

Infection Prevention & Control HH (HH) Surveillance Information Sheet

Purpose

The aim of this document is to inform Interior Health (IH) healthcare staff on key concepts related to Hand Hygiene (HH) surveillance.

Context

- In Canada, approximately 1 in 9 patients (250,000 individuals) acquire an infection each year because of time spent in the hospital and 8,000 to 12,000 of those individuals die from these infections.
- Increasing HH is vital to reduce transmission of microorganisms and reduce healthcare-associated infections.
- HH is a general term referring to practices that remove microorganisms from the hands and includes application of alcohol-based hand rub or hand washing with soap and water.
- Monitoring HH compliance according to the Four Moments for HH and offering healthcare providers feedback regarding compliance are considered essential elements of HH improvement initiatives.
- IH uses direct observation to monitor HH compliance of healthcare providers as recommended by the World Health Organization (WHO) and other organizations such as the Canadian Patient Safety Institute.

Key Messages

- Ongoing surveillance provides timely data to clinicians, frontline staff, and leaders to monitor, understand, and use HH compliance data to improve HH practices.
- There are several initiatives throughout IH to improve the HH compliance of healthcare providers and thereby improve patient safety.
- HH compliance and quality improvement initiatives are required as per Accreditation Canada and is publicly reported on the external webpage.

Methodology

- Frontline staff complete HH reviewer training and work with the Infection Prevention and Control (IPAC) Program to become a site-based reviewer.
- Trained site-based reviewers directly observe a healthcare provider's HH practices in relation to the Four Moments for HH.
 - Moment 1: Before initial patient/patient environment contact
 - Moment 2: Before aseptic procedure
 - ⊖ Moment 3: After body fluid exposure risk
 - ⊖ Moment 4: After patient/patient environment
- Trained site-based reviewers use the Clean Hands System to perform HH reviews.
- The Clean Hand System is composed of the Clean Hands app, paper tool and portal. The Clean Hands app and paper tool are used to collect data. The Clean Hands portal is the database where the data are stored and where real-time reports can be generated.

Calculation

HH compliance calculations are shown below. The HH compliance allows for comparability both within a single facility over time, or between different facilities within Interior Health.

$$\text{HH Compliance (\%)} = \frac{\text{Number of Compliance Observations}}{\text{Total Number of Observations (Compliant and Non-compliant)}} \times 100$$

Limitations and Explanations

- Interior Health's HH compliance reports only include HH observation data that were collected by IH programs, sites and units using the Clean Hands System (and prior to May 2025 the Crede HH Platform).
- Small sample sizes are not reliable as a change in HH compliance could be due to chance alone rather than the effect of a HH improvement initiative.
- To minimize inaccurate measures due to small sample sizes and improve reliability and representativeness, the IPAC Program established guidelines based on the Provincial HH Working Group's Recommendations on Sampling and Reporting for HH Audits.
- The quality of HH is not assessed as part of the surveillance (i.e. how long or how well a healthcare provider cleaned their hands).
- Since the HH reviews use the direct observation methodology, the Hawthorne effect plays a role, whereby HH performance improves when healthcare professionals know they are under observation.

Background Information about IPAC Surveillance Indicators

IPAC surveillance indicators are measures which flag potential quality issues that may need further review and investigation. They are used for a variety of purposes, including by healthcare providers to monitor trends and improve care, by governments to monitor care, and for public reporting.

HH compliance is a measurement of success for HH at appropriate times according to the 4 Moments for HH as per the IH HH Policy. HH compliance is calculated by dividing the number of compliant observations by the total number of compliant and non-compliant observations recorded by a trained site-based reviewer during a review and are presented for a fiscal year or fiscal quarter.

IPAC surveillance reports are available here: <https://healthbc.sharepoint.com/sites/IPCPortalIH/SitePages/Hand-Hygiene-Surveillance-%26-Reporting.aspx>