	Association of Hearing Instrument Practitioners of Ontario
Section	**Quality Assurance**
Sub-Section	**Infection Control Policy** **December 2014**

1.0 Purpose of the Policy

Members of the Association of Hearing Instrument Practitioners of Ontario (AHIP) are aware of the need to disinfect the various hearing aid devices and related equipment they work with as a required task under current standards of practice. Since infection control is extremely important to the health and safety of both patients/clients and practitioners, the following document describes in detail, strategies for both the prevention of transmission of infectious disease and procedures for infection control in the hearing aid clinic.

These guidelines serve a number of purposes:

- Serve as a reference document for AHIP registered Hearing Instrument Practitioners in identifying appropriate procedures for infection control in the context of their practice
- Assist the AHIP registered Hearing Instrument Practitioner in his/her ongoing practice assessment
- Provide guidance for pursuing continuous learning
- Provide guidance for managing the hearing aid clinic in relation to infection control
- Assist in the development of college curricula and training relating to infection control
- Inform other stakeholders, i.e. other professions, clinic owners, regulators and the public on the infection control procedures considered advisable for the AHIP registered Hearing Instrument Practitioner

The Association of Hearing Instrument Practitioners of Ontario recommends these guidelines to its members as appropriate strategies to prevent infectious disease transmission in the hearing aid clinic. The control of infectious disease is an ongoing responsibility of the health care workers, and systems need to be in place to disinfect:

- All hearing aid work received by the clinic
- Work areas in the facility
- Laboratory equipment and accessory material
- All hearing aid work prepared for shipping

2.0 Guidelines Respecting Infection Control

Infection control involves taking steps to prevent the spread of infectious agents to you and your employees. Developing an effective and efficient infection control plan in the hearing aid clinic requires that you understand:

1. How to prevent transmission of infectious diseases,
2. Management, if exposure occurs, and
3. Guidelines for your infection control plan.

3.0 Importance of Infection Control / Rationale

Every health professional has the responsibility towards the safety of all their patients/clients. They are responsible with creating and maintaining healthy and safe work environments. There is an abundance of direct patient care within a hearing aid clinic, and therefore patients/clients and clinicians are potentially exposed to an infectious environment.

There are many procedures commonly undertaken within the hearing aid clinic that are specific to hearing aids.

Specifically, these guidelines have been developed to assist Hearing Instrument Practitioners to meet professional standards and government regulations relating to infection control measures.

3.01 *Standard Precautions*

A special note must first be made concerning terminology. There are several terms used when referring to infection control in health care. These include "universal precautions", "routine precautions", and "standard precautions".

The Laboratory Centre for Disease Control, Health Canada, the Public Health Agency of Canada and the U.S. Centers for Disease Control developed the strategy of *Universal Precautions* or guidelines on the prevention of transmission of blood borne pathogens in health care settings to prevent contact with patient blood and body fluids. In 1996, Centers for Disease Control expanded the concept and changed the term to *Standard Precautions*. *Standard Precautions* apply to contact with: 1) blood; 2) all body fluids, secretions, and excretions (except sweat), regardless of whether they contain blood; 3) non-intact skin; and 4) mucous membrane.

The ***Standard Precautions*** contained within the Infection Control Policy for Hearing Instrument Practitioners of Ontario refers to protective and standard care steps to be used when Hearing Instrument Practitioners are in direct or indirect contact with all patients/clients. All patients/clients should be considered potential carriers of or susceptible hosts to infectious disease.

4.0 Independent Procedures

The following independent procedures follow the general protective and standard care steps outlined by the Standard Precautions. These independent procedures are commonly incorporated as sub-steps in the hearing aid specific procedures.

4.01 ***Personal Protection***

a) Hand Hygiene

"In health care settings, adherence to hand hygiene recommendations is the single most important practice for preventing the transmission of pathogens in health care and directly contributes to patient safety."

