

Hand cleaning compliance in healthcare facilities, Q3 & Q4 of 2019/20

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

September 2020

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 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?

Compared to the previous quarters, the provincial hand cleaning compliance increased significantly in both acute care facilities (ACF, 87%) and long-term care facilities (LTCF, 90%) in quarter 4 (Q4) of 2019/20, concurrent with the COVID-19 pandemic. The increase in compliance occurred both before contact with a patient or the patient's immediate environment (82%) and after contact (91%), and among nursing staff, clinical support services, and other healthcare providers in acute care facilities.

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

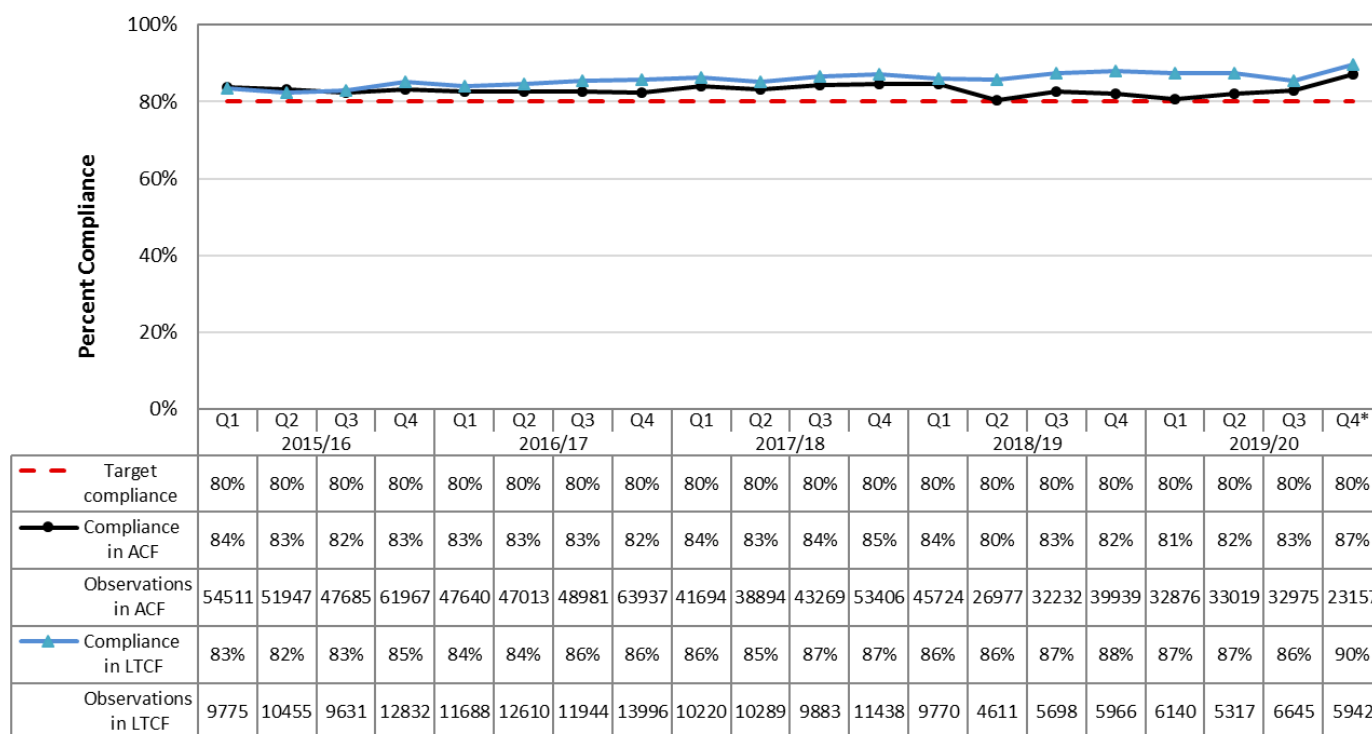
Expectation	100%	while recognizing positive improvement
Performance target	80%	of hand cleaning opportunities taken
Performance in Q3 & Q4 of 2019/20		
Acute care facilities	85%	Of 56,132 opportunities observed
Long-term care facilities	87%	of 12,587 opportunities observed

