

PROCEDURE VI-10.PROC.1	Hand Hygiene Procedures	DOMAIN Quality of Care
Sponsor: Chief Quality and Privacy Officer Lead(s): Corporate Director, Infection Prevention and Control		Date Approved: October 29, 2024
		Date Effective: October 30, 2024
		Date of Next Review: October 2027

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Purpose Statement:

To outline the required minimum **hand hygiene** procedures and technique to be followed within Covenant Health to prevent the transmission of microorganisms, reduce healthcare-associated infections, and promote the health and safety of **staff, patients, designated family/support persons** and visitors.

Parent Policy:

VI-10 [Hand Hygiene](#)

Applicability:

Proper hand hygiene is the single most effective practice in reducing transmission of microorganisms. All Covenant Health employees, members of the medical and midwifery staff, volunteers, students, and other persons acting on behalf of or in conjunction with Covenant Health, including contracted service providers shall perform proper hand hygiene with **alcohol-based hand rub (ABHR)** or soap and water in accordance with the four moments of hand hygiene and other indicated circumstances as outlined in this procedure and the Covenant Health hand hygiene policy.

Responsibility:

Hand hygiene is a shared responsibility. Staff shall be supported to encourage one another to perform hand hygiene, using appropriate technique, at the right moments as set out by this procedure and the Covenant Health hand hygiene policy.

Managers are responsible to address non-compliance with all provisions of this procedure.

Procedure:

1. Hand Hygiene Product Purchase and Management

- 1.1 Only Alberta Health Services (AHS)/Covenant Health-provided hand hygiene products (soaps, ABHR) and lotions/creams shall be used for hand hygiene.
- 1.2 Plain soap, antimicrobial soap, ABHR, and lotions/creams must be purchased in disposable, closed system containers that do not allow for “topping up” or refilling of the product.
- 1.3 Hand hygiene products must be clearly labeled, used prior to the expiry date, and discarded appropriately by the designated staff.

- 1.4 Disposal of expired ABHR or any unused portion of ABHR shall be as per manufacturer provided information and/or the product Safety Data Sheet (SDS).

2. Appropriate Selection and Use of Products for Hand Hygiene

- 2.1 ABHR is the preferred product for performing hand hygiene (see Appendix A: *Appropriate Product Selection for Hand Hygiene*), except:
- when hands are visibly soiled with blood, body fluids, dirt, or food/drink;
 - prior to, during, and after **food handling**;
 - immediately after using the toilet; and
 - when providing care for patients with diarrhea and/or vomiting.
- 2.2 Plain soap and water are recommended (see Appendix A: *Appropriate Product Selection for Hand Hygiene*):
- when hands are visibly soiled with blood, body fluids, dirt, or food/drink;
 - prior to, during, and after food handling;
 - immediately after using the toilet; and
 - when providing care for patients with diarrhea and/or vomiting.
- 2.3 When caring for patients with diarrhea and/or vomiting and a hand hygiene sink is not readily available at the **point-of-care**, ABHR may be used, followed by **hand washing** with soap and water as soon as an employee designated hand hygiene sink is available.
- 2.4 Bar soap for hand hygiene is not acceptable in the healthcare setting.
- 2.5 **Antimicrobial** (also called **antiseptic**) **soap** and water shall be used only before surgical and/or prolonged invasive procedures and should not be used for routine hand hygiene.
- 2.6 During a boil water advisory, tap water can be used to remove visible soil from hands followed by hand hygiene using ABHR.
- 2.7 Hand cleaning wipes/towelettes can be used for removing visible soil from hands when running water is not available. ABHR shall be used after the use of hand cleaning wipes/towelettes. Hands shall be washed with plain soap and water once running water is available. Consult with IPC if wipes/towelettes are not available.
- 2.8 Hand hygiene sinks shall be used exclusively for hand washing only and shall not be used for other purposes which may include, but not limited to equipment cleaning, blood/body fluid/waste disposal, waste fluid disposal (such as IV fluids, lipids, used antiseptics) or food preparation.

- 2.9 Use only Alberta Health Services (AHS)/Covenant Health-provided skin lotions/creams which are compatible with the ABHR and gloves provided for use.

3. Timing of Hand Hygiene

- 3.1 Hand hygiene is to be performed based on the 4 moments of hand hygiene.

