



# Best Practices for Hand Hygiene Facilities & Infrastructure in Healthcare Settings

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## Facilities & Infrastructure Checklist

Prepared by the Provincial Hand Hygiene Working Group

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## Introduction

Effective hand hygiene kills or removes transient microorganisms on the skin and maintains good hand health. Hand hygiene should be performed:

1. *Before* initial contact with each patient or items in their environment;
2. *Before* performing an invasive/aseptic procedure;
3. *After* providing care involving risk of exposure to, or contact with, body fluids; and,
4. *After* contact with a patient or their environment.

There are two methods of killing/removing microorganisms on hands:

1. *Sanitizing with a 70 to 90 percent alcohol-based hand rub (ABHR)* is the preferred method for cleaning hands when hands are not visibly soiled. Using easily-accessible ABHR in healthcare settings takes less time than traditional hand washing and has been shown to be more effective than washing with soap and water when hands are not visibly soiled.
2. *Washing with soap and running water* must be performed when hands are visibly soiled. The effectiveness of alcohol is inhibited by the presence of organic material. The mechanical action of washing, rinsing and drying is the most important contributor to the removal of transient microorganisms that might be present. If hands are visibly soiled and running water is not available, healthcare providers can use a moistened towelette to remove the visible soil and then apply ABHR.

A lack of availability of hand washing facilities is a significant barrier for compliance with hand hygiene protocols. Studies have shown that providing a conveniently located hand hygiene sink in each patient room reduces Hospital Acquired Infection rates. In addition to sink placement, the following factors must be considered in policies relating to hand hygiene facilities and infrastructure:

- Appropriate placement of hand hygiene products (e.g. placing ABHRs at all points of care);
- Appropriate product selection (e.g. touch-free paper towel dispensers); and,
- Proper management of product dispensing containers.

All existing BC healthcare facilities should complete an Infrastructure Audit every three years to identify specific physical spaces that are non-compliant with Ministry of Health guidelines and requirements. The audit should identify the specific guidelines/requirements not being met, the reason for non-compliance, and a corrective action plan to achieve compliance.

## About This Document

This document is a supplementary checklist designed to be used as a guide to assist planning and compliance monitoring. This document should not be used as a replacement for referenced and published policies, guidelines, standards, and regulations.

This document is a compilation of best practices from 3 sources:

- The British Columbia (BC) Ministry of Health's (MoH) *Best Practices for Hand Hygiene*, 2012;
- Canadian Standards Association (CSA) standards Z8000 (Canadian Health Care Facilities – Planning, Design and Construction); and
- CSA standards Z317.1 (Special requirements for plumbing installations in health care facilities)<sup>1</sup>.

All “shall” statements in this document are indicated in **bold** font.

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<sup>1</sup> CSA Z317.1 standards are included in this checklist; Z317.1 items are specifically referenced in three Z8000 standards: 5.3.1.1, 12.4.3.1, and 12.4.7.

## Facilities and Infrastructure Guidelines and Standards

All “shall” statements in this document are indicated in **bold** font.

Ref	Guideline/Standard	Y/N/N-A	Comment
<b>Facility Design Process</b>			
1.	MoH p.35		<b>All hand hygiene facilities shall be developed in consultation with infection prevention and control personnel, and shall be consistent with all relevant risk assessments.</b>
2.	CSA Z8000: 4.5.1.4; 4.5.2; 7.5.1.3		<b>Planning and design of healthcare facilities shall make provisions to facilitate adequate hand hygiene facilities, including providing accessible hand hygiene sinks and waterless hand hygiene stations designed for caregiver and patient hand hygiene measures.</b>
3.	CSA Z8000: 5.2.2.1		<b>Design development shall provide the healthcare facility with the sign-off floor plans and site plan, upon which additional details are provided and coordinated between all major consultants and users. Healthcare facility review would include detailed elements such as location of infection prevention and control elements (e.g., hand hygiene sinks and waterless hand hygiene stations, storage for personal protective equipment (PPE), isolation rooms).</b>
4.	MoH p.36		<b>The healthcare facility design shall specify:</b> <ul style="list-style-type: none"> <li>i. the placement of hand hygiene sinks or stations within the facility, including their location in relation to other fixtures, and;</li> <li>ii. the design of such sinks or stations.</li> </ul>
5.	CSA Z8000: 5.2.2.1		<b>All users or their representatives shall sign off on the design development drawings prior to proceeding to finalized contract documents.</b>
<b>Sinks</b>			
<i>Availability and Placement of Sinks</i>			
6.	MoH p.35		There should be sufficient sinks to encourage and assist staff to readily conform to hand hygiene protocols.
7.	MoH p.36		Sinks need to be convenient and accessible and, where possible, follow established criteria regarding placement and design.
8.	MoH p.35		<b>A sink with warm running water shall be available for hand washing in all clinical areas, separate from and in addition to any sinks used in patient washrooms or in the preparation of clinical samples.</b>
9.	CSA Z8000: 7.5.11.2.1		<b>There shall be one hand washing sink inside every inpatient bedroom, adjacent to the entrance. (Sinks in patient washrooms do not meet this requirement.)</b>
10.	CSA Z8000: 7.5.11.2.1		<b>There shall be one sink inside every location that is meant to accommodate only one patient at any given time.</b>

