I. Description

Describes infection prevention practices followed in UNCH Outpatient Care Services sites to reduce the risk of infection

II. Rationale

A variety of diagnostic and therapeutic services are provided to outpatients that may have an associated risk of infection. This risk can be minimized by strict adherence to the infection control guidelines included in this policy.

III. Policy

A. Infection Control Practices for Outpatient Care Services Clinic

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 applicable personnel guidelines in the Infection Prevention policy: Infection Control Guidelines for Adult and Pediatric Inpatient Care.

   c. Hand hygiene will be performed in accordance with the Infection Prevention policy: Hand Hygiene and Use of Antiseptics for Skin Preparation.

      i. Artificial nails and applications are prohibited for clinical staff.

      ii. Nails should be kept short, neat and groomed and should not extend beyond the fingertips.

   d. Personnel should be familiar with the principles of asepsis outlined in the Infection Prevention policy: Cleaning, Disinfection, and Sterilization of Patient Care Items.

   e. The Exposure Control Plan for Bloodborne Pathogens and the Tuberculosis Control Plan will
be followed.

2. Infection control education, including OSHA-required education for Bloodborne pathogens and TB, is required annually via LMS.

3. Regulated Medical Waste Disposal
   a. Regulated medical waste must be disposed of within the guideline outlined in the Infection Prevention policy: Guideline for Disposal of Regulated Medical Waste.

B. Isolation Precautions

1. Detailed information regarding Standard Precautions, Contact Precautions, Droplet Precautions, and Airborne Precautions may be found in the Infection Prevention policy: Isolation Precautions. Due to the nature of patient care provided in the UNCH Outpatient Care Services locations, the following modifications should be followed in addition to the applicable general isolation policies.
   a. When patients with suspected or known communicable diseases are transported to other departments, the receiving department must be notified of the patient's impending arrival so that appropriate isolation/precaution guidelines can be followed.
   b. Hemodialysis and CF Clinic will follow their own infection control policies regarding management of patients. Please refer to the Infection Prevention policy: Patients with Cystic Fibrosis and the Infection Prevention policy: Dialysis Unit.
   c. Clinic staffs that perform duties for inpatients and outpatients must be familiar with inpatient isolation policies, door signs, and proper use of personal protective equipment (PPE).

2. Standard Precautions
   a. Use Standard Precautions for the care of all patients.
   b. Standard Precautions apply to: 1) blood; 2) all body fluids, secretions, and excretions except sweat, regardless of whether or not they contain visible blood; 3) non-intact skin; and 4) mucous membranes. Standard Precautions are designed to reduce the risk of transmission of microorganisms from both recognized and unrecognized sources of infection in hospitals.
   c. Principles of Standard Precautions:
      i. Safe Injection Practices
         a. The following recommendations apply to the use of needles, cannulas that replace needles, and where applicable intravenous delivery system.
         b. Whenever possible, use of single-dose vials is required. Please refer to the Patient Care policy: Medication Management: Use of Multi-Dose Vials/Pens of Parenteral Medications and Vaccines in Acute Care and Ambulatory Care Environments.
         c. Use aseptic technique to avoid contamination of sterile injection equipment.
         d. Do not administer medications from a syringe to multiple patients, even if the needle or cannula on the syringe is changed. Needles, cannulae and syringes are sterile, single-use items; they should not be reused for another patient or to access a medication or solution that might be used for a subsequent patient.
e. Use fluid infusion and administration sets (i.e., intravenous bags, tubing, connectors) for one patient only and dispose appropriately after use. Consider a syringe or needle/cannula contaminated once it has been used to enter or connect to a patient's intravenous infusion bag or administration set.

f. Use single-dose vials for parenteral medications whenever possible.

g. Do not administer medications from single-dose vials or ampules to multiple patients or combine or save leftover contents for later use.

h. If a multidose vial is approved for use and must be used, both the needle or cannula and syringe used to access the multidose vial must be a new sterile needle or cannula and syringe with each access.

i. Do not keep multidose vials in the immediate patient treatment area and store in accordance with the manufacturer's recommendations; discard if sterility is compromised or questionable.

j. Do not use bags or bottles of intravenous solution as a common source of supply for multiple patients.

ii. Infection control practices for special lumbar puncture procedures:

a. Wear a surgical mask when placing a catheter or injecting material into the spinal canal or subdural space (i.e., during myelograms, lumbar puncture and spinal or epidural anesthesia).

iii. Patient Placement

a. Place a patient who contaminates the environment or who does not (or cannot be expected to) assist in maintaining appropriate hygiene or environmental control in a private room or exam room

iv. Hand Hygiene

a. Refer to the Infection Prevention policy: Hand Hygiene and Use of Antiseptics for Skin Preparation for full details regarding hand hygiene in all patient care areas.

b. Perform hand hygiene after touching blood, body fluids, secretions, excretions, and contaminated items, whether or not gloves are worn.

c. Perform hand hygiene immediately after gloves are removed, between patient contacts, and when otherwise indicated to avoid transfer of microorganisms to other patients or environments.

d. It may be necessary to perform hand hygiene between tasks and procedures on the same patient to prevent cross-contamination of different body sites.

v. Personal Protective Equipment:

a. Gloves

   • Hand hygiene must be performed before donning clean or sterile gloves. Wear nitrile gloves when touching blood, body fluids, secretions, excretions, non-intact skin, rashes and contaminated items.
• Perform hand hygiene and put on clean gloves before touching mucous membranes and/or non-intact skin.

• Change gloves between tasks and procedures on the same patient after contact with material that may contain a high concentration of microorganisms.

• Remove gloves promptly after use and perform hand hygiene before touching items and environmental surfaces and before going to another patient to avoid transfer of microorganisms to other patients or environmental surfaces.

b. Mask, Eye Protection, Face Shield:

• Wear a mask and eye protection or a face shield to protect 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.

c. Gowns

• Wear a gown to protect skin and to prevent soiling of clothing during procedures and patient-care activities that are likely to generate splashes or sprays of blood, body fluids, secretions, or excretions.

