

## **Ventura County Health Care System Oversight Committee Administrative Policies**

June 13, 2024

The following administrative policies were reviewed and recommended for approval by appropriate departments and committees.

1. 100.011 Hospital Visitation
2. 106.085 HCA Restraining Order Policy
3. L.SPH.49 Ketones
4. NPP.04 Small Bore Tube Feeding Tube Insertion and Management

Ventura County Health Care System Oversight Committee  
Administrative Policies - June 13, 2024  
Summary of Changes

#	Title	Review Period	Summary of Changes
1	100.011 Hospital Visitation	Triennial	Removed reference to ED Quiet Room, as it no longer exist. Added language for Addiction Medicine Unit.
2	106.085 HCA Restraining Order Policy	Triennial	Added SB 553 verbiage and SB reference.
3	L.SPH.49 Ketones	Biennial	Policy migrated into PolicyStat from paper format. Changed manufacturer of reagents and controls.
4	NPP.04 Small Bore Tube Feeding Tube Insertion And Management	Triennial	New policy



Origination 11/22/2017  
Last Approved 5/29/2024  
Effective 5/29/2024  
Last Revised 5/29/2024  
Next Review 5/29/2027

Owner Jason Arimura:  
Associate  
Hospital  
Administrator-  
Ancillary Services  
Policy Area Administrative -  
Operating  
Policies

## 100.011 Hospital Visitation

### POLICY:

In order to ensure the safety and security of patients, employees and volunteers of Ventura County Medical Center (VCMC) and Santa Paula Hospital (SPH), to maintain an orderly environment and assist patients and visitors with finding their destination, there is controlled access to both facilities. Hospital visitation guidelines are available in English and Spanish in the Patient Information Booklet.

At designated entrances only, all guests will be required to check in as either a visitor or a vendor and will then be issued a wrist band or vendor identification (ID) badge.

Hospital visitation will not be restricted, limited or otherwise denied based on age (with the exception of children <13 year old), race, ethnicity, religion, culture, language, physical or mental disability, socioeconomic status, sex, sexual orientation, and gender identity and expression.

### PROCEDURE:

There are specific designated entrances at both VCMC and SPH available for patients, visitors, vendors and employees. Any person in the hospital without a visitor or vendor wrist band, vendor ID badge or employee badge should be directed to one of the hospital entrances so that they may sign in and be issued a wrist band or vendor ID badge.

### HOSPITAL VISITATION GUIDELINES

For the welfare of our patients and to contribute to each patient's recovery, we urge all visitors to observe the following visitation guidelines:

- A. Regular visitation hours are from 9:00 a.m. to 9:00 p.m. daily.

- B. Patient visits should not exceed two (2) visitors at any given time, unless there is a special circumstance and approved by the Department Manager or House Supervisor.
- C. Visitors must be in good health. Visiting is not allowed if the visitor is ill.
- D. Visitors are required to comply with all hospital infection control policies.
  - 1. Visitors of Neonatal Intensive Care Unit (NICU), Pediatrics Unit, Pediatric Intensive Care Unit (PICU), immunocompromised or other high-risk patients may be asked to mask based on community prevalence of respiratory illnesses or at the discretion of the provider or nurse in charge.
- E. Service animals will continue to be allowed entrance.
- F. No visitors under the age of 13 are permitted in patient care areas unless they are the parents of hospitalized children, the significant other of a laboring person, a brother or sister of a child who is a patient in NICU, Pediatrics Unit, PICU, Obstetrics Unit (OB) or family members of a terminally ill patient. Visitors meeting this criteria may visit under these conditions:
  - 1. Siblings may visit during regular visitation hours only. They must be accompanied by a responsible adult.
  - 2. Siblings must be in good health, as determined (when necessary) by a nurse or physician on the unit.
- G. Shoes and shirts are required for all visitors.
- H. Noise levels should be kept to a minimum in the corridors and while in patient rooms.
- I. No food should be brought in from outside the hospital unless approved by physician and/or nursing staff. Visitors should only eat in patient areas after conferring with nursing staff. Visitors may go to the cafeteria to purchase food.
- J. Smoking is prohibited anywhere on hospital grounds, including all parking areas. Smoking includes the use of cigarettes, cigars, water pipes, pipes, hookahs, marijuana (including medical marijuana) and electronic smoking devices, such as e-cigarettes and vaping pens. There are no designated smoking areas on Hospital property. See policy [106.004 Smoking Policy](#) for more information.
- K. Fresh or dried flowers, or potted plants, are not allowed in patient-care areas for immunosuppressed patients.
- L. Pediatrics Unit and Pediatric Intensive Care Unit (PICU) - We invite parent participation in the Pediatrics and PICU Unit. One parent may stay with the patient at all times as space allows. Grandparents or other significant adult(s) may visit with a parent, unless otherwise specified. Prior to sibling visitation in the PICU, a joint discussion concerning the risks and benefits of visitation will be had with the charge nurse, Child Life Specialist, physician and parents. See policy [P.32 PICU, NICU and PEDS Visiting Policy](#) for more information.
- M. Neonatal Intensive Care Unit (NICU)-We invite parent participation in the NICU Unit. Parents will be required to wear their identification armband when visiting. One parent may stay with the patient at all time as space allows. Grandparents or other significant adult(s) may visit with a parent unless otherwise specified. See policy [P.32 PICU, NICU and PEDS Visiting Policy](#) for more information.
- N. Emergency Department

1. No children under the age of 13 unless they are the patient, the parent of a patient, or the support person of a pregnant person.
2. Children must be accompanied by an adult, when in the ED or the waiting room.
3. In critical situations, family members can stay at bedside at the nurse's discretion.
4. To provide a safe environment, visitors are asked to refrain from multiple entries and exits from the patient care area.
5. The ED is not to be used as a thoroughfare to other areas of the hospital. Visitors should use an alternate entrance to gain entry into the hospital, with the exception of off hours when the front lobby is closed.
6. Visitation for ED Hold patients will follow the rules for visitation in the ED.

O. Addiction Medicine Unit (ADM)

1. There are no overnight visitors permitted in this unit. Visitation remains from the hours of 9:00 a.m. to 9:00 p.m. daily.
2. Due to potential for foodborne illness and/or contraband, family and visitors are asked not to bring food from the outside to ADM patients in the hospital. The Dietary Services department will make every effort to accommodate the dietary requests of the patients.

P. Obstetrics Unit

1. The support person of the patient may stay in post-partum or ante-partum overnight. A sibling must be accompanied by an adult. The support person will receive an identification bands at the time of delivery.

Q. Post Anesthesia Care Unit (PACU) - Visitors will be restricted to the parent(s) of a minor, the parents(s) or caregiver of persons with special needs and under special conditions.

R. Visitation hours for the Inpatient Psychiatric Unit (IPU) are Monday through Friday, 5:30 p.m. through 7:20 p.m., and on weekends and holidays, 12:30 p.m. to 2:30 p.m. We do attempt to accommodate visits during times other than those posted on an individual basis. It requires a physician's order and should be arranged in advance.

S. Exceptions to the visitation policy may be made in extenuating circumstances. This will be done with collaboration between Medical Staff, Nursing Supervisor, the patient and their family.

T. In the event of an infectious disease outbreak, the visitor policy may be adjusted at the recommendation of the Infection Control Committee, the Medical Director of Infection Control and Prevention, or the Hospital Chief Medical Officer. If adjusted, the policy will be reviewed on a monthly basis.

The VCMC entrance will be open daily from 5:00 am until 9:00 pm. The Customer Service desk at VCMC will be staffed by one to two Security Guards 24 hours a day, 7 days a week, as well as a Customer Service employee from 5:00 am to 9:00 pm. At SPH the entrance will be open from Monday through Friday 6:30 am to 9:00 pm and Saturday through Sunday 8:30 am to 6:30 pm. Entrance can be gained through the Emergency Department when the front lobby is closed.

Upon entering, guests will check in as a visitor or a vendor and be issued either a wrist band or vendor ID

badge. Employees entering the facility through the Main Entrance must wear hospital ID badges. Employees without hospital ID badges will be issued a visitor wrist band which must be worn for the duration of their time spent in the Hospital. If a visitor or vendor is noted anywhere in either hospital without an wrist band or vendor ID badge, they will be instructed to obtain a wrist band or vendor ID badge. All vendors shall comply with policy [106.083 Vendor Access and Registration](#).

**Emergency Department Entrance.** The ED at VCMC and SPH will be staffed with a Security Guard 24 hours a day, 7 days a week.

**VCMC Hillmont Surgery Entrance.** This entrance will be designated for staff and providers only via badge access. No patients, visitors or vendors will be permitted to enter the Hospital through this entrance. Staff and providers may enter through this entrance 24 hours a day, 7 days a week.

**VCMC Loma Vista MRI Trailer Entrance.** This entrance will be designated for staff and providers only via badge access. No patients or visitors will be permitted to enter the Hospital through this entrance. Staff may enter through this entrance 24 hours a day, 7 days a week.

**VCMC Radiology Entrance.** This entrance is closed to everyone.

**VCMC Lab Entrance.** This entrance will be designated for staff and providers only via badge access. No patients or visitors will be permitted to enter the Hospital through this entrance. Staff and providers may enter through this entrance 24 hours a day, 7 days a week.

**VCMC Boardwalk Entrance.** This entrance will be designated for staff and providers only via badge access. No patients or visitors will be permitted to enter the Hospital through this entrance. Staff and providers may enter through this entrance 24 hours a day, 7 days a week.

**SPH Staff Entrance.** This entrance will be designated for staff and providers only via badge access. No patients or visitors will be permitted to enter the Hospital through this entrance. Staff may enter through this entrance 24 hours a day, 7 days a week.

## REFERENCE:

Patient Information Booklet. Ventura County Medical Center and Santa Paula Hospital. [VCHCA-505-050 (01/2020)]

## All Revision Dates

5/29/2024, 2/26/2024, 1/2/2024, 9/18/2023, 7/6/2023, 3/8/2023, 11/22/2017

## Approval Signatures

Step Description

Approver

Date

Hospital Administration

Diana Zenner: Chief Operating  
Officer, VCMC & SPH [JA]

5/29/2024

Policy Owner

Jason Arimura: Associate  
Hospital Administrator-  
Ancillary Services

5/29/2024

COPY



Origination 3/9/2023  
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Next Review 5/21/2027

Owner James Rodriguez:  
Agency Safety Officer  
Policy Area Administrative -  
Operating Policies

## 106.085 HCA Restraining Order Policy

Printed copies are for reference only.

Please refer to electronic copy for the latest version.

### POLICY

It is the policy of the Health Care Agency (HCA) to help protect, according to court ordered Restraining Orders (RO) and Temporary Restraining Orders (TRO), employees during normal business hours.

### PURPOSE

Per State of California Senate Bill 553: Any employer, whose employee has suffered unlawful violence or a credible threat of violence from any individual, that can reasonably be construed to be carried out or to have been carried out at the workplace, may seek a temporary restraining order and an order after hearing on behalf of the employee and, at the discretion of the court, any number of other employees at the workplace, and, if appropriate, other employees at other workplaces of the employer.

The HCA recognizes that staff, by the nature of their jobs, occasionally may be exposed to security threats in the workplace that require obtaining a RO or a TRO against clients or public. It is also recognized that an employee may provide Management with a Domestic Violence RO or TRO. By following policy procedures, actions can be taken to mitigate and prevent potential security threats to staff and clients.

### PROCEDURE

Procedures are to be managed to ensure employee and client safety, and to be reported and acted upon as specified below.



## **Restraining Orders or Temporary Restraining Orders against Clients**

The Division Manager, and Department Deputy Director, with recommendations from the HCA Safety Officer (SO), County Counsel and law enforcement, will determine if a RO or TRO will be pursued for incidents involving threats, assaults, harassment, or intimidation toward a specific employee, general employee groups, or County buildings by clients, public, or former employees. If an incident poses an immediate threat of harm, the Division Manager, Supervisor and SO will establish actions to be taken to protect the employee and employees. Once the RO or TRO is obtained, a copy is to be given to SO, and Department Deputy Director immediately. The Deputy Director is to notify the Department Director. The SO will provide a copy to HCA Human Resources, General Services Agency (GSA) Security and/or County Risk Management as appropriate. The SO may contact the affected employee(s) if appropriate.

- The SO will provide directives and work with Management to facilitate a workplace security/safety plan for each incident to ensure employee safety, court ordered mandates are adhered to, and responses if RO or TRO are violated.
- A workplace security/safety plan may include, but is not limited to:
  - Implementing security measures, such as, arranging an escort, security guards, changing locations, code words, etc.
  - Obtaining a picture and description of the restrained person
  - Obtaining a vehicle description of the restrained person
  - Directives to call 911, or how to respond if RO or TRO is violated
  - How to respond, if restrained person is a patient, or client

## **Domestic Violence Restraining Orders or Temporary Restraining Orders**

### **Employee Responsibility**

If an employee obtains a RO or TRO that orders the restrained person (respondent) to stay-away from the employee and/or employee's place of work and/or employee's vehicle, a verbal notification and a copy of the RO or TRO is to be provided to the Supervisor and/or Division Manager.

The Supervisor, Division Manager and SO will work with the employee and take actions to ensure court ordered mandates and employee's safety. Measures will be taken to reasonably keep information confidential.

If an employee is feeling threatened by a family member, household member, intimate partner, or friend, they should notify their Supervisor, Division Manager or SO, James Rodriguez at 805-339-1103 even if they have not pursued a RO or TRO. All information will be taken seriously, and measures will be taken to help protect the employee.

The employee will adhere to agree upon actions to ensure safety of oneself and co-workers.

## **Co-workers Responsibility**

If an employee discloses to a co-worker that he/she fears their safety is in jeopardy or that they are pursuing or has a RO or TRO, the co-worker should report the information to a Supervisor, Division Manager, SO or HCA HR. The co-worker can ask that their name be kept anonymous.

## **Supervisor / Division Managers Responsibility**

When an employee either presents a RO or TRO, discloses that they are pursuing a RO or TRO; states they feel their safety is in jeopardy, or a co-worker discloses information about the domestic safety of another employee, the Supervisor or Division Manager is to contact the SO, James Rodriguez at 805-339-1103 immediately. Provide all information disclosed, any documentation and a copy of the RO, or TRO.

It is the responsibility of the employee's Management to take steps to protect the employee and co-workers, even over the employee's objection. Measures will be taken to protect the employee's confidentiality by being reasonably discreet, but the overriding responsibility is to protect the employee and HCA employees.

If the employee or employees are in immediate danger or potential danger of harm, Division Management is to take immediate actions to help protect the employee and employees.

Once the SO has received all information and met with the affected employee, a workplace security/safety plan will be provided to the Division Manager for actions to protect the employee and employees, and that court ordered mandates are in compliance.

A workplace security/safety plan may include, but is not limited to:

- Implementing security measures, such as, arranging an escort, security guards, changing locations, code words, etc.
- Obtaining a picture and description of the restrained person
- Obtaining a vehicle description of the restrained person
- Who to notify, such as the security guard, reception staff and appropriate site staff
- Directives to call 911 if restrained person violates the RO or TRO
- Directives on how to respond if perpetrator (person without a RO or TRO against them) comes on site
- How to respond, if restrained person is currently a patient, or client
- How to respond, if perpetrator (person without a RO or TRO against them) is currently a patient, or client

Division Managers are to provide the SO with any further updates, such as, the employee obtaining a RO instead of a TRO, the employee or co-worker(s) discloses additional information, or the restrained person has violated the RO or TRO.

# Safety Officer Responsibility

Upon notification from an employee, co-worker, Supervisor, Division Manager or Management, that an employee has presented or disclosed they are pursuing a RO or TRO, or that an employee's safety may be in jeopardy due to domestic violence, the SO will immediately meet with the affected employee and gather all pertinent information and develop a workplace security/safety plan to help protect the employee and employees, and ensure court mandates are in compliance.

Once a workplace security/safety plan is developed, the SO will provide the Division Manager and other appropriate Management the plan and help coordinate actions for protection.

The SO will provide the workplace security/safety plan as a follow up in an email to the affected employee, appropriate Management, Division Manager, the Department Deputy Director, and HCA Human Resources. The Deputy Director is to notify the Department Director.

The SO may contact Employee Assistance Program, County Counsel, GSA Security Control or County Risk Management.

The SO will continue to follow up with the employee, Supervisor and Division Manager for updates, and may provide additional actions for implementation.

## References:

1. State of California, Senate Bill No. 553, Ch 289, Section 527.8 of the Code of Civil Procedure[JR1] Section 1 (a).
2. County of Ventura, Administrative Policy Manual, Policy No. Chapter IV(B) – 12 Restraining Order
3. County of Ventura, Security and Emergency Action Plan

## All Revision Dates

5/21/2024, 3/9/2023

## Approval Signatures

Step Description	Approver	Date
HCA Safety	John Polich: Deputy Director - Governmental & Regulatory Affair	5/21/2024
Policy Owner	James Rodriguez: Agency Safety Officer	5/20/2024



Origination 1/28/2012  
Last Approved 5/24/2024  
Effective 5/24/2024  
Last Revised 5/24/2024  
Next Review 5/24/2026

Owner Erlinda Roxas:  
Director,  
Laboratory  
Services  
Policy Area Laboratory  
Services

## L.SPH.49 Ketones

### INTENDED USE:

Ketone tablets are for the semi-quantitative determination of ketones (acetoacetic acid and acetone) in urine, serum, and plasma.

Urine testing is CLIA Waived.

Serum/Plasma Testing is Moderately Complex for clinical laboratory testing only.

### SUMMARY AND EXPLANATION:

The presence of ketone bodies is important in the evaluation of carbohydrate metabolism. The test is based on the nitroprusside reaction with ketone bodies to give a purple color.

### PRINCIPLE OF THE TEST:

Acetoacetic acid or acetone in urine or blood will form a colored complex with nitroprusside in the presence of glycine. A buffer provides the optimum pH for this reaction.

### SPECIMEN:

Urine: Test fresh urine within **one hour of collection**. If testing cannot be done within an hour, refrigerate specimen immediately and let it return to room temperature before testing. Urine preservatives may affect test results.

Serum or Plasma: Specimens may be refrigerated at 2° to 8°C for up to 72 hours. For longer storage, samples may be frozen at or below -20°C.

# REAGENTS AND SUPPLIES:

1. AimTab™ Ketone Tablets
  - a. Each AimTab™ Ketone Tablet contains sodium nitroprusside, aminoacetic acid, disodium phosphate, sodium borate, lactose, and nonreactive binding ingredients.
  - b. Store at 15° to 30°C unopened.
  - c. Once opened, AimTab™ Ketone Tablets stability is decreased on exposure to moisture.
    - i. Recap the bottle promptly after removing the tablet.
    - ii. Tablets should be used on a regular basis and not stored for an extended period of time after bottle is opened.
  - d. Do not store in direct sunlight.
  - e. Do not use when deterioration is noted by a tan-to-brown or darkening color of the tablet.
  - f. Do not swallow or eat tablet.
2. Calibrated Timer
3. Plastic pipette
4. Clean white paper
5. Quality Control" positive and negative controls
6. Gloves

## PROCEDURE:

1. Bring samples to room temperature prior to testing.
  - Frozen samples must be completely thawed and mixed well prior to testing.
  - Samples should not be frozen and thawed repeatedly.
2. Carefully remove tablet from bottle and replace cap promptly.
3. Place tablet on a clean, dry, white paper.
4. Using a clean plastic pipette, dispense one drop of urine or serum directly on top of tablet.
5. Urine: Wipe off any excess urine and compare color of tablet to color chart at **30 seconds** after application of sample.
6. Serum or Plasma: Wipe off any excess serum and compare color of tablet to color chart at **2 minutes** after application of sample.

## QUALITY CONTROL:

1. Run positive and negative controls along with the patient sample.
2. Controls are run each day of use, or at opening of a new bottle of AimTab™ Ketone Tablets.

3. Technical Assistance: Germaine Laboratories at 210-682-4192.

**Urine:** Bio-Rad qUAntify Advance Control Level 1( Negative) and Level 2 (Positive)

- Follow manufacturer's instructions for use.
- Bring to room temperature (18° to 25°C) and invert several times to ensure homogeneity.

**Serum:** Germaine Ketone Serum Controls (Positive and Negative)

- Follow manufacturer's instructions for use.
- Bring to room temperature. Mix gently by inversion before use.
- Use in the same manner as patients specimens.
- Do not use if turbid, it may be an indication of contamination.
- Do not mix caps from different vials.
- Handle as though capable of transmitting disease.
- Controls are stable up to **3 months**.

## INTERPRETATION OF RESULTS:

**POSITIVE:** tablet shows any signs of purple color. Match color to color chart on container and report as SMALL, MEDIUM, or LARGE. No calculations are necessary.

**NEGATIVE:** No color change will be present at the correct read time. Disregard any pink, tan, or yellow color.

## LIMITATIONS:

Improper handling of the product to allow moisture absorption will adversely affect results.

False positive results may occur with urine specimens containing bromsulphthalein, large amounts of phenylketones, levodop metabolites, or other sulfhydryl compounds.

## EXPECTED RESULTS:

Ketones are not found in blood or urine under normal conditions or carbohydrate metabolism.

## PERFORMANCE CHARACTERISTICS:

AimTab™ Ketone Tablets will detect as little as 5 mg of acetoacetic acid/dL in urine. AimTab™ Ketone Tablets are specific for the detection of acetoacetic acid and acetone. AimTab™ Ketone Tablets are about 10 times more sensitive to acetoacetic acid than acetone and will not react with betahydroxybutyric acid. In urine, the small color block corresponds to approximately 20 mg acetoacetic acid/dL, the moderate color block to 20 to 40 mg/dL, and the large color block to approximately 80 to 100 mg/dL. The lower limit of detection in serum is approximately 10 mg acetoacetic acid per dL.

# REFERENCES:

1. Free, H.M., Smeby, R.R., Cook, M.H., and Fern, A.H.: A comparative study of qualitative tests for ketones in urine and serum, *Clin. Chem.* 4:323, 1958.
2. Riekers. H. and Miale, J.B.: Ketonuria: An evaluation of tests and some clinical implications. *Amer. J. Clin. Path.* 30:530, 1958.
3. Levison, S. A., MacFate, J.H., *Clinical Laboratory Diagnostic and Management of Laboratory Methods*. 19th Edition Philadelphia: WB Saunders; pp. 241:374, 454, 1996.
4. Free, A.H., and Free, H.M.: Nature of nitroprusside reactive material in urine in ketosis: *Amer. J. Clin. Path.* 30:7, 1958.
5. Henry, JB. et. al.: *Clinical Diagnostic and Management of Laboratory Methods*, 19th Edition Philadelphia: WB Saunders; pp. 241-374, 454, 1996.
6. Csako, G.: False Positive Results for Ketone with the Drug Mesna and other Free Sulfhydryl Compounds. *Clinical Chemistry*: 33/2:289, 1987.

## All Revision Dates

5/24/2024, 1/28/2012

## Attachments

[AimTab Ketone Tablets Rev. 12.18 .pdf](#)

## Approval Signatures

Step Description	Approver	Date
Hospital Administration	Jason Arimura: Associate Hospital Administrator- Ancillary Services	5/24/2024
Laboratory Services Department	Brad Adler, MD: Medical Director, Laboratory Services	5/24/2024
Laboratory Services Department	Erlinda Roxas: Director, Laboratory Services	5/23/2024



Origination 5/30/2024  
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Last Revised 5/30/2024  
Next Review 5/30/2027

Owner Tess Slazinski  
Policy Area Nursing Practice  
Protocols

## NPP.04 Small Bore Tube Feeding Tube Insertion And Management

### POLICY:

The feeding tube is placed at the bedside into the stomach or small bowel, via a real-time visualization of tube tip location device. The feeding tubes are placed in the Intensive Care Unit (ICU) per a licensed practitioner (LP) order. The hospital utilizes the Iris feeding tube system.

### Indications for Use:

Patients who are unable to take nutrition by mouth and at risk for aspiration pneumonia.

### Contraindications for Use:

DO NOT use this system in patients who are post transsphenoidal hypophysectomy (TPH) surgery, basilar skull fracture, suspected basilar skull fracture, and/or facial fracture(s).

### Competency:

Advanced practice nurses and registered nurses who have received didactic training from the device company and performed **three** successful placements are permitted to place these feeding tubes. A confirmatory x-ray is obtained to ensure proper placement per a LP order.

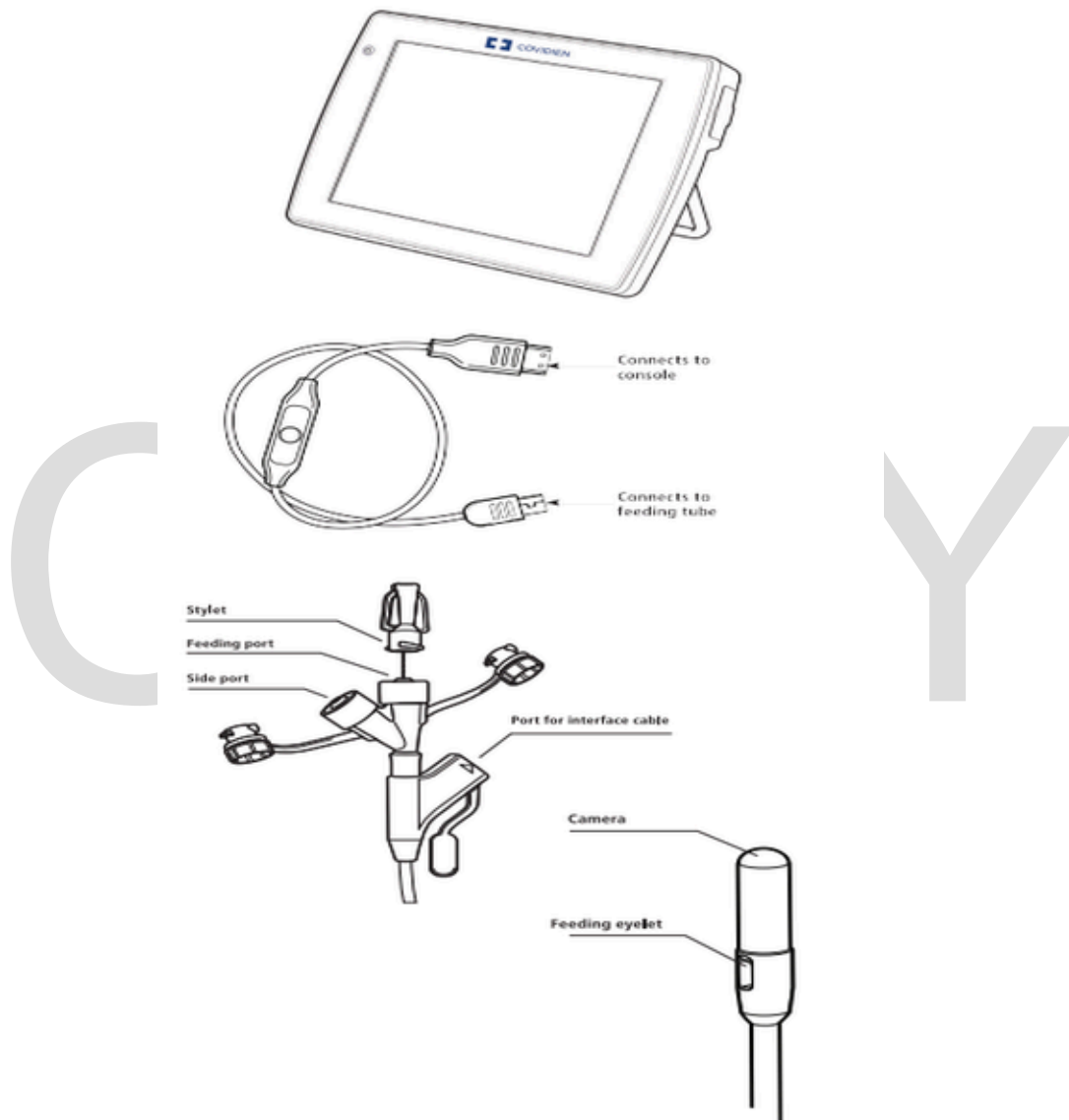
### Procedure:

- A. **Pre-insertion:** Explain the procedure to the patient and/or family.
- B. **Equipment preparation (see photo A):**
  - a. Position the console in direct line of sight.
  - b. Plug in the power cable if necessary.
  - c. Power on the console using the power button.



- d. Enter login and password
- e. Connect the interface cable to the console, then connect the interface cable to the feeding tube.
- f. Start procedure on console and input patient information.
- g. Activate the Hydromer™ coating on the tip of the tube by submerging it in water for a least 5 seconds.

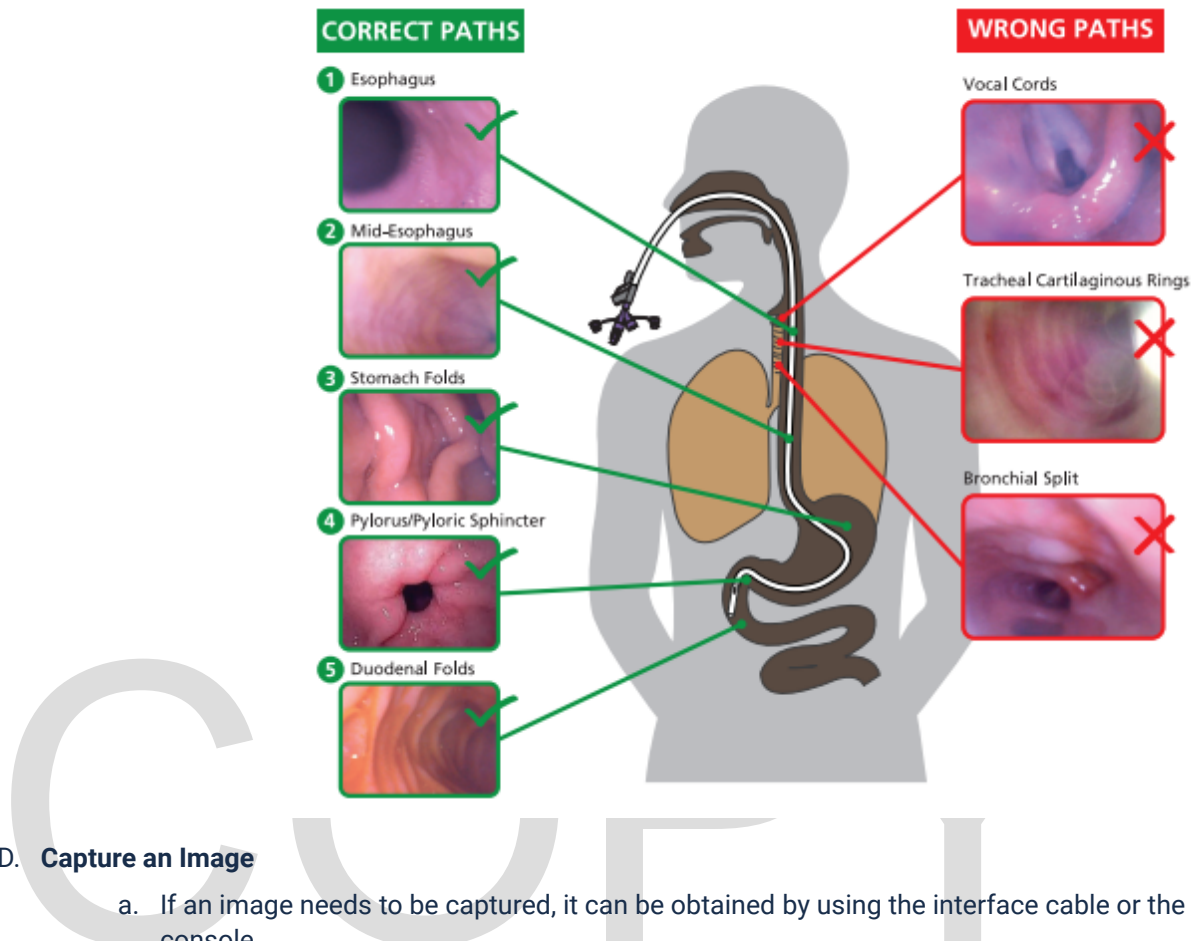
**Photo A:**



**C. Insertion:**

- a. Position the patient for feeding tube placement and estimate feeding tube length.
- b. Chose the most patent nare and insert the feeding tube with the stylet.
- c. Using the console for placement
  - i. Utilize the console screen to correctly identify markers during placement (see photo B)

**Photo B:**



**D. Capture an Image**

- a. If an image needs to be captured, it can be obtained by using the interface cable or the console.

**E. Ending the procedure**

- a. When the procedure is complete and the feeding tube has been placed properly, tap the green check mark.
  - i. Tap the green check mark again to complete the procedure.
- b. Disconnect the interface cable from the feeding tube.

**F. Confirm Placement**

- a. Obtain confirmatory x-ray per LP order.
- b. Remove stylet prior to enteral nutrition delivery.
  - i. The interface cable is reusable, **do not discard**.

**G. Reconnecting**

- a. The console to place the feeding tube will retain the memory of which patient is associated to that tube.
- b. Reconnecting the console to the same feeding tube will allow the console to recognize the tube and provide a patient data confirmation prompt.

# References

Cardona, E., et al. (2021). Bedside postpyloric enteral tube placement using Kangaroo IRIS technology: A single-center case series. *Nutrition*, 86: 111195.

Covidien User Manual (2012). Kangaroo Feeding Tube with IRIS Technology console and accessories. Covidien LLC, Maine.

Taylor, S., et al. (2021). Tube placement using "IRIS": A pilot assessment of its utility and safety. *Intensive and Critical Care Nursing*, 66.

Taylor, S., et al. (2021). Integrated real-time imaging system, "IRIS" Kangaroo feeding tube: A guide to placement and image interpretation. *BMJ Open Gastroenterology*, 8(1): e000768.

## All Revision Dates

5/30/2024

## Approval Signatures

Step Description	Approver	Date
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	5/30/2024
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	5/30/2024
Nursing Education	Sharon Waechter: Clinical Nurse Manager, Nursing Education	5/30/2024
Protocol Author	Tess Slazinski	4/15/2024



## VENTURA COUNTY MEDICAL CENTER

*Property of the Medical Staff, Privileged and Sensitive Information*

**CONFIDENTIAL**

### Medical Executive Committee Document Approvals

June 2024

**a. Policies & Procedures / Forms / Orders**

1.	100.080 Labeling Medications On and Off the Sterile Field	page	3-4
2.	100.202 Preop Management of Elective Surgery Patients	page	5-7
3.	106.028 Isolation Precautions	page	8-13
4.	108.000 Plan for Provision of Nursing Care	page	14-17
5.	108.021 Pressure Injury Prevention and Wound Management	page	18-24
6.	ICU.24 Adult Intensive Care Unit Admission and Scope of Service	page	25-26
7.	L.BB.21 Limiting Transfusion of Group O Rh Negative Red blood Cells	page	27-31
8.	L.BB.65 Release of Uncrossmatched Blood	page	32-39
9.	MCH.13 Newborn and Infant Hearing Screening	page	40-47
10.	MCH.24 Management of Early Onset Sepsis (EOS) in the Newborn	page	48-51
11.	N.24 Umbilical Catheter Use in the NICU	page	52-57
12.	N.45 Neonatal Skin Care	page	58-68
13.	N.61 Neonatal Gastrostomy Feeding and Care	page	69-72
14.	N.70 Very Low Birthweight Intraventricular Hemorrhage Prevention Protocol	page	73-80
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## VENTURA COUNTY HEALTH CARE AGENCY

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 Perioperative Services  
**Policy Area:** Administrative - Patient Care  
**References:**

# 100.080 Labeling Medications On and Off the Sterile Field

## POLICY

Ventura County Medical Center/Santa Paula Hospital shall label all medications, medication containers (e.g., syringes, medicine cups, basins) or other solutions on and off the sterile field in surgery, anesthesia, and other procedural settings that are not immediately administered. The policy applies to pre-, intra-, and post-operative components and all procedural settings that use medications including but not limited to radiology and other imaging services, endoscopy area, nursing unit and clinics where procedures are conducted.

## PROCEDURE

- A. Medications and solutions both on and off sterile fields shall be labeled even if there is only one medication being used. The label should be prepared and applied at the same time the solution or medication is prepared. Applying the label immediately before drawing up the medication is also acceptable.
  1. Note that it is not permissible to use commercially pre-labeled syringes, basins, or cups, or to pre-label syringes, basins or cups prior to surgery or a procedure.
- B. Medication or solution label must include medication name or solution name, strength, amount of medication or solution containing medication (if not apparent from the container), diluent name and volume (if not apparent from the container).
- C. Labeling occurs when any medication or solution is transferred from the original packaging to another container.
- D. All medication labels are verified verbally and visually by two qualified people whenever the person preparing the medication is not the person who will be administering it.
- E. Medications include any prescription medications; diagnostic and contrast agents used on or administered to persons to diagnose, treat or prevent disease or other abnormal conditions; radioactive medications; respiratory therapy treatments; and any product designated by the [Federal Drug Administration \(FDA\)](#) as a drug. Solutions include chemicals and reagents such as formalin, saline, sterile water, Lugol's solution, radio-opaque dyes, glutaraldehyde and chlorhexidine.
- F. Any medication or solutions found unlabeled are to be immediately discarded. All original containers from medications or solutions remain available for reference in the perioperative area until the conclusion of the procedure.

G. All labeled containers are to be discarded at the conclusion of the procedure.

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Surgery Committee	Tracy Chapman: VCMC - Med Staff	pending
Pharmacy & Therapeutics Committee	Sul Jung: Associate Director of Pharmacy Services	5/13/2024
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	4/9/2024
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	4/9/2024
Surgical Services	Gwendolyn Vontoure: Director Perioperative Services	4/9/2024



## VENTURA COUNTY HEALTH CARE AGENCY

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 Perioperative Services  
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**References:**

# 100.202 Preop Management of Elective Surgery Patients

## POLICY:

It is the policy of Ventura County Medical Center (VCMC) and Santa Paula Hospital (SPH) to have patients in the best possible state of health prior to elective surgery to reduce the risk of post-operative complications.

## PROCEDURE:

### A. Glycemic Management

1. Glucose management prior to elective surgery:
  - a. The Primary Care Provider (PCP) will check HbA1c within the last three (3) months for all adult patients prior to referring a patient to the surgeon.
  - b. Recommendation for hemoglobin A1C (HbA1c) <8%: PCP refers patient to surgeon.
  - c. Recommendation for patients with HbA1c result >8%:
    - i. PCP works with patient to get diabetes mellitus (DM) controlled and HbA1c <8%, or
    - ii. PCP sends patient to Diabetologist or Endocrinologist for consult.
2. Glucose management on day of elective surgery:
  - a. Glucose checked in pre-op/same-day surgery area for all patients >age 18 and children with a history of diabetes.
  - b. If HbA1c is unknown, or known to be greater than 8%, day surgery registered nurse (RN) will notify the attending surgeon and diabetes physician to determine whether surgery should proceed.
  - c. Goal glucose is <180mg/dL pre-op, intra-op and post-op for at least 48 hours. If glucose is >180mg/dL, RN will notify attending surgeon and diabetes physician to determine whether surgery should proceed.
  - d. If glucose >180mg/dL **and** patient is scheduled for vascular surgery, joint replacement, hysterectomy, colorectal, or spinal surgery, provider must order insulin drip, utilizing the insulin infusion software program.
  - e. For all other elective surgeries, if glucose is >180mg/dL, the day surgery RN will contact the attending surgeon and diabetes physician to determine intraoperative glucose management.



- i. If provider decides to continue surgery and case is > 1 hour, provider orders insulin drip, utilizing the insulin infusion software program.
  - ii. If provider decides to continue surgery and case is < 1 hour, provider may order subcutaneous insulin injection.
- f. When an inpatient on an Insulin drip requires surgery, the pre-op RN, operating room (OR) circulating RN, post-anesthetic care unit (PACU) RN and Anesthesiologist will monitor glucose levels and continue the patient on the insulin drip utilizing the insulin infusion software program recommendations to titrate insulin.
- 3. Prior to hospital discharge, patient will have a scheduled follow-up appointment with his/her PCP, or with DM specialist physician.

#### **B. Smoking Cessation**

- a. All patients referred for surgical procedures will be assessed for smoking by their PCP. Patients who are smokers will be referred to health care agency's (HCA's) Smoking Cessation (SC) program.
- b. In the surgical clinics, patients will be assessed for smoking. Patients who are smokers will be referred to the Smoking Cessation program if they have not already been referred by their PCP.
  - i. Clinic nurses will document in the EHR under 'Social History' that patient has been assessed, counseled, and educated regarding smoking cessation. Patients identified as smokers will be referred to the Smoking Cessation program and this intervention will also be documented in the EHR.
  - ii. Surgical providers will document in History and Physical assessments under "Social History" that they have assessed patients regarding smoking cessation. They will write an order for Smoking Cessation counseling and referral to the SC program.
- c. At VCMC pre-operatively, nurses will assess, counsel, and educate patients regarding smoking cessation. The nurses will refer patients who have not been referred to the Smoking Cessation program.
- d. The Respiratory Department at VCMC will be responsible for monitoring compliances with smoking cessation counseling and referral to the SC program.

#### **C. Chlorhexidine**

- a. The clinics will disperse chlorhexidine wipes (x3 packets) to all patients undergoing a surgical procedure. Patients will be instructed to bathe the night before the surgery and use the wipes as instructed.
- b. All VCMC/SPH medical and surgical units, including Intensive Care Unit (ICU), Definitive Observation Unit (DOU), Emergency Room (ER), and Obstetrics (OB) will instruct patients to use chlorhexidine wipes prior to surgery. If patients are unable to complete this task, the nurse or nursing assistant can do it for them. The nurse will document that this has been completed in the Cerner/ electronic health record pre-op checklist.

#### **D. Pre-op Education Booklet**

- a. All surgical patients will be provided with a pre-op education booklet that outlines how to prepare for surgery, how to minimize infection, and the rationale for smoking cessation.

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## Attachments

No Attachments

## Approval Signatures

Step Description	Approver	Date
Medical Executive Committee	Tracy Chapman: VCMC - Med Staff	pending
Hospital Administration	Minako Watabe: Chief Medical Officer, VCMC & SPH	4/19/2024
Hospital Administration	Diana Zenner: Chief Operating Officer, VCMC & SPH	4/9/2024
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	4/9/2024
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	4/9/2024
Policy Owner	Gwendolyn Vontoure: Director Perioperative Services	4/9/2024



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**Policy Area:** Administrative - Environment of Care  
**References:**

## 106.028 Isolation Precautions

### POLICY:

Isolation precautions are used to care for the patient with a transmissible infectious agent. The purpose of isolation precautions is to interrupt the transmission of disease and prevent transmission of infection to staff and other patients.

The use of isolation precautions is a two-tiered process. Standard precautions are used for all patients and the category of isolation precautions is added according to the mode of transmission of the disease.

The following policy applies unless advised/directed otherwise by Infection Prevention and/or Infectious Diseases. All Ventura County Medical Center (VCMC), Santa Paula Hospital (SPH) and hospital-based Ambulatory Care clinic staff shall follow the guidelines below which are designed to prevent transmission of organisms to patients, care providers and multi-use equipment. Multiple drug-resistant organisms (MDRO), defined by the CDC as microorganisms, predominantly bacteria, that are resistant to one or more classes of antimicrobial agents, are a threat to patient and staff health and safety. It is essential to keep these organisms contained. Compliance with the following transmission-based precaution guidelines is required to prevent transmission of organisms and enhance patient and staff safety.

See References for an alphabetical list of infectious diseases and the correct category of isolation to be used.

### PROCEDURE:

#### Initiation of Isolation Precautions:

1. The nurse may initiate isolation precautions based on information obtained in the nursing assessment. The nurse then informs the physician of the need for an Isolation Precautions order.
2. Physician orders the appropriate isolation/precautions.
3. Infection Prevention department representative, Infectious Diseases physician or Infection Control Committee (ICC) Chairman may initiate isolation precautions.
4. Post the appropriate Isolation/Precautions sign outside the patient room.

#### Discontinue Isolation Precautions:

A physician's order is required.

#### Patient Transport

1. Notify receiving department of isolation status by entering the information in the electronic health record (EHR). Verbal communication must also occur with the receiving department prior to the patient's arrival.
2. Limit movement of the patient throughout the hospital or clinic.
3. When transport or movement is necessary, cover or contain the infected or colonized areas of the patient's body. Airborne and droplet isolation precautions require a surgical mask be placed on the patient.
4. Remove and dispose of contaminated PPE and perform hand hygiene prior to transporting patients on Contact Precautions.
5. Don clean PPE to handle the patient at the transport location.
6. Family members and visitors are required to conform to this policy and wear appropriate Personal Protective Equipment (PPE) as directed.

## Airborne Precautions

Diseases requiring airborne precautions are transmitted via airborne droplet nuclei or small particles in the respirable size range carrying infectious agents.

### Patient Placement

1. Place the patient in a designated negative air pressure room.

#### ***Santa Paula Hospital:***

Call the Maintenance Department at 652-3219 between 0800 and 1700h. After hours, page the Maintenance Department through Paging at 652-6075.

2. The doors of these rooms must remain closed at all times when the rooms are being used for airborne isolation.
3. In the event that additional negative air pressure rooms are required, contact the nursing supervisor or the Maintenance Department.

All staff entering airborne isolation rooms shall follow the proper procedure: enter the anteroom and allow the anteroom doors to completely close. Once the green light is illuminated, staff may enter the patient room. Once in the patient room, the green light will signal that the patient room doors have completely closed.

1. Place the patient in a private room, until airborne isolation room is available.
2. Patients in airborne isolation rooms must have doors closed.
3. RNs should respond to pressure alarms in a timely manner. If staff is unable to deactivate the alarm, call Facilities Maintenance at ext. 6683 for assistance.

**Surgery Patients:** Any patient who has been placed on Airborne Isolation for suspected or diagnosed illness and has surgery will be recovered in the OR suite and then be transported to the negative pressure room with the appropriate staff.

**Ambulatory Care Clinics:** Each clinic has a designated room for isolation precautions.

**Behavioral Health Clinics:** Clinic Administrator or designee will be made aware and client or participant will be instructed to wait outside until consultation is made with trained medical personnel, the Ventura County Behavioral Health Safety Officer or Infection Control. Client or participant may be referred for medical clearance.

## **Respiratory Protection**

1. Healthcare workers shall wear a N95 mask or Portable Air-Powered Personal Respiratory (PAPR) when in patient room.
2. Susceptible persons should not enter the room of patients known or suspected to have rubeola (measles) or varicella (chickenpox) if other immune caregivers are available.
3. Visitors shall wear a surgical mask.

## **Droplet Precautions**

Diseases requiring droplet precautions are transmitted a short distance, approximately three (3) feet, from the respiratory tract of infectious individuals to susceptible mucosal surfaces of the recipient.

### **Patient Placement**

- Patients on droplet precautions should be placed in a private room.
- Cohorting only after discussion with Infection Prevention.

### **Respiratory Protection**

- Wear a surgical mask.

## **Contact Precautions**

Diseases requiring contact precautions are transmitted by infectious agents via direct and indirect contact with the patient or their environment.

Isolation supplies (PPE's, masks, etc.) are now kept in hallways closets adjacent to patient rooms.

### **Gloves and gown**

1. Gloves and gown must be worn upon entering the room.
2. Gloves and gown must be removed immediately upon exiting the room.
3. Perform hand hygiene after removal of gloves and gown.

### **Hand Hygiene and the Patient with Clostridium Difficile Infection:**

1. Wash hands with soap and water.
2. Do not use alcohol gel for hand hygiene.
3. Use the Contact Precautions sign with the brown color for patients with Clostridium difficile infection.

### **Patient Care Equipment**

1. Do not share patient care equipment.
2. Return to the designated department for cleaning and disinfection.

### **Room Cleaning After Discharge**

Proper cleaning and disinfection of the patient's room after discharge is important to prevent the spread of infection from a contaminated environment. Inspection of the mattress for intactness between patients is also recommended.

1. Isolation sign remains outside of the room after discharge.

2. The room is thoroughly cleaned, and then disinfected using the hospital-approved disinfectant (e.g. bleach-based disinfectant for *Clostridium difficile*).
3. The housekeeper reverses the isolation sign in its holder so that nursing staff know the room has been cleaned and disinfected and is ready for the next patient.

## Multi-Drug Resistant Organism (MDRO) Isolation Quick Sheet

	Current Infection WITH Active Drainage/ Excretions	Current Infection WITHOUT Active Drainage/Excretions	Current Colonization	History of
<b>Methicillin-Resistant Staphylococcus Aureus (MRSA)</b>	✓			
<b><u>Candida Auris (CAURIS)</u></b>	✓	✓	✓	✓ up to 4 years
<b><u>Carbapenem-Resistant Enterobacteriaceae (CRE)</u></b>	✓	✓	✓	✓ up to 1 year
<b><u>Vancomycin-Resistant Enterococcus (VRE)</u></b>	✓			
<b><u>Resistant pseudomonas, resistant acinetobacter spp. or resistant stenotrophomonas spp</u></b>	✓			
<b>Extended-Spectrum Beta- Lactamase (ESBL)</b>				
<b><del>Carbapenem-Resistant Enterobacteriaceae (CRE)</del></b>	<del>✓</del>	<del>✓</del>	<del>✓</del>	<del>✓</del> (within 4 year)
<b><del>Vancomycin-Resistant Enterococcus (VRE)</del></b>	<del>✓</del>			
<b><del>Resistant pseudomonas, resistant acinetobacter spp, or resistant stenotrophomonas spp</del></b>	<del>✓</del>			

## Candida Auris Screening and Isolation

Screen patients coming from high acuity post-acute care facilities including long-term acute care hospitals [LTACHs] and ventilator-capable skilled nursing facilities [vSNFs] if they are admitted to ICU unit.

Empiric contact isolation should be applied on admission of those patients pending screening results.

Consider screening such patients if they have high risk and admitted to other location.

Patients with risk factors for acquiring *C. auris*, including:

- mechanical ventilation
- indwelling medical devices, including central lines, feeding tubes, urinary catheters, etc.
- receipt of complex or high acuity medical care
- frequent or long healthcare stays, especially at high-risk facilities
- colonization or infection with other multidrug-resistant organisms

**Extended-Spectrum Beta-Lactamase (ESBL): No Isolation needed**

***Clostridioides difficile*:** Contact precautions are required until 48 hours after resolution of all symptoms (fever, abdominal pain, and diarrhea)

Diarrhea for *Clostridioides difficile* testing is defined as 3 or more watery stools in a 24 hour period). Only stool corresponding to 6 or 7 on the Bristol Stool Chart will be accepted by the laboratory for *C. difficile* testing.

**Other MDRO's:** As identified by Infection Control Committee.

## **Personal protective Equipment (PPE) utilization for care of all patients under Standard Precautions:**

- Wear gloves when anticipating contact with blood or other potentially infectious materials, mucous membranes, or nonintact skin, or potentially contaminated intact skin.
- Change gloves and sanitize hands during patient care if the hands will move from a contaminated body-site (e.g., perineal area, wound) to a clean body-site (e.g., face).
- Wear a gown to protect skin and prevent soiling or contamination of clothing during procedures and patient-care activities when contact with blood, body fluids, secretions, or excretions is anticipated
- Use PPE to protect the mucous membranes of the eyes, nose and mouth during procedures and patient-care activities that are likely to generate splashes or sprays of blood, body fluids, secretions and excretions. Select masks, goggles, face shields, and combinations of each according to the need anticipated by the task performed. If a patient is coughing, use a mask.
- During aerosol-generating procedures (e.g., bronchoscopy, suctioning of the respiratory tract [if not using in-line suction catheters], endotracheal intubation) in patients who are not suspected of being infected with an agent for which respiratory protection is otherwise recommended (e.g., *M. tuberculosis*, SARS or hemorrhagic fever viruses), wear one of the following: a face shield that fully covers the front and sides of the face, a mask with attached shield, or a mask and goggles (in addition to gloves and gown)

## **Contact Precautions**

MRSA – methicillin resistant staph aureus

VRE – Vancomycin Resistant *Enterococcus faecium*, *Enterococcus faecalis*

CRE – Carbapenamen Resistant *Escherichia coli* and/or *Klebsiella pneumoniae*

*Acinetobacter baumannii* - multidrug resistant

*Stenotrophomonas maltophilia* – multidrug resistant

*Clostridium difficile* – **Enteric Contact Precautions**

If there is any evidence of multidrug resistance with any other organisms, please contact the Infectious Disease physician for guidance. In addition, continue isolation practices for other communicable diseases

according to policy.

