Hand cleaning compliance in healthcare facilities, Q1-Q3 of 2020/21

June 9, 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 Q1 – Q3 of 2020/21. In ACF, the compliance before contact with a patient or the patient's immediate environment was significantly lower than compliance after contact, and compliance among physicians 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 Q1-Q3 of 2020/21		
Acute care facilities	**85%**	Of 61,205 opportunities observed
Long-term care facilities	**91%**	of 8,222 opportunities observed

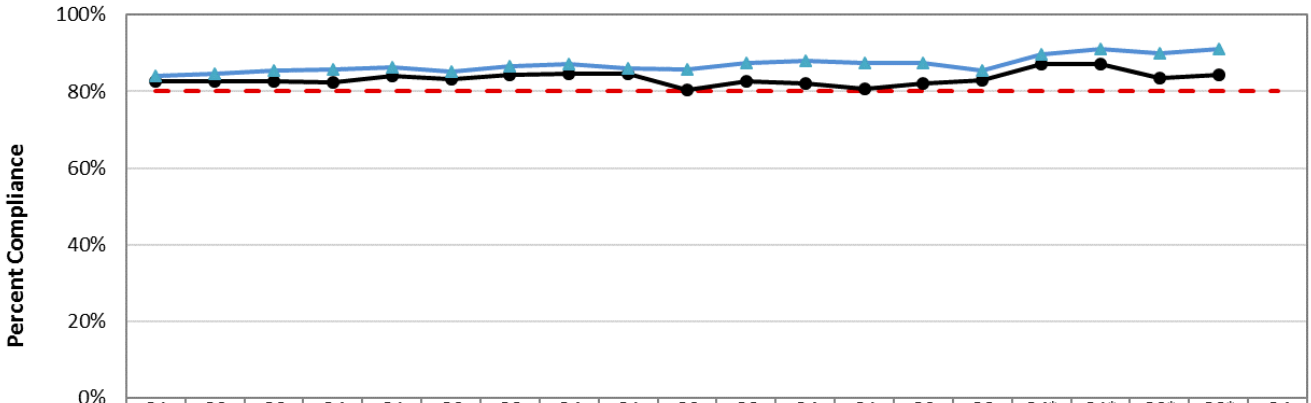
A. Hand cleaning observations and compliance by health authority, Q1 - Q3 of 2020/21*

Health authority	Acute care facilities		Long-term care facilities	
	Observations	Percent compliance	Observations	Percent compliance
Interior Health	11,129	85%	N/A[1]	N/A[1]
Fraser Health	11,022	85%	N/A[1]	N/A[1]
Vancouver Coastal Health[2]	2,849	76%	1,509	98%
Island Health	19,599	80%	3,199	91%
Northern Health	13,792	91%	3,514	88%
Provincial Health Services Authority	2,814[3]	91%	N/A[4]	N/A[4]
Total	**61,205**	**85%**	**8,222**	**91%**

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

1. No auditing data were reported during Q1-Q3 of 2020/21
2. Includes auditing data from Providence Health Care
3. Includes auditing data from BC Mental Health and Substance Use Services in Q3 of 2020/21
4. There are no long-term care facilities owned or operated by Provincial Health Services Authority

