


Infection Control Manual		
	Policy Name	Women's Hospital Maternal Units (3WH, L&D, 5WH, NBN & NCCC): Recommendations from Infection Prevention
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	Responsible for Content	Hospital Epidemiology

I. Description

Describes practices followed in the Women's Hospital Maternal Units, including labor and delivery, antepartum, postpartum, newborn nursery and newborn critical care center to reduce the risk of infection for patients and personnel.

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II. Rationale

Practices and procedures related to the Women's Hospital Maternal Units are associated with a risk of infection for both of the mother and the infant, as well as personnel. Strict adherence to the infection control guidelines in this policy can minimize this risk.

III. Policy

A. Infection Control Practices in the Women's Hospital Maternal Units

1. Personnel

- a. Personnel should adhere to guidelines established by the Hospitals' Occupational Health Service (OHS). Refer to the policy: "Infection Control and Screening Program: Occupational Health Service."
- b. Healthcare personnel (HCP) should adhere to all personnel guidelines in the Infection Control Policy: "Infection Control Guidelines for Adult and Pediatric Inpatient Care."
- c. Hand hygiene will be performed in accordance with the Infection Control Policy: "Hand Hygiene and Use of Antiseptics for Skin Preparation."
 - i. Artificial nails and applications are prohibited for all HCP who have direct contact with patients.

- ii. Nails should be clean and kept less than ¼ inch long, Nail polish, if used, must be intact. Grossly chipped/lifting nail polish is a potential infection risk.
 - iii. Anyone handling a newborn will perform hand hygiene with an approved antimicrobial agent or alcohol based hand rub prior to and after contact.
 - iv. Nitrile gloves must be worn by HCP until after the baby's first bath.
- d. Personnel should be familiar with the principles of asepsis outlined in the Infection Control Policy: "Cleaning, Disinfection, and Sterilization of Patient Care Items."
- e. The Isolation Precautions Policy, the Exposure Control Plan for Bloodborne Pathogens and the Tuberculosis Control Plan will be followed.
- f. Infection control education, including OSHA-required education for Bloodborne pathogens and TB, is completed annually via LMS.
- 2. Biological Waste Disposal
 - a. Regulated medical waste must be disposed of within the guideline outlined in the Infection Control Policy: Disposal of Regulated Medical Waste
- 3. Environmental Services (refer to the Environmental Services Infection Control Policy)
 - a. For the "Whirlpool Cleaning Procedure," see Appendix 2.
 - b. Daily Cleaning
 - i. NBN, daily cleaning should coincide with periods when most infants are out of the nursery.
 - ii. NCCC-daily cleaning should be performed by EVS.
- 4. Patient (Maternal and Neonates)
 - a. Isolation/Communicable Diseases
 - i. Isolation Precautions: For patients with "rule out, or suspected TB," refer to the Infection Control Policy: "Tuberculosis Control Plan."
 - ii. Infants of maternal patients with communicable diseases (e.g. influenza: fever, sore throat, cough; suspected or confirmed TB) may require isolation and/or separate housing away from the infectious mother.
 - iii. All maternal patients flagged in the medical record with a history of a multi-drug resistant organism (MDRO) should be placed on contact precautions until the HCP consults with Hospital Epidemiology (phone 984-974-7500).
 - iv. See Appendix 4: Herpes Simplex for care of infants and mothers with proven or suspected herpes for a description of isolating mothers or infants with proven or suspected herpes simplex.
 - v. The UNC Center for Maternal and Infant Health website contains OB algorithms including but not limited to: Amniotic Fluid Testing for Infection, Cytomegalovirus, Group B Streptococcus, HIV Positive Status, Influenza, Parvovirus B19, Syphilis, Toxoplasmosis, and Tuberculosis.
 - vi. HCP will contact Hospital Epidemiology for assistance with specific cases as necessary.
 - b. Patient Care Practices

- i. Multi-dose medication vials should be managed by following UNC Health Care's Administrative Policy, "Use of Multi-Dose Vials of Parenteral Medications in Acute Care and Ambulatory Care Environments."
- ii. In and out catheterization and/or insertion of urinary drainage catheters will be performed aseptically following Nursing Policy NURS 0143: Urinary Drainage Devices.
- iii. Urine for culture will be obtained following Lab 0003: UNCH Inpatient/Clinic Urine Collection Policy.
- iv. Vaginal Examinations: Hands must be cleaned thoroughly and a clean glove worn for each exam. Individual packets of sterile lubricant will be used.
- v. For care of intravascular devices (e.g., peripheral and central IVs, arterial catheters, Hickman/Broviac catheters), refer to the Infection Control Policy: The Prevention of Intravascular Catheter-Related Infections_or_Nursing Policy: CVAD Care & Maintenance.
- vi. Umbilical Catheters
 - 1) Umbilical arterial and venous catheters are placed using sterile technique with gowns, masks, and sterile gloves. Hair and beards must be covered.
 - 2) Dressings are not routinely applied.
 - 3) Umbilical stumps with an arterial or venous line in place are inspected q12h.
 - 4) Notify the physician if signs and symptoms of local infection at the site are noted.