• Select a gown that is appropriate for the activity and amount of fluid likely to be encountered. Fluid-resistant gowns are available for use (e.g., blue plastic gowns). A non-fluid resistant gown (i.e., isolation gown) may be worn in all other procedures not requiring a fluid-resistant or sterile gown.

• Carefully remove a soiled gown so clothes are not contaminated. Gowns should be removed promptly when no longer needed and should be properly disposed of. Disposable gowns may not be used more than once.

vi. Patient Care Equipment

a. Handle used patient-care equipment soiled with blood, body fluids, secretions, and excretions in a manner that prevents skin and mucous membrane exposures, contamination of clothing, and transfer of microorganisms to other patients and environments.

b. Ensure that reusable equipment is not used for the care of another patient until it has been cleaned and reprocessed appropriately.

c. Ensure that single use items are discarded properly and used for only one patient.

vii. Linen

a. Handle, transport, and process used linen soiled with blood, body fluids, secretions, excretions in a manner that prevents skin and mucous membrane exposures and contamination of clothing and that avoids transfer of microorganisms to other patients and environments.

b. Soiled laundry will be bagged in linen bags that prevent soak-through and/or leakage of fluids to the exterior. If the outside bag becomes wet or soiled it must be
double bagged into a second linen bag.

d. Respiratory Hygiene/Cough Etiquette

i. Provide surgical masks to all patients with symptoms of a respiratory illness. Provide instructions on the proper use and disposal of masks.

ii. For patients who cannot wear a surgical mask, provide tissues and instructions on when to use them (i.e., when coughing, sneezing, or controlling nasal secretions), how and where to dispose of them, and the importance of hand hygiene after handling this material.

iii. Provide hand hygiene materials in waiting room areas, and encourage patients with respiratory symptoms to perform hand hygiene.

iv. Designate an area in the waiting room where patients with respiratory symptoms can be segregated (ideally by at least 3 feet) from other patients who do not have respiratory symptoms.

v. Place patients with respiratory symptoms in a private room (preferred) or cubicle or exam room as soon as possible for further evaluation.

vi. Implement use of surgical or procedure masks by health care personnel during the evaluation of patients with respiratory symptoms.

vii. Consider the installation of Plexiglas barriers at the point of triage or registration to protect health care personnel from contact with respiratory droplets.

viii. If no barriers are present, instruct registration and triage staff to remain at least 3 feet from unmasked patients and to consider wearing surgical masks during respiratory infection/flu season.

ix. Continue to use Droplet Precautions to manage patients with respiratory symptoms until it is determined that the cause of symptoms is not an infectious agent that requires precautions beyond Standard Precautions.

3. Airborne Precautions

a. In addition to Standard Precautions, patients with known or suspected tuberculosis (TB), chicken pox, disseminated shingles, or measles are placed in Airborne Precaution isolation. If possible, patients requiring airborne precautions should have appointments rescheduled until they are no longer considered contagious or should be seen only in clinical sites with airborne isolation rooms.

b. Airborne Precautions in outpatient clinics are implemented as follows:

i. Placement of the patient in an exam room with the door closed or a separate waiting area apart from other patients (as soon as possible in a room meeting airborne isolation requirements).

ii. Give the patient a surgical mask and instruct them to keep their mask on.

iii. Give the patient tissues to use for covering coughs and sneezes.

iv. Health Care Personnel will wear N95 respirators when entering the exam room. If an
N95 is not available or the healthcare worker is not fit tested a surgical mask should be worn.

c. Please refer the Airborne Isolation Rooms List for the most recent listing of areas on-campus and off-campus locations that have airborne infection isolation rooms (negative pressure rooms).

d. Chicken pox, disseminated shingles, herpes zoster, measles

   i. Patients with known or suspected chicken pox, disseminated Herpes Zoster (≥3 dermatomes), or measles should be placed on Airborne Precautions in a negative pressure room.

   ii. If a negative pressure room is not available, the patient should be seen only in clinical sites with airborne isolation rooms. Alternatively, and only when necessary, patients with suspected airborne infections should be seen at the end of the day when no other patients are in the clinic.

   iii. If a patient with chicken pox can be seen outside the facility or can be rescheduled at a time when they are no longer infectious (i.e. all lesions dried and crusted), that would be preferable.

   iv. Caregivers should be immune to measles and chicken pox.

   v. Patients with Chickenpox or Measles should don a mask on entry into the facility and should not use the main entrance, if possible.

   vi. Place the patient in an exam room immediately. Keep the door closed.

   vii. After the patient leaves the clinic, keep the exam room door closed for 3½ hours if the room is NOT a negative pressure room. If a HEPA filter has been utilized during the patient’s care, the room needs only be closed for 30 minutes after the patient leaves.

   viii. Rooms with negative pressure should be kept closed for 30 minutes after the patient leaves.

   ix. After the appropriate "closed" time has elapsed, clean all surfaces with an EPA-registered disinfectant (e.g. MetriGuard, Sani-Wipes) before using the room for another patient.

e. Tuberculosis

   i. Please refer the Infection Prevention policy: Tuberculosis Control Plan for full details regarding TB control.

      a. Patients with signs and symptoms suggestive of tuberculosis should be evaluated promptly to minimize time spent in outpatient care waiting areas. Such patients should have Airborne Precautions applied while the diagnostic evaluation is being conducted. It will be the responsibility of the clinic director or an attending level physician to designate clinic personnel who will be responsible for determining whether.

      b. Airborne precautions should be implemented as described in this section.

      c. The patient should be referred immediately to the Pulmonary, Pediatric Specialty or
Infections Disease Clinic for evaluation for active tuberculosis.

d. Patient Check-In / Waiting Process:

- Front line personnel (front desk, information and front door staff) should identify patients with symptoms (see below) that may indicate potential tuberculosis, and immediately notify the charge nurse.

