

# Hand cleaning compliance in healthcare facilities, Q1 2018/19

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

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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 84% in acute care facilities and 87% in residential care facilities during quarter 1 (Q1) 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 (79% vs. 89%), and compliance among physicians (74%) was lower than other healthcare providers. The overall provincial compliance in acute care facilities has remained relatively stable since 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

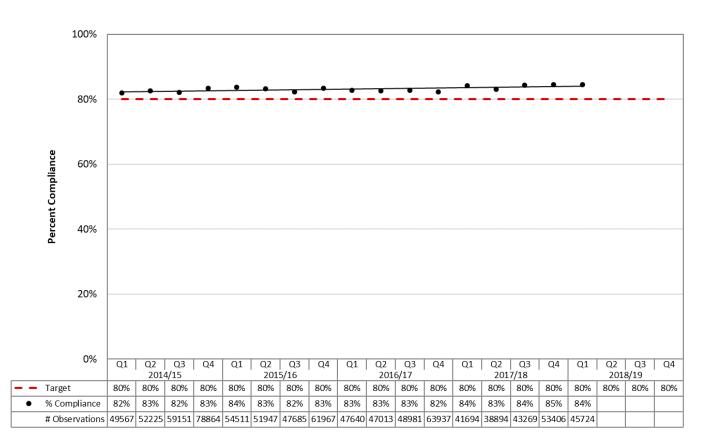
Expectation	100%	while recognizing positive improvement
Performance target	80%	of hand cleaning opportunities taken
Performance in Q1 2018/19		
Acute care facilities	84%	Of 45,724 opportunities observed
Residential care facilities	87%	of 12,757 opportunities observed

Note: In the following graphs,

- 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 (Q1 2018/19: April 1, 2018 June 28, 2018) for Fraser Health, Vancouver Coastal Health (including Providence Health Care), Island Health, and Northern Health, and by calendar quarter (April 1, 2018 June 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) The line in each graph represents the overall linear trend over time.
- 5) 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, audits were completed by staff from the same facilities (self-auditing). Therefore, direct comparison of the percent compliances between health authorities or between acute care facilities and residential care facilities is not recommended.

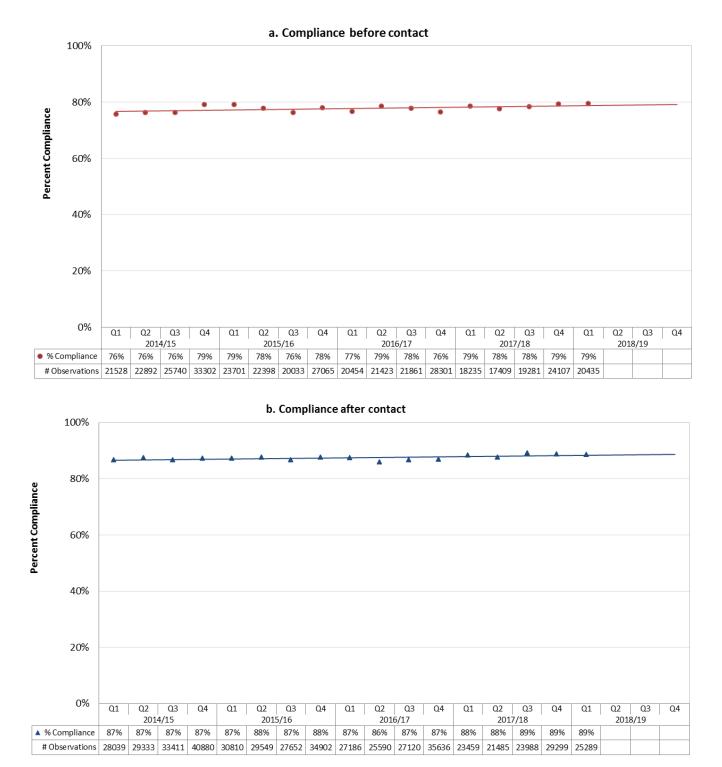
Figure 1. Overall provincial hand cleaning compliance in acute care facilities by quarter and year,