## References:

- Centers for Disease Control and Prevention - [CDC Isolation Transmission-Based Precautions Guidelines](#)
- Siegel JD, Rhinehart E, Jackson M, Chiarello L, and the Healthcare Infection Control Practices Advisory Committee, 2007 Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings <https://www.cdc.gov/infectioncontrol/guidelines/isolation/index.html>.
- Siegel JD, Rhinehart E, Jackson M, Chiarello L, and the Healthcare Infection Control Practices Advisory Committee, Healthcare Infection Control Practices Advisory Committee (HICPAC) Management of Multidrug-Resistant Organisms in Healthcare Settings 2006; <https://www.cdc.gov/infectioncontrol/guidelines/mdro/>Last update: February 15, 2017.

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## Attachments

No Attachments

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Step Description	Approver	Date
Medical Executive Committee	Tracy Chapman: VCMC - Med Staff	pending
Infection Prevention Committee	Magdy Asaad: Infection Prevention Manager	6/3/2024
Policy Owner	Magdy Asaad: Infection Prevention Manager	5/29/2024





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**Policy Area:** Administrative - Nursing  
**References:**

## 108.000 Plan for Provision of Nursing Care

### POLICY:

Nursing Services are directed by a Chief Nursing Officer (CNO), who is a Registered Nurse, qualified by advanced education and management experience. The CNO and Hospital/Clinical Nurse Managers are responsible for maintaining the standards of patient care and the standards of nursing practice; for establishing and monitoring the policies/procedures of the nursing service, for performance assessment and improvement, and for ensuring the competency of nursing personnel. The Nursing Administrative team will support the hospital and nursing mission, philosophy and standards.

### PROCEDURE:

The CNO has the requisite authority and responsibility to participate in the development and implementation of the Plan for Providing Nursing Care. The nursing department is responsible and accountable to the Medical Staff and Administration through its Nursing Managers and, ultimately, the CNO.

### SCOPE OF NURSING SERVICE:

Nursing is an organized and systematic process provided by or under the direction of a Registered Nurse. The practice of nursing encompasses the provision of care to patients and their families. It requires specialized knowledge, judgment, and skills derived from the principles of biological, physical, behavioral, social and nursing sciences and research. The nursing process is the basic tool for identifying and assessing patient's needs and planning appropriate care. The nursing process also encompasses evaluation of the interventions and implementing revisions when necessary to provide the most effective care.

As a profession, Nursing serves as a foundation for health care, optimizing, restoring and maintaining physical and psychosocial functions of the individual. As such, Nursing includes the recognition of priority health care needs, health care teaching, managing interdisciplinary patient care and patient advocacy. Nursing services are provided in a collaborative atmosphere, working with other disciplines to provide quality, cost effective and individualized health care to all patients. The services offered are designed to meet the unique needs of Ventura County, which is composed of all ages, diverse cultures and socioeconomic backgrounds.

### PROCEDURE:

The Nursing department consists of an Administrative Function, Clinical Function, Educational Function, and an Infection Control Function, which are under the jurisdiction of the CNO. The CNO is a Registered Nurse licensed in the state of California with appropriate education and experience. The CNO is employed on a full

time basis and reports to the Hospital Administrator. The CNO is accountable for providing an optimal level of patient care in an environment conducive to professional practice. The CNO will oversee the provision of nursing care that is in compliance with requirements of Title 22, Joint Commission Standards and other regulatory agencies. The CNO is responsible to the Chief Executive Officer for meeting the staffing standards of the Nursing Units.

The Administrative function consists of Staffing Standards, budgetary needs, timekeeping, and payroll duties. The Nursing Supervisors and the Clinical Nurse Manager have the responsibility, each shift, for providing competent staff based on the needs of the patients. The Nursing Supervisors function as the Administrative representative in the absence of the Chief Executive Officer and CNO. An On Call Administrator (AOD) provides "back up." The Nursing Administrative team is responsible for assuring "one level" of nursing care throughout the facilities. The Administrative team is responsible to ensure all appropriate personnel possess current licensure and competency. The Hospital/Clinical Nurse Managers are responsible for establishing annual departmental goals. Each Hospital/Clinical Nurse Manager is responsible to the CNO for the planning, implementation, and evaluation of quality nursing care delivered in the respective service areas. Patient care will be delivered by competent Registered Nurses, Licensed Vocational Nurses, Nursing Assistants, and Operating Room Technicians. Job duties will be assigned based on scope of practice, regulatory requirements and competency. The Registered Nurse is responsible for overseeing the nursing process. Non-patient care duties will be performed by Health Technicians (transporters), Monitor Technicians, Medical Office Assistants, and Emergency Department supervising clerks to support and assist patient care providers.

The Education Function is directed by the Clinical Nurse Manager – Education. The Education program consists of staff development and patient/family education. The Nurse Manager is responsible for overall needs assessment, planning, implementation, and evaluation of educational programs designed for the professional and technical growth of the nursing staff and orientation of new nursing staff. The Clinical Nurse Manager is responsible for planning, implementing, and evaluating patient/family education. The Clinical Nurse Manager will network with agency and community resources to provide quality patient education.

The Infection Control Function is coordinated by a qualified Registered Nurse. The Infection Control Nurse is responsible for prevention, surveillance and control infection throughout the hospitals and affiliated clinics.

## **MISSION**

In accordance with the mission of the Ventura County Medical Center and Santa Paula Hospital, the Nursing Department provides nursing care to the patients of Ventura County with emphasis on the indigent population and persons not having access to private health care. The Nursing Department provides quality nursing care in a professional, competent, compassionate manner regardless of age, race, creed, color, gender or economic status. As experts in providing health care, nursing will consistently meet the physical and emotional needs of our patients while respecting the cultural and spiritual needs of the patient and their families.

## **VISION**

As nurses and patient care support staff, we all share the responsibility of creating and promoting a collaborative, supportive and safe working environment that places the patient, family and community in the center. By delivering safe, competent and compassionate services at every opportunity, and by cultivating relationships in the community that allow us to grow, our actions allow development within nursing and promote nursing as a profession that "grows their own."

## PHILOSOPHY

Nursing does not occur in a vacuum. We consistently collaborate, in our practice, with residents, attending physicians, ancillary support and Administration. We believe in:

- Nursing as an art and science that delivers evidence based care across the continuum
- Patients being the center of nursing care
- Being recognized by the community for providing the highest quality nursing care for our patients and their families.
- Promoting patient and family education allowing for the optimal level of health
- Maintaining the nursing process as an integral part of our practice
- Patient focused goals allowing for collaboration from all care providers, the patient and families.
- Ethical and professional behavior allowing for a culture that supports empowerment and accountability.
- Utilizing evidence based practice through continuous quality improvement
- Nursing

## STAFFING

The CNO is responsible for coordinating the overall Nursing Department Staffing Plan. The staffing will be reviewed on an ongoing basis to ensure appropriate staff mix, numbers of staff, and cost effectiveness. Daily staffing will be assessed by the Clinical Nurse Managers, Hospital Nurse Manager and Nursing Supervisors.

All reasonable steps will be taken to assure that sufficient numbers of qualified staff are assigned to assess, identify problems, intervene, evaluate, delegate and coordinate safe patient care. There shall be a documented method of determining staffing requirements based on the assessment of patient acuity/needs and State staffing requirements (refer to policy [108.006 Nurse Staffing and Scheduling](#)).

The positions within the Department of Nursing, are outlined in a position description, this includes the scope, responsibilities, requirements, line of authority and demands of the position. In addition, each position has an evaluation, which includes specifically measurable performance criteria.

## PERFORMANCE IMPROVEMENT

The Nursing department is an integral part of the performance improvement process. Nursing services actively participates in the agency wide Performance Improvement (PI) Program designed to monitor, evaluate and improve the quality and appropriateness of clinical services and patient care by:

- Following the Plan, Design, Study, Act philosophy adopted by the facility
- Identifying opportunities for improvement through a collaborative, interdisciplinary process.
- Implementing solutions and actions, which will bring about desired changes.
- Participate in the PI committees and Task teams as assigned.
- Assist with monitoring to assess for improvement and identify problem areas
- Indicators will be established to monitor in an ongoing manner, and provide linkage between risk management and performance improvement.
- Establishing indicators and thresholds to assist with performance monitoring. The pre-established levels, that when exceeded, may trigger an intensive evaluation. External and internal benchmarking (CORE) will be utilized when appropriate.
- Participate in Sentinel Event task force and root cause analysis as assigned.
- Develop Lean Healthcare management skills to allow for a more streamlined approach to change

The CNO is an active member of the Performance Improvement Coordinating Council (PICC). The Hospital/

Clinical Nurse Managers and Department Managers are active members of the Performance Improvement Teams as appropriate. Staff Members are encouraged to participate on the Performance Improvement Teams.

## NURSING STANDARDS

The Nursing Department will maintain established Standards of Care and Standards of Practice to meet the needs of the patients and their families. The Nursing Departmental Standards will be based on nationally recognized standards and/or community standards when appropriate (refer to policy [108.004 Nursing Standards](#)).

All revision dates:

7/12/2023, 8/9/2022, 8/1/2009, 5/1/2006, 2/1/2005,  
7/1/2001, 4/1/2000, 1/1/1999

### Attachments

No Attachments

### Approval Signatures

Step Description	Approver	Date
Medical Executive Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	5/24/2024
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	5/23/2024
Policy Owner	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	5/23/2024



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**Next Review:** 3 years after approval  
**Owner:** Alicia Casapao: Director of Quality and Performance Improvement  
**Policy Area:** Administrative - Nursing  
**References:**

## 108.021 Pressure Injury Prevention and Wound Management

### POLICY

Ventura County Medical Center and Santa Paula Hospital are committed to providing quality care to all its patients. Risk for pressure injury development will be evaluated upon admission to a nursing care unit as indicated using the age appropriate Braden scale, appropriate tool, or procedure. Based on assessment, a plan of care will be developed and implemented using appropriate prevention and treatment interventions (see appendices). ~~The primary Licensed Practitioner (LP) shall be informed of patient skin integrity issues and documented in the patient's medical record.~~

### PURPOSE

The purpose of this policy ~~and procedure is to~~ establish guidelines for the assessment of risk, early detection, prevention, and identification of ~~occurrence of~~ skin breakdown in ~~hospital~~ hospitalized patients. It also describes interventions, management and documentation of potential or actual cases of alteration in skin integrity during the patient's hospital stay.

**PERFORMED BY: All licensed nursing personnel.**

### RESPONSIBILITY

- The prevention and management of pressure ~~ulcer~~ injury requires interdisciplinary collaboration to identify and manage contributory factors and implement a plan of care that promotes wound healing
- WOUND CARE TEAM**
  - consulted for treatment recommendations
  - responsible for confirming the stage of suspected pressure injuries beyond Stage I
  - will confer with the licensed practitioner (LP) and primary nurse regarding the appropriate treatment to effectively manage the patient's skin breakdown
- The primary ~~Licensed Practitioner (LP)~~ will disclose the occurrence of a pressure ~~ulcer meeting~~ injury that meets the criteria of an adverse event to the patient or designated family member / significant other. The disclosure shall be documented in the Electronic Health Record (EHR). (See also 102.002 Disclosure of Unanticipated Outcomes)

# PROCEDURE:

## Skin and Risk Assessment / Reassessment

### A. Assessment/Reassessment

#### 1. Risk assessment

- a. Use age-appropriate Braden Scale on all inpatients to assess for pressure injury risk (refer to Attachment B and C):

- Utilize Braden Scale for patients greater than 8 years old
- Braden Q Scale for patients 21 days old up to 8 years old
  - On Admission
  - Daily
  - Transfers
  - As needed (PRN) (e.g. decline in patient condition)
  - After prolonged procedure/surgery (longer than 2 hours)

~~Skin assessment, on ALL patients, which includes a head-to-toe, physical inspection of the skin (between skin folds, buttocks, areas under and around respiratory therapy medical devices and medical equipment)~~

- ~~Frequency minimum (may perform more frequently based on patient condition):~~
  - ~~Every 4 hours~~
    - ~~ICU~~
    - ~~PICU~~
    - ~~NICU~~
  - ~~Every shift~~
    - ~~Nursery~~
    - ~~Pediatric~~
    - ~~Post-Partum~~
    - ~~Labor & Delivery~~
    - ~~Med-Surg~~
    - ~~Tele~~
    - ~~DOU~~
    - ~~Behavioral Health~~
- ~~Preventive/protective padding placed over intact, non-broken skin are temporarily removed when performing a skin inspection.~~
- ~~Therapeutic/Immobilization devices, e.g. cervical collars, trach collar, boots, braces, halo vests, and thoracic-lumbosacral orthoses (TLSOs) may require a licensed practitioner's order prior to removal. The device is still to be checked for tightness around skin and bony prominences, moisture, surrounding skin status, and patient comfort.~~

- ~~Perform a skin assessment upon patient's return from prolonged procedures/surgeries.~~
- ~~When there is a decline in patient's condition~~
- ~~Per primary LP order~~
- b. Skin assessment per unit guidelines. Please refer to [Policy 100.015 Patient Assessment and Reassessment](#).
- c. Additional skin assessments may be required under the following conditions:
  - Preventive/protective padding placed over intact, non-broken skin. Remove temporarily when performing a skin inspection
  - Medical devices: check for moisture and tightness around skin and bony prominences
  - Upon patient's return from prolonged procedures/surgeries.
  - As needed based on patient's condition
  - Per LP order
- d. On admission, transfer, and discharge the Four Eyes check shall be performed by two licensed professionals (e.g. Two RNs or One RN/One ~~Nurse Practitioner (NP), Licensed Practitioner (LP), or Physician Assistant (PA)~~ and documented in the electronic health record (EHR), noting the name of the second licensed professional.
- e. In the **Emergency Department**, perform a skin assessment with Four Eyes check as soon as decision to admit to inpatient or observation is made and prior to transfer.
- f. Surgical Department - ~~See Policy S.49 Perioperative Nursing Standards of Practice~~ See Policy [S.49 Perioperative Nursing Standards of Practice](#)

#### **Treatment/Interventions**

~~Registered Nurses (RNs) to initiate Interdisciplinary Plan of Care (IPOC), related to skin integrity, for patients~~

~~with actual or at risk for impaired skin integrity (Braden Score of 16 or less).~~

~~Licensed vocational nurses, nursing attendants, and student nurse workers are to collaborate with the RN ensuring the plan of care compliments the patient's needs and interventions are carried out.~~

#### **B. Treatment/~~Equipment~~ Interventions**

~~Braden Score of 19 or greater~~

- ~~a. Assess for skin integrity risk every shift and as necessary with changes in patient condition~~
- ~~b. Encourage or assist patient to change position every two (2) hours~~
- ~~c. Provide patient/family education~~

~~Braden Score  $\leq$  18 (18 or below)~~

- ~~a. Assist with turning at minimum every two hours.~~
- ~~b. Implement pressure relieving devices:~~
  - ~~i. Mattress overlay~~
  - ~~ii. Heel offloading boots~~
  - ~~iii. Foam wedges~~

- iv. ~~Pillows~~
  - v. ~~Special therapy beds~~
  - vi. ~~Protect skin underneath restrictive devices (i.e. restraints, splints, medical devices/ equipment)~~
  - e. ~~Initiate appropriate care plans in EHR (i.e. Pressure Ulcer Management, Pressure Ulcer Prevention, Impaired Skin Integrity). Update care plans as indicated.~~
  - d. ~~Request a wound care consult, if indicated.~~
  - e. ~~Complete nutritional screening within 24 hours of admission.~~
- ~~Assess the need for measures to control incontinence~~
- ~~External catheter~~
  - ~~Frequent diaper changes~~
  - ~~Barrier creams / barrier cream-infused cleansing cloths~~
  - ~~Linen changes, as needed~~
  - ~~Super absorbent chux pads~~
1. Registered Nurses (RNs) to initiate Interdisciplinary Plan of Care (IPOC), related to skin integrity, for patients with actual or at risk for impaired skin integrity (Braden Score of 16 or less) e.g., Pressure Ulcer Management, Pressure Ulcer Prevention, Impaired Skin Integrity.
  2. ~~Braden Score  $\leq 14$  (14 or below), pressure injury is present:~~
    - a. ~~Initiate a wound care consult as soon as patient is identified as moderate or severe risk (Braden  $\leq 14$ )~~
    - b. ~~Implement Pressure Injury Prevention Measures (see above Section 2)~~
    - c. ~~Initiate a nutrition consult~~
    - d. ~~Initiate order for turn schedule (nurse initiated order in EHR)~~
    - e. ~~Initiate appropriate Interdisciplinary Care Plans (see 2.a.v), and update as indicated~~
    - f. ~~Consult with Wound Care Team for staging of Hospital Acquired Pressure Injuries (HAPI's) or Community Acquired Pressure Injuries (CAPI's) See Attachment A.~~
- of 19 or greater
1. Assess for skin integrity risk every shift and as necessary with changes in patient condition
  2. Encourage or assist patient to change position every two (2) hours
  3. Provide patient/family education
  4. Braden Score < 18 (18 or below)
    - i. Assist with turning at minimum every two hours.
    - ii. Implement pressure relieving devices as indicated.
    - iii. Request a wound care consult, if indicated.
    - iv. Complete nutritional screening within 24 hours of admission.
  5. Assess the need for measures to control incontinence



6. Braden Score < 14 (14 or below) and/or pressure injury is present:

- i. Initiate a wound care consult as soon as patient is identified as moderate or severe risk (Braden < 14)
- ii. Implement Pressure Injury Prevention Measures
- iii. Initiate a nutrition consult
- iv. Initiate order for turn schedule (nurse-initiated order in EHR)
- v. Initiate appropriate IPOCs and update as indicated
- vi. Consult with Wound Care Team for staging of Hospital Acquired Pressure Injuries (HAPI's) or Community Acquired Pressure Injuries (CAPI's) See Attachment A.

7. Patients with medical devices

8. End-of-Life Patients

- i. Reposition prn to maintain patient's comfort

~~Patients with medical devices~~

- ~~a. RN to ensure that skin in contact with medical devices are padded accordingly and observed for skin breakdown. Examples of devices (nasal cannula, nasogastric tubes, tracheostomy, cervical collar, brace, splints, CPAP, sequential compression device (SCD), gastric tube, boots, external catheters)~~

~~End-of-Life Patients~~

- ~~a. Reposition and turn the patient periodically to maintain patient's comfort.~~

**C. Documentation**

~~Skin assessment on admission, every shift, transfer to another unit, and with changes in patient condition (as indicated)~~

- 1. Skin and Braden assessment on admission, upon transfer, and per unit guidelines - [Policy 100.015 Patient Assessment and Reassessment](#).
- 2. Photos taken
- 3. Nursing progress notes: Describe wound(s) in detail and consult with Wound Care Team for staging beyond Stage 1

~~Braden Scale assessment~~

- 4. Interdisciplinary Plan of Care (IPOC)

~~All pertinent information related to skin abnormalities (e.g., skin integrity under medical devices, incision/wound if present)~~

- 5. Pressure injury prevention interventions ~~(e.g., positioning devices, pressure relieving devices, special surfaces in use, position changes, patient's ability to turn)~~

~~Photos taken~~

- 6. LP that was notified
- 7. Patient/Caregiver/Family education
- 8. Patient response to intervention(s)
- 9. LP Disclosure to patient/family

## D. Photos

1. Measure and photograph any skin impairment on:

- Admission
- Upon discovery of a new skin impairment
- When significant changes occur
- Weekly ~~(Wound Wednesdays)~~
- ~~Within a week of~~ Prior to discharge or transfer to outside facility
- Photos must include medical record number, date and time
- ~~For photos that include a ruler, document measurement in iView~~ Only document measurements confirmed by ruler

### Notifications

1. ~~Notify Primary Licensed Practitioner (not limited to) of:~~

- ~~▫ Wound/skin abnormalities present on admission and upon discovery~~
- ~~▫ Deterioration of existing wound/skin abnormality~~
- ~~▫ Need for possible debridement~~
- ~~▫ Signs of infection~~
- ~~▫ Orders for wound treatment~~

## E. Reporting

1. All actual or suspected pressure injuries must be reported immediately to department manager or designee. (See attachment D - HAPI Reporting Workflow and attachment D.1 CAPI Reporting Workflow)
2. All actual or suspected pressure injuries must be reported via the notification system, utilizing the "Skin Integrity" category (See attachment E - Skin Integrity Reporting Workflow).
3. Notify primary LP
4. Notify unit leadership
5. Notify Wound Care Team
6. ~~Wound Care RN to activate reporting workflow (See attachment)~~ Activate reporting workflow upon confirmation of pressure injury reporting criteria - See Attachment D or Attachment D1.

## References

1. ~~Preventing Pressure Ulcers in Hospitals. What are the best practices in pressure ulcer prevention that we want to use? October 2014. Agency for Healthcare Research and Quality. Retrieved from: <http://www.ahrq.gov/professionals/systems/hospital/pressureulcertoolkit/putool3.html>~~
2. ~~Lyder CH, Ayello EA. Pressure Ulcers: A Patient Safety Issue. In Hughes RH, editor. Patient Safety and Quality: An Evidence-Based Handbook for Nurses. Rockville, MD; Agency for Healthcare Research and Quality (US); 2008 April. Chapter 12. <http://www.nlm.nih.gov/books/NBK2650>~~
3. ~~Wolters Kluwer Health, Inc. (2004). By the Numbers: Braden Score Interventions. Advances in Skin & Wound Care, 17(3), 150. [http://www.journals.lww.com/aswcjournal/citation/2004/04000/By\\_the\\_Numbers\\_Braden\\_Interventions.16.aspx](http://www.journals.lww.com/aswcjournal/citation/2004/04000/By_the_Numbers_Braden_Interventions.16.aspx)~~

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1. Preventing Pressure Ulcers in Hospitals. Content last reviewed February 2024. Agency for Healthcare Research and Quality, Rockville, MD. <https://www.ahrq.gov/patient-safety/settings/hospital/resource/pressureulcer/tool/index.html>
2. The Joint Commission. (2018). Preventing pressure injuries. *Quick Safety Issue 25*.<https://www.jointcommission.org/-/media/tjc/documents/newsletters/quick-safety-issue-25-july-2016-final2-w-addendumrev.pdf>
3. Curley et al., (2018). Predicting pressure injury risk in pediatric patients: The Braden Q Scale. *The Journal of Pediatrics*, 192(E2), 189-195. <https://doi.org/10.1016/j.jpeds.2017.09.045>

All revision dates:

5/24/2024, 9/12/2023, 1/10/2023, 9/13/2022, 1/28/2020, 2/1/1992

## Attachments

Attachment A - Pressure Injury Staging  
Attachment B - Braden Scale for Predicting Pressure Sore Risk.pdf  
Attachment C - Braden Q Scale.pdf  
Attachment D - HAPI Reporting Workflow.pdf  
Attachment D.1 - CAPI Reporting Workflow.pdf  
Attachment E - Skin Integrity Workflow.pdf

## Approval Signatures

Step Description	Approver	Date
Medical Executive Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	5/24/2024
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	5/24/2024
Policy Owner	Alicia Casapao: Director of Quality and Performance Improvement	5/24/2024



## VENTURA COUNTY HEALTH CARE AGENCY

**Origination:** 5/15/1996  
**Effective:** Upon Approval  
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**Last Revised:** 4/8/2024  
**Next Review:** 3 years after approval  
**Owner:** Kelly Johnson: Director, ICU/  
DOU/Telemetry  
**Policy Area:** Intensive Care Unit  
**References:**

# ICU.24 Adult Intensive Care Unit Admission and Scope of Service

## POLICY:

The purpose of the Intensive Care Unit (ICU) is to provide the critically ill patient with a consistently high level of quality care which is aimed at the treatment of life-threatening illnesses and the maintenance of all physical and mental functions of the individual during the illness phase. It is the intent of the unit to return each patient to an optimum state of well-being where, given the limitations of his/her disease process, he/she can lead an independent, satisfying and productive life.

## PROCEDURE:

### Equipment:

- A. All ICU patient rooms are equipped with preliminary emergency equipment (e.g., oxygen outlets, compressed air and suction, electrocardiography (ECG) monitor, and code blue alarm notification system).
- B. The emergency cart within the unit is equipped with appropriate Advanced Cardiac Life Support (ACLS) drugs and equipment.
- C. Each patient room is equipped with a patient call light.

### ORGANIZATION:

- A. The ICU is guided by the Critical Care Committee, a multidisciplinary committee including the Medical Staff and the ICU Medical Director. The ICU is directed and staffed according to the nature of the critical patient care needs anticipated and the scope of services offered.
  - Trauma patients requiring ICU admission must be admitted to, or be evaluated by, a surgical service within 24 hours.
- B. The ICU Committee is responsible for the efficient development, operation, and improvement of the unit.
- C. The ICU Committee chairperson is appointed by and responsible to the Chief of Staff. The Committee chairperson has received special training, acquired experience and demonstrated competence in critical care medicine.
- D. The ICU Committee Chair works collaboratively with the ICU nursing leadership (e.g., the ICU Nursing

Director and the Clinical Nurse Specialist) to assist in writing, reviewing and approving policies and procedures.

## STAFFING

- A. As much as possible, staffing needs for each shift are predicted and planned for by consideration of census and individual patient acuity. Age appropriate care shall be provided and documented according to age specific competency care standards.
- B. As patient acuity dictates, consideration will be given for 1:1 Registered Nurse (RN) assignments.
- C. Upon hire, the ICU RN must take and pass a written ECG test. (Passing score = 80%)
- D. Annually, the ICU RN must attend and complete a skills competency assessment conducted by the unit CNS.
- E. All ICU nurses must be certified in ACLS within 6 months of hire.

## ADMISSION POLICY AND CRITERIA

- A. Admission to the ICU shall be on the acceptance of the attending physician or his/her designee. It is the responsibility of the physician to advise the patient and his/her relatives of the need for critical care.
- B. Critically and seriously ill patients who require specialized medical and nursing care shall be admitted. (see attached spreadsheet for admission criteria.)

## DISCHARGE CRITERIA

Stability for transfer out of the unit will be based on the ICU clinician's judgment, including but not limited to hemodynamic, ventilatory, and neurologic criteria.

All revision dates:

4/8/2024, 1/12/2024, 6/14/2023, 1/1/2017, 12/1/  
2013, 6/1/2013, 12/1/2009, 5/1/2006, 5/1/2004, 5/1/  
2001, 5/1/1998

## Attachments

[Updated ICU and DOU admission criteria 10.11.23 \(002\).xlsx](#)

## Approval Signatures

Step Description	Approver	Date
Medicine Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	4/8/2024
Policy Owner	Kelly Johnson: Director, ICU/DOU/Telemetry	4/8/2024



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Owner Erlinda Roxas:  
Director,  
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Policy Area Laboratory  
Services - Blood  
Bank

## L.BB.21 Limiting Transfusion of Group O Rh Negative Red Blood Cells

### PRINCIPLE:

Group O Rh negative (O Neg) red blood cells (RBC) may be safely transfused to recipients of any ABO group and Rh type. This has led to an over reliance on O Neg. O Neg RBCs are a precious resource occurring in just 6-8% of the donor pool. The American Association of Blood Banks (AABB) has released recommendations for hospitals to maintain adequate inventory of O Neg RBC.

We shall follow AABB recommendations and community standards to support the transfusion requirements of our population. Routine, urgent, and emergency use of O Neg RBC is delineated and recommended alternatives are described in this policy.

1. Special attention should be given to women of childbearing potential to reduce the risk of immune response against Rh antigens, that can cause hemolytic disease of the newborn.
2. The goal is to avoid inappropriate use of O Neg RBCs and to maintain O Neg inventory at an adequate level.

**The prompt collection of a patient specimen and rapid pre-transfusion blood bank testing are key to provide ABO/Rh type-specific/type-compatible RBCs.**

### POLICY:

#### Routine: Group O Rh Negative Red Blood Cells

O Neg RBC are always indicated when the recipient is group O Rh Negative, and in several neonatal

conditions

1. All recipients known to be Group O Rh Negative
2. Rh Negative neonates of any blood group (< 4 month of age).
3. Rh positive neonates of any blood group with confirmed or suspected Rh related hemolytic disease of the newborn
4. All intrauterine transfusions.

## Emergency: Group O Rh Negative Red Blood Cells

- A. When blood group is not yet known but emergency transfusion is indicated, Group O Neg RBC is dispensed in several emergency clinical scenarios. **The prompt collection of a patient specimen and rapid pre-transfusion testing are key to provide ABO/Rh type-specific/type-compatible RBCs.** Change to type-specific/type-compatible units immediately when the patient's ABO/Rh type becomes known. Consult a pathologist for alternatives to O Neg RBCs when appropriate.
- B. Trauma Code Yellow Tier 1 Adult/Ped:
  1. As provided for in policy [T.01 VCMC Trauma Response Plan](#), O Neg RBCs would be dispensed AFTER whole blood resuscitation and until the ABO/Rh is completed only in:
    - a. Patients <18 years of age.
    - b. Females 18-55 years of age, when whole blood is not available.
    - c. For non-trauma MTP initial resuscitation when whole blood is not available.
- C. Massive Transfusion Protocol
  1. As provided for in policy [T.02 Adult Massive Transfusion Protocol](#), O Neg RBC would be dispensed until ABO/Rh completed
    - a. Patients <18 years of age
    - b. Females 18-55 years of age, when whole blood is not available.
  2. Once ABO/Rh is known, switch to type compatible RBC.
- D. Code Maternity
  1. Two (2) units of O Neg RBCs will be dispatched in the cooler upon the overhead paging of "Code Maternity" as provided for in policy [OB.09 Code Maternity](#).
  2. Many pregnant persons have blood type known. When emergency is less dire, type compatible is preferred over O Neg RBC. Crossmatch when available.
- E. Multiple Casualty Incidence (MCI) - Tier 1 Adult/Ped
  1. As provided for in policy [T.13 Multiple Casualty Incident \(MCI\)](#).
    - a. O Neg RBCs shall be prioritized for females presumed of childbearing potential, though whole blood may be administered.

2. If the supply of Rh-negative blood runs out and the patient may die, give Rh-positive blood.

## Emergency: Group O Rh Positive Whole Blood and Red Blood Cells

- A. When blood group is not yet known but emergency transfusion is indicated, Group O Rh positive (O Pos) whole blood or RBCs are dispensed for the following scenarios:
  1. Trauma Code Yellow Tier 1 Adult/Ped:
    - a. As provided for in policy [T.01 VCMC Trauma Response Plan](#):
      - i. O Pos **whole blood** are indicated for:
        - a. Patients  $\geq 18$  years of age.
      - ii. When whole blood is not available, O Pos **RBCs** are indicated for:
        - a. Males  $\geq 18$  years of age.
        - b. Females  $>55$  years of age.
    - b. Policy [T.01 VCMC Trauma Response Plan](#) shall govern extension of **O Pos whole blood** for younger patients.
  2. Massive Transfusion Protocol (MTP)
    - a. As provided for in policy [T.02 Adult Massive Transfusion Protocol](#), for the indicated patients, O Pos whole blood and RBCs would be dispensed until ABO/Rh completed. AFTER O Pos whole blood is transfused and until ABO/Rh obtained, O Pos RBCs are dispensed for:
      - i. Males  $\geq 18$  years of age
      - ii. Females  $>55$  years of age
      - iii. Any patient, if O Neg runs out.
        - a. Blood Bank staff shall contact the Pathologist as soon as possible and document all actions taken. A Deviation of Standard Operating Procedure Form should be completed and submitted to the Pathologist at the earliest time.
    - iv. During ongoing MTP, for patients in 'i' or 'ii', do NOT switch to O neg RBC, even for Rh negative patients.
- B. When dispensing Rh-positive units of red blood cells, enter the mnemonic GRHPB (Group Rh Positive Blood) in the Blood Bank Comments in Patient Product Inquiry application.
- C. During times of extreme O Neg shortage, O Neg will be prioritized for O Neg females of childbearing potential ( $\leq 55$  years old) and other Group O Pos patients may receive O Pos.



# Urgent Group O Rh Negative Substitute

- A. RBCs of recipient's blood type, especially with special requirements, may not be available in a reasonably safe time.
  1. Patient with antibodies to RBC antigens. Type-specific phenotype-compatible products should be used whenever possible. O Neg RBCs may be used when it is the only phenotype-compatible blood available.
    - a. When time is not crucial, provider should contact Blood Bank to arrange for needed special inventory.
  2. Uncommonly, Group compatible Rh negative RBC may not be available, O Neg RBC may be used.
  3. Irradiation, age of unit in neonates, Cytomegalovirus seronegative, may also not be available in a reasonable safe time with recipient's blood type.
    - a. Consider O Pos before O Neg.
    - b. Consult pathologist as needed for alternatives.
    - c. When time is not crucial, provider should contact Blood Bank to arrange for needed special inventory.

## Tier 1 Emergency Release RBC Algorithm

The following algorithm is extracted from policy [T.01 VCMC Trauma Response Plan](#) for whole blood/ RBCs:

Patients <18 years	Females 18-55 years	Males ≥18 years	Females >55 years
O Neg RBCs	Whole Blood	Whole Blood	Whole Blood
When Low Titer O Positive Whole Blood is Not Available:			
O Neg RBCs	O Neg RBCs	O Pos RBCs	O Pos RBCs

### All Revision Dates

6/4/2024, 9/1/2016

### Approval Signatures

Step Description	Approver	Date
Laboratory Services Department	Erlinda Roxas: Director, Laboratory Services	Pending

Laboratory Services  
Department

Brad Adler, MD: Medical  
Director, Laboratory Services

Pending

COPY



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Next Review 2 years after approval

Owner Erlinda Roxas:  
Director,  
Laboratory  
Services  
Policy Area Laboratory  
Services - Blood  
Bank

## L.BB.65 Release of Uncrossmatched Blood

### PRINCIPLE:

When blood is urgently needed, the patient's physician must weigh the risk of transfusing uncrossmatched or partially crossmatched blood against the risk of delaying transfusion until compatibility testing is complete.

### BACKGROUND:

The most frequent use of uncrossmatched blood is for a Tier 1 Adult Trauma code activation. Low Titer O Positive Whole Blood is the default product and follows with Attachment A - Emergency Release Algorithm found in policy T.01 VCMC Trauma Response Plan. The highest use of uncrossmatched blood is with adult massive transfusion protocols (MTP) as detailed in policy T.02 Adult Massive Transfusion Protocol. The products are dispensed according to sex and age.

### POLICY:

If transfusion is deemed medically necessary and blood is released before pre-transfusion testing is complete, the records must contain a signed statement from the requesting physician indicating that the clinical situation was sufficiently urgent to require release of blood before completion of compatibility testing. Such a statement does not need to be obtained before a lifesaving transfusion takes place.

When urgent release is requested, the blood bank staff should take the following actions:

1. If the patient's ABO group is unknown, group O red blood cells should be issued as follows:
  - a. Issue uncrossmatched group O RBCs if the patient's ABO group is unknown. It is preferable to give O Negative blood if the recipient's type is unknown, especially if the patient is a female of childbearing potential.

- i. Follow the algorithm in attachment A to determine the release of O RBCs with the Rh determined by the age and gender of the patient.
  - ii. O Negative RBCs can be issued when a patient's age, gender, and identification are not known.
2. If there has been time to confirm the recipient's ABO group, the transfusion service should issue ABO- and Rh-compatible blood.
3. Place an "Uncrossmatched Blood" sticker prominently on the front of the unit.
4. Begin and complete compatibility testing promptly. If incompatibility is detected, the patient's physician and the pathologist should be notified.

## SPECIMEN COLLECTION: N/A

### MATERIALS:

1. "***Uncrossmatched Blood***" stickers



2. Large 9x12 Ziploc bags.
3. Small 7x9 Ziploc bags.
4. "***ABO GROUP CONFIRMED/Rh OF NEGATIVE UNITS CONFIRMED***" stickers.



5. Safe-T-Vue blood temperature indicators.
6. Gel refrigerant cold packs and blue ice blocks.
7. Blood transport coolers.
8. Deviation from Standard Operating Procedures Form
9. Emergency Issue Blood Product Form (Computer Down Form is required)

## PROCEDURE:



### BLOOD BANK INVENTORY

1. Two (2) units of thawed AB plasma should be kept on hand in preparation for Tier 1 Pediatric Traumas, Pediatric Massive Transfusion Protocols, and Code Maternity events.
2. In preparation for Tier 1 Adult Traumas and Adult Massive Transfusion Protocols, four (4) liquid or thawed Group A plasma should be kept on hand, subject to modification by joint conference of Trauma service and Blood Bank leadership.
3. Whole Blood is limited by manufacturing from Vitalant. There is no minimum on hand. To minimize waste, as whole blood inventory nears expiration, efforts are encouraged to use before expiration such as use in non-trauma Group O positive recipients.
4. A minimum of two (2) units of Group O negative RBCs should be kept on hand in designated space in Blood Bank. An additional four (4) units of combined whole blood or Group O RBCs

shall be reserved for uncrossmatched emergency release at all times.

## PREPARATION OF RED BLOOD CELLS FOR RAPID EMERGENCY RELEASE

Approximately 6 units of uncross matched O Negative and O Positive red blood cells will be prepared and ready for issue at all times. These units will be segregated and placed in separate designated areas in the refrigerator.

Step	Action	Comment
1	Remove one (1) refrigerant cold pack from the refrigerator	
2	Remove one (1) group O RBC from the general inventory in the refrigerator and place it on the refrigerant cold pack.	Choose the longest dated units to avoid short dates from expiring on the emergency release shelves.
3	Regroup the unit if not already done and attach a yellow sticker denoting "ABO Group Confirmed/Rh of Negative units confirmed"	
4	Remove one (1) Safe-T-Vue blood temperature indicator from the refrigerator and place on the unit and activate prior to placing the unit back in the refrigerator.	SOP 7.6.1 <i>Safe-T-Vue Blood Temperature Indicators</i>
5	Two (2) segments will be removed from each group O RBC and labeled with a donor identification number label from the back of the respective unit.	<b>NOTE:</b> Each labeled segment should indicate a container number if appropriate
6	The labeled segments will be placed into a small Ziploc bag and the Ziploc bag attached to the unit with a cable tie.	
7	Place an "Uncrossmatched Blood" sticker on the unit	
8	The RBC unit, with the attached Ziploc bag will be placed on the appropriate emergency release shelf in the blood product refrigerator	
9	At the time of issue, the small Ziploc bag will be removed and remain in the blood bank.	Staple the bag to the dispense packing form until the units are either returned or crossmatching required.

### ISSUE OF EMERGENCY RELEASE UNCROSS MATCHED RED BLOOD CELLS:


## O NEGATIVE

Step	Action	Comment
------	--------	---------

1	Emergency release uncross matched O Negative RBCs may be released to a member of the medical or nursing staff without presentation of a blood pickup request or addressograph label bearing the patient's first and last name and medical record number.	<ul style="list-style-type: none"> <li>• Patient ABO group unknown</li> <li>• Age and Gender Unknown</li> <li>• The initial cooler for the paging "<b>Code Yellow Tier 1 Adult/Ped</b>" will be two (2) O Negative RBCs and two AB plasma <u>or two (2) units whole blood</u> as outlined in the <u>Trauma-policy T.01 VCMC Trauma Response Plan.01, VCMC Trauma Response Plan.</u></li> <li>• The MCI activation will be a cooler with two (2) O Negative RBCs and two (2) AB Plasma <u>or two (2) units whole blood</u> as outlined in the <u>Trauma-policy T.13 Multiple Casualty Incident (MCI).13, Multiple Casualty Incident (MCI).</u></li> <li>• The cooler for "<b>Code Maternity</b>" should contain 2 units of O Negative RBCs as outlined in <u>OB policy "Code Maternity" OB.09 Code Maternity.09</u></li> </ul>
2	The ziplock bag with two labeled segments must be removed from each unit before they are issued.	One segment is used in the crossmatch and both are saved along with the specimen for 14 days.
3	Each unit(s) should be labeled with an " <b>Uncrossmatched Blood</b> " red sticker.	
4	Issue the blood to the transporter. The transporter must be a member of the VCMC/SPH nursing or medical staff (MD/ <u>DO</u> /NA/MOA/RN/LVN).	<p>Dispense and Assign application – Emergency dispense task</p> <p>SOP 7.5 <b>Supplying Blood in Blood Transport Coolers</b> if multiple units are to be issued)</p>
5	A visual inspection of the appearance of the unit must be performed and documented.	SOP 7.6 <b>Visual Inspection of Blood Components)</b>
6	The Blood Bank Technologist issuing the unit will sign and indicate the time of issue on the emergency transfusion tag	
7	The transporter will sign and indicate the time of receipt of the blood for transport on the emergency transfusion tag.	
8	The emergency transfusion tag will be attached to the blood product unit with a cable tie.	All transfusion tags should remain attached to units for the duration of the transfusion.

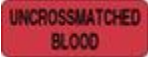
## ISSUE OF EMERGENCY RELEASE UNCROSS MATCHED RED BLOOD CELLS:

### GROUP O, Rh DETERMINATION BASED ON AGE AND GENDER (Attachment A)

Children <del>Age</del> <18 <u>years</u>	Females <55 ( <del>child-bearing age</del> )	Females >55 <u>18-55</u> <u>years</u>	Males $\geq$ 18 <u>years</u>	Females >55 <u>years</u>
O Negative	O <u>Positive Whole Blood or</u> O Negative <u>PRBC</u>	O Positive Whole Blood or PRBC	O Positive Whole Blood or PRBC	
Step	Action	Comment		
1	Emergency release <del>uncross</del> <del>matched</del> <u>uncrossmatched</u> group O Whole Blood or RBCs and AB Plasma, Rh based on age and gender, may be released to a member of the medical or nursing staff upon presentation of a blood pick up request or an addressograph label bearing the patient's first and last name and medical record number.	Patient's ABO group is unknown The release of group O Positive/O Negative Whole Blood or RBCs and AB Plasma, prior to the receipt of a patient specimen, will follow the algorithm as outlined above and in attachment A as outlined for trauma.		
2	The Ziploc bag with two labeled segments must be removed from each unit before they are issued.	One segment is used in the crossmatch and both are saved along with the specimen for 14 days.		
3	Each unit(s) should be labeled with an " <b>Uncrossmatched Blood</b> " red sticker.			
4	Issue the blood to the transporter. The transporter must be a member of the VCMC/ SPH nursing or medical staff (MD/ <u>DO</u> /NA/ MOA/RN/LVN).	Dispense and Assign application – Emergency dispense task  SOP 7.5 <b>Supplying Blood in Blood Transport Coolers</b> (if multiple units are to be issued)		
5	A visual inspection of the appearance of the unit(s) must be performed and documented.	SOP 7.6 " <i>Visual Inspection of Blood Components</i> "		
6	The blood bank staff issuing the unit will sign and indicate the time of issue on the emergency transfusion tag.			
7	The transporter will sign and indicate the time of receipt of the blood for transport on the emergency transfusion tag.			
8	The emergency transfusion tag(s) will be attached to the respective blood product unit with a cable tie.	All transfusion tags should remain attached to units for the duration of the transfusion.		

## ISSUE OF EMERGENCY RELEASE UNCROSS MATCHED RED BLOOD CELLS:

# TYPE SPECIFIC/TYPE COMPATIBLE

Step	Action	Comment
1	Emergency release uncrossmatched type specific/type compatible red blood cells will be released to a member of the VCMC/SPH nursing or medical staff (MD/DO/NA/MOA/ RN/LVN) upon presentation of an addressograph label bearing the patient's first and last name and medical record number.	Patient ABO group known based on current testing
2	The Ziploc bag with two labeled segments must be removed from each unit before they are issued.	One segment is used in the crossmatch and both are saved along with the specimen for 14 days.
3	Each unit(s) should be labeled with an "Uncrossmatched Blood" red sticker.	
4	Issue the blood to the transporter. The transporter must be a member of the VCMC/SPH nursing or medical staff (MD/DO/NA/MOA/ RN/LVN).	Dispense and Assign application – Emergency dispense task  SOP 7.5 <i>Supplying Blood in Blood Transport Coolers</i> (if multiple units are to be issued)
5	A visual inspection of the appearance of the unit must be performed and documented on the Unit Issue Form.	SOP 7.6 <i>Visual Inspection of Blood Components</i>
6	The Blood Bank Technologist issuing the unit will sign and indicate the time of issue.	
7	The transporter will sign and indicate the time of receipt of the blood for transport	
8	The emergency transfusion tag will be attached to the blood product unit with a cable tie.	The emergency tag should remain attached to the unit for the duration of the transfusion.

**CALIBRATION: N/A**

**CALCULATIONS: N/A**

**QUALITY CONTROL: N/A**

**RESULTS**

Step	Action	Comment
1	Once a patient specimen is received, complete all pre-transfusion testing.	The attending physician or anesthesiologist and the pathologist will be notified



		immediately when a positive antibody screen or incompatibility is detected.
2	When compatibility testing has been completed for all emergency released units that were transfused, notify the requesting physician of the results.	
3	Staple the crossmatch tag to the original dispense packing list	
4	Associate all emergency released units to the patient.	<p>Directions for reconciling "Products Dispensed to Unknown Patient"</p> <ol style="list-style-type: none"> <li>1. Correct Inventory application</li> <li>2. Choose emergency dispense tab</li> <li>3. Enter unit number</li> <li>4. Enter patient MRN#</li> <li>5. Save</li> </ol>

## PROCEDURE NOTES:

1. The attending physician or anesthesiologist will be notified immediately when incompatibility or a positive antibody screen is detected.
2. The pathologist will be notified immediately when incompatibility or a positive antibody screen is detected. The pathologist will communicate with the attending physician or anesthesiologist and determine the appropriate red blood cells to be released by the blood bank staff. Any deviations from approved policies and procedures that are approved by the pathologist will be documented on a "Deviation from Standard Operating Procedure" form and signed by the pathologist involved in the case.
3. The patient should be switched to O Positive units as soon as the age and gender of the patient is known, as outlined in attachment A and upon presentation of patient identification.
4. Previous Blood Bank records must **not** be used to determine which blood group to issue, nor may the patient's blood group be taken from other records such as blood donor cards, dog tags, etc.

## REFERENCES:

1. Standards for Blood Banks and Transfusion Services. Bethesda, MD: American Association of Blood Banks, Current Edition.
2. Roback, John D. Technical Manual. Bethesda, MD: American Association of Blood Banks, 2014. Current Edition.
3. United Blood Services. (n.d.) *A new standard of transfusion care: appropriate use of O-negative red blood cells*. Scottsdale, Arizona.

All Revision Dates  
6/4/2024, 7/26/2022, 9/28/2016

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Attachments

[Attachment A - Emergency Release Algorithm](#)  
[Image 01](#)

Approval Signatures

Step Description	Approver	Date
Laboratory Services Department	Erlinda Roxas: Director, Laboratory Services	Pending
Laboratory Services Department	Brad Adler, MD: Medical Director, Laboratory Services	Pending

COPY



## VENTURA COUNTY HEALTH CARE AGENCY

**Origination:** 4/1/1994  
**Effective:** Upon Approval  
**Last Approved:** N/A  
**Last Revised:** 5/7/2024  
**Next Review:** 3 years after approval  
**Owner:** Kristina Swaim: Clinical Nurse Manager, OB  
**Policy Area:** Maternal Child Health  
**References:**

# MCH.13 Newborn and Infant Hearing Screening

## POLICY:

This program is to identify those newborns that require further auditory assessment in order to rule out possible hearing deficits. Screening results are communicated in writing to the Primary Care Physician (PCP) who will follow the infant after discharge. Ventura County Medical Center & Santa Paula Hospital will perform hearing screening services in accordance with the Inpatient Provider Standards and in accordance with California Health and Safety Code Sections relating to newborn hearing screening with amendments required by Assembly Bill (AB) 2651, Chapter 335 (September 19, 2007). Hospitals may outsource the services to an outside vendor, and will notify SCHCC (Southern California Hearing Coordination Center) of any changes in services.

## PROCEDURE:

- All newborns who are admitted to the newborn services will be given a hearing screen prior to discharge.
- All parents of newborns admitted to Couplet Care (CC) or Neonatal Intensive Care Unit (NICU) may waive the Newborn Hearing Screen (NBHS) on the grounds that the tests conflict with his or her beliefs or practices. A declination must be signed by parent(s) prior to discharge.
- Hearing screening for newborns is available 7 days / week.  
~~NICU will only have Auditory Brainstem Response (ABR) screening.~~

## GUIDELINES:

### Staff

1. The **NBHS PROGRAM DIRECTOR** is a Registered Nurse on staff who is ultimately responsible for the management of the program which includes the following:
  - a. Present data to the Pediatrics Committee and NICU Steering Committee meetings annually.
  - b. Notifies the SCHCC (Southern California Hearing Coordination Center) within one (1) week of any staff changes related to the program. Notifies the SCHCC within a week of inactive Data Management Service (DMS) users and request logins for new DMS users.
  - c. May delegate to Hearing Screening Coordinator (HSC) the following:
    - i. Training and oversight of the individuals performing the screening.
    - ii. Reporting of required information to SCHCC.

- iii. Staff and physician education.
  - iv. Coordination of services and follow-up.
2. California Children's Service (CCS) paneled **AUDIOLOGIST or equivalent** will be available at least annually, on a consultant basis, as needed to:
- a. Aid in the assessment and evaluation of the program.
  - b. Inspect and approve equipment.
  - c. Review and approve the program at least annually.
  - d. Review and approve NBHS policies & procedures.
3. **HEARING SCREENING COORDINATOR (HSC)**
- a. Is accountable to the Program Director.
  - b. Is the data manager and will ensure that all infants are entered into the Data Management Service (DMS) daily.
  - c. Checks weekly the NICU admission logbook and the CC screening logbook against the DMS entries to identify missed screen.
  - d. Will be responsible for troubleshooting problems. Will be the contact person for the HCC when issues arise with the data transmission or data entries.
  - e. Will manually enter data every day at the end of the shift into the DMS.
  - f. Oversees the daily functioning of the NBHS Program, which may include the training and oversight of the individuals performing the screening, parent, medical and nursing staff education, reporting/data management, quality assurance, coordination of services and infant follow-up.
  - g. Maintains a stock of supplies and orders before supply is down to a one month supply.
  - h. Maintains the Newborn Hearing Screening (NBHS) logbook.
  - i. Shall report changes in NBHS Program Director to the HCC within 1 week of the change.
4. **HEARING SCREENERS (HS)** may be a Registered Nurse (RN), Licensed Vocational Nurse (LVN), Certified Nursing Assistant or unlicensed assistant that has documented training in the use of the hearing screening equipment and have met the competency criteria established by the Inpatient Infant Hearing Screening Provider Standards.
- a. Hearing Screen Technician will ~~do~~ only perform the screening ~~only~~. The staff RNs ~~and~~ or LVNs assigned to care for the baby will provide all parent education and results.
  - b. The Hearing Screen Technician will have individual training; complete initial and annual competency testing. Initial training includes viewing a hearing screening video, reading selected training materials and articles, including these Policies and Procedures, observing a hearing screen and doing return demonstrations during preceptor orientation. Competency records will be located in the employee file in the appropriate manager's office.

## Equipment

The NBHS Program will use Screening Auditory Brainstem Response (SABR) equipment which has been FDA approved to detect mild (30-40 dB) hearing loss in infants and newborns. Each screening results in either a PASS or REFER.

1. The hearing screening equipment includes the following:
  - a. Cable assemblies
    - i. Electrode yoke attachment
    - ii. 3 electrodes (green, white, black)
    - iii. Bioamplifier
    - iv. Isolation transformer
    - v. Earphone
  - b. Single-patient use supplies
    - i. Disposable ear tips or couplers
    - ii. Self adhering disposable electrodes
2. Biomedical Department will do a yearly check on the hearing screening equipment. Logs are maintained regarding annual calibration dates, repair or replacement of parts and are available in that department.
3. In case of malfunction of screening equipment, the screener will notify the HSC for backup/loaner equipment. Equipment will be replaced within 24 hours. If no equipment is available within 24 hours, the SCHCC will be notified by phone within the next business day.
4. The equipment is stored in a secure area of the Couplet Care/NICU.

## PROCEDURE

### A. NBHS Logbook

1. The NBHS Logbook will be maintained by the HSC, to include at the minimum the following: name of newborn, date of hearing screen, medical record number, date of birth, hearing screening result(s) and follow-up appointment information. The hearing screener will enter on a daily basis all the babies from both Couplet Care and the NICU admission logbook into the DMS.
2. The NBHS Logbook will be kept with the hearing screening equipment. The HSC will verify completeness of the NBHS logbook by correlating with the Labor & Delivery, Couplet Care & NICU admission logbook at least weekly to ensure missed babies are identified in a timely manner.
3. All newborns admitted to Couplet Care and the NICU will be entered into the NBHS Logbook.

### B. Hearing screening procedure

1. See manufacturer's procedure
2. Wash hands prior to and after handling each infant
3. Uses Universal Precaution
4. Cleans equipment and disposes of supplies after each use.