Moment 1) Before contact with **patient/patient environment** such as entering a patient's environment and providing patient care.

Moment 2) Before clean or **aseptic procedures** such as:

- wound care;
- handling intravenous devices;
- insertion of central venous catheters;
- preparing medications;
- food handling;
- accessing clean supplies and linens;
- accessing items considered **clean objects**;
- accessing and putting on (donning) personal protective equipment (PPE), including gloves.

Moment 3) After **bodily fluid exposure risk**, even if gloves are worn, such as:

- removal of gloves (doffing) used to contact body fluids;
- if moving from one contaminated body site to another site during the care of the same patient.

Moment 4) After contact with patient/patient environment, such as:

- removing (doffing) PPE, including gloves;
- leaving a patient's environment before making physical contact with the **external environment** or another patient/patient's environment;
- after handling patient care equipment (e.g., monitors, and IV pumps).

- 3.2 Hand hygiene must also be performed, but not limited to:

- whenever hands are visibly soiled;
- at the beginning and end of each shift;
- before and after breaks;
- before and after using a shared computer, mobile device, or telephone;
- after using the toilet;
- after touching surfaces and/or objects considered **dirty objects** (privacy curtains, trash containers, items dropped on floor, sharps container, items from dirty side of environmental services cart);

- after blowing your nose/covering your cough.

4. Alcohol-Based Hand Rub Procedure

- 4.1 Ensure hands are dry and not visibly soiled.
- 4.2 Short sleeves are preferred when using ABHR. As applicable, roll up long sleeves and/or push up any wrist accessories prior to utilizing ABHR.
- 4.3 Dispense a palmful of ABHR so that all surfaces of both hands are covered and allows for a minimum of 20 seconds of rubbing.
- 4.4 Vigorously rub product over all surfaces of the hands (i.e., palms, fingers and thumbs, spaces between fingers and thumbs, backs of hands, under nails) and wrists.
- 4.5 Continue rubbing for at least 20 seconds until dry.
- 4.6 Periodically apply AHS/Covenant Health-provided hand lotion/cream to assist in maintaining skin integrity.

5. Hand Washing with Soap and Water Procedure

- 5.1 Short sleeves are preferred when hand washing. As applicable, roll up long sleeves and/or push up any wrist accessories prior to hand washing.
- 5.2 Adjust water flow and temperature to prevent splashing and to reach a comfortable water temperature.
- 5.3 Wet hands and wrists with running water.
- 5.4 Apply soap and thoroughly distribute over hands.
- 5.5 Vigorously rub hands together for at least 15-30 seconds, covering all surfaces of the hands (i.e., palms, fingers and thumbs, spaces between fingers and thumbs, backs of hands, under nails) and wrists.
- 5.6 Rinse soap from hands with fingers in a downward position under running water.
- 5.7 Dry hands by gently blotting with disposable paper towel.
- 5.8 If sink does not have foot controls or an automatic device, use disposable paper towel to turn off manual faucets.
- 5.9 Use a disposable paper towel to open door.
- 5.10 Discard the disposable paper towel.

- 5.11 Periodically apply AHS/Covenant Health-provided hand lotion/cream to assist in maintaining skin integrity.

6. Barriers to Effective Hand Hygiene

- 6.1 Staff wearing casts, dressings, bandages, splints or other upper extremity devices that interfere with proper hand hygiene shall not perform **direct patient care** or other tasks that require hand hygiene. These staff shall inform their manager and Covenant Health Occupational Health, Safety and Wellness (OHS&W).

Note: other tasks that require hand hygiene include, but are not limited to, reprocessing/handling of surgical linens and/or medical devices, preparing medications, food handling, accessing and/or distribution of clean supplies, etc.