### A. Hand cleaning compliance in acute care facilities



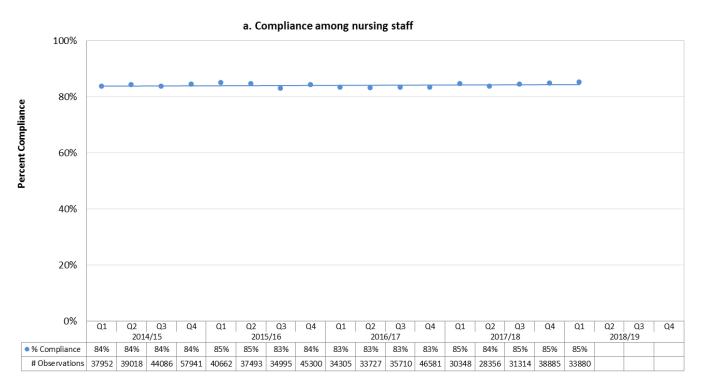
# 2014/15-2018/19

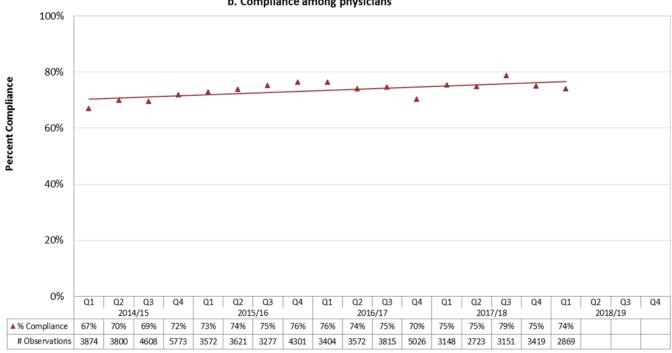




<sup>1.</sup> Before contact includes the moments before contact with the patient or the patient's immediate environment (e.g. around their bedside). After contact includes the moments after contact with the patient or the patient's immediate environment (e.g. around their bedside)

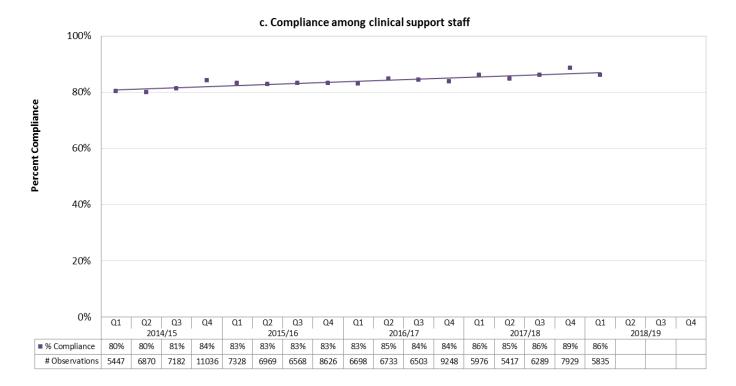
## Figure 3. Provincial hand cleaning compliance in acute care facilities by healthcare provider group, 2014/15– 2018/19





b. Compliance among physicians

# Figure 3. (continued) Provincial hand cleaning compliance in acute care facilities by healthcare provider group, 2014/15–2018/19



100% و 80% Percent Compliance 60% 40% 20% 0% Q3 Q3 Q3 Q3 Q2 Q3 Q1 Q2 Q4 01 Q2 Q4 Q1 Q2 Q4 Q1 Q2 Q4 Q1 Q4 2017/18 2018/19 2014/15 2015/16 2016/17 % Compliance 80% 81% 79% 82% 79% 79% 81% 80% 82% 80% 82% 80% 82% 82% 83% 81% 83% # Observations 2294 2537 3275 4114 2949 3864 2845 3740 3233 2981 2953 3082 2222 2398 2515 3173 3140

