















# Hand cleaning compliance in healthcare facilities, Q2 of 2018/19

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

December 2018

**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?

Patients in acute care facilities and residents in residential care facilities are vulnerable to healthcare-associated 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 chances for germs to be spread by hands and to surfaces. 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, touching 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 provincial hand cleaning compliance was 81% in acute care facilities (ACF) and 84% in residential care facilities (RCF) during quarter 2 (Q2) of 2018/19, both surpassing the provincial target of 80%. In acute care facilities, compliance before contact with a patient or the patient's immediate environment was significantly lower than compliance after contact (74% vs. 86%), and compliance among physicians (70%) was lower than other healthcare providers.

#### 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

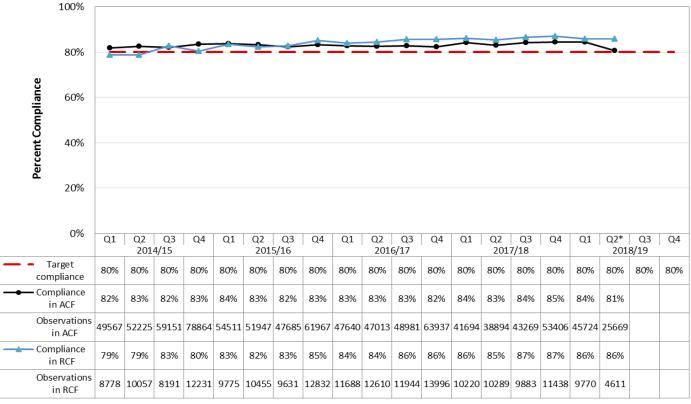
Expectation	100%	while recognizing positive improvement
Performance target	80%	of hand cleaning opportunities taken
Performance in Q2 2018/19		
Acute care facilities	81%	Of 25,669 opportunities observed
Residential care facilities	84%	of 4,611 opportunities observed

Note: In the following graphs,

- 1) The hand cleaning compliance rates below are based on audits performed at all acute care facilities and residential care facilities which are owned/operated by or affiliated with the health authority in the province. The provincial target for 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 (Q2 2018/19: June 29 September 20, 2018) for Fraser Health, Vancouver Coastal Health (including Providence Health Care), Island Health, and Northern Health, and by calendar quarter (July 1 September 30, 2018) for Interior Health and Provincial Health Services Authority.
- 3) The time frame of each fiscal quarter varied by fiscal year and there were more days in fiscal quarter Q4 than in Q1, Q2, and Q3 of each fiscal year.
- 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 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 or dedicated auditors, while in the small acute care facilities and all residential care facilities, audits were completed by staff from the same facilities (self-auditing). As of Q2 in 2018/19, Fraser Health employs co-op program students as regional hand hygiene auditors in acute care facilities, while all residential care facilities self-audit. Therefore, direct comparison of the percent compliances between health authorities or between acute care facilities and residential care facilities is not recommended.

# A. Overall hand cleaning compliance in BC

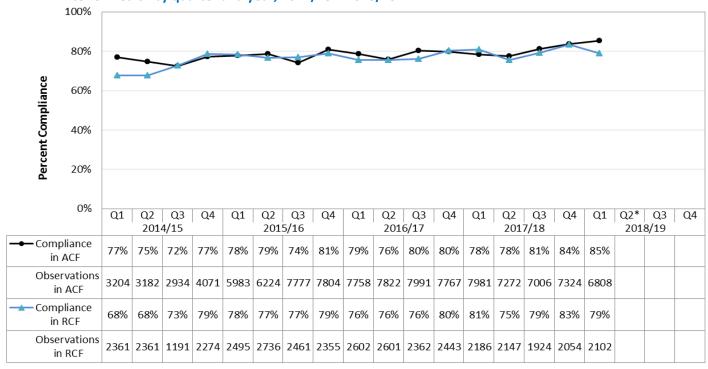
Figure 1. Provincial hand cleaning compliance in acute care facilities (ACF) and residential care facilities (RCF) by quarter and year, 2014/15 – 2018/19



<sup>\*</sup> The audit data in both acute care and residential care facilities were not available in Interior Health for Q2 of 2018/19 due to upgrading of hand hygiene auditing information system. FHA modified the reporting of audit data from Q2 of 2018/19 and onward such that only observations performed by regional hand hygiene auditors in acute care facilities were included. Audit data by site auditors in acute care facilities and all residential care facilities were not included due to concerns about data quality and inconsistency in auditing.

