

# PRACTICE DIRECTION: Infection Prevention Control (IPC) for Mobile Delivery of Services

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The College of Dental Hygienists of Manitoba, Professional Practice Committee is responsible for developing professional resource documents for dental hygienists. Council approves these documents, of which, the purpose is to explain, enhance, add, or guide dental hygiene practice in accordance with The Dental Hygienists Act and Regulations. It is the responsibility of the dental hygienist to understand and comply with these documents.

# College of Dental Hygienists of Manitoba's Practice Direction: Infection Prevention and Control (IPC) for Mobile Delivery of Services

#### **Purpose**

This practice direction is to inform registrants of the College of Dental Hygienists of Manitoba (CDHM) about the current standards for infection prevention and control (IPAC) for mobile delivery of dental hygiene services.

## **Background**

In Manitoba, mobile delivery of dental hygiene services may be provided in many practice settings. Such settings could include care homes, group homes, community centres, educational facilities and/or hospital settings. (See Practice Directions for <a href="Practice Settings Requirements">Practice Settings Requirements</a> and <a href="Supervision Requirements">Supervision Requirements</a> before engaging in the provision of care in an alternative practice setting). Mobile dental hygiene practice requires the use of portable dental equipment and infection prevention and control practices. Maintaining asepsis in the practice environment is essential.

Dental hygiene infection control recommendations from the Centre for Disease Control and Prevention<sup>1,2</sup> apply to all settings where dental hygiene services are provided.<sup>3</sup>

A mobile dental hygiene setting should observe standard precautions and infection prevention recommendations.

#### Requirement

This Practice direction is to be used in conjunction with all other relevant regulatory and public health guidelines, standards and facility policies (examples include national and provincial ministerial orders, regulatory IPAC Guidelines, RHA policies).

To ensure appropriate infection control measures are being met when providing dental hygiene service in a mobile/alternative setting it is necessary to consider the following:

#### Site considerations

Dental hygiene services should only be provided in environments that are able to support safe, quality care. When evaluating the environment, dental hygienists should consider ways in which to minimize the transfer of microorganisms from soiled hands, soiled instruments, or soiled environmental surfaces.<sup>4</sup>

#### Site Evaluation

- Is there a sink for handwashing?
- Is there adequate space to separate clean/sterile from dirty supplies and instruments? (A distance of two meters is required from an active treatment area from a storage area of clean supplies and equipment).

- Are there electrical outlets in close proximity?
- Treatment rooms or instrument reprocessing areas that are carpeted or have upholstered or wood furnishings are not acceptable, as they are difficult to clean and disinfect.

## Asepsis

Clinical contact surfaces are very likely to be contaminated with blood and body fluids through direct spray, spatter, contaminated instruments, or from the clinician's gloved hands.<sup>4</sup>

Examples of potential clinical contact surfaces include:

- chair controls and switches
- headrest
- drawer and faucet handles
- light handles and switches
- countertops
- radiography equipment
- pens
- chairside computers
- keyboards and monitors
- telephones
- doorknobs
- reusable containers of dental materials

Clinical contact surfaces should be cleaned and disinfected between patients and at the end of the workday using an appropriate intermediate-level disinfectant.

Treatment areas should be well-organized and kept free of unnecessary equipment and supplies, especially on countertops.

Gloves should be worn while cleaning and disinfecting surfaces to prevent occupational exposure to infectious agents and hazardous chemicals.

Equipment barriers may be placed to protect equipment receiving high use and high volumes of bioburden, such as light handles. Equipment barriers are placed to reduce time for cleaning organic (blood, saliva) and inorganic materials (paste, varnish) from surfaces.

Suitable barrier materials include:

- clear plastic wrap
- plastic tubing
- plastic bags
- plastic-backed paper
- plastic sheets
- other moisture-proof materials

Barriers can become contaminated during treatment. Barriers require replacement between patients or when visibly soiled or damaged.

