Safety Policy 803

Infection Control For Memphis Speech and Hearing Center

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Policy: The following guidelines for infection control are written to inform and instruct all personnel, faculty, staff, volunteers and students who participate in clinic at the Memphis Speech and Hearing Center. Further information regarding infectious disease, disinfection, sterilization, regulatory agencies and terminology can be found in the references listed at the end of these guidelines. The CSD Exposure Control Plan is available for review in the CSD Dean's suite. Infection Control for Research Labs is outlined in Safety Policy 312. It is strongly recommended that all personnel be familiar with the information contained in these references.

Procedure:

I. Background
   a. In accordance with the Occupational Safety and Health Administration's Bloodborne Pathogens Standard (29 CFR 1910.1030), this plan has been developed to minimize the risk of exposure to bloodborne pathogens as well as other potentially infectious bodily substances. While direct exposure to blood is unlikely, this plan is written to protect the employees, students, volunteers and patients from that possibility and to reduce the exposure of personnel to non-bloodborne pathogens, as well. If exposure occurs, please visit http://www.memphis.edu/ehs/pdfs/bbpecattach3.pdf to complete the report form.
   b. Engineering and work practice controls will be utilized to minimize or eliminate potential exposure to employees. Where occupational exposure remains after institution of these controls, personal protective equipment will be utilized.
   c. Environmental infection control and basic housekeeping practices will be implemented to protect patients, students, volunteers, and employees.
   d. Potentially contaminated waste material will be disposed of in accordance with approved biohazardous waste procedures.
   e. All chemicals in use in the MSHC will be stored, utilized, labeled and disposed of in accordance with the directions contained in the Material Safety Data Sheet (MSDS) for that product.
   f. Purchase and use of materials or chemicals not reported in this document will be reported to the Administrative Associate for appending to this document.
   g. There will be an annual review of the infection control documents for MSHC with oversight by the CSD Clinical Education and Policies Committee.

II. Personnel
   a. Not all faculty, staff, volunteers, students, and/or interns have the same potential risk of exposure to infectious materials.
   b. Professional Staff, Students and Volunteers
      i. Audiologists, Speech-Language Pathologists, volunteers and students engaged in direct patient contact might encounter the following tasks or

procedures that place them at some risk of exposure to infectious material including but not limited to using, handling, cleaning, disinfecting, or sterilizing:

Audiology	**Speech-Language Pathology**	**All**
Instruments with 2% glutaraldehyde Earmolds/hearing aids/cochlear implants Ear examination through otoscopy Cerumen management Ear impressions Otoscopes Hearing Aid Workroom Equipment (e.g. Stethosets, Cleaning tools) Sound Suite Equipment (e.g. Headphones, Audiometers, Immittance bridges)	Oral Mechanism Examinations Endoscopic equipment Airflow masks Nasometers TEP prostheses Speaking valves Inner cannulas of tracheostomy tubes Dentures Oral prostheses Mucous/sputum	Patient "touch and splash" surfaces Immittance probe tips, earlight tips, and specula Toys Changing diapers Microphones Headphones Surfaces/tables Emesis

c. Clinic and Office Personnel
    i. Clinic and/or office personnel may be exposed to infectious material but typically do not participate in cleaning/disinfecting procedures.
d. Building Maintenance and Cleaning Staff
    i. These individuals may be exposed to infectious material through assistance in cleaning or through removal of trash containing infectious materials.
e. Other personnel utilizing space in MSHC should be aware of and comply with University policy regarding Hazardous Waste and Bloodborne Pathogen training and policies.