5. Equipment

- a. General Guidelines (refer to policy, "Infection Control Guidelines for Adult and Pediatric Inpatient Care." for cleaning recommendations)
 - i. Disposable equipment or equipment labeled for single use only should not be reused. Refer to the Infection Control Policy: Reuse of Single Use Devices.
 - ii. All patient equipment/items which come in contact with mucous membranes/non-intact skin must be cleaned and high-level disinfected between patients. Refer to the Infection Control Policy: Cleaning, Disinfection and Sterilization of Patient Care Items. Please direct questions regarding cleaning and disinfection of equipment to Hospital Epidemiology (984-974-7500).
 - iii. Reusable equipment going to CPD for sterilization should be cleaned or decontaminated so that all visible organic soil (blood, proteinaceous matter, debris, etc.) is removed prior to being placed in the CPD container. This prepares the item for safe handling and for subsequent disinfection or sterilization. Wear gloves and use extreme caution to prevent sharps injury. If splash or splatter is likely, wear appropriate protective equipment (gown, eyewear/mask, or face shield).
 - iv. Respiratory Equipment must be cared for in accordance with the guidelines in the Infection Control Policy: Respiratory Care Department IC0057.
 - v. Non-disposable equipment should be returned to the place of origin for reprocessing e.g. patient equipment/soiled utility room.

- vi. All cables used for patient monitoring (e.g., cardiac cables, EKG cables, pulse oximeter) should be cleaned with an EPA-registered hospital disinfectant (e.g., Sani-Wipe, MetriGuard, Bleach) between each patient use.
- vii. Shared equipment (e.g., intravenous poles, hair removal clippers, dynamaps, oximeters) should be cleaned with an EPA-registered hospital disinfectant between patients, when visibly soiled, and after use for patients on Contact Precautions.
- viii. Stretchers should be routinely cleaned between patients using an EPA-registered hospital disinfectant.

b. Specific Equipment to the Women's Maternal Units

- i. Isolettes, Bassinets, and Warmers
 - 1) Isolettes, bassinets and warmers are cleaned with an EPA-registered hospital disinfectant when visibly soiled while in use.
 - 2) Terminal disinfection is the responsibility of Patient Equipment personnel
- ii. Circumcision Equipment
 - 1) The restraint board should be cleaned between patients with an EPA-registered hospital disinfectant. Disposable straps (e.g., Posey) should be used on circumcision board.
 - 2) Reusable circumcision instruments (e.g. Gomco): Soiled reusable instruments and equipment should be washed with detergent or an enzymatic detergent to remove obvious debris before returning to Central Processing Department (CPD) for decontamination and sterilization. Forceps or tongs should be used to remove sharps to prevent injury. The equipment and instruments are placed in a covered container with BIOHAZARD label.
- iii. Clothing/Linens
 - 1) An Infant's personal clothing/linens must be separately washed from other infant's clothing.
 - A washer and dryer are available for the family members and patients to use. Clothes of patients will be washed with commercially prepared detergents and dried separately. No special wash cycle is required for patients colonized or infected with antibiotic-resistant microbes (e.g., VRE, ORSA), or *C. difficile*, as the normal wash cycle has been found effective in eliminating such organisms from the clothes and washing machine.
 - Unit owned clothing/linens may be washed together at one time at an approved health care laundry facility.
- iv. Scales
 - 1) Scales used for infant weights are cleaned with an EPA-registered hospital disinfectant between each patient and when visibly soiled. Paper liners are changed with each patient contact.
 - 2) Diaper scales are cleaned with an EPA-registered hospital disinfectant daily and when visibly soiled.

v. Pediatric Security Tag (e.g., HUGS)

- 1) The security tag will be disinfected between patients performing all of the following steps.
 - Pre-Clean with soap and water when visibly soiled.
 - Wipe off with an EPA-registered hospital disinfectant.
 - The strap is single use and should be replaced between patients.

vi. Ultrasound probes

- 1) Abdominal ultrasound probes that only contact intact skin will be cleaned between patients using an EPA registered disinfectant approved by the equipment manufacturer.
- 2) Vaginal ultrasound probes should be cleaned and disinfected in the following manner:
 - Upon completion of a vaginal ultrasound, the ultrasound probe must be high-level disinfected (HLD) following the Infection Control Policy IC 0008 Cleaning, Disinfection, and Sterilization of Patient Care Items.
 - When HLD is achieved with the Trophon device, manufacturer's instructions for use must be followed.
 - High level disinfected vaginal ultrasound probes must be stored in a clean area with peel pack covering to denote processed and ready for next patient.
- 3) HLD activities require demonstrated competency upon hire and annually. Competency form may be found in the Cleaning, Disinfection, and Sterilization of Patient Care Items Policy, appendix 4.

6. Infant Care

a. Cobedding

- i. Cobedding is defined as infants of multiple birth gestation sharing one bed in an attempt to improve the patients' clinical outcome.
- ii. In the event that cobedding is approved by the patient care management team, the infants should be of the same multiple birth gestation, free of infection and communicable disease, and not on Contact Precautions.
- iii. Hand Hygiene must be performed between contacts with each baby.

b. Circumcision Care

- i. Refer to "Normal Newborn Infant Care" Nursing Policy.

c. Skin Care and Skin Disinfection

- i. Intact skin is the body's first protection from organism invasion and infection. Refer to the Nursing Policy: "Skin Integrity". For neonatal skin care recommendations, refer to AWHONN guidelines found in the reference list.