	<b>Ref</b>	<b>Guideline/Standard</b>	<b>Y/N/N-A</b>	<b>Comment</b>
11.	CSA Z8000: 7.5.11.2.1	<b>There shall be a minimum of one sink per three patients inside every location that is meant to accommodate more than one patient at any given time, with a maximum distance of six meters between any patient station and the nearest sink.</b>		
12.	CSA Z8000: 7.5.11.2.1 9.8.3.4.1	<b>There shall be one sink in any space where treatment is provided, or where any procedure or physical examination is provided.</b>		
13.	CSA Z8000: 9.5.3.16.1	<b>Hygiene sinks and supplies shall be immediately outside of an operating room or procedure room.</b>		
14.	CSA Z8000: 7.5.11.2.1	<b>There shall be one sink inside every utility or soiled-material holding room, adjacent to the exit. Sinks or hoppers intended for processing contaminated material do not meet this requirement.</b>		
15.	CSA Z8000: 7.5.11.2.1	<b>There shall be one sink inside, or within six meters of, each nursing station.</b>		
16.	CSA Z8000: 7.5.11.2.1	<b>There shall be one sink inside each area where un-bagged soiled linen is handled.</b>		
17.	CSA Z8000: 7.5.11.2.1	<b>There shall be one sink inside, or within six meters of, any staff lounges.</b>		
18.	CSA Z8000: 7.5.11.2.1	<b>There shall be one sink within each laboratory work room and within six meters of each laboratory workstation.</b>		
19.	CSA Z8000: 10.2.3.2	<b>Decentralized housekeeping rooms shall include a hand hygiene sink and hopper sink.</b>		
20.	CSA Z8000: 7.5.11.2.1; 9.11.3.4	<b>There shall be one sink (and an emergency eyewash station) within each room or vestibule where medication is prepared, including pharmacies (sink must be away from the medication preparation area due to the risk of splashing and aerosolization).</b>		
21.	CSA Z8000: 7.5.11.2.1	<b>There shall be one sink within any room where food or patient-care item is prepared, including trays, infant formula, etc.</b>		
22.	CSA Z8000: Table 11.1	<b>In common areas, a hand hygiene sink shall be mounted on the wall adjacent to the door and in each subdivided space.</b>		
23.	CSA Z8000: 7.5.11.2.1	<b>There shall be one sink within any area where hands are likely to be contaminated, including but not limited to shipping-receiving areas, storage areas, or waste disposal areas, located adjacent to the exit.</b>		
24.	CSA Z8000: 7.5.11.2.1	<b>There shall be three sinks within each airborne precaution facility: one within the ante-room, one within the isolation room, and one within the bathroom, all located adjacent to the exits.</b>		