Following barrier removal, underlying surfaces should be examined to ensure they did not inadvertently become contaminated, and equipment is disinfected before applying a new barrier.<sup>4,5,6</sup>

## Transportation of equipment and supplies

All supplies must be placed into designated containers for ease of transport and for safety. (Transport Canada)

All containers for storage or transporting contaminated instruments, must be puncture proof, secure, and labelled as biohazard, e.g., plastic bins (smooth, impervious with locking lids).

Containers are cleaned and disinfected using the 2-step cleaning and disinfecting process.

All supplies and transport containers are kept contained and/or closed during dental hygiene treatment

4 containers are required for storage/transport (all lids and containers clearly labelled with permanent marker):

- 1. clean supplies
- 2. sterilized instruments
- 3. dirty instruments
- 4. liquids

#### Sterile equipment

Keep sterile equipment packaged and in a clean, disinfected, dry container to transport (labeled as clean/sterile).

Inspect packages daily to ensure sterility is maintained.

#### Dirty equipment

Handling of dirty instruments must reduce the risk of exposure and/or injury to personnel and clients, as well as reducing the risk of contamination of environmental surfaces.

While wearing appropriate PPE (utility gloves, mask, eye protection, and faceshield), discard disposables (gauze, floss, etc.), clean debris off instruments, use enzymatic cleaning solution/spray\* (following manufacturer's instructions) to keep instruments moist until reprocessing, contain in closed cassette and place cassette into "dirty" container.

A "dirty" container is a sealed, sturdy, leak-proof container to prevent cross contamination during transportation. A biohazard label must be visible and secured to the container.

Since dental/dental hygiene instruments and devices cannot be cleaned immediately after use, the instruments or devices must be kept moist for transport, and decontaminated the same day, using

either ultrasonic cleaner or washer/disinfector. The instruments are then packaged and sterilized per the manufacturer's instructions, same day or in the near future (next day).

Ideally, the RDH will transport/equipment without stops (site of clinical treatment to site of reprocessing).

Additionally, **chain of custody is required**. However, the RDH is responsible for the equipment/instruments at all times.

\*An enzymatic cleaning solution/spray specifically intended for this purpose must be used, following manufacturer instructions and recommendations.

NOTE: Contaminated dental devices must not be left overnight, even if enzymatic cleaner is used.

# Reprocessing of Equipment

Always follow manufacturer's instructions for reprocessing.

Some environmental and structural considerations for a reprocessing area include a separate room with a one-way instrument flow, alcohol-based hand rub stations and a dedicated hand hygiene sink. The sink in the reprocessing area must not be used for hand hygiene.

Classification of devices for reprocessing is based on intended use and the potential risk of disease transmission.

Handpieces and motors are cleaned, sterilized, and maintained as per the manufacturer's instructions.

#### Critical:

Items penetrating body tissues allowing for direct contact with the bloodstream or another sterile area of the body, such as periodontal scalers. Semi-critical items with the potential for contact with open lesions, or irritated mucous membranes, are treated as critical items.

Minimum reprocessing requirements: cleaning followed by heat sterilization after every use; sterility must be maintained until the next point of use.

#### Semi-Critical:

Items that come into contact with non-intact skin or intact mucous membranes, but do not penetrate body surfaces, such as mouth mirrors or re-usable impression trays.

Minimum reprocessing requirements: cleaning followed by heat sterilization after every use; sterility must be maintained until the next point of use.

NOTE: Check manufacturer's instructions for those items that can be sterilized, but only for a limited number (five) of times (mouth mirror with plastic handle, etc.). A log will need to be kept ensuring the number of reprocessing cycles is not exceeded before requiring disposal.

NOTE: Never use surface disinfectants on instruments that will be sterilized. Disinfectant leaves a permanent precipitate on the instrument during sterilization and surface disinfectant is not meant for intraoral contact.

### Non-Critical:

Items that do not touch the client or touch only intact skin, but no mucous membranes, such as environmental surfaces, blood pressure cuffs, etc.

Minimum reprocessing requirements: cleaning followed by intermediate level disinfection (i.e., tuberculocidal) or disposable barriers.

