



Bermuda Hospitals Board

Know Your BHB: Your Life In Their Hands

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Diarrhea, flu and colds are common everywhere. Even antibiotic resistant infectious organisms such as MRSA are present in the community. What is the best way to protect yourself? Wash your hands thoroughly and frequently – in other words: practice hand hygiene!

Infectious organisms can survive on the skin or on surfaces you touch. If you go into your colleague's office and she has a cold, you could pick up the cold virus by turning the door knob, touching her desk, or using her pen, keyboard, mouse or telephone. You could then pass the virus on other colleagues with a simple handshake.

In a hospital environment, some infections are not as obvious as a cold. Patients colonized with MRSA (which means they carry the organism but are not sick), for example, may show no symptoms. Healthcare workers who go from patient to patient must therefore carry out appropriate hand hygiene frequently to prevent a 'hospital-acquired infection'.

This is a big safety issue. Patients in hospital are often more frail or susceptible to infections, and they are more at risk of serious complications. In the US, it is estimated that more than 2 million people are affected by hospital-acquired infections and more than 100,000 die annually as result.

With all the modern techniques and drugs available in hospitals, proper hand hygiene by health workers is still the single most important way to prevent the spread of infections.

This is why monitoring hand hygiene activities by staff is a key way to measure clinical quality – and why compliance to international hand hygiene standards across BHB is being shared so that you can 'Know Your BHB' better.

So what is appropriate hand hygiene?

First, hands must be washed with soap and water, or disinfected using an alcohol-based hand rub that contains between 60-80% alcohol. Alcohol-based hand rubs are preferred because they are very effective against most bacteria, viruses and fungi. They are also faster to use than washing with soap and water, and do not require running water. Washing with soap and water is mandated, however, when hands are visibly soiled or when caring for patients with infections such as *C. difficile*, norovirus and other causes of diarrhea.

Second, hands must be thoroughly cleaned. It takes at least fifteen seconds to rub around all the surfaces and nails. Don't think that sounds long? Count to 15 next time you wash your hands and see if you would pass the test - or sing the song 'Happy birthday to you' all the way through twice (which takes about the same time). Consciously rub every surface, in between all fingers and around nails.

Finally, hands must be cleaned at each of the five moments identified by the World Health Organization:

- Before patient contact
- Before performing an aseptic technique such as insertion of an IV or catheter
- After patient contact
- After contact with patient surroundings
- After contact with blood or body fluids.

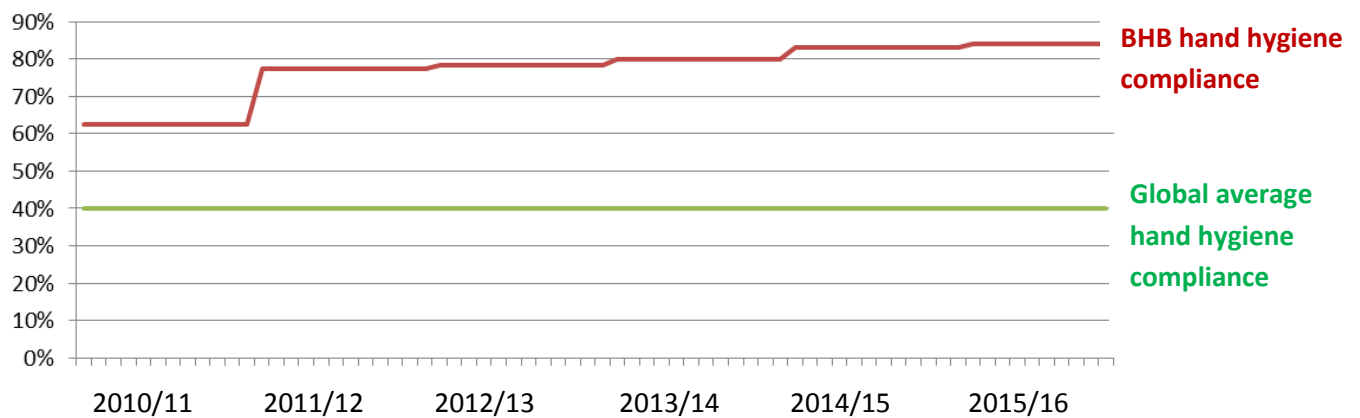
In addition, hand hygiene should always be performed following glove removal as gloves can have microscopic tears or holes that can contaminate hands during glove removal.

Globally, healthcare worker compliance with hand hygiene in high income countries is estimated to be about 40%¹. Experts agree that low hand hygiene compliance rates are rarely the result of deliberate noncompliance or lack of caring. It is sometimes due to the unavailability of sinks, soap, paper towels or alcohol rub dispensers, or time pressures, and sometimes because healthcare workers skin becomes sore and cracked from frequent washing.

At BHB, monitoring for hand hygiene compliance is carried out monthly on all inpatient acute care wards. Results are reported to each ward and posted at each nursing station for all to see, including patients and visitors.

Hand hygiene compliance rates at BHB have been improving, in part due to the monitoring and continuous education. Hospital-wide (all services) annual hand hygiene rates have risen from 78% in 2012/13 to 83% in 2014/15. The ultimate goal is 100% compliance.

Patients and visitors can be to be part of this effort. Don't be afraid to speak up and ask your healthcare provider if they have washed their hands. Your life is in their hands.



1. Erasmus V, et al., Systematic review of studies on compliance with hand hygiene guidelines in hospital care. *Infect Control Hosp Epidemiol.* 2010; 31(3):283-294. doi:10.1086/650451.