An acceptable hand hygiene procedure clearly indicates when and how hand hygiene should be executed. As described in the Best Practices for Hand Hygiene the ***four moments for hand hygiene*** in health care include;

1. BEFORE initial patient/patient environment contact
2. BEFORE aseptic procedures
3. AFTER body fluid exposure risk
4. AFTER patient/patient environment contact

There are two methods of killing/removing microorganisms on hands;

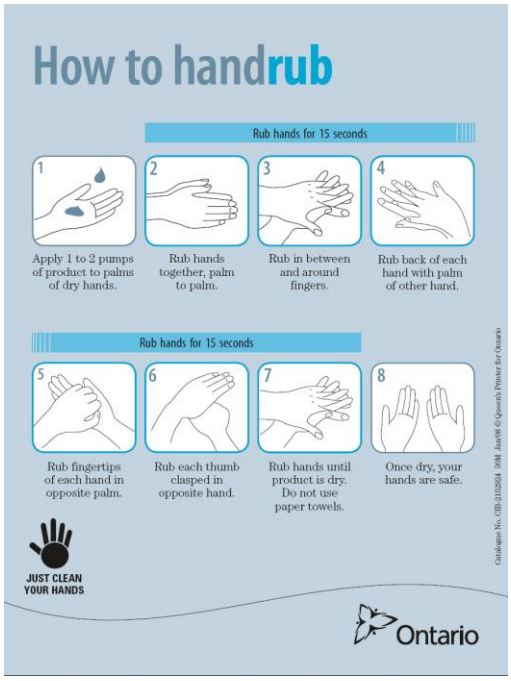
1) Hand sanitizing with a 70 – 90% alcohol based hand rub (ABHR) is the preferred method (when hands are not visibly soiled) for cleaning hands.

Using easily-accessible ABHR in health care settings takes less time than traditional hand washing and has been shown to be more effective than washing with soap (even when using an antimicrobial soap) and water when hands are not visibly soiled.

2) Hand washing with soap and running water must be performed when hands are visibly soiled.

The effectiveness of alcohol is inhibited by the presence of organic material. The mechanical action of washing, rinsing and drying is the most important contributor to the removal of transient bacteria that might be present.

Cleaning with alcohol-based hand rub



Hand washing with soap and water

(Taken from "Just Clean Your Hands", Ontario's hand hygiene program for hospitals. Available online at: www.justcleanyourhands.ca)

b) Personal Barriers

Personal barriers include gloves, masks, eye protection, gowns, head covers and more. For the purpose of these guidelines gloves will be discussed in detail.

Common hearing aid procedures for which gloves should be worn.

Gloves should be worn in the hearing aid dispensing environment during procedures:

1. where open wounds and/or blood is present
2. involving handling of earmolds or hearing aids including, but not limited to, accepting earmolds or hearing aids from patients/clients, during cleaning or disinfecting stages of earmolds or hearing aids, during earmold or hearing aid modification procedures
3. involving removal or handling of earmold impressions
4. involving cleaning or disinfecting other instruments contaminated with cerumen or other bodily substances
5. requiring submersion or removal of instruments into or from cold sterilant
6. where hands are likely to become contaminated with potentially infectious material including cerumen

4.02 *Instruments and Surfaces*

Differentiation of common terms utilized in infection control procedures

Cleaning:	removal of gross contamination
Disinfecting:	killing a percentage of germs
Sterilization:	killing 100% of germs including endospores

a) Sterilization of Critical Instruments

Sterilants, by definition, must neutralize and destroy spores because if the spore is not killed, it may become vegetative again and cause disease.

Within a hearing aid clinic, reusable instruments that may contact cerumen and are intended to be used with multiple patients/clients should be sterilized, including curettes used for cerumen removal, immittance and otoacoustic emissions probe tips, reusable specula used for otoscopic examination, or tools used to clean hearing aid ports. Cold sterilization should be used within the hearing aid clinic environment. Cold sterilization involves soaking instruments in liquid chemicals for a specified number of hours. Items must be thoroughly cleaned for cold sterilization procedures. Sterilization of critical instruments will occur at the end of the day, in preparation for the next business day, to allow for appropriate soaking times according to the manufacturer's instructions.