- Front line personnel should note if there are comments associated with the appointment regarding the patient having symptoms/conditions that indicate that the patient may have tuberculosis. These patients should be brought to the attention of nursing personnel for further assessment.

- Front line personnel should offer surgical masks and tissues to all patients with coughs and encourage the patient to cover his/her mouth and nose with a tissue when coughing or sneezing. Nursing staff should be notified of patients who are coughing excessively.

- Patients with known or suspected active pulmonary tuberculosis should be given a surgical mask to wear and placed in an exam room immediately.

- Patients who have respiratory symptoms and report any of the following high-risk situations should be brought immediately to the attention of the nursing staff for further evaluation.

  e. Medical conditions that may indicate tuberculosis include a cough for more than three weeks, especially if any of the following are present:

  - Profound fatigue
  - Unintentional weight loss
  - Night sweats
  - Fevers
  - Hemoptysis (bloody sputum)
  - Anorexia (loss of appetite)

  f. Historical facts which increase the risk of pulmonary tuberculosis:

  - Exposure to others with active tuberculosis
  - History of a positive skin test (TST)
  - History of therapy with anti-tuberculosis drugs
  - HIV infection
  - Immigrants from countries in Africa, Asia or South America
  - Migrant farm workers
  - Persons who are or have recently been incarcerated
  - Homeless individuals
g. Nursing Assessment:

- Nursing personnel (if not available, a physician) are responsible for evaluating patients who display symptoms or signs of active tuberculosis or are at high risk for active tuberculosis.

- Nursing Assessment: Nursing personnel (if not available, a physician) are responsible for evaluating patients who display symptoms or signs of active tuberculosis or are at high risk for active tuberculosis.

- Nursing personnel should immediately assess patients with symptoms suggestive of tuberculosis when notified by front line personnel. Patients should be removed from the waiting area and placed in an exam room with the door closed (preferably in a room meeting TB isolation requirements-Airborne Precautions room with negative pressure and out exhaustion).

- If the room does not meet OSHA TB standards, i.e., it is not a negative pressure room, then the patient should be provided with a surgical mask and shown how to wear the mask properly (i.e., it must cover nose and mouth). Staff will don an N95 respirator if available and staff has been fit tested. If staff is not fit-tested for an N95 respirator, then a tightly fitting surgical mask must be worn.

- Arrangements should be made to transfer the patient as soon as possible to a UNCH facility with airborne isolation rooms or the local health department for further evaluation. See referral section below.

- If the patient leaves the room for any reason (e.g., to obtain a chest radiograph) he/she must wear the surgical mask.

- Rooms used by suspect TB patients that are not airborne isolation rooms (i.e., negative pressure) and in which there was not a HEPA filter in place during the patient's visit, should be closed for a minimum of 3 ½ hours after the suspect patient leaves. Normal terminal cleaning can be performed in this room after the 3 ½ hour closed time.

- If a HEPA filter has been utilized for the duration of the patient's visit, the room needs only be closed for 30 minutes after the patient leaves.

- Nursing personnel should notify the physician as rapidly as feasible, that the patient may have active tuberculosis.

- Patients waiting for an inpatient bed should not wait in the admitting office but be placed in an appropriate Airborne Isolation room in clinic until a bed becomes available. Alternatively, patients should be sent to the ED to wait for admittance if the clinic is closed.

- Referral to Pulmonary Medicine, Infectious Disease Clinic, or Pediatric Specialty Clinic.

- All patients suspected or known to have tuberculosis should be referred to their local health department for free treatment. When active TB has
been ruled out or appropriately treated, then they can continue care at UNC outpatient clinics.

- Pulmonary Clinic, Pediatric Specialty of the Infection Disease Clinic: Patients at high risk for HIV infection are to be sent to the Infectious Disease Clinic. Patients seen in the Family Practice Center with either known or suspected TB should be referred to the ID Clinic or Pulmonary Disease Clinic for evaluation until proven noninfectious. Patients under the age of 19 years should be referred to the Pediatric Specialty Clinic.

- Infectious Disease Clinic: Page the Infectious Disease Fellow on call at 216-0626. Infectious Disease Clinic is located on the first floor of UNCMC Memorial Hospital.

- Pulmonary Medicine Clinic: Call Hospital Operator 984-974-1000, and ask for a pulmonary consult.

- Pediatric Specialty Clinic: Call 984-974-1401 for appointments or call the Hospital Operator at 984-974-1000 and ask for the on-call Pediatric Infectious Disease Consultant.

- Additional Considerations for Selected Areas: Ambulatory Surgery Center: Patients with known or suspected TB will not be operated on in the Ambulatory Surgery Center.

4. Contact Precautions

a. There are few data on the risk of multidrug-resistant organism (MDRO) transmission in the ambulatory setting. In most cases, adherence to Standard Precautions is sufficient to prevent cross-transmission. However, cross-transmission has occurred. Due to the concern for cross-transmission of MDROs, some UNCH outpatient care clinics choose to follow Contact Precautions for patients colonized/infected with MDROs.

b. In addition to standard precautions, the following guidelines are intended to assist the clinician when managing outpatients with MDROs who receive care in clinics that utilize Contact Precautions.

   i. Place the patient in an exam room or cubicle as soon as possible.

   ii. A disposable isolation gown and exam gloves should be worn by all staff that have direct contact with the patient. Gown and gloves should be removed and hand hygiene performed when leaving the exam room.

   iii. Exam room patient's care equipment (e.g., exam table, computers) should be disinfected using a SaniCloth or Metriguard before use for another patient.

   iv. Some diagnostic and treatment areas (e.g., GI Procedures, Interventional Radiology) see both inpatients and outpatients. In these areas, staff should follow Contact Precautions for inpatients when indicated. For all other patients (inpatients that do not require Contact Precautions and outpatients), Standard Precautions are followed.

   v. The pediatric infusion room will utilize contact precautions for those patients who require Contact Precautions due to an MDRO. When the patient needs to leave the area (e.g.
to utilize the bathroom), they will wear clean clothing or a clean hospital gown and perform hand hygiene. There are criteria that must be met in order for contact precaution patients to be allowed to leave their contact isolation area in the Isolation Policy in the section on Contact Precautions.

