

## Hand cleaning compliance in healthcare facilities, Q4 of 2020/21

August 18, 2021

**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 long-term care facilities are vulnerable to healthcare-associated infections, a leading cause of death for people receiving care within our health care system. Germs can be easily transmitted through direct person-to-person contact (e.g. shaking hands), or by touching contaminated surfaces (e.g. bed/side rails) or equipment (e.g. thermometer). 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 spread between individuals and to surfaces, via healthcare providers' hands. Monitoring hand cleaning practice is an important way to provide feedback about improvements and challenges in compliance, and, in turn, to 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 overall provincial hand cleaning compliance among healthcare providers was 85% in acute care facilities (ACF) and 91% in long-term care facilities (LTCF) during Q4 of 2020/21 (Table 1 and Figure 1). In ACF, the compliance before contact with a patient or the patient's immediate environment was still lower than compliance after contact (Figure 2a). The compliance among physicians reached 80% for the first time in the past five years (Figure 2b).

### 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

<b>Expectation</b>	<b>100%</b>	while recognizing positive improvement
<b>Performance target</b>	<b>80%</b>	of hand cleaning opportunities taken
<b>Performance in Q4 of 2020/21</b>		
Acute care facilities	<b>85%</b>	of 43,998 opportunities observed
Long-term care facilities	<b>91%</b>	of 4,716 opportunities observed

**Table 1. Hand cleaning observations and compliance by health authority, Q4 of 2020/21\***

Health authority	Acute care facilities		Long-term care facilities	
	Observations	Percent compliance <sup>i</sup>	Observations	Percent compliance <sup>i</sup>
Interior Health	9,041	82%	N/A <sup>ii</sup>	N/A <sup>ii</sup>
Fraser Health	14,796	86%	N/A <sup>ii</sup>	N/A <sup>ii</sup>
Vancouver Coastal Health <sup>iii</sup>	1,914	81%	885	97%
Island Health	11,375	83%	1,638	91%
Northern Health	5,909	92%	2,193	89%
Provincial Health Services Authority	963	91%	N/A <sup>iv</sup>	N/A <sup>iv</sup>
<b>Total</b>	<b>43,998</b>	<b>85%</b>	<b>4,716</b>	<b>91%</b>

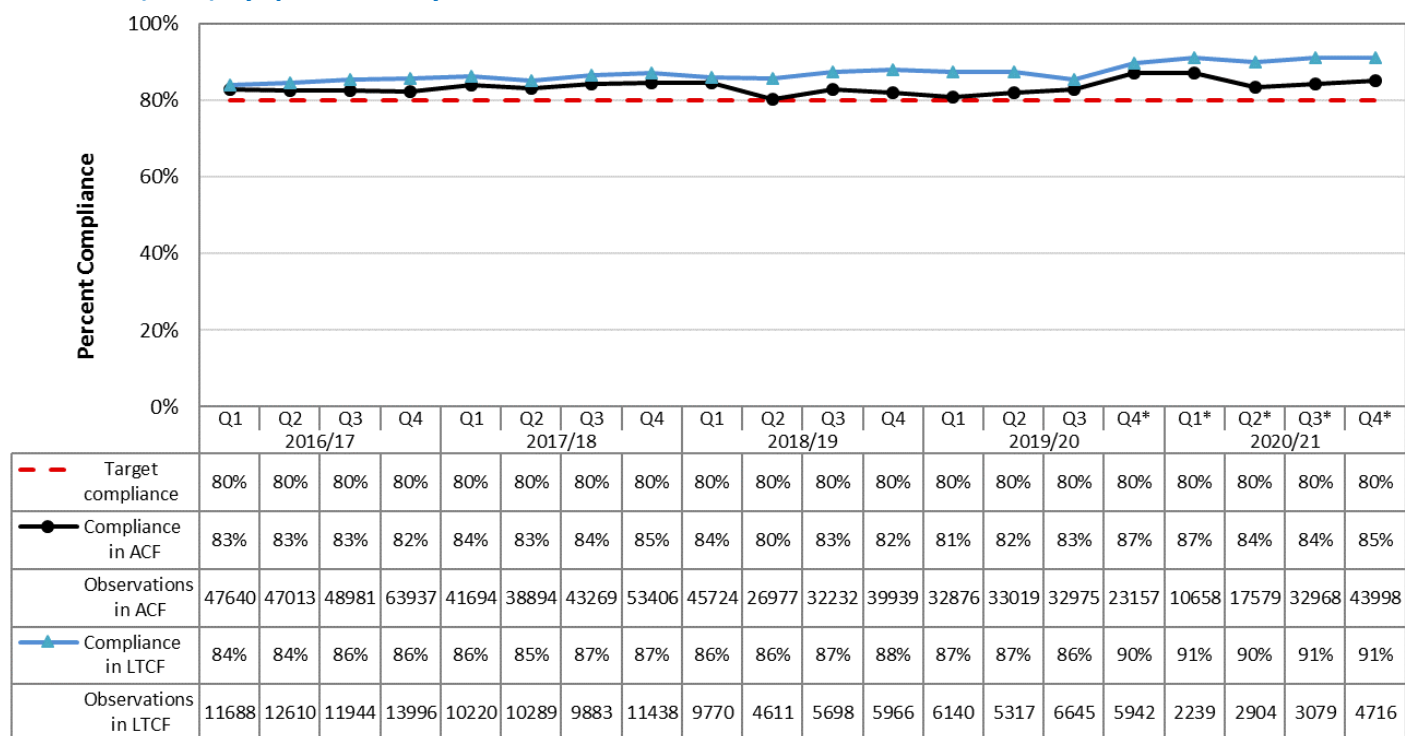
\* Auditing of hand cleaning compliance was suspended in some health care facilities due to the COVID-19 pandemic response.