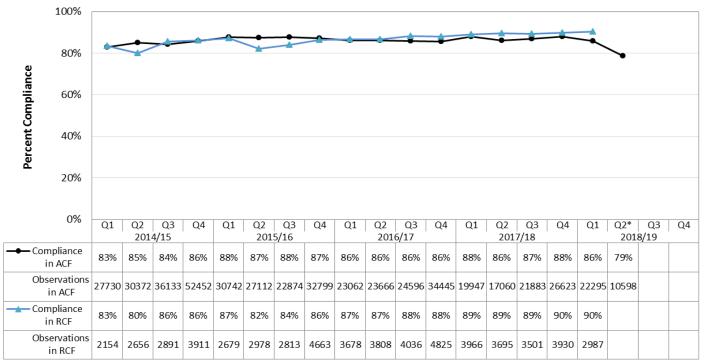
### B. Hand cleaning compliance by health authority

Figure 2. Overall hand cleaning compliance in acute care facilities (ACF) and residential care facilities (RCF) in Interior Health by quarter and year, 2014/15 – 2018/19



<sup>\*</sup> The audit data in both acute care and residential care facilities were not available in Interior Health for Q2 of 2018/19 due to upgrading of hand hygiene auditing information system.

Figure 3. Overall hand cleaning compliance in acute care facilities (ACF) and residential care facilities (RCF) in Fraser Health by quarter and year, 2014/15 – 2018/19



<sup>\*</sup> FHA modified the reporting of audit data from Q2 of 2018/19 and onward such that only the observations performed by the regional hand hygiene auditors in acute care facilities were included. Audit data by site auditors in acute care facilities and all residential care facilities were not included.

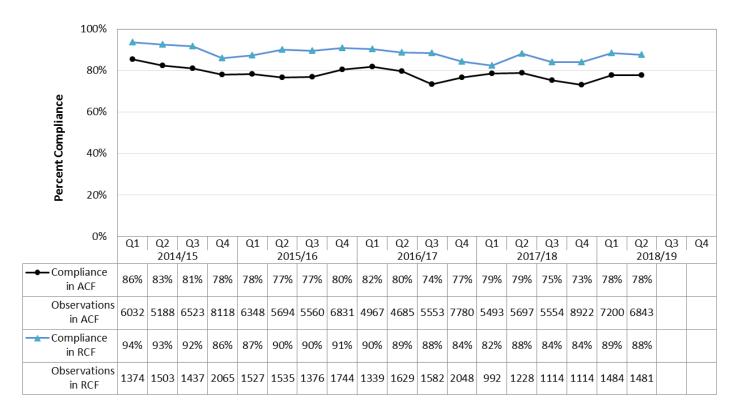
100% 80% Percent Compliance 60% 40% 20% 0% Q2 Q1 Q2 Q3 Q4 Q1 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 2017/18\* 2018/19\* 2014/15 2015/16 2016/17 -Compliance 80% 78% 79% 79% 79% 79% 79% 78% 77% 79% 82% 77% 85% 87% 89% 87% 82% 84% in ACF Observations 8604 8973 8983 8921 7443 8596 7413 7556 7343 6109 6059 7608 3269 2991 2728 3023 3154 2763 in ACF Compliance 81% 83% 81% 62% 83% 86% 87% 88% 86% 89% 91% 89% 93% 91% 93% 91% 88% 91% in RCF Observations 839 1471 1125 1269 1509 1432 1232 1936 | 2878 | 2927 | 2526 | 2778 | 1982 | 1889 | 2071 | 2594 | 1610 | 1696

Figure 4. Overall hand cleaning compliance in acute care facilities (ACF) and residential care facilities (RCF) in Vancouver Coastal Health by quarter and year, 2014/15 – 2018/19

The data include audits in acute care and residential care facilities of Providence Health Care (PHC).

in RCF

Figure 5. Overall hand cleaning compliance in acute care facilities (ACF) and residential care facilities (RCF) in Island Health by quarter and year, 2014/15 – 2018/19



<sup>\*</sup> Vancouver Coastal Health (except PHC) modified their hand hygiene auditing monitoring program from Q1 2017/18 to focus more on "inthe-moment" feedback and quality improvement. Observations performed following feedback in the same fiscal period were not included.