Note: In the following graphs,

- 1) The hand cleaning compliance rates below are based on audits performed at all acute care facilities and long-term care facilities that 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 (Q3 2019/20: September 20 – December 12, 2019; Q4 2019/20: December 13, 2019 – March 31, 2020) for Fraser Health, Vancouver Coastal Health (including Providence Health Care), Island Health, and Northern Health, and by calendar quarter (Q3 2019/20: October 1 – December 31, 2019; Q4 2019/20: January 1 – March 31, 2020) 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 long-term care facilities. All audits in Providence Health Care 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 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; self-auditing data were not reported. Therefore, **direct comparison of the percent compliances between health authorities or between acute care facilities and long-term care facilities is not recommended.**

A. Overall hand cleaning compliance in BC

Figure 1. Provincial hand cleaning compliance in acute care facilities (ACF) and long-term care facilities (LTCF) by quarter and year, 2015/16 – 2019/20

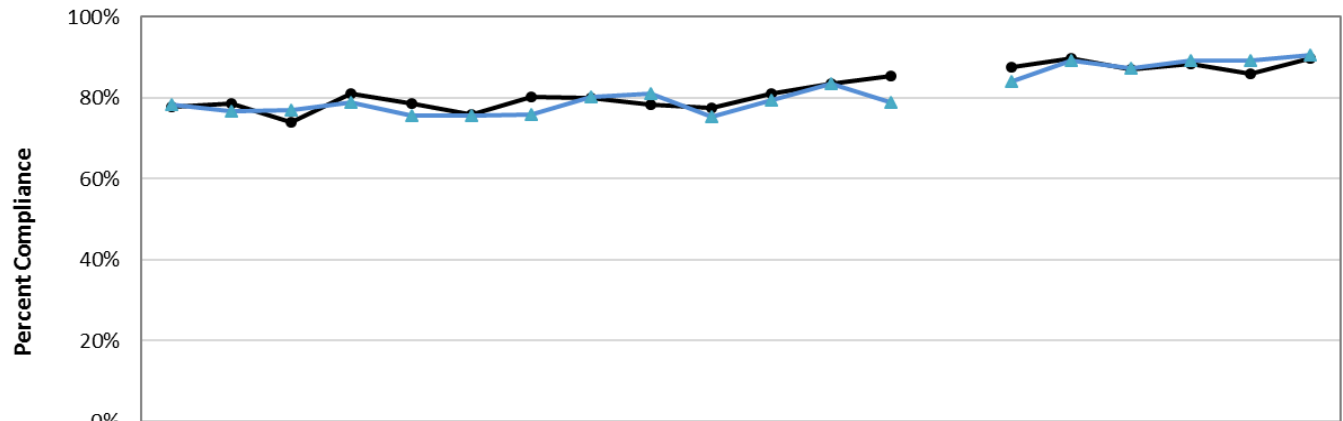


Please refer to the notes under each health authority for details of changes in reporting of audit data over time.

* Auditing of hand cleaning compliance was suspended in some health care facilities in Q4 due to responses to COVID-19 pandemic.

