



Guidelines for pharmacists and pharmacy technicians

Hand hygiene

Background

Hand hygiene is the most effective way of preventing the transmission of healthcare-associated infection (HAI) to patients, staff, and visitors in all healthcare settings. Effective hand hygiene programs include proper training and education on policies, procedures, and practices that are reviewed on a regular basis.

Guidelines

1. Hand hygiene is performed in accordance with the 4 Moments of Hand Hygiene.
 - a) Before contact with a patient or patient's environment (e.g., donning personal protective equipment (PPE), entering an examination room, providing patient care).
 - b) Before a clean or aseptic procedure (e.g., wound care, handling intravenous devices, handling food, preparing medications).
 - c) After exposure or risk of exposure to blood and/or body fluids (e.g., hands visibly soiled, after removal of gloves).
 - d) After contact with a patient or patient's environment (e.g., doffing PPE, leaving examination room, after handling patient care equipment).
2. Appropriate products are selected and used for hand hygiene.
 - a) Alcohol-based hand rubs (ABHRs) containing 60-90% alcohol are used for performing hand hygiene, except in situations described in "b".
 - b) Plain soap and water are used
 - when hands are visibly soiled with food, dirt, blood, body fluids and/or a buildup of ABHR;
 - during food preparation; or
 - following glove removal when providing care for patients with diarrhea and/or vomiting.
 - c) Antimicrobial (antiseptic) soap is only used in limited circumstances, such as before aseptic procedures, and is not used for routine hand hygiene.
 - d) Hand cleaning wipes/towelettes are only used for hand cleaning in exceptional circumstances when sinks and running water are not available; hand hygiene using ABHR must be done following use of hand cleaning wipes/towelettes.
 - e) If hand lotions are used, they are compatible with hand hygiene products selected.
3. ABHR is used in accordance with the following procedure:
 - a) Hands are not visibly soiled and are dry before use.
 - b) Enough ABHR is applied to ensure coverage of all hand surfaces.
 - c) Product is vigorously rubbed over all surfaces of the hands and wrists, including: palms, space between fingers, back of hands and wrists, fingers, fingertips, and thumbs.
 - d) Hands remain wet for a minimum of 15 seconds.
 - e) Hands are rubbed until completely dry.

4. Soap and water are used in accordance with the following procedure:
 - a) Hands are wet with warm water and enough soap is applied to ensure lathering of all hand surfaces.
 - b) Hands are vigorously rubbed over all surfaces of the hands and wrists, including: palms, space between fingers, back of hands and wrists, fingers, fingertips, and thumbs.
 - c) Hands are rubbed for a minimum of 15 seconds.
 - d) Hands are rinsed under warm, running water.
 - e) Hands are dried with disposable paper towels.
 - f) Hands are not re-contaminated after washing (i.e., faucet is turned off and doors are opened with paper towel).
 - g) Paper towels are discarded in a waste receptacle.
5. Hand hygiene is supported by adequate infrastructure.
 - a) Hand hygiene products are as close as possible to the point of care.
 - b) Wall-mounted ABHR dispensers are installed in appropriate designated areas away from sinks and in accordance with the Alberta Fire Code. Areas include, but are not limited to:
 - examination rooms,
 - public areas (e.g., building entrance/exits),
 - nursing stations,
 - medication carts ,
 - staff rooms,
 - computer stations,
 - medical device reprocessing areas, and
 - clinical and medication preparation areas without sinks.
 - c) Hand hygiene products are not used past expiry. Date of expiration is visible on product containers.
 - d) Sinks dedicated for hand hygiene are not used for other purposes (e.g., equipment cleaning, waste disposal, food preparation).
 - e) Hand hygiene products are available for patients and visitors.
6. Employees that cannot perform adequate hand hygiene do not perform tasks that require hand hygiene.
 - a) Employees that cannot perform adequate hand hygiene include, but is not limited to individuals
 - wearing casts, dressings, and/or splints;
 - wearing artificial nails, nail enhancements, and/or chipped nail polish;
 - wearing hand jewellery other than a simple ring (i.e., band); and
 - experiencing hand sensitivity reactions (e.g., dermatitis).

- b) Tasks that require hand hygiene include, but are not limited to
- providing patient care,
 - reprocessing or handling surgical linens and/or medical devices,
 - preparing pharmaceuticals or medications, and
 - handling food.

7. Hand hygiene training and education is provided to new employees during orientation and ongoing thereafter.

References

- Alberta Health Services Infection Prevention & Control. 2011. [Hand Hygiene Policy PS-02](#).
- Alberta Health Services Infection Prevention & Control. 2011. [Hand Hygiene Procedure PS-02-01](#).
- Alberta Health Services Infection Prevention & Control. 2018. [Guide to Conduct Hand Hygiene Reviews](#).
- Public Health Agency of Canada. 2012. [Hand Hygiene Practice in Healthcare Settings](#).