Figure 6. Overall hand cleaning compliance in acute care facilities (ACF) and residential care facilities (RCF) in Northern Health by quarter and year, 2014/15 – 2018/19

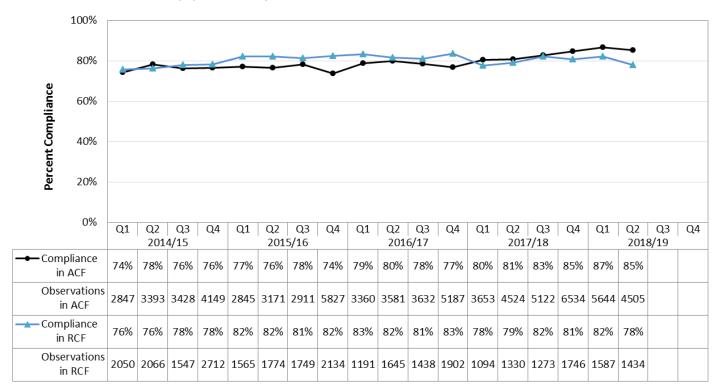
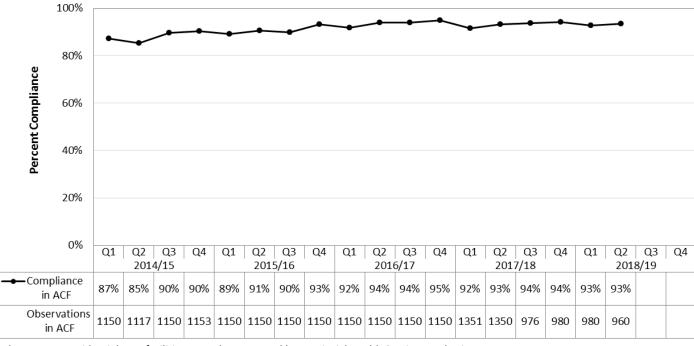


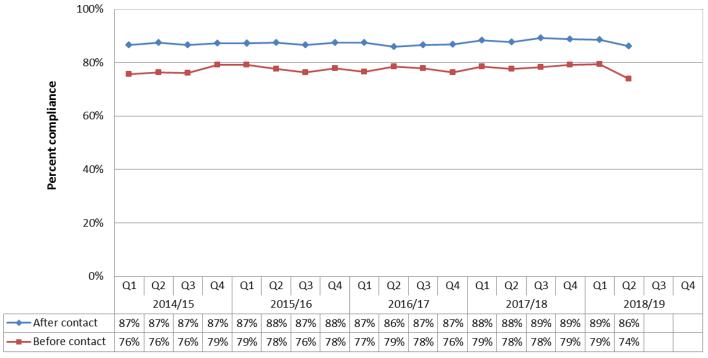
Figure 7. Overall hand cleaning compliance in acute care facilities in Provincial Health Services Authority by quarter and year, 2014/15 – 2018/19



There are no residential care facilities owned or operated by Provincial Health Services Authority

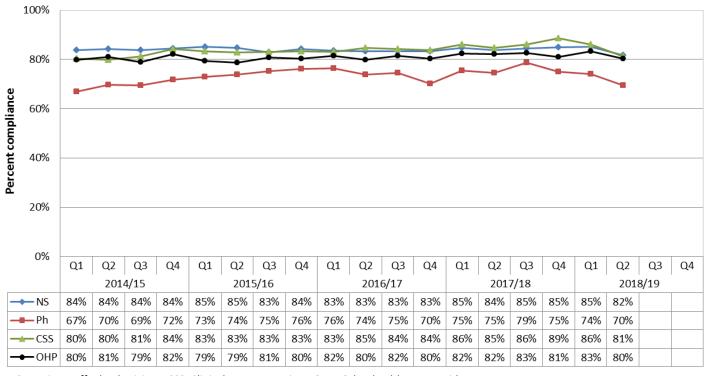
# C. Hand cleaning compliance in acute care facilities

Figure 8. Overall hand cleaning compliance in acute care facilities by moment of contact, 2014/15 – 2018/19



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 9. Provincial hand cleaning compliance in acute care facilities by healthcare provider group, 2014/15 – 2018/19



NS:Nursing staff; Ph: Physicians; CSS: Clinical support services; OHP: Other healthcare providers

# 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:

Provincial Infection Control Network of BC (PICNet)
1001 West Broadway, Suite 504
Vancouver, BC V6H 4B1
Tel: 604-875-4844 x 22985

Fax: 604-875-4373 Website: <a href="www.picnet.ca">www.picnet.ca</a> Email: <a href="mailto:picnet@phsa.ca">picnet@phsa.ca</a>