SUPPLEMENTAL GUIDELINE:

Best Practice Guidelines for
the Management of
Clostridium difficile Infection
In Home Care Settings

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Best Practice Guidelines for the Management of *Clostridium difficile* Infection in Home Care Settings

Introduction:

Home care refers to care or support provided within a client’s home environment. Care may be provided on a short-term or long-term basis and involve nursing care, home support, respite or palliative care. Within this supplemental guideline, the client, resident, or individual receiving healthcare or support will be referred to as the ‘client’ throughout.

There is little evidence to suggest that the provision of healthcare in the home setting results in substantial disease transmission. Most infections in the home setting are related to procedures and devices such as urinary or intravascular catheters. Risks of transmission mainly relate to hand hygiene and aseptic practices of the caregiver, cleaning and disinfection of equipment and supplies used between clients, and environmental cleanliness (PICNet, 2014).

Once in the home setting, clients with *Clostridium difficile* infection (CDI) are at low risk of transmitting the infection to their friends or families or their healthcare workers (HCW). Risks may be higher if family members are immunocompromised.

This guideline provides information for HCWs who provide home care/support to clients with suspected or confirmed CDI. The type of care or service provided in the home will depend on the type of worker (e.g. nursing care vs home support). HCWs may travel to several homes in one day. Many of the infection prevention and control measures in this setting are aimed at preventing spread of *Clostridium difficile* to another client during subsequent home visits.

This supplemental guideline provides home care setting specific direction and can be used as an accompaniment with the information provided in the Department of Health and Wellness *Best Practice Guidelines for the Prevention & Management of Clostridium difficile Infection In Prehospital, Acute & Continuing Care* (2013) where applicable.
Infection Prevention and Control Measures in the Home Care Setting

1. Contact Precautions

Routine Practices are used for every client regardless of disease status. In addition to Routine Practices and point-of-care risk assessment (Appendix B), Contact Precautions should be initiated for any client in the home when CDI is suspected. Precautions should be initiated at the onset of symptoms, even before CDI lab test results are available.

Personal Protective Equipment

Contact Precautions require the use of personal protective equipment (PPE), specifically gloves and a long-sleeved gown. Gloves should be worn for all direct contact with the client as well as direct contact with the client’s immediate environment, personal items, and equipment. A clean gown to protect the HCWs clothing from contamination should be worn when there is substantial contact with the client or environmental surfaces (e.g. bathing, wound care, toileting).

Discontinuation of Precautions

Contact precautions for clients with suspected or confirmed CDI may be discontinued when the diarrhea is resolved (e.g. 48 hours without symptoms of diarrhea, e.g. formed or normal stool for the client) or if its cause is determined not to be infectious. Re-testing for *C. difficile* cytotoxin is not necessary to determine when precautions may be discontinued.

2. Hand Hygiene

Effective hand hygiene is essential to limit the spread of *C. difficile*. While the use of an alcohol-based hand rub (ABHR) is considered the optimal choice for hand hygiene for HCWs, performing hand hygiene with soap and water may be theoretically beneficial when caring for clients with CDI. Access to adequate hand washing sinks may be challenging in the home setting. Sinks used to clean hands must have potable water and single-use disposable towels available.

Hand hygiene should be performed by HCWs frequently with the following considerations:

1) When performing hand hygiene in a client’s home, the HCW should use their own hand hygiene supplies (e.g. soap and/or ABHR) provided by the agency.

2) When washing hands with soap and water, the sink used by the HCW should be visibly clean, have potable water and disposable single-use towels. HCWs should not use the bathroom used by the client to clean their hands.
3) If an adequate hand washing sink is not available, ABHR should be used and hand hygiene with liquid soap and water should be performed as soon as a suitable hand washing sink is available.

4) If the HCWs hands are visibly soiled with dirt, blood or other body fluids and there is no running water available in the home, the HCW can clean their hands with an individual-use hand wipe (impregnated with plain soap, antimicrobials, or alcohol). ABHR should be used after the use of hand wipes, and hands should be washed with liquid soap and water once a suitable sink is available.

5) Hand hygiene is performed before and after glove use.

Considerations for client hand hygiene:
1) Clients with CDI who are able to participate in self-care should be taught and reinforced about the importance of hand hygiene before eating or preparing food, after using the toilet or other personal hygiene activities, as well as before leaving their homes for common/public areas, and when returning home from public places.

2) Clients who are unable to perform hand hygiene due to physical or mental impairments should be assisted with hand hygiene prior to meals, after toilet use, etc.