i. Direct comparison of percent compliance between health authorities is not recommended due to different auditing methods

ii. No auditing data were reported during Q4 of 2020/21

iii. Includes auditing data from Providence Health Care

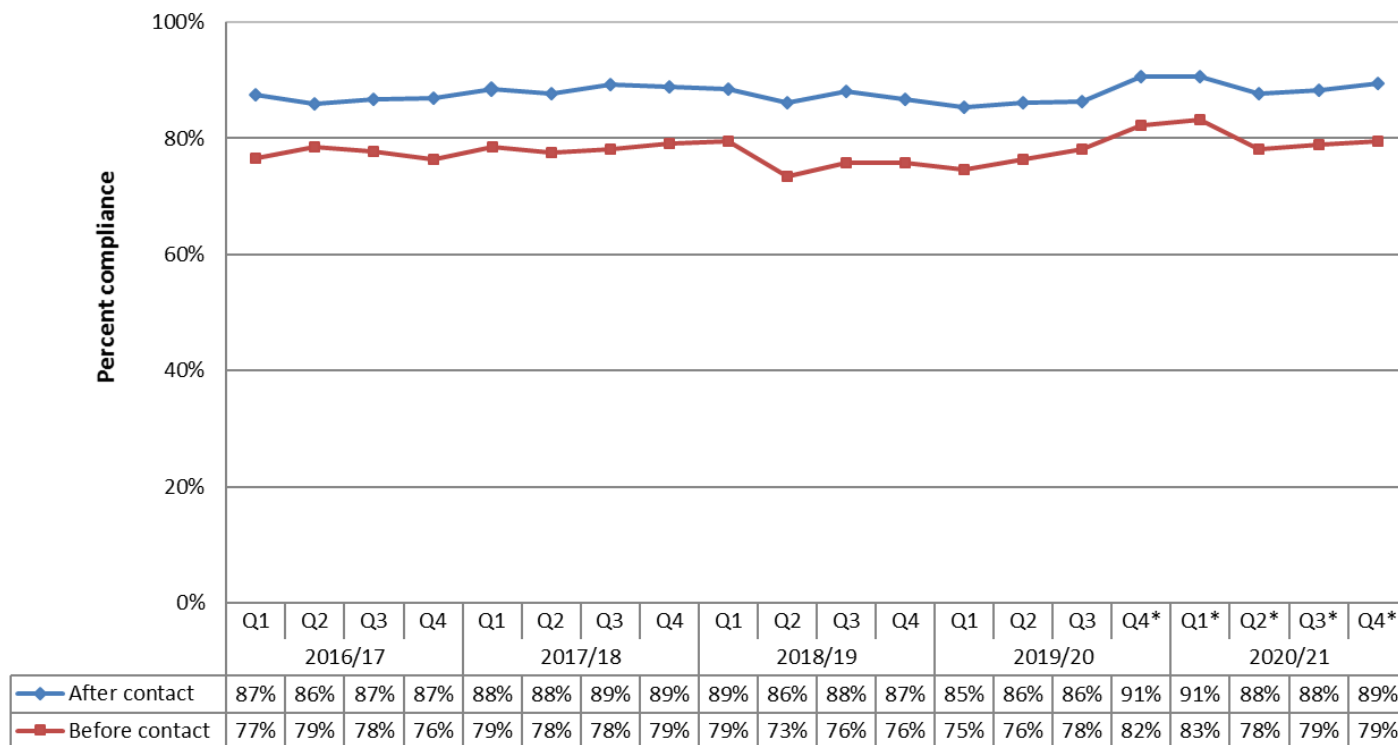
iv. There are no long-term care facilities owned or operated by Provincial Health Services Authority

**Figure 1. Provincial hand cleaning compliance in acute care facilities (ACF) and long-term care facilities (LTCF) by quarter and year, 2016/17 – 2020/21**

\* Auditing of hand cleaning compliance was suspended in some health care facilities due to the COVID-19 pandemic responses.