### C. Couplet Care and NICU Procedure

Parents will receive a copy of the introductory CA NBHS Program ("Newborn Hearing Screening Program") prior to screening in the language of their preference. Hearing screening shall be provided to all newborns with physician's admission order for NBHS. NICU infants will have a current physician's order prior to screening. Consent is the signed general admissions consent. Infants in Couplet Care are screened at the mother's bedside or in a quiet area of the unit. Infants in NICU are screened at infant's crib side

1. Select a baby appropriate for screening by the following criteria:
  - a. There is a NBHS physician order.
  - b. Infant is close to discharge.
  - c. Infant is sleeping or quiet state, usually a half an hour to an hour after last feeding.
  - d. Infant is medically stable for screening.
2. The hearing screening process and documentation:  
By Hearing Screener:
  - If screen result is PASS, give NBHS Pass Brochure to assigned RN to give to parents. Enter into DMS the required fields for pass results. Pass results print out will be scanned into the electronic health record (EHR).
  - If baby REFERS, check equipment and newborn and re-screen immediately prior to discharge. Only two (2) screening tests should be performed. Schedule an outpatient follow up screening to take place within four (4) weeks of discharge. The outpatient appointment schedule is kept in Couplet Care. Refer results print out will be scanned into the EHR.
  - Place the appointment information and the hearing screen results in EHR
  - Write the appointment information on the back of the NBHS Refer brochure. The brochure is given to the assigned RN to give to the parents.
  - Verify with the parents their address and phone number and obtain information for an additional contact person not living with the parents including phone number and address. Obtain and verify the PCP's name and phone number. This information as well as the required fields for "refer" results will be entered into the DMS.
  - Record in the notebook of DMS any special needs of the baby's family, i.e., deaf, blind, monolingual, foster care or for adoption.
  - Enter NBHS results in the Newborn Screening logbook and the EHR and for NICU infants enter results in the NICU Newborn Screening (NBS) logbook and the EHR.  
By Hearing Screening Coordinator
  - Will reconcile weekly the Newborn screening logbook and the NICU admission logbook against DMS reports.
  - Will ensure the required fields for refers are completed in DMS.
3. Services and care coordination/referrals
  - a. Infant requiring diagnostic hearing evaluation.
    - Any infant with unilateral or bilateral atresia of the external auditory canal or ~~microtia~~micotia of the pinna, infant greater than 6 months corrected age, or if the physician determines that a diagnostic audiologic evaluation is indicated, the infant shall be referred to the CCS program for authorization of diagnostic services in lieu of inpatient screening.
    - Enter in DMS "refer" for results of the ear with a malformation and "NA" as the method.
    - A hearing screen will be performed on the normal ear for unilateral atresia or microtia and result will be entered into DMS.
    - The HSC will assist the family with completing the CCS application noting any special needs of the family (e.g., deaf, blind, monolingual or going to foster care) and refer the

family for diagnostic hearing evaluation at a Type C Communication Disorder Center or equivalent if family has private insurance.

- The HS will complete a Service Authorization Request (SAR).
- The CCS family application, a completed SAR, Newborn Hearing Screening Infant Reporting Form and face sheet shall be faxed to the CCS office of the county in which the family resides as well as the SCHCC and provider.
- Infants with atresia shall also be referred to the Early Start Program by completing and faxing the referral form.

b. Missed Screen

- The infant whose hearing screening is missed will be scheduled to return to the hospital for outpatient screening. The HSC will schedule the missed infant within 1 week of discharge for screening to be done within 4 weeks. The appointment date, time and location will be recorded in the EMR.
- HSC will notify the parents of the appointment by phone and mail a notification letter about the missed event and the scheduled appointment will be mailed to the family. A copy of this letter will be scanned into the EMR. The HSC will enter into DMS the attempts made to contact the family.
- The HSC will enter into DMS the required fields for missed screen.
- If a hearing screen is missed due to a family being discharged early or Against Medical Advice, and a waiver is not obtained, the nursing team will indicate such on the waiver. Two RN's will sign verifying the miss.
- 

c. Waived Screen

- If the parents choose to waive the newborn hearing screening, the Hearing Screener will inform the assigned RN and provide a NBHSP Waiver brochure. The assigned RN will inform and educate the parents; if screening is still refused, the parents will sign a waiver form, and receive the California (CA) NHSP Waiver brochure. Signed waiver for hearing screening will be filed in the baby's chart, and a copy given to the parents. Non-English speaking parents will have an explanation given through an interpreter.
- The HSC will enter into DMS the required fields for waived screening.
- The HSC will scan a copy of the signed waiver form into the EMR.

d. Transfers

Infants transferred into the NICU from other hospitals

- All infants transferred into the NICU will receive a hearing screening according to the NICU NBHS Policy prior to discharge.
- Transfer information, including the name of the sending hospital, will be entered into the NBHS logbook.
- The HSC will accept transfers into DMS within 24 hours.
- The HSC will respond to the DMS prompts for weekly transfer updates.

Infants transferred into the NICU from Couplet Care

- All infants transferred into the NICU will receive a hearing screening according to the NICU NBHS Policy prior to discharge.

#### Infants transferred out of NICU to another facility

- All infants transferred out to another facility will receive a hearing screening according to the NICU NBHS Policy prior to transfer if medically stable. Results will be documented in the EHR. Results will be communicated to the receiving hospital in writing.
- Transfer information (including results, if done, and name of receiving hospital) will be entered into the NBHS logbook.
- The HSC will enter required fields into DMS and initiate transfer within 24 hours.

#### e. Expired or Not Medically Indicated (NMI)

- The HSC will enter the required fields for expired and not medically indicated into DMS and NBHS logbook.
- Pertinent information will be documented in the newborns medical record by the physician/neonatologists indicating why the hearing screen is not medically indicated. The HSC will enter pertinent information into the NBHS logbook and in the DMS notebook for not medically indicated newborns.

## Educational Activities

### A. Medical and Nursing Staff Education

1. Physician information will be presented by the NBHS Program Director to the medical staff via pediatric committee meetings and/or written correspondence annually or as requested by committee chair.
2. Nursing and non-nursing staff will be updated at least annually in staff meetings, written correspondence, and/or in-house e-mail. The NBHS Program will be included during orientation for each employee in maternal-child services and during their annual nursing skills validation.

### B. Parent Education

1. The NBHS Program is discussed at the hospital's Maternity Tour and written information, using the NHSP, "Important Information for Parents-To-Be," brochure in English, Spanish and other required languages (when indicated), is given to prospective parents.
2. An admitting packet is given to all parents on arrival to the CC and/or NICU. The packet contains the Newborn Hearing Screening Program (NHSP) brochure.
3. Education is given using the appropriate NBHS printed materials Hearing Screening Pass, Refer, or Diagnostic Hearing Evaluation Referral at the conclusion of screening by licensed personnel.
4. The NBHS "Waiver of Newborn Hearing Screening" brochure is given when parents refused the hearing screening.

### C. Hearing Coordination Center Semi-Annual District Meetings

The hospital NHSP will send a representative who is an employee of the hospital to attend the CA NHSP meetings facilitated by the HCC and report back to the hospital respective committees and administrative directors.



## Reporting/Data Management

- A. DMS entry will be done **daily** on all infants who pass, refer, are waived, are missed, are transferred to another facility, expire or hearing screening is not medically indicated.
- B. The HSC will submit the number of **total live births** to SCHCC monthly, within 10 days of the end of the month.
- C. Screening logs for CC and NICU will be made available to the SCHCC upon request.

## Quality Assurance

- A. The HSC will provide data to the Program Director monthly.
- B. Quarterly screening rates will be monitored.
  - Well Newborn (WNB): A minimum of 98% of newborns admitted will be screened prior to discharge.
  - NICU: 100% of infants will be screened prior to discharge.
  - Individual hearing screener's refer rates and the program as whole will be no less than 1% and no greater than 5%.
- C. The HSC will ensure at least monthly that all babies are entered into the DMS and review records to make sure information for each baby is entered accurately utilizing the reports built-in in the DMS.
- D. Corrective measures for variances by HSC may include the following:
  - Checking equipment for current calibration.
  - Observing Hearing Screener perform a hearing screen and re-train as needed.
  - Checking staff compliance with policies and procedures.
  - Re-training of staff with refer rates greater than 5% or less than 1%
- E. All results of monitoring will be reporting to the Pediatric Committee on a quarterly basis.

## REFERENCES:

American Academy of Pediatrics (2007), **Policy Statement; Newborn and Infant Hearing Loss: Detection and Intervention.**

CA Health & Safety Code, Division 106, Part 2, Chapter 3, Sections 22 and 23 commencing with section 124115 and section 123975 (NICU).

California Children's Services Manual of Procedures (CCS), Chapter 3 Provider Standards Infant Hearing Screening Services 3.42.1-11. ~~April 2016~~ September 2017

All revision dates: 5/7/2024, 4/9/2024, 8/16/2022, 3/9/2021, 6/1/2014, 1/1/2014, 6/1/2010, 5/1/2010, 2/1/2008, 9/1/2006, 4/1/2006, 5/1/2004, 6/1/2002, 8/1/1999

## Attachments

No Attachments

## Approval Signatures

Step Description	Approver	Date
Medical Staff Committees: Family Medicine, OB, Pediatrics Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	5/7/2024
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	5/7/2024
Policy Owner	Kristina Swaim: Clinical Nurse Manager, OB	5/7/2024



Origination: 8/10/2021  
Effective: Upon Approval  
Last Approved: N/A  
Last Revised: 6/6/2024  
Next Review: 1 year after approval  
Owner: Kristina Swaim: Clinical Nurse Manager, OB  
Policy Area: Maternal Child Health  
References:

## MCH.24 Management of Early Onset Sepsis (EOS) in the Newborn

### POLICY

Ventura County Medical Center (VCMC) and Santa Paul Hospital (SPH) established evaluation and treatment guidelines for newborns **35 weeks gestational age** and older at risk for neonatal Early Onset Sepsis (EOS).

### DEFINITIONS

- A. Early Onset Sepsis (EOS) — invasive bacterial infection of the blood or cerebrospinal fluid (CSF) of the newborn, that occurs in the first week after birth. Neonatal Early Onset Sepsis occurs in approximately 0.3 to 0.5 cases per 1000 live births in the United States. Neonatal bacterial sepsis is the 6th leading cause of infant mortality in the United States.
- B. Group B Streptococcus (GBS) — a gram positive organism known to colonize the lower gastrointestinal tract of a mother which has the potential to spread and transmit to the fetus.
- C. Intra-amniotic Infection — also known as chorioamnionitis, an infection with resultant inflammation of any combination of the amniotic fluid, placenta, fetus, fetal membranes, or decidua. Symptoms of maternal fever and one or more of the following: maternal leukocytosis, purulent cervical drainage, fetal tachycardia.
- D. Neonatal Sepsis Risk Calculator — a tool that calculates an individual neonate's risk of developing EOS. It is based on a multivariate analysis of five risk factors for EOS from data on over 600,000 live births with a gestational age greater than (>) 34 weeks, at 14 hospitals in the USA, between 1993- 2007. This model has an advantage over standard algorithms as it takes away the possible subjectivity of the physician in diagnosing intraamniotic infection and instead uses objective measurements including highest maternal temperature as a continuous variable, duration of rupture of membranes (ROM), gestational age, GBS status and intrapartum antibiotics to identify those infants who are at risk. This predictive model has been shown to reduce the number of newborn invasive procedures and the unnecessary exposure to antibiotics without missing those who are infected.

### PROCEDURE

#### A. Screening For EOS

1. Licensed Clinical Practitioner (LCP) and registered nurse (RN) will review maternal history/ intrapartum course to determine maternal and perinatal risk factors predisposing newborns to EOS.

## 2. Criteria for Screening

- Gestational age ~~<37~~ or = to 36 weeks
- Maternal intra-partum temperature  $\geq 100.4$  or chorioamnionitis
- Maternal GBS+ status

Prolonged rupture of membranes (ROM)  $\geq 18$

- Consider screening newborns with vital sign or clinical abnormalities in the first 12 hours after birth.

## B. Management of EOS for the Newborn-Process

1. Licensed Clinical Practitioner or RN will Calculate the EOS risk within the first 1 hour of life for all newborns ~~<~~ or = to 36 weeks gestational age and older with any of the following risk factors listed above in section A2 Criteria for Screening, or if there are any concern for illness including but not limited to;

- Temperature instability (Temperature  $\geq 99.4$  axillary,  $\geq 100.4$  Rectal or  $\leq 97.5$  axillary) ·
- Respiratory, gastrointestinal, and neurological abnormalities
- **NOTE:** At risk infants should have clinical reassessment performed and documented frequently in the first 4-6 hours of life because classification of clinical status and management recommendations may change.

2. Perform assessment after completion of skin to skin contact with mother and newborn, first feeding and examination of newborn.

3. The Neonatal Sepsis Risk Calculator may be used within the first 12 hours of life if the newborn is exhibiting vital sign or clinical abnormalities. Clinical judgment by the provider will be used to guide management of care.

~~3~~4. Enter data into the Neonatal Sepsis Risk Calculator

a. Incidence of EOS: ~~4/1000~~ 0.5/1000 (this number is subject to change)

b. Gestational Age

c. Maternal Fever Intrapartum or Intra-amniotic Infection (Chorioamnionitis)

d. Rupture of membranes

e. Maternal Group B Streptococcus positive (GBS+) status.

f. Type and duration of intrapartum antibiotics given before birth.

g. Signs of clinical illness at birth.

5. Place infant in one (1) of three (3) categories in the Neonatal Sepsis Risk Calculator based on clinical assessment for completion. **See Attachment A for Reference**

a. Clinical Illness

b. Equivocal

c. Well Appearing

## 6. Vital Signs & Observation Period:

Follow Sepsis Calculator "clinical recommendation" based on risk stratification:

- If recommendation is "no additional care" for infant with any risk factors:
  - Routine well newborn vital signs per institution protocol
  - Observation period 24-48 hours depending on clinical scenario
- If recommendation is for increased level of monitoring/observation:
  - Vital signs Q4 hoursX24 (following immediate post-partum period)
  - Vital signs per NICU protocol if infant admitted to NICU
  - Observation period of 24-48 hours depending on clinical scenario

6. Ensure the Neonatal Sepsis Risk Calculator information is included in shift report. If unable to complete all fields within the flow sheet, notify Primary Care Provider.

7. Notify provider if:

a. The clinical recommendation suggested by the Neonatal Sepsis Risk Calculator is to obtain labs and/or initiate antibiotics

i. Obtain vital signs every 4 hours for 24 hours.

ii. If needing to obtain a blood culture, a minimum of 1ml is needed

iii. One blood culture not two will be taken.

iv. If antibiotics are to be started, transfer to NICU

b. The infant has an equivocal exam at greater than or equal to (>) 2 hours of life.

c. The infant has clinical signs or symptoms of illness

d. The RN provider has any concerns or questions any time after birth

NICU neonatologist ~~or neonatal nurse practitioner (NNP)~~ will be called to evaluate newborn if admission to NICU should be considered. Otherwise Primary care provider should be notified.

### C. Management of EOS for the Newborn-Patient Education

1. Provide consistent education with families throughout the hospital stay, regarding probable length of stay

An observation period of **24-48**-hours is recommended for the following newborns with EOS risk factors listed in section A, Management of EOS for the newborn.

2. Educate parents about the implication of EOS.

Including:

- Plan of care
- Treatments, interventions
- GBS status and perinatal risks to newborn

## References:

- ACOG Committee Opinion (2017). Intrapartum Management of Intramniotic Infection. American College of Obstetricians and Gynecologists. August 2017, Number 712.
- Escobar, G.J., Puopolo KM, Wi S, et al. (2014). Stratification of risk of early-onset sepsis in newborns ≥ 34 weeks' gestation. Pediatrics, 133:30-6.
- Kersete.M et al. (2016). Application of Sepsis Calculator in Newborns with Suspected Infection. J Matern Fetal Neonatal Med 29(23), 3860-3865.

- Kuzniewicz et al. (2017). Quantitative, Risk-based Approach to the Management of Neonatal Early- Onset Sepsis. JAMA, April. · Puopolo KM, Benitz WE, Zaoutis TE, AAP COMMITTEE ON FETUS AND NEWBORN, AAP COMMITTEE ON INFECTIOUS DISEASES. (2018). Management of Neonates Born at  $\geq 35$  0/7 Weeks' Gestation With Suspected or Proven Early-Onset Bacterial Sepsis. Pediatrics, 142(6):e20182894.
- AWHONN Perinatal Nursing (2021) Fifth Edition. Wolters Kluwer

All revision dates:

6/6/2024, 12/14/2022, 8/10/2021

## Attachments

[Appendix B-Antibiotics.docx](#)

[Attachment A - Early Onset Sepsis Newborn Clinical Classification](#)

## Approval Signatures

Step Description	Approver	Date
Pediatrics Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	5/30/2024
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	5/30/2024
Policy Owner	Kristina Swaim: Clinical Nurse Manager, OB	5/30/2024



## VENTURA COUNTY HEALTH CARE AGENCY

**Origination:** 7/1/2001  
**Effective:** Upon Approval  
**Last Approved:** N/A  
**Last Revised:** 3/8/2024  
**Next Review:** 3 years after approval  
**Owner:** Jennifer Ferrick: Director, Peds/  
PICU & NICU  
**Policy Area:** NICU  
**References:**

### N.24 Umbilical Catheter Use in the NICU

## POLICY:

To provide guidelines for the Neonatal Intensive Care Unit (NICU) nurse on the set up, monitoring, use and removal of an umbilical ~~artery~~arterial or umbilical venous catheter in a neonate.

## PROCEDURE:

The ~~registered nurse~~Registered Nurse (RN) is essential to the safe insertion and monitoring of umbilical catheters. The RN assists with set up, prepares the infusion fluids, draws blood samples, protects the catheter from accidental dislodgement or disconnection, and safely removes the catheter when no longer indicated. An umbilical catheter may be placed for emergency resuscitations in which case the ~~Neonatal Nurse Practitioner~~physician will modify the procedure as needed.

Umbilical catheters are deep central lines which require aseptic technique during insertion. Standard precautions and aseptic technique are required during IV fluid and tubing changes, and when obtaining blood specimens. Umbilical artery catheters require the use of a monitored transducer to prevent unexpected blood loss. ~~Standard precautions required.~~

## EQUIPMENT

### A. Insertion:

1. Infant warming device/limb restraints/monitors: cardio-respiratory and oxygen saturation.
2. Sterile gloves and gown/surgical cap and mask.
3. Sterile towels
4. Umbilical catheter tray.
5. ~~Heparin flush — two (2) 10ml vials with one (1) unit/ml heparin in normal saline.~~0.45 Normal Saline with heparin (1 unit/ml) flush fluid
6. Catheters – 3.5 fr and 5 fr. single and double lumen (size per physician/~~ANP~~ request).
7. Stopcock, needleless adapter, ~~mini-trifuse~~ for venous catheter.
8. ~~IV fluid (per order), metriset, filter.~~Buretrol and 0.2 micron filter.
9. Infusion pump.
10. Blood pressure transducer for arterial catheter.

11. Syringes ~~1ml~~; 3ml, 5ml and blood gas.
12. Duoderm/micropore tape/commercial umbilical catheter holder ("bridge").
13. Padded clamp.

B. Care and Maintenance:

1. Alcohol pads
2. 2 x 2 gauze
3. 3ml and 5 ml syringes
4. Dressing to secure catheter (tape or "bridge")
5. Pressure transducer system for arterial catheter
6. IV administration set and ordered solutions
7. Padded clamp
8. Gloves

C. Obtaining Blood Specimen:

1. Flush solution
2. Appropriate syringe for blood samples being obtained (3ml, 5ml, blood gas)
3. Alcohol pads
4. Appropriate tubes for labs being obtained
5. Gloves

D. Removal:

1. Sterile gloves
2. Sterile 4 x 4 gauze
3. Suture removal kit
4. Hemostat

## PROCEDURE

A. Insertion:

1. Stabilize infant airway, check warming device and monitors. Place neonate supine and restrain four extremities. ~~Note color of feet, bruising or decreased perfusion in lower extremities. Check for signed consent if not an emergency placement.~~
2. Assess vital signs, glucose, and other physiologic functions before beginning procedure. Note color of feet, bruising or decreased perfusion in lower extremities.
3. Check for signed consent if not an emergency placement.
4. Perform Time Out.
5. Equipment set up on table adjacent to neonatal bed. Once tray open, add additional supplies using sterile technique.
6. Observe monitors during catheter insertion, notify physician/~~NNP~~ if abnormalities noted. Assist as needed. Check color, perfusion and pulses of lower extremities after insertion.



7. Notify ~~radiology~~Radiology when catheter placed, enter request ~~in to computer~~ for STAT portable chest and abdomen x-ray for line placement. ~~If requested by PHYSICIAN/NNP, maintain~~Maintain sterile field during ~~X~~x-ray.
8. Per ~~PHYSICIAN/NNP~~physician request after ~~X~~x-ray, ~~Nurse~~nurse may withdraw catheter by stabilizing catheter at suture level and gently pulling back the ordered distance. Note the centimeter marking at the umbilicus.
9. When catheter confirmed at the appropriate location by the physician/~~NNP~~, start IV fluids ~~are started~~ as ordered. Ensure no air bubbles are in system. Arterial catheter tubing includes ~~metriset~~buretrol, filter and transducer with stopcocks. Venous catheter tubing includes ~~metriset~~buretrol, filter, stopcock with multi-access needleless ports on main lumen. Second lumen on a venous ~~lumen has~~catheter must have a needleless port. Refer to ~~"Blood Pressure Transducer" Policy/Procedure~~policy N.50 Use of Blood Pressure Transducer in the NICU.
10. Remove povidine iodine from abdomen using warm water and pat dry. Place strips of Duoderm vertically adjacent to umbilicus, then tape catheters securely using bridge technique ~~and~~with clear micropore tape, or use a commercial "bridge."
11. Umbilical tape (cord tie) may be left in place for up to 24 hours to control bleeding. Assess the color and perfusion of the skin around the umbilicus if tape is left in place.
12. Remove restraints and position neonate for comfort. When available, notify parents of completion of procedure.

B. Care and Maintenance:

1. Perform hand hygiene and adhere to strict aseptic technique when entering any umbilical catheter line.
2. ~~Use sterile technique when entering umbilical catheter line.~~ Change IV tubing, transducer and stopcocks every 96 hours. Change as needed if an accumulation of blood cannot be cleared with flush. New tubing should be set up and ready ~~to go~~for use prior to discontinuing old tubing. Protect catheter with gauze prior to applying clamp. Fill catheter hub with IV fluid prior to connecting to tubing. Recalibrate transducer.
3. Flush solution (~~0.45~~ normal saline with heparin 1u/ml ~~heparin~~) to be kept at bedside at all times. Discard every 24 hours.
4. Notify physician/~~NNP~~ of evidence of decreased perfusion to lower body such as discoloration (cyanosis or blanching) of abdomen, buttocks, legs or toes, decrease in pulses, or cooling of skin temperature. Also notify if a loss of transducer wave form or difficulty withdrawing blood from an arterial line.
5. Keep connections secure at all times. Set ~~Transducer~~arterial transducer alarm limits per physician/~~NNP~~ orders.
6. Assess and document catheter position and fluids infused every hour
7. Refer to medication guide for drugs that may be infused through umbilical catheters.

C. Obtaining blood specimen:

1. ~~Equipment:~~
  - a. ~~Specimen collection syringe~~
  - b. ~~3 or 5 ml syringe~~

~~c. Heparin flush and syringe~~

If both arterial and venous umbilical catheters are in place, it is preferable to draw blood samples from the arterial catheter (see N.17 Arterial Line Management in the NICU). If samples must be drawn from the UVC, use the following steps:

2. Using ~~standard precautions~~ aseptic technique, vigorously prep the ~~proximal~~ stopcock with alcohol and allow to dry
3. Remove the current syringe and either discard or attach sterile tip protection.
4. Attach empty 3 ml syringe using sterile technique. Open stopcock to neonate and slowly (at a rate of 1 ml/30 seconds) withdraw approximately 1.5-3-5ml clearance blood ~~depending on the size of the baby and the catheter~~. Close the stopcock to the baby, remove the syringe and place a sterile tip protector.
5. Attach empty 3-5 ml syringe. Open stopcock to neonate and slowly (at a rate of 1ml/30 seconds) withdraw the blood specimen. Close the stopcock and give the syringe to an assistant.
6. Attach clearance blood syringe. Open stopcock, withdraw ~~if needed~~ to ensure absence of air bubbles ~~and then~~ slowly return the clearance blood. Close the stopcock.
7. Attach Heparin flush syringe. Open stopcock, withdraw ~~if needed~~ to ensure absence of air bubbles ~~and then~~ slowly clear the line of visible blood. Close the stopcock to the flush syringe. ~~Check for waveform and recalibrate as needed.~~
8. When using a double-lumen catheter, blood samples should be drawn from the larger lumen. The other lumen's infusion should be paused to prevent contamination of the blood sample.

D. Discontinuation:

1. Equipment:

~~Betadine swab~~

- a. Gloves
  - b. Suture removal set
  - c. Gauze 4x4
2. ~~When ordered, begin~~ Verify order for catheter removal and insert PIV prior to discontinuing umbilical line if needed.
  3. ~~Glove and clean umbilicus with betadine~~ Observe standard precautions. Remove sutures using forceps. If scissors are required, notify physician ~~ANP~~.
  4. Turn off IV infusion pump. Close stopcock to the neonate.
  5. Removing a venous catheter:
    - a. Grasp the catheter firmly with one hand and slowly pull it out over several minutes.
    - b. Apply gentle pressure using a sterile 4" x 4" gauze pad if the vein begins to bleed. Note that a small amount of oozing may occur, which is normal.
  6. ~~Note centimeter marking. With slow steady pressure, pull~~ Removing an arterial catheter ~~out till 2-3 cm are remaining in stump. Wait 2-3 minutes, then remove catheter and pinch umbilical stump with clean gauze. Do not apply deep pressure to abdomen as this will increase cerebral blood pressure. Hold pressure on site for 3-5 minutes. If bleeding occurs, continue to apply pressure for 1-3 minutes.:~~
    - a. With slow steady pressure, pull catheter out until 5 cm are remaining in stump. Wait 2-3

minutes, then remove the remainder of the catheter at a rate of 1cm/minute to allow vasospasm.

- b. Pinch umbilical stump with clean gauze. Do not apply deep pressure to abdomen as this will increase cerebral blood pressure. Hold pressure on site for 3-5 minutes. If bleeding occurs, continue to apply pressure for 1-3 minutes.

7. Avoid prone position for 4 hours to observe for bleeding. If oozing occurs, notify physician ~~ANP~~.

8. Verify and document that the catheter is complete and intact upon removal.

## DOCUMENTATION

~~A. Nursing notes—date, time, personnel and infant's tolerance of procedure.~~

~~B. Assessment BID—include color, perfusion, cm marking.~~

~~C. Nursing Flowsheet—blood out, volume of flush or medications, IV fluids.~~

## REFERENCES:

~~N.O.E.P., 2007~~

~~Deacon, J and P. O'Neill, **Core Curriculum for Neonatal Intensive Care Nursing**, WB Saunders, 2004.~~

~~Center for Disease Control (CDC) Guidelines, 2012.~~

A. Insertion: baseline vital signs before insertion; date and time of procedure, infant's tolerance of the procedure, appearance of the umbilicus and lower extremities; time out performed and CLIP form

B. Continue to assess and document the condition of the umbilicus, non-invasive blood pressure every 12 hours, arterial blood pressure every hour; assessment of lower extremities

C. Intake and Output – blood out, volume of flush or medications, type of IV fluids infused and rate.

D. Catheter removal, including the entire length removed and any associated blood loss

## REFERENCES:

A. Beauman, S. S., & Bowles, S. (Eds.). (2019). *Policies, procedures, and competencies for neonatal nursing care* (6th ed.). National Association of Neonatal Nurses.

B. Centers for Disease Control and Prevention. (2011, revised 2017). *Guidelines for the prevention of intravascular catheter-related infections*. Retrieved July 2022 from <https://www.cdc.gov/infectioncontrol/guidelines/bsi/recommendations.html> (Level I)

C. VCMC Policy N.50 Use of Blood Pressure Transducer in the NICU

D. VCMC Policy N.17 Arterial Line Management in the NICU

All revision dates:

3/8/2024, 10/1/2012, 2/1/2010, 4/1/2008, 3/1/2006,  
12/1/2004, 12/1/2001

## Attachments

No Attachments

## Approval Signatures

Step Description	Approver	Date
Pediatrics Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	3/26/2024
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	3/26/2024
NICU	Melissa Krebs: Director, NICU	3/26/2024
NICU	Jennifer Ferrick: Director, Peds/PICU & NICU	3/8/2024



# VENTURA COUNTY HEALTH CARE AGENCY

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 Owner: Jennifer Ferrick: Director, Peds/  
 PICU & NICU  
 Policy Area: NICU  
 References:

## N.45 Neonatal Skin Care

### POLICY:

To present practice recommendations for NICU staff regarding neonatal skin care with the goal of optimizing neonatal skin integrity, reducing exposure to potential toxins, and promoting healthy barrier function. To describe evidence-based approaches to accomplish the following:

- A. Assess the neonate's skin condition: by using the AWHONN/NANN Neonatal Skin Condition Score(NSCS)
- B. Identify neonates who are at risk for alterations in skin integrity.
- C. Recognize environmental and treatment-related agents that may alter skin integrity.

### PROCEDURE:

- A. Assess skin integrity of infant, head to toe, at the time of admission then every shift; or more frequently as needed
- B. Identify risk factors for skin injury ~~every shift~~; and interventions will be implemented to reduce the risk.  
~~Assess the skin for erythema, dryness, flaking, breakdown, and rashes, every shift.~~
- C. Determine cause of skin breakdown ~~every shift~~ and notify ~~PHYSICIAN/NNP~~ Neonatologist for any interventions.

### EQUIPMENT

Gather appropriate equipment from the list below:

- ~~A. A&D Ointment~~
- ~~B. Aquaphor~~
- ~~C. Bacitracin~~
- ~~D. Baby Soap/Baby Wash~~
- ~~E. Desitin~~
- ~~F. Deoderm~~
- ~~G. CU Mattress Pad~~
- ~~H. Gloves~~

- I. Heat Shield
- J. Hibiclens
- K. Hydrogel Tape
- L. Mineral Oil
- M. Polyethylene Bag
- N. Povidone—Iodine Solution/Chlorhexidine
- O. Sheepskin
- P. Sterile Water
- Q. Triple Antibiotic Ointment
- R. Zinc Oxide

## **GUIDELINES:**

- A. Bathing equipment: tub, mild cleanser
- B. Disinfectants: Povidone – Iodine Solution, alcohol, sterile water or saline to remove disinfectants from skin
- C. Emollients: petroleum based, water-miscible ointments
- D. Adhesives: hydrocolloid, hydrogel, silicone-based
- E. Diaper dermatitis skin barrier products

## **GUIDELINES:**

- A. Newborn Skin Assessment
  - 1. ~~Assess skin daily for color, dryness, erythema and breakdown/excoriation.~~
  - 2. ~~Identify risk factors for skin injury as applicable for individual patients. Risk factors may include but are not limited to the following:~~
    - a. ~~Gestational age <32 weeks~~
    - b. ~~Edema~~
    - c. ~~Use of paralytic agents~~
    - d. ~~Use of vasopressor~~
    - e. ~~Use of endotracheal tubes, nasal CPAP, nasogastric/orogastric tubes~~
    - f. ~~Vascular access devices~~
    - g. ~~Numerous monitors, electrodes, probes~~
    - h. ~~Surgical wounds~~
    - i. ~~Ostomies~~
    - j. ~~High Frequency Ventilators~~
  - 3. ~~Determine potential causes of skin breakdown such as the following:~~
    - a. ~~Adhesive removal~~
    - b. ~~Burn/thermal injury~~

- ~~e. Abrasion/friction~~
  - ~~d. Diaper dermatitis~~
  - ~~e. Pressure ulcer~~
  - ~~f. Infection~~
- ~~4. If a purulent skin lesion is noted or infection is suspected, notify PHYSICIAN/NNP. Obtain skin culture and gram stain as ordered.~~
  1. Assess skin, head to toe, daily or more frequently as needed.
  2. Identify risk factors for skin injury as applicable for individual patients. Risk factors may include but are not limited to the following:
    - a. Physiological (e.g., prematurity, dehydration, vascular injury, edema)
    - b. Mechanical (e.g., medical devices, friction, pressure, thermal devices)
    - c. Postural (e.g., immobility)
    - d. Pharmacologic (e.g. vasopressors, paralytic agents)
    - e. Chemical (e.g., disinfectants, intravenous fluid injury)
    - f. Congenital (e.g., epidermolysis bullosa)
  3. Determine potential causes of skin breakdown such as the following:
    - a. Adhesive removal
    - b. Burn/thermal injury
    - c. Abrasion/friction
    - d. Diaper dermatitis
    - e. Pressure ulcer
    - f. Infection
  4. If a purulent skin lesion is noted or infection is suspected, notify Neonatologist. Obtain skin culture and gram stain as ordered.
  5. Use the Neonatal Skin Condition Score to objectively evaluate overall skin condition by AWHONN/ NANN Neonatal Skin Condition Score (NSCS). The Neonatal Skin Condition Score (NSCS) tool objectively evaluates overall skin condition (risk factors-age younger than 30 weeks, adhesive use, hypo-perfusion, high frequency ventilation). Perfect score=3, worst score=9
    - a. Dryness
      - I. 1=normal, no sign of dry skin
      - II. 2=dry skin, visible scaling
      - III. 3=very dry skin cracking/fissure
    - b. Erythema
      - I. 1=no evidence of erythema
      - II. 2=visible erythema, <50% body surface
      - III. 3=visible erythema, > or equal 50% body surface
    - c. Breakdown
      - I. 1=none evident
      - II. 2=small, localized areas

### III. 3=extensive

#### B. Wounds

1. Wounds should be digitally photographed at initial assessment/discovery and scanned into the EMR.
2. An adequate description of the wound will include (as a minimum)
  - a. Location on the body
  - b. Size (length x width) in centimeters
  - c. Color
3. Documentation of a wound will include (as a minimum)
  - a. Description of wound
  - b. Wound Care performed
  - c. Infant's progress and treatment plan
4. Notify Neonatologist upon wound discovery
5. Nursing will clearly document in the EMR the location of the wound and if the wound was over a pressure point, surgical site or area of trauma

#### C. Bathing

##### 1. First Bath

The first bath should be provided once the neonate's temperature has ~~been stabilized and has remained within the normal range for 2-4 hours~~; achieved thermal and cardiorespiratory stability

- a. For infants >32 weeks use baby soap/baby wash and rinse well.
- b. For infants <1000 grams or <32 weeks use warm water only during first ~~week~~ 2 weeks of life.
- c. Standard precautions, ~~including and~~ wearing gloves, should be maintained ~~until after the first bath~~ at all times.
- d. ~~Excessive vernix may be removed, but removal of all vernix is not necessary for hygienic purposes. Allow vernix to naturally wear off; leave vernix on the skin. If contaminated with meconium or blood, gently remove the contaminant, but scrubbing to remove all the vernix is not necessary or recommended. Vernix functions as a moisturizer by increasing skin hydration and water-holding capacity.~~

##### 2. Routine Bathing

- a. ~~Bathe to remove debris. Daily soap bathing is discouraged during the neonatal period. Bathe to remove debris. Baths should be given twice a week and as needed..~~
- b. Select mild ~~cleansers~~ non-alkaline soap that ~~have~~ has a neutral ph such as baby soap/baby wash. ~~Water-only baths can be alternated with baths using cleansers.~~
- c. For preterm infants <32 weeks of gestation, clean skin surfaces gently using warm water only during the first week of life. Use soft materials such as cotton cloth or cotton balls. Avoid rubbing. Water can be squeezed onto the skin during rinsing. If areas of skin breakdown are evident, use warm sterile water.
- d. Decisions about the frequency of bathing should be based on individual needs and consideration of family beliefs and values.
- e. Consider immersion bathing for stable infants once umbilical lines are discontinued.

##### 3. Immersion Bathing

Immersion bathing is placing the infant's entire body, except the head and neck, into a tub of water.

- a. Consider immersion bathing as safe and an effective method to achieve and maintain infant



hygiene.

- b. Selection of immersion bathing should be based on assessment of individual infant condition and needs:
  - i. Stable preterm infants after the umbilical lines are discontinued
  - ii. Infants with the umbilical clamp in place
- c. Use a water depth of approximately 3 inches or deep enough to allow the infant to settle into the water with his/her shoulders well covered.
- d. Use a water temperature of 100.4 degrees F.
- e. Educate parents about bath safety and identify positive aspects of immersion bathing for infant comfort and development.
- f. After the bath:
  - i. Dry the infant immediately, diaper, place cap and double-wrap in warm blankets. Skin-to-skin contact with mother, or radiant warmer ~~or heat lamps~~ with skin probe attached and alarms set may be used for re-warming as needed.
  - ii. Approximately 10 minutes after the bath, dress the infant, change the cap and wrap in dry, warm blankets.
  - iii. Clean and disinfect the tub and other equipment consistent with facility infection control policies.

#### 4. Cord Care

- a. ~~Immediate:~~  
~~Clean the cord and surrounding skin surface as needed with mild cleanser used for initial or routine bathing and rinse thoroughly or cleanse with sterile water.~~ Initially clean cord and skin with neutral pH cleanser or sterile water.
- b. Ongoing Cord Care:
  - i. Keep the cord care open to air, clean and dry. If the cord becomes soiled with urine or stool, cleanse the area with water.
  - ii. Educate ~~families~~ parents about normal mechanism of cord healing.
  - iii. Teach parents or caregivers to keep area clean and dry, avoid contamination with urine and stool, keep diaper folded away from area, and wash hands prior to handling infant's umbilical cord area.

#### 5. ~~Circumsision~~ Circumcision Care

- a. Site Preparation: ~~Prepare~~ the site will be prepared with povidone iodine ~~(PI) or chlorhexidine (CHG)~~ solution.
- b. Following the procedure, completely remove any remaining povidone iodine ~~(PI)~~ solution with warmed sterile water.
- c. Following the procedure, cover the penis with petrolatum-impregnated (Vaseline) gauge ~~strips~~ or single package gauze pads and ~~tubes of~~ antibiotic ointment ~~for 24 hours (if ordered) for the first 3 days.~~
- d. Lubricants should not be used if the procedure is performed with a Plastibell™ (it may move out of place).

- e. Cleanse newly circumcised penis with water for the first 3-4 days to prevent irritation.

D. ~~Disinfectants~~/Antimicrobial Skin Preparation

Disinfect skin surfaces before invasive procedures such as intravenous ~~tube~~catheter insertion, umbilical vessel catheterization, chest tube insertion, intravenous puncture or heel sticks for laboratory samples. Use ~~chlorhexidine (CHG)~~ or povidone iodine (PI) for skin disinfection. Remove with sterile water or saline after the procedure is complete.

- ~~1. Apply CHG for 30 seconds or with two consecutive wipings.~~
- ~~2. Apply PI with two consecutive wipings. Allow to dry for 30 seconds~~
- ~~3. Remove CHG or PI with sterile water or saline after the procedure is complete.~~
- ~~4. Use Deoderm or Hydrogel tape under nasal cannula, PICC line adapter, umbilical catheters, then secure with tape or op-site.~~
1. Apply povidone iodine with three consecutive wipes or swabs. Allow to dry.
2. Remove povidone iodine with sterile water or saline after the procedure is complete.
3. Consider using Duoderm or Hydrogel under nasal cannulas, enteral feeding tubes, umbilical catheters, then secure with tape or op-site. Consider commercial skin barrier under tape to secure endotracheal tubes.
4. Use Isopropyl alcohol or 2% CHG in isopropyl alcohol for disinfection of needleless connectors and other IV access ports and hubs
5. Skin antiseptics containing chlorhexidine gluconate (CHG) are labeled as "use with care in premature infants or infants under 2 months" due to risk for irritation or chemical burns.

E. Diaper Dermatitis

To maintain optimal skin environment:

~~Change diapers frequently.~~

~~Use diapers made with absorbent gel materials.~~

1. Check for wet or soiled diapers frequently, with clustered care-giving, and change as needed considering the infant's gestational age and severity of illness.
2. Discourage use of commercially available diaper wipes. 4x4 gauze and warm water is appropriate to gently cleanse the diaper area.
3. If diaper dermatitis is present, document a diaper area skin assessment and diaper area skin treatment at least once per shift.
4. Prevention strategies for neonates at risk include the following:
  - a. Use of petrolatum-based lubricants or barriers containing zinc oxide.
  - b. Avoiding the use of products not currently recommended for neonates, e.g., polymer barrier films.
5. Treat significant skin excoriation from contact irritant diaper dermatitis by the following methods:
  - a. Identify and treat the underlying cause.
  - b. Protect injured skin with thick application of barrier containing zinc oxide.

- c. Use an alcohol-free, pectin-based layer covered with petrolatum or zinc-oxide ointment if other therapy is ineffective.
6. Identify *Candida albicans* diaper rash by presence of red satellite lesions/culture. This rash will become more intense if covered by occlusive ointments. Treatment includes antifungal ointments or creams. A *Candida* rash can also be left exposed to air and light.

#### F. Adhesives

1. Use adhesives sparingly to secure life support, monitoring and other devices in all newborns.
2. Use semi permeable dressings to anchor silicone catheters, peripheral intravascular devices, other central venous catheters, nasal cannulas and nasal or oral gastric tubes.
3. Consider using pectin barriers or hydrocolloid adhesive products to act as a barrier along with tape.
4. Use wraps such as stretchy gauze to anchor electrodes, probes and limbs to arm boards.
5. Use electrocardiogram or limb electrodes containing hydrogel adhesive.
6. Minimize contact between adhesive tape and skin by "backing" tape or applying cotton to adhesive.
7. Alcohol-free skin protectant may be applied on term infants >30 days of age to provide a protective ~~interfact~~interface between the skin and bodily wastes, fluids, adhesive products and friction.
8. Remove adhesives slowly and carefully using ~~water-soaked cotton balls~~moistened gauze or saline pledgets. ~~Pull tape on a horizontal plane~~Slowly pulling adhesives at a very low angle, folding tape back onto itself parallel to the skin surface, while ~~continuously wetting the adhesive~~holding the surrounding skin ~~interfact~~in place may reduce epidermal stripping. Alternatively, use mineral oil or petrolatum to loosen tape unless re-taping is necessary at that site.
9. Avoid the use of solvents, enhancing bonding agents, and adhesive bandages after drawing laboratory samples.

#### G. Emollients

1. Emollients (e.g., Aquaphor) may be used to decrease transepidermal water loss (TEWL) in premature neonates.
2. Emollients may be used to protect or restore skin integrity as follows:
  - a. As a preventive therapy, initiate emollient (Aquaphor) use at 24-28 hours of age or as needed. Apply a preservative-free water-miscible, petrolatum-based emollient sparingly (0.5 – 1.5 ml) to all body surfaces, excluding head, face and scalp, every 12 hours or as needed.
  - b. At the first sign of dryness, fissures or flaking, apply an emollient every 12 hours or as needed.
  - c. Apply gently to skin, especially with very-low-birth weight neonates, and avoid friction.
  - d. Observe carefully for development of systemic infections, such as coagulase negative staphylococcus infections, especially in neonates <750g.
3. Emollients should be dispensed from the Pharmacy in unit dose or patient-specific containers. Every effort should be made to maintain sterility of the emollient container. All surrounding treatment surfaces that may be contaminated by emollients should be thoroughly cleaned.
4. Emollients may be used during phototherapy while under radiant heater.

#### H. Transepidermal Water Loss

1. Use a single technique or combination of techniques to reduce transepidermal water loss and

minimize evaporative heat loss in premature infants <30 weeks of gestation or weighing less than 1200 grams.

2. The following techniques have been shown to be effective in reducing transepidermal water loss:
  - a. An occlusive polyethylene bag covering body torso and extremities may be used immediately after delivery during stabilization to reduce the postnatal temperature decrease caused by excessive evaporative heat loss. Remove the wrapping after the neonate has been stabilized in the delivery room and admitted to the NICU.

~~Place the VLBW infant in 70% or higher humidity tent and maintain temperature 84-6 degrees (RT) to maintain neutral thermal environment for the first week of life.~~

~~Move infant to double-walled incubator after stabilization or employ strategies to increase relative humidity in area immediately surrounding the infant on a radiant warmer.~~

~~Use polyethylene plastic blankets or tents to reduce transepidermal water loss and evaporative heat loss. Plastic wraps should not be in contact with skin surfaces for prolonged periods.~~

- b. Apply preservative-free, water-miscible, petrolatum-based emollient to all surfaces except head and face per orders to reduce transepidermal water loss.
  - c. Utilize humidity per physician order of protocol (See N.71 Clinical Humidification in the NICU Policy)

#### I. Skin Breakdown

1. Prevent or minimize the risk of skin breakdown by using any of the following methods:

- a. ~~Products/devices to prevent pressure sores such as the following:~~

~~i. water mattresses~~

~~ii. air mattresses~~

~~iii. gelled mattresses and pads~~

~~iv. sheepskin~~

Assessing the skin under medical devices frequently (every 1-4 hours) to identify pressure points

- b. Use products to prevent skin breakdown, such as alcohol free skin protectants or devices.

Transparent dressing may be placed over bony prominences such as knees and elbows to prevent friction injuries. Barrier devices such as duoderm to prevent nasal injuries from noninvasive ventilatory support

- c. Petrolatum or petrolatum-based ointments applied to the groin and thigh of very low-birth weight infants to prevent injuries caused by urine.

2. Treat skin breakdown and excoriations using one or more of the following methods:

- a. Obtain skin cultures and/or Gram stains from erythematous or purulent excoriations to evaluate for infection as ordered by the ~~PHYSICIAN/NNP (per lab protocol)~~ Neonatologist.
  - b. Cleanse the affected area using sterile water or normal saline diluted 1:1 with sterile water every 4-6 hours; a 20 ml syringe with a blunt needle or polytetrafluoroethylene (Teflon) catheter can be used to gently debride the area of exudates per medical orders.
  - c. Antifungal ointment can be used for fungal infections. Systemic treatment may be indicated for very low-birth weight infants who have positive skin cultures for yeast, whose respiratory status

is unstable or who have thrombocytopenia.

- d. If extensive bacterial colonization is suspected, antibiotic ointment such as mupirocin nasal treatment, polymyxin B, zinc bacitracin polymyxin or neomycin may be used sparingly every 8-12 hours per medical orders.
- e. Petrolatum-based ointments can be used over uninfected or infected lesions after cleansing and application of antibacterial ointment. Do not use over fungal lesions.
- f. Transparent adhesive dressings, hydrogel and hydrocolloid dressings can be used for discrete wounds or large denuded areas. Do not use on infected wounds because bacteria and fungus can proliferate under this tape of dressing.

#### J. Intravenous Infiltration

Intravenous infiltration is the unplanned leaking/administration of an infusing nonvesicant solution or medication into the surrounding tissue. Extravasation is the unplanned administration of an infused vesicant or blistering agent into the tissue. In this policy, infiltration refers to both intravenous (IV) infiltration and extravasation.

1. The following interventions are recommended to minimize the risk of infiltration:

- a. Secure intravenous devices with transparent adhesive dressing or clear tape so the insertion site is clearly visible. Place tape loosely over bony prominences to prevent obstruction of venous return.
- b. In peripheral intravenous lines, limit glucose concentrations to 12.5% and amino acid concentration to 2%.
- c. Assess the catheter insertion site and perfusion to the area distal to the catheter insertion, with appropriate documentation, at least hourly.
- d. If signs of infiltration are noted, stop the infusion immediately. Signs and symptoms of infiltration include swelling, pain at the site, coolness of skin, leakage at the site, erythema, blistering, and in some cases, the lack of a blood return. In severe cases, there may be blanching of the overlying skin, blister formation and subsequent skin sloughing.

2. Nonpharmacologic interventions for intravenous infiltration may include but are not limited to the following:

- ~~a. Elevate the site or the affected extremity.~~
- ~~b. Make multiple puncture holes over the areas of greatest swelling and squeeze or let the extravasated fluid leak out of the tissue to remove the infiltrate and prevent skin sloughs. This procedure should only be performed according to PHYSICIAN/NNP order.~~
- a. Elevate the site or the affected extremity.

3. Pharmacologic interventions for intravenous infiltration may include the following:

- a. Administer the appropriate therapeutic agent as soon as possible but no later than 12-24 hours after the infiltrate is identified, as ordered by the ~~PHYSICIAN/NNP~~ Physician.
- b. Hyaluronidase may be administered via the intravenous cannula before removal or as a subcutaneous injection, if ordered. ~~The standard dose is 15~~ Inject 1 mL (150 units. ~~After cleansing the site, subcutaneously administer 4-5)~~ as 5 separate 0.2-mL subQ injections in a circular pattern around the ~~periphery of the extravasation site.~~ periphery of the extravasation site.

~~Dilute a 150-unit vial of hyaluronidase in 1 ml of normal saline; then take 0.1 ml of this solution and further dilute to 1 ml.~~ Use 25- or 26-gauge needle and change after each injection

- c. Alternatively, dilute 0.1 mL hyaluronidase (150 units/mL) with 0.9 mL of normal saline to give a concentration of 15 units/mL. Inject as 5 separate 0.2-mL subQ injections around the periphery of the extravasation site. Use 25- or 26-gauge needle and change after each injection
  - d. Hyaluronidase may be given directly through the affected catheter in a dose of 1 ml of the 15 ~~U~~unit/ml solution. Pull back the intravenous catheter or needle 1-2 mm to remove it from the vein while leaving it in the subcutaneous tissue. Inject the hyaluronidase through the catheter, and then remove the catheter.
  - e. Phentolamine is the antidote for infiltration of alpha-adrenergic agents or those causing vasoconstriction such as dopamine or norepinephrine. The recommended dose is 0.5 mg diluted to 1 ml, delivered subcutaneously around the periphery of the infiltration in 4-5 0.2 ml injections after the removal of the intravenous catheter.
4. For an extensive infiltration, consultation with a plastic surgeon or dermatologist may be considered per physician/~~NNP~~ orders.
  5. Topical 2% nitroglycerin ointment, 4 mm/kg, may be applied directly to the site of severe skin ischemia in term infants >21 days of age with intact skin per physician/~~NNP~~ orders.

#### K. Skin Nutrition

1. Provide overall nutritional care for neonates.
2. Give nutritional supplements parenterally as ordered, including lipids, trace minerals including zinc and multivitamins.
3. Administer intravenous lipids as ordered at 0.5-1.0g/kg/day to prevent essential fatty acid deficiency in newborns that cannot digest adequate amount of enteral nutrients.
4. Administer zinc supplementation for infants requiring parenteral nutrition per physician/~~NNP~~ order:
  - a. ~~Term: <3 months: 250 mcg/kg/day; >3 months: 100 mcg/kg/day;~~
  - b. ~~Premature: 400 mcg/kg/day.~~
  - c. ~~The following trace element dosages are recommended: Term: 0.2 ml/kg/day, with an additional 200 mcg/kg/day of zinc to provide the recommended intake.~~

## REFERENCES:

~~AWHONN: NOEP, 3<sup>rd</sup> edition, 2015~~

The Association of Women's Health, Obstetric and Neonatal Nurses. Neonatal Skin Care: Evidenced Based clinical Practice Guideline. 4th Ed. Washington DC: The Association. 2018

Kenner, C., Altimier, L, and Boykova M. (2020). Comprehensive Neonatal Nursing Care. 6th Ed. New York, Springer Publishing

Sunquist Beauman, S. & Bowles, S. (Eds.) 2019. Policies, Procedures, and Competencies for Neonatal Nursing Care. 6th ed. National Association of Neonatal Nurses

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All revision dates:

4/22/2024, 7/1/2015, 3/1/2010, 2/1/2005, 12/1/2001

## Attachments

[AWHONN Neonatal Skin Condition Score Tool.docx](#)  
[Diaper Dermatitis Algorithm.pdf #1.docx](#)

## Approval Signatures

Step Description	Approver	Date
Medical Executive Committee	Tracy Chapman: VCMC - Med Staff	pending
Pediatrics Committee	Tracy Chapman: VCMC - Med Staff	5/22/2024
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	5/21/2024
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	5/21/2024
NICU	Jennifer Ferrick: Director, Peds/PICU & NICU	5/21/2024
NICU	Melissa Krebs: Director, NICU	4/27/2024



## VENTURA COUNTY HEALTH CARE AGENCY

Origination: 12/1/2001  
Effective: Upon Approval  
Last Approved: N/A  
Last Revised: 3/8/2024  
Next Review: 3 years after approval  
Owner: Jennifer Ferrick: Director, Peds/  
PICU & NICU  
Policy Area: NICU  
References:

# N.61 Neonatal Gastrostomy Feeding and Care

## POLICY:

To guide the Neonatal Intensive Care Unit (NICU) nurse in the care and feeding of an infant with a gastrostomy tube (G-Tube).