III. Cleaning and Disinfecting
a. Definitions from Bankaitis & Kemp (2005)
    i. Cleaning: removal of gross contamination from contaminated instruments and areas without necessarily involving the killing of germs.
    ii. Disinfecting: process involving killing a percentage of germs.
b. Procedures will be used in the clinic areas including all sound rooms, hearing aid rooms all therapy rooms, speech clinic laboratory, and lobby as well as the sound rooms and surrounding suite space.
c. Containers with a cleaning and disinfecting solution will be in infection control/materials areas on the first floor.
d. Clorox or viricidal wipes will be in each therapy space and should be used to clean each room after every patient.
e. Sterilization materials will be limited to the infection control/materials rooms.
    i. Containers for sterilization chemicals will be provided with lids that must remain in place except when instruments are being placed or removed.
    ii. There will be no food or drink in these areas.

f. All soiled instruments needing cleaning, disinfection, or sterilization will have visual soil and debris removed with a germicidal cloth or enzyme soap prior to being placed in a cleaning and disinfectant bath.
    i. Personnel assigned to infection control duties will be responsible for transferring instruments to a sterilization bath and carrying out sterilization procedures.

IV. Infection Control Protocols
a. Environmental
    i. Surface Disinfection - Surfaces to be Cleaned will include counter tops, tabletops, doorknobs, light switches, chair armrests, and test equipment surfaces will be cleaned and disinfected following each clinic session or following test procedures (responsible party-student or employee completing their session).
        1. The table surfaces used for therapy, diagnostics, hearing aids, cochlear implants will be cleaned and disinfected following each use (responsible party-student or employee doing the hearing aid modifications).
        2. Headphones and other equipment used with a patient (such as the patient signal button) will be cleaned and disinfected with a disinfectant towelette following each use (responsible party-student or employee completing the testing).
        3. Toys used in clinic will be cleaned and disinfected following each use. Items may be cleaned in the dishwasher or washer & dryer located in the infection control/materials room.
        4. Areas used for disinfection and sterilization will be cleaned and disinfected daily (responsible party-the students assigned to infectious disease duties).
b. Surface Disinfection Procedures is a two-step process of cleaning gross contamination followed by a disinfectant to kill germs. A product containing both a cleaning compound and disinfectant can be used for both steps.
    i. Each sound room, test, or therapy area will be supplied with a hospital grade disinfectant/cleaner, wipes or spray and will be supplied with disposable drop-cloths.
    ii. During cleaning, gross contamination and debris will be removed with a paper towel or other disposable or cleanable device. The surface will then be wiped down with a disinfectant cloth or spray solution.
    iii. Disinfection will follow with a surface wipe or spray leaving it wet for at least two minutes, or longer if specified on the product label. The surface will then be wiped dry, if needed.
c. Disinfection
    i. Immersion: Noncritical objects and instruments will be immersed for disinfection. These items include rod portion of the endoscope, earmolds, and pen light tips that appear to be free of blood, mucus, or cerumen. These items will remain in the disinfectant bath as long as directed on the disinfectant instructions.
    ii. UV disinfection of instrumentation: All facets of instruments exposed to exhalation by unmasked faculty, volunteers, students, and patients will be

disinfected for at least 10 seconds by use of a UV wand, and the space in which this activity occurred will be illuminated by UV light for at least 15 minutes. Signage on the door of the space will warn personnel of the period that the UV light has been on.