7. Milk – Human Milk Management

a. General Information

- i. Human milk should be managed as a body fluid, using standard precautions for handling.
- ii. Care should be taken that human milk is never mislabeled, contaminated, wasted or misappropriated (given to the wrong patient).
 - 1) In the event a patient is inadvertently given human milk from a source other than his/her mother, refer to Appendix 1: Worksheet for Human Milk Exposure found in the Administrative Policy: Patient to Patient Exposure to Bloodborne Pathogens and Human Breast Milk. Appendix 2 of Nursing Policy 0067-Breastfeeding and Human Milk provides further information for LIPs and Parents (handouts) when there is an unintended donor/ recipient situation.
- iii. Breastfeeding – Refer to the “Breast Feeding and Human Milk Storage and Handling” Nursing Policy.
- iv. For more information, contact Lactation Services at 984-974-8078 or by referring to the Nursing Procedure: Breast milk Storage and Handling. Lactation services can also be reached via Vocera.

b. Electric Breast Pump

- i. Cleaning Parts and Instruction for User
 - 1) Electric breast pumps can be obtained by calling Lactation Services (984-974-5435) or 5 Women's (984-974-1377) to access and electric breast pump for any patient room in the hospital. The pump and stand available from Lactation Services will be cleaned with an EPA registered hospital disinfectant between patients or when visibly soiled.
 - 2) In areas that stock and care for unit breast pumps (e.g., Women's and Children's Units and ED), the pump must be cleaned on a routine basis (e.g. daily) and when visibly soiled or after removal from a Contact Precautions room using an EPA-approved disinfectant (e.g. Sani-cloth). Pumps will be stored in a clean location.
 - 3) Each hospitalized mother or mother of a hospitalized infant who needs to pump her milk will be given her own pump kit.
 - 4) If either the mother or the infant has a potential communicable disease, is immuno-compromised, or is on Contact Precautions, the mother should have a dedicated pump.

ii. Individual Pump Kits

The nurse or lactation consultant will instruct the mother in the following cleaning procedure:

- 1) Pump parts will be cleaned in a dedicated basin (not a sink).
- 2) Pump parts should be removed from the tubing and disassembled after each use. They should be rinsed in cold water to remove the milk residue, washed thoroughly in hot soapy water and rinsed well to

remove any soap residue. Tubing should not be washed as only air travels through it. Any tubing with milk backed up into it should be replaced and the pump inspected for overflow. Condensation of water vapors in the tubing can be removed by turning the pump on high with tubing only connected to the pump. Air movement through the tubing will dry and remove the condensation.

- 3) All parts should then be placed upside down to drain on a clean paper towel, covered with another towel and allowed to air dry, or dried with clean paper towels and placed in the mother's personal bag.
- 4) The nurse, using standard precautions, should assist the mother who is too sick to clean her pump parts.
- 5) If a pump kit has been contaminated or does not appear clean, the mother will be provided with a fresh kit.

8. Visitation

- a. Refer to "Administrative Policy 0181: Visiting Hours and Regulations" for general guidelines regarding visitation.
- b. Adults and children with communicable diseases will not be allowed to visit infants.
- c. Visitors will be monitored by the nursery nursing staff and will be excluded if evidence of a communicable disease is present (including infectious dermatitis, upper respiratory tract infections and gastrointestinal tract infections, chicken pox or shingles).
- d. Under special circumstances, significant family members with oral herpes infections may visit if they have properly covered lesions. These persons must be instructed on measures to prevent viral transmission. (Refer to appendix 4 Herpes Simplex)

B. Infection Control Practices in Labor and Delivery

1. Labor and Delivery Areas and Traffic Control

- a. Access to the Labor and Delivery Suite is limited to personnel responsible for patient care or providing service to the delivery suite and to patient visitors as designated below.
- b. The restricted access area of the Labor and Delivery OR Suite is designated by strips of black and yellow tape. All persons entering this area must wear appropriate surgical attire.
- c. The number of persons attending a delivery or other procedure will be monitored by the charge nurse in consultation with the physician. Attempts will be made to keep this number to a minimum.
- d. Visitation: Unit policy limits Labor, Delivery and Recovery Room visitor number to 3.
 - i. Families of patients may visit at the discretion of the nursing/medical staff in accordance with the Administrative Policy: "Hospital Visitation," restricting those with signs or symptoms of communicable illness. This policy will be monitored and implemented by the nursing staff.
 - ii. Visitors will perform hand hygiene before approaching the bedside.
 - iii. Scheduled tours are provided for couples and siblings when patient activity allows. They are not allowed to enter the OR delivery rooms. Children cannot enter the restricted areas.

2. Personnel in Labor and Delivery

a. Hand Hygiene and Personal Protective Equipment in Labor and Delivery

- i. For the manual extraction of retained placenta or placental fragments wear elbow length gloves followed by sterile gloves.
- ii. Refer to Appendix 5 of the Infection Control Policy: Infection Control Guidelines for Perioperative Services for description of surgical hand antisepsis.
- iii. Persons involved in the delivery (other than obstetricians and assistants who perform a timed surgical hand antisepsis) will thoroughly perform hand hygiene with an approved antimicrobial agent prior to entering the LDR or OR delivery room. (Refer to Appendix 5 of the Infection Control Guidelines for Perioperative Services)

b. Dress Code in Labor and Delivery Rooms

- i. All personnel (including students) assigned for duty will wear hospital-laundered scrub attire available via the scrub-dispensing machine.
- ii. When a delivery occurs in a LDR room, medical and nursing personnel will wear hospital-laundered scrub attire.
- iii. Labor support persons or significant others are not required to wear scrubs or a cover gown over their clothing.