## PROCEDURE:

The ~~RN and LVN~~ nurse will care for the gastrostomy tube, which is a catheter surgically passed through the abdominal wall into the stomach for the purpose of decompressing and /or feeding. The nurse ~~educates will~~ educate the parents in preparation for discharge (as appropriate).

## EQUIPMENT

~~40ml syringe~~  
~~60ml catheter tip or Leur tip syringe~~  
~~Breast milk, formula or tube feeding, as ordered~~  
~~Sterile water~~  
~~½ strength Hydrogen Peroxide, Normal Saline or mild soap~~  
~~Q-tips~~  
~~40 Fr Foley catheter~~

### A. For Dressing Change

- Gloves
- 2x2 gauze pads
- Normal Saline
- Cotton-tipped swabs
- Soap
- Topical Medication as needed/ordered

### B. For Feeding

- Appropriately sized catheter tip syringe, leur-lock syringe, or appropriate adapter
- Breastmilk, formula or tube feeding, as ordered
- Sterile water
- Supplies for feeding pump or syringe pump, if applicable



# GUIDELINES

- ~~A. Gather all equipment.~~
- ~~B. Prior to feeding, check gastric residual:~~
  - ~~1. Attach barrel of syringe, unclamp gastrostomy tube, and allow any secretions to flow by gravity into syringe.~~
  - ~~2. The residual may also be checked by aspirating. Attach 10 ml syringe, gently aspirate.~~
  - ~~3. Record amount and description of residual and return residual to stomach. Notify physician/NNP if residual appears abnormal.~~
- ~~C. Reclamp tubing.~~
- ~~D. Attach feeding syringe to gastrostomy tube. Fill syringe with the appropriate feeding. Unclamp tubing. Let the feeding flow in by gravity, taking approximately 20-25 minutes or longer.~~
- ~~E. Hold the infant or position on right side or prone with the head of the bed elevated.~~
- ~~F. Hold syringe just above the level of the stomach.~~
- ~~G. Offer pacifier for sucking, as appropriate.~~
- ~~H. Following the feeding, flush the tube with 1-2ml of water, unless patient is fluid restricted. Reclamp tube post feeding, or elevate and leave open 15-30 minutes, according to physician order.~~
- ~~I. Clean gastrostomy site Q 6 hours or as ordered:~~
  - ~~1. ½ strength Hydrogen Peroxide, using sterile Q-tips.~~
  - ~~2. Normal Saline, using sterile Q-tips.~~
  - ~~3. Clean site with mild soap and water, dry.~~
- ~~J. If gastrostomy tube becomes dislodged notify physician/NNP.~~
  - ~~1. Have replacement catheter available.~~
  - ~~2. A 10-Fr. Foley may be placed in ostomy hole to prevent hole from closing until new catheter can be put in.~~
- ~~K. Keep G-tube site exposed to air as tolerated, minimal tape.~~

## DOCUMENTATION

- ~~L. 24-hour flowsheet, nurses' notes—type and amount of feeding, care of the G-tube site. Document how feeding was tolerated.~~
- ~~M. Parents Discharge Teaching form (Patient Education Plan)—instructions given to parents, use of equipment, comfort with feeding baby.~~

### A. For Dressing Change

- 1. Perform hand hygiene.
- 2. Remove old dressing.
- 3. Using a cotton-tipped swab and normal saline, cleanse around the base of the insertion site until the site has healed.
- 4. Once the site has healed, use 2x2 gauze pads, soap and water to clean the skin around the

gastrostomy tube. Clean around the button and the button itself. Rotate the button with each cleaning once the sutures are removed.

5. Allow the skin to dry. Apply topical ointment as prescribed.
6. Use a single layer of a 2x2 gauze folded in half on either side of the wound or a foam dressing surrounding the base of the tube. No securement is needed if the baby has a button.
7. When the area has healed (approximately 2 weeks), leave the site open to air with no dressing, unless there is drainage.

#### **B. Feedings**

1. Perform hand hygiene.
2. Attach the extension tube to the button.
3. Attach an appropriate sized syringe to the extension tube.
4. Allow the prescribed tube feeding to flow in by gravity. Hold the syringe just above the level of the stomach. Feedings should take 15-20 minutes. The feeding should not be injected under pressure. For feedings to be given over a specified amount of time or continuously, use an infusion pump.
5. Allow the infant to suck on a pacifier during feeding to fulfill normal sucking desire and to help with relaxation.
6. Hold the infant or position on right side or prone with the head of the bed elevated.
7. Follow the feeding and any medication administration with a small amount of sterile water (1-5 mL) to rinse the tube and to prevent occlusion.
8. Re-clamp the gastrostomy tube and disconnect the syringe. If the infant also has had a Nissen fundoplication, the tube should be vented or left open to air for 15-20 minutes, or as ordered, after the feeding. To vent the tube, suspend it with the barrel of a catheter tip syringe attached.

#### **C. Gastrostomy Tube Replacement**

1. Appropriate-sized replacement G-tube should be kept at the bedside, as available.

#### **D. Maintenance and Care**

1. If gastrostomy tube becomes dislodged notify physician.
2. Keep G-tube site exposed to air as tolerated, minimal tape.

#### **E. Considerations**

1. When gastrostomy is placed, the following information should be readily available.
  - a. Type and size of button and type of extension tubing.
2. The initial dressing change after gastrostomy tube placement is usually performed 3-5 days after placement.
3. After the initial dressing change, site care should be performed every 24 hours and PRN if drainage is present.
4. Topical medication may be prescribed by the physician for the prevention or care of skin breakdown and should be used only if ordered.
5. Site care will be done with normal saline, then mild soap and water once the site has healed, unless ordered otherwise.

6. Any drainage, redness, or leakage around the site should be reported to the physician.

#### **F. Parent Teaching**

1. Parents or primary caretakers should be included in the routine care of the gastrostomy tube, beginning in the immediate post-operative period.
2. Teaching should include assessment and care for the site, bathing, feeding via gastrostomy tube, and troubleshooting problems with the tube.
3. Home care supplies should be obtained before discharge if the infant is to be discharged with a gastrostomy tube. Appropriately-sized replacement G-tube should be readily available in case the G-tube is displaced.
4. Written material regarding care of the gastrostomy tube should be provided for the family.

#### **G. Documentation**

1. I-View: Systems Assessment: Gastric Tube. Care of the gastrostomy site and the amount of drainage (if any) from the site, appearance of skin integrity, and dressing changes (as applicable).
2. Amount and type of feeding, and the infant's tolerance to feeding.

## **REFERENCES:**

~~AWHONN: NOEP, 3<sup>rd</sup> edition, 2015~~

Beauman, S.S. & Bowles, S. (Eds.). (2019). *Policies, Procedures, and Competencies for Neonatal Nursing Care*, 6<sup>th</sup> ed. National Association of Neonatal Nurses.

Lippincott Procedures. (2021, November 19). Enteral feeding, gastrostomy feeding button, maintenance and reinsertion, pediatric. <https://procedures.lww.com/lnp/view.do?pld=3378335&hits=enteral.feeding.gastrostomy.feedings&a=false&ad=false&q=enteral%20feeding%2C%20gastrostomy>

All revision dates:

3/8/2024, 1/1/2015, 3/1/2010, 4/1/2008, 12/1/2004

## **Attachments**

No Attachments

## **Approval Signatures**

Step Description	Approver	Date
Pediatrics Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	3/26/2024
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	3/26/2024
NICU	Melissa Krebs: Director, NICU	3/26/2024
NICU	Jennifer Ferrick: Director, Peds/PICU & NICU	3/8/2024



VENTURA COUNTY  
HEALTH CARE AGENCY

Origination: N/A  
Effective: Upon Approval  
Last Approved: N/A  
Last Revised: N/A  
Next Review: 3 years after approval  
Owner: Pearl Dahm: Clinical Nurse  
Specialist  
Policy Area: NICU  
References:

## N.70 Very Low Birthweight Intraventricular Hemorrhage Prevention Protocol

~~**PURPOSE:** Define the care for very low birthweight (VLBW) infants less than 1500 grams and/or infants 31 and 6/7 weeks and below for optimization of care and the prevention of IVH.~~

~~**POLICY:** This policy will be initiated for all infants born at less than 31 and 6/7 weeks or weighing less than 1500 grams.~~

~~The first set of care guidelines will be followed for the first 72 hours of life followed by the second set of guidelines until the first 7 days of life.~~

~~Provide parents with education about importance of specific care for the VLBW infant.~~

~~Encourage parents to have active involvement in the infant's care.~~

~~**DEFINITION(S):** Extremely premature infants are at high risk for neurological and developmental abnormalities in the first week~~

~~of life. Intraventricular hemorrhage (IVH) is a major cause of adverse outcomes in the extremely low birth weight (ELBW) infant. The goal is to optimize development by providing an environment and experiences that support physiologic stability and allow for brain development, growth and learning of the extremely low birth weight infant.~~

~~PROCEDURE(S): The first week of life is very important for the ELBW infant and they are at great risk for an IVH during this period. Best practice brain shell card was developed using evidence based practice to guide care of the ELBW during their first week of life to improve outcomes by decreasing the risk of IVH. The brain shell card should be hung at the infant's bedside on admission to ensure continuity of care.~~

## ~~Process:~~

### ~~1) Admission:~~

~~A. In advance of delivery; have a pre-warmed Giraffe set up in the OR or delivery room with thermal hat over plastic covered head, warming mattress, and polyethylene occlusive wrap.~~

~~B. Prepare the NICU admission space with items for admission and umbilical line placement prior to delivery.~~

~~C. Pre-Warm IV fluid, boluses, medication, and blood products in isolette prior to infusion.~~

~~D. Obtain birth weight and document on admission in the EMR.~~

~~E. Hang brain shell card on the monitor at the bedside.~~

### ~~2) Thermoregulation~~

~~A. Place infant on servo control (skin control) the first week of life at 36.6 degrees Celsius as soon as possible after delivery.~~

~~B. DO NOT dry infant but instead place directly in the Polyethylene occlusive wrap.~~

~~C. Keep infant on warming mattress throughout umbilical line placement until obtaining x-ray for confirmation of line placement.~~

~~D. Close giraffe lid and limit raising the Giraffe unless during a procedure.~~

~~E. Begin humidification set at 80% for first week of life after line placement. (Humidification aids in thermoregulation while supporting fluid balance).~~

~~F. Keep Stethoscope bell inside of isolette to keep warm.~~

### ~~3) Positioning:~~

~~A. Keep head as close to midline as possible in a Snuggly and baby contained in a developmentally supported position (hand hugs/flexed). (Postural changes in the premature infant can lead to changes in the cerebral circulation due to an immature systemic circulatory system).~~

~~B. Maintain HOB elevated 30 degrees (decreases cerebral venous pressure), and lower HOB slowly for x-rays.~~

~~C. Do not raise buttock above head for diaper changes.~~

### ~~4) Skin Care~~

~~A. Universal precautions (gloves) should always be used.~~

~~B. Remove betadine or any other skin preparation with saline wipe or normal saline.~~

~~C. Use of alcohol on the skin should be avoided.~~

~~D. Avoid use of adhesives~~

~~E. Handle infant gently to avoid trauma to skin~~

~~F. Tape should not be used.~~

~~G. Gently clean skin surfaces using warm water; avoid rubbing. If areas of skin breakdown are evident; use sterile water.~~

~~H. Use micro-preemie leads~~

### ~~5) Minimal Stimulation:~~

~~A. Cluster care every 4-6 hours~~

~~B. Minimize suctioning unless infant shows signs of respiratory distress~~

~~C. Limit painful procedures~~

### ~~6) General Care First 72 hours:~~

~~A. Two person handling with cares~~

~~B. No prone positioning or skin to skin unless ordered by MD. Encourage parents to provide therapeutic touch and "hand hugs"~~

~~C. No weights after birth weight obtained~~

~~D. No abdominal girths~~

~~E. No baths~~

~~F. No peripheral BP if UAC in place~~

~~G. Withdraw blood from infant over a minimum of 40 seconds, and return blood to infant over a minimum of 40 seconds. (Flushing rapidly may alter cerebral blood flow resulting in an increased incidence of IVH)~~

~~H. Encourage Moms to pump and provide colostrum for oral swabbing.~~

~~7) General Care 72 hours to 7 Days of Life: Change Brain shell card to opposite side~~

~~A. May place prone or do skin to skin if physiologically stable.~~

~~B. Begin Daily weights and slowly lower Head of bed.~~

~~C. Keep buttocks below head during diaper changes.~~

~~D. No abdominal girths~~

~~E. No baths~~

~~F. Continue two person handling with care, weights, and x-rays.~~

~~G. UAC lab draws 40 second pull and 40 second push. (Flushing rapidly may alter cerebral blood flow resulting in an increased incidence of IVH)~~

~~H. Continue to encourage Moms to pump and provide Colostrum swabbing.~~

## ~~REFERENCE(S):~~

~~Kochan M, Leonardi B, Firestone A, et al. Elevated midline head positioning of extremely low birth weight infants; effects on cardiopulmonary function and the incidence of periventricular-intraventricular hemorrhage. J Perinatology. 2019;39(1): 54-62.~~

~~Persad, N.; Kelly, E; Amaral, N.; Neish, A; Cheng, C; Fan, C-PS; Runeckles, K; Shah, V. Impact of a "Brain Protection Bundle" in Reducing Severe Intraventricular Hemorrhage in Preterm Infants <30 weeks GA: A Retrospective Single Center Study. Children 2021. 8, 983.~~

~~Beauman, S. S. and Bowles, S. NANN. Policies,~~



# ~~Procedures, and Competencies for Neonatal Nursing Care. 6th edition. 2019.~~

## PURPOSE

Define the care for very low birthweight (VLBW) infants less than 1500 grams and/or infants 31 and 6/7 weeks and below for optimization of care and the prevention of IVH.

## POLICY:

This policy will be initiated for all infants born at less than 31 and 6/7 weeks or weighing less than 1500 grams. The first set of care guidelines will be followed for the first 72 hours of life followed by the second set of guidelines until the first 7 days of life. Provide parents with education about importance of specific care for the VLBW infant. Encourage parents to have active involvement in the infant's care.

## DEFINITION(S)

Extremely premature infants are at high risk for neurological and developmental abnormalities in the first week of life. Intraventricular hemorrhage (IVH) is a major cause of adverse outcomes in the extremely low birth weight (VLBW) infant. The goal is to optimize development by providing an environment and experiences that support physiologic stability and allow for brain development, growth and learning of the extremely low birth weight infant.

## PROCEDURE(S)

The first week of life is very important for the VLBW infant and they are at great risk for an IVH during this period. IVH best practice protocol was developed using evidence based practice to guide care of the VLBW during their first week of life to improve outcomes by decreasing the risk of IVH. The protocol should be hung at the infant's bedside on admission to ensure continuity of care.

## PROCESS

### 1. Admission:

- A. In advance of delivery; have a pre-warmed Giraffe set up in the OR or delivery room with thermal hat over plastic covered head, warming mattress, and polyethylene occlusive wrap.
- B. Prepare the NICU admission space with items for admission and umbilical line placement prior to delivery.
- C. Pre-Warm IV fluid, boluses, medication, and blood products in isolette prior to infusion.
- D. Obtain birth weight and document on admission in the EMR.
- E. Hang protocol on the monitor at the bedside.

### 2. Thermoregulation

- A. Place infant on servo-control (skin control) the first week of life at 36.6 degrees Celsius as soon as possible after delivery.
- B. DO NOT dry infant but instead place directly in the Polyethylene occlusive wrap.
- C. Keep infant on warming mattress throughout umbilical line placement until obtaining x-ray for

confirmation of line placement.

D. Close giraffe lid and limit raising the Giraffe unless during a procedure.

E. Begin humidification set at 80% for first week of life after line placement. (Humidification aids in thermoregulation while

F. Keep Stethoscope bell inside of isolette to keep warm.

### 3. Positioning:

A. Keep head as close to midline as possible in a Snuggly and baby contained in a developmentally supported position (hand hugs/flexed) and may use rolls. (Postural changes in the premature infant can lead to changes in the cerebral circulation due to an immature systemic circulatory system).

B. Maintain HOB flat (decreases cerebral venous pressure).

C. Do not raise buttock above head for diaper changes.

### 4. Skin Care

A. Universal precautions (gloves) should always be used.

B. Remove betadine or any other skin preparation with saline wipe or normal saline.

C. Use of alcohol on the skin should be avoided.

D. Avoid use of adhesives

E. Handle infant gently to avoid trauma to skin

F. Tape should not be used.

G. Gently clean skin surfaces using warm water; avoid rubbing. If areas of skin breakdown are evident; use sterile water.

H. Use micro-preemie leads if available.

### 5. Minimal Stimulation:

A. Cluster care every 4-6 hours

B. Minimize suctioning unless infant shows signs of respiratory distress

C. Limit painful procedures

### 6. General Care First 72 hours:

A. Two person handling with cares

B. No prone positioning or skin to skin unless ordered by MD. Encourage parents to provide therapeutic touch and "hand hugs"

C. No weights after birth weight obtained

D. No abdominal girths

E. No baths

F. No peripheral BP if UAC in place

G. Withdraw blood from infant over a minimum of 40 seconds, and return blood to infant over a minimum of 40 seconds. (Flushing rapidly may alter cerebral blood flow resulting in an increased incidence of IVH)

H. Encourage Moms to pump and provide colostrum for oral swabbing.

## Z. General Care 72 hours to 7 Days of Life:

- A. May place prone or do skin to skin if physiologically stable.
- B. Begin Daily weights and
- C. Keep buttocks below head during diaper changes.
- D. No abdominal girths
- E. No baths
- F. Continue two person handling with care, weights, and x-rays.
- G. UAC lab draws 40 second pull and 40 second push. (Flushing rapidly may alter cerebral blood flow resulting in an increased incidence of IVH)
- H. Continue to encourage Moms to pump and provide Colostrum swabbing.

## REFERENCE(S)

Kochan M, Leonardi B, Firestone A, et al. Elevated midline head positioning of extremely low birth weight infants: effects on cardiopulmonary function and the incidence of periventricular-intraventricular hemorrhage. J Perinatology. 2019;39(1): 54-62.

Persad, N.; Kelly, E; Amaral, N.; Neish, A; Cheng, C; Fan,C-PS; Runeckles, K; Shah, V. Impact of a "Brain Protection Bundle" in Reducing Severe Intraventricular Hemorrhage in Preterm Infants <30 weeks GA: A Retrospective Single Center Study. Children 2021. 8, 983.

Beauman, S. S. and Bowles, S. NANN. Policies, Procedures, and Competencies for Neonatal Nursing Care. 6th edition. 2019.

All revision dates:

## **Attachments**

[Please protect my brain \(1\).pdf](#)

## **Approval Signatures**

Step Description	Approver	Date
Pediatrics Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	4/1/2024
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	4/1/2024
NICU	Jennifer Ferrick: Director, Peds/PICU & NICU	4/1/2024
NICU	Pearl Dahm: Clinical Nurse Specialist	3/27/2024
NICU	Melissa Krebs: Director, NICU	3/27/2024



VENTURA COUNTY  
HEALTH CARE AGENCY

Origination: N/A  
Effective: Upon Approval  
Last Approved: N/A  
Last Revised: N/A  
Next Review: 3 years after approval  
Owner: Pearl Dahm: Clinical Nurse Specialist  
Policy Area: NICU  
References:

## N.71 Clinical Humidification in the NICU

~~**PURPOSE:** To provide a method to decrease evaporative heat loss due to trans-epidermal water loss (TEWL) during postnatal maturation of the epidermal barrier in premature infants. Humidification has the following advantages: increased ability to maintain the infant's temperature; improved maintenance of fluid and electrolyte balance; improved energy balance--fewer calories expended in temperature maintenance and improved skin integrity.~~

### **PURPOSE:**

To provide a method to decrease evaporative heat loss due to trans-epidermal water loss (TEWL) during postnatal maturation of the epidermal barrier in premature infants. Humidification has the following advantages: increased ability to maintain the infant's temperature; improved maintenance of fluid and electrolyte balance; improved energy balance--fewer calories expended in temperature maintenance and improved skin integrity.

### **POLICY:**

- ~~**1) The Giraffe Omni-bed (GE Healthcare) shall be used to provide humidity infants.**~~
- ~~**2) Humidity shall be provided for all premature**~~

~~infants from birth up to 30 weeks gestation.~~

~~A) 23 to 27 weeks gestation: 85% for one week. Then 50% until 30 weeks gestation.~~

~~B) Greater than 27 weeks gestation: 80% for one week. Then 50% until 30 weeks gestation. Then ambient humidity.~~

~~3) Humidity shall be instituted within the first 6 hours of life.~~

~~4) Special attention should be paid to the assessment of the infant's body temperature with increases or decreases in humidity levels.~~

~~A) If the neonate becomes hypothermic discontinue weaning and return relative humidity to last setting where the neonate's temperature was stable.~~

~~B) If the neonate becomes hyperthermic, decrease the humidity by 5% decrements to a minimum of 50%.~~

~~5) If condensation occurs along any surface of the incubator to the point where visual contact with the neonate is obscured, decrease humidity by 5% decrements and wipe down condensation.~~

~~DEFINITION(S): Neonatal skin is more fragile than adult skin because fewer fibers connect the epidermis to the dermis. Increased skin permeability in premature infants increases the~~

~~loss of fluids and electrolytes. Infants born at 23-25 weeks have very delicate skin that is not keratinized and will have transepidermal water losses (TEWL) up to ten times higher than a term infant. They are high risk for severe dehydration via fluid losses from the skin if proper humidification is not maintained and water intake is not increased to replace the inordinate Insensible water loss. The skin is not mature until 30-32 weeks post conceptual age.~~

1. The Giraffe Omni-bed (GE Healthcare) shall be used to provide humidity infants.
2. Humidity shall be provided for all premature infants from birth up to 30 weeks gestation. See attached Humidification protocol.
  - A. 23 to 28 weeks gestation: 80% for one week. Then 50% until 30 weeks gestation.
  - B. Greater than 28 weeks gestation: 70% for one week. Then 50% until 30 weeks gestation. Then ambient humidity.
3. Humidity shall be instituted within the first 6 hours of life.
4. Special attention should be paid to the assessment of the infant's body temperature with increases or decreases in humidity levels.
  - A. If the neonate becomes hypothermic, discontinue weaning and return relative humidity to last setting where the neonate's temperature was stable.
  - B. If the neonate becomes hyperthermic, decrease the humidity by 5% decrements to a minimum of 50%.
  - C. If condensation occurs along any surface of the incubator to the point where visual contact with the neonate is obscured, decrease humidity by 5% decrements and wipe down condensation.

## **DEFINITION(S):**

Neonatal skin is more fragile than adult skin because fewer fibers connect the epidermis to the dermis. Increased skin permeability in premature infants increases the loss of fluids and electrolytes. Infants born at 23-25 weeks have very delicate skin that is not keratinized and will have transepidermal water losses (TEWL) up to ten times higher than a term infant. They are high risk for severe dehydration via fluid losses from the skin if proper humidification is not maintained and water intake is not increased to replace the inordinate Insensible water loss. The skin is not mature until 30-32 weeks post conceptual age.

## **PROCEDURE(S):**

- ~~1) Keep direct contact with infant to a minimum.~~
- ~~2) Monitor infant's temperature with skin temperature probe.~~
- ~~3) Use portholes to access infant.~~
- ~~4) While infant is receiving humidity therapy, keep the Giraffe Omni-bed in incubator mode and only raise the canopy as needed.~~
- ~~5) Remove all stuffed animals from the incubator for the duration of the humidity use.~~
- ~~6) Change all linens, including Snuggle-Ups and Bendy bumper covers as needed.~~
- ~~7) Document in the EMR humidity use every shift; including when humidity is implemented, percentage being delivered and setting changes.~~

## **IMPLEMENTING HUMIDITY:**

- ~~1) Remove reservoir from bed and fill to maximum line with sterile distilled water.~~
  - ~~A) Use a fresh unopened bottle for every refill.~~
  - ~~B) Bottles must not be shared.~~
  - ~~C) Any fluid not used from the bottle needs to be discarded.~~
- ~~2) Enter option screen to adjust humidifier per~~

~~physician order.~~

~~3) Reservoir will be cleaned when humidity is discontinued per Giraffe Manual protocol.~~

~~A) Cavicide can be used for cleaning reservoir and will need to rinse after.~~

1. Keep direct contact with infant to a minimum.
2. Monitor infant's temperature with skin temperature probe.
3. Use portholes to access infant.
4. While infant is receiving humidity therapy, keep the Giraffe Omni-bed in incubator mode and only raise the canopy as needed.
5. Remove all stuffed animals from the incubator for the duration of the humidity use.
6. Change all linens, including Snuggle-Ups and Bendy bumper covers as needed.
7. Document in the EMR humidity use every shift; including when humidity is implemented, percentage being delivered and setting changes.

## **IMPLEMENTING HUMIDITY:**

1. Remove reservoir from bed and fill to maximum line with sterile distilled water.
  - A. Use a fresh unopened bottle for every refill.
  - B. Bottles must not be shared.
  - C. Any fluid not used from the bottle needs to be discarded.
2. Enter option screen to adjust humidifier per physician order.
3. Reservoir will be cleaned when humidity is discontinued per Giraffe Manual protocol.
  - A. Cavicide can be used for cleaning reservoir and will need to rinse after.

## **REFERENCE(S):**

~~Gardner, S.; Carter, B. S., Enzman-Hines, M., Niermeyer, S. (2021) Merenstein & Gardner's Handbook of Neonatal Intensive Care: An Interprofessional Approach. 9th ed. Elsevier, Inc~~

~~Kenner, C., Altimier, L., & Boykova, M. (2020). Comprehensive Neonatal Nursing Care. 6th ed.~~



~~New York, Springer Publishing.~~  
~~The Association of Women's Health, Obstetric and Neonatal Nurses. (2018) Neonatal Skin Care: Evidenced Based Clinical Practice Guideline. Washington DC: The Association. 4th Ed~~

Gardner, S.; Carter, B. S., Enzman-Hines, M., Niermeyer, S. (2021) Merenstein & Gardner's Handbook of Neonatal Intensive Care: An Interprofessional Approach. 9th ed. Elsevier, Inc

Kenner, C., Altimier, L., & Boykova, M. (2020). Comprehensive Neonatal Nursing Care. 6th ed. New York, Springer Publishing.

The Association of Women's Health, Obstetric and Neonatal Nurses. (2018) Neonatal Skin Care: Evidenced Based Clinical Practice Guideline. Washington DC: The Association. 4th Ed

All revision dates:

## Attachments



[Humidification protocol.png](#)

## Approval Signatures

Step Description	Approver	Date
Pediatrics Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	4/1/2024
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	4/1/2024
NICU	Jennifer Ferrick: Director, Peds/PICU & NICU	4/1/2024
NICU	Pearl Dahm: Clinical Nurse Specialist	3/26/2024
NICU	Melissa Krebs: Director, NICU	3/26/2024



Origination: N/A  
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 Last Approved: N/A  
 Last Revised: N/A  
 Next Review: 3 years after approval  
 Owner: Jennifer Ferrick: Director, Peds/ PICU & NICU  
 Policy Area: NICU  
 References:

## N.72 Standardized Procedure for Neonatal Emergent Needle Aspiration for Pneumothorax

### PURPOSE:

To provide standardized and safe guidelines for ~~an~~ a Registered Nurse (RN) to perform an emergent needle aspiration procedure for the evacuation of a clinically significant pneumothorax in a neonate.

### POLICY:

- A. In the absence of a trained ~~MD~~physician, the trained Neonatal ~~RN~~Registered Nurse is responsible for initiating the Emergent Evacuation of Pneumothorax Standardized Procedure for patients requiring immediate relief of a pneumothorax causing ventilation/perfusion abnormalities.
- B. Contraindications to emergent pneumothorax evacuation:
  1. Absence of significant ventilation/perfusion abnormalities.
  2. Absence of increasing hypoxia.
  3. Absence of increasing respiratory distress.
  4. Continuing clinical stability.
- C. Written records of ~~RNs~~Registered Nurses who have met the standardized procedure competency requirements will be maintained and updated annually.
- D. Informed consent is not required prior to emergent pneumothorax evacuation. The neonate's medical record shall reflect the emergent need for the procedure.
- E. The Neonatologist will be notified as follows:
  1. Prior to the performance of procedure.
  2. After the procedure is completed.
- F. Parents/caregivers will be notified of the procedure and infant's condition.
- G. Patient population is neonates.

### CIRCUMSTANCES UNDER WHICH THE RN MAY PERFORM THIS STANDARDIZED

# PROCEDURE

- A. The qualified ~~RN in the NICU~~ Registered Nurse in the Neonatal Intensive Care Unit can perform a needle aspiration of a pneumothorax on a neonate in an emergent basis when the Neonatologist is physically unavailable, or under MD supervision for assistance in the delivery room or for training purposes.
- B. The infant must be compromised by a documented pneumothorax and compromised ventilation, oxygenation, and circulation.

## SETTING IN WHICH THE RN MAY PERFORM THIS STANDARDIZED PROCEDURE

- A. ~~Birth Center~~ Labor and Delivery (L&D)
- B. Neonatal Intensive Care Unit (NICU)
- C. Transport

## EXPERIENCE, TRAINING, AND EDUCATION REQUIREMENTS

- A. Experience
  - 1. A qualified Registered Nurse (valid State of California Registered Nurse License) ~~RN~~ will have completed initial orientation (education/training/demonstration of competency) to the ~~NICU~~ Neonatal Intensive Care Unit and have successful completion of the ~~NRP~~ Neonatal Resuscitation Program course of the ~~AAP and AHA~~ American Academy of Pediatrics and American Heart Association.
- B. Education/Training
  - 1. Completion of ~~NICU RN~~ Neonatal Intensive Care Unit Registered Nurse orientation.
- C. Initial Evaluation
  - 1. Initial competencies will be documented on the ~~NICU RN orientation~~ Neonatal Intensive Care Unit Registered Nurse competency sheet and kept in the employee file.
- D. Continuing Evaluation of Competence
  - 1. After initial competency requirements are completed, a yearly competency evaluation is required.
  - 2. Continuing competency and education of the ~~RN~~ Registered Nurse will be documented on an annual basis with return demonstration of a needle aspiration of a pneumothorax procedure in a laboratory setting to the satisfaction of the ~~NICU CNS~~ Neonatal Intensive Care Unit Clinical Nurse Specialist or designee or Neonatologist.
  - 3. Annual competencies will be documented on the Annual Competency Summary Sheet and kept in the employee file.
- E. Clinical Nurse Specialist or Designee Competency Validation
  - 1. Experience
    - a. Have at least three years of clinical experience in neonatal nursing care at least which shall have been in a facility with an ~~NICU~~ Neonatal Intensive Care Unit that is equivalent to a Regional or Community ~~NICU~~ Neonatal Intensive Care Unit.

## 2. Education/Training

- a. Have evidence of current successful completion of ~~NRP~~ Neonatal Resuscitation Program course of the ~~AAP and AHA~~ American Academy of Pediatrics and American Heart Association (instructor course recommended).

## 3. Initial Evaluation

- a. The ~~CNS~~ Clinical Nurse Specialist or designee will have knowledge on needle aspiration which includes:
  - i. Anatomy, indications for needle aspiration during emergent situations, equipment needed to perform needle aspiration, complications.
  - ii. Demonstration of needle aspiration in a laboratory setting under the supervision of the ~~NICU~~ Neonatal Intensive Care Unit Medical Director or physician designee.
- b. Initial competency will be documented on the ~~Orientation~~ Competency Form and kept in the employee file.

## 4. Continuing Evaluation of Competence

- a. After initial competency requirements are completed a yearly competency evaluation is required.
- b. Continuing competency of the ~~CNS~~ Clinical Nurse Specialist or designee will be documented on an annual basis with return demonstration of needle aspiration procedure in a laboratory setting to the satisfaction of the ~~NICU~~ Neonatal Intensive Care Unit Medical Director or physician designee.
- c. Annual competencies will be documented on an Annual Competency Summary Sheet and kept in the employee file.

# SCOPE OF SUPERVISION REQUIRED

- A. Every two years the Interdisciplinary Practice Committee will review and approve the Standardized Procedure.

# DEVELOPMENT AND APPROVAL OF THE STANDARDIZED PROCEDURE

## A. Method of Development

1. Standardized Procedure developed by the Department of Nursing.
2. Standardized Procedure approved by the Interdisciplinary Practice Committee.
3. Standardized Procedure approved by the appropriate Medical Staff Department and Medical Executive Committee.

# EQUIPMENT

18, or 20 gauge IV catheter

23 gauge butterfly

20 or 30 ~~mL~~ milliliter syringe

3 way stopcock

Alcohol wipes or Sterile saline wipes

Povidone Iodine swabs Sterile gloves

IV T-connector

Transparent dressing Sterile 4x4

## PROCEDURE(S):

- A. Have someone notify the Neonatologist immediately when an infant shows signs of a tension pneumothorax.
- B. Confirm the diagnosis by auscultation and transillumination or CXR if patient clinical status allows.
  1. Turn the lights down and place the transilluminator on the anterior chest wall above the nipple and the axilla.
- C. Prepare equipment.
- D. Procedure requires two nurses, the assistant can prepare the equipment and help position the infant.
  1. Check proper patient identification
  2. Perform pre-procedure time-out
- E. If using an 18 or 20 gauge ~~IV~~intravenous catheter, connect the three way stopcock to the syringe and attach to an ~~IV~~intravenous T-connector. The stopcock, syringe, and T-connector set-up will be attached to the ~~IV~~intravenous catheter following needle insertion. If using a 23 gauge butterfly, connect the three way stopcock to the syringe and attach to the butterfly tubing. The stopcock, syringe, and butterfly needle with tubing stay connected during the needle insertion process.
- F. Don sterile gloves.
- G. Cleanse the site with three Povidone Iodine swabs and allow to dry before wiping off with alcohol wipes or sterile saline wipes.
- H. Lateral approach:
  1. Turn infant 45 degrees with pneumothorax side up and support with a blanket. Move arm away from the insertion site.
  2. Insert catheter perpendicular to the chest wall between the 4<sup>th</sup> and 5<sup>th</sup> intercostal space in the anterior axillary line.
    - a. Location is usually adjacent to the nipple line.
    - b. The puncture site should never be near the breast tissue
  3. Place needle just over the top of the rib.
    - a. Neurovascular bundle runs under the ribs.
- I. If using an 18 or 20 gauge IV catheter, following insertion immediately remove the needle and attach the stopcock with syringe and t-connector to the catheter. If using a 23 gauge butterfly, following insertion immediately begin evacuating air.
- J. Evacuate the air into the syringe.
  1. The stopcock position is off to the environment.

- K. When the syringe is full of air, turn the stopcock off to the infant and evacuate the air from the syringe into the environment. Continue the process until you are unable to easily get air return.
  1. Call out the amount of air evacuated so that it can be documented in the **EMR**Electronic Health Record.
- L. If using an 18 or 20 gauge IV catheter, stabilize the catheter and tubing to the infant with the stopcock turned off to the infant and cover with a transparent dressing.
  1. In 5 minutes pull back the plunger on the syringe to evaluate for the re-accumulation of air. Repeat evacuation process if necessary.
- M. If using a 23 gauge butterfly catheter, remove needle following air evacuation and place a gauze and transparent occlusive dressing over the insertion site.
- N. Notify Neonatologist after the procedure is complete.
- O. Prepare the infant for placement of a chest tube or remove the catheter (if still in place) and place a transparent occlusive dressing over the insertion site.
- P. Obtain a chest x-ray when infant is stable.
- Q. Document the procedure time-out in the **EMR**Electronic Health Record and the emergent needle aspiration in the **EMR**Electronic Health Record as a procedure note.

## REFERENCE(S):

American Heart Association (AHA) & American Academy of Pediatrics (AAP). (2021). Neonatal Resuscitation Textbook. 8<sup>th</sup> ed.

Board of Registered Nursing (BRN) (2017). Standardized Procedure Guidelines. <http://www.rn.ca.gov/pdfs/regulations/npr-i-19.pdf>

Gupta, A. O., & Dirnberger, D. R. (2020). Thoracostomy. In J. Ramasethu & S. Seo (Eds.), *MacDonald's atlas of procedures in neonatology* (6th ed., pp. 307-320). LWW.

All revision dates:

### Attachments

No Attachments

### Approval Signatures

Step Description	Approver	Date
Medical Executive Committee	Tracy Chapman: VCMC - Med Staff	pending
Interdisciplinary Practice Committee	Tracy Chapman: VCMC - Med Staff	5/22/2024
Pediatrics Committee	Tracy Chapman: VCMC - Med Staff	5/22/2024
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	5/21/2024

Step Description	Approver	Date
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	5/21/2024
Policy Owner	Jennifer Ferrick: Director, Peds/PICU & NICU	5/21/2024



# VENTURA COUNTY HEALTH CARE AGENCY

**Origination:** 7/1/2016  
**Effective:** Upon Approval  
**Last Approved:** N/A  
**Last Revised:** 4/14/2021  
**Next Review:** 3 years after approval  
**Owner:** Kristina Swaim: Clinical Nurse Manager, OB  
**Policy Area:** OB Nursing  
**References:**

## OB.02 Emergency C-Section

### POLICY:

To provide a rapid and coordinated response to an emergent Cesarean Section on the OB floor.

### PROCEDURE:

The OB team will activate an "Emergency C-section." The physician, RN or designee will call the Paging operator and activate an "Emergency C-section."

#### AT VCMC:

- A. The Paging operator will call "Code Emergency C-section" overhead and will contact the following individuals:
  1. VCMC on call obstetrician
  2. Anesthesiologist on call
  3. Nursing Supervisor
  4. NICU Respiratory Therapist
  5. The Charge Nurse or designee will notify NICU
  6. Unless otherwise informed, the obstetrician/physician will respond by coming directly to the OB Department. If the Obstetrician/physician on call cannot respond rapidly, the Charge Nurse or designee will begin calling obstetricians on the emergency call back list.
  7. The Nursing Supervisor will call in the OR team.
  8. Unless otherwise informed, the Anesthesiologist will respond by coming directly to the OB Department. If the Anesthesiologist on call cannot respond rapidly, the Charge Nurse or designee will begin calling Anesthesiologists on the emergency call back list.
  9. The OB operating room will be equipped and stocked for a C-Section at all times including a hysterectomy tray. The room will be checked every shift by the Charge Nurse or designee.

#### AT SANTA PAULA HOSPITAL:

- A. The Paging operator will call "Code Emergency C-section" overhead, and then page the Nursing Supervisor. The Paging operator will then page or call the following individuals to the Nursing Supervisor at 805-218-1712:



1. SPH on call physician
2. VCMC on call obstetrician
3. Anesthesiologist on call
4. Respiratory therapist.
5. Unless otherwise informed, the obstetrician/physician will respond by coming directly to the OB Department. If the Obstetrician/physician on call cannot respond rapidly, the Charge Nurse or designee will begin calling obstetricians on the emergency call back list.
6. The Nursing Supervisor will call in the OR team.
7. Unless otherwise informed, the Anesthesiologist will respond by coming directly to the OB Department. If the Anesthesiologist on call cannot respond rapidly, the Charge Nurse or designee will begin calling Anesthesiologists on the emergency call back list.
8. The OB operating room will be equipped and stocked for a C-Section at all times. The room will be checked every shift by the Main OR staff.

### **Prevention of Retained Surgical items during an Emergency Cesarean Section**

It is the policy of **Ventura County Medical Center (VCMC)/Santa Paula Hospital (SPH)** that:

- All surgical items opened and used during a surgical procedure will be accounted for.
- A count may be initiated by any member of the perioperative team involved in the counting process
- Manual counts of radiopaque soft goods, sharps, miscellaneous items, and instruments opened onto the sterile field will be performed in all surgical invasive procedures.
- Instrument counts can be waived during the initiation of an Emergency Cesarean Section. However, subsequent counts and a final count must be done prior to the closing of the patient.
- When instrument counts are waived, unless the patient's safety is at risk, intraoperative imaging will be performed before the patient is transferred from the OR.
- Any perioperative team member (e.g., anesthesia professional, float RN) who assists the surgical team by opening sterile items onto the sterile field will:
  - count the items with the scrub person,
  - add the counted items to the count documentation (e.g., count sheet, whiteboard), and
  - promptly inform the RN circulator of what was added..
- See Policy **S.27 Prevention of Retained Surgical Items**

All revision dates:

4/14/2021, 3/8/2018, 7/1/2016

## **Attachments**

No Attachments

## **Approval Signatures**

<b>Step Description</b>	<b>Approver</b>	<b>Date</b>
Medical Staff Committees: Family Medicine & OB	Tracy Chapman: VCMC - Med Staff	pending

Step Description	Approver	Date
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	4/4/2024
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	4/4/2024
Policy Owner	Kristina Swaim: Clinical Nurse Manager, OB	4/4/2024



## VENTURA COUNTY HEALTH CARE AGENCY

**Origination:** 12/1/2004  
**Effective:** Upon Approval  
**Last Approved:** N/A  
**Last Revised:** 4/4/2024  
**Next Review:** 3 years after approval  
**Owner:** Kristina Swaim: Clinical Nurse Manager, OB  
**Policy Area:** OB Nursing  
**References:**

### OB.22 Newborn Physician Consultations

#### POLICY:

To provide a physician coverage schedule for normal newborns who do not have an attending assigned while in couplet care.

#### PROCEDURE:

- A. Please call Pediatric services to notify them of birth of a newborn for their service.
- B. Non-well newborn evaluation/consultation: Please follow the chain of command (do not by-pass resident or attending in charge of the babies).
- C. In emergency situation: Inform NICU team and the primary physicians in charge of the ~~newborn~~ newborn simultaneously.
- D. If NICU team evaluation is needed for any newborn problem, call the Neonatal Unit Charge Nurse ~~Practitioner (NNP)~~ for evaluation.
- E. For consultation with the Neonatologist, the resident or attending may contact the Neonatologist on service.

All revision dates:

4/4/2024, 2/27/2023, 2/17/2023, 7/1/2016, 7/1/2010,  
7/1/2006

#### Attachments

No Attachments

#### Approval Signatures

Step Description	Approver	Date
Medical Staff Committees: Family Medicine, OB, Pediatrics Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	4/4/2024

Step Description	Approver	Date
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	4/4/2024
Policy Owner	Kristina Swaim: Clinical Nurse Manager, OB	4/4/2024



## VENTURA COUNTY HEALTH CARE AGENCY

Origination: 3/1/1986  
Effective: Upon Approval  
Last Approved: N/A  
Last Revised: 6/3/2024  
Next Review: 3 years after approval  
Owner: Kristina Swaim: Clinical Nurse  
Manager, OB  
Policy Area: OB Nursing  
References:

# OB.45 OB Management of Fetal Heart Rate Tracing

## POLICY:

To provide guidelines for fetal heart rate (FHR) monitoring and uterine contraction (UC) assessment and documentation in the Obstetrics (OB) Department. To assist in directing the trained Registered Nurse to initiate, assess, document and intervene in the care of a labor patient after assessment of fetal wellbeing to ensure patient and fetal safety.

To provide standardized interpretation and communication regarding FHR and UC data based on criteria set forth by the National Institute of Child Health and Human Development (NICHD).

To utilize informed consent and clinical judgment to provide a level of monitoring customized to the patient's clinical condition and personal preferences, with the goal of achieving a delivery without significant acidemia or unnecessary iatrogenic interventions. To provide the guidelines for the registered nurse to utilize FHR and UC monitoring and assessment to support the overall goals of supporting maternal coping and labor progress.

## PROCEDURE:

### Electronic Fetal Monitoring (EFM)

Prepare equipment:

1. Explain fetal monitoring procedure and rationale to patient.
2. Place two belts to patient to keep EFM equipment secure.
3. Perform Leopold's maneuvers or ultrasound to determine fetal position and fetal lie.
4. Assist patient to comfortable position, avoid supine to maximize utero-placental perfusion.
5. Apply gel to the surface of the ultrasound transducer and then place on the abdomen, attach belt.
6. Apply tocometer transducer at fundal height, attach belt to secure. Tare or "Zero" the tocometer.
7. Within the first 10-20 minutes identify fetal heart rate baseline (FHR BL), variability, and the presence of periodic and episodic changes to determine if these findings reflect adequate fetal oxygenation.
8. Palpate the abdomen, assess frequency, duration and intensity of contractions. Determine if the uterus is relaxed between contractions.
9. During the intrapartum period, it may become necessary to monitor the fetus and/or uterine activity with

the direct (internal) mode via intrauterine pressure catheter (IUPC). Internal monitoring requires fetal membranes to be ruptured. Artificial Rupture of membranes may only be done by a physician. A physician or RN who has met competency may apply or insert the appropriate device using routine admission orders when the membranes have already been ruptured.

## Definitions:

- **EFM:** Uses an ultrasound or fetal scalp electrode to record the fetal ECG producing a visual representation of the FHR that is continuously recorded as the FHR tracing. It is used to detect and record the baseline rate, variability, accelerations and periodic or episodic decelerations.
- **Electronic:Continuous:** EFM will be maintained in a continuous manner. This may be accomplished externally (ultrasound/tocometer), internally (FSE/IUPC) or with a combination of both.
- **Electronic:Intermittent:** EFM will be implemented and continued at intervals indicated by risk status.

## 2008 NICHD Nomenclature for Fetal Heart Rate Patterns:

- A. **Category I:** FHR patterns not generally associated with hypoxemia (Category I) are followed in a routine manner without any specific action required include all of the following:
1. Baseline rate 110-160 beats/min
  2. Moderate variability
  3. Absence of any late or variable decelerations
  4. Early decelerations may or may not be present
  5. Accelerations may or may not be present
- B. **Category II:** FHR patterns are not predictive or abnormal fetal acid-base status but are indeterminate and require evaluation and continued surveillance and reevaluation, includes any of the following:
1. Baseline rate
    - Tachycardia or Bradycardia not accompanied by absent baseline variability.
  2. Baseline FHR variability.
    - Minimal baseline variability
    - Absent baseline variability not accompanied by recurrent decelerations
    - Marked baseline variability
  3. Absence of induced accelerations after fetal stimulation.
  4. Periodic or episodic decelerations
    - Recurrent variable decelerations with minimal or moderate baseline variability
    - Variable decelerations with other characteristics, such as slow return to baseline.
    - Prolonged decelerations greater than or equal to 2 minutes, but less than 10 minutes
    - Recurrent late decelerations with moderate baseline variability
- C. **Category III:** Predictive of abnormal fetal acid-base status, requires prompt evaluation and attempts to resolve such as maternal oxygen, change in maternal position, discontinuation of labor stimulation, treatment of maternal hypotension or additional efforts. These tracings include either:
1. Absent baseline FHR variability along with any of the following:
    - Recurrent late decelerations

- Recurrent variable decelerations
- Bradycardia

2. Sinusoidal pattern

D. **\*Recurrent:** Periodic changes that occur with greater than 50% of uterine contractions in a 20 minute window or two concurrent 10 minute windows.

## Definition of Terms:

Term:	Definition:
Baseline rate	Mean fetal heart rate (FHR) rounded to increments of 5 bpm during a 10-minute segment excluding periodic or episodic changes, periods of marked variability, and segments of baseline that differ by >25 bpm. Duration must be ≥2 minutes.
Normal Baseline:	Baseline rate of 110-160 bpm
Bradycardia	Baseline rate of <110 bpm
Tachycardia	Baseline rate of >160 bpm
Baseline Variability	(Indicator of and adequately oxygenated fetus):determined in a 10-minute window, excluding accelerations and decelerations. Fluctuations in the baseline FHR that are irregular in amplitude and frequency and are visually quantified as the amplitude of the peak-to-trough in bpm.
Reactive FHR Tracing	A tracing is identified as "reactive" when the tracing exhibits 2 accelerations/20 minutes, >15 bpm above baseline lasting >15 seconds in association with moderate variability and a baseline between 110-160 bpm. If before 32 weeks gestation=2 accelerations/20 minutes with accelerations > 10 bpm above baseline lasting for > 10 seconds.
Absent variability	Amplitude range: undetectable
Minimal variability	Amplitude range: is between 2 to > 5 beats/min
Moderate variability	Amplitude range: 6 to 25 beats/min
Marked variability	Amplitude range: more than 25 beats/min
Sinusoidal	A regular, smooth, sine wave-like baseline with a frequency of approximately 2-5 minute cycles per minute, equally distributed above and below the baseline, and with amplitude of 5-15 bpm. There is absent variability and baseline FHR 110-160.
Acceleration	An <i>abrupt</i> increase in FHR above baseline - time from the onset of the acceleration to its peak less than 30 seconds. The peak is 15 beats per minute or more above the baseline, and the acceleration lasts 15 seconds or more, but less than 2 minutes. Accelerations lasting greater than or equal to 10 minutes is defined as a baseline change.
Prolonged acceleration	2 minutes or longer and less than 10 minutes, a duration of greater than 10 minutes is a baseline change.
Late deceleration	A <i>gradual</i> decrease and return to the baseline FHR in association with a uterine contraction - time from onset of the deceleration to its nadir 30 seconds or longer. Typically symmetrical in shape with the nadir occurring after the peak of

Term:	Definition:
	the uterine contraction.
Early deceleration	A <i>gradual</i> decrease and return to the baseline in association with a uterine contraction - time from onset of the deceleration to its nadir 30 seconds or longer. Typically symmetrical in shape and coincident in timing with uterine contractions, with the nadir occurring simultaneously with the peak of the uterine contraction
Variable deceleration	An <i>abrupt</i> decrease in FHR below the baseline, with onset to nadir fewer than 30 seconds. May or may not be associated with uterine contractions. The decrease from baseline is 15 beats per minute or greater and lasts 15 seconds or longer, but lasts less than 2 minutes from onset to return to baseline.
Prolonged deceleration	A decrease in FHR below the baseline of 15 beats per minute or more and lasting at least 2 minutes but less than 10 minutes from onset to return to baseline. A deceleration that is sustained for 10 minutes constitutes a change in baseline.
Recurrent decelerations	Occur with 50% or more of uterine contractions in any 20-minute segment.
Intermittent decelerations	Occur with less than 50% of uterine contractions in any 20-minute segment.

### **Risk Assessment:**

EFM rate monitoring can be continuous or intermittent as determined by the risk status of the mother and/or fetus, professional nursing judgment, and/or provider order. Determine risk status and patient preference to determine appropriate method of fetal monitoring. When an increased risk of fetal compromise is suspected, continuous electronic fetal monitoring will be used.

- A. **Low Risk:** Patient without any identified risk factors or risk factors unlikely to affect maternal or fetal status during labor and delivery.
- B. **At Risk:** Patients with identified risk factors that may affect maternal or fetal status during labor and delivery. At risk patients enter labor with stable maternal and fetal status. The patient population includes, but not limited to, those with preeclampsia, chronic HTN, insulin dependent diabetes, preterm fetus, post-term fetus, meconium-stained amniotic fluid, medically indicated induction of labor.
- C. **At Greater Risk:** Patients with major or multiple risk factors which more commonly affect maternal or fetal status during labor and delivery. At greater risk patients enter labor with unstable maternal or fetal status. This patient population includes, but is not limited to, those with cocaine or other substance abuse, prior Cesarean Section or other uterine surgery, IUGR, oligohydramnios, multiple gestation, vaginal bleeding, heart disease, and uncontrolled diabetes.

### **Uterine Contractions:**

Uterine Contractions are quantified as the number of contractions present in a 10 minute window, averaged over 30 minutes. Contraction frequency alone is a partial assessment of uterine activity and duration, intensity, and relaxation times are equally as important as frequency in clinical practice. The following represents terminology to describe uterine activity.

**Normal:** 5 or less contractions in a 10 minutes, averaged over 30 minutes.



**Tachysystole:** Greater than 5 contractions in 10 minutes, averaged over 30 minutes.

- a. Tachysystole should always be qualified as the the absence or presence of associated FHR decelerations.
- b. Tachysystole applies to both spontaneous or stimulated labor.

## **GUIDELINES:**

### **A. Assessment:**

1. The most commonly employed method of detection of hypoxemia is electronic monitoring of the FHR.
2. Admission/Triage Assessment:
  - a. Upon presentation to triage or admission to Labor and Delivery, fetal status should be evaluated. All patients greater than 24 weeks gestation are monitored for a minimum of 20 minutes. If greater than 28 weeks gestation, the tracing should be continuous until Category I.
  - b. Before discontinuing the EFM prior to discharge home, the non-stress test must be reactive.
  - c. Notify provider if not Category I after 40 minutes and/or variant FHR patterns are noted. If patient is laboring, accelerations may not be required to determine Category I tracing.
  - d. Prior to discontinuing the EFM for ambulation or other activity while in labor, the tracing must meet criteria of a reactive NST or a Category I tracing.
  - e. If triage patient has been ambulating for a period of time (2 hours or more), another 20 minute tracing of the fetal heart rate and uterine activity should be completed prior to discharge home from triage.