d. Compliance among other healthcare providers



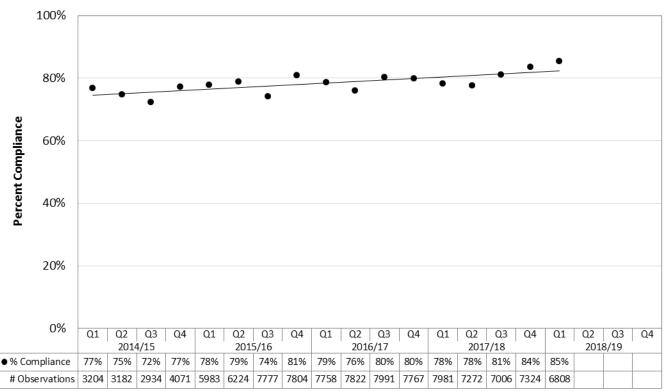
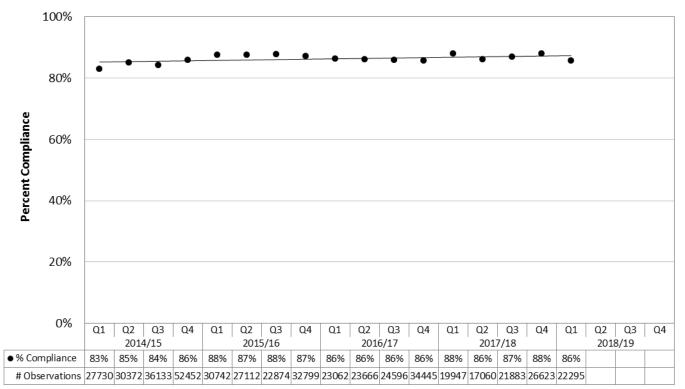


Figure 5. Overall hand cleaning compliance in acute care facilities in Fraser Health by quarter and year, 2014/15–2018/19



Q4

Q2 Q3

2018/19

20%

0%

• % Compliance

# Observations

Q1

80%

Q2 Q3

2014/15

78% 79%

Q4

79%

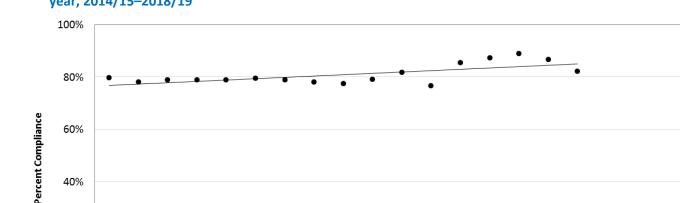
Q1

79%

Q2

79%

2015/16



# Figure 6. Overall hand cleaning compliance in acute care facilities in Vancouver Coastal Health<sup>2</sup> by quarter and year, 2014/15–2018/19

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

Q2

2016/17

79% 82%

Q1

77%

8604 8973 8983 8921 7443 8596 7413 7556 7343 6109 6059 7608 3269 2991 2728 3023 3154

Q3

Q4

77%

Q2

87%

2017/18

Q1

85%

Q3

89%

Q4

87%

Q1

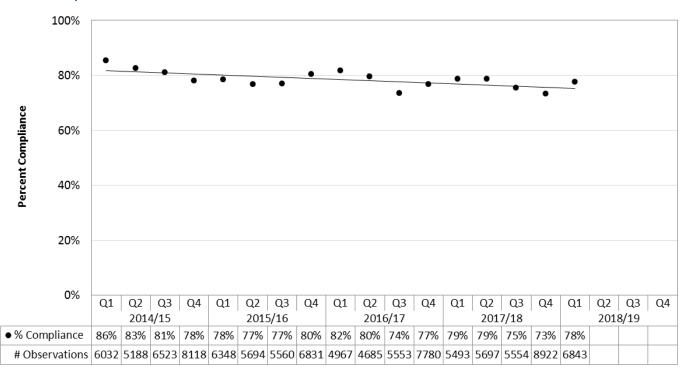
82%

Q3

79%

Q4

78%



<sup>2.</sup> The data include audits in acute care facilities of Providence Health Care (PHC). Vancouver Coastal Health (except PHC) modified their hand hygiene auditing monitoring program from Q1 2017/18 to focus more on "in-the-moment" feedback and quality improvement. Audits continue to be conducted monthly but the number of observations has been reduced.