NOTE: Disposable barriers are not sufficient barrier protection on their own. The item still needs to be cleaned and disinfected prior to and after treatment.

## Single Use Items:

Single-use dental instruments or devices that are labeled by the manufacturer as single-use must not be reused on any other patient. Items considered to be single use item include any item with packaging that states it is "consumable" or "disposal" or is marked as a 2 within a circle and crossed.



Single-use medical/dental devices are only used on an individual patient for a single procedure and then must be discarded. If uncertain, treat item as single use.

#### Waste disposal

Waste must be separated into biomedical/hazardous waste and general waste and disposed of in appropriate manner (e.g., according to manufacturer's instructions for use) to prevent the transmission of possible infections and environmental contamination from contaminated waste.

## General waste:

General waste items are no more infectious than residential waste and requires only careful containment and removal.<sup>6,7</sup>

Plastic garbage bags should be removed and tied off when ¾ full and replaced with a new bag. Do not overfill.<sup>6</sup>

Dispose of general waste on site. If unable to dispose of on site, bag waste carefully, ensuring that the exterior of the bag is not contaminated or compromised until it can be transported to a public garbage bin.

The majority of soiled items generated in the provision of dental hygiene care do not require any special disposal methods, other than careful containment and removal.<sup>7</sup> Items such as gauze, cotton rolls, and examination gloves that have come in contact with blood, saliva, or other bodily

fluids are safe to go in general waste as long as it does not release liquid or semi-liquid blood if compressed.<sup>6,7</sup>

## Biomedical-hazardous waste:

Biohazardous waste includes blood saturated gauze, saliva saturated gauze (release liquid or semi-liquid blood if compressed) or removed tissue.

Do not dispose of hazardous/biomedical waste in with regular garbage. It must be bagged separately in a yellow, leak-resistant, biohazard bag and labelled as biohazardous with universal biohazardous label. Biomedical waste must be released to designated carrier for proper disposal.

Do not dispose of biohazardous materials at a site/facility that does not have a disposal arrangement with an approved waste carrier. 4,7,8

## Sharps disposal

Sharps includes needles, syringes with needles, scalpel blades, clinical glass or anything else capable of causing cuts or punctures.

Sharps must be separated from other types of waste and collected in an appropriate sharps container. The container must be clearly labelled as a sharps container with a universal biohazard symbol. The container should be yellow in colour, puncture-resistant and leak-proof.<sup>9</sup>

Sharps must be disposed of properly, immediately at point of use. Do not transport used sharps without containing them.

Once the sharps container has reached its max capacity, it must only be released to an approved biomedical waste carrier for disposal. It cannot be placed in the regular garbage.

At the end of day, disinfect the exterior of the sharps container using the 2-step cleaning and disinfecting process.

Place sharps container into a transportation container – never transport loose sharps.

# Suction lines and suction waste disposal

High volume evacuator and low-volume suctions must be purged between patients by aspirating water or an appropriate evacuation system cleaner. At the end of the day, flush the suction lines with an enzymatic cleaner or appropriate cleaning solution.<sup>4,10,11</sup>

The suction waste container must be emptied during the day if it becomes <sup>3</sup>/<sub>4</sub> full and/or at the end of the treatment day.

Suction waste can be disposed of into a designated toilet or utility sink. No one else should be present in the bathroom/utility room during waste disposal, and all PPE must be worn (gloves, eye protection, faceshield, mask). A biohazard sign should be displayed outside of the bathroom/utility room to ensure that no one uses the room during disposal. When pouring waste into designated toilet or utility sink, minimize splashing as much as possible.

If using a toilet, ensure that the lid is closed before flushing the suction waste. Once the toilet has completed flushing, perform the 2-step cleaning and disinfecting process of the handle, lid, seat, and any other contaminated area.

If using a utility sink, run water after pouring the suction waste, perform the 2-step cleaning and disinfecting process of the faucet, sink and any other contaminated area.

Replace the suction waste canister and preform the 2-step cleaning and disinfecting process on the exterior of the suction container.

