Infection Control Manual		
UNC HEALTH CARE	Policy Name	**Clinical Neurophysiology Laboratory**
	Policy Number	**IC 0038**
	Date this Version Effective	**March 2016**
	Responsible for Content	**Hospital Epidemiology**

I. Description

Describes infection control practices followed in the Neurophysiology Labs.

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II. Rationale

Infection control is an important component of patient care in the Clinical Neurophysiology Laboratory. Procedures performed in this area include electroencephalogram (EEG), evoked potential, and electromyogram (EMG). Health Care Personnel (HCP) working in this clinic should be alert to patients with possible infections and take appropriate measures to prevent the spread of disease to other patients, visitors, and staff. Likewise, appropriate infection control measures which relate to Clinical Neurophysiology Laboratory equipment used in these areas and the general environment should be observed.

III. Policy

A. Personnel

1. Hand Hygiene
   a. Hand hygiene must be performed in accordance with the Infection Control policy: "Hand Hygiene and Use of Antiseptics for Hand Preparation."
2. Dress Code
   a. HCP should adhere to all guidelines in the Infection Control policy: "Infection Control Guidelines for Adult and Pediatric Inpatient Care."
   b. Clean scrub clothes must be worn daily and changed when contaminated. Scrubs not contaminated with blood or other potentially infectious materials may be laundered at home.
   c. Employee-owned clothing (e.g., scrubs) contaminated with blood or other potentially infectious materials will be processed by the employer in accordance with the "Exposure Control Plan for Bloodborne Pathogens."

3. Occupational Health
    a. HCP should adhere to guidelines established by the Occupational Health Service (OHS). See the policy: "Infection Control and Screening Program – OHS."
    b. Infection control education, including OSHA-required education for bloodborne pathogens and TB, is completed annually via LMS.
    c. HCP should be familiar with and follow policies outlined in the Exposure Control Plan for Bloodborne Pathogens, the Tuberculosis Control Plan, and Isolation Precautions.

B. General Guidelines

1. The work areas in the treatment rooms should be cleaned by the Clinical Neurophysiology Laboratory staff between patients with an EPA-registered disinfectant detergent (e.g., MetriGuard, Sani-Cloths).
2. Isolation/Precautions
    a. HCP are responsible for following the Infection Control Isolation Precautions Policy.
    b. When patients with suspected or known communicable diseases (e.g., patients on isolation precautions) 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.
    c. Ambulatory patients who have symptoms of a respiratory infection of uncertain etiology should be instructed to use tissues and cover their mouths and noses when coughing or sneezing. They should spend a minimum of time in common waiting areas. HCP should use Standard Precautions when caring for these patients. Guidelines for the management of patients with known or suspected tuberculosis are located in the Tuberculosis Control Plan.
3. Visitors with communicable infectious diseases (e.g., chicken pox, influenza) should not accompany patients to the department.
4. Elective procedures should be deferred if possible when patients have a communicable infectious disease.
5. All sterile procedures will be performed using meticulous aseptic technique.
6. Utility Rooms and Clean Supply Storage – Refer to the Infection Control Guidelines for Adult and Pediatric Inpatient Care Policy.

C. Equipment and Cleaning Agents

1. General Guidelines
    a. Equipment labeled for single use only should not be reused. Refer to the Reuse of Single Use Devices Policy.
    b. Equipment, instruments and surfaces should be cleaned and disinfected according to the Cleaning, Disinfection and Sterilization of Patient-Care Items Policy. Personnel performing the cleaning and disinfection of semicritical instruments must be trained on employment and annually thereafter.
    c. Shared patient care equipment (e.g., blood pressure cuffs, computers, stretchers, Stella EEG recorder) should be disinfected with an EPA-registered disinfectant detergent when soiled or contaminated, after use on a patient on Contact or Enteric Contact Precautions, and on a routine basis (e.g., weekly). For patient on Enteric Contact Precautions the preferred cleaning agent is a bleach wipe or a 1:10 dilution of bleach and water.

d. Food, medication, and specimens should be refrigerated separately. The refrigerator should be clearly identified as a nourishment, medical, or specimen refrigerator and cleaned routinely (e.g., monthly). Temperatures should be monitored and recorded daily when the clinic is open to ensure temperatures are in the proper range. The temperatures should be maintained between 33 and 45° F. Maintenance should be called if there is a deviation from this range. Specimen refrigerators must display a BIOHAZARD label.

e. All reusable equipment (ribbon cable, surgical instruments etc.) that requires sterilization (i.e., critical items that contact sterile tissue or sterile body fluid [blood]) should be washed in instrument detergent or enzymatic solution and water and sent to CPD for sterilization.

f. Exam tables, recliners and short-term use beds should be disinfected with an EPA-registered disinfectant weekly, when visibly soiled, and after use for patients requiring Contact or Enteric Contact Precautions. For patient on Enteric Contact Precautions the preferred cleaning agent is a bleach wipe or a 1:10 dilution of bleach and water.

g. Computers (keyboard, mouse, and touch-screen) should be disinfected on a routine basis (e.g., weekly). The pop-up germicidal wipes (e.g., Sani-Cloths) can be used with the exception of monitors and touch screens which should be cleaned per manufacturer's recommendations.