5. Droplet Precautions
   a. In addition to Standard Precautions, patients with known or suspected communicable diseases spread through the droplet route are placed on Droplet Precautions isolation.
   b. These diseases include but are not limited to:
      i. Influenza (flu)
      ii. Epiglottitis due to *Haemophilus influenzae*
      iii. Meningitis due to *Neisseria meningitides* or *Haemophilus influenzae*
      iv. Mumps
      v. Pertussis (whooping cough)
      vi. And many others
   c. If possible, these patients should have appointments rescheduled until they are no longer considered contagious.
   d. If this is not medically feasible, the patient should ideally be scheduled as the last case of the day.
   e. The patient should not be allowed to linger in the waiting area with other patients/staff. A surgical mask should be placed on the patient upon arrival at the clinic. Every effort should be made to place the patient in an exam room as soon as they arrive at the clinic.
   f. Healthcare personnel should wear a surgical mask when entering the patient's exam room or when working within 3 to 6 feet of the patient.
   g. To transport patients under Droplet Precautions, notify area to which patient is being transported of impending arrival and of any special precautions to be used to prevent transmission of infection. Have the patient wear a surgical mask during transport.

C. Communicable Disease Reporting

Personnel should know which diseases are reportable to the Public Health Department and encourage physician compliance (refer to the Infection Prevention policy: Reporting of Communicable Diseases). Additional information and forms may be obtained online from Infection Prevention website.

D. Cleaning Routines and Cleaning Agents

1. Cleaning Agents
   a. Surfaces should be cleaned with an EPA-registered, hospital-approved disinfectant (e.g., MetriGuard, Sani-Cloths), 70% alcohol or a 1:10 bleach solution (effective for 30 days). MetriGuard requires a one minute contact time for effectiveness.
   b. Cleaning Routines
i. **Intravenous poles and lamps** should be cleaned with an EPA-registered, hospital-approved disinfectant (e.g., MetriGuard, Sani-Cloths), 70% alcohol, or a 1:10 bleach solution on a routine basis and when visibly soiled. Mayo stands should be disinfected after each use with an EPA-registered disinfectant.

ii. **Electronic thermometers** will be equipped with two probes (rectal-red or oral-blue) and disposable hard-plastic sheaths. A new plastic sheath should be used for each temperature. The cord, probe, and unit should be thoroughly cleansed routinely (i.e., weekly) and when visibly soiled with an EPA-registered disinfectant detergent, 70% alcohol, or a 1:10 bleach solution. Rectal electronic thermometers should have the probe handle cleaned after each use. **Ear (tympanic membrane) thermometers** are equipped with a probe and disposable, plastic probe covers. A new plastic cover should be used for each temperature. The unit, including the end of the probe, should be cleaned routinely and when visibly soiled with 70% alcohol.

iii. **EKG cables** should be wiped with an EPA-registered disinfectant detergent between each patient.

iv. **Patient care equipment** (e.g., reusable blood pressure cuffs, wall mounted otoscopes) should be cleaned with an EPA registered disinfectant detergent (e.g., MetriGuard or Super Sani-Cloths) routinely, when obviously soiled, and after use for patients requiring Contact Precautions. Disposable cuffs are for one patient only and must be discarded after each use.

v. **Exam tables, recliners and short-term use beds** should be cleaned routinely, (i.e., weekly), when visibly soiled, and after use for patients requiring Contact Precautions. In cases of symptomatic diarrheal diseases, these items should be cleaned with a bleach-based disinfectant such as Sani-Cloth bleach wipes.

vi. **Pediatric scales** should be cleaned daily, when visibly soiled and after patients with signs and symptoms of gastroenteritis. In cases of symptomatic gastroenteritis, pediatric scales should be cleaned with a bleach-based disinfectant.

vii. **Shared equipment** such as measuring tools shall only have contact with intact skin or wounds covered with clean dressings. This equipment shall be cleaned between each use with an EPA-registered, hospital-approved disinfectant (e.g., Sani Cloths).

viii. Change cubicle curtains on a routine basis and when visibly soiled.

### E. General Guidelines

1. **BCG Bladder Installations**
   
   a. **BCG bladder installations** are performed to provide palliative treatment to patients who have superficial bladder carcinomas. BCG is a biologically active material and should be managed with caution. The procedure must be strictly followed and care exercised to eliminate the possibility of exposure to the substance by employing the appropriate personal protective equipment. (Refer to Appendix 1).

2. **Computers**
   
   a. Computers located at the nurses' station (e.g. clinical workstation) should be managed in a
clean manner. Gloves must be removed and hands washed after providing patient care and prior to use of computer equipment.

b. Computers used for patient care activities include mobile units and computers permanently located in the patient care areas. These computers have no direct contact with the patient. Mobile units should be used with clean hands. The computers should not be taken into the rooms of patients who are on Contact Isolation. If the computer is taken into the room, it must be disinfected prior to use for another patient. Mobile computers should be disinfected on a regular basis (e.g. weekly) and when visibly soiled. The keyboard and mouse should be wiped with an EPA-registered disinfectant detergent disposal cloth. The surface should appear visibly wet and allowed to air dry. Touch screens should be cleaned according to the manufacturer’s instructions for cleaning.

c. Computers that are permanently installed in exam rooms should be cleaned on a routine basis (i.e., weekly), when visibly soiled, and by Environmental Services during terminal cleaning. An EPA-registered disinfectant detergent for environmental surfaces (e.g., Metriguard or Sani-Cloths) should be used.