**Figure 2. Hand cleaning compliance in acute care facilities by quarter and year, 2016/17 – 2020/21**

**a. by moment of contact**

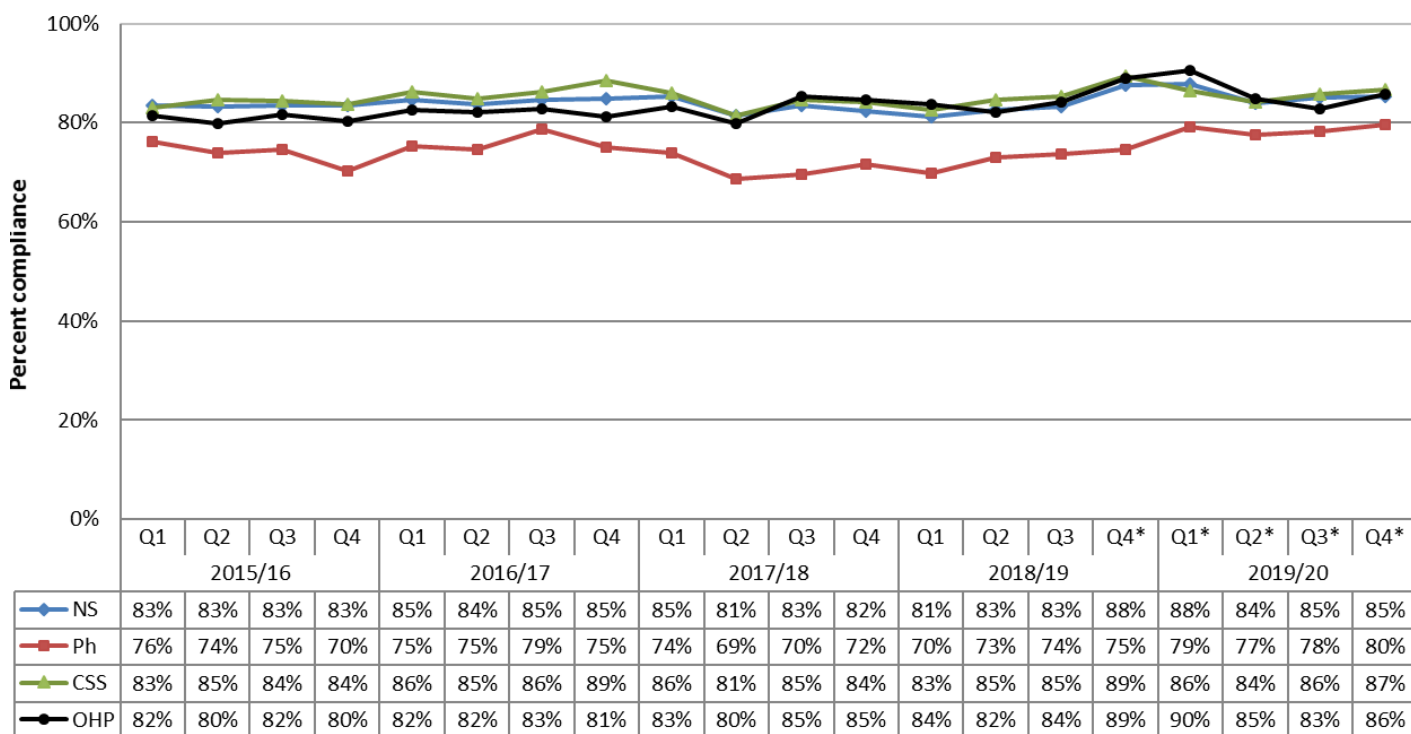


\* Auditing of hand cleaning compliance was suspended in some health care facilities due to the COVID-19 pandemic responses.

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).

**b. by healthcare provider group**



\* Auditing of hand cleaning compliance was suspended in some health care facilities due to the COVID-19 pandemic responses.

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

**Notes:**

- 1) The hand cleaning compliance rates in this report are based on audits by direct observation performed at acute care facilities and long-term care facilities that are owned/operated by or affiliated with a health authority in the province. The provincial target for hand cleaning compliance was to achieve 80% for both before and after contact with the patient and/or the environment and for each healthcare provider group.
- 2) Data were aggregated by fiscal quarter (Q4 2020/21: December 11, 2020 – March 31, 2021) for Fraser Health, Vancouver Coastal Health (including Providence Health Care), Island Health, and Northern Health, and by calendar quarter (Q4 2020/21: January 1 – March 31, 2021) 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) Direct comparison of the percent compliances between health authorities or between acute care facilities and long-term care facilities is not recommended. Variations exist in auditing strategy and method among the health authorities. Infection control practitioners and university co-op students for both acute care facilities and long-term care facilities performed audits in Interior Health. Infection control practitioners performed all audits in Providence Health Care. At Provincial Health Services Authority facilities, a hand hygiene coordinator and infection control practitioners 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 or dedicated auditors, while in the small acute care facilities and all long-term care facilities, audits were completed by staff from the same facilities (self-auditing). From Q2 2018/19 onwards, Fraser Health only reported observations performed by regional hand hygiene auditors in acute care facilities and the self-auditing data were not reported to PICNet. In addition, direct observation is prone to inducing observer bias and Hawthorne effect, which can lead to an inflated hand cleaning compliance. Please refer to the most recent annual surveillance report at <https://www.picnet.ca/surveillance/> for more details of the data limitations.

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: [www.picnet.ca](http://www.picnet.ca)  
Email: [picnet@phsa.ca](mailto:picnet@phsa.ca)