d. All equipment that meets humans is assumed to be contaminated and is always to be handled with gloved hands prior to and during cleaning and disinfection.
e. Handling, Cleaning and Disinfecting Hearing Aids and/or Earmolds
    i. The hearing aid and/or earmold will be received from the patient/patient in a disinfectant cloth, gloved hand, tissue, or container provided for this purpose.
        1. There will be small plastic bags and/or cardboard boxes available in all audiology test areas as well as front desk reception and the business office for receipt of hearing aids and earmolds.
        2. The business office staff will be instructed to have the hearing aid/earmold placed in a bag or box by the patient and will place the box in the Hearing aid workroom for drop box clinic.
        3. Under no circumstances will the office personnel handle the hearing aids or earmolds that have not been cleaned and disinfected.
    ii. Audiologists and students will wear gloves during cleaning and disinfecting process.
        1. Due to the inability to immerse hearing aids or cochlear implants for disinfection, disinfectant cloths or spray (Sanitize H/H) on a tissue will be used to clean and disinfect the surface areas of the hearing aid or cochlear implant.
        2. Then the hearing aid or cochlear implant should undergo UVC light source treatment.
        3. Earmolds, which can be separated from behind-the-ear hearing aids or cochlear implants, will be immersed in a cleaning solution.
        4. All instruments (wax loop, picks, etc.) used to clean a hearing aid or cochlear implant will be disinfected following use.
    iii. Stethoscope ear tips and the tip that attaches to the hearing aid or cochlear implant will be cleaned with a disinfectant cloth following each use and then immersed in sterilizing solution, if needed.
    iv. Once cleaned and disinfected, hearing aids or cochlear implants can be placed in the test box for electroacoustic analysis or for programming purposes. The hearing aid surface or cochlear implant will be disinfected again following test completion.
    v. The disposable boxes or plastic bags used to receive and store hearing aids or cochlear implants are to be thrown out once the hearing aid or cochlear implant is returned to the patient.
    vi. Syringes used during earmold impressions are to receive surface disinfection with a disinfectant cloth or spray unless it encounters blood. In this instance, once wiped cleaned, should be immersed in sterilizing solution.

V. Sterilization
    a. Definitions from Bankaitis & Kemp (2005)

i. Sterilization: killing 100% of germs including endospores.

b. This procedure is required for instruments that contact blood, ear drainage, cerumen, mucous, sputum, or emesis.
    i. This includes probe tips, specula, stethoscope tips, oral appliances, and TEP.
    ii. Instruments used in cleaning hearing aids such as wax loops and picks may occasionally need sterilization if blood or ear drainage is encountered during their use.
    iii. Items belonging to or leaving with patients will typically be cleaned, disinfected, and returned to the patient.
    iv. If otoscopy reveals blood or visible ear drainage, sterilization of the earmold should be considered.
        1. Cold sterilization with 2% glutaraldehyde (Aurasept, Wavicide, etc.) or 7.5% hydrogen peroxide (Sporox) will be utilized.

c. Sterilizing solution will be placed in a covered plastic tray, which is approved for this use.
    i. Gloves and eye protection will be worn when handling the solution.
    ii. Lab coats for protection of clothing are available for use when changing sterilizing solution.
    iii. Instruments will be removed, rinsed in water, and set on a prepared surface to dry. Once the instruments are dry, they will be returned to the appropriate storage containers.

VI. All disinfectant and sterilizing solutions will be changed every 14-28 days as directed on the label, or sooner if the solution becomes visibly soiled, viscous and/or fails the effectiveness test.
    a. Infection control logs will be posted in each cleaning area. Each solution change will be dated and recorded on the log.
    b. MSDS instructions will be followed in safe handling and disposal of the solution.

VII. Handling and Cleaning the Rod Portion of the Endoscope (see Appendix III - C for full cleaning procedures)
    a. The soiled portion of the endoscope will be cleaned with enzyme soap and rinsed.
    b. The fiber optic portion of the endoscope is immersed in the sterilizing solution (Cidex Plus) for 20 minutes.
    c. Rinse with running water until residue is cleaned.
    d. Dry with a soft cloth and place in the clean endo-caddy.
    e. This procedure must be done for each trial with a new person/patient.

VIII. Human
    a. Hand Washing
        i. Hands will be thoroughly cleaned before and after each patient (and after handling any potentially biohazardous material) through handwashing or use of an alcohol- based handrub.
        ii. The hand washing procedure to be followed is remove rings (as able), start water, lather the soap scrubbing palms, the backs of hands, between fingers, under fingernails, over the wrists, and onto the forearms. Rinse the soap off with running water, dry the hands using a paper towel, then turn off

the water using the damp towel, not clean hands. Avoid using hot water as this may increase risk of dermatitis. Or apply alcohol-based hand rub product to palm of one hand and rub hands together, covering all surfaces of hands and fingers, until hands are dry. Follow the manufacturer's recommendations.