3. Cystic Fibrosis

   a. For guidelines for patients with Cystic Fibrosis, refer to the Infection Prevention policy: Patients with Cystic Fibrosis.

4. Dressings

   a. Wound care/dressing changes should be done using aseptic technique utilizing the appropriate PPE as described by standard precautions. Dressing materials should be sterile.

   b. Please note the universal symbol on packaging for single patient use. If this symbol is present, the item may only be used for one patient.

5. Ophthalmology (see Appendix 4 for equipment disinfection routines)

   a. Management of Patients with Conjunctivitis:

      i. When a patient is discharged from the "red eye room," the following general cleaning practices should be done.

      ii. All equipment is properly cleaned and disinfected. If the equipment cannot be immediately cleaned after use, the used equipment should be placed in the middle of the desk pad.

      iii. Close the exam room door to let others know that this room is not clean.

      iv. Change the tissue paper on the slit lamp and wipe the entire slit lamp, headrest and handlebars with a 1:10 bleach solution or 70% alcohol.

      v. Wipe all horizontal surfaces (i.e., counter tops, exam chairs) with an EPA-registered disinfectant such as Sani Cloths or Metriquard.

   b. Eye Drops in Ophthalmology

      i. Eye drops must be used as prescribed on the label. If an eye drop is labeled as "single patient use" or "single use only", it cannot be used on multiple patients. A multidose eye drop may be used on more than one patient with the following exceptions:
a. If used on a conjunctivitis patient, it must be discarded after use.

b. If there is any suspicion that the bottle has been contaminated (e.g., the tip has touched a patient's eyelashes or eye), it should be discarded after a single use.

c. If there is any sign that the fluid in the bottle is no longer safe to use (e.g. turbidity, color change, unusual odors, etc.), then it should not be used.

c. Procedures in Ophthalmology
   i. For noninvasive ophthalmology procedures performed in the Ophthalmology Clinic, personnel must perform hand hygiene and don sterile gloves. For ophthalmology procedures performed in Day Op, personnel must adhere to the Infection Prevention Guidelines for Perioperative Services.

   ii. ERG Electrodes (electroretinography)
       a. Clean with a 50/50 mix of regular Tide detergent and distilled water (do not use tap water).

       b. Following cleaning, the electrodes should be disinfected using 1:10 bleach solution (10% bleach, 90% distilled water) for 5 minutes. Use of a simple kitchen timer is highly recommended. If time exceeds 5 minutes, the silver coating will turn brown, and eventually black. Rinse immediately and thoroughly after soaking in bleach with distilled water.

6. Equipment
   a. Atomizers
      i. After each use, the single use, disposable atomizer cap or tip is discarded and the atomizer is thoroughly wiped with an alcohol pad. Every 30 days or sooner if indicated, the atomizers are washed in enzymatic detergent, rinsed, and steam sterilized.

   b. ENT Equipment
      i. Only single use, disposable ear and nasal specula are used in speech therapy. Ear irrigations should be performed using sterile solutions.

   c. Glucometers
      i. The glucometer and its case are maintained in a visibly clean manner at all times. The glucometer should be cleaned after each use and when visibly soiled using a Super Sani Cloth wipe following manufacturer's instructions for cleaning. The glucometer should be stored in a designated clean area (e.g., nurses' station).

   d. Gynecological Equipment
      i. Fitting diaphragms should be washed in detergent, completely immersed in 70% alcohol for at least 20 minutes and allowed to dry. Alternatively, they may also be cleaned with an enzymatic detergent (e.g., Valsure) according to manufacturer's instructions for use and steam sterilized.

      ii. Cryosurgery probes will be high-level disinfected with 2% glutaraldehyde for a minimum of 20 minutes. Any portion of the probe that could have mucous membrane contact (the
probe stem) should be disinfected by wrapping with a cloth soaked in the glutaraldehyde for a minimum of 20 minutes. Ensure the wrapped probe stem is placed in a covered basin during this process. After disinfection, the probe tip and probe stem should be rinsed with sterile water or tap water and dried before use. In order to prevent damage to the electrical component, this may have to be accomplished using several water-soaked cloths. If tap water is used, rinse or wipe down with alcohol as the final step.

iii. Vaginal ultrasound probes should be cleaned and high level disinfected following the infection Prevention policy: Cleaning, Disinfection, and Sterilization of Patient-Care Items.

iv. Reusable vaginal speculae should be cleaned with an enzymatic detergent (e.g. Valsure) according to manufacturer's instructions for use. After soaking in enzymatic detergent according to manufacturer's instructions, use a clean cloth or brush to wash the instruments then rinse with water and allow to air dry prior to packaging for sterilization.

v. In order to retrieve supplies when a sterilizer malfunctions (i.e. biological indicator turns positive), vaginal specula should be individually wrapped in peel packs. An internal and external chemical indicator should be used with each peel pack and the date and/or load number should be written on the package. After sterilization, the speculae should be stored in a manner that prevents contamination. Vaginal speculae labeled single use only (disposable) must be discarded after use.

e. Hand Center, Splinting Tank/Whirlpool

i. Water in the splinting tanks should be emptied weekly, the tank cleaned and refilled with tap water.

ii. The hydrocolator tanks are cleaned and maintained according to manufacturer's instructions.

iii. The whirlpool is cleaned and disinfected after each patient use. The procedure for disinfecting the whirlpool is as follows: Fill whirlpool with cold water. Add 200 ml. of 5.25% sodium hypochlorite (liquid household bleach). This achieves 1000 ppm of available chlorine. Allow to stand for 2-3 minutes with hose detached and completely submerged in whirlpool. Agitate whirlpool for 2 minutes. Empty. Reattach hose to drain.