c. Dress Code in OR Delivery Rooms

- i. Refer to Appendix 1: Infection Control Attire in Restricted Zones from the Perioperative Services Infection Control policy will be followed for procedural rooms.
- ii. All personnel must wear cap and scrub attire in the OR delivery room. Hair on the head and face must be fully covered to prevent shedding of hair and squamous cells. Large sideburns and ponytails must be covered or contained. Disposable bouffant and hood style covers will be provided. Bald and shaved heads must be covered to prevent shedding of squamous cells. Personally-owned cloth caps are permitted. Personal head coverings must not be worn for more than one day without laundering. Personal head coverings soiled with blood or OPIM must be discarded and must not be taken home for laundering. Shoe covers will be worn if exposure to blood and other potentially infectious materials is reasonably anticipated. A mask that fully covers the mouth and nose is applied before entering an OR delivery room if an operation is about to begin or is already underway or if sterile instruments are exposed.
- iii. The neonatal resuscitation team personnel wear a green gown or jump suit, head covering, and masks when attending a delivery. (With the exception of emergencies)
- iv. All personnel involved in either the setting up or the cleaning of a delivery suite must wear scrub attire and a cap when in the OR delivery suite. Masks are worn as stated above.
- v. All personnel entering the restricted area of the OR delivery room to check or maintain equipment will wear a jumpsuit or scrub attire and cap.
- vi. Leaving and returning to the OR Delivery Room

- 1) When leaving the department above for public areas, personnel will change scrubs of soiled.
 - 2) Upon leaving the suite, the cap (if disposable), mask, and shoe covers must be discarded and new ones reapplied upon reentrance into the suite area.
 - 3) Upon re-entering the OR, the dress code will be followed as described.
3. Patient Care Practices in Labor and Delivery
- a. Cesarean Section
 - i. Patient deliveries that are performed via a cesarean section in the OR Delivery Room should be performed following all the infection control steps for surgical procedures found in the Infection Control Policy: Infection Control Guidelines for Perioperative Services.
 - ii. All staff involved in surgical deliveries must be familiar with and follow the Infection Control Policy: Infection Control Guidelines for Perioperative Services.
 - a. Skin
 - i. Any superficial skin infection/lesion should be washed with an antimicrobial agent and dressed with a sterile dressing.
 - ii. The LIP should be consulted regarding any skin lesions.
 - b. Placentas
 - i. Disposal of Placentas
 - 1) The decision to discard the placenta after delivery or send it for pathologic evaluation should be made immediately after delivery.
 - 2) The physician should check the appropriate box on the postpartum physician order form.
 - 3) Those placentas that will not be sent for pathologic evaluation will be discarded on the Labor and Delivery Unit. Each placenta is placed in a plastic container with a tight fitting lid, which is disposed of in the red bag trash. Refer to Infection Control Policy: Guidelines for Disposal of Regulated Medical Waste.
 - ii. Lotus Birth
 - 1) A lotus birth is the practice of leaving the umbilical cord uncut after childbirth so that the baby is left attached to the placenta until the cord naturally separates at the umbilicus.
 - 2) The placenta must be placed in a bowl and handled with standard precautions.
 - iii. Patient's Request for Placenta
 - 1) Refer to Administrative Policy: Custody of Internal Body Tissue, Organs or Body Parts.
 - c. Use of Tub Bath During Labor

- i. The guidelines for the use of the bath/whirlpool tub during labor, listed in Appendix 1, should be followed.
 - ii. Between patient uses, the tub should be thoroughly cleaned. The guidelines for cleaning the bath/whirlpool tub, listed in Appendix 2 should be followed.
- d. Internal Pressure Catheters (for monitoring contractions or for amnioinfusion) or Internal Fetal Electrodes (for fetal heart rate monitoring):
 - i. Carefully insert the catheter and leads by means of aseptic technique (wear sterile gloves).
 - ii. Purchase disposable products whenever possible.
 - iii. Do not remove components of monitoring system from sterile packages and set up until the system is actually needed.
 - iv. Between patients: clean the external cables with an EPA-registered hospital disinfectant and clean or launder the straps per manufacturer's recommendations used to hold the fetal monitors on.
 - v. Maintain a closed system.
 - vi. Use extreme caution to avoid contamination during procedures such as calibration.
 - vii. Use sterile solutions for system.
 - viii. Use sterile equipment for all fluid pathways in the pressure-monitoring system.
 - ix. Use continuous-flush system instead of intermittent flushing with a syringe.
 - x. A direct intrauterine pressure device that functions without the fluid-filled catheter apparatus is preferred.
 - xi. Avoid scalp electrodes, if possible, if maternal infection with hepatitis B, HIV, or herpes simplex virus is known or suspected.
- 2. Infant Care in Labor and Delivery
 - a. Mouth-to-mouth techniques for suctioning meconium must not occur. Wall suction is the accepted method.
 - b. All infants should receive prophylaxis for neonatal gonococcal infections.

C. Infection Control Practices in the NCCC and NBN

- 1. Personnel in NCCC
 - a. Hand Hygiene in NCCC
 - i. HCP and all visitors must wash their hands and forearms with an antimicrobial soap (e.g. CHG) for 30 seconds upon entry to NCCC.
 - ii. All HCP must perform NCCC Unit Entry Scrub (wash hands for 30 seconds up to the elbows) at the beginning of the shift and upon returning to the unit after a break or meal.
 - iii. Mothers with hand IV catheters should cleanse their hands with alcohol based hand sanitizer carefully in order to keep the IV dressing dry.
 - b. Staff Drinks in the Pods

- i. A violation of the blood borne pathogens regulation can lead to significant fines for the Hospital regarding food and drink in patient care areas. The entire pod is considered a patient care area.
- ii. Staff drink bottles may be stored in a closed cabinet in the Pods.
- iii. The cabinet must be labeled for staff covered drinks only.
- iv. Hand hygiene must be performed before accessing the drink storage cabinet and drinks must be consumed near the designated clean storage cabinet (i.e. Do not take drinks back to patient bedside and consume them in an area that is likely to be contaminated.)
- v. Hand hygiene must be performed after returning the drink bottle to the cabinet and resuming patient care.
- vi. Drinks are not to be placed on bedside tables, stands, shelves, etc. within the Pods.
- vii. HCP behavior must be monitored to ensure compliance. Hospital Epidemiology or the Safety Department will periodically spot check the NCCC for compliance with this policy.