	Ref	Guideline/Standard	Y/N/N-A	Comment
25.	CSA Z8000: 7.5.11.2.1	<b>There shall be one sink either inside or adjacent to the entrance of each diagnostic MRI room.</b> Note that a metal trap is still required for these sinks; it will need to be located outside the MRI room's radio frequency cage, connected to the sink by a plastic pipe which passes through the cage.		
26.	CSA Z8000: 7.5.12	<b>A scrub sink (as distinct from a hand hygiene sink) shall be provided in any area where operative procedures are performed including ORs, delivery rooms, endoscopy suites, interventional radiology, and cardiac catheterization suites.</b>		
27.	MoH p.36	Sinks should be located in such a way and at sufficient distance that they do not contaminate clients/patients/residents cleaning supplies or adjacent counters through splashing.		
28.	MoH p.36	<b>If applicable, a wheelchair-accessible hand hygiene sinks shall be provided in addition to the hand hygiene sinks used by staff.</b>		
<b>Sink Usage</b>				
29.	MoH p.36	<b>Hand hygiene sinks shall not be dedicated to any other purpose.</b>		
30.	MoH p.36	<b>Sinks used for cleaning equipment or disposing of any waste fluids of any sort shall not be used for hand hygiene.</b>		
31.	MoH p.35	Hand washing sinks should be cleaned on a regular basis.		
32.	MoH p.35	Hand washing sinks should be regularly inspected to ensure they are maintained in good condition.		
33.	MoH p.35	<b>Paper towels and liquid soap shall be provided at each hand washing sink.</b>		
34.	MoH p.35	A current hand washing guide should be posted at each hand washing sink in order promote correct washing methods.		



	Ref	Guideline/Standard	Y/N/N-A	Comment
<b>Technical Specifications for Sinks</b>				
35.	MoH p.36	Wheelchair-accessible hand hygiene sinks should be wall-mounted, 510 mm long by 685 mm wide, and comprised of slab-type vitreous china with combination-set faucets and gooseneck spouts.		
36.	CSA Z8000: 7.8.8.2.5	<b>Washrooms for inpatient bedrooms for bariatric patients shall be designed and equipped with a sink that can support at least a 363 kg downward force. Note: Patients sometimes lean on sinks for support.</b>		
37.	MoH p.36	<b>Hand hygiene sinks shall be constructed of a non-porous material such as porcelain, enamel, vitreous china, or 18+ gauge stainless steel.</b>		
38.	CSA Z8000: 9.2.3.2.2	<b>All sinks and drains, including in the soiled utility room, shall have corrosion-resistant drains.</b>		
39.	MoH p.36	<b>Traps shall be metal, and gaskets shall be plastic or neoprene only.</b>		
40.	MoH p.36	<b>Traps shall be 40 mm diameter.</b>		
41.	MoH p.36	<b>Overflows shall not be used, as the difficulty of sanitizing them presents an unacceptable contamination risk.</b>		
42.	MoH p.36	<b>Flow rate shall be maintained at a level adequate to ensure the removal of soap residue.</b>		
43.	MoH p.36	<b>Cup and bar sinks are not appropriate as hand hygiene sinks. Hand hygiene sinks shall be designed with rims of minimal width, and with surfaces angled down towards the inside, in order to prevent both water building and the placement of objects on sink rims.</b>		
44.	CSA Z317.1: 8.3.1.1	<b>Sinks shall be self-rimming, counter mounted, or wall hung.</b>		
45.	CSA Z317.1: 8.3.1.1	<b>Sinks shall be equipped with concealed arm carriers (if wall hung).</b>		
46.	MoH p.36	The design of hand washing sinks (e.g., depth, position of drain) should prevent splash back that may contaminate hands or faucets. The minimum depth recommended by the CHICA-Canada Healthcare Facility Design Position Statement is 225 mm. The minimum inside dimensions should be 350 by 250 mm.		
47.	MoH p.36	<b>Backsplashes must extend a minimum 0.6 meters / two feet above sink level and a minimum of 25 cm/10 inches below sink level.</b>		
48.	MoH p.36	<b>Backsplashes must be seam-free. All edges must be sealed with a waterproof barrier. Backsplashes must include the area under the paper towel dispenser and soap dispenser.</b>		
49.	MoH p.36	<b>Sinks and spouts shall be designed in order to minimize splashing and/or aerosolization. For example, spouts shall not direct water directly into drains, but to the basin surfaces in front of those drains. Collars shall be placed such that runoff is directed into sink basins.</b>		
50.	CSA Z317.1: 8.3.1.1	<b>Sinks shall be equipped with gooseneck spouts.</b>		
51.	MoH p.36	<b>Spouts shall be free of aerators/modulators/rose sprays and shall not swivel.</b>		