B. Hand cleaning compliance by health authority

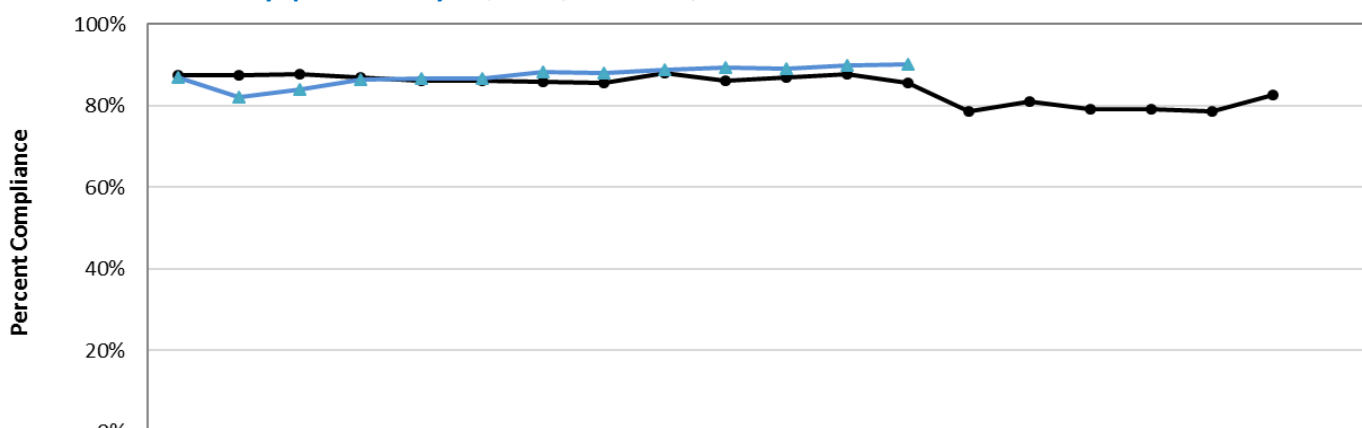
Figure 2. Overall hand cleaning compliance in acute care facilities (ACF) and long-term care facilities (LTCF) in Interior Health by quarter and year, 2015/16 – 2019/20



	2015/16				2016/17				2017/18				2018/19				2019/20			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
● Compliance in ACF	78%	79%	74%	81%	79%	76%	80%	80%	78%	78%	81%	84%	85%		88%	90%	87%	89%	86%	90%
Observations in ACF	5983	6224	7777	7804	7758	7822	7991	7767	7981	7272	7006	7324	6808		4691	6591	6660	6585	5283	5850
▲ Compliance in LTCF	78%	77%	77%	79%	76%	76%	76%	80%	81%	75%	79%	83%	79%		84%	89%	87%	89%	89%	90%
Observations in LTCF	2495	2736	2461	2355	2602	2601	2362	2443	2186	2147	1924	2054	2102		1206	940	2185	1952	1952	1615

Due to upgrading of hand hygiene auditing information system, audit data were not available for Q2 of 2018/19 in both acute care and long-term care facilities and Q3 of 2018/19 in some acute care facilities.

Figure 3. Overall hand cleaning compliance in acute care facilities (ACF) and long-term care facilities (LTCF) in Fraser Health by quarter and year, 2015/16 – 2019/20