2. Mothers in NCCC

a. Drink Consumption

- i. Drinks may be provided to the mother only while she is using the breast pump.
- ii. The mother should be instructed to perform hand hygiene before beginning to use the pump.
- iii. After she has finished using the breast pump, mom should finish her drink and dispose of the drink container.
- iv. Unfinished drinks should not be placed by her infant's bedside for later consumption.
- v. Staff must take responsibility for communicating this policy to the parents and for ensuring compliance.

b. Mothers with Fever

- i. Mothers with post-partum fever (>38 degrees C) will not be permitted to visit inside the nursery or handle their infants until an infectious process has been identified and assessed as non-communicable.

3. Equipment in NCCC

a. Beds, Isolettes, and Warmers

- i. For beds owned by the NCCC (e.g., Fisher and Pykel radiant warmer beds, HARD cribs), terminal cleaning is performed by the NCCC staff using an EPA-registered hospital disinfectant.
- ii. In the event a used isolette, bassinet or warmer is urgently needed for a new patient and cannot be sent to patient equipment for terminal disinfection, the nursery staff may disinfect using an EPA-registered hospital disinfectant.
- iii. Phenolics must not be used for disinfection of isolettes. Hyperbilirubinemia has been associated with the use of phenolic detergents in enclosed spaces occupied by infants.

- iv. Isolettes should be changed when they are soiled and cannot be easily cleaned and on a routine basis.
 - v. The NCCC transport isolettes are cleaned between each patient use by the NCCC staff with an EPA-registered hospital disinfectant.
- b. Ophthalmology
- i. Eye speculums must be high level disinfected or sterilized before use; eye speculums cannot be cleaned with alcohol, sani-wipe or bleach in between uses.
 - ii. Eye speculums will be used and taken back to the eye clinic for sterilization by the ophthalmology department; it is the responsibility of the ophthalmology department to maintain the eye speculums.
 - iii. Multi-patient use eye drops must be discarded if the vial touches the eye.
4. Visitation

For additional information, see UNCH Administrative Policy: "Hospital Visitation."

a. NBN

- i. Only parents or banded individuals are permitted to visit in the newborn nursery.
- ii. Unit visitation guidelines are to be followed.
- iii. Healthy newborns can be visited in the mother's hospital room after the visitors clean their hands.
- iv. Siblings free of communicable diseases may visit the mother's room for limited time periods under the supervision of a parent or guardian.
- v. No visitors with a communicable disease are permitted in the mother's room when the infant is in the room.

b. NCCC

- i. Visitors are admitted to the NCCC whenever accompanied by one of the parents of the patient.
- ii. Parents and grandparents may be with their infant/grandchild anytime based on the condition of the patient.
- iii. Visitors are limited to two per infant at any one time.
 - 1) Exception: More than two may visit in NCCC if one of the visitors is a sibling of the patient.
 - 2) Exception: More than two may visit in NCCC if there is an impending death of an infant.
- iv. At the discretion of the unit management with the input of Hospital Epidemiology, the NCCC may limit the visitation by children younger than 12 years of age during the time of the year when respiratory viruses are in the community to prevent the spread of respiratory illness to the inpatient.
 - 1) If the NCCC is closed to child visitation, siblings are allowed to visit infants at the discretion of Hospital Epidemiology, under special circumstances, and after they have been screened for communicable diseases.

- v. If the infant requires isolation precautions, the nursing staff will instruct visitors on the proper isolation precautions procedure. (Refer to Infection Control Policy: "Isolation Precautions.") Visitors will be required to comply with precautions listed on the precaution sign.
- vi. Infants and their parents returning to the hospital occasionally return to the NCCC nurseries to visit NCCC personnel. Visitation should occur outside the NCCC.

5. Special Isolation Policies in NCCC and NBN

- a. Refer to the Infection Control Policy: "Isolation Precautions" for examples of common infectious diseases and type of precautions necessary.
- b. Refer to Appendix 5: Isolation Guidelines for Infants and Mothers with Infectious Diseases for examples of common infectious diseases and types of precautions necessary for the mother and placement options for the baby Airborne Precautions and Pulmonary Tuberculosis
 - i. Infants with known or suspected infection transmitted by the airborne route (e.g. tuberculosis, chickenpox) or infants born to mothers with known or suspected to have infection transmitted by the airborne route (which the baby may acquire) must be separated from other infants and placed on Airborne Precautions which includes use of a separate isolation room.
 - 1) A tissue test should be performed daily with the results recorded in the patient care record. If the room air flow is neutral or positive pressure rather than negative, Plant Engineering should be notified to correct the problem.
 - ii. A newborn whose mother has known or suspected active pulmonary tuberculosis may be removed from Airborne Isolation if the infant's chest x-ray is negative.
 - iii. Infants born to Mothers with Known or Suspected Active Pulmonary Tuberculosis
 - 1) The physician should evaluate and treat the infant according to guidelines provided in the "Red Book: Report of the Committee on Infectious Diseases, 2015."
 - 2) Must not be housed or visit with the mother, even to breast feed
 - 3) The mother may pump her milk and the infant may be fed the pumped breast milk by a caregiver other than mom as mycobacterium is not found in breast milk.
 - 4) If the mother has tuberculosis mastitis, she may pump to maintain supply but the milk should be discarded.