	Ref	Guideline/Standard	Y/N/N-A	Comment
52.	MoH p.36	<b>Sinks shall not be capable of taking plugs.</b>		
53.	MoH p.36	<b>Strainers and anti-splash-fittings present an unacceptable contamination risk and shall not be used.</b>		
54.	CSA Z317.1: 8.3.2	<b>Lavatories for nursing stations, examination rooms, treatment rooms, and other similar locations shall be provided with blade handles with a minimum length of 100 mm or with other appropriate means to permit hands free operation.</b>		
55.	MoH p.36	Controls (faucets) should be operated by foot, elbow or knee. Electric eye operation is acceptable.		
56.	MoH p.36	<b>Temperature control shall not be automatic. A means to control the temperature of the sink manually shall be provided.</b>		
57.	CSA Z317.1: 8.1.7	<b>Where automatic faucets are used, provision shall be made for appropriate regulation of the temperature of the water delivered to the faucet. The design shall be such that activating the water does not contaminate the hands<sup>2</sup>. Note: Hot water should be recirculated close to the faucet. Temperature control is important as extremes can negatively affect skin integrity and hand hygiene practices. While electronic-type fixtures and fittings offer hands-free, sanitary, and simplified operation, contamination of electronic faucets has been linked to infection in patients. See the CDC/HICPAC document, Guidelines for Environmental Infection Control in Health-Care Facilities.</b>		
58.	MoH p.36	<b>Any electric eye controls shall be designed with alternate modes of use in case of power interruptions.</b>		
<b>Additional Sink and Room Requirements (By Service)</b>				
<b>Adult Day Health Care Programs</b>				
59.	CSA Z8000: 8.8.2.5.4	<b>All communal activity areas shall have convenient access to a hand hygiene sink or waterless hand hygiene station.</b>		
60.	CSA Z8000: 8.8.2.6.8	<b>The healthcare facility shall have at least one toilet and one sink for every ten participants.</b>		
<b>Ambulatory Care – General</b>				
61.	CSA Z8000: 9.3	<b>The staff workstation, hand hygiene sink, and supplies shall be convenient and provided at a ratio in accordance with current infection prevention and control guidelines.</b>		
62.	CSA Z8000: 9.2.3.5.5;	<b>Hand hygiene sinks shall be directly accessible and distributed uniformly as follows:</b> <b>i. within treatment areas at a minimum ratio of 1:3 stations;</b>		
63.	9.2.3.5.6	<b>ii. hand hygiene stations shall be at the entrance of each treatment room;</b>		
64.		<b>iii. there shall be one hand hygiene station for each chair or bed; and,</b>		
65.		<b>iv. at least one hand hygiene station shall be located in each treatment pod.</b>		

<sup>2</sup> Class C facilities need not comply with the requirements of this Clause but shall comply with applicable local codes.

	Ref	Guideline/Standard	Y/N/N-A	Comment
66.	CSA Z8000: 9.2.3.5.1	In areas where haemodialysis or haemoperfusion are routinely performed, hand hygiene sinks shall have a separate water supply and drainage facility that does not interfere with haemodialysis piping.		
67.	CSA Z8000: 9.2.3.5.8	A personal protective equipment (PPE) alcove shall be located immediately outside the precaution room to hold gloves, goggles, face shields, masks, gowns, and a waterless hand hygiene station.		
<b>Ambulatory Care – Oncology</b>				
68.	CSA Z8000: Table 9.3	Convenient access to a stainless steel hand hygiene sink shall be provided (in addition to separately required special equipment stainless steel wash sink, and an eyewash station).		
<b>Burn Units</b>				
69.	CSA Z8000: 8.7.2.1	Design of burn treatment services shall include single inpatient bedrooms complete with hand hygiene sink for staff. <i>Note: For new construction (i.e., where the plumbing does not have existing biofilms), the use of ultraviolet lights in the supply pipes for the hand hygiene sink can reduce the spread of infection from water systems. Environmental controls and ventilation systems provide a positive pressure environment. This includes a separate anteroom.</i>		
<b>Clinical Laboratories</b>				
70.	CSA Z8000: 9.7.2.3	Hand hygiene sinks and process sinks, as well as emergency shower and eyewash stations, shall be provided.		
71.	CSA Z8000: 9.7.2.2; Table 9.7	Hand hygiene sinks shall be provided at the entrances and exits to the laboratory and shall be distributed throughout the department. (If multiple stations, not less than 1 sink for every 4 places).		
72.	CSA Z8000: 9.7.2.2	Provision shall be made for a clean space with a hand hygiene sink in the phlebotomy area for the preparation of trays and storage of phlebotomy carts.		
73.	CSA Z8000: Table 9.7	A biosafety cabinet, cryostat, microscope, hand hygiene sink, LIS/LAN workstation, stainer/cover slipper, and staining sink shall be provided.		
<b>Critical Care</b>				
74.	CSA Z8000: Table 8.2	Critical care rooms shall have a staff zone with hand hygiene station, waste disposal system, and computer station.		
<b>Emergency Care</b>				
75.	CSA Z8000: Table 9.4	A utility sink with a plaster trap shall be provided in addition to the hand hygiene sink.		
<b>Inpatient Rooms</b>				
76.	CSA Z8000: 7.5.7.1	There shall be a washroom with a toilet and sink for each inpatient. Toilets shall not be located in inpatient bedrooms.		

