

Hand cleaning compliance in healthcare facilities, Q3 of 2016/2017

Prepared by the Provincial Hand Hygiene Working Group of British Columbia (PHHWG)

March 2017

Mission: To create a comprehensive provincial program that will improve and sustain hand hygiene culture, in order to decrease the transmission of healthcare-associated infections in BC healthcare facilities

What is hand cleaning?

Hand cleaning means using an alcohol-based hand rub or soap and water to kill or remove germs on hands.

Why is hand cleaning important?

Both patients in acute care facilities and residents in residential care facilities are vulnerable to healthcareassociated infections, a leading cause of death for people receiving care within our health care system. Germs can easily be transmitted through direct person-to-person contact, or by touching contaminated surfaces or equipment. Hand cleaning is a simple and effective way of reducing the spread of germs, and is the responsibility of all individuals involved, including patients/residents, visitors, and healthcare providers.

Why do we measure hand cleaning compliance?

Healthcare providers, including nursing staff, physicians, clinical support services, and others such as housekeeping staff, should lead by example in maintaining good hand hygiene. They move frequently between patients/ residents, and from room to room, while providing care or working in the patient/resident's room. This movement provides many chances for germs to be spread by hands. Monitoring hand cleaning practice is vital to improve compliance and, in turn, reduce infections in healthcare settings.

How do we measure hand cleaning compliance?

Every quarter, trained auditors observe a sample of healthcare providers, and record whether they clean their hands at the appropriate times, i.e. before and after touching a patient or the patient's immediate environment (e.g., changing bed linen, holding a bed rail, clearing a bedside table, etc.). The percentage score reports how often healthcare providers clean their hands when required to do so during an audit. Wearing gloves is not a substitute for hand cleaning.

Why is the compliance being publicly reported?

Improving hand cleaning compliance is a key measure to reduce healthcare-associated infections. Reporting on performance provides transparency to the public, and assists healthcare facilities in care quality improvement.

How are we doing?

The overall provincial hand cleaning compliance was 83% in acute care facilities and 86% in residential care facilities during quarter 3 (Q3) of 2016/17, both surpassing the provincial target. In acute care facilities, compliance before contact with a patient or the patient's immediate environment was lower than compliance after contact (78% vs. 87%), and compliance among physicians was lower than other healthcare providers. The compliance in acute care facilities has plateaued since Q1 2014/15.

What are we doing to improve compliance?

- 1. Encouraging all health care providers to incorporate hand cleaning into their practice routines
- 2. Ensuring that hand cleaning products are readily available for all staff, patients, and residents
- 3. Reporting performance back to unit staff, senior leaders, physicians, and the public
- 4. Targeting educational and promotional activities to increase hand cleaning knowledge and awareness
- 5. Identifying new initiatives and opportunities to improve the compliance before patient contact and to engage physicians more effectively

Expectation	100%	while recognizing positive improvement
Performance target	80%	of hand cleaning opportunities taken
Performance in Q3 of 2016/17		
Acute care facilities (ACF)	83%	of 48,961 opportunities observed
Residential care facilities (RCF)	86%	of 11,944 opportunities observed

Note: in the following graphs,

- 1) The hand cleaning compliance below included the audits performed at all acute care facilities and residential care facilities which are owned/operated by or affiliated to the health authority in the province. The provincial target on hand cleaning compliance, established by the provincial Hand Hygiene Working Group (PHHWG) in 2011, was to achieve 80% by the end of fiscal year 2014/15 (March 31, 2015).
- 2) Data were aggregated by fiscal quarter (Q3 of 2016/2017 from September 9 to December 1, 2016) for Fraser Health, Vancouver Coastal Health (including Providence Health Care), Island Health, and Northern Health, and by calendar quarter (October 1 to December 31, 2016) for Interior Health and Provincial Health Services Authority.
- 3) The line in each graph represents the overall linear trend over time.
- 4) Variations exist in auditing strategy and method among the health authorities. Audits in Interior Health were performed by infection control practitioners and university co-op program students for both acute care facilities and residential care facilities. All audits in Providence Health Care's facilities were performed by infection control practitioners. Provincial Health Services Authority employs co-op program students to perform the audits. In Fraser Health, Vancouver Coastal Health (excluding Providence Health Care), Island Health, and Northern Health, the audits in the large acute care facilities were performed by infection control practitioners, while in the small acute care facilities and all residential care facilities were audited by staff from the same facilities (self-auditing). So direct comparison of the percent compliances between health authorities or between acute care facilities and residential care facilities is not recommended.



Figure 1. Overall provincial hand cleaning compliance in acute care facilities by quarter and year, 2012/13 – 2016/17







^{1.} Before contact includes the moments before contact with the patient or the patient's immediate environment (e.g. around their bedside). After contact includes the moments after contact with the patient or the patient's immediate environment (e.g. around their bedside)

Figure 3. Provincial hand cleaning compliance in acute care facilities by healthcare provider group, 2012/13 – 2016/17





Figure 3. (continued) Provincial hand cleaning compliance in acute care facilities by healthcare provider group, 2012/13 - 2016/17





d. Compliance among other healthcare providers





Figure 5. Overall hand cleaning compliance in acute care facilities in Fraser Health, 2012/13 – 2016/17





Figure 6. Overall hand cleaning compliance in acute care facilities in Vancouver Coastal Health², 2012/13 – 2016/17

Figure 7. Overall hand cleaning compliance in acute care facilities in Island Health³, 2012/13 – 2016/17



^{2.} The data include audits in Providence Health Care (PHC)

^{3.} Dedicated auditors were employed to perform auditing in some large acute care facilities as of Q1 of 2013/2014



Figure 8. Overall hand cleaning compliance in acute care facilities in Northern Health, 2012/13 – 2016/17

Figure 9. Overall hand cleaning compliance in acute care facilities in Provincial Health Services Authority, 2012/13 – 2016/17



Figure 10. Overall provincial hand cleaning compliance in residential care facilities by quarter and year, 2014/15 – 2016/17



Figure 11. Overall hand cleaning compliance in residential care facilities in Interior Health, 2014/15 – 2016/17





Figure 12. Overall hand cleaning compliance in residential care facilities in Fraser Health, 2014/15 – 2016/17

Figure 13. Overall hand cleaning compliance in residential care facilities in Vancouver Coastal Health⁴, 2014/15 – 2016/17



^{4.} The data include audits in Providence Health Care (PHC)





Figure 15. Overall hand cleaning compliance in residential care facilities in Northern Health, 2014/15 – 2016/17



This report was created by the

Provincial Hand Hygiene Working Group of British Columbia (PHHWG) and Provincial Infection Control Network of British Columbia (PICNet)

Questions about this report may be sent to:

Bruce Gamage Network Director, PICNet 504–1001 West Broadway Vancouver, BC V6H 4B1 Email: bruce.gamage@phsa.ca