For more information on management of patients with known or suspected MTB, refer to Infection Control Policy: Tuberculosis Control Plan.

- c. Contact Precautions and MRSA & other MDROs
 - i. Infants born to mothers with known MRSA (Methicillin Resistant Staphylococcus aureus) colonization or infection should be placed on Contact Precautions.
 - ii. May be housed rooming in with the mother in Contact Precautions when admitted to Labor and Delivery or NBN/5WH.

- iii. If cared for in the nursery, pediatric floor or the NCCC, the infant will be placed on Contact Precautions in an isolation room.
- iv. In the event that one twin becomes colonized with MRSA there are several options which could be implemented situation dependent with the input of Hospital Epidemiology.
 - 1) Colonized twin in isolation, non-colonized twin not isolated and being screened weekly for potential acquisition.
 - Parents/visitors could be required to gown/glove with colonized twin to reduce risk of MRSA/ORSA acquisition to non-colonized twin.
 - 2) Colonized twin in isolation and non-colonized twin empirically isolated and non-colonized twin no longer screened for acquisition.
- v. Infants born to mothers with an MDRO other than MRSA (e.g. VRE, MDR pseudomonas).
 - 1) Contact hospital epidemiology (984-974-7625) for guidance regarding appropriate isolation for infant
- d. Mothers with Cystic Fibrosis
 - i. Will be managed with discussion between the medical director of Hospital Epidemiology and the baby's attending physician.
- e. Cohorting of Infants in NCCC due to Epidemic
 - i. In the event of a suspected epidemic, (e.g. viral respiratory diseases *Staphylococcal* outbreak) the isolation of infected infants from non-infected infants will be done by cohorting patients in the affected pod.
 - ii. Hospital Epidemiology should be notified as soon as possible.
 - iii. Known infected infants will be placed in the designated pod and no other infants will be admitted to the area until all the infected infants have been discharged.
 - iv. All non-exposed infants and new admissions will be admitted to any of the unaffected pods.
 - v. In the event of an outbreak, any or all of the CDC enhanced measures may be utilized to control the outbreak with guidance from the medical director of Hospital Epidemiology.

D. Implementation

It is the responsibility of the Women's Hospital Maternal Units nursing managers and Medical Directors to implement this policy.

IV. Reviewed/Approved by

Hospital Infection Control Committee

V. Original Policy Date and Revisions

Oct 2013, August 2016, Dec 2016_{rev}, Jan 2018_{rev}

Appendix 1: Labor and Delivery Unit Policy for the Use of Bath During Labor

Purpose: To describe guidelines for use of the bathtub in the labor and delivery unit.

Supportive Data: Use of a bath during labor is intended to facilitate relaxation and/or pain management in uncomplicated pregnancies.

Contraindications: The following criteria will exclude use of the tub:

1. High risk pregnancy factors

Guidelines for Use:

1. Adjust water temperature to comfort level.
2. Only the patient is allowed in tub.
3. Patient gown may be worn if woman desires clothing.
4. Cover IV site and tape with plastic to keep dry.
5. Have patient stand, or sit on side of tub for fetal monitoring with doptone or use telemetry EFM.
6. Patient may stay in tub throughout first stage of labor, even with ruptured membranes until the time of delivery.
7. Physician orders must be written for:
 - Intermittent fetal monitoring and/or telemetry EFM

Safety:

1. If patient has temperature elevation of >37.8 degrees, she should not be in the tub.
2. Return patient to bed before pushing or delivery.
3. **NEVER USE ELECTRICAL EQUIPMENT WITH PATIENT IN WATER.**

Cleaning: Cleaning will be done by Environmental services (see Appendix 2).

Documentation: Use of tub and patient response should be documented in EMR.

Appendix 2: Labor and Delivery Whirlpool Cleaning Procedure

Because the water and the tub surfaces become contaminated with the mother's skin flora and blood during labor and delivery, whirlpool/jacuzzis need to be drained after each patient and the surfaces thoroughly cleaned and disinfected. The whirlpool/jacuzzis should also be cleaned prior to use if it has not been cleaned within the last 24 hours.

Procedure:

Environmental services will perform tub cleaning upon patient discharge and nursing will perform tub clean before patient use in the following manner:

- a) Abrasive cleaners should not be used on the tub.
- b) Don impermeable gown, gloves and face shield.
- c) Strain any particulate matter and discard in toilet.
- d) Drain whirlpool tub.
- e) Using a clean wash cloth scrub the tub surface using a 1:10 bleach solution.
- f) Clean all inside tub surfaces including agitator, faucet, drain, and trim with a 1:10 bleach solution.
- g) Rinse all inside tub surfaces with clean water
- h) Dispose of wash cloth in a dirty linen bag.
- i) Flushing the whirlpool:
 1. Keep door to hallway closed to minimize fumes leaking into hallway.
 2. Don protective clothing.
 3. Adjust the jets fully clockwise (closed) so there is no air introduction into them.
 4. Fill the tub with hot water from faucet to a level of 2 inches above the highest jets.
 5. Add 4 ounces (120cc) of undiluted chlorine bleach and 4 ounces of powdered dishwasher detergent to the hot water.
 6. Expose all inside surfaces to the bleach/dishwasher solution for 10 minutes.
 7. Turn on the jets and run whirlpool for 10 minutes, drain.
 8. Refill the tub with water to a level of 2 inches above the highest jets and turn the whirlpool on for another 10 minutes, drain.
 9. Dry inside tub surfaces with clean towels and keep the tub dry until it is to be used again.
 10. Turn the jets counterclockwise (open).