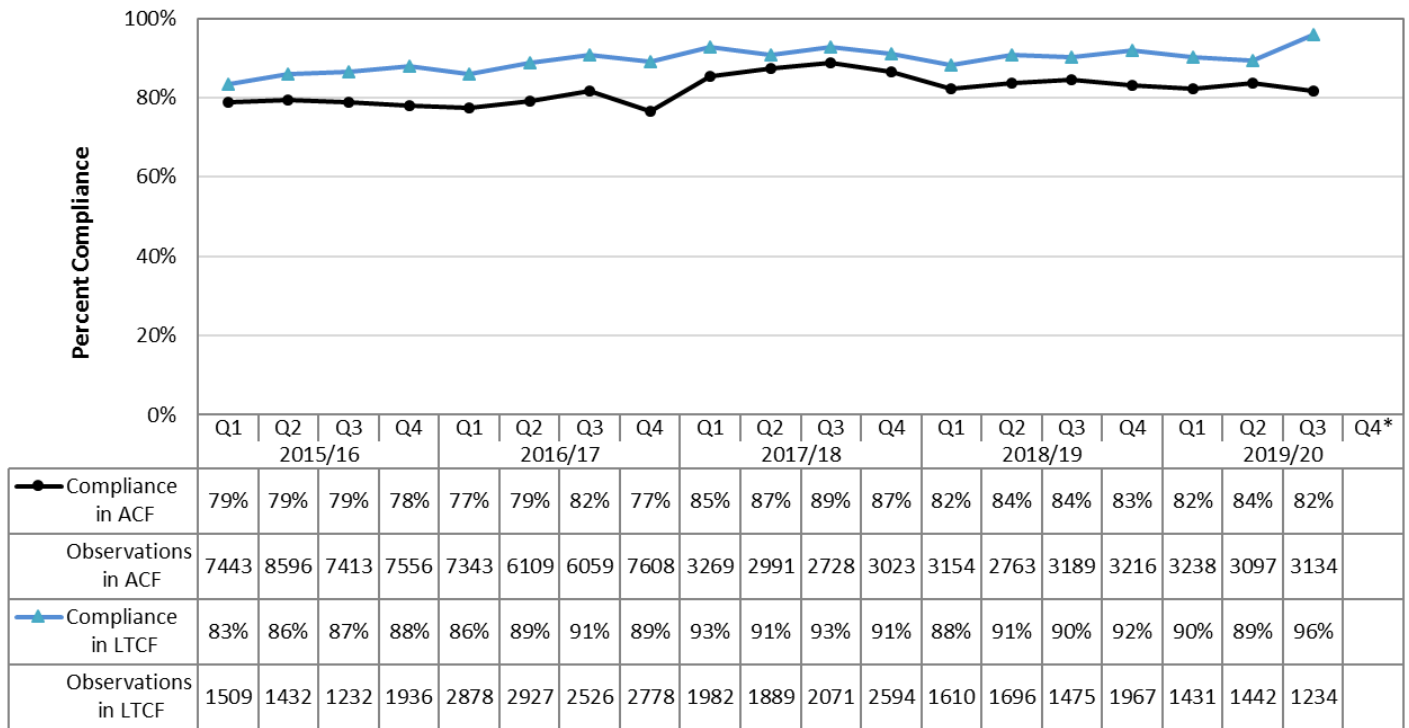


	2015/16				2016/17				2017/18				2018/19				2019/20			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4*
● Compliance in ACF	88%	87%	88%	87%	86%	86%	86%	86%	88%	86%	87%	88%	86%	79%	81%	79%	79%	79%	83%	
Observations in ACF	30742	27112	22874	32799	23062	23666	24596	34445	19947	17060	21883	26623	22320	10598	10844	14215	10866	11135	11202	
▲ Compliance in LTCF	87%	82%	84%	86%	87%	87%	88%	88%	89%	89%	89%	90%	90%							
Observations in LTCF	2679	2978	2813	4663	3678	3808	4036	4825	3966	3695	3501	3930	2987							

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 reported to PICNet. Audit data by site auditors in acute care facilities and all long-term care facilities were not reported.

* Auditing of hand cleaning compliance was suspended in Q4 due to responses to COVID-19 pandemic.

Figure 4. Overall hand cleaning compliance in acute care facilities (ACF) and long-term care facilities (LTCF) in Vancouver Coastal Health by quarter and year, 2015/16 – 2019/20



Audit data from both acute care and long-term care facilities of Providence Health Care (PHC) were included. Vancouver Coastal Health (except PHC) modified their hand hygiene auditing and monitoring program from Q1 2017/18 to focus more on “in-the-moment” feedback and quality improvement. Observations performed following feedback in the same fiscal period were not included. * Auditing of hand cleaning compliance was suspended in Q4 due to responses to COVID-19 pandemic.

Figure 5. Overall hand cleaning compliance in acute care facilities (ACF) and long-term care facilities (LTCF) in Island Health by quarter and year, 2015/16 – 2019/20