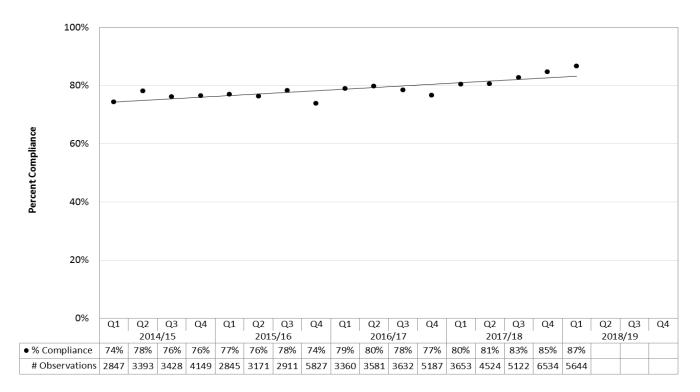
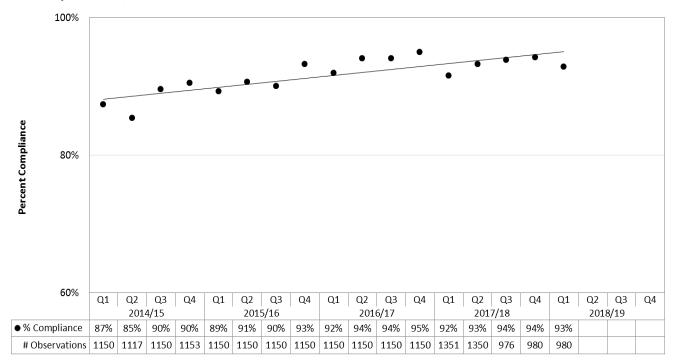
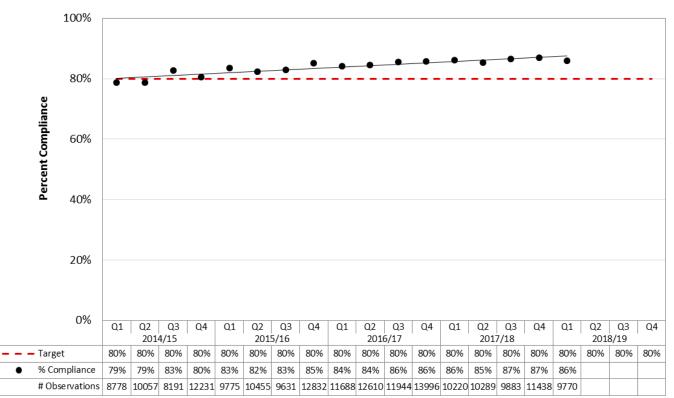


Figure 9. Overall hand cleaning compliance in acute care facilities in Provincial Health Services Authority by quarter and year, 2014/15–2018/19

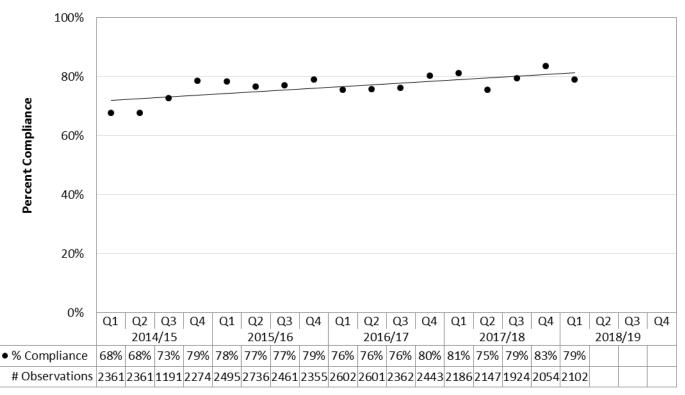


### B. Hand cleaning compliance in residential care facilities





# Figure 11. Overall hand cleaning compliance in residential care facilities in Interior Health by quarter and year, 2014/15–2018/19