b. Gloves and Protective Clothing
    i. Gloves will be worn for all procedures that may create exposure to blood, cerumen, ear drainage, or contagious rashes. This applies to earmold impression removal, oral mech exams, endoscopic exams, otoscopy, immittance, OAEs, placing and removing immittance tips and specula, any hearing aid procedure and other situations as deemed appropriate by each clinician.
    ii. Gloves must be changed after each procedure is complete and prior to any additional procedure requiring gloves if the user encounters unclean objects, one's clothing, hair, skin, or body fluids or leaves the room.
    iii. Gloves will be worn for cleaning and disinfecting instruments, toys, hearing aids, and when handling sterilizing solutions. Two pairs of gloves will be worn when treating patients known to be infected with HIV or Hepatitis B.
    iv. Gloves are to be removed by grasping the wrist of one glove with the other gloved hand, pulling the glove off into an inside/out position. The ungloved hand will then be used to grasp the inside edge of the remaining glove and pull off in an inside/out manner folding the first glove inside the second. Gloves will then be placed in a trash receptacle.
    v. Before and after glove removal, the clinician should wash hands with soap and water or use alcohol-based hand sanitizer when soap and water are not immediately available.
    vi. When using the endoscope or during VNG appointments (where exposure to emesis or other contaminants may occur), each clinician present in the room will be required to wear a disposable gown, buttoned lab coat, or other protective covering available in the lab. This must be discarded before leaving the lab. Lab coats are to be cleaned if soiled (or weekly if used regularly) in the infection control room. Personal lab coats may be taken home for cleaning if stored in a plastic or paper bag before leaving the clinic.

IX. Personal Illness
    a. Staff, volunteers and students are encouraged to use good judgment regarding personal illness and the potential for spreading illness to co-workers and patients.
    b. Staff, volunteers and students should not enter the clinic, at MSHC or off-site, if they are sick. Illness that creates an inability to attend to clinic responsibilities may necessitate a change in clinical faculty member, student clinician, or evaluation/therapy appointment (refer to Policy C-107).
    c. Symptoms of infectious disease include, but are not limited to fever, rash, cough, sore throat, vomiting, and diarrhea.
    d. Medical treatment for strep throat, conjunctivitis, and other contagious diseases is required before returning to clinic.

X. Waste Management

a. Most waste can be placed in the regular trash that will consist of plastic lined trash bins placed throughout the clinic area.
b. Items that are visibly contaminated with cerumen, ear drainage, blood, mucous, sputum or emesis will be disposed of as Biohazardous Waste in the red biohazard bags. After the red bag is sealed, it is transferred to the biohazard disposal container for Stericycle, Inc. pick-up as scheduled or specially arranged. To arrange a special pick- up, call 800-633-9278.
c. All other waste contaminated with cerumen, saliva, drainage, etc. can be placed in the regular trash.
d. Tongue blades are to be broken before they are discarded.
e. Used disinfectant will be disposed of in accordance with the directions found on the Material Safety Data Sheet (MSDS) for each product which will be kept in a binder in the Infection Control Room.
f. All sharps are to be disposed into an approved Sharps Disposal Container. When the container is full, then it is to be placed into the Stericycle, Inc. disposal container for biohazard materials. Stericycle, Inc. will pick-up the disposal container biannually unless notified otherwise. Sharps may include needles, razor blades, broken glass and/or syringes.

XI. References

a. Bankaitis, A. U., & Kemp, R. J. (2005). *Infection control in the audiology clinic* (2nd ed.). Auban. Clark, J. G., Kemp, R. J., & Bankaitis. (2019, November 30). *Infection Control in Audiological Practice*.
b. Audiology. https://www.audiology.org/publications/guidelines-and-standards/infection-control- audiological-practice.
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d. Kemp, R. J., & Iles, R. L. (1996). *Infection control for the professions of audiology and speech-language pathology*. Oaktree Products.
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g. Kulpa, J. (1990). AIDS/HIV: Implications for Speech-Language Pathologists and Audiologists. *ASHA*, *32*(12). https://doi.org/10.1044/policy.tr1989-00234