

THE ROLE OF GOOD HAND HYGIENE PRACTICES IN PREVENTING THE SPREAD OF SWINE FLU

The current pandemic is caused by a new strain of the swine influenza virus (H1N1), which normally causes disease in pigs. The new version is spreading from person to person by the normal transmission routes associated with colds and seasonal influenza. Viral particles enter the body via the respiratory tract, but the air is not the only means by which the virus is spread. It can survive for certain periods on household surfaces and also on the skin. It is recognised that hands can play an important role in spreading the virus between people and also contaminating objects.

Preventing the spread of swine flu

Guidelines have been issued by the Department of Health indicating that preventing the spread of germs is the single most effective way to slow the spread of diseases like swine flu. The guidance states that you can help protect yourself and your family by:

- ensuring everyone washes their hands regularly with soap and water,
- cleaning surfaces regularly.

And that you can prevent the virus spreading to others by:

- always carrying tissues,
- using tissues to cover your mouth and nose when you cough and sneeze,
- binning the used tissues as soon as possible, and
- washing your hands regularly.

CATCH IT. BIN IT. KILL IT.

Why is good hand hygiene so important?

If somebody who has swine flu coughs or sneezes but they do not cover their nose and mouth with a tissue, droplets containing the virus will be dispersed. These droplets typically spread at least a metre, which means that a person close to them might breathe in the spray and the droplets could fall onto surrounding surfaces. The infected person's hands can easily become contaminated by droplets during coughing and sneezing. Surfaces the person then touches, such as door handles, hand rails, telephones and keyboards, can then become contaminated. The flu virus can live on a hard surface for up to 24 hours and a soft surface for about 20 minutes. If another person touches the surface within these times, they can pick-up viral particles onto their own hands. When touching their eyes, nose or mouth they may also become infected as the virus enters their body. An even more direct means of transmitting the virus is through skin-to-skin contact, such as when shaking the hands of an infected person whose hands are contaminated.

Good hand hygiene by thorough washing and drying of the hands will reduce the hand contamination and help prevent the spread of the disease. Indeed it makes sense to minimise touching your mouth, eyes or nose unless you have recently cleaned your hands.

When to wash the hands

To help reduce the spread of influenza, it makes good sense to wash the hands frequently throughout the day. It is particularly important to wash them after coughing, sneezing or disposing of your used paper tissues.

Inside the home we should also continue to wash hands at times when we would normally do so, to reduce the potential spread of harmful organisms (such as after using the toilet and before preparing food). However there should also be increased vigilance if somebody in the household is ill and suspected of having an infection such as swine flu. In particular, the sick person and their carer should wash their hands frequently.

How to wash the hands

Good hand hygiene is more than just a matter of washing at the appropriate times – the actual way in which you wash your hands is just as important.

Many people spend less than 10 seconds for the whole process of washing and rinsing their hands. This is not long enough as hands should be washed for at least 20-30 seconds. If they are particularly dirty, this time period needs to be extended.

The next time you wash your hands, slowly count out: 1, 2, 4, 5, 6.....20. Twenty seconds might be a lot longer than you think!

The hand washing technique should involve first wetting the hands then applying sufficient soap to cover the whole surface of the skin. The soap needs to be well distributed by rubbing the palms together and also by interlacing the fingers and not forgetting to rub the back of the hand and fingers. Both hands should be rinsed thoroughly under running water – if possible, keep your hands upright at this stage, so that any contamination and soap residue is readily washed away with the stream of water.

Pay particular attention to washing the areas around rings if these cannot be removed at the start of the wash. Long and artificial nails can harbour more germs than short ones and care must be taken with washing the underside of them.

Importance of drying the hands

Finally, dry the hands thoroughly using paper towels, a clean cloth towel or an electric hand dryer. This step is very important. Human skin is a relatively dry environment and this helps to limit the types and numbers of micro-organism that can survive on it. Micro-organisms surviving within droplets of moisture may be afforded a degree of protection and survive for much longer. Therefore if the hands remain damp, there is a greater chance of either infecting ourselves by transferring the micro-organisms when touching our eyes, nose and mouth, or by transferring micro-organisms onto surfaces we next touch.

If hands repeatedly remain damp because of ineffective hand drying, it can also lead to a deterioration in the skin's condition and integrity. This in turn can lead to either an increase in the number of micro-organisms on the skin or a change in the type of micro-organisms compared with the normally harmless ones which we all carry on our hands.

In the home, a cloth towel will normally be used to dry the hands. In situations where somebody is ill in the household with suspected influenza, it would be sensible for them to have a separate towel of their own to help reduce the possibility of infecting others.

Use of hand sanitisers

Washing hands with soap and water, followed by thorough drying, is the preferred method of hand cleansing. Droplets and visible dirt which could trap micro-organisms are washed away and there is the opportunity to clean harder to reach areas, such as cleaning under the fingernails with a nail brush if hands are heavily soiled. However, at times when soap and water is not available and when the hands are not visibly soiled, then hand sanitisers which have proven anti-microbial performance are also an aid to hygiene. A variety of such products is now available, many in small bottles or dispensers that can be conveniently carried in a pocket or handbag. The sanitiser is normally in a liquid or gel form and should be rubbed thoroughly over the hands and fingers and allowed to dry.

Swine flu

Swine flu has proved to be a highly contagious disease. Thankfully, for the vast majority of people the symptoms are relatively mild, but a small number of people are at risk of becoming more seriously ill due to their age or the fact that they have under-lying serious health problems.

It is recommended that people in high-risk groups be vaccinated against H1N1 (swine flu). This includes all pregnant women, at any stage of pregnancy.

Those concerned that they may have swine flu can obtain more information about flu symptoms from <http://www.nhs.uk/Conditions/Pandemic-flu/Pages/Introduction.aspx>