Cerumen as Infectious Material

Cerumen is not an inherently infectious substance; however it may contain dried blood or mucus. If there is visible blood in or on cerumen, then that cerumen specimen is a potentially infectious substance and the instruments contacting it must be sterilized before and after contact. One difficulty is that the nature of cerumen makes it very difficult for a clinician to determine whether blood, particularly dried blood, is present. For this reason instruments should be sterilized after use when visibly contaminated with cerumen, ear drainage or blood.

b) Surface Disinfection

Patient-care rooms, hearing aid repair areas and reception counters should be disinfected regularly. Disinfectant spray can be used with paper towel as well as approved disinfectant towelettes. This should be done at the beginning of the day and immediately following patient/client appointments.

4.03 *Waste*

Infectious waste must be disposed of appropriately.

Appropriate disposal of infectious waste in a hear aid clinic

Regular Receptacle	Most waste contaminated with ear discharge or cerumen
Separate, Impermeable bag and then in regular receptacle	Waste contaminated with excessive cerumen or mucus
Impermeable bags labeled for biohazard waste	Materials containing significant amounts of blood (not anticipated in hearing aid clinics)

5.0 Hearing Aid Specific Procedures

Infection control is an important component of standard clinical practice. What dispensing professionals do in the hearing aid clinic and how procedures are performed influence patient/client outcomes and safety as well as, the overall health of all those involved. Recommendations for the most common procedures in the hearing aid clinic are provided in the following sections.

5.01 *Ear impression procedures*

Hands should be washed following standard hand hygiene guidelines. In the absence of visible open wounds or ear drainage proceed with insertion of otoblock and injection of impression material. As material sets prepare impression box and paperwork. Before removal, put on appropriate sized gloves. Immediately place impression in box with pre-folded paperwork. Remove gloves and close box. Disinfect patient-care surface.

5.02 *Dispensing hearing aids*

Handle newly-ordered hearing aids with gloved hands. Immediately before dispensing aid clean hearing aids with paper towel of disinfectant towelette. During the appointment, put on gloves prior to educating patient/client about proper techniques for insertion and removal of hearing aid. Disinfect patient-care surface.

5.03 *Accepting hearing aids or earmolds from patients/clients*

Accept hearing aid from patient/client with gloved hands. If patient/client removes aid before gloves are on, instruct the patient/client to place the aid on a paper towel of disinfecting towelette. Wear protective eye wear when cleaning hearing aid vents or other ports with a pick. Disinfect hearing aid with disinfectant towelette. Once finished handling hearing aid, clean any contaminated picks and probes, then sterilize. If visibly contaminated with cerumen sterilization is indicated. Disinfect patient-care surface.

5.04 ***Performing a hearing aid listening check***

Pre-clean and disinfect hearing aid surface. Attach hearing aid to listening probe tip of hearing aid stethoscope. Once complete on one or both aids, clean and disinfect listening probe tip and earpieces of stethoscope. Disinfect patient-care surface.

5.05 ***Performing electroacoustic analysis of hearing aid***

Pre-clean and disinfect hearing aid surface. Perform the analysis. Ensure that the coupler is cleaned and disinfected. Disinfect patient-care surface.

5.06 ***Performing real-ear measurements***

Only perform in absence of visible open wounds or ear drainage. Be careful not to handle or touch the contaminated tube. Immediately discard disposable probe-tubes. For re-usable probe-tubes, immediately clean and disinfect the contaminated probe-tube. Disinfect patient-care surface.

5.07 ***Earmold or hearing aid modification procedures***

Pre-clean and disinfect the entire surface of the hearing aid. Prior to the use of grinding or buffing wheel;

- Put on a pair of safety glasses.
- Put on a mask to cover nose and mouth.
- Put on a pair of gloves.
- Position protective cover of grinding of buffing wheel to minimize exposure to particles from wheel or hearing aid.

Before re-inserting hearing aid into patient's/client's ear, disinfect the earmold or hearing aid with fresh disinfectant towelette. Disinfect patient-care surface.

References

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