Appendix 3: Flu Guidelines for Couplet Care in Maternity Care Center and Labor and Delivery

In the attempt to minimize exposure to infants, mother, family members and HCP below are some guidelines for couplet care after delivery.

If a mother has suspected or confirmed Influenza the following guidelines should be followed. Guidelines from CDC, WHO, Red Book and consultation from Dr. Carl Seashore (NBN Medical Director), Dr. David Weber (Medical Director, Hospital Epidemiology), Dr. Lohr (NBN attending physician), Dr. Stuebe (OB attending physician), and 5 Women's nursing management team are as follows:

- Medical professional must explain that couplet care may be done however there is a risk to the infant will contract influenza. Parents may opt to have the infant "room in" if they understand the risks. The risk to the infant will never be 0% even if the infant is housed away from the mother. The explanations of risks to the infant of an influenza positive mother must be documented by Licensed Independent Provider (LIP) in the medical record.
 - The infant can stay in the room with the family if they desire. If the mother is experiencing severe flu-like symptoms and there is not another a family member present, the infant may be placed in an isolation room in the newborn nursery on Droplet/Contact isolation.
 - The infant may go to the newborn nursery and must be placed in an isolation room. The couplet nurse will be responsible for care of the baby and return the infant to the mother's room for feedings.
 - Contact and Droplet Precautions must be initiated and ordered for the infant and mother. ALL visitors must perform hand hygiene upon entering the room and wear a mask, gown and gloves while in the patient room. They must perform hand hygiene upon exiting the room.
 - All symptomatic persons (including mother) must wear a mask if within 6 feet of the infant.
 - While breastfeeding or interacting with the infant, the mother must wash her hands before initiating and wear a mask.
 - Enhanced Precautions (e.g. mother wearing mask while breast feeding) may be discontinued if
 - Mother is afebrile for greater than 24 hours
- AND
- Mother has completed antiviral therapy for 24 hours
- AND
- Mother is asymptomatic from respiratory symptoms for greater than 24 hours
- Mother and infant must remain on Droplet/Contact precautions for 7 days from the onset of symptoms as outlined in the Isolation Precautions Policy
- Retesting the mother for influenza is not necessary. The flu test is PCR and may be positive even when there is non-viable virus present.

Appendix 4: Herpes Simplex

Infections due to herpes simplex virus (HSV) Type I and Type II can be encountered in both patients and hospital personnel. Viral transmission can occur through contact with primary or recurrent lesions or through excretions (e.g., saliva, vaginal secretions) that contain the virus even when no lesions are obvious. Hand hygiene and barrier techniques are essential to prevent spread of the virus among patients and personnel.

Obstetrical Patients

- The mother should be educated to the risks that herpes simplex virus infection may pose to the newborn and others, both while in the hospital and at home, stressing measures to prevent viral transmission.
- Patients with proven or clinically suspected genital herpes at delivery should be managed as follows:
 - The patient with a lesion(s) consistent with genital herpes simplex infection, with or without a positive viral culture, is placed in a private room using standard precautions during the labor, delivery, and postpartum period.
 - Personnel should practice strict hand hygiene when entering room
 - Dressings and pads should be handled carefully and with gloves and discarded in the regular trash. If the pad or dressing is heavily saturated, it should be placed in the red bag trash (regulated medical waste).
 - A mother may visit her baby in the NCCC if her lesions are inactive or if possibly active lesions are covered. The mother is permitted to handle and feed her infant after thorough hand hygiene with an approved antimicrobial agent. She must be provided with clean linens free from contamination with infectious material. The baby may then be brought from the nursery to the mother.
 - Fetal scalp monitors should be avoided when possible in infants of women suspected of having active genital herpes infection during labor.
 - The patient with a positive genital culture for herpes simplex, but with no apparent lesion, should be housed in a private room.
 - The mother who has a positive history for genital herpes infection and has no active herpes simplex lesions or a positive genital culture for herpes simplex at term requires standard isolation precautions for herself or the infant. She should be taught to practice strict hand hygiene after bathroom use and before handling her newborn, particularly during the first month of the infant's life.
- The obstetrical patient with active non-genital herpes infection (e.g., oral, ocular, disseminated, or cutaneous) should be managed and instructed as follows:
 - She should practice strict hand hygiene before handling her newborn, particularly during the first month of the infant's life.
 - Prior to handling the baby, she should ensure that the lesions are covered (e.g., mask or dry dressing). When lesions are dried and crusted, covering them is no longer necessary.
 - A mother with cold sores or stomatitis should not kiss or nuzzle her infant until the lesions have cleared.
 - The mother should avoid touching the lesions, the mask or the dressing when holding the baby.

- She should thoroughly wash hands after any contact with the lesions.
- Breast feeding is acceptable if no lesions are present on the breast and if active lesions elsewhere on the mother are covered.

Newborn

- Newborns with suspected or proven herpes simplex virus infection should be cared for as follows:
 - Infant should be kept in a private isolation room or may room-in inside the mother's private room.
 - Contact Precautions are followed.
 - **Neonates with documented perinatal exposure should be managed with Contact Precautions, as they may be in the incubation phase of infection. Infants are considered exposed when the mother has active genital disease and the child is delivered vaginally or by cesarean section and membranes were ruptured >4 hours.**
 - Newborns whose mothers have active non-genital herpes infection at term are not at risk during delivery and are not subject to isolation precautions at birth.