f. Respiratory Care Equipment

i. All equipment is cleaned and disinfected as outlined in the Infection Prevention policy: Pulmonary Function Laboratory.

ii. Clean respiratory equipment (e.g., manual ventilation bags, oxygen tubing, laryngoscope blades, etc.) should be used for each patient.

iii. Patients receiving lung volume measurements through a peak flow meter will be given a new disposable mouthpiece. The screen should be removed and cleaned weekly and when visibly contaminated by immersion in 70% alcohol. The outside of the Peak Flow Meter will be routinely cleaned with alcohol. If the flow meter used does not have a removable filter, the entire device must be exposed to a complete high level disinfection
cycle according to the Infection Prevention policy: **Cleaning, Disinfection and Sterilization of Patient-Care Items**. This shall include testing the chemical's minimum effective concentration with the appropriate test strips, proper soak times, rinsing, and drying.

iv. Disposable airways are preferred. If a non-disposable airway is used, it should be cleaned and steam sterilized.

v. Maxi-mist machines should be wiped with an EPA-registered disinfectant after each use. The tubing is disposable.

vi. Disposable nebulizers should be used in the clinic setting and are to be discarded after patient use. If medication needs to be diluted with saline or water prior to administration, please use only sterile water or saline.

g. Pulse Oximeter Probe
   i. Disinfect with 70% alcohol or an EPA-registered disinfectant routinely, e.g., weekly, when visibly soiled, and after use by a patient on Contact Precautions.

h. Speech/Wellness Flowhead
   i. The flowhead is used to measure oral flow rates. Wipe the interior and membrane with an alcohol swab and then spray/atomize alcohol onto the membrane and let it dry. Reusable nose clips will be disinfected with alcohol. Single-use nose clips are disposed of after patient use.

i. Procedure Carts
   i. Procedure carts should be set-up as needed as close to the start of the procedure as possible.
   
   ii. During times procedure carts are not in use, items should be securely stored in cart drawers. As always, medication and sharps must be secure.

   iii. Sterile endoscopes and instruments must remain in their protective wrap until ready for use.

j. Urology Prostate Biopsy Ultrasound Probe
   i. Fully disposable prostate biopsy equipment is highly preferred.
   
   ii. After each procedure, the biopsy probe should be disassembled (needle guide removed from the probe).
   
   iii. The probe and needle guide should be cleaned with an enzymatic or instrument detergent (e.g., Valsure) taking care to flush all lumens, then rinsed with tap water prior to high-level disinfection (HLD).
   
   iv. After cleaning, the ultrasound probe and needle guide, shall be exposed to a complete high level disinfection cycle according to the Infection Prevention policy: **Cleaning, Disinfection and Sterilization of Patient-Care Items**. This shall include testing the chemical's minimum effective concentration with the appropriate test strips, proper soak times, rinsing, and drying.
v. While soaking in the chemical used for high level disinfection, the lumen of the needle guide and probe channel should be flushed with the high level disinfecting chemical (e.g., OPA, glutaraldehyde) to assure the inner components will be appropriately high level disinfected.

vi. Following HLD, the probe and lumens should be rinsed thoroughly with sterile water and air-dried.
   a. Tap water followed by an alcohol rinse may be used rather than sterile water.
   b. Flushing air through the lumens will facilitate the drying process.
   c. The probe must be dry prior to storage.

7. IV Therapy
   a. IV catheter-associated infections are a serious complication of IV therapy. Strict adherence to aseptic technique is required for the insertion, maintenance and removal of IV lines. Personnel working with intravenous catheters must comply with the Infection Prevention policy: The Prevention of Intravascular Catheter-Related Infections.

b. Stopcocks
   i. Stopcocks should not be used in ambulatory care facilities.
   ii. Stopcocks may be used by appropriate healthcare personnel in the Ambulatory Surgery Center in the Ambulatory Care Center as follows
      a. Prep all ports with alcohol or povidone-iodine and let dry prior to access.
      b. Stopcock ports must be covered with a sterile cap at all times except during access, such as drawing blood or IV fluid administration.
      c. Use a new sterile cap after each removal. Never reuse an old cap.
      d. Flush stopcock immediately if blood is seen in the port of the stopcock.
      e. No blood cultures should be drawn from the stopcock (refer to Nursing Policy: Blood Cultures).

8. Medications
   a. Hand hygiene should be performed before preparing medications.
   b. Aseptic technique must be used when entering a medication vial. Cleanse the rubber diaphragm of the medication vial with alcohol before inserting needle into the vial. Use a sterile syringe with needle or a sterile vial adaptor for each access. Avoid touch contamination of the vial adaptor prior to penetrating the rubber diaphragm. Vial adapters are intended for single patient use only and may not be used for multiple patients.
   c. The medication preparation areas shall be clean, uncluttered and functionally separate. These areas should be cleaned routinely, e.g., daily, with an approved EPA-registered disinfectant (e.g., MetriGuard, Super Sani-Cloths).
   d. Medications should not be prepared within 3 feet of a sink unless a splashguard is present.

9. Nourishments
a. Eating and drinking of nourishments by clinical service personnel is prohibited in clinical areas and other potentially contaminated areas. Personnel should not consume foods brought in for patients.

10. Plants

   a. Plants and flowers are not allowed in treatment/procedure areas or areas in which patient care supplies are stored. Personnel must perform hand hygiene after handling plants or changing water.

11. Preoperative CHG treatments

   a. When a patient is indicated for surgery, provide them with instructions and supplies for a preoperative whole body CHG treatment with CHG-containing wipes. Instruct patients to shower or bathe the night before surgery with soap and water, followed by the CHG treatment. Refer to patient education sheet for contraindications, exceptions, and specific instructions regarding application of wipes.

