

# Hand Hygiene



**H**and hygiene is a general term referring to practices that remove microorganisms from the hands. Hand hygiene may be performed using alcohol-based hand rub or handwashing using soap and water. When performed correctly, hand hygiene remains the single most effective measure to reduce microorganism transmission in healthcare and maintaining hand hygiene compliance is essential. Significant work continues within AHS and Covenant Health to strengthen hand hygiene practices in healthcare.

## AHS IPC Hand Hygiene Program

In 2022/2023, AHS reported a hand hygiene compliance of 91.2 per cent. Hand hygiene reviews are performed across the province in both inpatient and outpatient settings on an ongoing basis, with quarterly reporting. In 2022/2023, hand hygiene reviews were performed at 250 AHS acute care and non-acute care sites and in 1,001 areas or clinics across the province.

The AHS IPC Hand Hygiene Program consists of zone teams, each comprised of a project manager and coordinator(s), and members from the provincial team that provide support. The AHS IPC Hand Hygiene Program is a partnership between AHS IPC and healthcare providers and involves clinical and non-clinical departments.

One aspect of this partnership is the recruiting and training healthcare providers to be site-based reviewers that perform hand hygiene reviews. Hand hygiene reviewers are critical to both the success and sustainability of the AHS IPC Hand Hygiene Program. They perform hand hygiene reviews and identify barriers or challenges to performing hand hygiene at the local level, such as required education and training needs. Another aspect of this partnership is the alignment of provincial-level activities. The AHS IPC Hand Hygiene Program coordinates these activities with direct engagement at the local level through zone IPC committees.

The AHS [Hand Hygiene Policy \(2021\)](#) and [Hand Hygiene Procedure \(2021\)](#) guide hand hygiene practices.



## Hand hygiene document management processes

Since its inception in 2014/2015, the IPC Hand Hygiene Program has developed numerous resources. Resources such as the AHS [Hand Hygiene Policy \(2021\)](#) and [Hand Hygiene Procedure \(2021\)](#) are updated on a scheduled three-year revision cycle, while other resources, such as the [Guide to Conduct Hand Hygiene Reviews](#), are revised on an ad hoc basis as needed. In 2022/2023, the IPC Hand Hygiene Program developed a formal process to revise hand hygiene resources. This process includes a standard operating procedure, algorithm, and inventory of all resources. The program will now be able to proactively identify and review existing resources on a scheduled three-year cycle from the resources' most recent effective date. This process aligns with the AHS Policy and Forms schedule review timeframe.

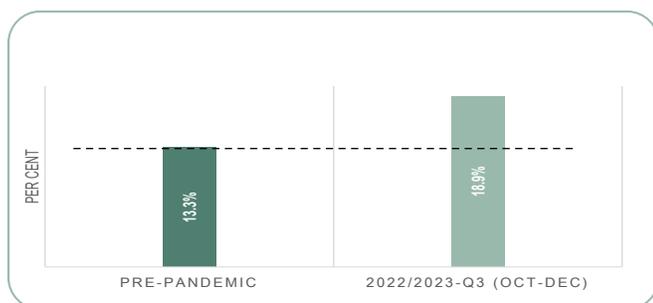
Monitoring hand hygiene compliance and offering direct feedback to healthcare are considered essential elements of hand hygiene improvement initiatives. The AHS IPC Hand Hygiene Program uses a vendor-supported platform – Clean Hands. Site-based reviewers collect data that are entered or uploaded into the Clean Hands Portal via the Clean Hands paper tool or iPad app. The platform supports immediate feedback as users of the system can access real-time information on hand hygiene compliance through the Clean Hands Portal.

## Increasing accountability and ownership

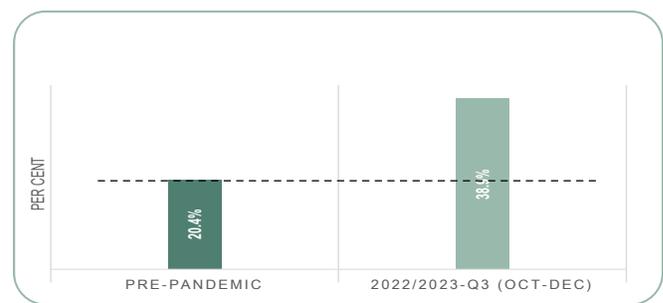
The AHS IPC Hand Hygiene Program increases accountability and ownership of hand hygiene practices through the use of site-based reviewers. Throughout the pandemic AHS' hand hygiene compliance remained stable; however, the number of sites and units performing hand hygiene compliance reviews was significantly lower. In 2019/2020, approximately 79.6 per cent of acute care inpatient units performed hand hygiene reviews pre-pandemic, but by January 2023 (2022/2023-Q3), this decreased to 61.1 per cent (Figure 13 and Figure 14). Units with fewer than 10 beds have the lowest compliance with performing hand hygiene reviews, with almost 60.3 per cent not contributing observations. This is reflected in the results from the spring and fall surveys from Accreditation Canada in that a common deficiency in IPC criteria is a lack of or inconsistent hand hygiene reviews being performed.