- 6.2 Staff providing direct patient care or performing other tasks that require hand hygiene shall:
- keep natural fingernails clean and short. Fingernails should not extend past the fingertip;
 - not wear artificial nails, nail enhancements/embellishments, or nail polish;
 - not wear hand jewelry other than a simple ring (i.e., plain band);
 - maintain skin integrity; cover open cuts or sores on hands/wrists with waterproof bandages. Staff having skin sensitivities and/or conditions that affect skin integrity shall inform their manager and OHS representative for guidance.
- 6.3 Wrist accessories (e.g., watches, medical bracelets), if worn, shall be easily pushed up from the wrist to properly perform hand hygiene.
- 6.4 The use of gloves shall not be a substitute for performing hand hygiene. Staff shall:
- change gloves between each patient;
 - change gloves between performing contaminated and clean care procedures on the same patient (e.g. urinary catheter to an intravenous line);
 - perform hand hygiene before putting on and after taking off gloves.
- 6.5 Units, programs, and sites are supported in developing unit, program, or site-specific hand hygiene standards and/or guidelines that exceed the requirements outlined in this policy (e.g. bare below the elbow policies).

These standards and/or guidelines must be reviewed and approved by IPC prior to implementation.

7. Placement of Hand Hygiene Products and Considerations in Facility Design

- 7.1 Hand hygiene products shall be located at or as close as possible to point-of care.
- 7.2 Wall-mounted ABHR dispensers shall be installed in consultation with appropriate stakeholders following the [Alcohol Based Hand Rub Dispenser Placement Recommendations](#) and [Alcohol Based Hand Rub Dispenser Placement Algorithm](#).

Placement areas include, but not limited to:

- point-of-care
 - nursing stations
 - portable medication carts
 - patient room entrances
 - multi-use computer stations and other multi-use devices
 - entrances to facilities and units
 - cafeteria entrances
- 7.3 Staff shall assess risk and take appropriate corrective action where the placement or access to ABHR constitutes a patient and/or visitor safety risk (e.g., ABHR dispensers shall be placed where monitoring is easy to achieve and opportunities for intentional ingestion, vandalism, and theft are minimal).
- ABHR dispenser placement and ABHR storage shall follow the National Fire Code – Alberta Edition as outlined in the [Alcohol Based Hand Rub Dispenser Placement Algorithm](#).
- 7.4 In areas where ABHR dispensers cannot be wall-mounted due to risk of oral ingestion, AHS/Covenant Health-provided personal-size ABHR products should be available to staff.
- 7.5 The [Alcohol-based Hand Rub: Product Ingestion Risk Screening Tool](#) shall be used to help identify individuals at risk of ingestion of ABHR and to inform Covenant Health Staff in the development of a patient specific safety plan.
- The [Alcohol-based Hand Rub: Product Ingestion Care Management](#)

[Guidelines](#) provides information on what to do when a patient ingests ABHR.

- 7.6 To avoid product confusion, wall-mounted ABHR dispensers shall be clearly labeled and installed away from hand hygiene sinks.
- 7.7 The design and location of hand hygiene sinks shall be determined in consultation with Infection Prevention and Control and other appropriate stakeholders.
- 7.8 For hand drying fixtures, a dispenser for single-use towels incorporating a “no touch” design that allows only the towel be touched during dispensing is preferred.
- 7.9 Electric air hand dryers shall not be used for hand hygiene sinks.

Definitions:

Alcohol-based hand rub (ABHR) – means an approved Alberta Health Services/Covenant Health liquid, gel, or foam formulation containing alcohol (60-90%) which is applied to the hands to reduce the number of transient microorganisms.

Antimicrobial (also called **antiseptic**) **soap** means a detergent product containing an antiseptic agent at a concentration sufficient to inactivate microorganisms and/or temporarily suppress their growth.

Aseptic Procedure - for the purpose of this policy, is the process of preventing transmission of organisms to a person, object, or an area in a healthcare setting while providing care. This process can be either clean (medical asepsis) or sterile (surgical asepsis). The purpose of asepsis is to protect the patient against harmful germs, including the patient’s own germs, entering his/her body.

Bodily Fluid Exposure Risk - for the purpose of this policy, when the healthcare provider has engaged in a care activity involving actual bodily fluid contact or risk of bodily fluid exposure (e.g., contact with blood or blood products, emptying urinal/catheter bag, contact with mucosa, suctioning oral/nasal secretions, contact with non-intact skin, contact with inanimate objects that are likely to be contaminated). The healthcare provider must clean their hands prior to touching any other surface including the patient and/or patient environment.

Clean Objects – for the purposes of this policy, these are objects may come into contact with multiple sources of flora however their integrity must be maintained so they do not become contaminated. Clean Object list: lab Services cart, medication cart, wound care cart, “clean” side of Environmental Services cart, anesthetic cart, crash cart, patient care supplies in clean supply room/cart, clean linen cart, isolation cart, PPE supplies including glove box.