12. Refrigerators

   a. Food, medications and specimens shall be refrigerated separately. The refrigerator should be clearly identified as a nourishment, medication or specimen refrigerator and cleaned routinely.

   b. Open juice containers should be discarded if contamination or spoilage is suspected. Food brought into a clinic from patients should not be homemade and must be prepackaged by an outside facility (e.g., grocery store, bakery).

   c. All refrigerator/freezers containing medications should be monitored. A 24 hour minimum/maximum temperature logging thermometer should be used in all refrigerators and freezers that are not under constant supervisions (i.e. overnight and on weekends). Temperatures should be monitored and recorded at least daily to ensure temperatures are in the proper range. Records should be maintained for three years for vaccine refrigerators and 90 days for non-vaccine refrigerators.

   d. Vaccines must be stored according to the NC Immunization Guidelines for Safe Vaccine Storage. Refrigerator/freezer temperatures must be monitored and recorded according to the same guidelines.

   e. Specimen refrigerators must display a BIOHAZARD label. Refrigerated laboratory kits/reagents cannot be stored in a specimen refrigerator.

   f. Ideally, refrigerated laboratory kits/reagents should be stored in a separate refrigerator. Alternatively, they may be stored in a medication refrigerator if stored separately, such as in a drawer, separate labeled container or section within the refrigerator.

13. Reuse of Single Use Items/Devices

   a. Disposable equipment shall not be reused. Refer to the Infection Prevention policy: Reuse of Single Use Devices.

14. Service Animals

   a. For guidelines for service animals in ambulatory care, refer to the Infection Prevention policy:
15. Skin Preparation
   a. Procedures in which the skin is punctured/incised should be performed using meticulous aseptic technique. For acupuncture, EMG, and other procedures that involve the skin being penetrated with a needle, the skin should be prepped with alcohol prior to needle insertion. For further information on preparation of a patient's skin for non-surgical and surgical procedures, refer to the Infection Prevention policy: Hand Hygiene and Use of Antiseptics for Skin Preparation.

16. Specimen Transport
   a. Laboratory specimens should be collected properly and transported in containers that do not leak.
   b. If laboratory specimens are transported via the ACC shuttle bus, the outside of the container and the requisition must not be contaminated.
   c. Specimens should be transported in a container designated with a BIOHAZARD label.
   d. Specimens from hospital-based clinics may be transported via the Computerized Tube System (CTS). Specific packaging instructions for specimens and other guidelines for CTS specimen transport are located in the Plant Engineering policy: Usage of the (CTS) Computerized Tube System.

17. Sterile Solutions and Supplies (NaCl, Sterile Water)
   a. Sterile pour (irrigation) solutions are single-patient use and any unused portion must be discarded immediately after use.

18. Supplies, Storage
   a. Storage on floors is not allowed.
   b. Clean patient care items may be stored in the dirty utility room only when contained within an enclosed cabinet.
   c. Patient care items may not be stored in cabinets under sinks due to the increased likelihood of water contamination. The only items that may be stored under sink cabinets are trash bags, cleaning agents (no hand hygiene products or paper towels) and, battery disposal bins, equipment recycling bins (e.g. Pulse-ox) unused sharps safety containers.
   d. Patient care supplies must be stored at least 3 feet from a sink unless a splashguard is present.

19. Surgical Site Infection/Post-Operative Surgical Site Infection Surveillance
   a. Infection Prevention should be notified in the event a surgical site infection is identified or suspected in the outpatient setting. Report the patient's name, medical record number and date of surgery to the Infection Prevention department. Staff directory is online.

20. Toys
   a. Items to be used by younger children (who have a tendency to put things in their mouth) should be made of a cleanable material.
b. Used cleanable toys (e.g. non porous items such as plastic blocks, etc) and tables are cleaned with an EPA-registered hospital disinfectant (e.g., Sani Cloths) on a routine basis (e.g. weekly), after use on a patient on contact precautions and when visibly soiled. If the EPA-registered disinfectant contains bleach, accelerated hydrogen peroxide or quaternary ammonium compounds, the toy should be rinsed or wiped with tap water and dried following the use of the disinfectant.

c. Non-cleanable toys (e.g., porous items such as puzzles, cardboard, books, etc.) should not be used unless they are intended to be given to a single patient.

d. New toys brought into the playroom do not need to be sterilized or disinfected.

e. Cleanable toys used by a patient on Enteric Isolation precautions should be cleaned with a bleach solution (i.e. bleach wipes or 1:10 bleach solution) and then rinsed or wiped with tap water before being returned to the playroom for use by other children.

f. Books and magazines in waiting areas are allowed.

21. Ultrasound Gel

a. Bottles of ultrasound gel should not be topped off or refilled. The bottle should be used until empty and then discarded. It is preferable to use unit dose packets of ultrasound gel.

b. Care must be taken to avoid allowing the nozzle of US gel bottles to touch non-intact skin or contaminated surfaces. If contamination is suspected, discard the bottle.

c. Sterile ultrasound gel is used in surgical settings requiring a sterile field. Only sterile gel should be used on and in close proximity to mucous membranes (e.g., vaginal procedures), broken skin, and wound dressings.

22. Utility Rooms

a. Doors to dirty utility rooms should remain closed at all times.

23. Visitation

a. Visitors with communicable infectious diseases should not accompany patients to the Outpatient Care setting.

24. Water Features

a. Water features are discouraged in healthcare settings. Designs that call for water features must be approved prior to acquisition by Hospital Epidemiology. No tabletop waterfalls/water gardens are allowed in patient care areas.

b. Fish Tanks/ Beta fish in Peace Lily arrangements are not allowed in clinical areas (e.g. nursing stations, any patient care areas). Fish tanks are allowed in certain areas, such as recreation therapy, reception areas and waiting rooms, with the following strict precautions.

   i. The tank is completely enclosed to prevent patients having direct access to the water and fish (e.g., enclosed area with observation window, freestanding tank with solid, affixed top.

   ii. They are not managed by health care workers but by a contracted service provider.
F. High Level Disinfection and Sterilization

1. All high level disinfection and sterilization activities must be in compliance with and according to the Infection Prevention policy: Cleaning, Disinfection and Sterilization of Patient-Care Items. The sterilization competency for outpatient care sites is yearly. See appendix 2.