### **B. Intrauterine Fetal Resuscitation Interventions and Management:**

1. Notify physician of assessment, interventions, and evaluation of the interventions in a timely manner.
2. In the presence of acute or non-recovering fetal intolerance to labor or maternal distress, begin preparations for an assisted vaginal delivery or cesarean section.
3. If not improved with conventional methods, and if uterine tachysystole is noted, consider administration of 0.25 mg of Terbutaline subcutaneously. If no maternal contraindications exist.
4. Assess cervical status, verify there is not a prolapsed umbilical cord, and confirm that delivery is not imminent. Consider placement of fetal scalp electrode (FSE) and/or intrauterine pressure catheter (IUPC).
- ~~May administer O<sub>2</sub> by tight face mask at 8 to 10 L/min. Patients with moderate variability are considered to have a normal acid-base balance and often do not require oxygen. (ACOG, 2010). A physician order is required to provide oxygen.~~
5. Provide IV bolus of 500 mL to 1000 mL of Normal Saline or Lactated Ringers to increase maternal circulatory volume and utero-placental blood flow, unless contraindicated by maternal condition.
6. Reposition patient to improve utero-placental blood flow and fetal oxygenation (right side, left side, hands and knees).
7. ~~May discontinue~~ Strongly consider decreased dose or discontinuation of oxytocin if ~~present~~ being used to decrease uterine stimulation. Notify physician.

## DOCUMENTATION:

Admit patient to the Electronic Health Record (EHR) and associate to the FetaLinks system if not already done.

### Frequency of Assessment and Documentation

Documentation of the FHR and UC assessment in the medical record may occur at intervals that are different from assessment. When assessment and documentation are done at different intervals, this can be specified in the FetaLinks System. Example: "Assessing FHR q 5 min" can be written in the notes, while a complete "Fetal Heart Rate" screen is completed in Power Chart Maternity (EHR) every 15 minutes.

### Fetal Assessment includes the following:

1. Baseline FHR (a single number rounded in increments of 5BPM).
2. FHR variability:
  - a. Absent (undetectable)
  - b. Minimal (undetectable to 5 BPM)
  - c. Moderate (6-24 BPM)
  - d. Marked (greater than or equal to 25 BPM)
3. Presence of accelerations, periodic or episodic decelerations, changes or trends of FHR patterns over time.
4. Instrumentation (US or FSE, tocometer or IUPC).
5. Uterine Activity:
  - a. Frequency
  - b. Duration
  - c. Intensity (with IUPC mmHg).
  - d. Resting Tone (frequency with tocometer, mmHg IUCP).

**Uterine activity includes the following:** Mode, frequency, duration, intensity

	Assessment	Documentation
<b>Antepartum, not in Labor</b>	Individualized per orders	Individualized per orders
<b>Latent Phase: Low-risk without oxytocin</b>	Assess hourly *More frequently if clinical condition indicates increased frequency of assessment and documentation.	Document hourly, unless clinical condition indicates increased frequency of assessment/ documentation.
<b>Low Risk with Oxytocin or Risk factors</b>	Every 15 minutes with oxytocin. Every 30 minutes without oxytocin, risk factors present.	Document every 30 minutes
<b>Active Phase Labor:</b>	Assess every 15 minutes	Document every 30 minutes
<b>Second Stage Labor:(passive</b>	Assess every 15 minutes	Document every 15 minutes

fetal decent)		
<b>Second Stage Labor:(actively pushing)</b>	Assess every 5 minutes	Document every 15 minutes

**Note:** Frequency of assessment should always take into consideration maternal-fetal condition, and at times shall need to occur more often based on maternal-fetal clinical needs, for example, a temporary or ongoing change in maternal or fetal status. Guidelines should not replace clinical judgment.

#### **Specific Circumstances:**

##### **A. Pitocin Induction or Augmentation:**

1. FHR and uterine activity are assessed and documented with each **dosage change**.
2. FHR and uterine activity are:
  - a. Assessed every 15 minutes and documented every 30 in the first stage of labor and in second stage prior to actively pushing.
  - b. Assessed every 5 minutes and documented every 15 minutes in second stage labor when actively pushing.
  - c. The maternal, fetal, or uterine condition may warrant closer observation and documentation.

##### **B. Epidural Anesthesia:**

1. Obtain FHR every 15 minutes if unable to continuously monitor during epidural placement when monitoring can safely occur.
2. Continuous monitoring following placement of epidural catheter.
3. For patients with stable anesthesia and no risk factors that warrant closer observations, assessment of the fetal heart rate occurs every 15 minutes and documentation every 30 minutes.

**C. Operative Vaginal Delivery:** With the use of a vacuum extractor or forceps, the FHR will be both assessed and documented every 5 minutes beginning when the forceps or vacuum is applied and continuing until removal.

##### **D. Cesarean Section Delivery:**

1. FHR will be obtained and documented prior to the transfer into OR.
2. FHR will be obtained following anesthesia placement, prior to abdominal prep.

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## Attachments

No Attachments

## Approval Signatures

Step Description	Approver	Date
Medical Staff Committees: Family Medicine & OB	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	4/4/2024
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	4/4/2024
Policy Owner	Kristina Swaim: Clinical Nurse Manager, OB	4/4/2024



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Owner: Kristina Swaim: Clinical Nurse Manager, OB  
Policy Area: OB Nursing  
References:

## OB.62 Trial of Labor After Cesarean (TOLAC)

### POLICY:

Trial of labor after Cesarean (TOLAC) will be allowed in women who have had one or two previous Cesarean Sections and meet the other TOLAC criteria. Prostaglandins will not be administered for induction of TOLAC patients. Oxytocin use in TOLAC patients is not contraindicated.

Women who have had one or two previous Cesarean Sections may have a trial of labor after Cesarean (TOLAC) if they meet the OB/GYN department's criteria and guidelines. The appropriate physician will counsel the woman about the risks and benefits of a TOLAC and VBAC and Repeat Cesarean Section. This must be documented and the TOLAC informed consent signed. Anesthesia and the OB surgical team will be immediately available during active labor.

### PROCEDURE:

#### 1. INFORMATION:

##### A. Candidates for TOLAC:

1. Time interval since previous Cesarean Sections will be a minimum of 18 months from last Cesarean Section to estimated delivery date (EDD).
2. The woman has had no more than two prior Cesarean Section deliveries.
3. The woman has had no other uterine scars or ruptures, whether from previous Cesarean Section or uterine surgeries.
4. The clinical assessment suggests the woman has a pelvis clinically large enough to allow a vaginal birth.

##### B. Contraindications to a trial of labor:

1. A woman who has had a vertical or t-shaped uterine incision scar.
2. A woman with a documented small maternal pelvis or a documented macrosomic baby greater than 4500 grams. A woman with any contraindication to vaginal delivery (e.g. placenta previa).

##### C. Staffing:

1. A physician with privileges to perform a Cesarean Section will be continuously present at VCMC when a TOLAC patient is in labor.
2. Anesthesia and surgical team are immediately available for an emergent Cesarean Section

during the active phase of labor (i.e. 6 cm dilated cervix) or earlier at the discretion of the attending physician on call.

## GUIDELINES:

- A. **TOLAC IN HOUSE:** When a TOLAC patient is determined to be in labor, the attending physician, nurse or resident will call **Pagingoperator** and ask them to activate the **TOLAC In House** call list. The operator will contact the **Obstetricianobstetrician** or OB/FP on front-up call, the Anesthesiologist and the Nursing Supervisor with a TOLAC In House page. The Nursing Supervisor will notify the scrub tech on call for TOLAC's. Time of notification will be recorded. The Obstetrician or family medicine attending with Cesarean Section privileges will assess the patient to see if she is still a TOLAC candidate. This will be documented in the electronic health record (EHR) on the "OB TOLAC Intrapartum Checklist."
- B. **TOLAC ACTIVE:** When the TOLAC patient is in active labor, or earlier at the discretion of the attending physician, the attending physician will call the paging operator and ask them to **activeactivate** the TOLAC Active call list. The operator will page the Obstetrician, the Anesthesiologist and the Nursing Supervisor with a TOLAC Active page. The Nursing Supervisor will notify the scrub tech. The Anesthesiologist and scrub tech should come immediately to labor and delivery (L&D) and sign in. Sign in time should be documented in the "TOLAC Sign In" folder in L&D using the time on a digital device (cell phone). If the obstetrician on call is not the Cesarean Section privileged physician who is primarily responsible for the care of the TOLAC patient, the obstetrician will immediately call Labor and Delivery to acknowledge the TOLAC Active page and will prepare to come to the hospital if needed.
- C. Informed consent for TOLAC will be obtained. The TOLAC consent form and Cesarean consent form will be signed.
- D. Any physician with obstetrical privileges may manage a TOLAC patient, with the following expectations;
  - 1. The attending physician managing the patient should be present in the hospital throughout labor.
  - 2. A physician with Cesarean Section privileges must also be present in the hospital throughout labor.
- E. Neonatal intensive care unit (NICU) will be notified of all TOLAC patients.
- F. Establish intravenous accesses with **#18** gauge catheter.
- G. Obtain CBC and Type and Screen.
- H. Keep patient NPO, except for clear fluids.
  - I. Continuous fetal and uterine activity monitoring will occur in labor
- J. Notify anesthesia of patient's admission.
- K. Have one operating room (OR) room available as long as the patient is in labor. The scrub tech will have all packs and instruments ready for immediate opening.
- L. The patient may receive an epidural anesthesia when desired.
- M. Oxytocin may be used for patients desiring vaginal birth after cesarean, who have been evaluated by the physician and screened using criteria in the Trial of Labor After Cesarean (TOLAC) Policy and have signed the TOLAC consent form. Follow Oxytocin Administration Orders. See also Oxytocin Administration Policy.
- N. Rupture of membranes to induce or augment labor is acceptable.
- O. Use of a Foley bulb without Oxytocin to ripen the cervix is an acceptable practice for an unfavorable cervix. Prostaglandins including misoprostol are contraindicated.

- P. A version may be attempted on patients with prior low transverse uterine incision who are at low risk for adverse maternal or neonatal outcomes from external cephalic version and TOLAC (American College of Obstetricians & Gynecologists (ACOG) Practice Bulletin #115) at the discretion of the physician.

## NURSING CARE:

- A. The nurse must provide ongoing care and assessment with particular attention to signs and symptoms of uterine rupture:
1. Signs and Symptoms of Uterine Rupture
    - a. Development of Category II (involving recurrent late or variable decelerations) or III fetal heart rate pattern.
    - b. Constant discomfort, which does not subside between contractions.
    - c. Marked maternal restlessness and/or anxiety inconsistent with the intensity contractions or with discernible contractions.  
~~Persistent abdominal pain over symphysis pubis, even with epidural.~~
    - d. Persistent abdominal pain over symphysis pubis, even with epidural.
    - e. Difficulty obtaining technically adequate fetal heart rate and contraction pattern due to possible patient restlessness, increased uterine tonus with ongoing slow rupture or tocometer/ultrasound located over the area of rupture.
    - f. Ripping/tearing sensation in abdominal suprapubic area due to frank rupture
    - g. Perception by patient that the baby's position has changed radically (i.e. moving up near ribs or palpated fetal anatomy).
    - h. Elevation in station of fetal head or presenting part cannot be palpated.
    - i. Abnormal pain, such as shoulder pain.
- B. All Labor and Delivery RNs will complete a competency on care of the woman desiring a TOLAC and recognize the signs and symptoms of uterine rupture.

## DOCUMENTS:

- A. TOLAC checklist
- B. TOLAC consent form # 7224
- C. TOLAC Candidate Physician Assessment Form

## REFERENCES:

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## Attachments

No Attachments

## Approval Signatures

Step Description	Approver	Date
Medical Staff Committees: Family Medicine & OB	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	4/4/2024
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	4/4/2024
Policy Owner	Kristina Swaim: Clinical Nurse Manager, OB	4/4/2024





## VENTURA COUNTY HEALTH CARE AGENCY

**Origination:** N/A  
**Effective:** Upon Approval  
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**Last Revised:** N/A  
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**Owner:** Erin Olivera: Clinical Nurse Manager, IPU/CSU  
**Policy Area:** Inpatient Psychiatric Unit (IPU)  
**References:**

# Patient Safety Observation

## PURPOSE:

The Ventura County Medical Center Inpatient Psychiatric Unit (IPU) and Crisis Stabilization Unit (CSU) identifies patients at risk for elopement, assault, self-harm, suicidal behaviors, damage to property, or infringement on the rights of others. While protecting patients' rights staff provide levels of observation and interventions to maximize the safety of patients, visitors, and staff.

## POLICY:

All patients will be routinely observed in compliance with physician orders and prescribed protocols. The level of observation may be increased by the Physician or Registered Nurse (RN) after evaluation and assessment.

## DEFINITION(S):

- **Standard / Routine Observation** – Performed at all times providing scheduled checks of the patients whereabouts, status, and environmental safety.
- **One to Two Observation** – Two patients assigned to one staff to be observed concurrently.
- **One to One Observation** – Patient has one assigned staff to maintain constant visual observation.

## PROCEDURE(S)

### A. Initiation / Admission

1. Patients admitted to the IPU/CSU will have a skin assessment and contraband check. The patient must remove all clothing, including undergarments and socks. Two same-gender staff (when available), one of whom must be an RN, will assist the patient. Staff will check the back of the patient's body with a hospital gown covering the front, and then, check the front of the patient's body without the gown to ensure that no contraband is present on the person and that the patient's skin is intact. The patient's belongings will also be separated and searched for contraband. Once the skin assessment and belongings check has been completed, the patient may have their searched belongings, without contraband items returned. Pajamas will be offered.
2. Should a patient decline to turn over their belongings or don the gown for the skin assessment/contraband check, they will be immediately placed on one-to-one observation in the admission hallway. One to One observation will continue until the patient cooperates with the skin assessment and/or contraband check.

3. Physicians will assess each patient and identify those at risk during the initial Psychiatric Evaluation, utilizing a physician progress note. Based on the physician's assessment, the appropriate observation level will be ordered.
4. All observation needs for patients admitted without a face-to-face evaluation by a psychiatrist will be collaborated with the on call resident and or attending until seen by a psychiatrist. If a Registered Nurse's screening results in the need for an increased observation level, the RN will notify the Attending Physician or on call Physician of findings using SBAR and obtain a physician's order. The physician's order shall include the Observation Level and the reason for the monitoring. All communication and collaboration regarding observation levels will be reported to the Physician and noted in the Electronic Health Record under provider Notification and or the Progress Note.
5. Each patient will be assessed by an RN upon admission. Patients may require constant observation based on:
  - A history of high-risk behaviors, current symptoms, is highly volatile, impulsive, and/or suicidal, requires frequent redirection, prompting, and encouragement to maintain control, requires maximum staff structure for protection of self or others due to frequent or continuous loss of behavior control.
  - Moderate to severe risk for falls, extreme or unusual nursing care needs require the equivalent of one staff's total time during shift.
  - Patient who requires more than fifty percent assistance with ADLs or constant supervision to complete ADLs. Extreme or unusual nursing care needs require at least 2/3 of one nursing staff's time during one shift.
  - Symptoms of disorientation, confusion, agitation, delusions, or hallucinations that require interventions of longer duration or higher frequency of observation.
  - Clinical symptoms that indicate a moderate self-harm or harm to others with significant support needs. Elopement risk.
6. The patient may have his/her room searched and the charge nurse will determine which objects may stay in the room. Any object removed from the room that belongs to the patient must be labeled and told which belongings are being removed from the room and where they are stored. Documentation of the search is to occur and a doctor's order must be obtained.
7. Care provided by assigned staff will be delegated and overseen by the assigned bedside nurse. The nurse will retain the responsibility of the nursing process and administration of medications. Assigned Staff will provide physical care, within their scope of practice and training, for the patient for whom they are assigned. This may include the documentation of vital signs, meals and intake and output.
8. Assigned Staff, as directed by the nurse, will complete all aspects of Activities of Daily Living (ADL's) for the patient provided they have demonstrated competency. This includes, but is not limited to, the following: bathing, feeding, toileting, and range of motion (ROM). Exception: Security Personnel may provide observation only. They are not to assist with ADLs or physical care. Assigned Staff, other than a Registered Nurse, may not perform assessments.
9. Assigned Staff will not leave the patient without the assigned nurses' approval and/or relief. If a break is needed, a handoff to the temporary staff member will occur prior to leaving the patient. Personal cell phones are not permitted while caring for the patient. You are expected to communicate directly with the RN caring for the patient. Any information that may be useful should be provided during patient handoffs.
10. Reassessments are performed by an RN every four (4) hours or as needed according to the patient's condition. Documentation of the outcome of the assessment in the Nursing Progress Notes is required at

least once per shift (concurrent documentation of reassessments is not required). The Progress note includes a summary of the patient's behavioral health condition and is annotated in the "ABC" format. This format is based on clinical staff's observation, intervention, and evaluation of the patient.

11. All Assigned Staff must have Crisis Prevention Institute (CPI) training. In certain circumstances, you may be required to take action to prevent a patient from harming themselves. Attempt to stop these actions by giving brief, clear instructions. Repeat this up to 3 times (over one minute) in a firm yet quiet manner. Be sure that you have the patient's attention. Make eye contact when possible. If the patient persists in this harmful behavior, contact the nurse right away. Convey attitudes of compassion, empathy and understanding. Do not offer to counsel the patient spiritually or emotionally. Allow the patient to talk, but do not offer your judgments or opinions. Do not promise the patient that you will not tell the staff what you have been told.
12. In certain circumstances if the patient becomes agitated or uncontrollable, do not attempt to restrain them. Keep yourself safe: push your duress alarm or call 7-6666 for a "Code Grey". Stay calm and speak clearly so the information can be forwarded quickly and clearly.

## **B. CRITERIA:**

### **A. Standard/Routine Observation:**

1. All patients will be placed on standard/routine observations while they are admitted in the IPU. The patient will be advised of the observation level and the process involved.
2. The staff members will observe and check in with the patients at least every fifteen minutes, documenting the patient's location and status at each interval.
3. It is expected that staff will enter the room, approach the patient, and check their identity using the wristband if needed.
4. A separate hallway variable round observation of the patient will also be conducted in between the fifteen minutes and documented per policy.
5. Assigned staff will make direct visual contact with patients and confirm they are in no danger or distress.
6. Observations may not be completed standing in the nurse's station, a doorway or at a distance, particularly for patients who are sleeping. It is expected that staff will enter the room, approach the patient, and check their identity using a wristband if needed.
7. Flashlights may be used during the night rounds respectfully ensuring the flashlight is not directed at their face. Staff must verify, the patient is in his/her bed, breathing with an adequate respiratory rate visualizing the rise and fall of the chest.
8. Staff will provide interventions as appropriate and notify the Charge Nurse of any change in patients' condition or location.
9. Documentation of fifteen-minute rounds is to occur at the time of assigned patient rounds and not in advance.
10. While making patient rounds, the staff member observes the environment for unsafe conditions and reports them immediately. Staff members will monitor bed linens to avoid patients having access to multiple sheets at one time.
11. The Charge RN should review and sign the observation board at multiple intervals to ensure completion as assigned.

12. If unable to locate a patient anytime during rounds, notify the Charge Nurse and begin Elopement procedure.

**B. One to Two Observation and One to One Observation**

1. One to two staff to patient ratio. The observer is in the hallway where they can observe both patients concurrently.
2. One-to-One staff-to-patient ratio. The level of observation in the patient remains in staff view always. The physician may specify the maximum distance between the patient and the One-to-One staff (i.e., arm's length).
3. Advise the patient of observation level and process involved.
4. Search the environment for safety.
5. Initiate Patient Observation Record
6. The patient is observed continuously and has additional every fifteen-minute observation documentation.
7. The observer will notify RN of any changes in behavior.
8. The RN will document any signs of injury on the Patient Observation Record at a minimum of every 2 hours.
9. Accompany patient to bathroom/shower. The door shall be kept slightly open with all high risk patients to monitor and ensure safety. An attempt will be made to provide same gender staff.
10. A physician order will remain in place until the behavior or circumstance no longer requires the use of One to Two or One to One observation. Order must be renewed each calendar day.

All revision dates:

## Attachments

No Attachments

## Approval Signatures

Step Description	Approver	Date
Psychiatry Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	4/17/2024
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	4/17/2024
Inpatient Psychiatric Unit & Crisis Stabilization Unit	Erin Olivera: Clinical Nurse Manager, IPU/CSU	4/17/2024



## VENTURA COUNTY HEALTH CARE AGENCY

Origination: 6/1/2009  
Effective: Upon Approval  
Last Approved: N/A  
Last Revised: 12/8/2020  
Next Review: 3 years after approval  
Owner: Marcos Rodriguez: Manager,  
Rehabilitation Services  
Policy Area: Rehab Services  
References:

### RS.07 Rehab Services Pediatric Treatment Areas

#### POLICY:

The Outpatient Rehab Services Department recognizes the unique safety issues that are present when treating the pediatric client. For this reason, additional safety measure will be incorporated into the operations of pediatric therapy services.

#### PROCEDURE:

The following safety measures shall be implemented in pediatric treatment areas:

- Electrical outlets shall be covered with approved pediatric safety plugs.
- Mirrors shall be made of safety glass or acrylic.
- Cabinets containing small or sharp objects, chemicals or other dangerous items shall be secured with child safety locks.
- Children shall not be left unattended in treatment rooms or waiting areas.
- Children shall be closely supervised during treatment to ensure they do not have access to any unsafe equipment or any other items requiring adult supervision.
- Certain equipment, such as balance equipment, may require constant close supervision of the pediatric patient to ensure safety.
- Small children that are not being treated shall stay in the waiting area and are not allowed in treatment spaces.
- Staff working with children should be aware of developmental levels in terms of safety and cognitive levels as to better assess the needs and ensure the safety of their patient.
- If any pediatric patients have balance issues, fall risks shall be discussed with their parents.

All revision dates:

12/8/2020, 2/25/2019

#### Attachments

No Attachments

## Approval Signatures

Step Description	Approver	Date
Pediatrics Committee	Tracy Chapman: VCMC - Med Staff	pending
Rehab Services	Marcos Rodriguez: Manager, Rehabilitation Services	4/3/2024



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Owner: Marcos Rodriguez: Manager,  
Rehabilitation Services  
Policy Area: Rehab Services  
References:

## RS.16 Treatment Modalities: Pediatric Intensive Care Unit Occupational Therapy

### Purpose

- a. To describe the use of various treatment modalities for children in the Pediatric Intensive Care Unit (PICU)

### Policy

- a. A variety of modalities are used by Occupational Therapists (OT) in the pediatric population. All modalities will be used after careful consideration of each individual patient, purpose for use, precautions, and contraindications.

### General Modalities

- a. Manual therapy
- b. Feeding and oral motor skills training
- c. Positioning
- d. Activities of Daily Living (ADL) training
- e. Cognitive Training
- f. Visual Perceptual skills training
- g. Motor skills training
- h. Therapeutic exercises (strength, Range of Motion (ROM), etc.)
- i. Therapeutic activities
- j. Neuromuscular Reeducation/Neurodevelopment Treatment
- k. Splinting and orthotic fabrication and fitting
- l. Equipment recommendation and training
- m. Taping
- n. Work/community reintegration
- o. Functional mobility training

# Physical Agent Modalities

- a. Physical agent modalities may be applied following a complete evaluation by the treating therapist and review of purpose for use, precautions, and contraindications as they relate to a child's age, a child's medical condition, and signing of the treatment plan by the physician
  - i. A therapist will provide 100% attendance during physical agent modality application on patients under the age of 18.
  - ii. An occupational therapist administering Physical Agent Modalities will have their Advanced Practice Certification in Physical Agents and Modalities Specialty (PAMS), or work under the supervision of an Occupational Therapist who has this certification and/or a Physical Therapist.
  - iii. ~~It is the department's policy not to use ultrasound on patients under the age of 18 years.~~ Ultrasound on patients under 18 will be used at therapist discretion after discussion with the patient and/or parent.
  - iv. Skin Precaution
    - 1. Due to the increased sensitivity to heat and cold in the pediatric patient population, additional padding will be applied, and greater frequency of verbal and visual monitoring will occur throughout treatment.
    - 2. Electrical stimulation is used primarily for the older pediatric population. Specific attention will be given to examining the skin before and after electrode placement for signs of irritation.
    - 3. Tape will be removed with signs or report of itching, burning, or irritations.
  - v. Communication
    - 1. The therapist will speak directly using clear, simple terms of explanation, telling the patient what to expect.
    - 2. Patient will be observed closely, especially when unable to verbally communicate, for adverse autonomic responses and signs of pain or discomfort.
    - 3. Patient will be observed for signs of fear, and reassured when needed.

**Refer to list of indications and precautions in the individual equipment operating manuals.**

All revision dates:

4/3/2024, 12/8/2020, 1/19/2012

## Attachments

No Attachments

## Approval Signatures

Step Description	Approver	Date
Pediatrics Committee	Tracy Chapman: VCMC - Med Staff	pending



Step Description	Approver	Date
Rehab Services	Marcos Rodriguez: Manager, Rehabilitation Services	4/3/2024



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Next Review: 3 years after approval  
Owner: Marcos Rodriguez: Manager,  
Rehabilitation Services  
Policy Area: Rehab Services  
References:

## RS.17 Treatment Modalities: Pediatric Intensive Care Unit Physical Therapy

### Purpose

- a. To describe the use of various treatment modalities for children in the Pediatric Intensive Care Unit (PICU)

### Policy

- a. A variety of modalities are used by Physical Therapists (PT) in the pediatric population. All modalities will be used after careful consideration of each individual patient, purpose for use, precautions, and contraindications.

### General Modalities

- a. Manual therapy
- b. Positioning
- c. Motor skills training
- d. Therapeutic exercises (strength, Range of Motion (ROM), etc.)
- e. Therapeutic activities
- f. Neuromuscular Reeducation/Neurodevelopment Treatment
- g. Splinting and orthotic assessment
- h. Equipment recommendation and training
- i. Taping
- j. Community reintegration
- k. Functional mobility training
- l. Gait training

### Physical Agent Modalities

- a. Physical agent modalities may be applied following a complete evaluation by the treating therapist and review of purpose for use, precautions, and contraindications as they relate to a child's age, a child's

medical condition, and signing of the treatment plan by the physician

- i. A therapist will provide 100% attendance during physical agent modality application on patients under the age of 18.
- ii. ~~It is the department's policy not to use ultrasound on patients under the age of 18 years.~~ Ultrasound on patients under 18 will be used at therapist discretion after discussion with the patient and/or parent.
- iii. Skin Precaution
  1. Due to the increased sensitivity to heat and cold in the pediatric patient population, additional padding will be applied, and greater frequency of verbal and visual monitoring will occur throughout treatment.
  2. Electrical stimulation is used primarily for the older pediatric population. Specific attention will be given to examining the skin before and after electrode placement for signs of irritation.
  3. Tape will be removed with signs or report of itching, burning, or irritations.
- iv. Communication
  1. The therapist will speak directly using clear, simple terms of explanation, telling the patient what to expect.
  2. Patient will be observed closely, especially when unable to verbally communicate, for adverse autonomic responses and signs of pain or discomfort.
  3. Patient will be observed for signs of fear, and reassured when needed.

All revision dates:

4/3/2024, 12/8/2020, 1/19/2012

## Attachments

No Attachments

## Approval Signatures

Step Description	Approver	Date
Pediatrics Committee	Tracy Chapman: VCMC - Med Staff	pending
Rehab Services	Marcos Rodriguez: Manager, Rehabilitation Services	4/3/2024



## VENTURA COUNTY HEALTH CARE AGENCY

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Owner: Marcos Rodriguez: Manager,  
Rehabilitation Services  
Policy Area: Rehab Services  
References:

### RS.18 Use of Modalities - Pediatrics

#### PURPOSE:

To define guidelines for use of modalities on pediatric clients.

#### POLICY:

Modality use in the pediatric population occurs primarily in the out-patient setting. Modalities include, but are not limited to: heat, ice electrical stimulation and taping. Ultrasound on patients under 18 will be used at therapist discretion after discussion with patient and/or parent.

#### PROCEDURE:

- I. Modalities may be applied following a complete evaluation by the treating therapist and review of purpose for use, restrictions/precautions and contraindications as they relate to age specific criterion and understanding by the client/parent or guardian.

- II. **Age Specific Precautions**

- A. **Skin Precautions –**

1. Due to the increased sensitivity to heat and cold (vascular response) in the pediatric population, additional padding will be applied, increased frequency of verbal and visual monitoring will occur throughout treatment.
    2. Electrical stimulation is used primarily for the older pediatric population. Specific attention will be given to examining the skin before and after electrode application for signs of irritation. Tape will be removed with signs or report of itching, burning, irritating response to the tape.

- B. **Communication**

1. Therapist will speak directly using clear simple terms of explanation, telling the patient and parent what to expect.
    2. Patient will be observed closely especially when unable to verbally communicate for adverse autonomic responses and signs of pain or discomfort.
    3. Patient will also be observed for signs of fear and reassured.
    4. Therapist allows for participation in care and choices in handling equipment when possible and safe to do so.

C. The application of ultrasound will not occur over a growth plate.

D. When applying a modality to a pediatric patient, the patient will not be left unattended.

Refer to list of indications and precautions in the individual equipment operating manuals, the department policy and procedure manual and other professional references (e.g., **Physical Agents in Rehabilitation** by Michelle Cameron, W.B.Saunders).

All revision dates:

4/3/2024, 12/1/2010, 6/1/2006, 3/1/2006

## Attachments

No Attachments

## Approval Signatures

Step Description	Approver	Date
Pediatrics Committee	Tracy Chapman: VCMC - Med Staff	pending
Rehab Services	Marcos Rodriguez: Manager, Rehabilitation Services	4/3/2024



## VENTURA COUNTY HEALTH CARE AGENCY

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**Last Revised:** 6/4/2024  
**Next Review:** 3 years after approval  
**Owner:** Jeff Warren: Manager, Sterile Processing  
**Policy Area:** Sterile Processing Department  
**References:**

### S.01 SonoCheck Ultrasonic Function Test

#### POLICY:

To provide a pass/fail detection test for the presence of cavitation energy inside of an ultrasonic bath. The ultrasonic bath is to be tested weekly and after any major repair.

#### PROCEDURE:

- A. Prepare a bath of detergent in compliance with the instructions for use by the ultrasonic manufacturer and the detergent manufacturer.
- B. De-gas the bath in accordance with manufacturer's instructions.
- C. Ensure that the bath is within the proper temperature range as provided by the detergent manufacturer.
- D. Place two SonoCheck ampoules on each side of an empty ultrasonic basket and place the basket in the ultrasonic cleaner that has been de-gassed.
- E. Run the ultrasonic for at least five (5) minutes.
- F. All SonoChecks should change from blue/green to yellow within five (5) minutes.
- G. A negative result will indicate a blind spot of ultrasonic energy and Biomed and the ~~OR~~ operating room (OR) Clinical Nurse manager will be contacted to initiate repairs.
- H. After repair, a repeat SonoCheck will be completed prior to use.
- I. Record all results on the testing log sheet.
- J. Used SonoCheck vials are disposed of in a sharps container.

All revision dates:

6/4/2024, 9/1/2016

#### Attachments

No Attachments

## Approval Signatures

Step Description	Approver	Date
Surgery Committee	Tracy Chapman: VCMC - Med Staff	pending
Infection Prevention Committee	Magdy Asaad: Infection Prevention Manager	4/18/2024
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	4/9/2024
Surgical Services	Gwendolyn Vontoure: Director Perioperative Services	4/9/2024
Sterile Processing Department	Jeff Warren: Manager, Sterile Processing	4/3/2024



## VENTURA COUNTY HEALTH CARE AGENCY

Origination: 10/1/1984  
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Last Approved: N/A  
Last Revised: 2/18/2020  
Next Review: 3 years after approval  
Owner: Gwendolyn Vontoure: Director  
Perioperative Services  
Policy Area: Surgical Services  
References:

# S.02 Admission of Patients to the Surgery Department

## POLICY:

It is the Ventura County Medical Center/Santa Paula Hospital policy that each patient admitted to the Surgery Department for operative and/or other invasive procedures shall be assessed by a qualified Registered Nurse (RN) for the physical, psychological and social needs of the patient. This process involves the collecting of necessary data, analysis of that data and decisions made based on that data. Patients are initially immediately assessed upon admission to the pre-op area and reassessed at frequent intervals thereafter.

## PROCEDURE:

- A. A patient assessment is done in order to implement a nursing plan of care and to determine the need for further assessment. Upon admission to the preoperative area of the Surgery Department, an assessment is performed by the RN. This data includes, but is not limited to:
1. Identification of the patient using two (2) identifiers: patient name and date of birth.
  2. The procedure to be performed, per the physician's written order, appropriate consent(s), and the patient's understanding of the procedure.
  3. Correct surgical site marked with the Surgeon's initials where appropriate.
  4. The patient's allergy status including latex allergy.
  5. Any medications the patient may be taking, including supplements and herbal remedies.
  6. Baseline vital signs.
  7. The patient's functional status and mobility.
  8. The patient's psychological and emotional status.
  9. Any diagnostic or laboratory test results that are pertinent to the procedure available on the chart.
  10. The patient's history and physical completed within the appropriate time frame and placed on the chart.
  11. The advance directive, guardianship papers or power of attorney for healthcare where appropriate and available.
  12. All jewelry and body jewelry or hardware is removed and any valuables are given to the family member or visitor accompanying the patient. If no such person is available, all valuables will be



documented in the electronic health record (EHR) and placed in the hospital safe.

13. All removable dental work is removed and disposition is documented.

14. Eyeglasses and contact lenses are removed if appropriate.

B. The patient's assessment continues with the documentation on the Universal Protocol for Correct Patient, Procedure Side/Site Time Out, the time any antibiotic was given and that a "time out" is performed before any incision is made.

C. The patient's physiological responses and tolerance to the procedure are continually reassessed throughout the operative experience by all members of the healthcare team, including the circulating RN and the anesthesiologist. Modifications and changes in the plan of care are based on the reassessment data.

D. The patient's postoperative status is reassessed upon admission to the post-anesthesia care unit (PACU).

1. Vital signs are immediately assessed and then at frequent intervals.

2. The patient's functionality and mobility status are immediately assessed and then reassessed at frequent intervals.

3. The type of airway is documented in the EHR and oxygen status is assessed and monitored.

4. An EKG rhythm strip is attached to the PACU record.

5. The patient's level of pain and response to pain medication is frequently assessed, monitored and documented in the EHR.

6. Fluid status is assessed and documented in the EHR.

All revision dates:

2/18/2020, 10/1/2016, 1/1/2014, 7/1/2011, 5/1/2010,  
5/1/2006, 2/1/1996, 11/1/1992

## Attachments

No Attachments

## Approval Signatures

Step Description	Approver	Date
Surgery Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	4/9/2024
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	4/9/2024
Surgical Services	Gwendolyn Vontoure: Director Perioperative Services	4/9/2024



## VENTURA COUNTY HEALTH CARE AGENCY

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Next Review: 3 years after approval  
Owner: Gwendolyn Vontoure: Director  
Perioperative Services  
Policy Area: Surgical Services  
References:

### S.03 Hazardous Drug Use in the Operating Room

#### POLICY:

By order of a Licensed Practitioner, selected hazardous drugs may be used in the Operating Room.

#### PROCEDURE:

- A. The Licensed Practitioner (LP) shall provide written medication orders for hazardous drugs to the Operating Room (OR) staff.
- B. When the surgical procedure is scheduled, the OR staff shall inform the Pharmacy Department of the procedure and provide a copy of the written order for the hazardous drug.
- C. On the day of the procedure, the Day Surgery staff shall contact the Pharmacy Department upon the patient's arrival, or no later than one hour prior to the start of the procedure. No medication shall be prepared until the Pharmacy Department is notified.
- D. The Pharmacy Department shall deliver the compounded medication to the OR registered nurse that is responsible for the patient's care or to the OR team leader.
- E. OR staff shall obtain a small, rigid chemotherapy trace waste bin and chemotherapy-rated gloves from Central Supply for use during the procedure.
- F. A chemotherapy spill kit shall be available.
- G. The ~~L~~~~I~~~~P~~~~L~~P shall instill medication into the patient and place any unused medication, used syringes, and used sponges into a chemotherapy waste container.
- H. The sealed receptacle shall be placed in the OR trash room for pick up and disposal by Environmental Services.

All revision dates:

6/4/2024, 6/22/2020, 12/1/2013

#### Attachments

No Attachments

## Approval Signatures

Step Description	Approver	Date
Surgery Committee	Tracy Chapman: VCMC - Med Staff	pending
Pharmacy & Therapeutics Committee	Sul Jung: Associate Director of Pharmacy Services	5/13/2024
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	4/9/2024
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	4/9/2024
Surgical Services	Gwendolyn Vontoure: Director Perioperative Services	4/9/2024



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**Owner:** Jeff Warren: Manager, Sterile Processing  
**Policy Area:** Sterile Processing Department  
**References:**

## S.07 Bowie Dick Test

### POLICY:

The proper functioning of the prevacuum sterilizer shall be tested daily in a separate, special cycle by the use of a Bowie Dick test. The Bowie Dick test checks the proper functioning of the vacuum pump by indicating if all air is being removed from the chamber and items before the exposure phase of the cycle.

### PROCEDURE:

- A. Check the chamber drain trap for debris.
- B. Turn on the sterilizer and place the test pack on the lower front bottom shelf of the loading rack (over the drain), in an otherwise empty chamber.
- C. Run the test at four (4) minutes sterilize and one (1) minute dry time.
- D. If the Bowie Dick (Dynamic Air Removal Test) DART is not uniformly brown, ~~black~~ the test has failed. Run a second test.
- E. If the second Bowie Dick test fails, the sterilizer will be removed from service, the OR Clinical Nurse Manager shall be notified and the Biomedical Engineering department is notified for repairs/service.
- F. When the sterilizer is placed back into service, three ~~consecutive biological tests should be run in an empty chamber with each test yielding negative results. Additionally, three~~ (3) consecutive Bowie Dick tests are run with each test result demonstrating sufficient air removal. Additionally, three consecutive biological tests should be run in an empty chamber with each test yielding negative biological results.
- G. If the test has passed, label the sheet with the sterilizer number, date and initials of the staff member performing the test.
- H. Log the test on log sheet. Log sheets will be kept indefinitely.

### Resource:

2017 Association for the Advancement of Medical Instrumentation ■ ANSI/AAMI ST79:2017

All revision dates:

4/3/2024, 2/12/2020, 9/1/2016

## Attachments

No Attachments

## Approval Signatures

Step Description	Approver	Date
Surgery Committee	Tracy Chapman: VCMC - Med Staff	pending
Infection Prevention Committee	Magdy Asaad: Infection Prevention Manager	4/18/2024
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	4/9/2024
Surgical Services	Gwendolyn Vontoure: Director Perioperative Services	4/9/2024
Sterile Processing Department	Jeff Warren: Manager, Sterile Processing	4/3/2024



## VENTURA COUNTY HEALTH CARE AGENCY

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Owner: Gwendolyn Vontoure: Director  
Perioperative Services  
Policy Area: Surgical Services  
References:

# S.09 Post-Axillary or Brachial Plexus Block Patient Care

## POLICY:

Patient safety will be maintained after administration of axillary or brachial plexus block (Bier Block). During axillary block, patient has no control of affected extremity. Prevent injury by close observation on a continuous basis until return of sensation to affected extremity

## EQUIPMENT:

Cardiac monitor  
Pulse oximeter  
Blood pressure machine  
Stethoscope  
Ice Pack

## PROCEDURE:

- A. Monitor vital signs every (Q) 15 minutes and/or as necessary (PRN) for one hour or until patient is stable.
- B. If supraclavicular approach is used, rule out pneumothorax by:
  1. monitoring rate and depth of respiration
  2. auscultating breath sounds
  3. monitoring for shortness of breath
  4. monitoring for chest pain accentuated by deep breathing
  5. performing a chest X-ray when ordered
- C. If axillary approach is used, check for obliteration of radial arterial pulse.
- D. Elevate extremity on pillow.
- E. Apply ice pack as ordered by Anesthesiologist.

## Document in Electronic Health Record (EHR):

1. Vital signs

2. Rate and depth of respiration
3. Progression of the return of sensation to involved extremity
4. Ability to control movement of affected extremity
5. Neurovascular status of affected extremity

## REFERENCES

- A. PeriAnesthesia Nurses Association of California (PANAC) Standards of Care
- B. The Association of periOperative Registered Nurses (AORN) Standards of Care

All revision dates: 2/18/2020, 11/30/2016, 12/1/2013, 11/1/1998, 11/1/1992

## Attachments

No Attachments

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Surgery Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	4/9/2024
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	4/9/2024
Surgical Services	Gwendolyn Vontoure: Director Perioperative Services	4/9/2024



## VENTURA COUNTY HEALTH CARE AGENCY

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Last Approved: N/A  
Last Revised: 6/4/2024  
Next Review: 3 years after approval  
Owner: Jeff Warren: Manager, Sterile Processing  
Policy Area: Sterile Processing Department  
References:

# S.10 Care and Cleaning of Laryngoscope Blades and Handles

## POLICY:

To provide guidance to perioperative staff for cleaning, decontaminating, and storing laryngoscope blades and handles. The expected outcome is that the patient is free from signs and symptoms of infection. It is the policy of **Ventura County Medical Center and Santa Paula Hospital** that:

- Laryngoscope blades and handles will be cleaned, decontaminated, dried, and stored in a manner that reduces patient and staff exposure to potentially pathogenic microorganisms.

## PROCEDURE:

- Clean and high-level disinfect or sterilize laryngoscope handles and blades according to the manufacturer's written instructions [for use](#) (IFU) after each use.
- Package and store cleaned and disinfected laryngoscope blades and handles in a manner that prevents contamination.
  - Store laryngoscope blades in individual packages.

## Competency

Perioperative staff involved in the cleaning, decontaminating, and storing of laryngoscope blades and handles, instruments and equipment will receive education and complete competency verification activities on cleaning, decontaminating, and storing laryngoscope blades and handles.

## Quality

Perioperative staff involved in the cleaning, decontaminating, and storing of laryngoscope blades, handles and equipment will complete quality assurance and performance improvement activities related to cleaning, decontaminating, and storing laryngoscope blades and handles.

## Glossary

**High-level disinfection:** A process that kills all microorganisms with the exception of small numbers of bacterial spores and prions.

**Low-level disinfection:** A process that kills most bacteria, some viruses, and some fungi. This process may not



kill resistant microorganisms such as *Mycobacterium tuberculosis* or bacterial spores.

## References

Petersen C, ed. Infection. In: *Perioperative Nursing Data Set* . 3rd ed. Denver, CO: AORN, Inc; 2011:254-276.

Guideline for cleaning and care of surgical instruments. In: *Guidelines For Perioperative Practice*, , 2019 edition. Denver, CO: AORN, Inc.

All revision dates:

6/4/2024, 10/9/2019, 9/1/2016

## Attachments

No Attachments

## Approval Signatures

Step Description	Approver	Date
Surgery Committee	Tracy Chapman: VCMC - Med Staff	pending
Infection Prevention Committee	Magdy Asaad: Infection Prevention Manager	4/18/2024
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	4/9/2024
Surgical Services	Gwendolyn Vontoure: Director Perioperative Services	4/9/2024
Sterile Processing Department	Jeff Warren: Manager, Sterile Processing	4/3/2024



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**Owner:** Gwendolyn Vontoure: Director  
 Perioperative Services  
**Policy Area:** Surgical Services  
**References:**

## S.11 Cell Saver Use in the Operating Room

### POLICY:

An autologous cell recovery system shall be employed whenever high blood loss is expected, when blood from the Blood Bank is not an option, or during an emergency situation when blood retrieval is the best option.

### EQUIPMENT

- A. Cell saver machine and supplies (provided by outside contractor)
- B. Suction machine
- C. Normal saline - 1000mL bags
- D. Heparin

### PROCEDURE:

- A. To initiate the system, 30,000 units of Heparin in 1000mL normal saline is used for the blood coming from the field.
- B. Each unit retrieved is washed with a 1000mL normal saline at approximately 37 degrees Celsius.
- C. All blood is filtered through a 40 micron filter twice, when coming from the field and as transfused by the anesthesiologist.
- D. Manufacturer directions are followed for the operation of the machine.

### DOCUMENTATION

- A. Documented on anesthesia record as amount of blood product recovered and infused.
- B. Document name of perfusionist in operating room (OR) electronic health record under "others in room."

### KEY POINTS

- A. A contracted perfusionist will perform all cell saver related procedures.
- B. All cell saver supplies shall be furnished by the hospital and stocked in the Surgery Department.
- C. Vectra Medical in coordination with the Surgery Department and Anesthesia Department has the authority, responsibility, and accountability of the intra-operative and perioperative blood recovery and reinfusion program.

- D. The transfusion service Medical Director is involved in establishing policies and procedures related to intra- and perioperative collection and reinfusion procedures. The Surgery Department submits or presents a quarterly report of blood usage to the Ventura County Medical Center (VCMC) Blood Usage Committee to track cases utilizing blood salvage during surgery; the report includes procedure, volume of blood managed and all important comments made.
- E. At no time should autologously collected salvaged Red Blood Cells be sent to the blood bank. The salvaged blood will either be transfused or disposed of in the proper fashion per the operating surgeon.
- F. Informed consent for the transfusion of salvaged blood is obtained by the surgeon which includes the risks, expected benefits and available alternatives to transfusion, including non-treatment. The patient shall receive a written information ( "A Patient's Guide to Blood Transfusion") regarding options pursuant to the Paul Gann Act.

Contract perfusionist:

Vectra Medical, Inc. (805) 644-5979  
P.O. Box 7135 Ventura, CA 93003

All revision dates: 6/9/2020, 12/12/2019, 10/1/2016, 12/1/2013, 2/1/1996, 11/1/1992

## Attachments

No Attachments

## Approval Signatures

Step Description	Approver	Date
Surgery Committee	Tracy Chapman: VCMC - Med Staff	pending
Laboratory Services	Brad Adler, MD: Medical Director, Laboratory Services	4/18/2024
Laboratory Services	Erlinda Roxas: Director, Laboratory Services	4/18/2024
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	4/8/2024
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	4/8/2024
Surgical Services	Gwendolyn Vontoure: Director Perioperative Services	4/8/2024



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**Next Review:** 3 years after approval  
**Owner:** Jeff Warren: Manager, Sterile Processing  
**Policy Area:** Sterile Processing Department  
**References:**

## S.12 Surgical Instruments, Cleaning and Care of Loaned Instruments

### POLICY:

To provide guidance to perioperative staff for managing loaned instruments. The expected outcome is that the patient is free from signs and symptoms of infection.

It is the policy of **Ventura County Medical Center and Santa Paula Hospital** that:

- Loaned instruments will be requested when the surgery is scheduled and delivered to the facility in sufficient time to allow for in-house inventory, disassembly, cleaning, inspection, packaging, and terminal sterilization in accordance with the manufacturer's written Instructions for Use (IFU).
- Before use, all loaned instruments and devices will be cleaned, decontaminated, inspected, packaged, and sterilized or high-level disinfected according to the instrument or device manufacturer's written IFU.
- The manufacturer's written IFU will be readily available to the staff responsible for processing loaned instruments and devices used for operative or other invasive procedures performed in the facility.
- Accessories for cleaning and processing loaned instruments specified by the instrument or device manufacturer will be obtained before processing and used in accordance with the IFU.
- Loaned instruments will be considered contaminated and delivered directly to the sterile processing area.

In emergent situations (prompt or urgent action), inter-hospital use of sterile instruments and/or tray is permissible however authorization of by the Director of Surgical Services is required.

Per American National Standards Institute/Association for the Advancement of Medical Instrumentation (ANSI/ AAMI) guidelines:

- Sterile items should be transported in a manner that will protect the items from puncture and from contamination by moisture, excessive humidity, condensation caused by exposure to temperature extremes, insects, vermin, dust and dirt, excessive air pressures, and microorganisms. Adequate protection during transport minimizes the potential for damage and helps maintain sterility.
- Sterile packages to be transported from sterile processing should be contained in a closed bin, a closed case cart, or a plastic bag.
- Carts containing sterile packages should be secured within the vehicle to prevent damage or contamination.
- Vehicles that are loaded and ready for transport should not be left unattended in unsecured areas. Instruments and trays should be transported direct from Sterile Processing Department (SPD) to SPD.

Inspect all sterile instruments and trays upon receipt by verifying:

- Items are properly wrapped and labeled
- Items are appropriately contained in plastic
- External indicator autoclave tape is intact
- Instrument pouch or wrapper have no tear or abrasions
- Rigid transport container is locked or sealed

## PROCEDURE:

### *Loaned Instruments or Equipment*

- Remove instruments and related accessories from external shipping containers and web-edged or corrugated cardboard boxes before transfer into the decontamination area.
- Inspect all loaned instruments for defects and correct function upon receipt by verifying
  - instrument tip integrity and alignment,
  - security of screws,
  - ability of ratchets to hold,
  - sharpness of cutting edges,
  - integrity of lock boxes,
  - freedom of moveable parts, and
  - integrity of insulations (for instruments used for electrosurgery).
- Disassemble, clean, decontaminate, inspect, package, and sterilize loaned instruments or equipment according to the manufacturer's written IFU before patient use, and before they are returned to the vendor or lending facility.
- Inventory and document the type and quantity of loaned instruments and confirm receipt with the lender upon delivery and before return to the vendor or lending facility.

## Documentation

Documentation will be completed to demonstrate compliance with local, state, and federal regulations and manufacturer's written IFU.

- **Sterile Processing staff** will document the following items for cleaning and care of loaned instruments and equipment
  - date,
  - time,
  - instruments,
  - method of cleaning,
  - number or identifier of mechanical decontaminator,
  - name and title of team member performing the cleaning,
  - lot numbers of chemicals used,
  - testing results on mechanical instrument washers,
  - disposition of defective instruments or equipment; and
  - inventory records of loaned instrumentation upon receipt and before return to the vendor or lending facility.

## Competency

Perioperative staff involved in the cleaning and care of loaned surgical instruments and equipment will receive

education and complete competency verification activities on managing loaned instruments.

## Quality

Perioperative staff involved in the cleaning and care of loaned surgical instruments and equipment will complete quality assurance and performance improvement activities related to managing loaned instruments.

## Glossary

*Loaned Instruments:* Medical devices used in health care facilities that are not owned by the facility.

## References

ANSI/AAMI ST79:2017 standards and recommended practices; Section 11.3.1- 11.1.5 : Page 67-68

Petersen C, ed. Infection. In: *Perioperative Nursing Data Set* . 3rd ed. Denver, CO: AORN, Inc; 2011:254-276.

Guideline for cleaning and care of surgical instruments. In: *Guidelines for Perioperative Practice*. Denver, CO: AORN, Inc.

All revision dates:

6/9/2020, 9/1/2016

## Attachments

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## Approval Signatures

Step Description	Approver	Date
Surgery Committee	Tracy Chapman: VCMC - Med Staff	pending
Infection Prevention Committee	Magdy Asaad: Infection Prevention Manager	4/18/2024
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	4/9/2024
Surgical Services	Gwendolyn Vontoure: Director Perioperative Services	4/9/2024
Sterile Processing Department	Jeff Warren: Manager, Sterile Processing	4/3/2024



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Owner: Gwendolyn Vontoure: Director  
Perioperative Services  
Policy Area: Surgical Services  
References:

## S.15 Borrowing and Lending of Surgical Equipment and Supplies

### POLICY:

To outline the proper procedure for the receipt, storage and documentation of borrowed surgical equipment and/or supplies in order to guarantee their return or replacement.

### PROCEDURE:

#### A. Borrowing/Receiving:

1. Borrowed equipment and/or instruments shall be stored in the designated area until time of sterilization or time of use.
2. All deliveries shall be signed for by Registered (RN) in charge, the instrument technician or materials specialist.
3. Documentation of receipt in Equipment/Supply Loan Book shall include:
  - a. Date of receipt
  - b. Equipment identification (inventory)
  - c. Identification of lender and borrower

#### B. Storage:

1. All borrowed equipment will be stored in the designated area.
2. Location of storage, if not open storage, will be recorded with the documentation of receipt of the material.
3. All equipment will be protected from damage.

