

Management of Aerochambers™/chambers/spacers Infection Prevention and Control (IP&C) Communication Form

1. Issue:

Aerochambers™, “chambers”, or “spacers” are used throughout the region to deliver medications via metered dose inhalers. According to various manufacturer’s instructions for use (MIFU) any chamber **provided by the region** shall be cleaned at intervals ranging from one week to every month. The cleaning needs to be done in a designated area away from patients/resident/clients (PRCs). The alternative is discarding the chamber at weekly or monthly intervals instead of cleaning it. It should be noted that this Communication Form only addresses cleaning and not disinfection, therefore the chamber must be dedicated to only one PRC. ***This communication form does not address chambers of persons receiving care in their place of residence.***

2. Recommendations:

- 2.1. Consult MIFU for recommended cleaning interval for the chamber (e.g., one week, one month).
- 2.2. Each facility/site/program shall decide which “Option” (1 or 2) is to be used by the staff to manage Aerochambers™/chambers/spacers (chamber). The option will be communicated to those responsible for chamber management (e.g., front line staff). The decision will not be made by the individual staff member.
- 2.3. The chamber expiry date – usually once a year according to the MIFUs, (different from the cleaning or discard date) shall be noted in the PRC records. The chamber shall be disposed of on that date, when Option 2 is being used.

OPTION 1:

- 2.3.1. Discard chamber instead of cleaning. (i.e., if the MIFU says clean after one week, discard after one week of use). Or if person receiving care is being discharged, give the chamber to them to take home, if facility/site/program allows.
- 2.3.2. Label/store chamber with “discard date” (dd/mmm/yyyy) and specific PRC’s identifier.

OPTION 2:

- 2.3.3. Only one chamber should be cleaned at a time to ensure chamber is returned to the correct PRC
- 2.3.4. The labelling, disassembling, cleaning and drying of the chamber (the cleaning process) must ensure chambers are returned to the correct PRC.
 - The chamber must be returned to the same PRC after the cleaning and drying process, because it is not being disinfected
 - Label chamber or storage bin (if using) with the specific PRC’s identifier. Labelling may be done with a felt tip permanent marker, if name washes off during the cleaning process, relabel it. Discuss with site/program ICP/designate other appropriate ways for labelling.
 - If using a storage bin, clean and disinfect it with an IP&C Approved Disinfectant prior to returning the clean and dried chamber to it.
 - Note on Care Plan (or equivalent) when the next cleaning date is (when to clean the chamber according to MIFU) and the expiry date of the chamber (e.g., six months, one year)
- 2.3.5. Perform hand hygiene throughout the cleaning process according to the [4 Moments of Hand Hygiene](#)

- 2.3.6. The cleaning process must be done in a designated space away from the PRC bed side, care area. The space must have:
- Adequate room to disassemble, clean and dry the chamber
 - A dedicated sink/basin for cleaning, do not use a PRC sink or a hand hygiene sink
 - Have easy access to hand hygiene facilities
 - Have a surface that can be easily cleaned and disinfected.
- 2.3.7. Do not use any area where clean items are handled or stored
- 2.3.8. Area, including the sink, must be cleaned and disinfected with an [IP&C approved disinfectant](#) prior to chamber cleaning process
- 2.3.9. The disassembly and steps for cleaning must follow the chamber specific MIFU
- 2.3.10. Cleaning a chamber in a healthcare setting requires specific products:
- A neutral detergent (e.g., Neutrawash) with a dispensing pump. Do not use dish soap in a healthcare setting for cleaning healthcare equipment
 - In healthcare facilities, a dishwasher is not an option for cleaning chambers, due to the risk of cross contamination
 - Place chamber on clean paper towel to air dry, far enough away from the area where the chamber was being cleaned to avoid cross-contamination with splashes and sprays. Never reuse paper towel to dry a different chamber.
- 2.3.11. Wear PPE according to [Point of Care Risk Assessment \(PCRA\)](#) during the cleaning process. E.g., gloves at a minimum, fluid resistant gown, mask and eye/face protection if splashes and sprays are expected
- 2.3.12. After process, while chamber is air drying:
- Clean and disinfect work surface with and [IP&C approved product](#) and allow to air dry
 - Clean and disinfect sink/basin used to clean chamber and allow to air dry prior to cleaning more chambers
 - Once chamber is air dried, clean and disinfect surface under the paper towel the chamber was drying on.
- 2.3.13. Once chamber is air dried, return to designated PRC storage spot.

3. Background

3.1. Discussion of issue:

- 3.1.1. Chamber must be cleaned or discarded at intervals ranging from every week to every month
- 3.1.2. There is a cost associated with discarding chambers on a weekly or monthly basis
- 3.1.3. Chambers have varying MIFUs that describe the cleaning process
- 3.1.4. The cleaning process requires:
- Following the chamber specific MIFU
 - Each chamber be dedicated to the user and be labeled/stored to ensure it cannot/will not be used by

another PRC

- In healthcare facilities, a dishwasher is not an option for cleaning chambers, due to the risk of cross contamination
- A process is needed to ensure the cleaned* chamber is returned to the correct PRC
- Dedicated healthcare worker time is required
- Correct PPE, neutral detergent and non-fibre/paper towels for drying
- A designated space with adequate room, not in the PRC care area, to disassemble, clean and dry the chamber, which may be difficult to designate in some settings.

3.2. Options & Analysis reviewed prior to decision making:

- 3.2.1. Discarding, instead of cleaning a chamber, saves time and resources
- 3.2.2. Cost of discarding the chambers
- 3.2.3. Healthcare facilities must have a designated space (as described in 2.1.5) for the cleaning process, and have education and training on the correct process
- 3.2.4. Cost associated with healthcare facility providing the following:
 - Neutral detergent with a pump dispenser to clean the chamber
 - A process to ensure the chambers are not returned to the wrong PRC during the cleaning process, because the chamber is not being disinfected to a level where it can be safely used by another PRC.
 - Time for only one chamber to be disassembled, cleaned and dried at a time to avoid mix-up of chambers and prevent cross contamination

4. References:

- 4.1. Canadian Standards Association (CSA Group). National Standards of Canada. Z8000-18. Canadian healthcare facilities (2018). (Accessed: March 7th 2024)
- 4.2. Canadian Standards Association (CSA Group). National standards of Canada. CSAZ314:23. Canadian medical device reprocessing in all health care settings (2023). (Accessed: February 14th 2024).

* Process does not include disinfection

Communication Form Contact:

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