	Ref	Guideline/Standard	Y/N/N-A	Comment
77.	CSA Z8000: 7.5.7.1	In services where patients will not use a toilet (e.g., ICUs and nurseries), the washroom may be omitted; <b>however, each room with inpatient beds shall have a means for staff to dispose of human waste, comprising either:</b> <ul style="list-style-type: none"> <li>i. a separate closed toilet room with hand hygiene sink</li> <li>ii. a separate closed waste management mechanism with an adjacent hand hygiene sink</li> </ul>		
78.	CSA Z317.1: 8.3.1.2	<b>Each patient room in a Class A-1 or A-2 HCF shall have two lavatories: one for patient care and one for personnel hand hygiene.</b>		
<b>Maternal and Infant Care</b>				
79.	CSA Z8000: 8.3.3.8.1	<b>Locations for baby bath demonstration shall have a hand hygiene sink.</b> <i>Note: Mobile baby/infant baths should not be used.</i>		
80.	CSA Z8000: Table 8.3 5b	<b>There shall be one hand hygiene sink per four infant stations.</b>		
<b>Medical Device Reprocessing</b>				
81.	CSA Z8000: Table 9.6	<b>Dedicated cleaning sinks shall be provided close to the area where use of reusable equipment is ongoing.</b>		
82.	CSA Z8000: 9.6.3.4	<b>Where disinfection and sterilization facilities are required, dedicated ventilation, cleaning sinks, and equipment shall be provided.</b>		
83.	CSA Z8000: Table 10.1	<b>Hand hygiene sinks shall be conveniently located at all entrances to and exits from the decontamination area.</b>		
84.	CSA Z8000: Table 10.1	<b>Hand hygiene sinks or waterless hand hygiene stations shall be located in all personnel support areas, such as staff lounges and change rooms.</b>		
85.	CSA Z8000: Table 10.1	<b>Accessible, adequately supplied, and properly functioning soap dispensers and towel dispensers, or waterless hand hygiene stations shall be made available.</b>		
86.	CSA Z8000: Table 10.1	If electronic sensors are used, there should be a back-up system for operation during power outages.		
87.	CSA Z8000: 10.7.4.7	<b>Whenever possible, multi-person contact with high-touch work surfaces shall be minimized through the use of automated equipment and related design features built into the Medical Device Reprocessing Department.</b> <i>Note: Examples of methods to reduce contact include motion-activated waterless hand hygiene stations and motion-activated door openers.</i>		