#### C. Lending:

1. An inventory will be conducted prior to delivery of equipment to be loaned and be maintained on file until the material is returned.
2. At the time of release of equipment into the care of borrower, the required documentation shall include:
  - a. Date of loan
  - b. Date of anticipated return

- c. Identification of borrower
- d. Inventory of loaned material
- e. Signature of person receiving equipment or material on behalf of borrower
- f. Signature of ~~VCMC~~Hospital staff member releasing equipment
- g. Indication of who authorized the loan, if appropriate

D. Return:

- 1. Staff receiving returned loan items must inspect and confirm condition and inventory if applicable by signature
  - a. Person returning loan items must sign return slip.
  - b. Staff receiving loan items must sign return slip.

E. Unreturned Items:

- 1. RN in charge, materials specialist or instrument technician to establish and document appropriate repair, replacement and return arrangement with borrower.
- 2. On first normal working day following date of expected return of borrowed equipment, materials specialist or instrument technician will contact borrower and determine when equipment is to be returned and inform RN in charge who will establish an appropriate plan for subsequent follow-up.

All revision dates:

8/1/2023, 4/1/2010, 11/1/2004, 2/1/1996, 3/1/1995

## Attachments

No Attachments

## Approval Signatures

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Surgery Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	4/9/2024
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	4/9/2024
Surgical Services	Gwendolyn Vontoure: Director Perioperative Services	4/9/2024





## VENTURA COUNTY HEALTH CARE AGENCY

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Owner: Gwendolyn Vontoure: Director  
Perioperative Services  
Policy Area: Surgical Services  
References:

# S.18 Do Not Resuscitate (DNR) in the Operating Room

## POLICY:

- A. It shall be the policy of the Anesthesia Department of Ventura County Medical Center/Santa Paula Hospital that any patient arriving from the floor with a Do Not Resuscitate (DNR) order be re-evaluated regarding that policy within the province of the Operating Room.
- B. This will include conference with the operating surgeon and the anesthesiologist, with the appropriate joint message relayed and discussed with the family.

## PROCEDURE:

- A. We recognize that decisions within the hospital may reflect the need to proceed with certain procedures even while the families have realized the highly problematic status of patients who may actually be terminal in other respects. However, since the induction and maintenance of anesthesia involve procedures that by other definitions would be called resuscitative, this information must be properly relayed to families.
- B. DNR status will be suspended upon entering the ~~OR~~operating room (OR) and will continue as recovered from general anesthetic.

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## Attachments

No Attachments

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Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	4/9/2024

Step Description	Approver	Date
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	4/9/2024
Surgical Services	Gwendolyn Vontoure: Director Perioperative Services	4/9/2024



## VENTURA COUNTY HEALTH CARE AGENCY

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**Owner:** Gwendolyn Vontoure: Director  
 Perioperative Services  
**Policy Area:** Surgical Services  
**References:**

# S.21 Electrosurgical Safety

## POLICY:

To provide guidance to perioperative safety for the use and care of electrosurgical equipment, including high frequency, ultrasonic, and argon beam modalities. The expected outcome is that the patient is free from signs and symptoms of electrical injury.

## PROCEDURE:

It is the policy of Ventura County Medical Center/Santa Paula Hospital that:

- Safety selecting new and refurbished electrosurgical units (ESU's) and accessories for purchase or use will make decisions based on safety features to minimize risks to patients and safety.
- The ESU will be used in a manner that minimizes the potential for injuries.
- The electrical cords and plugs of the ESU will be handled in a manner that minimizes the potential for damage and subsequent patient and user injuries.
- The active electrode will be used in a manner that minimizes the potential for injuries.
- When monopolar electrosurgery is used, a dispersive electrode will be used in a manner that minimizes the potential for injuries.
- Capacitive-coupled pads will be used according to manufacturer's written instructions for safe operation in conjunction with a compatible ESU.
- Safety will take additional precautions when using electrosurgery during minimally invasive surgery.
- Bipolar active electrodes, including vessel occluding devices, will be used in a manner that minimizes the potential for injuries.
- Ultrasonic electrosurgical devices will be used in a manner that minimizes the potential for injuries.
- Argon-enhanced coagulation technology will be used in a manner that minimizes the potential for injury.
- Safe practices will be followed relative to potential hazards associated with surgical smoke generated in the perioperative area.
- Local, state, and federal fire safety regulations must be followed when using electrosurgery.

## Procedure Interventions

### *Electrosurgical Unit*

- Securely mount an ESU on a tip-resistant cart or shelf used only for the ESU.
- Protect ESU's from liquids.
  - Do not place liquids on top of the ESU.

- Encase foot pedal accessories in a clean, impervious cover when there is a potential for fluid spills on the floor.
- Verify safety and warning alarms and activation indicators are operational, audible, and visible at all times.
- Perform visual inspections and test the return electrode monitor according to the manufacturer's instructions before use.
- The registered nurse (RN) circulator will confirm the power settings with the operator before activation.
  - Use the lowest effective power setting needed to achieve the desired tissue effect.
  - If the operator requests a continual increase in power, perioperative safety must check the entire ESU and accessories circuit for adequate placement of the dispersive electrode and cord connections.
- Select settings according to the operator's preference so long as they are consistent with the intended application and the manufacturer's written instructions for patient size, active electrode type, and return electrode placement.
- Include the following in the post-procedure routine:
  - turn off the ESU;
  - dispose of single-use items;
  - clean all reusable parts and accessories according to the manufacturer's instructions; and
  - inspect accessories and parts for damage, function, and cleanliness.
- If an ESU is not working properly or becomes damaged, remove it from service immediately and report damage or malfunction to Biomedical Department for equipment maintenance or repair.
- Verify the electrical cord and plug are
  - sufficient in length;
  - free of kinks, knots, and bends; and
  - have been inspected or tested for outer insulation damage.
- When purchasing an ESU,
  - select the ESU and accessories to:
    - include technology to minimize the risk of alternate site injuries,
    - include technology to minimize or eliminate the risk of insulation failure and capacitive-coupling injuries, and
    - minimize the risk of unintentional activation.
  - obtain instructions for use, warranties, and a manual for maintenance and inspections from the manufacturer and make these documents readily available to perioperative safety.

## ***Active Electrode***

- When using the active electrode:
  - visually inspect it before each use and replace it if it is damaged;
  - place it in a clean, dry, non-conductive safety holster;
  - secure it to the sterile drapes with a plastic or other non-conductive device;
  - keep it free of kinks and coils during use;
  - only the user will activate the device, whether through a hand or foot control;
  - securely seat the electrode tip into the hand piece;
  - do not make alterations to the hand piece or electrode tip by bending or using sheaths made of rubber catheters;
  - clean the electrode tip away from the incision; and
  - use the electrode with an electrically inert, near isotonic solution (e.g., dextran 10, dextran 70, glycine 1.5%, sorbitol, mannitol) in a fluid-filled cavity, unless the equipment manufacturer's written

instructions for use direct otherwise.

## ***Dispersive Electrode***

- When using a single-use dispersive electrode in monopolar surgery, the perioperative RN will
  - assess and document the patient's skin condition before and after ESU use;
  - use a single-use dispersive electrode once and then discard it;
  - place the dispersive electrode after final positioning of the patient;
  - use a new single-use dispersive electrode if the dispersive electrode is repositioned;
  - use an appropriately sized dispersive electrode for the patient (e.g., neonate, infant, pediatric, adult) and not alter it (e.g., cut, fold);
  - verify the manufacturer's expiration date, and not use the electrode if the expiration date has passed;
  - open the package containing the dispersive electrode immediately before use;
  - check the integrity of the dispersive electrode for flaws, damage, discoloration, adhesiveness, and dryness;
  - place the dispersive electrode on clean, dry skin over a large, well-perfused muscle mass on the operative side and as close as possible to the operative site according to the manufacturer's instructions for use;
  - not place the dispersive electrode over bony prominences, scar tissue, hair, metal prosthesis, tattoos, weight-bearing surfaces, potential pressure points, or areas distal to tourniquets;
  - avoid dispersive electrode contact with metal devices (e.g., jewelry, monitoring leads, needle electrodes);
  - place the dispersive electrode away from warming devices;
  - verify uniform contact with the skin after application;
  - correct poor skin contact by
    - removing oil, lotion, moisture, or prep solution;
    - clipping excessive hair;
    - changing sites; and
    - applying a new pad;
  - keep the dispersive electrode dry and protected from fluids that may seep or pool; and
  - remove the dispersive electrode by holding the adjacent skin in place and peeling back slowly.

## ***Reusable Capacitive-Coupled Pad***

- When using a reusable capacitive-coupled pad in monopolar surgery, the perioperative RN will
  - use the capacitive-coupled pad according to manufacturer's written instructions for safe operation in conjunction with a compatible ESU;
  - use a correctly sized pad for the patient (i.e., adult, pediatric);
  - ensure adequate contact with the patient by using minimal materials between the capacitive-coupled pad and the patient;
  - avoid the use of thick foam, gel pads, and extra linen between the patient and the capacitive-coupled pad;
  - use an isolated generator;
  - clean the capacitive-coupled pad with the health care facility-approved and EPA-registered disinfectant if it is contaminated with blood or body fluids in accordance with the manufacturer's instructions;
  - check the capacitive-coupled pad for tears or breaks in the surface material before use, replace damaged pad cables, repair surface damage with the manufacturer's repair kit, and replace the pad

- if superficial damage is not repairable;
- use two capacitive-coupled pads or one capacitive-coupled pad with two cords when two ESUs are being used; and
- replace the capacitive-coupled pad when the expiration date is reached.

## ***Minimally Invasive Surgery***

- During minimally invasive surgery, perioperative team members will
  - verify that the insufflation gas is nonflammable;
  - use conductive trocar systems;
  - not use hybrid trocar systems (i.e., combination plastic and metal);
  - detect insulation failure using
    - active electrode shielding and monitoring,
    - active electrode indicator shafts that have two layers of insulation of different colors, and
    - active electrode insulation integrity testers to detect full thickness insulation breaks;
  - select the lowest power setting that achieves the desired result; and
  - not activate the electrode until it is in close proximity to the tissue.
- The perioperative RN will instruct patients to immediately report any postoperative signs or symptoms of electrosurgical injury, including
  - fever,
  - inability to void,
  - lower gastrointestinal bleeding,
  - abdominal pain,
  - abdominal distension,
  - nausea,
  - vomiting, and
  - diarrhea.

## ***Argon-Enhanced Coagulation***

- During argon-enhanced coagulation,
  - follow all monopolar safety measures;
  - purge air from the argon gas line and electrode by activating the system before use;
  - limit the argon gas flow to the lowest possible level that provides clinical effect;
  - equip endoscopic CO<sub>2</sub> with audible and visual over-pressurization alarms that cannot be deactivated; and
  - observe for signs and symptoms of venous emboli and initiate treatment, if needed.

## ***Surgical Smoke***

- During open and laparoscopic procedures, remove surgical smoke by using a smoke evacuation system.
  - Use a smoke evacuation unit with a 0.1 micron filter (e.g., ultra-low particulate air [ULPA] or high efficiency particulate air [HEPA]).
  - Keep the suction wand as close as possible but no greater than 2 inches from the source of the smoke.
  - Use a central suction system with a 0.1 micron in-line ULPA filter to evacuate smoke. Place the filter between the suction wall/ceiling connection and the suction canister.
  - Use standard precautions when disposing of used smoke evacuator filters, tubing, and wands.
  - Use respiratory protection (e.g., fit-tested N95 filtering face piece respirator, high-filtration surgical

mask) during procedures that generate smoke.

## Fire Safety

- Follow fire safety measures and local, state, and federal regulations when using electrosurgery.
  - Do not activate the active electrode in the presence of flammable agents.
  - Exercise caution during surgery of the head and neck in the presence of combustible anesthetic gases.
  - Do not use electrosurgery in an oxygen-enriched environment.
  - Use moist sponges.

## Documentation

The following documentation will be completed by the perioperative RN:

- ESU identification number,
- range of settings used,
- dispersive electrode placement,
- patient's skin condition before and after dispersive electrode placement,
- adjunct electrosurgical devices used (e.g., ultrasonic scalpel, bipolar forceps), and
- safety holster use.

## Quality

Perioperative safety participating in procedures where electrosurgical equipment is used will participate in quality assurance and performance improvement activities related to the care and handling of electrosurgical equipment.

## Glossary

**Active electrode:** The electrosurgical unit (ESU) accessory that directs current flow to the surgical site (e.g., pencils, various pencil tips).

**Active electrode insulation testing:** Devices designed to test the integrity of the insulation surrounding the conductive shaft of laparoscopic electrosurgical active-electrode instruments. The devices detect full thickness breaks in the insulation layer.

**Argon-enhanced coagulation:** Radio-frequency coagulation from an electrosurgical generator that is capable of delivering monopolar current through a flow of ionized argon gas.

**Capacitive-coupled return electrode:** A large, nonadhesive return electrode placed close to and forming a capacitor with the patient, returning electrical current from the patient back to the electrosurgical unit (ESU).

**Dispersive electrode:** The accessory that directs electrical current flow from the patient back to the electrosurgical generator, often called the patient plate, return electrode, inactive electrode, or grounding pad.

**Electrosurgery:** The cutting and coagulation of body tissue with a high-frequency (i.e., radio frequency) current.

**Electrosurgical accessories:** The active electrode with tip(s), dispersive electrode, adapters, and connectors to attach these devices to the electrosurgery generator.

**Electrosurgical unit:** The generator that produces a high-frequency current waveform that is delivered to

tissues, the foot switch with cord (if applicable), the electrical plug, cord, and connections.

*Insulation failure:* Damage to the insulation of the active electrode that provides an alternate pathway for the current to leave that electrode as it completes the circuit to the dispersive electrode.

*Monopolar electrosurgery:* Electrosurgery in which only the active electrode is in the surgical wound, and the electrical current is directed through the patient's body, received by the dispersive pad, and transferred back to the generator, completing the monopolar circuit.

*Ultra-low particulate air (ULPA):* A filter that can, theoretically, remove 99.9999% of bacteria, dust, pollen, mold, and particles with a size of 120 nanometers or larger from the air.

*Ultrasonic scalpel:* A cutting/coagulation device that converts electrical energy into mechanical energy, providing a rapid ultrasonic motion.

## References

Petersen C, ed. Electrical injury. In: *Perioperative Nursing Data Set* . 3rd ed. Denver, CO: AORN, Inc.; 2011:173-177.

Guideline for electrosurgery. In: *Guidelines for Perioperative Practice* . Denver, CO: AORN, Inc.

All revision dates: 8/1/2023, 10/1/2016, 12/1/2013, 1/1/2005, 11/1/1998, 2/1/1996, 11/1/1992

## Attachments

No Attachments

## Approval Signatures

Step Description	Approver	Date
Surgery Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	4/9/2024
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	4/9/2024
Surgical Services	Gwendolyn Vontoure: Director Perioperative Services	4/9/2024





## VENTURA COUNTY HEALTH CARE AGENCY

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Owner: Gwendolyn Vontoure: Director  
Perioperative Services  
Policy Area: Surgical Services  
References:

# S.22 Medication and Fluid Transfer to the Sterile Field

## POLICY:

To provide guidance to perioperative staff for transferring or receiving medications to the sterile field. The expected outcomes are that the patient is free from signs and symptoms of infection and receives correctly administered medication.

It is the policy of Ventura County Medical Center/Santa Paula Hospital that:

- Perioperative staff will only transfer fluids or medications to the sterile field or prepare medications on the sterile field if it is within their job descriptions and their scopes of practice for licensure.
  - The registered nurse (RN) circulator will be the primary person to transfer medications to the sterile field.
  - The person to prepare the medication on the sterile field will be employed by the health care organization unless he or she is a licensed independent practitioner (LIP) who will be preparing and administering the medication.
  - LIPs who are not employed by the health care organization will follow the procedures for verifying the medication before it is administered to the patient.
- When medications are removed from their original containers, perioperative staff will follow the verification process (see the policy [100.080 Labeling Medications On and Off the Sterile Field](#)) before medications are administered.
- Perioperative staff will use sterile technique when transferring fluids or medications to a secondary container on the sterile field.
- For medications administered on the sterile field, perioperative staff will hold all primary and secondary medication containers until the end of the procedure.

## PROCEDURE:

- When medications are removed from their original containers and transferred to the sterile field, perioperative staff will implement the following safe practices for verification of the medication before it is administered.
- The RN circulator will:
  - Check the expiration date and visually inspect the medication for compromise before transferring the medication to the sterile field.
  - Use safety devices (e.g., blunt needles) when preparing (e.g., reconstituting) the medication.

- Confirm dose limits previously established before transferring the medication to the sterile field.
- Use a sterile transfer device to transfer medications to a secondary container on the sterile field.
- Not remove rubber stoppers from medication containers.
- Transfer one medication at a time.
- Verify the medication name, strength, dosage, and expiration date concurrently with the person receiving the medication on the sterile field.
- Confirm the label applied to the secondary medication container with the scrub person.
- The scrub person will:
  - Verify the medication name, strength, dosage, and expiration date concurrently with the RN circulator when receiving the medication on the sterile field.
  - Label the secondary medication container with the medication name, strength, concentration, and other pertinent information (e.g., expiration date for time-sensitive medications).
  - Present the label to the RN circulator for confirmation.
  - Give a verbal confirmation of the medication when handing it to the LIP for subsequent administration.
  - Use safety devices (e.g., self-capping needles, hemostats to remove needles from syringe).
  - Use sharp safety practices when handing medications to or receiving medications from the LIP who is administering the medication.
  - Discard any solution that is found on the sterile field without an identification label.
- Perioperative team members will monitor for processes that inhibit safe medication use, including safe injection practices.
- Perioperative team members will monitor compliance with safe handling of chemicals, cytotoxic agents, and hazardous waste in the workplace.
- When observing for potential risks where medications are used, perioperative team members will address environmental conditions, including
  - space,
  - illumination,
  - noise, and
  - interruptions.
- Perioperative team members will actively participate in error reporting according to policy [PH.48 Medication Error Reduction Plan](#) regardless of where the error originates within the medication-use process and whether patient harm results from the error.

## Documentation

- The RN circulator will document who administered medications and all activities related to medication administration as soon as possible after the medication is administered.
- The RN circulator will document all medications administered intraoperatively, with the exception of those medications administered by anesthesia professionals.
  - Medications administered will be documented in the electronic health record (EHR).
- Perioperative team members who administer medications will document patient responses to administered medications as soon as possible after the medication is administered.
- In the presence of an ineffective response or adverse events, perioperative team members who administer medications will document actions initiated or interventions implemented.
- Perioperative team members will document and report medication errors as closely as possible to the occurrence of the error by following policy [PH.48 Medication Error Reduction Plan](#) for reporting of medication errors.

## Performance Improvement

Perioperative staff who participate in operative or other invasive procedures where medications may be transferred to the sterile field will participate in quality assurance and performance improvement activities related to transfer of medications.

## References

Petersen C, ed. Medication administration. In: *Perioperative Nursing Data Set* . 3rd ed. Denver, CO: AORN, Inc.; 2011:203-210.

Guideline for medication safety. In: *Guidelines for Perioperative Practice 2019*. Denver, CO: AORN, Inc.

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## Attachments

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Step Description	Approver	Date
Surgery Committee	Tracy Chapman: VCMC - Med Staff	pending
Pharmacy & Therapeutics Committee	Sul Jung: Associate Director of Pharmacy Services	5/13/2024
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	4/9/2024
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	4/9/2024
Surgical Services	Gwendolyn Vontoure: Director Perioperative Services	4/9/2024



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**Policy Area:** Surgical Services  
**References:**

## S.28 Post-General Anesthesia Care of Patient

### POLICY:

Post-general anesthesia patients will have hemodynamic monitoring and be protected until they have regained their pre-operative level of consciousness and/or protective reflexes.

### EQUIPMENT

- A. Patient monitor, equipped with modules for:
  - 1. Cardiac monitor
  - 2. Pulse Monitor
  - 3. Blood pressure (BP) machine
  - 4. Invasive monitoring
- B. Urinal or bedpan
- C. Oxygen (0<sub>2</sub>) mask or O<sub>2</sub> cannula
- D. Graduated container
- E. Suction tips and catheters
- F. Stethoscope
- G. Disposable gloves
- H. Temperature probe
- I. Anesthesiologist's orders
- J. Medications

### PROCEDURE:

- A. As patient is admitted, receive verbal report from Operating Room (OR) registered nurse (RN) and anesthesiologist.
- B. Assess respiratory and circulatory status while attaching electrocardiogram (EKG), blood pressure (BP), pulse Oximetry monitors, noting airway if present.
- C. Assess level of consciousness (LOC).

- D. When respirations are spontaneous and regular, document all of the above.
- E. Review orders and document in electronic health record (EHR).
- F. Assess and document in EHR dressings, tubes, IV access, rate/depth of respirations, cardiac rate and rhythm, level of consciousness every (Q) 15 minutes, and as necessary (PRN) as per patient status.
- G. Assess and document in EHR pain or nausea with relief provided by medication. Obtain order for additional medication whenever indicated.
- H. Notify Anesthesiologist of change in patient status or deviation from baseline hemodynamics.
- I. When patient has met discharge criteria, obtain order for discharge from post-anesthetic care unit (PACU).
- J. Transport patient safely to hospital floor, Same Day Surgery, or to car.

## DOCUMENTATION

All documentation will be on the Post-Anesthesia Record in the EHR (attachment A) and will include:

- A. Respiration rate, depth and rhythm
- B. Vital signs taken every 15 minutes and PRN
- C. IV intake, irrigation intake, and urinary or drainage output
- D. Level of consciousness
- E. Medications and pain relief, if any
- F. Nausea and vomiting relief, if any
- G. Narrative containing physician visits, family visit, and score for discharge
- H. Place cardiac rhythm strip on reverse of PACU record

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Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	4/9/2024
Surgical Services	Gwendolyn Vontoure: Director Perioperative Services	4/9/2024



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References:

# S.29 Post-Epidural or Spinal Anesthesia Patient Care

## POLICY:

Patients under spinal or epidural anesthesia will be protected from positional, chemical or thermal injuries during the time sensory and motor anesthesia is present.

## EQUIPMENT:

- A. Cardiac monitor
- B. Stethoscope
- C. Urinal or bedpan
- D. Pulse oximeter
- E. Blood pressure machine
- F. Warm blankets

## PROCEDURE:

- A. Assess level of spinal anesthesia on arrival to post-anesthetic care unit (PACU).
- B. Monitor vital signs, check sensory levels and motor response every 15 minutes.
- C. Monitor patient's ventilatory status every 15 minutes and/or as necessary (PRN).
- D. Monitor urinary output. Check for bladder distention prior to discharging from PACU.

## Document in Electronic Health Record (EHR):

- A. Sensory level and range of motion upon arrival and every 15 min.
- B. Vital signs, including rate, depth, and rhythm of respiration
- C. Intake and output

## REFERENCES

- A. The Association of periOperative Registered Nurses (AORN) Standards

B. PeriAnesthesia Nurses Association of California (PANAC) Standards of Care

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## S.31 Guidelines for Monitoring Patients Requiring Pre-Medication

### POLICY:

Guidelines for monitoring have been established for patient protection. Patients who receive an intravenous (IV) pre-medication will be monitored directly in the Pre-op holding area.

### EQUIPMENT

- A. Oxygen (O2) setup
- B. Suction set up
- C. Patient monitor - pulse oximeter and blood pressure monitoring
- D. Crash cart

### PROCEDURE:

- A. IV access will be established.
- B. IV pre-medication is administered by an Registered Nurse (RN) or physician.
- C. Patients in Pre-op shall be under the direct observation of an RN who has been certified in Advanced Cardiovascular Life Support (ACLS). Specifically, the patient shall be observed for rate and depth of respiration.
- D. A patient may be connected to pulse oximeter prior to medication administration to obtain a baseline and thereafter to monitor patient's O2 saturation.
- E. Blood pressure, pulse and respiration may be monitored for sedated patients staying in Pre-op for longer than 15 minutes, when the patient's condition necessitates monitoring, or when the anesthesiologist has ordered monitoring.
- F. Document in the electronic health record (EHR) the time, dose, route, and name of medication on ordered pre-op.
- G. Direct observation of patient by RN is required, noting respiratory effort and level of consciousness.
- H. Start O2 at 6L/mask if O2 saturation decreases to less than 90%, and notify anesthesiologist immediately or nasal cannula L  $\geq$  90% of ~~sat~~saturation.



## DOCUMENTATION

- A. Medication ordered by physician will be documented in patient's EHR and noted by the RN in the EHR.
- B. Chart time, route, dosage and effect of medication should be noted in the EHR as well as name of RN administering medication.

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## S.34 Laser Use in the Operating Room

### POLICY:

To provide guidance to perioperative staff for the use and care of laser equipment and to assist practitioners in providing a safe environment for patients and health care staff during the use of laser technology. The expected outcome is that the patient is free from signs and symptoms of laser injury.

### PROCEDURE:

It is the policy of Ventura County Medical Center (VCMC)/Santa Paula Hospital (SPH) that:

- A laser safety program will be established for all owned, leased, or borrowed laser equipment in any location where lasers are used in the health care organization. The program will include
  - delegation of authority for supervising laser safety to a laser safety officer (LSO) responsible for:
    - verifying the manufacturer's hazard classification label of all lasers and laser systems;
    - performing a laser hazard evaluation before initial use;
    - overseeing the implementation of the health care laser system manufacturer's control measures;
    - developing policies and procedures for maintenance, service, and use of lasers;
    - verifying that protective equipment is available, used correctly, and free of defects;
    - ascertaining that warning signs and labels comply with the Federal Laser Product Performance Standard or international standards;
    - approving equipment and installation according to the manufacturer's instructions; and
    - coordinating laser safety and educational programs;
  - establishment of a multidisciplinary laser safety committee that includes the LSO and representatives from administration, medicine, anesthesia, nursing, and risk management;
  - establishment of use criteria and authorized procedures for all health care staff working in laser nominal hazard zones;
  - identification of laser hazards and appropriate administrative, engineering, and procedural control measures;
  - education of staff regarding the assessment and control of hazards; and
  - management and reporting of accidents or incidents related to laser procedures, including creating action plans to prevent recurrences.
- All staff will know where lasers are being used, and access to these areas will be controlled.
- Patients and staff in the laser treatment area will be protected from unintentional laser beam exposure.
- All people in the nominal hazard zone will wear appropriate eyewear selected and approved by the LSO.

- Potential hazards associated with surgical smoke generated in the laser practice setting will be identified and safe practices established.
- All people in the laser treatment area will be protected from electrical hazards associated with laser use.
- All people in the laser treatment area will be protected from flammable hazards associated with laser use.

## Procedure Interventions

- The laser treatment area will be identified with laser warning signs and access controlled to prevent unintentional exposure to the laser beam.
  - The LSO will determine the nominal hazard zone by referencing ANSI Z136.1 and ANSI Z136.3, as well as the safety information supplied by the laser manufacturer.
  - Clearly marked and recognizable warning signs specific to the type of laser being used and designed according to the information described in ANSI Z136.3 will be placed at all entrances to laser treatment areas when lasers are in use.
  - Doors in the nominal hazard zone will remain closed and windows, including door windows, will be covered as appropriate to the type of laser being used with a barrier that blocks transmission of a beam.
- Accidental activation or misdirection of the laser beam will be prevented by
  - restricting access to laser keys to authorized staff who are skilled in laser operation;
  - placing lasers in standby mode when not in active use;
  - placing the laser foot switch in a position convenient to the operator with the activation mechanism identified;
  - allowing only the laser user to activate the foot pedal of the laser device;
  - using the emergency shutoff switch to disable the laser in case of a component breakdown or untoward event; and
  - protecting exposed tissues around the surgical site with saline-saturated materials (eg, towels, sponges) when lasers with a thermal effect are being used.
- The laser assistant (e.g., RN, laser technician) must not have competing responsibilities that would require leaving the laser unattended during active use.
- Everyone in the nominal hazard zone will wear protective eyewear or use filters of specific wavelength and optical density for the laser in use.
  - Eyewear will be labeled with the appropriate optical density and wavelength for the laser in use.
  - Laser shutters or filters with the appropriate optical density will be used on microscopes, microscope accessory oculars, and endoscope viewing ports to protect the laser user from laser exposure.
  - Patient's eyes and eyelids will be protected from the laser beam.
    - Patients who remain awake during laser procedures will wear goggles or glasses designated for the type of laser being used.
    - Patients undergoing general anesthesia will be provided with appropriate protection, such as wet eye pads or laser-specific eye shields, as approved by the LSO.
    - Patients undergoing laser treatments on or around the eyelids will have their eyes protected by metal corneal eye shields that are approved by the US Food and Drug Administration.
- Surgical smoke will be removed by use of a smoke evacuation system in both open and minimally invasive procedures to prevent occupational exposure to laser-generated airborne contaminants.
  - When surgical smoke is generated, an individual smoke evacuation unit with a 0.1 micron filter (e.g., ultra-low particulate air [ULPA] or high-efficiency particulate air [HEPA]) will be used to remove surgical smoke.
  - The capture device (e.g., wand, nonflammable suction tip) of the smoke evacuation system will be positioned as close as possible, but no greater than two inches, from the source of the smoke.

- Used smoke evacuator filters, tubing, and wands will be handled using standard precautions and disposed of as biohazardous waste.
- Staff will wear respiratory protection (e.g., fit-tested surgical N95 filtering face piece respirator or high-filtration surgical mask) during procedures that generate surgical smoke.
- Laser systems and equipment will be evaluated for electrical hazards and approved by the LSO before they are placed in service.
- The manufacturer's directions for laser installation, operation, and maintenance and recommendations for electrical plugs and outlets will be followed.
- Laser service and preventive maintenance will be performed in accordance with the manufacturer's guidelines on a regular basis by qualified staff who have knowledge of laser systems.
- Fire safety measures will be implemented when lasers are in use according to local, state, and federal regulations.
  - The laser will not be activated in the presence of flammable agents (e.g., alcohol-based skin antiseptics, tinctures, de-fatting agents, collodion, petroleum-based lubricants, phenol, aerosol adhesives, uncured methyl methacrylate) until the agents are dry and vapors have dissipated.
  - Caution will be used in the presence of combustible anesthetic gases during surgery on the head, face, neck, and upper chest.
  - Sponges and drapes near the surgical site will be kept moist.
  - The lowest possible oxygen concentration that provides adequate patient oxygen saturation will be used.
  - Surgical drapes will be arranged to minimize the buildup of oxidizers (e.g., oxygen, nitrous oxide) under the drapes.
  - Wet towels and saline will be available on the sterile field.
  - The LSO will determine the type of extinguishers needed for each specific laser based on manufacturers' instructions and recommendations.
  - Laser-resistant endotracheal tubes will be used during laser procedures involving the patient's airway or aerodigestive tract.
  - Endotracheal tube cuffs will be inflated with normal saline with dye (e.g., methylene blue) during laser procedures involving the patient's airway or aerodigestive tract.
  - Moistened packs will be placed around the endotracheal tube and kept moist throughout the procedure.

## Documentation

Documentation will be completed to demonstrate compliance with local, state, and federal regulations.

- The following information will be documented in the perioperative record by the perioperative RN:
  - patient identification;
  - the type of laser used (e.g., wavelength, serial or biomedical number);
  - laser settings and parameters;
  - safety measures implemented during laser use;
  - the operative or invasive procedure;
  - on/off laser activation and de-activation times for head, neck, and chest procedures; and
  - patient protection (e.g., eyewear, eye shield).
- A laser safety checklist will be completed by the laser assistant and will include:
  - performing a laser self-test check before the patient is brought into the OR or procedure room,
  - calibrating the laser if needed,
  - conducting a test fire of the laser,

- posting "laser in use" signs at all entrances of the OR or procedure room,
- providing appropriate eyewear for the patient and staff,
- covering the windows of the OR or procedure room as needed,
- checking the availability of saline at the surgical field, and
- checking the appropriate type of fire extinguisher for the laser being used.
- The following information will be documented in the laser log by the laser assistant:
  - patient identification;
  - the type of laser, model number, serial number, and the health care organization-biomedical number;
  - the procedure(s) performed with laser;
  - names and titles of staff in the room;
  - completed laser safety checklists;
  - the number of joules used;
  - the total energy used; and
  - the wattage used.

## Competency

Perioperative staff participating in procedures involving laser environments will receive education and complete verification activities on the principles and processes for safety and patient care related to the laser systems used and the procedures performed in the facility.

The LSO will complete a formal medical laser safety course and obtain certification.

## Quality

Perioperative staff participating in procedures involving laser environments will participate in quality assurance and performance improvement activities related to the laser systems used and procedures performed in the facility.

## Glossary

*American National Standards Institute (ANSI):* Organization that provides guidance for the safe use of lasers for diagnostic and therapeutic uses in health care facilities. ANSI facilitates the development of consensus US standards and administers a system that assesses conformance to standards such as the ISO 9000 (quality) and ISO 14000 (environmental).

*High-efficiency filter or high-efficiency particulate air filter (HEPA):* Filters having a filtration rating of 0.3 microns at 99.7% efficiency.

*Laser:* Device that produces an intense, coherent, directional beam of light by stimulating electronic or molecular transitions to lower energy levels. Laser is an acronym for "light amplification by stimulated emission of radiation."

*Laser assistant:* Sets up the laser and runs the laser console to control the laser parameters under the supervision of the laser user.

*Laser safety officer (LSO):* Responsible for affecting the knowledgeable evaluation of laser hazards and authorized and for monitoring and overseeing the control of such laser hazards.

*Laser treatment area:* Area in which the laser is being operated.

*Laser user:* The laser user is employing the laser for its intended purpose within the user's scope of practice,

education, and experience.

**Nominal hazard zone:** The space in which the level of direct, reflected, or scattered radiation used during normal laser operation exceeds the applicable maximum permissible exposure.

**Optical density:** The ability of laser protective eyewear to absorb a specific laser wavelength.

**Ultra-low particulate air (ULPA) filter:** Theoretically, a ULPA filter can remove from the air 99.9999% of bacteria, dust, pollen, mold, and particles with a size of 120 nanometers or larger.

## References

Petersen C, ed. Laser injury. In: *Perioperative Nursing Data Set* . 3rd ed. Denver, CO: AORN, Inc.; 2011:185-188.

Guideline for laser safety. In: *Guidelines for Perioperative Practice* . Denver, CO: AORN, Inc.

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# S.37 Monitoring the Day Surgery Patient Receiving Local Anesthesia

## POLICY:

All Surgery patients undergoing a local anesthesia procedure shall be monitored by a Registered Nurse (RN).

## PROCEDURE:

### Monitoring of the Patient – General Considerations

- A. All medication shall be on the order of a physician.
- B. It is the responsibility of the RN to:
  - 1. Assess patient preparedness to determine behavioral and physiological changes that may occur as a response to local anesthetic agents.
  - 2. Obtain vital signs.
  - 3. Monitor vital signs preoperatively and every 15 min intraoperatively.
  - 4. Document all findings in the electronic health record (EHR).
- C. An RN assigned to monitor a patient receiving local anesthesia must have basic life support (BLS) certification.
- D. When emergency assistance is needed during a local procedure, the RN shall immediately notify the desk and summon appropriate assistance.

## DOCUMENTATION

- A. The local procedure note shall record in the electronic health record (EHR):
  - 1. Pre-procedure:
    - a. Allergies.
    - b. Level of awareness.
    - c. Baseline vital signs.
  - 2. Intra-procedure:
    - a. Vital signs every 15 minutes or less.

- b. Vital signs upon any significant deviation in response to medication or surgery.
  - c. Type, time, and amount of local anesthetic or any other medications administered.
  - d. Significant behavioral or physiological changes.
  - e. Interventions taken.
  - f. Type of procedure being done.
  - g. Name and signature of physician responsible for patient's care during procedure.
  - h. Signature of RN monitoring patient.
3. Post-procedure:
- a. Vital sign monitoring q 15 min or as designated by physician performing the procedure.

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Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	4/9/2024
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### S.49 Perioperative Nursing Standards of Practice

#### POLICY:

To state the perioperative nursing standards of practice.

#### PROCEDURE:

- A. Implementation of nursing process Perioperative (Pre-Op) Assessment/Data Collection
- B. Nursing Practice
  - 1. The collection of data about the health status of the individual is systematic and continuous. The data is documented in the electronic health record (EHR) and communicated to appropriate members of the health care team.
    - a. The data collected is relevant to the planned surgical intervention and includes, but is not limited to, the following:
      - i. Current medical diagnosis and treatment.
      - ii. Physical status and physiological responses.
      - iii. Psychosocial status of the patient.
      - iv. Cultural and spiritual information.
      - v. The patient's understanding, perceptions and expectations of the surgical procedure.
      - vi. Previous responses to illness, to hospitalization, and to surgery.
      - vii. Results of diagnostic studies.
  - 2. An initial assessment about the health status of the patient is made at the preoperative visit which occurs from one to thirty days prior to the surgery date or upon admission of patient.
    - a. For outpatient surgery admissions, the initial assessment is reviewed/verified upon the patient's admission on the day of surgery.
      - i. A physical assessment is also performed at this time.
  - 3. Immediately prior to surgery, a pertinent preoperative assessment is performed in the Pre-op area or before the patient is transferred into the operating room.
  - 4. Nursing diagnosis is derived from the individual's health status data.
    - a. Current health status deviations and/or problems are identified.

- b. Approved nursing diagnoses, supported by scientific knowledge are used.
- c. The nursing diagnoses are congruent with the medical diagnosis.
- d. The nursing diagnosis is documented in the Electronic Health Record (EHR).

## INTERPRETATION

### A. Preoperative Assessment Process

1. The patient/significant others are included actively in the assessment process to ensure accuracy. The operative site/side per Administrative Policy 100.062 is documented.
2. Verification of the operative procedure is made by checking the surgeon's consent order, the consent form and marking the site.
3. The patient's skin is checked for rashes, bruises, lesions and previous incisions.
4. The mobility of the patient is determined by patient's statement, range of motion and the history and physical.
5. Any deviation in laboratory values and x-ray results are reported.
6. Vital signs are checked to include temperature, pulse, respiration and blood pressure.
7. Body abnormalities, injuries, and previous surgery are noted to include loss of extremity or body part and congenital abnormalities.
8. Sensory impairments such as hearing, visual and tactile deficits are noted.
9. Identification of the presence of internal and external prostheses or implants such as pacemakers, Harrington rods or joint prostheses is made.
10. Cardiovascular status is assessed to include pulse alteration, arrhythmias, edema, electrocardiogram and arterial lines.
11. Respiratory status is assessed to include skin color, breath sounds, and presence of chest tubes. Arterial blood gas result, if available.
12. Renal status is assessed to include intake and output, urinalysis and renal function studies.
13. Nutritional status is noted to include nothing by mouth, weight, hyperalimentation lines.
14. Verification of allergies is made to include medications, food and chemicals such as betadine, as well as latex allergy and sensitivity.
15. Substance abuse screening occurs to include skin changes, patient's statement, and history and physical.
16. Identification of the patient's needs with regard to physical care or psychosocial support or assistance after discharge is made and communicated to social service personnel.
17. Determination of the patient's/significant other's perception of the surgery and expectation of care is made during the interview process.
18. The knowledge level of the patient/significant other is determined, lack of relevant information versus well informed.
19. Language barriers and comprehension difficulties are identified to determine the patient's ability to understand.
20. Philosophical and religious beliefs are noted with reference to blood transfusions, sacraments of the

sick or other symbols.

21. Identification of cultural practices is made such as having a family member in constant attendance or special disposition of limbs.
22. Assessment is carried out by collecting pertinent health data through patient interview, observation, review of records, and consultation with other members of the health care team.
23. Communication/documentation in EHR is done by verbal reports and written records.

## **NURSING PRACTICE**

- A. Nursing diagnoses and a prioritized plan of care are developed in collaboration with the patient/significant others and health care team members.
- B. Nursing diagnoses are delivered from the individual's health status data.
  1. Current health status deviations and / or problems are identified.
  2. Approved nursing diagnoses which are supported by scientific knowledge are used.
  3. Outcome goals are set to measure the patient's progress during the surgical course of events.
  4. Physician's orders and nursing interventions are identified for prioritization.
  5. The plan for nursing care prescribes nursing actions to achieve the goals.

## **INTERPRETATION**

- A. Nursing Diagnosis
  1. Assessment data is interpreted; pertinent data is selected, then priorities are set.
  2. Actual problems and potential patient problems are identified.
  3. Nursing diagnosis shall be supported by documentation in the EHR with rationale behind the diagnosis. Example: Anxiety related to impending surgery, or anxiety evidenced by crying, acting out, etc.
- B. Outcome Goals
  1. Outcome goals are mutually formulated with patient, significant other and other health care team personnel.
  2. Goals should direct the nursing action to correct, alter, or maintain the nursing diagnosis.
  3. Areas to consider when formulating outcome goals for patients experiencing surgical intervention should include, but are not limited to the following:
    - a. Absence of infection.
    - b. Maintenance of skin integrity.
    - c. Absence of adverse effect due to proper use of safety measures related to positioning, extraneous objects, and chemical, physical and electrical hazards.
    - d. Maintenance of fluid and electrolyte balance.
    - e. Knowledge of the patient and significant others physiological and psychological responses to surgical intervention.
    - f. Participation of the patient and significant others in the preparation for home care after surgery.

4. Measurable criteria for determining the attainment of the goals as a result of nursing actions are included in the goal statement.
5. A time estimate for goal attainment should be identified.
6. Goals are recorded and communicated to appropriate team members.

C. Plan of Care

1. The plan of nursing care reflects the preoperative assessment, priorities for nursing action, and logical sequence of nursing activities to attain the goals.
2. The plan is developed with and communicated to the patient, significant others and health care team members.
3. The plan reflects consideration of the patient's right and desires.
4. The plan specifies nursing activities performed in the perioperative period.

D. Preoperative Plan

1. The plan includes but is not limited to the following nursing actions:
  - a. Identity of the patient.
  - b. Adequate physical and emotional preparation for surgery.
  - c. Interpretation and documentation in EHR of data obtained during assessment.
  - d. Documentation in EHR of nursing plan, actions or interventions with the outcome goals.
  - e. Discharge planning and home care instructions with the patient and significant others.
  - f. Appropriate transportation after discharge for outpatients.

E. Intraoperative Plan

1. The plan includes but is not limited to the following nursing activities:
  - a. Assurance of information and supportive preoperative teaching specifically related to the surgical intervention and the operating room nursing care.
  - b. Identification of the individual.
  - c. Verification of the surgical site by active "time out" process.
  - d. Verification of operative consent and procedure and reports of essential diagnostic procedures.
  - e. Positioning according to physiological principles.
  - f. Adherence of principles of asepsis.
  - g. Assurance of appropriate and properly functioning equipment and supplies for the patient.
  - h. Provision for comfort measures and supports care to the patient.
  - i. Environmental monitoring and safety.
  - j. Psychological and physiological monitoring of the patient.
  - k. Evaluation of outcomes in relation to the identified nursing activities.
  - l. Communication of intraoperative information to significant others and members of the health care team.

## INTEROPERATIVE EVALUATION

- A. Dependent upon physical and psychological status, the patient demonstrates knowledge about the surgical procedure and potential physical and psychological effects by:
  - 1. Confirming verbally and/or in writing, consent for the operative procedure.
  - 2. Describing the sequence of events during the perioperative.
  - 3. Stating outcome expectations in realistic terms.
  - 4. Expressing feelings about the surgical experience.
- B. Patient identity is confirmed correctly.
- C. The correct surgical site is confirmed and marked with the surgeon's initial.
- D. The wound classification for infection control consideration is documented in EHR accurately. Sterile procedures were carried out aseptically.
- E. Sterile procedures were carried out aseptically.
- F. Required equipment and supplies were available and functioning safely/properly.
- G. Instruments, sponges, sharp and small item counts are correct or an X-ray of the surgical site is coordinated to rule out retained foreign body.
- H. Drugs and solutions are administered as prescribed and according to nursing policy with documentation in EHR.
- I. Intake and output is calculated and documented in EHR.
- J. Privacy and confidentiality was provided to the patient.
- K. Cultural and spiritual beliefs were honored.
- L. The patient is free of physical, chemical or electrical injury.
- M. The integrity of the patient's skin is maintained.
- N. The safe transfer of the patient to post anesthesia recovery (PAR) or nursing unit is accomplished.
- O. Verbal/documented in EHR report patient status is provided to receiving nurse in post anesthesia care unit (PACU) or nursing unit.

## REFERENCES:

- A. Petersen C, ed. *Perioperative Nursing Data Set*. 2nd ed rev. Denver, CO: AORN, Inc; 2007.
- B. *Nursing: Scope and Standards of Practice*. Washington, DC: American Nurses Association; 2004.

All revision dates:

6/9/2020, 10/1/2016, 12/1/2013, 4/1/2010, 10/1/  
2004, 2/1/1996, 11/1/1992, 10/1/1990

## Attachments

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## Approval Signatures

Step Description	Approver	Date
Surgery Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	4/9/2024
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	4/9/2024
Surgical Services	Gwendolyn Vontoure: Director Perioperative Services	4/9/2024



VENTURA COUNTY  
HEALTH CARE AGENCY

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Owner: Gwendolyn Vontoure: Director  
Perioperative Services  
Policy Area: Surgical Services  
References:

## S.51 Philosophy of Professional Perioperative Nursing Practice

### POLICY:

Professional nursing practice is the applied art and science which utilizes cognitive, technical and interpersonal skills. It is a direct service, is goal-directed and adaptable to the needs of the individual, family and community. It is a dynamic process which utilizes a holistic approach in assessing, diagnosing, planning, implementing and evaluating the health care of patients and families. It may be preventive, curative, supportive, rehabilitative, restorative and/or palliative. It requires a multidisciplinary collaborative approach, continuity and comprehensiveness of care

The primary goal of professional nursing at Ventura County Medical Center and Santa Paula Hospital is to promote the patient's highest level of wellness by providing a therapeutic milieu to enhance the healing process. Therefore, it is the professional nursing staff that must determine the appropriate level of nursing care that can be delivered within the constraints of available resources and evaluate the resultant quality of that care. Only the Registered Nurse is qualified to plan, supervise and evaluate nursing care and is responsible for assessing the patient before delegating any appropriate nursing care to ancillary nursing staff.

Professional nursing at Ventura County Medical Center and Santa Paula Hospital is faced with a rapidly changing world that is continually influenced and molded by a variety of factors, including increased complexity of medical technology and the changing health care delivery system.

### PROCEDURE:

#### FUNCTION AND GOALS OF THE PERIOPERATIVE NURSE

1. The Registered Nurse who is specialized in perioperative nursing practice performs nursing activities in the preoperative, perioperative, and postoperative phases of the patient's surgical experience.
2. The perioperative nurse provides the highest level of care to the patient and families and is specially educated in the care of the surgical patient.
3. The perioperative nurse is competent to assess the physiological and psychosocial health status of the patient/family.
4. The perioperative nurse interprets assessment data, identifies patient issues, makes diagnoses pertinent to the surgical procedure and supports such diagnoses with up-to-date scientific knowledge.
5. An individualized patient care plan will be utilized to establish patient goals based on the nursing

diagnosis by anticipating the need for equipment and supplies in an organized and timely manner.

6. The perioperative nurse demonstrates an awareness of the individual rights of the patient and provides privacy for the patient by maintaining confidentiality.
7. The nurse monitors the patient during surgery and initiates nursing actions based on the interpretation of physiological changes.
8. The nurse communicates and documents nursing actions performed during pre-operative, perioperative and postoperative care of the patient.

## REFERENCES:

Petersen C, ed. *Perioperative Nursing Data Set*. 2nd ed rev. Denver, CO: AORN, Inc; 2007.

All revision dates:

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Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	4/9/2024
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Surgical Services	Gwendolyn Vontoure: Director Perioperative Services	4/9/2024





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Owner: Jeff Warren: Manager, Sterile Processing  
Policy Area: Sterile Processing Department  
References:

## S.52 Physical Layout and Instrument Flow of the Sterile Processing Department

### POLICY:

To describe the physical layout and flow of the Sterile Processing Department (SPD) in order to ensure the proper handling of sterile and contaminated items.

### PROCEDURE:

SPD is a "restricted" area. Only authorized staff may enter this area. All staff must wear appropriate surgical attire, including surgical scrubs, cover jacket and hair cover. SPD is divided into separate areas: Decontamination, Assembly and Processing, and Distribution.

#### A. DECONTAMINATION AREA:

1. Decontamination is the area where contaminated instruments, supplies and trays are disinfected and washed.
2. Decontamination staff will wear appropriate surgical scrubs, hair covering, shoe covers, water resistant cover gown and mask during all cleaning.
3. Instruments will be transported to the Decontamination Area in a closed case cart via the "dirty" path of travel and entrance into SPD.
4. SPD staff will receive the case cart. No unauthorized or improperly attired staff member or vendor will enter the area.

#### B. ASSEMBLY AND PROCESSING AREA:

1. Assembly is the area that is used for processing and sterilization of clean items including the preparation and packaging of instrument and trays.
2. Only clean items will be taken into Assembly.
3. All personnel will be properly attired to enter into the Assembly area.
4. Staff will inspect and reassemble trays for sterilization.
5. Unnecessary traffic is minimized in the Assembly and sterilizer area.
6. Sterilizers will be operated by trained personnel directly responsible for sterilization.

#### C. DISTRIBUTION AREA:

1. The Distribution area is considered a restricted area and will have controlled traffic.
2. Cases will be "picked" in the distribution area by qualified personnel and placed in a clean closed case cart.
3. Case carts will be stored in the holding area adjacent to SPD until they are called for by the Surgery staff.
4. Case carts will be delivered to the surgery Central Core via the "clean" exit door of SPD and following the "clean" path of travel.
5. All staff will wear appropriate surgical attire including surgical scrubs, cover jacket and hair covering.

All revision dates:

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## Approval Signatures

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Surgery Committee	Tracy Chapman: VCMC - Med Staff	pending
Infection Prevention Committee	Magdy Asaad: Infection Prevention Manager	4/18/2024
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	4/9/2024
Surgical Services	Gwendolyn Vontoure: Director Perioperative Services	4/9/2024
Sterile Processing Department	Jeff Warren: Manager, Sterile Processing	4/3/2024



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Owner: Gwendolyn Vontoure: Director  
Perioperative Services  
Policy Area: Surgical Services  
References:

## S.54 Post-Nerve Block Anesthesia Patient Care

### POLICY:

Patient monitoring and teaching after administration of nerve block anesthesia.

### EQUIPMENT:

- Cardiac monitor
- Pulse Oximeter
- Blood pressure (BP) machine
- Stethoscope
- Thermometer

### PROCEDURE:

- Monitor vital signs per post-op protocol.
- Assess circulation and motor sensation to affected extremity per post-op protocol.
- Maintain patient's safety by supporting the affected extremity and protecting from harm related to movement and sensation deficits.
- Advise patients that they may experience numbness, tingling, heaviness, weakness, the feeling that the affected area has fallen asleep and/or inability to move the affected extremity.
- Instruct patient that protection of the affected extremity must be practiced while the area is numb. Provide sling to patients who have undergone a block affecting the upper extremity.
- Advise patients who have had a femoral or popliteal block that they should not walk until the block wears off completely, as they are at risk for falling. However, they may transfer from wheelchair to car and car to home if they use caution.
- Discuss plan for pain control once the block wears off.
- Include block information and assessment findings to receiving registered nurse (RN) if transferring within the hospital.

### Document in Electronic Health Record (EHR):

- Vital signs.

- B. Mobility and sensation of affected area.
- C. Color and warmth of affected area.
- D. Pain level, interventions and outcomes.
- E. Safety measures performed for limb protection.

## REFERENCE

PeriAnesthesia Nurses Association of California (PANAC) Standards  
The Association of periOperative Registered Nurses (AORN) Standards of Care

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Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	4/9/2024
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	4/9/2024
Surgical Services	Gwendolyn Vontoure: Director Perioperative Services	4/9/2024



## VENTURA COUNTY HEALTH CARE AGENCY

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Owner: Gwendolyn Vontoure: Director  
Perioperative Services  
Policy Area: Surgical Services  
References:

### S.56 Preop and Surgery Admission

#### POLICY:

Patients shall be admitted to the preoperative or surgery areas in an orderly, timely manner and screened for significant physical or mental changes which would cause cancellation of the scheduled procedure. Patients shall have necessary physician orders, History and Physical, and appropriate consents for their procedure. Patients shall receive education before, during, and after their admission.

#### PROCEDURE:

All patients require admission to the preoperative or surgery areas prior to executions of surgical procedures.