3. Client Care Equipment and Supplies

✓ Evaluate clients on a case-by-case basis to determine whether dedicated equipment is indicated.
✓ Limit the amount of reusable equipment that is brought into the home of clients.
✓ Minimize supplies going into the home and discard any unused disposable equipment or supplies from the home following discharge from home care services.
✓ Whenever possible, leave reusable client care equipment in the home until the client is discharged from home care services.
✓ Any reusable equipment left in the client’s home should be stored in a manner that prevents contamination (e.g. in a closed container, away from pets).
✓ Reprocess non-critical client care equipment (e.g., stethoscope) that cannot remain in the home by cleaning and using a low-level disinfectant before removing from the home. Alternatively, contaminated reusable items can be stored in a sealable plastic bag/container for transport to an appropriate facility for cleaning and disinfection.
✓ Personal Protective Equipment

Computer/Paper Medical Records
Computer and medical records should be placed on a clean, hard surface away from client care. Do not take a computer or medical record into an area where contamination is likely to take place (e.g. client point-of-care, bathroom). Perform hand hygiene between client contact and documentation. If possible, the medical record or technological equipment can be accessed at the completion of the client visit for charting.
Supply or Work Bag

The supply or work container/bag is not commonly associated with spreading infections.

- Supply/work bags should be made from a minimally porous material that is easily cleaned or washable.
- When used to bring items to a home where the client has CDI, the bag should be placed in an area away from client care. The outside of the bag should be wiped with a disinfectant product upon leaving the client’s home.
- In addition, the bag should be thoroughly cleaned and disinfected whenever it is visibly soiled, and at regular intervals with a disinfectant product (e.g. at least weekly).
- HCWs should perform hand hygiene prior to reaching into the bag to obtain supplies.
- Any equipment used on the client should be cleaned & disinfected prior to being returned to the bag.
- Inside the supply or work container/bag, semi-critical items (e.g. respiratory equipment such as nebulizers, nasal prongs, O2 masks) should be kept covered, and critical items (e.g. scissors, forceps) should be contained in sterile wrappers that will prevent contamination and exposure to moisture.

4. Handling Linen, Dishes and Cutlery

In home care settings, there are no special precautions required for linen, dishes or cutlery.

The following considerations should be given when managing linen in the client’s home:

- Soiled linen should be placed in a soiled linen basket at the point of use, if available.
- Soiled linen should be handled with a minimum of agitation to avoid contamination of air, surfaces and persons.
- Heavily soiled linen should be rolled or folded to contain the heaviest soil in the centre of the bundle. Any feces that can be removed with a gloved hand and toilet tissue should be placed into a bedpan or toilet for flushing.
- Wash linen with laundry detergent in hot water and tumble dry on a hot setting.
- Wash linen separately if heavily soiled with feces.

5. Client Appointments and Transfers

Suspected or confirmed CDI does not prevent a home care client from being seen within the healthcare system when medically appropriate (e.g. essential diagnostics and therapeutic tests/treatment) provided that the receiving unit/department/facility is able to comply with requirements for accommodation and Contact Precautions. Otherwise, appointments should be minimized or rescheduled until symptoms of CDI have resolved.
When booking medical transportation (e.g. ambulance) for transfer or emergencies for a client with known or suspected CDI, notification of the client diagnosis should be done at the time of booking.

6. **Environmental Cleaning & Disinfection**

The type and amount of environmental cleaning and disinfection done in the home will be dependent on the HCW role and duties. Successful cleaning and disinfection requires manual scrubbing followed by application of a disinfectant product to the surface.

When the HCW role involves routine environmental cleaning & disinfection, the following should be considered;
- Chlorine bleach is preferred based on its ability to kill *C. difficile* spores. Refer to Table 1 in the Guidelines regarding the *Dilution of Household Bleach (Sodium Hypochlorite) to Achieve Desired Chlorine Levels* (page 26).
- Pay attention to areas that may be soiled or contaminated with feces such as the bathroom (e.g. toilet and sink).
- After cleaning frequently touched surfaces and client equipment, use a disinfectant liquid or wipe according to direction on the product label, paying close attention to the required contact time. Always follow the manufacturer’s directions for use and ensure there is sufficient wet-contact time on items/surfaces. Disinfectants may need to be reapplied to ensure sufficient contact time.
- Clients and their family should be encouraged to perform frequent cleaning and disinfection of the home using chlorine bleach (preferred) or household products.

7. **Disposal of Fecal Matter**

The safe disposal of fecal matter is of critical importance in preventing contamination of the HCWs hands, clothing, and the environment.

- HCWs should wear appropriate personal protective equipment during the disposal process.
- Handle bedpans and commodes in such a way as to avoid contamination of the home with *C. difficile* spores.
- If possible, the client should use a dedicated bathroom.
- If the client has a toilet bowl brush, it should be dedicated to the toilet used by the client. The toilet brush should be discarded when the client has recovered.

**Supplemental Reference:**