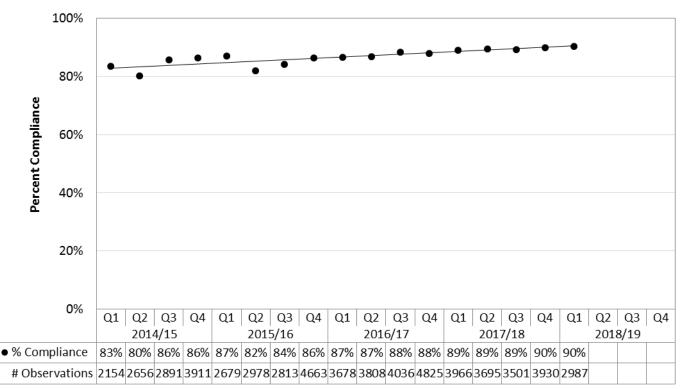
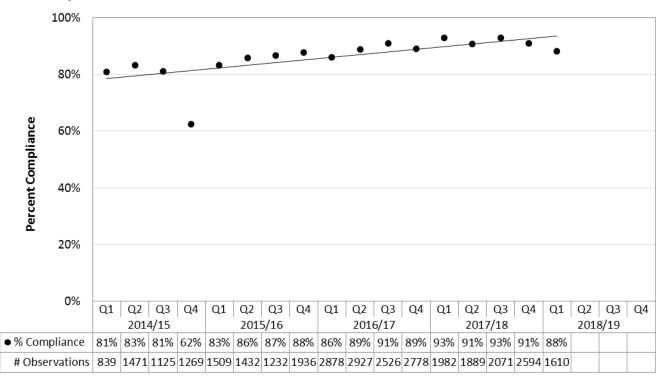
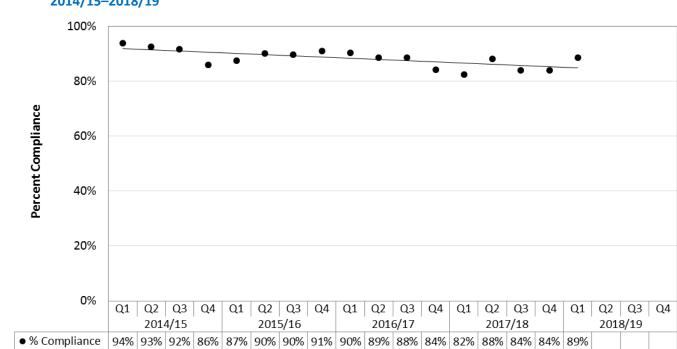


Figure 13. Overall hand cleaning compliance in residential care facilities in Vancouver Coastal Health by quarter and year, 2014/15–2018/19<sup>3</sup>



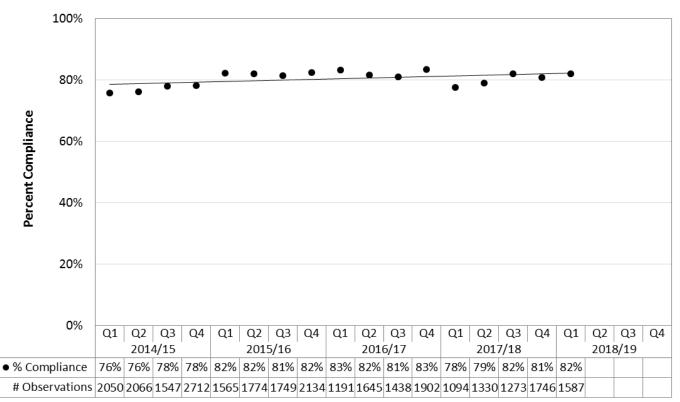
<sup>3.</sup> The data include audits performed in residential care facilities of Providence Health Care (PHC).



# Figure 14. Overall hand cleaning compliance in residential care facilities in Island Health by quarter and year, 2014/15–2018/19

# Figure 15. Overall hand cleaning compliance in residential care facilities in Northern Health by quarter and year, 2014/15–2018/19

# Observations 1374 1503 1437 2065 1527 1535 1376 1744 1339 1629 1582 2048 992 1228 1114 1114 1484



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:

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