#### Waterlines

All dental units should use water that meets drinking water standards (i.e., < 500 CFU/mL of heterotrophic water bacteria; < 0 Total coliform; < 0 *E. coli*). Independent reservoirs—or waterbottle systems—alone are not sufficient but preferred over municipally supplied units.

Any waterlines should be purged at the beginning of the day by flushing them out for 2-3 minutes. Any dental handpieces, ultrasonic scalers, or air/water syringes should be flushed of water and air for a minimum of 20–30 seconds after each patient. 1,4,7,10,11

Consult with the manufacturer of their dental unit or water delivery system to determine the best method for maintaining water quality and the recommended frequency of monitoring. 1,4,7,10

# **Applicable Legislation**

According to the Dental Hygienists Act and Regulations, the included practices of scaling and root planning, debridement and curettage, administering oral anesthetic, orthodontic and restorative procedures, and vital tooth whitening, are subject to the practice settings, as follows:

- *i.* a dentist's office
- ii. in a facility
- iii. as part of an oral health program
- *iv.* a setting approved by the patient's dentist.

See the <u>Practice Direction for Settings Requirements</u> and the <u>Practice Direction for Supervision</u> <u>Requirements</u> to review other practice considerations.

### **CDHM Competencies**

## The CDHM Registrant:

- Demonstrates awareness of and compliance with the policies of the practice environment (e.g. infection control procedures, safety guidelines, emergency preparedness, etc.). (Assessment #67)
- Applies principles of infection control. (Implementation #22)
- Adapts and applies clinical techniques to community settings (e.g. Aseptic technique, operator/client positioning, etc.). (Implementation #26)
- Applies principles of risk management for client health and safety (e.g. universal precautions, considering latex allergies, etc.). (Implementation #56)

- Applies principles of risk management for practitioner health and safety (e.g. universal precautions, etc.). (Implementation #57)
- Uses materials and equipment according to manufacturer's specifications. (Implementation #64)
- Manages hazardous substances and wastes. (Implementation #66)

<sup>\*</sup>This interpretation guideline reflects current knowledge and is subject to periodic review and revisions with on-going research.

#### References

- 1. Centers for Disease Control and Prevention (CDC). Guidelines for Infection Control in Dental Health-Care Settings 2003. December 2003.
- 2. Centers for Disease Control and Prevention (CDC). Summary of Infection Prevention Practices in Dental Settings: Basic Expectations for Safe Care. Atlanta, GA: Centers for Disease Control and Prevention, US Dept of Health and Human Services; October 2016.
- 3. Organization for Safety, Asepsis and Prevention (OSAP). Infection Control Checklist for Dental Settings Using Mobile Vans or Portable Dental Equipment. 2019.
- 4. College of Dental Hygienists of Ontario (CDHO), Infection Prevention and Control (IPAC) Guidelines. December 2018. Revised September 2019.
- 5. College of Registered Dental Hygienists of Alberta (CRDHA). Infection Prevention and Control (IPC) Requirements. Section 6: Specific Mobile Practice Considerations.
- 6. College of Dental Hygienists of British Columbia (CDHBC). Infection Prevention and Control Guidelines. Part F: Additional Considerations for Alternative Practice Settings. July 2012.
- 7. Royal College of Dental Surgeons of Ontario (RCDSO). Infection Prevention and Control in the Dental Office. Standard of Practice. November 2018.
- 8. Environment Canada. Dental Wastes Best Management Practices Guide for the Dental Community. April 2005.
- 9. Transport Canada, Government of Canada; the national standard on "Packaging of Category A and Category B infectious substances (Class 6, Division 6.2) and clinical, (bio)medical or regulated medical waste". Available at: https://tc.canada.ca/en/dangerous-goods/shipping-infectious-substances
- 10. Ontario Agency for Health Protection and Promotion (Public Health Ontario). IPAC Checklist for Dental Practice Settings: Core Elements. July 2019.
- 11. Lux, J. Infection control practice guidelines in dental hygiene Part 1. Can J Dent Hygiene. 2008. 42(2). 63-103.