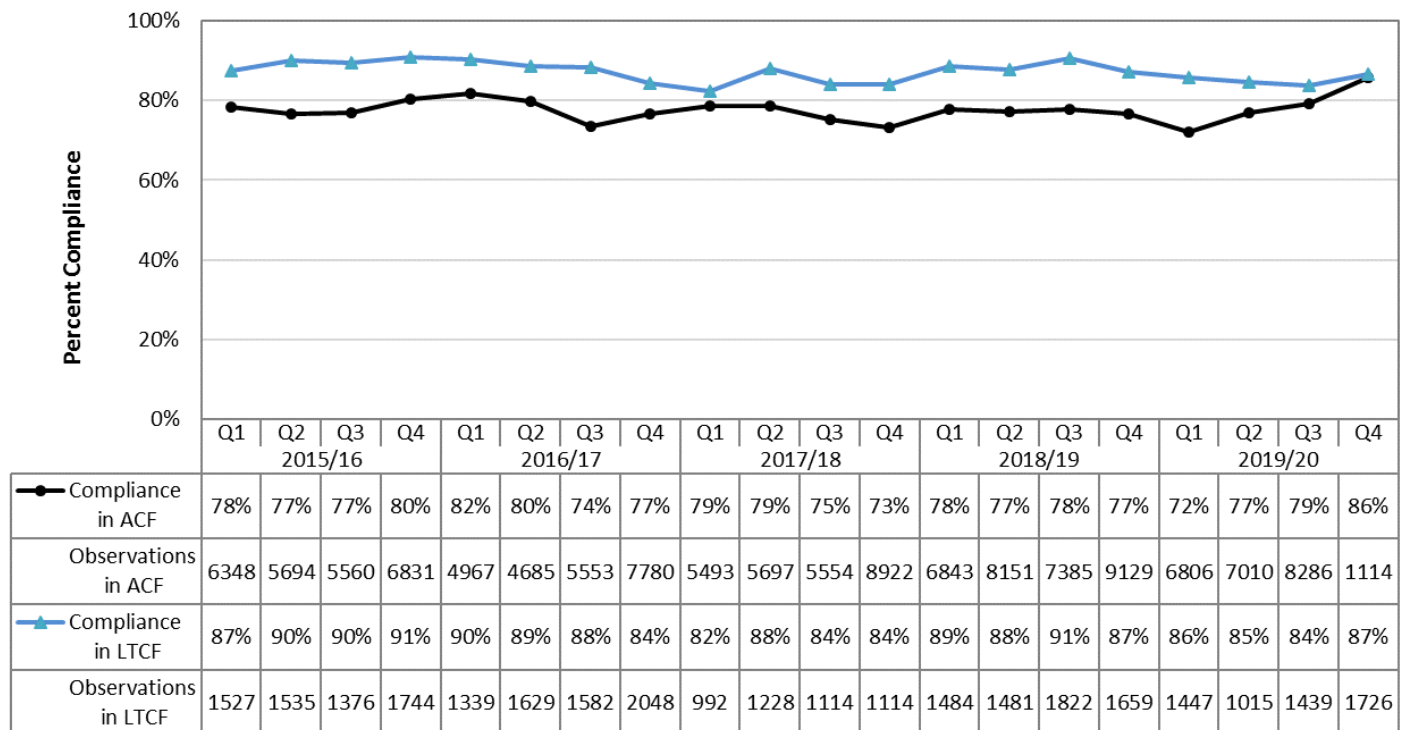


Figure 6. Overall hand cleaning compliance in acute care facilities (ACF) and long-term care facilities (LTCF) in Northern Health by quarter and year, 2015/16 – 2019/20