2. The high level disinfection competency for all areas is yearly.
   a. All personnel with high level disinfection responsibilities must attend the "High Level Disinfection at UNCH" workshop. This class is offered approximately every month. Contact Judie Bringhurst at judie.bringhurst@unchealth.unc.edu in the Infection Prevention department for more information and class dates.
   b. Endoscopes must be cleaned and disinfected according to the Endoscope Infection Control Policy.

G. Environmental Services and Waste Management

1. Housekeeping services to on-campus clinics are provided by UNCMC Environmental Services staff. Community-Based Clinics' and non-hospital clinics' services are sometimes contracted with an outside agency. These services should be consistent with guidelines provided in the Infection Prevention policy: Environmental Services.
   a. General Hospital Waste
      i. Solid waste from all patient rooms including isolation precautions rooms may be placed in a regular trash receptacle and discarded with the general hospital waste. Any trash bag that is torn should be double bagged.
      ii. Regular trash bags are generally white and display a BIOHAZARD label.
      iii. Small volumes (<20 ml) of blood and blood products from nursing units and outpatient clinics will be disposed of in trash receptacles and discarded with general hospital waste.
         - Blood and body fluids in amounts greater than 20ml may be discarded by carefully pouring the fluid down a clinical sink (hopper) or toilet.
         - Blood and body fluids in amounts greater than 20ml that cannot be safely discarded by pouring into a hopper or toilet must be tightly capped and will be disposed of in the regulated medical waste container.
      iv. Empty bulk blood and blood product containers (e.g., bags and bottles) and tubing may be disposed of in a regular trash receptacle.
   v. Hand washing sinks should never be used for disposal of blood or body fluids.
   vi. Hand washing sinks should never be used for disposal of used IV fluids since it is recognized that these fluids contain any pathogens that may have been present in the patient who received the fluids. Used IV fluids should be disposed of in a hopper.
   b. Regulated Medical Waste
      i. Regulated medical waste includes sharps disposal containers that are full and properly
closed, Pleurevacs, evacuated containers, and materials used in the preparation and administration of antineoplastic drugs including gloves, gowns and other trace contaminated items. These wastes are placed in a red trash bag located in an appropriate area. Refer to the Infection Prevention policy: Guidelines for Disposal of Regulated Medical Waste and the Environmental Health and Safety policy: Handling and Disposal of Hazardous Drugs.

ii. Blood and other bodily fluids should be discarded in a dirty sink or hopper, toilet, or using a vacuum-assisted evacuation system (e.g. Saf-T-Pump) and not in a sink intended for hand washing.

2. Sharps Disposal Containers

   a. It is the responsibility of every employee to ensure sharps are disposed of appropriately. Sharps disposal containers are located in exam rooms, procedure rooms, on medicine carts and selected high-use areas.

   b. Needles, syringes and sharp edged items (e.g., glass vials, capillary tubes, and glass slides) will be disposed of in these rigid, puncture-proof containers.

   c. Sharps disposal containers will be affixed to prevent the container from tipping over.

   d. Needles will not be cut or recapped after use.

   e. Clinics should check the sharps disposal containers on a daily basis and change when contents have reached the "full" mark on the container, or when 75% full.

   f. Full sharps containers will have the top locked and the container will then be placed in red bag waste. Nursing personnel are responsible for monitoring and changing sharps containers as needed.

3. Volunteer Organizations (MedWorld)

   a. MedWorld is a volunteer organization that collects and recycles medical supplies for developing countries. Areas participating in MedWorld must follow certain guidelines for disposable items designated for collection. These guidelines are located in the Infection Prevention policy: Guidelines for Disposal of Regulated Medical Waste.

IV. References


V. Related Policies

Infection Control and Screening Program: Occupational Health Service

Infection Control Guidelines for Adult and Pediatric Inpatient Care.

Hand Hygiene and Use of Antiseptics for Skin Preparation.

Cleaning, Disinfection, and Sterilization of Patient Care Items.

The Exposure Control Plan for Bloodborne Pathogens

Tuberculosis Control Plan

Guideline for Disposal of Regulated Medical Waste.

Patients with Cystic Fibrosis

Dialysis Unit

Medication Management: Use of Multi-Dose Vials/Pens of Parenteral Medications and Vaccines in Acute Care and Ambulatory Care Environments.

Hand Hygiene and Use of Antiseptics for Skin Preparation for full details regarding hand hygiene in all patient care areas.

Airborne Isolation Rooms List

Tuberculosis Control Plan for full details regarding TB control.

Reporting of Communicable

Patients with Cystic Fibrosis.

Infection Prevention Guidelines for Perioperative Services.

Environmental Services.

Attachments

1: BCG Bladder Instillation
2: Sterilization Competency for Ambulatory Care/Community-Based Centers
3: Ophthalmology Clinic – Red-Eye Log
4: Eye Equipment Cleaning Chart
5: Sequences for Putting on (Donning) and Taking Off (Doffing) PPE Used for Protection from Blood and Body Fluids
## Approval Signatures

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<tr>
<th>Step Description</th>
<th>Approver</th>
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<tbody>
<tr>
<td>Policy Stat Administrator</td>
<td>Patricia Ness: Clin Nurse Education Spec</td>
<td>01/2020</td>
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<tr>
<td></td>
<td>Thomas Ivester: CMO/VP Medical Affairs</td>
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<td>Emily Vavalle: Director, Epidemiology</td>
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<td>Sherie Goldbach: Project Coordinator</td>
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## Applicability

UNC Medical Center