- A. All patients shall first register in the appropriate admitting area before presenting to pre-op or surgery. An identification band will be placed on patient's wrist.
- B. Day Surgery patients should arrive approximately two (2) hours prior to their scheduled start of surgery.
- C. Upon arrival to the pre-op area, temperature, pulse, respiration, blood pressure, height and weight are taken and recorded in the electronic health record (EHR).
- D. Patients will disrobe and change into a patient gown.
- E. Patients will either send all personal belongings home with family or place all patient belonging in patient belongings bag or clear plastic bag with patient labels (wipe all non porous belongings with low level disinfectant Sani-Cloth) and store under patient gurney.
- F. Patients empty their bladder and are made comfortable on a gurney. Allergy bands are placed on the patient's wrist as needed.
- G. A final survey of the medical record is completed and should contain:
  1. All consents (procedure, blood, etc.)
  2. History and Physical completed within 30 days
  3. All ordered lab findings on chart or in Cerner
  4. Nurse's physical assessment
  5. Verification of transportation home for outpatients
- H. Surgical skin clip preps are performed, if ordered
- I. Ordered pre-op medications are given at designated time and recorded per policy

- J. IV infusion established when ordered
- K. Removable dentures, placed in labeled container and placed in labeled clothing bag.
- L. Money, valuables and jewelry are left at home. If brought to [Ventura County Medical Center \(VCMC\)/Santa Paula Hospital \(SPH\)](#), they are removed, and given to family members, or taken to the safe in the Admitting Office along with appropriate paperwork.
- M. Preop holding will call the surgery RN when the preop process is complete
- N. Family and/or friends are directed to the Surgery waiting room after patient goes into surgery.

## DOCUMENTATION

- A. For OR cases, document the following in Cerner using Surginet:
  1. Baseline vital signs, allergies and NPO status.
  2. Significant findings a.m. of surgery
  3. Any pre-op medications given or taken by patient
  4. Any pre-op preps done.
  5. IV start site, solution, size of catheter, etc.

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Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	4/9/2024
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	4/9/2024
Surgical Services	Gwendolyn Vontoure: Director Perioperative Services	4/9/2024



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**Owner:** Gwendolyn Vontoure: Director  
 Perioperative Services  
**Policy Area:** Surgical Services  
**References:**

# S.58 Preparation and Packing of Instruments and Supplies for the Sterrad Sterilizer

## POLICY:

To ensure instruments and supplies are properly prepared and packaged for sterilization in the Sterrad Sterilization Systems

## PROCEDURE

(Manufacturer's Instruction for Use will be followed):

- A. All instruments must be cleaned, rinsed, and thoroughly dried prior to placement in the Sterrad Sterilizers. Compressed air may be used to blow moisture out of lumens and other hidden spaces.
- B. Only pouches made with Tyvek may be used to package items not contained in instrument trays.
- C. Any items not packaged in a Tyvek pouch must be placed in an instrument tray and wrapped with a polypropylene wrapper for sterilization.
- D. Sterrad chemical indicator strips should be placed inside each pouch or tray to monitor the penetration of hydrogen peroxide. (After exposure to the sterilization process, the red bar will be golden yellow or lighter at end of cycle.)
- E. Place items to be sterilized inside the chamber. Arrange the load so that the trays are in a single layer and do not touch the walls, door, or electrode of the sterilizer.
- F. All peel-pouch packages should be placed on edge, if possible, with the opaque side of one pouch facing the transparent side of the next pouch.
- G. The first load each day requires biological monitoring. Place the Sterrad cyclesure biological indicator (BI) inside the sterilizer chamber at the back of the lowest shelf with the white Tyvek side facing upward.
- H. After the chamber has been properly loaded, close the door and:
  1. Enter the load item data
  2. Enter cycle notes if desired
  3. Select the desired cycle
- I. After completion of the cycle, all items need to be stamped with a date and load stamp.
- J. Record date, load number and stamp on the sterilization record prior to dispensing to areas for storage.

K. See biological monitoring policy and procedure for incubation and documentation of the biological indicator.

All revision dates:

9/1/2016

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Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	4/9/2024
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	4/9/2024
Surgical Services	Gwendolyn Vontoure: Director Perioperative Services	4/9/2024





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**Owner:** Gwendolyn Vontoure: Director  
Perioperative Services  
**Policy Area:** Surgical Services  
**References:**

### S.61 Reuse of Disposable Items

#### POLICY:

It is the policy of Ventura County Medical Center (VCMC)/Santa Paula Hospital (SPH) to not reprocess disposable, single-use items.

#### PROCEDURE:

- A. Some durable items, such as external fixators, are Food and Drug Administration (FDA) -approved for reprocessing and additional usage for a limited number of reprocesses. These items are sent to the vendor and reprocessed by the original manufacturer, and are inspected and assured according to their original standards prior to reuse.
- B. VCMC and SPH will only reuse items under these conditions after careful consideration and performing due diligence regarding each particular manufacturer.
- C. In all instances, reprocessing is performed in accordance with manufacturer's instructions.

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Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	4/9/2024
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	4/9/2024
Surgical Services	Gwendolyn Vontoure: Director Perioperative Services	4/9/2024



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**Owner:** Jeff Warren: Manager, Sterile Processing  
**Policy Area:** Sterile Processing Department  
**References:**

## S.62 Selection and Use of Packaging Materials for Sterilization

### POLICY:

To provide guidance to perioperative personnel for in the use of packaging systems for sterilization. The expected outcome is that the patient is free from signs and symptoms of infection.

### PROCEDURE:

It is the policy of Ventura County Medical Center/Santa Paula Hospital that:

- Packaging systems and packaging materials will be evaluated before purchase and use.
- Packaging systems will be compatible with the specific sterilization method for which they will be used.
- Packaging materials will be processed and stored in a way that maintains the qualities for sterilization.
- Packaging materials will be used according to the packaging manufacturer and the sterilizer manufacturer's written instructions for use (IFU).
- The shelf life of a packaged sterile item will be considered event-related.
- The total weight of an instrument containment device, including the contents, will not exceed 25 lbs.
- Count sheets will not be placed in instrument trays.

### *Storage and Processing*

- Launder reusable textiles after every use.
- Store packaging materials at room temperature and at a relative humidity that is in accordance with the packaging manufacturer's IFU.
- Discard wrapping materials labeled for single-use after one sterilization cycle.
  - Recycle single-use packaging materials suitable for recycling if desired.

### *Packaging*

- Package items to be sterilized in a manner that facilitates sterilization, maintains sterility, and provides for an aseptic presentation of the package contents.
- Inspect packaging materials, including filters for rigid sterilization containers, for defects and extraneous material before using.
  - Do not use packaging materials with defects or extraneous materials that cannot be removed.
- Select the size of wrapping material required to achieve adequate coverage of the item(s) to be

packaged.

- Wrap the item(s) securely in a manner that prevents gapping, billowing, or formation of air pockets.
- Position the item(s) to be sterilized within the package to allow sterilant contact with all surfaces.
- Disassemble instruments composed of more than one part unless the manufacturer's written IFU specifies that disassembly is not required.
- Position items to be sterilized that have concave or convex surfaces within packages in a manner that prevents those surfaces from retaining water.
- Place towels within instrument sets only if they are lint-free and laundered in a health care-accredited laundry facility.
- Place items to be sterilized in the package or tray in an open or unlocked position.
  - Use racks or stringers designed and intended for sterilization to maintain instruments in their open position as needed.

## ***Chemical Indicators***

- Place a chemical indicator on the outside and inside of every package to be sterilized unless the internal indicator is readable through the package material.
  - Place a class I chemical indicator (i.e., process indicator) externally.
  - Place a class III chemical indicator (i.e., single-parameter indicator), class IV chemical indicator (i.e., multi-parameter indicator), class V chemical indicator (i.e., integrating indicator), or class VI chemical indicator (i.e., emulating indicator) internally.
  - Place more than one chemical indicator for multilevel trays according to the tray manufacturer's IFU.
- Place chemical indicators in an area within the package that presents a challenge for air removal and sterilant contact.
- Follow the chemical indicator manufacturer's written instructions for storage, use, and expiration date.

## ***Reusable, Woven Packaging Materials***

- Inspect textiles on a light table for defects (e.g., holes, tears, worn spots).
  - Repair small defects using a vulcanized patch.
  - Keep the number of repairs to a minimum.
  - Discard reusable, woven packaging materials if there is a question about its suitability.
- De-lint reusable, woven packaging materials after laundering and before using.
- Mark the printed area each time the item is used if a printed area (e.g., grid system) for marking the number of reprocessings is available on the woven textile.
- Follow the manufacturer's IFU for the recommended number of reprocessings.

## ***Peel Pouches***

- Use peel pouches for small, lightweight, low-profile items (e.g., one or two clamps, scissors).
  - Do not package heavy devices, such as weighted vaginal speculums in peel pouches.
- Do not use peel pouches within wrapped sets or containment devices unless the pouch manufacturer can supply documented validation for this process.
- Do not perform double pouching (i.e., placing the item within one pouch and then placing this pouch inside another) without written instructions from the pouch manufacturer indicating that this practice has been validated and the pouch in question has been cleared by the FDA for this purpose.
- When double pouching is indicated, verify that the inner pouch
  - fits within the outer pouch without folding, and
  - faces in the same direction as the outer pouch (i.e., plastic or Mylar faces plastic or Mylar, and the

- paper or Tyvek faces paper or Tyvek).
- Place peel pouches on edge and spaced to permit sterilant contact and drying when loading the sterilizer.
  - Use racks designed and intended for sterilization to separate and hold pouches in a vertical position as needed.
- Label peel pouches according to the pouch manufacturer's IFU.
  - Place labels on the plastic side of the pouch.
  - Use a marker with nontoxic ink for writing on the plastic side of the pouch.

## ***Rigid Sterilization Containers***

- Follow the manufacturer's recommended sterilization method and cycle exposure times for each rigid sterilization container system.
  - Evaluate sterilization efficacy and drying effectiveness of rigid sterilization containers before initial use and periodically according to the manufacturer's written IFU.
- Refer to the containment device or organizing tray manufacturer's IFU to determine whether placing cassettes or organizing trays within rigid sterilization containers is acceptable.
- Inspect the integrity of the rigid container after each use and verify that the
  - mating surfaces and edges of the container and lid are free of dents and chips;
  - lid and container fit together correctly and securely;
  - filter retention mechanisms and fasteners are secure and not distorted or burred;
  - latching mechanisms are functioning correctly;
  - handles are working correctly;
  - integrity of the filter media is not compromised;
  - gaskets are pliable, securely fastened, and without breaks or cuts; and
  - valves are working correctly.
- Examine filter plates before and after the sterilization process.
  - Verify that single-use or reusable filters and valve systems are secured and working correctly before sterilization.
  - Use only intact filters.
  - Consider the contents unsterile if the filter is damp or dislodged or has holes, tears, or punctures.
- Remove damaged items from service and repair or replace.
- Clean rigid sterilization containers after each use.
  - Disassemble and clean all components (e.g., filter retention plates) unless otherwise specified in the manufacturer's IFU.
- Do not place additional materials (e.g., silicone mats, towels) within rigid sterilization containers unless the container manufacturer has provided directions for their use.
- Review the manufacturer's IFU to determine limitations related to density of materials, weight, and distribution of contents before placing devices within rigid sterilization containers.

## ***Labeling***

- Label packages to be sterilized before sterilization with the
  - sterilizer number or unique identifier if more than one sterilizer is in use;
  - cycle or load number;
  - date of sterilization;
  - description of the package contents (e.g., Kerrison rongeur, major abdominal set, Kleppinger bipolar forceps); and
  - identification of the assembler.

- Verify that package labels are visible and securely fixed to the package.
- Use a marker that is nontoxic, nonbleeding, and indelible to enter label information.
  - Write on the indicator tape or affixed label of wrapped packages or on the plastic side of peel pouches, and not on the packaging material.

## Quality

Perioperative staff using packaging systems for sterilization will participate in quality assurance and performance improvement activities related to packaging systems for sterilization.

## Glossary

**Chemical indicators:** Devices used to monitor exposure to one or more sterilization parameters.

- **Class I:** Process indicator that demonstrates that the package has been exposed to the sterilization process to distinguish between processed and unprocessed packages.
- **Class II:** Process indicator that is used for a specific purpose such as the dynamic air removal test (Bowie-Dick test).
- **Class III:** A single-parameter indicator that reacts to one of the critical parameters of sterilization.
- **Class IV:** A multi-parameter indicator that reacts to one, two, or more of the critical parameters of sterilization.
- **Class V (integrating indicator):** An indicator that reacts to all critical parameters of sterilization.
- **Class VI (emulating indicator):** An indicator that reacts to all critical parameters of a specified sterilization cycle.

**Containment device:** Reusable rigid sterilization container, instrument case, cassette, or organizing tray intended for the purpose of containing reusable devices for sterilization.

**Instrument case/cassette:** A container with a lid and a base to sterilize devices that permits air removal and sterilant penetration/removal. The devices require wrapping in packaging material if sterility of the container is to be maintained.

**Organizing tray:** A reusable metal or plastic tray that permits organization and protection of the contents. Some organizing trays have diagrams for the representative instrument etched onto the surface of the tray to facilitate their identification and location within the tray.

**Paper-plastic pouch (peel pouch):** A type of packaging made of Mylar® (a polyester film manufactured by Dupont) and paper that is suitable for packaging items to be sterilized in steam or a type of packaging made of Mylar® and Tyvek® (a polyethylene material manufactured by Dupont) that is suitable for packaging items to be sterilized in ethylene oxide, low-temperature hydrogen gas plasma, or hydrogen peroxide vapor.

**Rigid sterilization container system:** Specifically designed heat-resistant, metal, plastic, or anodized aluminum receptacles used to package items, usually surgical instruments for sterilization. The lids and/or bottom surfaces contain steam- or gas-permeable, high-efficiency microbial filters.

**Woven textile:** A reusable fabric constructed from yarns made of natural and/or synthetic fibers or filaments that are woven or knitted together to form a web in a repeated interlocking pattern.

## References

Petersen C, ed. Infection. In: *Perioperative Nursing Data Set*. 3rd ed. Denver, CO: AORN, Inc.; 2011:254-276.

Guideline for selection and use of packaging systems for sterilization. In: *Guidelines for Perioperative Practice*. Denver, CO: AORN, Inc.

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## Attachments

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Infection Prevention Committee	Magdy Asaad: Infection Prevention Manager	4/18/2024
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Surgical Services	Gwendolyn Vontoure: Director Perioperative Services	4/9/2024
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**Owner:** Jeff Warren: Manager, Sterile Processing  
**Policy Area:** Sterile Processing Department  
**References:**

### S.64 Sterile Processing Department Attire

#### POLICY:

All persons working in the Sterile Processing Department (SPD) will adhere to the rules regarding attire described in this policy.

#### PROCEDURE:

- A. Only scrubs provided by the hospital will be worn. If staff leave the hospital, they must change back into fresh, hospital-provided scrubs upon their return.
- B. Undergarments must be completely covered.
- C. Wet or soiled attire must be changed immediately.
- D. All hair must be completely covered by a hospital-provided bouffant cap or other hair covering, the hair covering must be lint-free and changed daily.
- E. Loose jewelry should not be worn as it is unsafe; other jewelry must be covered while working with equipment or instruments.
- F. All staff must wear a high filtration mask in restricted areas. Personal protective equipment (PPE) will be worn when working with contaminated equipment and supplies.
- G. Shoe covers can be worn in the assembly area and are required in the decontamination area. Shoe covers must be removed upon exiting the decontamination area. All shoe covers must be removed before leaving the SPD.
- H. A water-resistant gown must be worn in the decontamination area.
- I. If staff are grossly soiled by the spilling or splashing of contaminated liquids or substances, they shall immediately proceed to the locker room, remove soiled scrubs and put on clean, hospital-provided scrubs.
- J. All vendors, visitors or service engineers entering the SPD will be supplied with scrubs or a jump suit as well as hair covering.

All revision dates:

10/1/2016, 8/1/2013, 4/1/2011, 7/1/2006, 6/1/2001

## Attachments

No Attachments

## Approval Signatures

Step Description	Approver	Date
Surgery Committee	Tracy Chapman: VCMC - Med Staff	pending
Infection Prevention Committee	Magdy Asaad: Infection Prevention Manager	4/18/2024
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	4/9/2024
Surgical Services	Gwendolyn Vontoure: Director Perioperative Services	4/9/2024
Sterile Processing Department	Jeff Warren: Manager, Sterile Processing	4/3/2024





**Origination:** 10/1/1984  
**Effective:** Upon Approval  
**Last Approved:** N/A  
**Last Revised:** 2/1/1996  
**Next Review:** 3 years after approval  
**Owner:** Gwendolyn Vontoure: Director  
 Perioperative Services  
**Policy Area:** Surgical Services  
**References:**

## S.65 Selection of Barrier Materials for Gowns and Drapes

### POLICY:

Surgical gowns and drapes are chosen to provide barriers to microorganisms, particulate matter and fluids. They permit sterilization. They are made of materials that minimize the passage of microorganisms from nonsterile to sterile areas, and prevent the transfer of bloodborne pathogens from surgical patients to health care workers.

### PROCEDURE:

- A. Selected gowns and drapes are made of material that establishes a barrier to minimize the passage of microorganisms between nonsterile and sterile areas.
- B. Data is available from the manufacturer regarding the products barrier to strike-through, increased hydrostatic pressures, and the variable of prolonged time.
- C. Gowns and drapes are made of materials that are safe and comfortable for use in the operating room environment.
- D. Materials are non-abrasive, lint free, and free of toxic ingredients, non-fast dyes, and noxious odors.
- E. Materials are non-glare and colored to minimize distortion from reflected light.
- F. Materials are resistant to tears, punctures, strains and abrasions.
- G. Barrier materials shall resist combustion. Materials meet or exceed the requirements of the Flammable Fabrics Act and the National Fire Protection Association regulations.
- H. Unused disposable gowns and drapes should not be resterilized unless the manufacturer provides written instructions for processing.
- I. Re-usable fabrics, when used, shall be in addition to woven paper or plastic products, and shall not be employed as a primary draping material for the creation of a sterile field in the Operating Room.

### REFERENCES:

AORN Standards for Protective Barrier Materials  
 OSHA guidelines for PPE  
 NFPA regulations

## Attachments

No Attachments

## Approval Signatures

Step Description	Approver	Date
Surgery Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	4/9/2024
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	4/9/2024
Surgical Services	Gwendolyn Vontoure: Director Perioperative Services	4/9/2024



## VENTURA COUNTY HEALTH CARE AGENCY

**Origination:** 9/1/2016  
**Effective:** Upon Approval  
**Last Approved:** N/A  
**Last Revised:** 7/22/2020  
**Next Review:** 3 years after approval  
**Owner:** Jeff Warren: Manager, Sterile Processing  
**Policy Area:** Sterile Processing Department  
**References:**

### S.68 Steam Sterilization

#### POLICY:

To provide guidance to perioperative staff for steam sterilization of items to be used in the perioperative setting. The expected outcome is that the patient is free from signs and symptoms of infection. It is the policy of Ventura County Medical Center/Santa Paula Hospital that saturated steam under pressure will be used to sterilize heat- and moisture-stable items unless otherwise indicated by the device manufacturer.

#### PROCEDURE:

The following steps will be followed for steam sterilization of items to be used in the perioperative setting:

- Follow manufacturers' written instructions for use (IFU) for operating steam sterilizers.
- Determine the correct cycle parameters by:
  - reconciling cycle parameters recommended by the device manufacturer with the sterilizer manufacturer's written instructions for the specific sterilization cycle, or
  - following the device manufacturer's instructions when the sterilizer and the device manufacturer's instructions cannot be reconciled.
- Follow the sterilizer manufacturer's written IFU for load configuration and placement of items within the sterilizer.
- Use physical monitors (e.g., printouts, digital readings, graphs, gauges) for every cycle and load and review to verify that conditions necessary for steam sterilization have been met.
- Use external and internal chemical indicators with each package.
  - Place a class 1 chemical indicator (i.e., process indicator) on the outside of every package unless the internal indicator is visible through the package material.
  - Place a class 5 chemical indicator (i.e., integrating indicator) or a class 6 chemical indicator (i.e., emulating indicator) inside every package.
  - Place chemical indicators in an area within the package that presents a challenge for air removal and steam contact.
  - Consult the chemical indicator manufacturer, the device manufacturer, and the container manufacturer when there is a question concerning the correct number or placement of internal chemical indicators.
- Biological indicators shall be used on every steam cycle daily according to the manufacturer's written IFU to monitor sterilizer efficacy and for load release purposes.
  - Do not release loads containing an implant until the result of the biological indicator test is available.
- After steam sterilization, remove the contents of the sterilizer from the chamber and leave untouched until

cool enough to handle without concern that retained moisture may act as a wick for bacteria on the hands of staff who touch the package.

- Do not place warm or hot items on cool or cold surfaces.
- Allow items to cool on the sterilization rack.
- Consider sterile packages that have formed condensate as unsterile, and do not use the contents.

## Competency

Perioperative staff sterilizing items for use in the perioperative setting using steam will receive education and complete competency verification activities on the principles and processes of steam sterilization.

## Quality

Perioperative staff sterilizing items for use in the perioperative setting using steam will participate in quality assurance and performance improvement activities related to steam sterilization.

## References

Guideline for sterilization. In: *Guidelines for Perioperative Practice* . Denver, CO: AORN, Inc.; 2019

AORN Syntegrity® Solution. AORN Syntegrity® On-line Companion Guide; 2017.

All revision dates:

7/22/2020, 10/9/2019, 9/1/2016

## Attachments

No Attachments

## Approval Signatures

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Infection Prevention Committee	Magdy Asaad: Infection Prevention Manager	4/18/2024
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	4/9/2024
Surgical Services	Gwendolyn Vontoure: Director Perioperative Services	4/9/2024
Sterile Processing Department	Jeff Warren: Manager, Sterile Processing	4/3/2024



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**Effective:** Upon Approval  
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**Last Revised:** 6/9/2020  
**Next Review:** 3 years after approval  
**Owner:** Gwendolyn Vontoure: Director  
 Perioperative Services  
**Policy Area:** Surgical Services  
**References:**

## S.75 Sterilization Failure/Recall of Load

### POLICY:

Biological indicators (BI) are used in accordance with the manufacturer's written Instructions For Use. BI are run with the following:

- Steam cycle daily and every load containing implants
- Sterrad sterilization cycle daily

In the event of a sterilization failure as evidenced by a positive biological indicator, the following procedure is followed:

### PROCEDURE:

- The instrument team member will notify the Operation Room (OR) Clinical Nurse Manager or designee at the FIRST indication of a possible positive indicator.
- The affected sterilizer will be removed from service and the Biomedical Engineering Department will be notified.
- The load record of the questionable load will be reviewed and all items will be removed from patient care areas (including the clinics where appropriate) and be reprocessed.
- All loads following the last negative load will be recalled.
- The Infection Control Department, the Medical Director of Infection Control and Chair of the Infection Control Committee will be notified.
- Any patient care item not located will be assumed to be in patient care and all attempts will be made to determine if any patients are affected.
- The surgeon or attending physician will be notified by the OR Clinical Nurse Manager if an instrument tray or implant has been affected.
- The Chief Nurse Executive will be notified by the OR Clinical Nurse Manager.

### Reference:

2017 Association for the Advancement of Medical Instrumentation ■ ANSI/AAMI ST79:2017

All revision dates:

6/9/2020, 9/1/2016, 8/1/2013, 7/1/2006, 12/1/2001

## Attachments

No Attachments

## Approval Signatures

Step Description	Approver	Date
Surgery Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	4/9/2024
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	4/9/2024
Surgical Services	Gwendolyn Vontoure: Director Perioperative Services	4/9/2024



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Last Revised: 6/9/2020  
Next Review: 3 years after approval  
Owner: Gwendolyn Vontoure: Director  
Perioperative Services  
Policy Area: Surgical Services  
References:

## S.86 Documentation of Patient Care in the GI Lab

### POLICY:

The registered nurse (RN) at Ventura County Medical Center shall provide accurate patient documentation in the electronic health record (EHR) for all Gastrointestinal (GI) Lab patients.

### PROCEDURE:

1. The physician shall place the Gastrointestinal (GI) Lab order in Cerner and the EHR under endoscopy.
2. The physician shall complete and sign the patient's informed consent.
3. A thorough procedural note shall be completed by the physician in Cerner with medications given, pertinent findings, and follow up/orders.
4. The physician shall place the appropriate surgical pathology order in Cerner for the specimen sent to the Pathology Department.
5. The GI RN shall accurately document the procedure in Cerner to include:
  - a. Pre-procedural vital signs, medications, Nothing by Mouth (NPO) status, diagnosis, allergies
  - b. Time out
  - c. Procedure performed
  - d. Times of procedure
  - e. Medications administered
  - f. Significant events during the procedure
  - g. Recording of vital signs, oxygen saturation readings, level of consciousness (LOC)
  - h. Electrocardiogram (EKG) documented in Cerner
  - i. Post-procedural vital signs and recovery of patient including level of consciousness
6. All narcotics administered to the patient shall be properly logged out from Pyxis, per hospital protocol, INCLUDING WASTE.
7. The GI Lab RN shall note the following information in the GI Log (a copy of the GI log shall be kept in the GI Lab):
  - a. Patient label
  - b. Procedure times

- c. Name of procedure
- d. Name of physician
- e. Notation of any specimens obtained
- f. Endoscope Reprocessor Log printout

8. When procedural sedation has been administered, home care instructions shall be given to the patient and primary caregiver prior to discharge.

All revision dates:

6/9/2020

## Attachments

No Attachments

## Approval Signatures

Step Description	Approver	Date
Surgery Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	4/9/2024
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	4/9/2024
Surgical Services	Gwendolyn Vontoure: Director Perioperative Services	4/9/2024





Origination 7/1/2007

Last Approved N/A

Effective Upon Approval

Last Revised 6/3/2024

Next Review 3 years after approval

Owner Gina Ferrer:  
Manager, Trauma Services

Policy Area Trauma Services

## T.01 VCMC Trauma Response Plan

### POLICY:

To facilitate care for the critically injured trauma patient, thus promoting the most favorable outcome.

### PROCEDURE:

A "CODE YELLOW" is called so staff needed to care for critical trauma patients respond to the Emergency Department (ED). The trauma team response is to ensure a rapid and orderly assessment of patients with significant physiologic impairments or with a high index of suspicion for occult injury because of mechanism of injury.

Ventura County Medical Center (VCMC) established a tiered system of notification for trauma patients. This system incorporates probability and known injuries. It established guidelines for the Mobile Intensive Care Nurses to follow when receiving pre-hospital reports on trauma patients. The tiered alert has three (3) levels.

### CODE YELLOW, THREE-TIER SYSTEM

#### TIER I

Traumatic injury in which there is a high probability for immediate surgical intervention.

#### CRITERIA:

1. Hemodynamic instability (SBP <90 mm Hg, pulse >120 in adults & age specific hypotension/tachycardia); Pediatrics: systolic blood pressure (SBP) in age ≤ 1 year: <60mm Hg; age: 1-10 years: 70 mmHg + 2X the age in years).

2. Intubated patients transferred from the scene.
3. Respiratory compromise, or patients in need of an emergent airway. Includes intubated patients who are transferred to another facility with ongoing respiratory compromise.
4. Glasgow Coma Scale (GCS) <9 with mechanism attributed to trauma.
5. Penetrating wounds of the head, neck or torso (chest, abdomen, back, or buttocks).
6. Transferred patients from other hospital with unstable vital signs or who require blood products to maintain vital signs. Penetrating injuries to the head, neck or torso.
7. Open, depressed skull fracture.
8. Paralysis or suspected spinal cord injury,
9. Flail chest.
10. Unstable pelvic fracture.
11. Amputation proximal to the wrist or ankle.
12. Two or more long bone fractures.
13. Judgment of ED Physician/MICN.

## PROCEDURE:

- A. The MICN or designee will contact the surgeon on call directly by cell phone from the radio room at the determination of a Tier 1.
- B. The MICN or designee will contact the Blood Bank to notify them of the sex and age of a Tier I patient, if known.
- C. A Tier 1 code is called in to the operator with basic information: Adult or pediatric, or infant, mechanism of injury, estimated time of arrival (ETA).
  - An overhead page will state, "Code Yellow, Tier 1, adult/peds/infant ETA ...minutes."
  - The operator will send an alphanumeric page stating, " Code Yellow, Tier 1 adult/ peds/infant(mechanism of injury) ETA minutes " to all of the following people:
    - Surgeon on call, back-up on call surgeon, Anesthesiologist on call
    - ICU Resident, Surgical Resident, Medicine Resident
    - Nursing Supervisor
    - X-Ray Tech, CT Tech, Lab Technician, Respiratory Therapist
    - Security and Facilities Maintenance
    - Patient Advocate to arrive Monday – Friday from 8:00 am to 4:30 pm and Social Services from 8:00 a.m. to 4:30 p.m. Available off hours by phone.
    - The Nursing Supervisor will page the operating room (OR) staff (OR Tech, RN Staff)

**If multiple trauma patients are being transported to the hospital, refer to policy T.13 Multiple Casualty Incident (MCI).**

- D. The following people are to arrive immediately to the Trauma Room in the ED:
- Physicians: Attending ED physician, ED resident, Surgery Resident, Med-Ped Resident, ICU Resident.
  - Nurses: Two ED nurses (or more if requested), Nursing Supervisor, Trauma Support Nurse (TSN).
  - Ancillary Staff: X-Ray Tech, Respiratory Therapists, CT scan Tech, Transport, Security, Maintenance.
  - The Lab technician is to deliver appropriate products based on sex and age of the Tier 1 patient to the ED in a cooler:
    - ~~Males~~Patients <18 years ~~of age or females <55 years~~ of age: 2 units of O negative blood and 2 units of plasma.
    - ~~Males~~Patients ≥18 years ~~of age or females ≥55 years~~ of age: 2 units of O positive whole blood.
      - If whole blood is not available, whole blood may be replaced with ~~2 units of O positive blood and 2 units of plasma~~:
        - All males ≥18 years of age and females >55 years of age: 2 units of O positive blood and 2 units of plasma.
        - Females 18-55 years of age: 2 units of O negative blood and 2 units of plasma.
    - The lab tech will return in approximately 30 minutes to pick up any unused blood that has been released by the surgeon and return it to the lab.
  - The Patient Advocate is to arrive Monday - Friday from 8:00 a.m. to 4:30 p.m. and Social Services 7 days a week from 8:00 a.m. to 4:30 p.m.
- E. The on call trauma surgeon will respond to the hospital immediately within 15 minutes of patient's arrival to the ED, after they are alerted.
- F. The on call OR staff will respond to the hospital immediately and arrive to the OR within 15 minutes of notification. The Operating Room is to be readied and available within 15 minutes of notification and remain available until released by the Surgeon on call.
- G. The Anesthesiologist is to call the ED immediately after they are paged. The ED Physician or Trauma Nurse will give them all known information concerning the patient. The Anesthesiologist will then respond immediately for difficult airway assistance or for operative intervention. The Anesthesiologist will respond immediately if requested by the ED physician or surgeon.
- H. Physicians who completed primary training in 2016 and beyond who are NOT board certified or board eligible by the appropriate emergency medicine or pediatric emergency medicine board may provide care in the emergency room but CANNOT participate in trauma care. For example: if a physician who completed Family Medicine primary training in 2017, they would NOT be eligible to participate in trauma call panel.

Exception: When there is a Multiple Casualty Incident (MCI), all clinicians are needed to care for the injured patient, with supervision by ED boarded/board eligible or non-ED boarded

physician that graduated before 2016.

## TIER 2

Patients who sustain injury with any of the following alert mechanism, but without the presence of any minimum criteria for mandatory Category/Tier 1 Trauma Alert.

### CRITERIA:

1. Falls: adult >20 feet (ft).; child >10 ft. or 3X height.
2. Fall from any height, anti-coagulated.
3. High risk auto crash with:
  - Intrusion of vehicle >12 inches (") occupant compartment; 18" on opposite side
  - Ejection from automobile (partial or complete)
  - Death in same passenger space compartment
4. Auto vs. pedestrian/cyclist thrown, run over, or with significant impact.
5. Motorcycle crash >20 MPH; High energy dissipation, or rapid decelerating incidents - for example:
  - Separation from vehicle (motorcycle, all-terrain vehicle (ATV), animal, etc.)
  - Striking fixed object with momentum
  - Blast or explosion
6. High energy electrical injury
7. Burns >10% total body surface area (TBSA) (second or third degree) and/or inhalation injury. Burns to face, genitalia, hands, or feet
8. Suspicion of hypothermia, drowning or hanging
9. Blunt abdominal injury with firm or distended abdomen, or with seatbelt sign
10. Judgment of ED Physician/Mobile Intensive Care Nurse (MICN)

### PROCEDURE:

A Tier 2 code is called in to the operator with basic information (age, mechanism of injury, estimated time to arrival (ETA)).

- A. An overhead page will state, *"Tier 2 Code Yellow adult/peds/infant ETA .... Minutes"*.
- B. The operator will send an alphanumeric page stating, *"Tier 2 Code Yellow adult/peds/infant (mechanism of injury) ETA .... minutes"* to all of the following people:
  - Attending Surgeon, Surgical Resident
  - Trauma Program Manager
  - Nursing Supervisor
  - X-Ray Tech, CT Tech, Lab Technician, Respiratory Therapist
  - Security and Facilities Maintenance

- Patient Advocate Monday – Friday from 8:00 am to 4:30 pm and Social Services 7 days a week from 0800 am to 4:30 pm. Available off hours by phone.
- C. If multiple trauma patients are being transported to the hospital simultaneously (>3 patients), an MCI will be called. A tier designation can be communicated via overhead page and mass page if adequate pre-hospital information was received. i.e., "MCI, tier II x3, adult, tier I pediatric x2." Refer to policy [T.13 Multiple Casualty Incident \(MCI\)](#).
- D. The following people are to arrive immediately to the Trauma Bay:
- Physicians: Attending ED physician, ED resident, Surgery resident
  - Nurses: Two ED nurses (or more if requested), Nursing Supervisor, Trauma Support Nurse (TSN)
  - Ancillary Staff: X-Ray Tech, Respiratory Therapists, CT scan Tech, Security, and Maintenance
  - Lab technician
  - Patient advocate and social services are to arrive Monday - Fridays from 8:00 a.m. to 4:30 p.m.
- E. The General Surgeon has 60 minutes to respond to the trauma activation. He/she will call the emergency room to discuss the patient with the resident and ED physician and give input on studies needed prior to the patient going to CT. The surgeon will evaluate the patient prior to admission in the hospital. The attending surgeon (or surgery resident) will document patient arrival time and evaluation time in dictated progress notes or the Trauma H&P.
- F. Should the patient need to go to surgery, the OR team and an OR room will be available in 15 minutes.
- G. A Tier 2 Trauma can be upgraded to a Tier 1 Trauma at any time based on the patient's condition. In this situation, the MICN will notify the page operators who will both overhead page and alphanumeric page the above noted personnel with the message "Upgrade Tier 1 Trauma". The trauma scenario will then proceed as a Tier 1.
- H. The ED physician can request the Trauma Surgeon to arrive sooner if they feel the patient requires the Surgeon's immediate presence.
- The Trauma Surgeon will respond to the Trauma Bay within 15 minutes for multi casualty situations (greater than three trauma patients who are arriving simultaneously).
  - ICU Resident as well as Med/Ped Resident may be called if needed.
- I. Physicians who completed primary training in 2016 and beyond who are NOT board certified or board eligible by the appropriate emergency medicine or pediatric emergency medicine board may provide care in the emergency room but CANNOT participate in trauma care. For example: if a physician who completed Family Medicine primary training in 2017, they would NOT be eligible to participate in trauma call panel.

Exception: When there is a Multiple Casualty Incident (MCI), all clinicians are needed to care for the injured patient, with supervision by ED boarded/board eligible or non-ED boarded physician that graduated before 2016.

## TIER 3 (CONSULTATION)

1. Patients who do not meet criteria for level/Tier 1 or 2 following injury will be triaged by the Emergency Department Physician
2. Consultation may be obtained on an individual case basis as per the Emergency Department Physician
3. Tier 3 patients will be evaluated within 12 hours upon admission by an attending surgeon, which will be time stamped from when the consultation was requested.

***No overhead page or "mass" alphanumeric page is made.***

## CRITERIA:

1. Femur or facial fractures attributed to traumatic mechanism and requiring admission to a hospital bed
2. Dog or other animal bites requiring surgical debridement
3. Pregnancy >20 weeks gestation with mechanism attributed to trauma
4. Patients with bleeding disorder, or patients on anticoagulation with mechanism attributed to trauma
5. Transferred acute trauma patients who fulfill the above criteria. Patient should be upgraded according to severity
6. ~~Isolated Hip Injuries:~~ Isolated Hip Injuries:
  - ≥65 years of age, consider admission to Medicine if multiple co-morbidities with Tier 3 consult, but admit to Trauma if minimal co-morbidities. Final decision per on-call trauma surgeon.
  - <65 years of age, high impact (motorcycle crash (MCC), motor vehicle crash (MVC), high falls) - admit to Trauma
  - Other <65, low impact (ground level fall) - will be triaged by ED or Trauma physician. Ortho admission is appropriate.
  - ~~>65 years of age -- admit to Medicine but with Tier 3 consult~~
  - ~~<65 years of age, high impact (motorcycle crash (MCC), motor vehicle crash (MVC), high falls) -- admit to Trauma~~
  - ~~Other <65, low impact (ground level fall) -- will be triaged by ED or Trauma physician. Ortho admission is appropriate.~~

## PROCEDURE:

### ANESTHESIA/OR STAFF /OR AVAILABILITY

***In an effort to provide better care for the severely injured patient and reduce morbidity and mortality, an operating room, OR staff and Anesthesia personnel will be available to perform operative procedures.***

- A. Operating Room: An OR Room will automatically be placed on hold for all Tier 1 Traumas and will be available within 15 minutes of notification until released by the trauma surgeon. This decision to release the room will be made by the trauma surgeon as soon as possible, but not

before the primary and secondary survey have been completed.

- B. The Operating Room Staff (OR Tech & RN Staff) are to be called by the Nursing Supervisor for all Tier 1 traumas. They will ~~start driving to the hospital immediately and~~ arrive in the OR within 15 minutes of notification, where they will ready the OR and keep it available until it is released by the Surgeon on call.
- C. The anesthesiologist will be paged for all Tier 1 activations. The anesthesiologist is to call the trauma phone or Nursing Supervisor immediately. The Nursing Supervisor or Charge Nurse will document the time and date the anesthesiologist called in the Trauma Flow Sheet. The nursing supervisor will follow up with the ED Medical Office Assistant (MOA) and/or charge nurse and will call the anesthesiologist on call if he/she hasn't responded.
- D. It is expected that the Anesthesiologist will be available for difficult emergent airways and for emergent operative intervention immediately without delays.
- E. Anesthesia services at VCMC will follow the American College of Surgeons (ACS) requirement: ~~The on-call~~ Anesthesia services must be available within 15 minutes of request. Furthermore, the attending anesthesiologist in Level I and II trauma centers must be available in-house 24 hours a day present within 30 minutes of request for all operations.
- F. Direct phone communication will be held with the on call anesthesiologist by any member of the trauma/ED team, once the trauma surgeon has decided Urgent/Emergent operative management is indicated, or if their assistance is needed for a difficult airway. The only information that needs to be conveyed is the patient's age, sex, mechanism of injury, known past medical history, known injuries and planned surgery/need for airway. The Anesthesiologist is to proceed immediately and present to the operating room/Trauma room within 15 minutes of notification.
- G. In the event the on call anesthesiologist and OR staff are currently assisting with an operation, the trauma surgeon and anesthesiologist will discuss & will activate 2nd team, or if the trauma case should follow the current case (no more than 15 minutes for emergent cases).
- H. A Trauma Cart with basic instruments and supplies as well as a Defibrillator with internal paddles will be stored at a designated place at all times. This tray will be utilized while awaiting the arrival of the OR Staff and Anesthesiologist. This way, a patient requiring emergent, life-saving surgery can proceed to the OR, be prepped and draped and surgery begun before all members of the team have arrived. During this time, Respiratory Therapy will maintain Ventilator management with a basic ventilator, and the ER /ICU nurse will stay with the patient until all personnel have arrived. This EMERGENCY TRAUMA use of the OR will only be performed for life saving surgery. Indications include:
  - 1. Hemodynamic Instability
  - 2. Exsanguinations
  - 3. Return of cardiac activity after traumatic arrest
  - 4. Impending herniation following blunt head injury
  - 5. Cardiac Injury
  - 6. Evisceration following penetrating trauma
  - 7. Suspected vascular injury with active bleeding or expanding hematoma



## BLOOD BANK

- A. When a Tier 1-Code Yellow is called, the Lab technician is to deliver appropriate products based on sex and age of the Tier 1 patient to the ED in a cooler (see Attachment A):
- ~~Males~~Patients <18 years ~~of age or females <55 years~~ of age: 2 units of O negative blood and 2 units of plasma.
  - ~~Males~~Patients ≥18 years ~~of age or females ≥55 years~~ of age: 2 units of O positive whole blood.
    - If whole blood is not available, whole blood may be replaced with ~~2 units of O positive blood and 2 units of plasma~~:
      - All males ≥18 years of age and females >55 years of age: 2 units of O positive blood and 2 units of plasma.
      - Females 18-55 years of age: 2 units of O negative blood and 2 units of plasma.
- B. Any available staff nurse or physician can sign to receive the blood.
- C. The Blood Bank will inquire concerning any unused blood after approximately 30 minutes. Blood not used and released by the trauma surgeon will be returned to the Blood Bank.
- D. Any blood utilized on the trauma patient will require a signature. Blood used in the ED will be signed for by the ED physician, or the trauma surgeon involved in the trauma resuscitation once the patient has left the ED. Any blood used in the OR will be signed for by the Anesthesiologist. Any blood used on the floor or ICU will be signed for by the trauma surgeon. In addition, the trauma surgeon will sign for any blood listed above that was not signed for, within 24 hours.

## IMAGING SERVICES

- A. A radiology tech will arrive to the trauma bay immediately upon notification of a Tier 1 or 2 trauma
- B. CT tech will arrive immediately to the trauma bay immediately upon notification of a Tier 1 or 2 traumas.
- C. A 64 Channel (or better) CT scan will be utilized on all trauma patients having a CT scan performed.
- D. A verbal report will be given to the attending trauma surgeon on call for all radiographs with significant/critical findings or discrepancies from the preliminary report
- E. Trauma patient's radiographic reports will note chronology of preliminary report, final report, any discussions made with the attending trauma surgeon on call, and any discrepancies between the preliminary and final report.
- F. Trauma patients who require resuscitation and monitoring during transport to and while in the radiology department are accompanied by an on-call resident physician from the ICU or surgical services, as well as a nurse from the ED or ICU. The presence of the on-call surgeon for angiography procedures is based on his/her discussion with the Interventional Radiologist.



## SOCIAL SERVICES

***The overall purpose of social work involvement during a trauma is to help manage the crisis by focusing on the needs of the family of the patient .***

The social worker responsibilities include the following:

- A. Notifying family that the patient is in the ED regardless of whether another agency has done so, or initiate making such contact.
- B. If unable to find family, contacting the appropriate agency for help such as law enforcement, homeless outreach, mental health outreach, etc.
- C. Greeting the family members in the ED waiting room and, if the physician thinks it is appropriate, escorting them to the Trauma Bay to be with the patient.
- D. Monitoring how the family is coping and providing support, if needed.
- E. Facilitating communication between family members and ED, medical and nursing staff.
- F. Providing information about community resources and referrals to the family.  
In the event of life-threatening injury or fatality:
- G. Escort the family from the ED waiting room to the Quiet Room
- H. Participation in the meeting between the ED physician and/or trauma surgeon and family.
  - I. Remain in the Quiet Room with the family after the meeting to answer any questions that come up after the meeting with the physician.
- J. Provide information about community resources and referrals, including a list of mortuaries, to the family.
- K. Remain in the Quiet Room with the family to provide emotional support unless they request privacy.
- L. Document all interventions and assessment of the family's ability to cope

## PAGING

- A. For all Tier 1 & 2 Code Yellows, the Page Operator will send an alphanumeric page stating, "*Tier (1 or 2) Code Yellow (Adult/Pediatric/Infant) (mechanism of injury) ETA .... Minutes*" to the following people on call: Attending Surgeon, back-up on call surgeon, Anesthesiologist, Surgical Resident, ICU Resident, Med-Peds Residents, Trauma Program Manager, Nursing Supervisor, X-Ray Tech, CT Tech, Lab Technician, Respiratory Therapist, Security & Maintenance. In addition, they will also page the Patient Advocate & Social Services during Monday – Friday, 8:00 a.m. – 4:30 p.m.
- B. For all Tier 1 & 2 Code Yellows, The Page Operator will make an overhead page stating, "*Tier (1 or 2) Code Yellow (Adult/Peds/Infant) ETA .... Minutes*"
- C. If a trauma activation has been upgraded to a Tier 1, the operator will both overhead and alphanumeric page the above noted personnel with the message "Upgrade Tier 1 Trauma."
- D. If multiple trauma patients are being transported to the hospital, an MCI will be called overhead & alphanumeric page stating the number of patients.

## ADMISSIONS AND TRANSFERS

- A. All patients being admitted to the hospital who have sustained traumatic injury, must be evaluated by the Trauma Service. In most cases, the patient will be admitted to the Trauma Service for the first 12 - 24 hours with other specialty services as consults. The patient can then be transferred to a specialty service if they are found to only have an isolated injury which is managed by that specialty service and the Trauma Service is no longer needed. In rare situations (patients with low mechanism and low ISS scores i.e. ground level falls), the patient may be cleared by the Trauma Service and admitted to the other service with the Trauma Service consulting. Elderly patients with hip fractures from ground-level falls are usually admitted to the Trauma Service, but could be admitted to either medicine or orthopedic service, with a trauma consult, depending on their co-morbidities.
- B. All admitted trauma patients age 65 years and older will be evaluated by a Trauma-Medicine (T-MED) clinician to assist with any extenuating medical co-morbidities. The trauma team may request an evaluation of a non admitted trauma patient age 65 and older on a case-by-case basis depending on surgeon judgement.
- C. All Tier 1 patients must be assessed by the Trauma Surgeon within 15 minutes of the patient's arrival.
- D. All Tier 2 patients must be assessed by the Trauma Surgeon within 60 minutes of the patient's arrival.
- E. At any time, a Tier 2 or 3 trauma patients can be upgraded. In addition, the Trauma Surgeon will respond immediately to assess the patient at any time the ICU, ED, Floor, or Residents deem necessary.
- F. Notification of all acutely injured trauma patients (within 23 hours) who are being transferred to VCMC will be done utilizing the trauma hotline (805-652-6277). If the transferring facility states it is an emergent transfer, the call will be redirected to the ED trauma phone. Emergent trauma transfers can be accepted by the ED charge nurse or ED attending physician. If the transferring facility states it is an urgent trauma transfer, the phone call will be redirected to the trauma surgeon on call for acceptance. The patient should be managed in the same manner as described in this protocol. The ED attending physician or trauma surgeon on call must notify other specialty services (including the ICU) that may be required.. The trauma service should then be notified via the Tier System guidelines once the patient is en route (Tier level, age, mechanism and ETA).
- G. The Trauma Surgeon will be expected to evaluate and document a patient's stability prior to transfer or emergent surgery if requested.
- H. Trauma patients at VCMC are not to be transferred out, except for higher level of care.
  - I. See Pediatric Protocol for transfer criteria.
  - J. See Burns Protocol for transfer criteria.
- K. The guideline for patients in ER needing transfer out for higher level of care will be four (4) hours or less.

## REFERENCES:

- United Blood Services. (n.d.). *A new standard of transfusion care: appropriate use of O-negative*

red blood cells. Scottsdale, Arizona

- Trauma Policy [T.02 Massive Transfusion Protocol](#)
- Resources for Optimal Care of the Injured Patient. 6th Edition. 2014. Chapter 11. Page 76
- [Hanna K, Bible L, Chehab M et al. Nationwide analysis of whole blood hemostatic resuscitation in civilian trauma. J Trauma Acute Care Surg. 2020; 89\(2\): 329-335.](#)
- [Clements TW, Van Gen J, Menon N et al. Use of Low-Titer O-Positive Whole Blood in Female Trauma Patients: A Literature Review, Qualitative Multidisciplinary Analysis of Risk/Benefit, and Guidelines for Its Use as a Universal Product in Hemorrhagic Shock. J Am Coll Surg. 2023; 289\(3\): 347-357.](#)
- [McCartney J. \(2023, April 10\). Whole Blood in Resuscitating Trauma Patients is Making a Comeback. ACS Bulletin. 108\(4\). <https://www.facs.org/for-medical-professionals/news-publications/news-and-articles/bulletin/2023/april-2023-volume-108-issue-4/whole-blood-in-resuscitating-trauma-patients-is-making-a-comeback/>](#)

## All Revision Dates

6/3/2024, 12/14/2021, 7/1/2021, 3/9/2021, 9/10/2020, 9/29/2017, 9/1/2016, 5/1/2012, 1/1/2011, 10/1/2010, 10/1/2009, 8/1/2009, 6/1/2009, 5/1/2009, 7/1/2008

## Attachments

[Attachment A - Emergency Release Algorithm](#)

## Approval Signatures

Step Description	Approver	Date
Medical Executive Committee	Tracy Chapman: VCMC - Med Staff	Pending
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	6/1/2024
Trauma Operations, Performance & Patient Safety (TOPPS) Committee	Gina Ferrer: Manager, Trauma Services	5/31/2024
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	5/31/2024
Trauma Services	Thomas Duncan: Trauma Director	5/31/2024

COPY



Origination 12/1/2009

Last Approved N/A

Effective Upon Approval

Last Revised 6/4/2024

Next Review 3 years after approval

Owner Gina Ferrer:  
Manager, Trauma Services

Policy Area Trauma Services

## T.02 Adult Massive Transfusion Protocol

### POLICY:

The purpose of this policy is to expedite and anticipate blood product requirements in emergent, massive transfusion situations. The massive transfusion protocol (MTP) is a multidisciplinary process whereby blood and blood products are obtained rapidly. At Ventura County Medical Center (VCMC), massive transfusion is defined as transfusion of 4-6 units of Red Blood Cells (RBCs) within an hour, or 10 units of Red Blood Cells within 24 hours in an adult patient. A Massive Transfusion Protocol (MTP) will be initiated by the attending physician when immediate transfusion of six (6) or more units of Red Blood Cells is anticipated, or after using the initial two (2) units of emergency release uncrossmatched type O negative Red Blood Cells with two (2) units of Plasma, or two (2) units of Whole Blood, and there is a request for additional blood.

- For patients ~~less~~ **age 18 years and older and with weight equal to or greater than 18 years of age and with weight equal to or greater than 50 kg** please follow the Adult Massive Transfusion Protocol.
- For patients less than 18 years of age and with weight less than 50 kg please refer to the Pediatric Massive Transfusion Protocol.

### PROCEDURE:

#### A. INITIATION OF MASSIVE TRANSFUSION PROTOCOL (MTP)

1. The attending physician and/or designee will call the blood bank directly at (805) 652-6020 and provide the patient's age and gender, and name of physician activating the MTP, to initiate the Massive Transfusion Protocol (MTP) when:
  - a. The immediate transfusion of six (6) or more units of Red Blood Cells is

anticipated.

- b. The patient uses, or is predictably going to use, the initial two (2) units of emergency release type O negative ~~Packed~~ Red Blood Cells (~~PRBC's~~RBCs) or initial two (2) units of type O positive Whole Blood (based on age criteria) within half an hour.

- i. A signed order is required and attests that the clinical situation was sufficiently urgent to require the release of blood products before completion of blood type or compatibility testing.

- c. Once the MTP is activated, Rh will be based on patient's age and gender. If the age and gender of the patient is not immediately known, then O negative ~~blood~~RBCs will be dispensed, so the process is not delayed. See ~~Attachment A~~Attachment A - MTP Activation Algorithm for more information.
- d. The Blood Bank shall prepare four (4) units of crossmatched Red Blood Cells, four (4) units of Plasma, and one (1) plateletpheresis for the first cooler. The Blood Bank will continue to maintain six (6) units of crossmatched Red Blood Cells, six (6) units of Plasma and one (1) plateletpheresis for each subsequent cooler during the entire Massive Transfusion Protocol until termination of the protocol.
- e. The dictum **"Give the Yellow Stuff First"** will be followed.
- f. Calcium chloride (CaCl<sub>2</sub>) 1 gram intravenously (IV) will be administered after every MTP cooler set.
- g. Two (2) ~~rounds of Cryoprecipitate~~units of pooled cryoprecipitate will be provided with every other MTP cooler, i.e. with each even number cooler.

- 2. The Blood Bank will respond to the Massive Transfusion Protocol (MTP) after notification by phone by the attending physician or their designee.
- 3. The Laboratory will ensure that the Blood Bank will have adequate staffing to provide for Massive Transfusion demands, determine the adequacy of in-house inventory, and establish adequate lines of supply for additional blood components.
- 4. The nursing unit shall designate a runner to pick up blood products from the Blood Bank upon MTP activations.