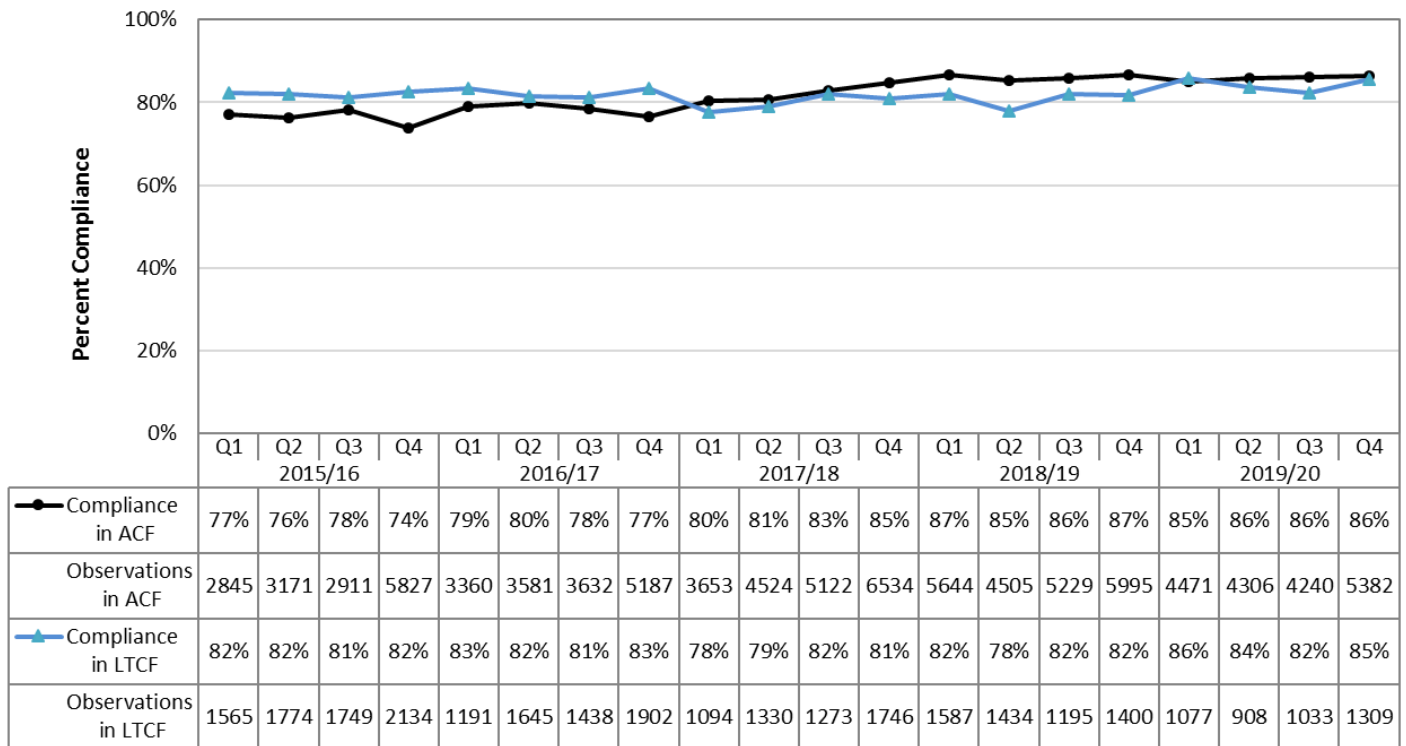
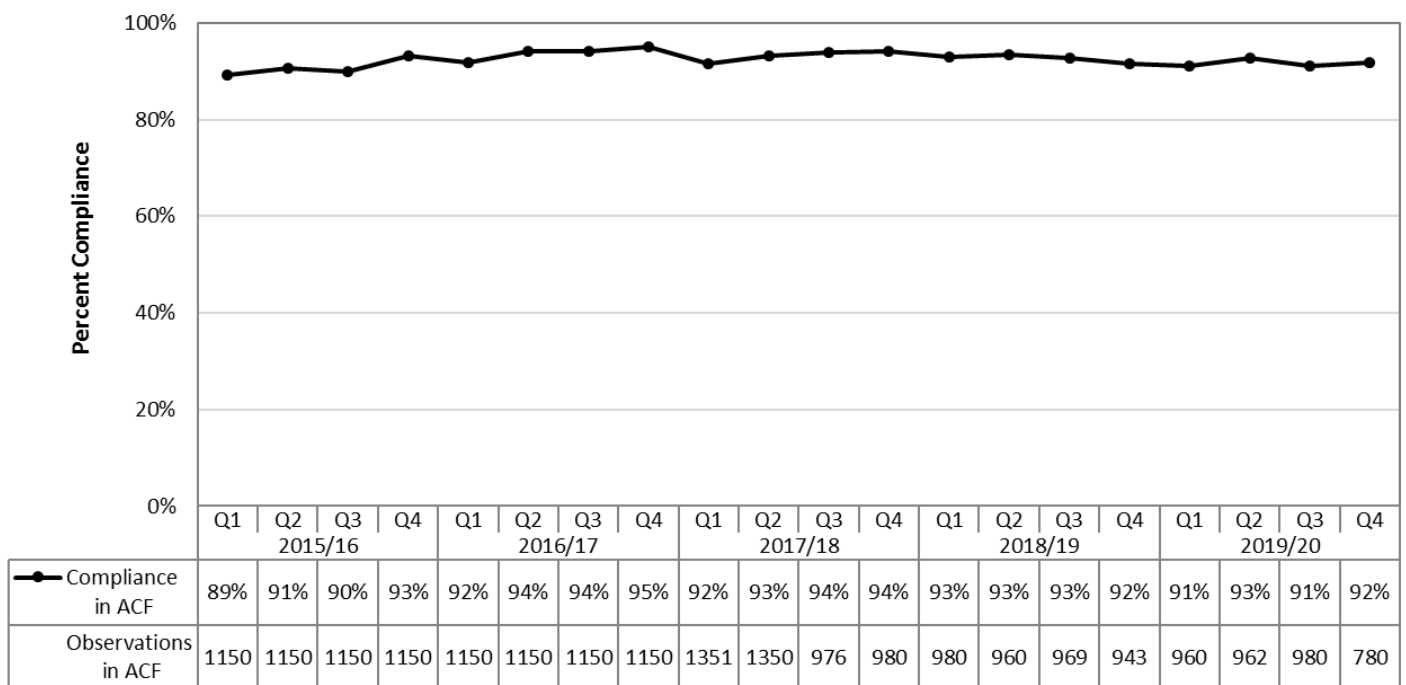