	Ref	Guideline/Standard	Y/N/N-A	Comment
<b>Operating and Procedure Rooms</b>				
88.	CSA Z8000: 9.5.3.2.2	<b>Stage one recovery/post-anesthetic care units (PACUs) shall contain water hand hygiene stations. One hand hygiene sink shall be provided in locations designed for one patient to be present at a time, or a minimum of one hand hygiene sink shall be provided for every four beds (uniformly distributed to provide equal access for each bed).</b>		
89.	CSA Z8000: 9.5.3.2.3	<b>Where outpatient surgeries are to be part of the surgical environment, and where outpatients receive sedation or simply require observation following a procedure, a separate stage two or step-down recovery room shall be provided. These rooms shall contain:</b>		
90.		<b>i. waterless hand hygiene stations;</b>		
91.		<b>ii. a clinical sink;</b>		
92.		<b>iii. one hand hygiene sink for locations where one patient is present at a time;</b>		
93.		<b>iv. a minimum of one hand hygiene sink per every four patients for locations that accommodate four or more patients at a time; and</b>		
94.		<b>v. hand hygiene sinks shall be distributed to provide equal access from each location (i.e. recovery chair/lounge or bed).</b>		
95.	CSA Z8000: 9.5.3.4.8	<b>A sub-sterile service area shall be provided and be equipped with a hand hygiene sink. This area may serve one or more operating or procedure rooms.</b>		
96.	CSA Z8000: 9.5.3.4.10	<b>The clean workroom shall contain a work counter, a hand hygiene sink, and storage facilities for clean supplies.</b>		
97.	CSA Z8000: 9.5.3.4.11	<b>Soiled workrooms shall contain a flushing-rim clinical sink or equivalent flushing-rim fixture, a hand hygiene sink, a work counter, and space for waste receptacles and soiled linen receptacles.</b> <i>Note: Rooms used only for temporary holding of soiled material may omit the flushing-rim clinical sink and work counters. However, if the flushing-rim clinical sink is omitted, other provisions for disposal of liquid waste shall be provided.</i>		
98.	CSA Z8000: 9.5.3.5.2	<b>Appropriate areas shall be provided for male and female personnel (orderlies, technicians, nurses, and doctors) working within the surgical suite, as follows:</b>		
99.		<b>i. the areas shall contain lockers, showers, toilets, hand hygiene stations, and space for donning surgical attire;</b> <b>ii. toilets and hand hygiene stations shall be convenient to the work areas in the OR and there shall be a sufficient number to serve the expected staff population.</b>		
100.	CSA Z8000: 9.5.3.9.2	<b>The decontamination area shall be equipped with one free standing hand hygiene sink and utility sinks as appropriate to the method of decontamination used.</b>		
101.	CSA Z8000: 9.5.3.17	<b>If clean supply spaces are used for setting up for procedures, those spaces shall be equipped with hand hygiene facilities. A scrub sink shall be located in an alcove in the corridor adjacent to room entry.</b>		

	Ref	Guideline/Standard	Y/N/N-A	Comment
<b>Special Purpose Examination Rooms</b>				
102.	CSA Z8000: Table 11.1	<b>For special purpose examination rooms, an alcove shall be provided outside the room for PPE and a hand sink.</b>		
<b>Soaps and Lotions</b>				
103.	MoH p.46	<b>Bar soap for hand hygiene is not acceptable in healthcare settings except for individual patient use.</b>		
104.	MoH p.45	Provide staff with hand moisturizing skin-care products (and encourage regular frequent use) to minimize the occurrence of irritant contact dermatitis associated with hand hygiene.		
105.	MoH p.41	<b>Liquid soap and lotion dispensers shall have hands-free operation and mounted to permit unobstructed access and minimize splashing or dripping onto the adjacent wall and floor surfaces.</b>		
106.	MoH p.41	<b>Liquid dispensers (soap or lotion) shall use non-refillable bottles and shall be placed to prevent splash-up contamination.</b>		
107.	MoH p.46	Single-use product dispensers are preferred and should be discarded when empty; containers should not be "topped-up".		
108.	MoH p.41	Dispensers should be clearly labeled and easily distinguishable from each other.		
<b>Paper Towels</b>				
109.	MoH p.38	Disposable paper hand-towels provide the lowest risk of cross-contamination and should be used for drying hands in clinical practice areas.		
110.	MoH p.38	Cloth drying towels should not be used.		
111.	MoH p.38	Towel dispensers should be mounted such that access to them is unobstructed and splashing or dripping onto adjacent wall and floor surfaces is minimized.		
112.	MoH p.38	To avoid recontamination of the hands, there should be single-use towels available to turn off faucets.		
113.	MoH p.38	Paper towels should be available to use on the exit door hardware and a trash container for used towels should be located near the exit door.		
114.	MoH p.39	Hot-air dryers should not be used in any health care facility areas as warm air currents dry hands slowly and can be used by only one individual at a time. This results in queues and the temptation to dry hands on clothing.		
115.	MoH p.39	Lidded, lined, foot pedal-operated waste bins, with waste bags, should be provided in close proximity to each hand washing sink.		
116.	MoH p.39	<b>Paper waste receptacles shall be a corrosion free material and wide mouth design.</b>		
117.	MoH p.39	<b>Space shall be allowed for the placement of waste bins in close proximity to the hand hygiene sink, and in close proximity to any exits in order to accommodate the use of paper towels on door handles or door hardware.</b>		