Performing hand hygiene reviews is challenging due to competing priorities of frontline staff including the launch of Connect Care, increasing patient acuity, and high staff burnout and staff turnover as well as frontline staff being deployed to other areas in the healthcare system and introduction of alternate work arrangements for eligible staff. While zones, sites, and units have the AHS IPC Hand Hygiene Program available to support them and continue to receive hand hygiene reports, other organizational supports such as zone hand hygiene committees were unable to meet. IPC and zone leaders are working to revive these committees.

**Figure 13: Acute care and mixed facilities not collecting data**



**Figure 14: Acute care inpatient units not collecting data**



## Reestablishing hand hygiene reviews at the Sturgeon Community Hospital

The AHS IPC Hand Hygiene Program continues to work with stakeholders to increase the number of hand hygiene reviews through the provision of a data collection and reporting system, provincial hand hygiene events, training of site-based reviewers, and hand hygiene resources for leadership.

In 2022/2023, the work at the Sturgeon Community Hospital highlights the importance of the partnership between IPC and operations in increasing the number of hand hygiene reviews at a site. In 2022/2023-Q1 (Apr-Jun), infection control professionals at the Sturgeon Community Hospital connected with members of the AHS IPC Hand Hygiene Program to present to the site's IPC committee as there had been a lot of turnover in leadership and management at the site. Dr. McFarlane, Physician, IPC, and Chad Herbers, Project Manager, IPC, partnered to develop a presentation that included a plan to reestablish site-based reviewers at the sites.

*Hand hygiene has always been a priority at the Sturgeon [Community] Hospital, though the demands of the COVID-19 pandemic challenged the site's ability to keep up with observations. As the pandemic demands settled into steady state, our IPC team and site operational leads re-committed to meeting hand hygiene observation targets. We worked collaboratively, with the support of the [AHS IPC Hand Hygiene Program], to address this through multiple strategies. Numbers are back up to target and we continue to work on sustainability of the program. - Dr. Alexandra McFarlane, Physician, IPC*

IPC partnered with site operations leadership and management to recruit and train site-based reviewers throughout 2022/2023-Q2 (Jul-Sep) and establish a schedule for hand hygiene reviews to be performed. As a result of this work, the number of hand hygiene reviews at the site has increased.

Fiscal Quarter	Target Hand Hygiene Observations	Total Hand Hygiene Observations
2022/2023-Q1 (Apr-Jun)	920	375
2022/2023-Q2 (Jul-Sep)	920	809
2022/2023-Q3 (Oct-Dec)	920	2,707
2022/2023-Q4 (Jan-Mar)	920	3,759

This model of engagement is being considered for other sites. The site continues to connect with the AHS IPC Hand Hygiene Program for information through the Edmonton Zone Infection Prevention and Control Committee.

## Increasing awareness

The AHS IPC Hand Hygiene Program promotes activities that encourage awareness of hand hygiene and increases accountability and ownership of hand hygiene practices. Covenant Health IPC participates in the planning and implementation of events. The IPC Events Working Group coordinate these events, which include Clean Your Hands Day on May 5, Global Handwashing Day on October 15, and National Infection Prevention and Control Week on the third week of October. These events are designed connect staff and patients in a positive way on hand hygiene and IPC to inspire conversations and have fun.

In recognition of [Clean Your Hands Day](#), May 5, 2022, six virtual hand hygiene practice puzzles to provide a fun distraction and to say thank you to staff for taking the time to clean their hands were launched. In recognition of [Global Handwashing Day, October 15, 2022, and National Infection Control Week, October 17-20, 2022](#), AHS IPC hosted an IPC practice quiz and two speakers' series events on the theme "Spread Prevention - Not Infection". Topics explored at the speakers' series events included barriers to hand hygiene, IPC micro-learning modules, IPC risk assessment, Provincial Personal Protective Equipment Safety Coach Program, and wastewater monitoring.

## Covenant Health IPC Hand Hygiene Program

In 2022/2023, Covenant Health reported a hand hygiene compliance of 94.2 per cent. Hand hygiene compliance is monitored in all Covenant Health acute care and continuing care sites twice a year between April 01 – May 31 and October 01 – November 30. It is important to note that AHS and Covenant Health data are not directly comparable because of key differences between the methodologies and the systems used to perform hand hygiene reviews.

The Covenant Health IPC Hand Hygiene Program is a partnership between Covenant Health IPC and healthcare providers. One aspect of this partnership is the education provided by the infection control professionals to site-based reviewers every review period. Hand hygiene compliance is monitored in all Covenant Health acute care and continuing care sites. Although not mandatory, some ambulatory care and outpatient units participate in hand hygiene improvement initiatives by performing hand hygiene reviews and providing education. Specific hand hygiene practices and trends identified during reviews are reported to the unit manager for appropriate follow-up and tailoring of hand hygiene education. This just-in-time feedback as well as identification and reporting of trends at the unit level continue to be essential elements of hand hygiene improvement initiatives. Each program, site, or unit creates an action plan to increase hand hygiene compliance when hand hygiene compliance rates are less than 95.0 per cent.

In Covenant Health, the Covenant Health *Hand Hygiene Policy (2021)* and *Hand Hygiene Procedure (2021)* guide hand hygiene practices.

The Covenant Health IPC Hand Hygiene Program uses a vendor-supported platform – HandyAudit – that is based on direct observation methodology. Data are entered into the HandyAudit portal using an AHS or Covenant Health issued iPad. The HandyAudit system, like the Clean Hands System, has the capacity to provide real-time compliance results.



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