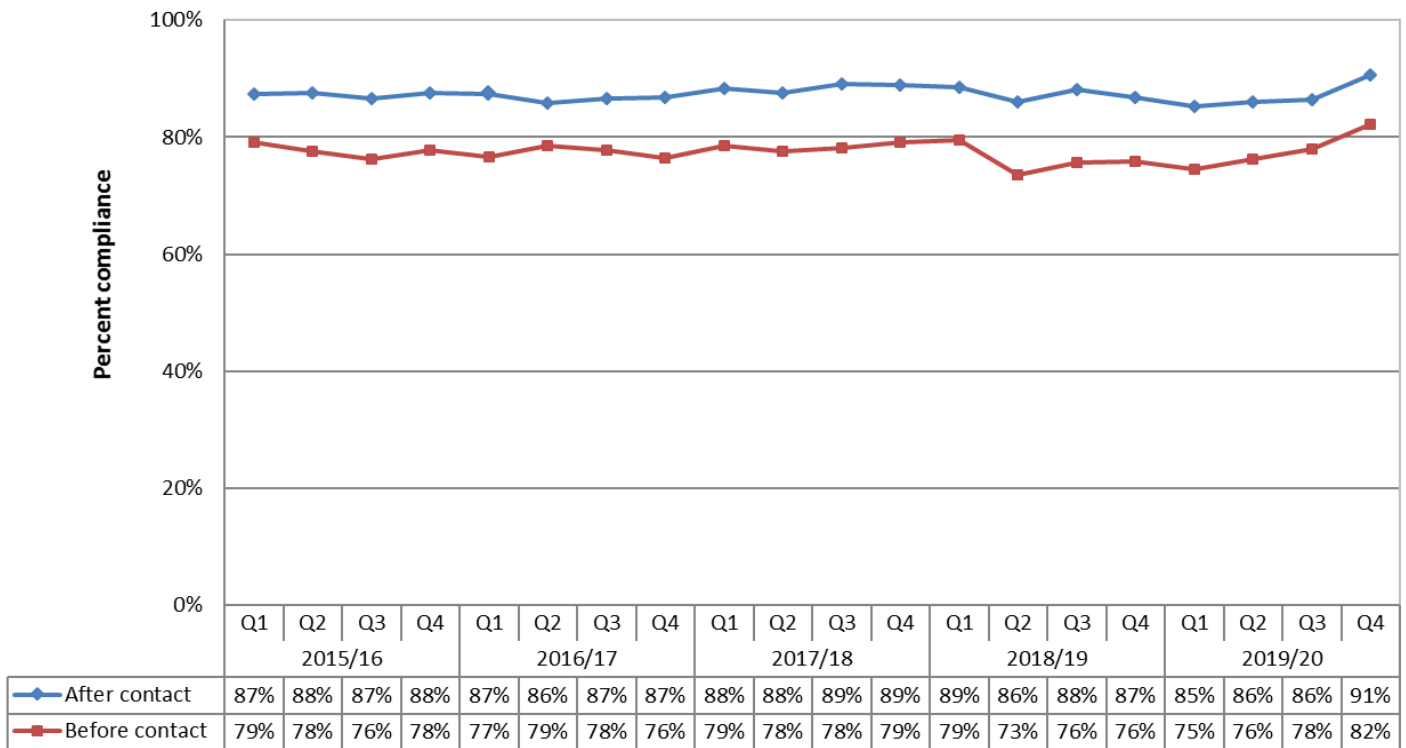
Figure 7. Overall hand cleaning compliance in acute care facilities in Provincial Health Services Authority by quarter and year, 2015/16 – 2019/20



Audit data from BC Cancer – Vancouver Center were included. There are no long-term care facilities owned or operated by Provincial Health Services Authority.