Ref	Guideline/Standard	Y/N/N-A	Comment
<b>Alcohol-Based Hand Rubs</b>			
<i>Availability and Placement of ABHRs</i>			
118.	MoH p.39	Installing alcohol-based hand rub dispensers at the point-of-care improves adherence to hand hygiene. Point-of-care is the place where three elements occur together: the patient, the healthcare provider and care or treatment involving patient contact. Hand hygiene products available at point-of-care are easily accessible to staff by being as close as possible (i.e. within arm's reach, to where patient contact is taking place).	
119.	MoH p.40	<b>Hand hygiene stations shall be installed at the point of care to improve adherence to infection prevention and control principles.</b>	
120.	MoH p.39	A user-needs assessment and a workflow analysis should be completed before making the decision about where to place products. A point-of-care risk assessment will also help to guide placement of ABHR for patients who do not have the mental capacity to realize the negative effects of ingestion or misuse of any kind, such as pediatrics, units with cognitively-impaired patients and mental health units. Consideration should also be given to dispensers protruding in a way that could cause injuries and product leaking on surfaces that could cause falls or other injuries.	
121.	MoH p.39	The multidisciplinary team and end users should be involved in the ABHR placement decision so that products are placed in the pattern of the workflow and are convenient to use.	
122.	MoH p.40	Stations should be installed outside inpatient rooms at the entrance.	
123.	MoH p.40	Stations should be installed at the bedside.	
124.	MoH p.39	ABHR should be provided in each of the following locations:	
125.		i. At all entrances to and exits from the facility.	
126.		ii. On the external wall immediately adjacent to the entrance to every inpatient room.	
127.		iii. On walls immediately adjacent to the entrances to any patient care areas of any sort.	
128.		iv. Adjacent to all points-of-care in all situations, except where the presence of alcohol would compromise patient safety.	
129.		v. In any location where PPE is donned or removed.	
130.		vi. At all entrances to Dirty and Clean Service Rooms.	
131.	MoH p.39	vii. In any additional location where its use is required to comply with routine hygiene practices.	
131.	MoH p.39	<b>Hand hygiene fixtures for ABHR shall be mounted at a height of approximately 1 m from the floor.</b>	
132.	MoH p.39	Adjacent floor and wall surfaces should be protected from the hand hygiene fluid.	

	Ref	Guideline/Standard	Y/N/N-A	Comment
133.	MoH p.40	Mounting of ABHR dispensers above carpets is not recommended due to the risk of damage and lifting/warping of carpets.		
134.	MoH p.40	The storage of product not for immediate use should be located in an acceptable storage room or cabinet in accordance with provincial fire safety regulations or local bylaw.		
135.	MoH p.41	Not more than one dispenser should be located at each entry into a room from any given corridor, and wall mount dispensers should be separated from each other by a minimum horizontal distance of 1220mm.		
136.	MoH p.40	ABHR dispensers placed on beds should be secured in an approved dispenser-holder.		
137.	MoH p.40	Dispenser spout faces should face away from beds in order to prevent dripping onto bed linens. If optimal placement or storage appears to conflict with local fire safety regulations or guidelines, consult both the fire marshal and the infection prevention and control team.		
138.	MoH p.40	Client/resident rooms may have up to two liters of product per room.		
139.	MoH p.40	The responsibility for refilling and replacing dispensers of ABHR (who and when) should be clearly delineated.		
<b>Fire Safety with ABHRs</b>				
140.	MoH p.39	Requirements of BC's Building Code, BC Plumbing Code and BC Fire Code (the "BC Codes") <sup>3</sup> as well as Municipality Fire Regulations must be met with respect to placement of ABHR.		
141.	MoH p.40	<b>Placement and storage of ABHR products, fixtures, and supplies shall be in compliance with the healthcare facility's fire prevention guidelines and applicable requirements.</b>		
142.	MoH p.40	<b>Where the optimal placement of an ABHR hand hygiene station for staff compliance appears to conflict with applicable fire safety requirements, the fire marshal and the infection prevention and control team shall be consulted to resolve the issue.</b>		
143.	MoH p.40	In general, the product should not be dispensed, stored or handled near any source of ignition. Alcohol-based products may have hazardous reactions with strong oxidizers or inorganic acids so do not dispense, store or handle near such hazards.		
144.	MoH p.40	<b>ABHR dispensers must not be installed directly over, or within 150 mm of, a source of ignition, such as an electrical outlet; and the wall space between the dispenser and the floor must be unobstructed.</b>		