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

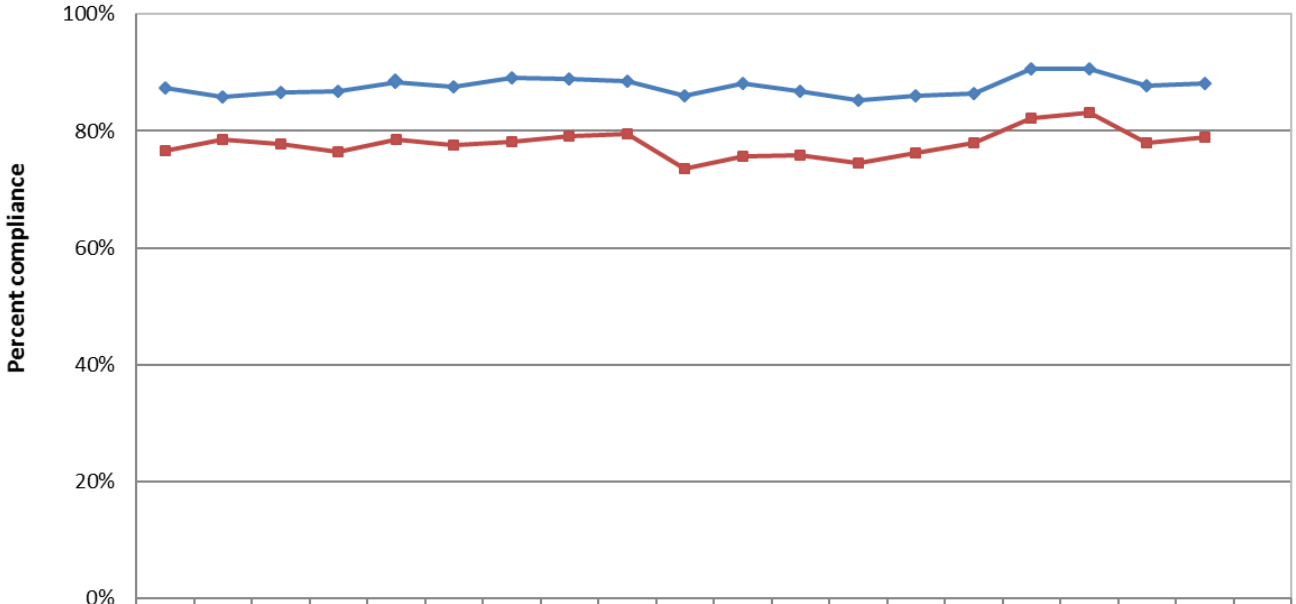


	Q1 2016/17	Q2 2016/17	Q3 2016/17	Q4 2016/17	Q1 2017/18	Q2 2017/18	Q3 2017/18	Q4 2017/18	Q1 2018/19	Q2 2018/19	Q3 2018/19	Q4 2018/19	Q1 2019/20	Q2 2019/20	Q3 2019/20	Q4* 2019/20	Q1* 2020/21	Q2* 2020/21	Q3* 2020/21	Q4 2020/21
Target compliance	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
Compliance in ACF	83%	83%	83%	82%	84%	83%	84%	85%	84%	80%	83%	82%	81%	82%	83%	87%	87%	84%	84%	
Observations in ACF	47640	47013	48981	63937	41694	38894	43269	53406	45724	26977	32232	39939	32876	33019	32975	23157	10658	17579	32968	
Compliance in LTCF	84%	84%	86%	86%	86%	85%	87%	87%	86%	86%	87%	88%	87%	87%	86%	90%	91%	90%	91%	
Observations in LTCF	11688	12610	11944	13996	10220	10289	9883	11438	9770	4611	5698	5966	6140	5317	6645	5942	2239	2904	3079	

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

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

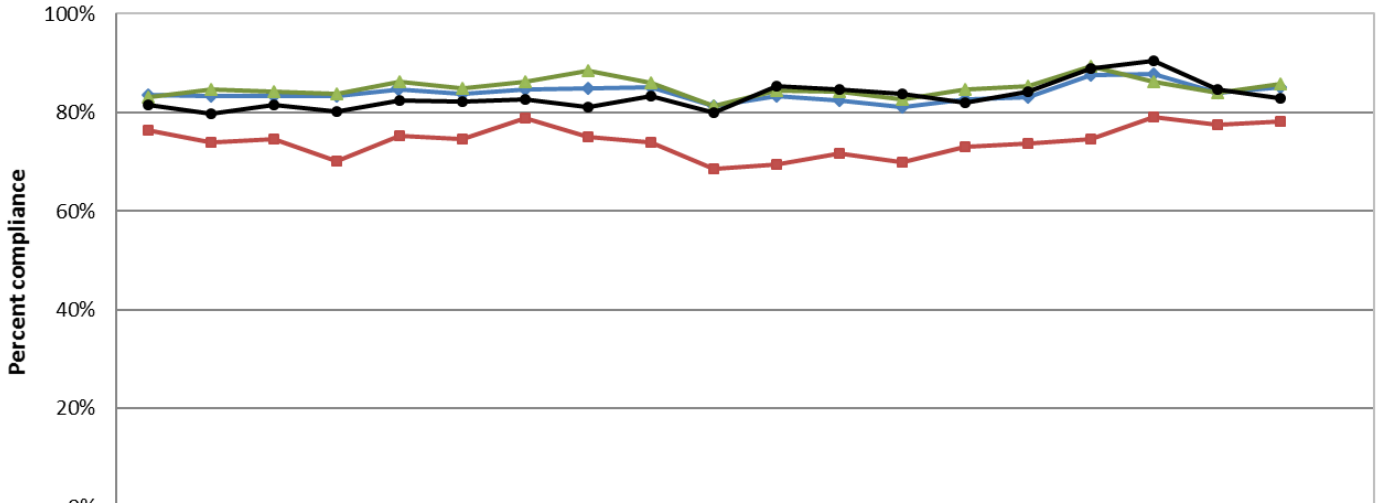
a. by moment of contact



	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4*	Q1*	Q2*	Q3*	Q4
	2016/17				2017/18				2018/19				2019/20				2020/21			
After contact	87%	86%	87%	87%	88%	88%	89%	89%	89%	86%	88%	87%	85%	86%	86%	91%	91%	88%	88%	
Before contact	77%	79%	78%	76%	79%	78%	78%	79%	79%	73%	76%	76%	75%	76%	78%	82%	83%	78%	79%	

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



	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4*	Q1*	Q2*	Q3*	Q4
	2015/16				2016/17				2017/18				2018/19				2019/20			
NS	83%	83%	83%	83%	85%	84%	85%	85%	85%	81%	83%	82%	81%	83%	83%	88%	88%	84%	85%	
Ph	76%	74%	75%	70%	75%	75%	79%	75%	74%	69%	70%	72%	70%	73%	74%	75%	79%	77%	78%	
CSS	83%	85%	84%	84%	86%	85%	86%	89%	86%	81%	85%	84%	83%	85%	85%	89%	86%	84%	86%	
OHP	82%	80%	82%	80%	82%	82%	83%	81%	83%	80%	85%	85%	84%	82%	84%	89%	90%	85%	83%	

* Auditing of hand cleaning compliance was suspended in some health care facilities due to responses to the COVID-19 pandemic.
NS: Nursing staff; Ph: Physicians; CSS: Clinical support services; OHP: Other healthcare providers

Note:

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 (Q1 2020/21: April 1 – June 25, 2020; Q2 2020/21: June 26 – September 17, 2020; Q3 2020/21: September 18 – December 10, 2020) for Fraser Health, Vancouver Coastal Health (including Providence Health Care), Island Health, and Northern Health, and by calendar quarter (Q1 2020/21: April 1 – June 30, 2020; Q2 2020/21: July 1 – September 30, 2020; Q3 2020/21: October 1 – December 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. 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; self-auditing data were not reported. 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. **Direct comparison of the percent compliances between health authorities or between acute care facilities and long-term care facilities is not recommended.**

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
Email: picnet@phsa.ca