2. Neurophysiology Equipment

a. Single fiber needles for EMG (non-lumened) will be cleaned with alcohol and placed in the sterilization chamber. The electrodes will be placed in the chamber containing boiling water and remain in the chamber for at least 5 minutes. The water in the sterilization chamber is changed before each use and the rubber septums, which allow introduction of the needles into the chamber, are cleaned with alcohol at least weekly.

b. An antiseptic (e.g., alcohol) should be used on the skin prior to insertion of needles.

D. Disinfection/Sterilization

1. Personnel in the Clinical Neurophysiology Laboratory providing on site high-level disinfection and steam sterilization should be familiar with the principles of disinfection and sterilization of reusable items. High-level disinfection of respiratory care equipment (e.g. CPAP masks) used in the Sleep Disorders Lab is achieved by pasteurization. HCP performing sterilization and/or high-level disinfection will be trained to ensure operator compliance. Periodic infection control rounds to areas using sterilizers and/or high-level disinfection will be performed by Hospital Epidemiology personnel to ensure documentation of disinfection and/or sterilization records. Refer to the Cleaning, Disinfection and Sterilization of Patient-Care Items policy.

2. The glutaraldehyde basin should be labeled with the discard date. Most 2% glutaraldehydes have a 14-day use-life after activation. The glutaraldehyde solution must be tested every workday to ensure the antimicrobial activity (or minimum effective concentration) is present. The result must be recorded on a log sheet. Use the test strip specific for the brand and type of germicide (e.g., use 1.5% test strips with Cidex-Activated Dialdehyde Solution®). The bottle of test strips must also be dated when opened and discarded as specified by the manufacturer (e.g., 120 days). The temperature of glutaraldehyde solutions should be tested daily and the temperature documented. The temperature should be at least 20°C. Notify Hospital Epidemiology if the temperature is consistently less than 20°C.

3. Soiled equipment and instruments are brought to a designated area (e.g., the Soiled Utility Room) for initial cleaning and decontamination. Activities flow from soiled to clean (e.g., instrument placed in sink, washed in enzymatic detergent and water, rinsed, and air-dried).
4. Items sterilized in CPD do not require an expiration date. These items may be used as long as the package is not torn, wet (or evidence of moisture damage), punctured, opened, or unsealed. When the manufacturer does not furnish an expiration date, packages are considered sterile until damaged or opened. When the manufacturer has an expiration date on the item, it must be used before the expiration date. A package that is not used before the expiration date should be discarded or reprocessed by an approved third party reprocessing company.
5. The date or load number of sterilization will be placed on the package for recall purposes.
6. All items processed for sterilization will be properly wrapped and processed in such a manner so as to provide an effective barrier to microorganisms and allow aseptic presentation upon opening. Once clean and dry, reusable instruments that require sterilization will be packaged in peel pouches. A chemical indicator will be placed in the interior and on the exterior of each package and sterilized by CPD.
7. All items will be inspected before use. The chemical indicator tape should be checked to ensure the item was processed (i.e., bars on tape change from pale to dark). The package should be examined for tears, punctures, indication of wetness or broken seal. Do not use if the aforementioned are determined. Once the package is opened, the chemical indicator within it should be examined. If the indicator tape has not changed (i.e., darkened), the package's contents should not be used.
8. Any package that has fallen or been dropped on the floor must be inspected for damage to the packaging or contents. If the package is heat-sealed in impervious plastic and the seal is still intact items packaged in plastic need not be reprocessed.
9. The loss of sterility is event-related, not time-related. Therefore, it is important to ensure proper storage of items so there is no compromise of the product packaging.
10. If EEG shows a distinct triphasic and polyphasic EEG reading suggestive of Creutzfeldt-Jakob Disease (CJD), Hospital Epidemiology, Perioperative Services, Central Processing, Microbiology Laboratory, and Pathology should be notified prior to a neurosurgical procedure on this patient. Prion sterilization procedures found in the CJD Infection Control Policy will be used on all contaminated neurosurgical instruments from patients at high risk for CJD, including patients undergoing brain biopsy when a specific lesion has not been documented.

E. Housekeeping

Housekeeping services are provided by the Department of Environmental Services.

F. Medical Waste Disposal

For guidelines, refer to "Guidelines for Disposal of Regulated Medical Waste."

G. Implementation

It is the responsibility of the Supervisor**,** Laboratory Director, and Medical Director of the Clinical Neurophysiology Laboratory or his/her designee to implement this policy.

IV. References

Rutala WA, APIC Guideline Committee. APIC guideline for selection and use of disinfectants. Am J Infect Control 1996;24:313-342.

V. Reviewed/Approved by

Hospital Infection Control Committee

VI. Original Policy Date and Revision

Revised on Mar 2005, Feb 2007, Feb 2010, Feb 2013, March 2016