## **B. PATIENT IDENTIFICATION AND SPECIMEN COLLECTION**

- 1. A Blood Bank specimen must be collected and sent to the Blood Bank as soon as possible. The specimen must be labeled with a red Blood Bank Identification band label, and must include the following identifying information:
  - a. Patient's first and last name/temporary name
  - b. Hospital medical record number
  - c. Date and time of specimen collection
  - d. Cerner user name of the person collecting the sample
- 2. The completed label shall be affixed to the tube before the person who drew the

sample leaves the side of the patient. The Blood Bank shall accept only those specimens that are completely, accurately, and legibly labeled (ball point pens must be used to label blood bank specimens. **Please do not use gel pens**)

3. The corresponding Blood Bank ID number armband **must** be attached to the patient at the time of collection.
4. If a patient's name is changed after a sample is drawn, ~~they~~the patient must be redrawn and re-banded using the new name. A patient cannot be transfused using the new name, their hospital number and the original Blood Bank ID number. If a critical situation occurs in which the patient must be transfused before analysis is completed on the new sample, uncrossmatched emergency release Type O ~~packed~~ red blood cells (~~PRBC's~~RBCs) and Plasma Rh based on patients age and gender will be used.
5. If a patient comes in whose identity is unknown, they will be registered using estimated age and gender, and their sample will be used for testing, crossmatching, issuing and transfusing until they are stable. At that time a new sample will be obtained and tested using the proper name.
6. If an un-banded patient sample is in the Laboratory and the patient's physician decides that a type and screen is necessary, or that the patient needs to receive any product for which a type and screen is necessary, the patient must be redrawn. This would be required for all blood products, including Red Blood Cells, Plasma, Cryoprecipitate, and Plateletpheresis. If a critical situation occurs in which the patient must be transfused before a new sample can be drawn and testing completed, uncrossmatched emergency ~~release~~released O Negative PRBC's and Plasma will be used.

#### C. **INITIAL RESUSCITATION**

1. When a Tier 1-Code Yellow is called, the Mobile Intensive Care Nurse (MICN) will call the Blood Bank at (805) 652-6020 and provide the age and gender of the patient, if known.
2. Lab staff will bring the appropriate set of emergency release blood products to the Emergency Department in a cooler.
  - a. Patients ≥18 years of age: two (2) units of O Rh-positive Whole Blood.
    - i. If Whole Blood is not available:
      - a. For males ≥18 years of age and females >55 years of age: two (2) units of O Rh-positive RBCs and two (2) units of plasma will be provided instead.
      - b. For females 18-55 years of age: two (2) units of O Rh-negative Red Blood Cells (RBCs) and two (2) units of plasma will be provided instead.
    - ii. **Note: Whole blood is indicated for trauma patients.**
    - iii. Whole blood may be used for other patients in urgent and emergent situations only by an attending physician's order. The case shall be sent to peer review in the respective Department

Committee.

- b. Patients <18 years of age: two (2) units of O Rh Negative Red Blood Cells (RBCs) and two (2) units of plasma.
- i. Refer to policy [T.15 Pediatric Massive Transfusion Protocol](#) for more information.

**D. RED BLOOD CELLS (RBCs)**

**1. Tier 1 Trauma Activations/Initial Resuscitation**

- a. ~~When a Tier 1-Code Yellow is called, the Mobile Intensive Care Nurse (MICN) will call the Blood Bank at 652-6020 and provide the age and gender of the patient, if known.~~
  - b. ~~Lab staff will bring the appropriate set of emergency release blood products to the Emergency Department in a cooler.~~
    - i. ~~Males <18 years of age or females <55 years of age: two (2) units of O Rh-negative packed Red Blood Cells (pRBCs) and two (2) units of plasma~~
    - ii. ~~Males ≥18 years of age or females ≥55 years of age: two (2) units of O Rh-positive Whole Blood.~~
      - a. ~~If Whole Blood is not available, two (2) units of O Rh-positive pRBCs and two (2) units of plasma will be provided instead.~~
      - b. **Note: Whole blood is indicated for trauma patients.**
      - c. ~~Whole blood may be used for other patients in urgent and emergent situations only by an attending physician's order. The case shall be sent to peer review in the respective Department Committee.~~
  - c. ~~These units may be used for initial support of hemorrhaging trauma patients as needed.~~
  - d. ~~The Blood Bank will have, on reserve, an additional four (4) units of uncrossmatched O Rh-negative pRBCs available for immediate issue unless blood inventory constraints require the use of type O Rh-positive uncrossmatched blood.~~
2. Upon receipt of the specimen in the Blood Bank, the patient's ABO, Rh type, and antibody screen testing will be performed immediately. The patient's blood type should be available within 15 minutes of receipt of the specimen and the antibody screen should be completed within 40 minutes of receipt of the specimen.
- a. ~~Red Blood Cells~~**RBCs** issued prior to receiving the specimen or prior to completion of the ABO and Rh type will be emergency release uncrossmatched ~~two (2) units of~~ type O Rh based on patients age and gender ~~PRBCs with two (2) units of Plasma, or initial 2 units of O positive whole blood~~**sex**.



- ~~Emergency release uncrossmatched type O Negative red blood cells may be released to a member of the medical or nursing staff without presentation of a request bearing the patient's first and last name and hospital medical record number.~~
    - ~~Emergency release uncrossmatched type O Rh based on patient's age and gender red blood cells may be released to a member of the medical or nursing staff with presentation of patient identification.~~
    - i. Type O Rh Negative RBCs may be released without presentation of a request bearing the patient's first and last name and hospital medical record number.
    - ii. Type O Rh based on patient's age and sex RBCs may be released after presentation of patient identification.
      - a. For males  $\geq 18$  years of age and females  $> 55$  years of age, O Rh Positive RBCs are indicated.
      - b. For females 18-55 years of age, O Rh Negative RBCs are indicated.
  - b. ~~Red Blood Cells~~RBCs issued prior to the completion of the antibody screen but after the completion of the type will be uncrossmatched-Type Specific or Type Compatible.
    - ~~Emergency release uncrossmatched type specific/type compatible red blood cells or crossmatched compatible red blood cells are released based on current patient testing and require presentation of a request bearing the patient's registered name and medical record number.~~
    - i. Emergency release uncrossmatched type specific/type compatible red blood cells or crossmatched compatible red blood cells are released based on current patient testing and require presentation of a request bearing the patient's registered name and medical record number.
  - c. The crossmatch will be performed as soon as possible for all ~~Red Blood Cells~~RBCs issued emergency release uncrossmatched.
3. The Blood Bank will initiate the crossmatch of four (4) units of type-specific or type compatible ~~Red Blood Cells~~RBCs immediately upon completion of the type and screen testing for the first MTP cooler and six (6) units of type-specific or type compatible RBCs for each subsequent cooler.
  4. ~~The attending physician will be notified by phone that four (4) units of crossmatched Red Blood Cells, four (4) units of Plasma, and one (1) plateletpheresis are ready for issue for the first cooler. The Blood Bank will continue to maintain six (6) units of crossmatched Red Blood Cells, six (6) units of Plasma and one (1) plateletpheresis ready for issue during entire Massive Transfusion Protocol until termination of the protocol.~~

5. The attending physician ~~or anesthesiologist~~ will be notified immediately by phone when ~~incompatibility or a positive antibody screen is detected~~ each MTP cooler has been prepared.
6. The attending physician or anesthesiologist will be notified immediately when incompatibility or a positive antibody screen is detected.

#### E. PLASMA AND PLATELETPHERESIS

1. Six (6) units of plasma will be recommended to be available for immediate use at all times.
2. Once the ABO and Rh type of the patient has been determined, type-compatible plasma will be provided.
3. One unit of plateletpheresis will be stocked and ready for issue. Additional plateletpheresis will be available with each subsequent MTP cooler.

#### F. CRYOPRECIPITATED ANTIHEMOPHILIC FACTOR (AHF)

~~Pooled~~ Two (2) units of pooled cryoprecipitate will be available within 30 minutes and added to every other cooler, starting with the second (2<sup>nd</sup>) cooler.

#### G. TRANEXAMIC ACID

The decision to use tranexamic acid (TXA) in conjunction with the massive transfusion protocol shall be made within three (3) hours of injury or start of massive bleed. Use the electronic health record (EHR) to place an order for the loading dose of 1 gram over 10 minutes and 1 gram over 8 hour infusion as a STAT designation. The loading dose is available in the Emergency Department (ED) Pyxis machine and Obstetrics (OB) Pyxis machine. The 8 hour infusion bag of TXA will be delivered by the pharmacy department within thirty minutes of order entry.

#### H. KCENTRA (4-FACTOR PROTHROMBIN COMPLEX CONCENTRATE)

Kcentra with or without vitamin K may be considered to control and/or prevent bleeding (in preparation of invasive procedures) of patients who are in warfarin-induced coagulopathy. See [CPG.56 Management of bleeding associated with anticoagulants and antiplatelet therapies](#) for full prescribing detail. For coagulopathy due to trauma (not warfarin associated), may consider 25 units/kg of Kcentra with the second set of blood product during massive transfusion.

#### I. TERMINATION OF MASSIVE TRANSFUSION PROTOCOL

The Blood Bank staff will notify the attending physician (or designee) as blood and blood products are made available. Products will be issued upon request, or held in the Blood Bank until needed. The Blood Bank staff will inquire at each notification if the Massive Transfusion Protocol (MTP) should continue. **It is the responsibility of the attending physician (or their designee) to notify the Blood Bank staff to discontinue the MTP by using the designated MTP hotline at (805) 652-6020.**

#### J. MONITORING

Initiation of the Massive Transfusion Protocol, designation of Massive Transfusion Protocol patients and use of emergency released uncrossmatched ~~PRBCs~~ RBCs and Whole Blood will be monitored and reviewed by the Blood Utilization Committee and the Trauma Operations Performance and Patient Safety (TOPPS) Committee.

#### K. RBC/PLASMA/PLATELET RATIO

The ratios of RBCs, plasma and platelets at each point in the protocol would be as follows (using "1" to represent our facilities platelet pack which contains at least  $3.0 \times 10^{11}$  platelets per single donor pheresis unit and which approximates 4-6 single donor platelet concentrates):

#### Non-Whole Blood

Non-Whole Blood [pRBCs/RBCs/Plasma/ Platelets]	Ratio	Total Cryo Calcium Chloride
Initial Resuscitation	2/2/ 0	2/2/0
Set 1	4/4/ 1	6/6/1 Calcium chloride 1 gm IV x1
Set 2	6/6/ 1	12/12/2 Cryo Calcium chloride 1 gm IV x1
Set 3	6/6/ 1	18/18/3 Calcium chloride 1 gm IV x1
<b>Clinical Pause</b>		<b>*See note below</b>
Set 4	6/6/ 1	24/24/4 Cryo Calcium chloride 1 gm IV x1
Set 5	6/6/ 1	30/30/5 Calcium chloride 1 gm IV x1

#### Whole Blood (Note: Each Whole Blood unit contains one (1) unit of Plasma)

Whole Blood [pRBCs/Plasma/ Platelets]	Ratio	Total Cryo Calcium Chloride
Initial Resuscitation	2/2/ 0	2/2/0
Set 1	4/4/ 1	6/6/1 Calcium chloride 1 gm IV x1
Set 2	6/6/ 1	12/12/2 Cryo Calcium chloride 1 gm IV x1
Set 3	6/6/ 1	18/18/3 Calcium chloride 1 gm IV x1
<b>Clinical Pause</b>		<b>*See note below</b>
Set 4	6/6/ 1	24/24/4 Cryo Calcium chloride 1 gm IV x1
Set 5	6/6/ 1	30/30/5 Calcium chloride 1 gm IV x1

After every second set of products issued, a PT/INR, Hemoglobin, Hematocrit, Platelet Count and Fibrinogen will be checked. Rotational Thromboelastometry (ROTEM) will be used to monitor administration of blood components during the MTP process.

\*A clinical pause should occur once a patient has received three rounds of MTP. This pause should prompt the following actions:

1. Ensure all necessary labs have been drawn and reviewed (e.g. arterial blood gas (ABG), type & screen, ROTEM, ionized calcium, fibrinogen).

2. Review of the situation amongst the team (trauma, intensive care unit, emergency department, or obstetrics and gynecology, etc.); consider patient's physiological status, i.e., whether the bleeding is surgical, if the patient is coagulopathic, patient's age, and comorbidities).

3. Determine if further MTP is beneficial. If MTP is stopped, communicate to the blood bank as soon as possible.

#### **L. Documentation**

##### **1. Emergency Department**

- a. All blood products from the MTP will be documented on the Trauma Resuscitation Flow Sheet. Include unit product number, time and milliliters transfused.
- b. Document all blood products given in electronic health record (EHR).
- c. All emergency release blood tags need a physician's signature.
- d. All MTP activations require a physician order in EHR.
- e. All emergency release blood tags to be placed in the patient's soft chart, and sent with patient when transferred to surgery or ICU.

##### **2. Surgery**

- a. All blood products from the MTP to be documented by the anesthesiologist on the anesthesia record. Include unit product number, time and milliliters infused.
- b. Circulating nurse shall document all blood products given in electronic health record (EHR).
- c. All emergency release blood tags need a physician's signature.
- d. All emergency release blood tags to be placed in the patient's soft chart, and sent with the patient to ICU/floor

##### **3. Intensive Care Unit**

- a. All blood products from the MTP shall be documented in EHR drop down menu. Choices are: **RBC's****RBCs**, Platelets, Plasma and Cryoprecipitate.
- b. Any MTP started in the ICU requires a physician's order.
- c. Once the MTP is complete, all emergency release tags shall be placed in the Stat Scan folder to be scanned into the EMR as follows: Monday - Friday 08:00 - 16:30. **MTP's****MTPs** occurring on the weekend shall be scanned on Monday morning.

##### **4. Obstetrics**

- a. All emergency release blood tags require a physician's signature.
- b. Any MTP started in Labor & Delivery or post partum requires a physician's signature.
- c. All blood products from the MTP shall be documented in EHR.
- d. Once the MTP is over, the emergency release blood tags shall be placed in the Stat Scan folder

Refer to Attachment B, *Massive Transfusion Protocol: Schedule of Products* for guidelines on the use of Cryoprecipitate and Kcentra.

## MASSIVE TRANSFUSION IN NON-TRAUMA PATIENTS

Massive blood loss can also occur during surgery or in nonsurgical settings such as GI hemorrhage and abdominal aortic aneurysm rupture. Transfusion support may be necessary to patients meeting the definition of a massive transfusion (4-6 units of red blood cells within an hour, or 10 units of red blood cells within 24 hours). However, the likelihood of coagulopathy requiring aggressive and automatic transfusion of plasma and platelets is much lower in the non-trauma setting for several reasons. Goal directed therapy is the endpoint as an alternate to damage control resuscitation.

The MTP - which is designed on the assumption that the patient has significant complex coagulopathy contributing to uncontrolled hemorrhage - is usually **not** necessary for these patients. Instead, frequent measurement of platelet count, PT/INR, fibrinogen and hemoglobin should be obtained, and transfusions given to maintain the various components of the coagulation system in the hemostatic ranges:

- Platelets above 50,000/ $\mu$ L.
- INR less than 1.6
- Fibrinogen greater than 100 mg/dL.

## PROCEDURE NOTE

1. Blood products shall stay in the cooler with lids closed until products are to be used.
2. Blood products must be double checked individually before hanging (not in bulk).
3. Blood products that remained in the cooler shall be returned to the blood bank within 4 hours.
4. Blood products from other facility or hospital that has not been spiked should not be given in our hospital. Unspiked blood product from another hospital should be sent to VCMC's blood bank.

## References:

1. Price TH, Ed. Standards Aor Blood Banks And Transfusion Services. 25th ed.
2. Bethesda, MD: AABB, 2008.
3. Roback, JD MD: Technical Manual. 16 th ed. Bethesda, MD: AABB, 2008.
4. AABB, Guidelines for Massive Transfusion. Bethesda, MD: AABB, 2005.

5. Tien, Can J Surg 2007; Spahn, Crit Care 2007
6. University of California Irvine Whole Blood Massive Transfusion Protocol, March 2021
7. [Hanna K, Bible L, Chehab M et al. Nationwide analysis of whole blood hemostatic resuscitation in civilian trauma. \*J Trauma Acute Care Surg.\* 2020; 89\(2\): 329-335.](#)
8. [Clements TW, Van Gen J, Menon N et al. Use of Low-Titer O-Positive Whole Blood in Female Trauma Patients: A Literature Review, Qualitative Multidisciplinary Analysis of Risk/Benefit, and Guidelines for Its Use as a Universal Product in Hemorrhagic Shock. \*J Am Coll Surg.\* 2023; 289\(3\): 347-357.](#)
9. [McCartney J. \(2023, April 10\). Whole Blood in Resuscitating Trauma Patients is Making a Comeback. \*ACS Bulletin.\* 108\(4\). <https://www.facs.org/for-medical-professionals/news-publications/news-and-articles/bulletin/2023/april-2023-volume-108-issue-4/whole-blood-in-resuscitating-trauma-patients-is-making-a-comeback/>](#)

## All Revision Dates

6/4/2024, 10/11/2022, 12/27/2021, 5/11/2021, 11/17/2017, 11/8/2016, 7/1/2016, 1/1/2014

## Attachments

[Attachment A - MTP Activation Algorithm](#)

[Attachment B - Massive Transfusion Protocol: Schedule of Products](#)

[Attachment C - Adult Trauma MTP ED Algorithm](#)

[Attachment D - Rotational Thromboelastometry \(ROTEM\) Algorithm.pdf](#)

## Approval Signatures

Step Description	Approver	Date
Trauma Services	Thomas Duncan: Trauma Director	Pending
Trauma Services	Gina Ferrer: Manager, Trauma Services	Pending



## VENTURA COUNTY HEALTH CARE AGENCY

**Origination:** 4/1/2009  
**Effective:** Upon Approval  
**Last Approved:** N/A  
**Last Revised:** 5/31/2024  
**Next Review:** 3 years after approval  
**Owner:** Gina Ferrer: Manager, Trauma Services  
**Policy Area:** Trauma Services  
**References:**

### T.03 Pediatric Trauma Guidelines

#### POLICY:

To establish a guideline for the care of the pediatric trauma patient at Ventura County Medical Center (VCMC).

#### PROCEDURE:

- A. Pediatric population age range is based on the American College of Surgeons definition of pediatric trauma ( $\leq 14$  years old). Or, the age range can be based on the discretion of the ~~admitting neurosurgeon or trauma surgeon~~. A patient <18 years old will be evaluated by the pediatric intensivist medicine (P-Med) service upon admission (if patient requires a full admission > 23 hours, or has significant co-morbidities requiring evaluation by the P-Med service even if patient is an observation only status < 23 hours).
- B. All patients are to have a thorough Primary Survey with immediate management of any life threatening issues
- C. After completion of the Primary Survey, a complete secondary survey can be performed
- D. Pediatric trauma patients who are admitted to the pediatric floor will be admitted to the TRAUMA SERVICE. The Trauma Service will consult the pediatric hospitalist as needed.
- E. Pediatric trauma patients who require admission to the PICU will be admitted to the Trauma Service and co-followed by the pediatric intensivist.
- F. If VCMC cannot meet the medical needs of a pediatric trauma patient, then the trauma team will contact another facility for transfer.
  1. The primary and secondary survey should be performed as usual, and life threatening issues should be dealt with immediately.
  2. If a pediatric trauma patient requires an emergent procedure in order to be stabilized, these will be performed prior to transfer.
  3. During the time awaiting transfer, the Trauma Team will contact the pediatric hospitalist or pediatric intensivist as needed.
  4. The Trauma Surgeon will be expected to evaluate and document the patient's stability prior to transfer or emergent surgery by another service.

All revision dates:

5/31/2024, 7/1/2013

## Attachments

No Attachments

## Approval Signatures

Step Description	Approver	Date
MEC Committee	Tracy Chapman: VCMC - Med Staff	pending
TOPPS Committee	Gina Ferrer: Manager, Trauma Services	6/6/2024
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	5/7/2024
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	5/7/2024
Pediatric Services	Andrei Bobrow: Medical Director, Pediatrics	3/26/2024
Trauma Services	Thomas Duncan: Trauma Director	3/2/2024
Trauma Services	Gina Ferrer: Manager, Trauma Services	2/29/2024





Origination 4/10/2017

Last Approved N/A

Effective Upon Approval

Last Revised 5/31/2024

Next Review 3 years after approval

Owner Gina Ferrer:  
Manager, Trauma Services

Policy Area Trauma Services

## T.13 Multiple Casualty Incident (MCI)

### POLICY:

To provide a system-wide hospital plan for receiving and caring for multiple trauma patients.

### PROCEDURE:

The Multiple Casualty Incident (MCI) plan may be implemented when the Emergency Department (ED) is to receive three (3) or more trauma patients, regardless of reported level of acuity, which cannot be safely cared for by the ED staff. See definitions for MCI and Code Triage below.

### Definitions:

- Multiple Casualty Incident is defined as 3 to 14 trauma victims, regardless of acuity.
- A Code Triage is 15 or more patients expected due to traumatic mechanism. The Emergency Department will immediately notify the Administrator on Duty (AOD) and the Nursing Supervisor. The AOD, Nursing Supervisor, or Emergency Department Charge Nurse will then notify Paging to announce a Code Triage-External on the overhead paging system.
  - Refer to Initiation of Code Triage in policy [106.034 Emergency Management Plan](#).
- Directly involved defined as: ED, Operating Room (OR), Post Anesthesia Care Unit (PACU), Intensive Care Unit (ICU), Pediatrics unit, Medical/Surgical units, Admitting, Paging Operator, Nursing Supervisors, Computed Tomography (CT), Blood Bank, Environmental Services, Respiratory Services, Radiology, Trauma Services, and the Residency Program.
- Indirectly involved includes all other patient care areas and ancillary services.

## Notification:

- Mobile Intensive Care Nurse (MICN)/Charge Nurse to initiate MCI in REDDINET.
- MCI Plan notification is 76666, and the number of patients (paging system).
- Code Triage notification 76666, and number of patients (paging system).

## Ventura County Emergency Medical Services (VCEMS):

- Notification of base station hospital by VCEMS will be through direct communication through base station phone.

## Procedure:

1. Trauma Team activation will be initiated to triage and stabilize arriving patients.
2. ED to activate as early as possible for multiple victims.
3. Nursing documentation is to be done on the *Trauma Resuscitation Flow Sheet*.
4. Trauma surgical attending will be notified and will respond to the ED (Tier 1 response). It will be the decision of the Attending Trauma surgeon to call the back up on-call trauma surgeon, trauma medical director, and/or additional surgeons.
5. STAT registration will be initiated for all the patients.
6. In the event that the MCI will overwhelm the ED, the ED Saturation plan will be implemented. The ED Charge Nurse or Clinical Nurse Manager, ED Physician, and or Attending Trauma Surgeon will make this decision. All ED patients with assigned beds will be sent to the assigned floor regardless of readiness of bed. It will be the ED's responsibility to obtain basic holding orders including diet, activity, pain and nausea medications. It will be the responsibility of the receiving nursing units to continue the care of these patients, which could include contacting designated attending physicians for orders.
7. All clinicians will be needed to care for the injured patients, with supervision by ED boarded/board eligible or non-ED boarded physician that graduated before 2016.
8. Any ED patients awaiting admission without assigned beds will be transported to wherever empty staffed beds are available, upon the direction of the nursing supervisor. The senior resident on the ED service will coordinate the care of patients waiting for admission with the Medical/Surgical Resident, who will assume the care and disposition of these patients.
9. Pediatric patients awaiting admission without assigned beds will be sent to Pediatrics. Any pediatric trauma patients who will need higher level of care will be transferred out to an appropriate accepting facility.
10. The nursing supervisor will report to the ED charge nurse and assist with the deployment of staff from critical care and placement of all ED admits.
11. The following nursing departments are required to send one registered nurse (RN) to the ED once the MCI has been activated.
12. ICU and PEDS RN's as determined by ED Charge Nurse and Nursing Supervisor.
13. Assignments to be determined by the ED charge nurse or trauma team.

14. Additional critical care nurse may be requested and every effort will be made to assist the ED when staffing permits.
15. ED Clinical Nurse Manager and Trauma Program Manager are to be called 24/7 and report to the ED if requested.
16. Trauma Medical Director to be called regardless of on call status.
17. Assignments will be made for the ED and overflow areas under the direction of the ED charge RN, rooms, equipment, supplies, and staff.
18. Trauma pagers and cell phones will be activated with MCI indicated and number of trauma victims.
19. Departments indirectly involved will go on stand-by until further notice
20. All members of the trauma team and ancillary services included in the trauma activations page are to report to the ED.
21. Triage and Designation of the trauma patients in the ED will be according to advanced trauma life support (ATLS) American College of Surgeons (ACS) guidelines and will be conducted by the ED physician until the attending trauma surgeon arrives or Trauma Medical Director or Deputy Trauma Medical Director arrives. Critical factors to be taken into consideration include the number of patients, acuity, location, and available resources.
22. Charge RN or designee will be responsible for entering the patients and pertinent information into the REDDI-NET SYSTEM (this will facilitate communications between hospitals and emergency medical services (EMS)).
23. Resuscitation of critical patients will be the shared responsibility of the Trauma Attending(s), ED Physicians, Senior Residents, the responding anesthesiologist(s) and the on-call Pediatrician. The final resuscitation and management decisions will be the responsibility of the trauma surgical attending or his/her designee.
24. The Paging Department is to make every effort to triage calls requesting the ED during this time and only forward the calls when they are unable to assist the caller.
25. Operating Room (OR) preop and post anesthesia care unit (PACU) will be used if available and additional space is needed to hold or monitor ED patients during this time. This also could include trauma patients awaiting OR and intensive care unit (ICU) until ICU beds are available. The OR Charge Nurse and Nursing Supervisor will coordinate staffing of these areas.
26. All families and patients waiting in the ED will be informed of the multiple victim activation so that they can anticipate delays. The waiting room may need to be evacuated to accommodate patients.
27. Performance Review will follow as soon as possible for all multiple victim activations.
28. Critical incident stress debriefing will be considered and offered to staff following all multiple victim activations as soon as possible.
29. For 5 or more tier 1 victims potentially requiring surgical intervention, 2 OR teams will respond and 2 OR rooms will be made available until released by the attending trauma surgeon.
30. In the case of treatment of multiply injured patients, all lower extremity long bone fractures should be stabilized as soon as possible in multiply injured patients. Every attempt should be made to stabilize lower extremity long bone fractures once a patient has been determined by

the trauma team and neurosurgery team to be stable enough to undergo surgery. The sequence of treatment should be femur first then tibia. Upper extremity long bone fractures should be treated once the patient has been optimized and adequately resuscitated.

31. Any other secondary procedures will be coordinated in collaboration with the Trauma Medical Director and the Orthopedic Trauma Surgery liaison.
32. Family Medicine and Surgery residents will respond according to their current call schedule. Additional back up residents can be activated at the request of Chief Residents and/or Residency Program Directors.

## **Specific Duties:**

**All ancillary services presently activated for Tier 1 trauma activations will be activated for MCI's. They are to respond to the ED as per present trauma policy.**

### **Attending Trauma Surgeon:**

- Triage/establish priorities of care/overall responsibility for MCI.
- Call in second trauma surgeon and or additional surgical staff.
- Request additional OR teams be called in.
- Release OR teams on standby.

### **Residents:**

- Resuscitation of patients.
- Continuity of care between assigned areas.
- Assist in the OR as assigned by attending trauma surgeon.

### **ED Physician:**

- Request activation of MCI.
- Assist in overall coordination of MCI as requested by attending trauma surgeon.
- Triage and provide destinations for victims until attending trauma surgeon arrives.
- Request additional ED physicians to respond.
- Assist with resuscitation of patients.

### **ED Charge Nurse:**

- Take and communicate radio report.
- Remain on radio or delegate ongoing radio communication.
- Ensure trauma activation page.
- Clear the ED.
- Coordination of ED staff and responding personnel in ED and overflow areas with Nursing Supervisor.
- Assignment of nursing, tech, support personnel to rooms.

- Reddi-net update.
- Notification of ED Clinical Nurse Manager.

#### **Trauma Program Manager:**

- Assist trauma team.
- May assist trauma medical director in overall organization of MCI.
- Responsible for the performance improvement (PI) review of all MCI's.
- Responsible for any debriefing requested.
- Responsible for integration and communication with arriving families.

#### **ED Registered Nurses:**

- Accept assignment from ED charge nurse.
- Assist with immediate clearing of ED.
- Preparation of all rooms to receive trauma patients.
- Accept role of hands on nurse, scribe role to be delegated to arriving critical care nurses.
- Critical care nurse to assume care of patients going to computer tomography (CT).

#### **ED Certified Nursing Assistants:**

- Accept assignments from ED charge nurse.
- Assist with immediate clearing of ED.

#### **Nursing Supervisor:**

- Responds immediately to the ED.
- Calls in OR teams as requested.
- Secures a place for ED admits to be sent if no beds assigned.
- Ensures all directly involved departments respond to the MCI with adequate staff.
- Ensures all involved departments are aware and prepared for response, Lab, respiratory, transport, etc., until the Hospital Incident Command (HICS) is activated. Once HICS is activated, all resource requisitions including staff will be directed to the Logistics section.
- Assists with assignments of beds.
- Notifies Administrator on Duty and Activates Hospital Incident Command System as needed, after collaborating with the on call Emergency Department Physician and/or surgeon on call
- Calls in additional Supervisors or Administrative staff as needed.
- Assists Social Worker with management of arriving families.
- Provides on-going communication with the units affected regarding actual victims, number of potential admissions, MCI status.
- Provides information to the media if directed by AOD.

#### **Intensive Care Unit:**

- Receive communication initiating the MCI via the paging system and/or ED charge nurse call

initiating the MCI.

- Intensive Care Unit will send one person to the ED to report to the charge nurse for further instruction.
- Intensive Care Unit charge nurse will prepare for potential admissions and transfers by making a list of patients who can be transferred either between units or to the Medical/Surgical areas.
- Intensive Care Unit charge nurse will receive communication from the Nursing Supervisor regarding the number of potential admissions and placement of MCI victims.
- Intensive Care Unit charge nurse will contact the appropriate physicians and services to transfer patients if necessary when directed to do so by the Nursing Supervisor.
- Intensive Care Unit charge nurse will call in additional staff if possible to care for MCI victims in the Critical Care area.
- If additional staff is requested in the ED, the charge nurse and nursing supervisor will review patient's safety needs and send additional staff as appropriate to maintain patient care in these areas.
- Intensive Care Unit Staff will assess unit supplies and order additional supplies as needed.
- Disaster carts are available from Central Supply.

#### **Pediatric Unit:**

- Receive specific communication from the shift Supervisor regarding number of potential patients and expected duration of MCI.
- Prepare to receive trauma patients from the ED.
- Prepare to discharge and/or transfer patients as able to home, facilities or to other units.
- Assess supplies and equipment needs and order, as indicated.
- Assess staffing needs and initiate calls for additional staff, as needed.

#### **Medical Surgical Unit:**

- Receive specific communication from the shift Supervisor regarding the number of potential victims and expected duration of the MCI.
- Prepare to receive patients from the Emergency Department.
- Prepare to receive existing patients from critical care areas to open beds in these areas.
- Assess supplies and equipment needs and order as indicated.
- Assess staffing needs and initiate calls for additional staff as needed.
- Prepare to send staff to ED to assist with patient care as needed.

#### **OR/PACU**

- Report number of available OR's to nursing supervisor until HICS positions activated.
- Assist with triaging of surgery patients under the direction of the surgeon on call.
- May be asked to halt elective cases as needed.
- Request additional staff as needed.

**ED Radiology Techs:**

- Call in additional techs.
- Call in attending radiologist to assist with reads.
- Prepare to triage outpatient studies under the direction of the radiologist.

**Paging Department:**

- Initiating emergency notifications per the MICN, nursing supervisor or AOD request.
- Notification of Administrator on Duty.
- Re-directing of incoming calls away from the ED during MCI as needed

**ED Registration Staff:**

- Registration of incoming patients, utilizing Stat registration if needed.
- Call in additional staff if needed.

**Social Services:**

- Notifying family that the patient is in the ED regardless of whether another agency has done so or says they will do so.
- If unable to find family, contacting the appropriate agency for help such as law enforcement, homeless outreach, mental health outreach, etc.
- Greeting the family members in the ED waiting room and, if the physician thinks it's appropriate, escorting them to the bedside to be with the patient.
- Monitoring family coping mechanisms and provide support, if needed.
- Facilitating communication between family members and ED medical and nursing staff.
- Provide information about community resources and referrals to the family.

**In the event of life-threatening injury or fatality:**

- Escort the family from the ED waiting room to the Quiet Room.
- Participation in the meeting between the ED physician and family.
- Remain in the Quiet Room with the family after the meeting to answer any questions that arise after the meeting with the physician.
- Provide information about community resources and referrals, including a list of mortuaries, to the family.
- Remain in the Quiet Room with the family to provide emotional support unless they request privacy.
- Document all interventions and assessment of the family's ability to cope in the electronic health record.

**Blood Bank:**

- Be prepared to activate Massive Transfusion Protocol as needed.
- Communicate the need for additional blood products to local blood bank.

**Environmental Services:**

- Be prepared to assist in expediting room turn over.
- Request additional staff as needed.

**Respiratory Care Services:**

- Be prepared to request additional supplies, particularly ventilators.
- Request additional staff as needed.

**Security:**

- Security Department will be responsible for securing the perimeter of the Emergency Department and assisting with crowd control.
- Will coordinate efforts with local enforcement agencies.

**All Revision Dates**

5/31/2024, 3/14/2024, 1/12/2024, 10/11/2023, 6/9/2020, 7/26/2017

**Approval Signatures**

Step Description	Approver	Date
Medical Executive Committee	Tracy Chapman: VCMC - Med Staff	Pending
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	6/1/2024
Trauma Operations, Performance & Patient Safety (TOPPS) Committee	Gina Ferrer: Manager, Trauma Services	5/31/2024
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	5/31/2024
Trauma Services	Thomas Duncan: Trauma Director	5/31/2024
Trauma Services	Gina Ferrer: Manager, Trauma Services	5/31/2024





**Origination:** 3/17/2024  
**Effective:** 3 Days After Approval  
**Last Approved:** N/A  
**Last Revised:** 5/31/2024  
**Next Review:** 3 years after approval  
**Owner:** Gina Ferrer: Manager, Trauma Services  
**Policy Area:** Administrative - Patient Care  
**References:**

## T.19 Trauma Mental Health Screen and Assessment Process

### PURPOSE:

To define a process to identify patients at high risk for mental health problems or psychological sequelae w/ subsequent referral to a mental health provider in an inpatient trauma population.

### Policy:

Trauma patients at high risk will be screened for mental health problems or psychological sequelae prior to discharge.

### BACKGROUND:

Per the American College of Surgeons Verification, Review, and Consultation program Resources for Optimal Care of the Injured Patient (2022 Standards): "All trauma centers must meet the mental health needs of trauma patients by having: A protocol to screen patients at high risk for psychological sequelae with subsequent referral to a mental health provider when required."

### PROCEDURE:

- Trauma patients 12years and over will be screened by the unit social worker for risk for mental health problems using the CSSRS (Columbia Suicide Severity Rating Scale) and ITSS (Injured Trauma Survivor Screen) in the electronic health record, whichever tool is appropriate to use. Positive screens will initiate a consultation to the Behavioral Health.  
See Attachment A: ITSS Screening Tool  
See Attachment B: CSSRS Screening Tool.
  - A positive CSSRS will be followed by SAFE-T **assessment** ([Suicide Assessment Five Step Evaluation](#)) by a licensed independent practitioner.
  - A positive ITSS screen will be followed by appropriate behavioral health referral.
- Social Services will discuss screening findings with the treating physicians to order appropriate level of behavioral health intervention based on results of screening or clinical determination of need.
- When indicated, the trauma team will put an order for Psychiatrist Consult in the EHR (Electronic Health Record).
- Psychiatrist or Psychologist will conduct a consult and evaluation with the patient. If the patient's condition does not allow for participation in screening or the consultation (Traumatic Brain Injury (TBI), dementia,

etc.) this will be documented in the medical record. The patient's condition will be monitored for improvement and will be contacted when the patient's condition is improved.

- The Behavioral Health consultation and evaluation will determine subsequent intervention which will be documented in the medical record. If the treatment plan requires follow-up after discharge, the plan will be documented.
- Screening results and completion of consult will be recorded in the trauma registry.

#### References:

1. Resources for Optimal Care of the Injured Patient-American College of Surgeons./files/quality-programs/trauma/tqp/ 022\_vrc\_injured-patient standards manual final.
2. Hunt J.C., Sapp, M., Walker C., Warren A.M., Brasel. K., & deRoos - Cassini T.A. (2017) Utility of the Injured Trauma Survivor Screen to Predict PTSD and Depression During Hospital Admission. Journal of Trauma and Acute Care Surgery, 82 (1), 93 - 101

All revision dates:

5/31/2024, 3/14/2024

## Attachments

[Attachment A-CSSRS \(Columbia Suicide Severity Rating Scale.docx](#)

[Attachment B-ITSS \(Injured Trauma Survivor Screen\).docx](#)

## Approval Signatures

Step Description	Approver	Date
Medical Executive Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	6/1/2024
Trauma Operations, Performance & Patient Safety (TOPPS) Committee	Gina Ferrer: Manager, Trauma Services	5/31/2024
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	5/20/2024
Trauma Services	Thomas Duncan: Trauma Director	5/20/2024
Trauma Services	Gina Ferrer: Manager, Trauma Services	4/7/2024



**Origination:** 12/1/2002  
**Effective:** Upon Approval  
**Last Approved:** N/A  
**Last Revised:** 4/17/2024  
**Next Review:** 3 years after approval  
**Owner:** Erin Olivera: Clinical Nurse Manager, IPU/CSU  
**Policy Area:** Inpatient Psychiatric Unit (IPU)  
**References:**

## Z.59 Patient Use of IPU Courtyards

### POLICY:

It is the policy of the Inpatient Psychiatric Unit (IPU) at Ventura County Medical Center to have the outdoor courtyards utilized by patients in a manner that promotes patient safety and security. This policy outlines the parameters of courtyard use by patients and staff responsibilities for the safety and security of patients as well as the prevention of patient ~~absent without leave (AWOL)~~ elopement.

### PROCEDURE:

Team A Courtyard requires a minimum of two (2) supervisory nursing staff.

- Courtyard A is the primary area for outside breaks and outdoor recreational activities.
- ~~Glass doors~~ Doors have both electronic and hard key locks that remain locked at all times when the courtyard is not in use.

Team B Courtyard requires a minimum of four (4) supervisory nursing staff.

- Courtyard B is to be used for specialized patient activities.
- ~~Glass doors~~ Doors have both electronic and hard key locks that remain locked at all times when the courtyard is not in use.

Team C Courtyard is restricted from all patient care use.

- Due to the low height of the exterior walls, Courtyard C poses a potential risk for patient ~~AWOL~~ Elopement and is thus not to be used for any patient activities.

The Courtyard outside of the seclusion area can be utilized one patient at a time with two (2) staff members present.

All revision dates:

4/17/2024, 6/9/2020, 7/26/2017, 5/1/2014, 3/1/2009,  
9/1/2007, 10/1/2006, 7/1/2004

### Attachments

[IPU Floor Map2.pdf](#)

## Approval Signatures

Step Description	Approver	Date
Psychiatry Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	4/17/2024
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	4/17/2024
Inpatient Psychiatric Unit & Crisis Stabilization Unit	Erin Olivera: Clinical Nurse Manager, IPU/CSU	4/17/2024

Delineation Of Privileges  
Plastic Surgery & Reconstructive Surgery

Name:

Privilege	Requested	Granted	Deferred	Suspended
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Basic Criteria:

- a. Successful completion of an ACGME or AOA-accredited residency/fellowship in Plastic Surgery
- b. Current board certification by the American Board of Plastic Surgery or the American Osteopathic Board of Plastic Surgery **OR**;
- c. Active participation in the examination process leading to certification within 5 years
- d. Documentation of a minimum of 100 cases representative of requested privileges within the previous 24 months

Evaluation Requirements: First 5 cases evaluated

Renewal Criteria:

Documentation of a minimum of 100 cases representative of requested privileges within the previous 24 months

PLASTIC SURGERY CORE PRIVILEGES:

Please indicate in the drop-down box below any portion of the core privileges not being requested

Admit, evaluate, diagnose, consult, perform history and physician examination, and perform surgical procedures for patients presenting with both congenital and acquired defects or repair due to trauma of the body's soft tissue.

Including but not limited to:

- Amputations
- Burn management acute/reconstructive
- Congenital defects of the head and neck, including clefts of the lip and palate
- Cosmetic surgery including liposuction/contouring, face, brow, and neck lifts, rhinoplasty, septoplasty, otoplasty, abdominoplasty, chemical peels
- Microsurgery including microvascular flaps/grafts, replantation/revascularization of upper/lower extremities/digits, reconstruction of peripheral nerve injuries
- Nerve blocks with local anesthetics
- Reconstruction by tissue transfer, including flaps/grafts
- Reconstruction of congenital and acquired defects of extremities, trunk, and genitalia
- Steroid injections
- Surgery of benign and malignant lesions of the skin and soft tissue
- Surgery of the breast including biopsies, reduction/augmentation, mastectomy, and reconstruction
- Treatment/surgery of facial disease and injury including maxillofacial structures
- Treatment of skin neoplasia
- Wound management
- [Management of soft tissue infections](#)
- [Gender affirming surgery to the face and trunk \(excludes genitalia – refer to the Transgender/Gender Affirming Surgery privilege list\)](#)

PLASTIC SURGERY PRIVILEGES REQUIRING ADDITIONAL CRITERIA, DOCUMENTATION OR COMPETENCIES:

COMPLEX CRANIOFACIAL SURGERY

- a. Documentation of training with special emphasis in this area or fellowship training in craniofacial surgery
- b. Documentation of a minimum of 10 cases in the previous 24 months

Evaluation Requirements: First 2 cases evaluated

Renewal Criteria: A minimum of 5 in the previous 24 months

Cranial vault remodeling and related procedures

Orthognathic surgery

**Delineation Of Privileges**  
Plastic Surgery & Reconstructive Surgery

Name:

Privilege	Requested	Granted	Deferred	Suspended
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**HAND SURGERY**

- a. Completion of plastic surgery training with documentation of special emphasis in this area or certificate of added qualification in Hand Surgery
- b. Documentation of a minimum of 20 cases in the previous 24 months

**Evaluation Requirements:** First 5 cases evaluated

**Renewal Criteria:** A minimum of 10 cases in the previous 24 months

**HAND SURGERY CORE PRIVILEGES:**

*Please indicate in the drop-down box below any portion of the core privileges not being requested*

Admit, evaluate, diagnose, consult, perform history and physician examination, and perform surgical procedures for patients presenting with both congenital and acquired defects or repair due to trauma of the hand and forearm

**Including but not limited to:**

- Repair, reconstruction and graft of tendon
- Peripheral nerve repair and graft
- Surgery for ganglia, paronychia, infections, cysts or tumors
- Amputation or revision of amputations
- [Carpal tunnel decompression](#) [Nerve decompression surgery](#)
- Skin, nerve and bone grafts pertaining to the hand and upper extremity
- Repair of laceration
- [Repair of rheumatoid arthritis deformity](#) [Surgical management of arthritic deformities of the hand and wrist](#)
- Repair of open and closed fractures to the hand [and wrist](#)

**FLUOROSCOPY**

Certificate Required

**LASER SURGERY**

Initial Criteria

- a. Documentation of training is required
- b. Documentation of a minimum of 5 cases in the previous 24 months
- c. Physician agrees to limit practice to only the specific laser types for which he/she has provided documentation of training/experience

Evaluation Requirements:

First 2 cases

Renewal Criteria:

A minimum of 5 cases in the previous 24 months

**Adult Moderate or Deep Sedation and Analgesia**

Initial Criteria:

- a. Current ACLS
- b. Completion of Sedation Module (minimum score of 80%)

Evaluation Criteria:

A minimum of 3 cases evaluated

Renewal Criteria:

- a. Current ACLS
- b. Completion of Sedation Module (minimum score of 80%)
- c. A minimum of 6 cases within the previous 24 months
  - If the volume is not met, the next case evaluated

Delineation Of Privileges  
Plastic Surgery & Reconstructive Surgery

Name:

Privilege	Requested	Granted	Deferred	Suspended
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Pediatric Moderate or Deep Sedation and Analgesia

Initial Criteria:

- a. Current PALS
- b. Completion of Sedation Module (minimum score of 80%)

Evaluation Criteria:

A minimum of 3 cases evaluated

Renewal Criteria:

- a. Current PALS
- b. Completion of Sedation Module (minimum score of 80%)
- c. A minimum of 6 cases within the previous 24 months
  - If the volume is not met, the next case evaluated

ACKNOWLEDGMENT OF PRACTITIONER:

I have requested only those privileges for which, by education, training, current experience and demonstrated performance, I am qualified to perform, and that I wish to exercise at the Ventura County Medical Center, Santa Paula Campus Hospital and/or within the VCMC Ambulatory Care System. I understand that exercising any clinical privileges granted, I am constrained by the hospital and medical staff policies and rules applicable generally and any applicable to the particular situation. I am willing to provide documentation of my current competence for the requested privileges.

Applicant’s electronic signature on file  
TEMPORARY PRIVILEGE APPROVAL

Department Chief’s Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Evaluator Assignment: \_\_\_\_\_

[ ] PROVISIONAL [ ] RENEWAL APPROVAL

Department Chief’s Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## **Ventura County Health Care System Oversight Committee**

### **Compliance Policies**

June 13, 2024

The following administrative policies were reviewed and recommended for approval by appropriate departments and committees.

1. 109-004 Disclosure by Whistleblowers and Workforce Member Crime Victims
2. 109-012 Processing Requests for an Accounting of Disclosures of Protected Health Information
3. 109-013 Requests to Amend Protected Health Information
4. 109-014 Request Restrictions on Use and Disclosure of Protected Health Information
  - a. VCHCA Request for Special Restrictions on use or Disclosure of Protected Health Information Exhibit A.
  - b. VCHCA Response to Request for Restrictions on use or Disclosure of Protected Health Information Exhibit B.
  - c. VCHCA Termination of Special Restrictions Requests. Exhibit C.
5. 109-017 Safeguarding Protected Health Information
6. 109-019 Use and Disclosure of Protected Health Information for Health Oversight
7. 109-020 Use and Disclosure of Protected Health Information for Cadaveric Organ- Eye or tissue Donation Purposes
8. 109-021 Use and Disclosure of Protected Health Information for Provider Facility Patient Directories
9. 109-022 Use of Protected Health Information for Fundraising
10. 109-027 Use and Disclosure of Protected Health Information - Treatment- Payment or Healthcare Operations
11. 109-045 Privacy Incident Internal Investigation Policy
12. 109-050 Requests to Receive Confidential Communications of Protected Health Information by Alternative Methods
13. 109-051 Patient Refund Policy
14. 109-052 Screening of Ineligible Persons
15. 109-053 Overpayments
16. 109-054 Compliance Helpline Reporting
17. 109-056 HCA Compliance Training
18. 109-057 HCA Corporate Integrity Agreement Certification
19. 109-058 HCA Compliance Audit & Monitoring Policy
20. 109-059 Federal and State False Claims Act Policy
21. 109-060 Patient Inducements
22. 109-062 Non-Compliance Report Internal Investigation Policy
23. 109-064 Compliance Committee Charter
24. HEALTH CARE AGENCY CODE OF CONDUCT
25. PHI Disclosure Tracking Log
26. 109.010 Authorization for Use and Disclosure of Protected Health Information
27. HIM.10 Patient Right to Access, Inspect and Copy Protected Health Information (Patient Access to Medical Records)





# VENTURA COUNTY HEALTH CARE SYSTEM

## Compliance Committee Policies and Procedures

June 2024

### Policies & Procedures / Forms / Orders

The following were reviewed and recommended for approval by the appropriate Departments and Committees.

#	Title	Summary	Frequency	Page
1.	109-004 Disclosure by Whistleblowers and Workforce Member Crime Victims	Purpose added. Minor formatting edits.	Annual	1-2
2.	109-012 Processing Requests for an Accounting of Disclosures of Protected Health Information	Minor formatting edits, no substantive changes.	Annual	3-6
3.	109-013 Requests to Amend Protected Health Information	Purpose added. Content synthesized without substantive changes.	Annual	7-10
4.	109-014 Request Restrictions on Use and Disclosure of Protected Health Information	Minor edits and format changes to the policy and Exhibits A, B, C, without substantive changes.	Annual	11-13
4.a.	VCHCA Request for Special Restrictions on use or Disclosure of Protected Health Information <b>Exhibit A.</b>	with policy 109.014		76-77
4.b.	VCHCA Response to Request for Restrictions on use or Disclosure of Protected Health Information <b>Exhibit B.</b>	with policy 109.014		78-79
4.c.	VCHCA Termination of Special Restrictions Requests. <b>Exhibit C.</b>	with policy 109.014		80
5.	109-017 Safeguarding Protected Health Information	Purpose added.	Annual	14-15
6.	109-019 Use and Disclosure of Protected Health Information for Health Oversight	Purpose added. Minor formatting edits.	Annual	16-17
7.	109-020 Use and Disclosure of Protected Health Information for Cadaveric Organ- Eye or tissue Donation Purposes	Purpose added. Minor formatting edits.	Annual	18-19
8.	109-021 Use and Disclosure of Protected Health Information for Provider Facility Patient Directories	Purpose added. Minor formatting edits.	Annual	20-22
9.	109-022 Use of Protected Health Information for Fundraising	Purpose and definitions added. Minor formatting edits.	Annual	23-24

10.	109-027 Use and Disclosure of Protected Health Information - Treatment- Payment or Healthcare Operations	Purpose added. Minor formatting edits	Annual	25-28
11.	109-045 Privacy Incident Internal Investigation Policy	Purpose added. Minor formatting edits	Annual	29-32
12.	109-050 Requests to Receive Confidential Communications of Protected Health Information by Alternative Methods	Purpose added. Content changes included simplifying the procedure narrative and adding "HIM Manager or designee" to allow for others to perform the procedure. Regulatory reference added.	Annual	33-34
13.	109-051 Patient Refund Policy	Procedure validated by the dept. with no substantive changes. Minor formatting edits.	Annual	35-36
14.	109-052 Screening of Ineligible Persons	Policy changed to align with new system and procedure currently in place.	Annual	37-40
15.	109-053 Overpayments	Minor formatting edits. No substantive changes.	Annual	41-43
16.	109-054 Compliance Helpline Reporting	Title change from "disclosure policy", and reference to "hotline" changed to "helpline" included updating the phone number.	Annual	44-46
17.	109-056 HCA Compliance Training	Minor edits to formatting, no substantive changes.	Annual	47-50
18.	109-057 HCA Corporate Integrity Agreement Certification	Changes made only to the timeframe that Certifiers must complete certification by. Change from "within 10 days" to "within a reasonable time" after the end of each annual reporting period. This change aligns the CIA.	Annual	51-53
19.	109-058 HCA Compliance Audit & Monitoring Policy	Changes include revising the purpose, no other substantive changes.	Annual	54-56
20.	109-059 Federal and State False Claims Act Policy	Purpose added. Review and verify the "know/knowingly" definition. Change the "claim" definition to lay terminology and adding examples. Minor formatting edits.	Annual	57-60
21.	109-060 Patient Inducements	Changed title from "Provision of Inducements to Patients" to "Patient Inducements." The rule referenced was changed from HIPAA to the Anti-Kickback Statute. Updated the reference from 2 USC to 42 USC.	Annual	61-62

22.	109-062 Non-Compliance Report Internal Investigation Policy	Purpose added. Minor formatting edits.	Annual	63-66
23.	109-064 Compliance Committee Charter	Added to PolicyStat for publishing purposes.	Annual	67-69
24.	Health Care Agency Code of Conduct	Single header changed. Added to PolicyStat for publishing purposes.	Annual	70-75
25.	PHI Disclosure Tracking Log (recommend retiring)	Content is covered in another policy 109.054 – recommend retiring.	Annual	NA
26.	109.010 Authorization for Use and Disclosure of Protected Health Information	Added section #6 Abortion Related Records to comply with changes to regulations. Other minor formatting edits.	Annual	81-86
27.	HIM.10 Patient Right to Access, Inspect and Copy Protected Health Information (Patient Access to Medical Records)	Co-owned by OCP and HIM. Changes to comply with minor formatting edits.	Annual	87-92