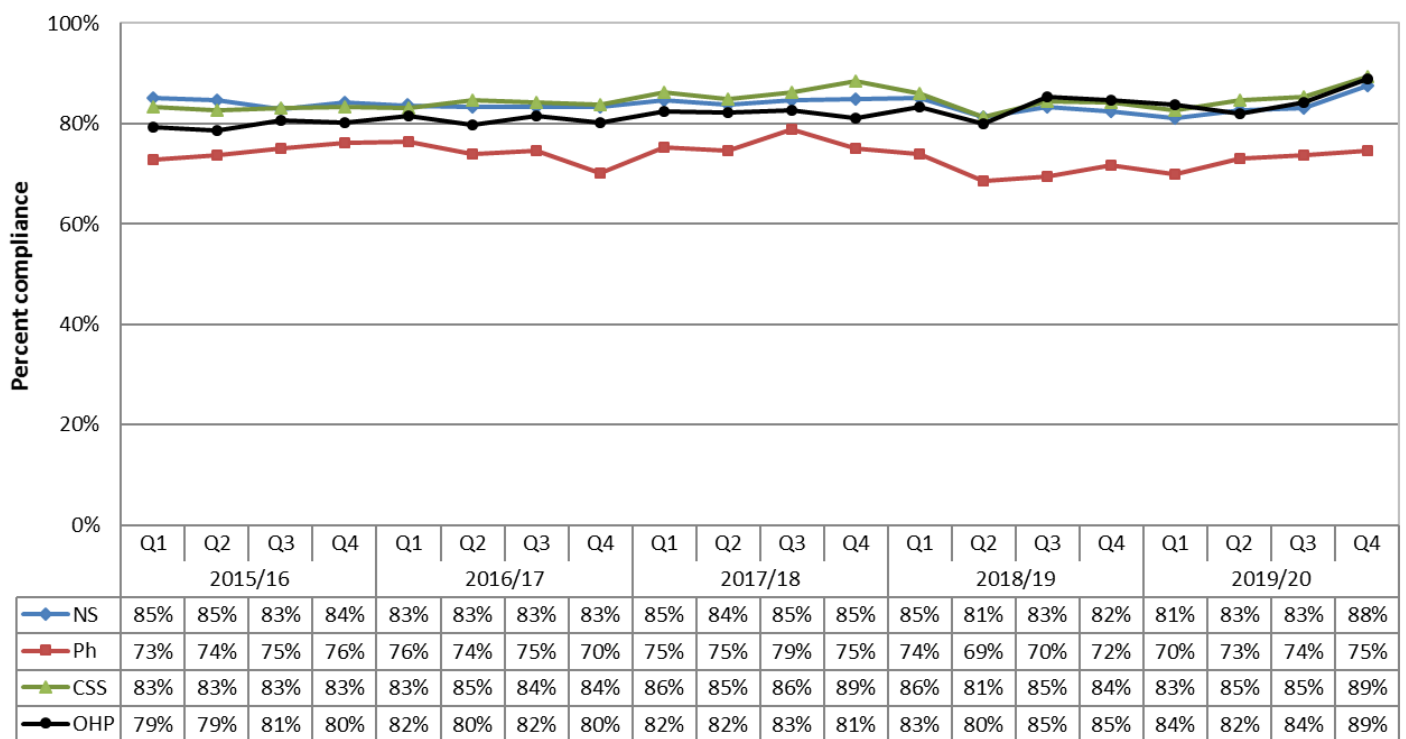
C. Hand cleaning compliance in acute care facilities

Figure 8. Overall hand cleaning compliance in acute care facilities by moment of contact, 2015/16 – 2019/20



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, 2015/16 – 2019/20



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
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