Designated family/support person(s) - means one or more individuals identified by the patient as an essential support, and who the patient wishes to be included in any encounters with the health care system, including, but not limited to, family, relatives, friends, and informal or hired caregivers.

Dirty Objects – for the purposes of this policy, these are objects that are potentially contaminated with

multiple sources of flora and are either difficult to clean or not cleaned between patients. These objects include trash containers/can, sink taps, privacy curtains, sharps container, and items dropped on the floor.

External Environment – for the purposes of this policy, these are shared areas within a healthcare facility that have multiple sources of flora (germs). This includes, but not limited to: shared areas within multi-bed rooms (e.g., the area outside of the patient’s curtain and the shared washroom), patient lounges, waiting areas, hallways, dining rooms, activity rooms, medication rooms, utility/storage rooms, nursing stations, etc.).

Food Handling – means to supply, sell, offer for sale, process, prepare, package, provide, display, service, dispense, store, and/or transport any food that is intended for public consumption.

Hand Hygiene – proper practices which remove microorganisms with or without soil from the hands (refers to the application of alcohol-based hand rub or hand washing with soap and water).

Hand Washing – means the use of running water and plain/antimicrobial soap to physically remove soil and transient microorganism from the hands with mechanical friction.

Manager – means the individual(s) who have the delegated human resources authority for directly planning, monitoring, and supervising direct (employee) reports.

Patient – means an adult or child who receives or has requested healthcare or services from Covenant Health and its staff, medical staff, volunteers, or individuals authorized to act on behalf of Covenant Health. This term is inclusive of residents, clients, and outpatients.

Patient Environment - for the purpose of this policy, means the areas immediately surrounding the patient that contains flora (germs) from a single patient.

Point-of-Care – is the place where three elements occur together – patient, healthcare provider, and care/treatment involving patient contact. The concept embraces the need to perform hand hygiene at recommended moments exactly where care takes place.

Staff – all Covenant Health employees, members of the medical and midwifery staff, volunteers, students, and other persons acting on behalf of or in conjunction with Covenant Health, including contracted service providers.

Relevant Covenant Health Policy and Policy Support Documents:	
A.	Policies: VI-10 Hand Hygiene
B.	Procedures:
C.	Guidelines:
D.	Job aids:

Appendix A: Appropriate Product Selection for Hand HygieneCovenant Health – Infection Prevention and Control Resources: [Hand Hygiene Resources](#)**E. Standards:****Keywords:**

Hand hygiene, hand washing, hands, ABHR, alcohol-based hand rub, soap and water, seconds, boil water advisory, diarrhea, vomiting, food handling, jewelry, ring, watch, bracelet, nails

References:

Alberta Health

- [Infection Prevention and Control Resources](#)

Alberta Health Services – Environmental Public Health

- [How to Use Water Safely in Acute Health Care Sites During a Boil Water Advisory](#)

Alberta Health Services – Infection Prevention and Control Resources

- [Alcohol-based Hand Rub Recommendations](#)
 - Dispenser Placement Algorithm
 - Dispenser Placement Guidelines
 - Product Ingestion Risk Screening
 - Product Ingestion Care Management Guidelines
- [Hand Hygiene Educational Resources](#)
- [Hand Hygiene Sink Requirements](#)
- [Infection Prevention and Control Healthcare Facility Design Guidelines Requirements](#)

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Past Revisions:

March 4, 2021

August 18, 2017

August 12, 2016

December 11, 2015

May 13, 2013

November 1, 2010

APPENDIX A**Appropriate Product Selection for Hand Hygiene**

Indication	Preferred Product Selection
Before and after direct contact with a patient	Alcohol Based Hand Rub
Before aseptic or clean procedures	Alcohol Based Hand Rub
Before and after touching objects or equipment in the immediate area around the patient	Alcohol Based Hand Rub
When hands are visibly soiled with blood, body fluids, dirt, or food/drink	Plain Soap and Water
After patient care or contact with used equipment in the patient's immediate environment when the patient has diarrhea and/or vomiting	Plain Soap and Water
Prior to, during, and after food handling	Plain Soap and Water
Immediately after using the toilet	Plain Soap and Water