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Appendix 5: Isolation Guidelines for Infants and Mothers with Infectious Diseases

Infectious Disease	Isolation Precautions Category for Baby	Air Pressure of Room	Placement Options for Baby	Comments
Mother with suspected or proven genital herpes and vaginal delivery	Contact Precautions	NA	Isolation room in Newborn Nursery, NCCC, room-in with mother in a private room (OB service)	Refer to appendix 4 for further instructions.
Mother with suspected or proven herpes, C-section and unruptured membranes	Standard Precautions; Contact precautions NOT necessary	NA	General Nursery	
Mother with suspected or proven herpes, C-section, and ruptured membranes 4 hours prior to C-section	Contact Precautions	NA	Isolation room in Newborn Nursery, NCCC, room-in with mother in a private room (OB service)	Refer to appendix 4 for further instructions.
Mother with suspected or proven pulmonary tuberculosis	Infant requires no special isolation	NA	Infant requires no special isolation	Infants born to mothers with known or suspected pulmonary tuberculosis must not be housed with the mother until the mother is considered no longer infectious. The mother should refrain from breast feeding until considered no longer infectious. The physician should evaluate and treat the infant according to guidelines provided in the "Red Book: Report of the Committee on Infectious Diseases."
Hepatitis B surface antigen positive mother (HbsAG+)	Standard Precautions	NA	General Nursery	
Human immunodeficiency virus (HIV+)	Standard Precautions	NA	General Nursery	
High-risk mother (Hemophiliac, IV drug user, sexual partner of the following: IV drug user, bisexual, HIV+, HbsAG+ and Hemophiliac)	Standard Precautions	NA	General Nursery	
Group B Strep	Standard Precautions	NA	General Nursery	
Cytomegalovirus (CMV)	Standard Precautions	NA	General Nursery	
Respiratory syncytial virus (RSV) with Ribavirin treatment	Contact and Droplet Precautions	Negative pressure due to Ribavirin treatment (preferably)	Negative pressure Isolation room in NCCC	Surgical mask and gloves upon entering room. Wear gown if in direct contact with patient.

Infectious Disease	Isolation Precautions Category for Baby	Air Pressure of Room	Placement Options for Baby	Comments
RSV without Ribavirin treatment	Contact and Droplet Precautions	NA	Isolation room in NCCC or NBN	May be handled in General Nursery or NCCC isolation room on Droplet-Contact precautions. Personnel must use careful technique regarding handwashing and use of gloves to prevent spread. Surgical mask and gloves upon entering room. Wear gown if in direct contact with patient or patient's environment.
Influenza	Droplet/Contact	NA	Mother's room; General Nursery Isolation Room	Refer to Appendix 5: Flu Guidelines for Couplet Care in the Maternity Care Center.
Rotavirus	Enteric	NA	General Nursery Isolation Room	
Congenital syphilis	Contact Precautions	NA	General Nursery Isolation Room	Gloves and gown are to be worn when in contact with infant until infant has received the first bath <u>and</u> 24 hours of effective therapy.
Chlamydial conjunctivitis	Standard Precautions	NA	General Nursery	
Gonococcal conjunctivitis	Standard Precautions	NA	General Nursery	
Wound infections (e.g., scalp electrode site or umbilical stump)	Standard Precautions	NA	General Nursery	
Varicella (in mother during hospital stay)	Airborne Precautions	Negative pressure room	Isolation room in NCCC, room in with mother in a private room (OB service), or private room on pediatric service.	Initiate Contact Precautions in addition to Airborne Precautions if lesions develop.
Varicella exposure (in mother)	Airborne Precautions	Negative	Same as above	Same as above
Zoster in mother	None	N/A	Can be in NBN or room, but cannot come in contact with lesions.	Mother placed on Airborne and Contact Precautions, in a negative pressure room with lesions covered with an occlusive dressing. If mom has disseminated shingles, baby cannot visit mother until all lesions are dried and crusted.
Mothers with Gastroenteritis (C.diff, norovirus)	NBN: enteric isolation NCCC: case by case basis, generally none needed	N/A	Room in with mom, NBN must be placed in isolation room and on enteric isolation.	While mothers are symptomatic, they cannot visit the NCCC. Mothers must be asymptomatic for 48 hours before visiting the NCCC.

Appendix 6: MRSA in NCCC/NBN Parent

Physicians need to:

- clearly express to the parents the risks to the infant (exposure to MRSA from the family members may cause colonization, infection, and death)
- explain to the family that hand hygiene can help prevent colonization recurrence in the infant
- document this conversation in the infant's chart
- validate that the following precautions are understood and followed by the colonized visitors and the nursing staff
- maintain orders to keep the infant on Contact Precautions, as recolonization may occur after visitation

If the parent/MD assesses the benefits to outweigh the risks and they accept the risks, the following steps will be taken to protect the NCCC environment, other patients, visitors, and staff:

Nursing Staff need to:

- follow Contact Precautions while caring for the infant, as if they are known to be colonized
- follow and enforce optimal hand hygiene for anyone involved inside
- educate the family about MRSA/ORSA and Contact Precautions in NCCC
- enforce that the colonized visitors follow these recommendations:

Colonized family members need to:

- clean their hands before touching the phone to gain access to NCCC
- visitation occurs only in the isolation room
- family members are not allowed to visit other patients in NCCC
- colonized family members will be encouraged to protect others by staying in the baby's isolation room until they are ready to go home for the day
- the colonized visitor will perform hand hygiene before touching the infant and before leaving the isolation room

Newborn Nursery Case:

- Colonized mother will be on Contact Precautions
- Baby will room in with mother
- Mother will be taught to perform hand hygiene before touching infant
- If infant needs to enter the Newborn Nursery, infant will be placed on Contact Precautions