<sup>3</sup> Provincial/territorial and local fire codes and regulations can apply to the location of units that use alcohol-based hand hygiene products. See NFPA 101 for information on the installation of alcohol-based waterless hand hygiene systems. CSA 2011. Canadian health care facilities – planning, design and construction. Mississauga, ON: CSA. Section 7.5.11.3.4.

	Ref	Guideline/Standard	Y/N/N-A	Comment
145.	MoH p.41	<b>ABHR storage rooms (defined as any room storing a quantity of 5 or more liters of ABHR), shall not have heat sources present, including battery stations, and a fire extinguisher should be located inside or immediately adjacent to these storage rooms.</b>		
<b>Additional Relevant Guidelines/Standards</b>				
146.	CSA Z317.1: 6.3.2.6.1	<b>The recycling of bath and shower water (grey water) involves distinct hygiene and infection control issues. As a result, recycled grey water shall not be used in healthcare facilities. <i>Note: Blood-borne pathogens and other contaminants might be present in grey water. All forms of grey water are capable of transmitting disease.</i></b>		
147.	CSA Z8000: 9.1.3.2.2	<b>There shall be a drug distribution station if medications are dispensed in the outpatient facility. This may be a part of the central staff station and shall include a work counter, sink, refrigerator, and locked storage for biological's and drugs.</b>		
148.	MoH p.45	Provide hand hygiene facilities for patients and visitors in all healthcare settings. Encourage and assist patients to perform hand hygiene upon arrival, before eating and before leaving their room or clinic area.		
149.	CSA Z8000 9.5.3.16.1	<b>Scrub facilities (scrub sinks) with hands-free operable controls shall be provided adjacent to the entrance of procedure rooms and shall be arranged to minimize incidental splatter on nearby personnel, medical equipment, or supplies.</b>		
150.	CSA Z8000: 9.5.3.4.4	<b>Two scrub positions (i.e. scrub sinks) shall be provided near the entrance to each operating room.</b>		
151.	CSA Z8000: 9.5.3.4.4	<b>Means shall be provided for visual or audio communication between the scrub sinks and the operating room.</b>		
152.	CSA Z317.1: 8.3.3	<b>Surgeon scrub-sinks shall:</b>		
153.		<b>i. be made of vitreous china, stainless steel, or a material whose durability and imperviousness are equivalent to vitreous china;</b>		
154.		<b>i. be of adequate size and design to permit the scrubbing of both hands and arms without having to come in contact with any surface;</b>		
155.		<b>ii. be sized and shaped to prevent splashing of the user;</b>		
156.		<b>iii. have a non-swivel faucet that provides adequate flow for quick rinsing;</b>		
157.		<b>iv. have hands-free operation (electric eye or knee/foot operation) and be designed to prevent contamination of the hands when water is activated;</b>		
158.		<b>v. have a means of manual adjustment of water temperature;</b>		
		<b>vi. be equipped with a seam-free backsplash integral with the sink that extends at least 60 cm above sink level;</b>		



	<b>Ref</b>	<b>Guideline/Standard</b>	<b>Y/N/N-A</b>	<b>Comment</b>
159.		<p><b>vii. have backsplashes covering the areas under the paper towel dispenser and soap dispenser.</b></p> <p><i>Note: Because surgeon-scrub sinks are also used for hand hygiene at the end of a procedure, a paper towel dispenser should be installed. Paper towel dispensers should be installed so as to prevent splashing and contamination of the dispenser.</i></p>		
160.	CSA Z8000: 8.4.2.1.3	<b>In all areas for mental health and addiction patients in healthcare facilities, the design shall include the selection of finishes and fixtures that maximize ability to reduce infection and disease transmission and the safe placement of hand hygiene stations and clean/soiled utility rooms.</b>		