

## HAND HYGIENE COMPLIANCE REPORTING

Public reporting of hand hygiene compliance rates in Ontario hospitals will begin on April 30, 2009. Hospitals will post on their web sites, on an **annual** basis and by hospital site, the compliance rate for:

- (i) hand hygiene before initial contact with the patient/patient's environment for all health care providers
- (ii) hand hygiene after contact with the patient/patient's environment for all health care providers

Hospitals will also report their data to the Ministry of Health and Long-Term Care through an online template captured by a central database. The ministry will post this information on its public website.

### What is hand hygiene?

Hand hygiene is the action of cleaning hands. There are two ways to clean hands. Using an alcohol based hand rub which kills organisms in seconds or, when hands are visibly soiled, using soap and running water.

### Why are hand hygiene rates being publicly reported?

The single most common way of transferring health care-associated infections (HAIs) in a health care setting is on the hands of health care providers. Health care providers move from patient to patient and room to room while providing care and working in the patient environment. This movement provides many opportunities for the transmission of organisms on hands that can cause infections. Monitoring hand hygiene practices is vital to improving rates and, in turn, reducing HAIs.

### What is the definition of hand hygiene compliance?

Four indications define proper hand hygiene compliance:

- (i) Before initial patient/patient environment contact
- (ii) Before aseptic procedure\*
- (iii) After body fluid exposure risk
- (iv) After patient/patient environment contact

\*An aseptic procedure could include: a) touching/manipulating a body site that should be protected against infections (e.g., wound care including dressing change and wound assessment); b) manipulating an invasive device that could result in infection of a body area (e.g. priming intravenous infusion set, inserting spike into opening of IV bag, flushing line, adjusting intravenous site, administering medication through IV port, changing IV tubing)

### What will be publicly reported?

The Ministry of Health and Long-Term Care (MOHLTC) will be collecting data on all four moments for hand hygiene (also called indications). However, only two of the moments are being publicly reported: before initial contact with the patient/patient's environment (moment 1) and after contact with the patient/patient's environment (moment 4).

## What determines the rate?

### Before Initial Patient/Patient Environment Contact:

$$\frac{\# \text{ of times hand hygiene performed before initial patient/patient environment contact}}{\# \text{ observed hand hygiene indications before initial patient/patient environment contact}} \times 100$$

### After Patient/Patient Environment Contact:

$$\frac{\# \text{ of times hand hygiene performed after patient/patient environment contact}}{\# \text{ observed hand hygiene indications after patient/patient environment contact}} \times 100$$

The number of times that hand hygiene was performed for each of the indications is divided by the number of observed hand hygiene indications for that specific indication, and the results are multiplied by 100.

This calculation represents the percentage compliance rate for hand hygiene for the reporting facility.

For example, hand hygiene was performed 60 times before initial patient/patient environment contact by all health care providers for 100 observed hand hygiene indications for initial patient/patient environment contact for all health care providers, resulting in a 60% compliance rate.

## How many observations are hospitals required to make?

To ensure that the data is statistically valid, a hospital with 100 beds should complete at least 200 observations opportunities for hand hygiene. The minimum number of observation opportunities is 50 for any hospital that has 25 beds or less. The maximum number of hand hygiene observed opportunities will be a factor of the number of inpatient beds the facility has (i.e., 300 beds requires at least 600 observed hand hygiene opportunities).

Observed opportunities should be captured with observation sessions that vary across time (i.e. day of the week and time of day) and place (i.e. ward/unit) within the hospital.

## What will the health care system do with this information?

Like the public reporting of other indicators, monitoring hand hygiene compliance rate is about overall performance improvement. The information gathered will assist hospitals in evaluating the effectiveness of their infection prevention and control interventions and make further improvements based on this information