PICNET PROVINCIAL INFECTION CONTROL NETWORK OF BRITISH COLUMBIA

A program of the Provincial Health Services Authority

Hand Cleaning, Norovirus, and C.diff – what's the diff?

Hand cleaning is the most effective way of preventing the spread of infections, and it's now easier than ever to clean your hands regularly, as hand sanitizer dispensers are located throughout healthcare facilities. However, you may have a read a recent news article claiming that alcohol-based hand sanitizer is ineffective against norovirus. You may have also heard that when you're in contact with patients with *C.difficile*, you should use soap and water rather than sanitizer. So how do you know which to use, when?



Alcohol-based hand rub (ABHR) is the preferred method of hand cleaning in most situations because it is easy to

get to and effective against most types of germs (as long as it is at least 60% alcohol).

There are two things that ABHR is not as effective with, and in these cases, soap and water are preferred.

1. Dirt and organic matter

If your hands are visibly dirty, you should wash with soap and water because ABHR doesn't remove dirt. Also, the effectiveness of hand sanitizer at killing germs is inhibited by organic matter.

2. Infectious diarrhea, C.difficle, and Norovirus

If you are dealing with patients known to have *C.difficile* or norovirus, or who have diarrhea/ vomiting and you don't yet know the cause, soap and water are preferred. *C.difficile* bacteria form protective spores that cannot be penetrated by alcohol, so the spores need to be physically **removed** from your hands. ABHR will kill about 90% of the norovirus particles on your hands, so to remove **all** of the germs, soap and water are recommended.

In either of the above cases—dirt, infectious diarrhea, C.difficile or norovirus—use the **first available** method of cleaning, and then soap and water as soon as you can get to a sink.

Clean your hands thoroughly!

Remember, for either ABHR or soap and water to be effective, you must thoroughly clean all areas of your hands. Don't forget your fingers, fingernails, wrists, and thumbs!

In addition, hand and wrist jewellery should not be worn, and nails should be short and free from nail polish, as jewellery and chipped polish can trap bacteria.

Gloves are not a substitute for hand cleaning as all gloves have micropores, and germs can get through. Be sure to clean your hands before **and** after glove use so that you don't transmit germs from yourself to the patient, or from the patient to you.

If additional precautions are in place, always adhere to the hand hygiene directions appropriate to those precautions.



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Myth: ABHR me

ABHR makes germs more resistant.

Fact:

Fact:

Germs do not develop resistance to alcohol. While some germs can develop ways of avoiding the effects of *antibiotics and some chemicals*, they cannot develop ways of avoiding the kill effect of alcohol.

Myth: ABHR has negative long-term health effects.

There is no evidence of negative health effects from using sanitizer. Alcohol has been used as a disinfectant for centuries.

Myth: Alcohol is absorbed into the bloodstream.

There is no absorption of alcohol into the bloodstream from using ABHR.

Myth: ABHR dries out hands.

Most ABHRs contain an emollient that helps maintain hand health.

Myth: People who clean their hands regularly are germophobes.

In order for hand hygiene to be fully effective, it must be performed before **and** after contact with the patient or patient environment. This does mean cleaning your hands many – possibly hundreds – of times during the day!

For more information on provincial hand hygiene guidelines, refer to the **Best Practices for Hand Hygiene in All Healthcare Settings and Programs** (BC Ministry of Health, August 2012).

For more information on infection prevention and control practices, please refer to PICNet's Gastrointestinal Infection Outbreak Guidelines for Healthcare Facilities.

You can find both documents, as well as with more infection prevention and control information, at www.picnet.ca