

Management

BULLETIN

Double, Double Soap and Bubbles!

Ah, October! Kids are back in school. Nights are becoming cool. Pumpkin spice everything is here and to some, that rules. However, the spookiest season of the year is right around the corner. No, I'm not talking about Halloween, but rather FLU SEASON (cue little Carol Anne saying, "It's baaaack"). For many health departments, emergency rooms and doctor's offices, saying "flu season" is the equivalent to yelling "BOO". To those who work in proximity to others in offices, a cacophony of sniffles, coughing, and nose blowing is scarier than any ghost, ghoulish or goblin (Karen, just go home already okay?!)

According to the US Centers for Disease Control (CDC), while seasonal flu viruses, like influenza A and B, are detected throughout the year in the United States, they are most commonly detected during the fall and winter. This flu activity typically begins to increase in October. Are you scared yet?

Don't be! We can all help each other through awareness and practice of the things to do to mitigate the risk of contracting the flu. In addition to getting a flu shot every year, staying home when you are sick, and covering your nose and mouth when you cough or sneeze with a tissue, one of the best ways to prevent getting sick and spreading the virus to others is performing good hand hygiene.

Why Wash your Hands?

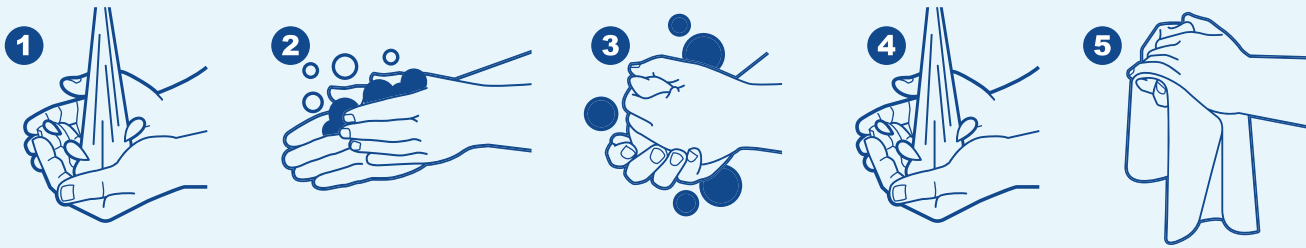
We know that the flu is spread by respiratory droplets made when people with the flu cough, sneeze or talk. These droplets can land in our mouths or nose or our breathing zone even if we are six feet away. You may also get the flu by touching a surface or object that has the flu virus on it and then touching your own mouth, nose or eyes.

When you wash your hands with soap on a regular basis, you are removing the germs from your hands and preventing those germs from getting into your body when you touch your face. You are also preventing those germs from being transferred to objects that others might touch.

According to the CDC, when communities are educated on good hand hygiene, respiratory illnesses in the general population decrease by 16-21%. Handwashing also helps battle the rise in antibiotic resistance since preventing sickness reduces the amount of antibiotics prescribed and the likelihood that antibiotic resistance will occur.

How to Wash Your Hands

To wash your hands effectively the CDC recommends the following steps:



1. Wet your hands with clean, running water (warm or cold), turn off the tap and apply soap.

2. Lather your hands by rubbing them together with soap. Be sure to lather the backs of your hands, between your fingers and under your nails.

3. Scrub your hands for at least 20 seconds and while you're doing that, sing "Happy Birthday" to yourself twice.

4. Rinse your hands well under clean running water.

5. Dry your hands using a clean towel or air dry them.

What about hand sanitizer?

In a pinch, when soap and water are not available, alcohol-based hand sanitizers can reduce the number of germs on hands. It has become common protocol to use hand sanitizer between seeing patients since studies show that hand sanitizers work well in clinical settings where hands encounter germs but generally do not become heavily soiled or greasy.

However, a new study from Japanese researchers challenges the idea that "ethanol-based disinfectants are effective at completely destroying influenza A viruses quickly in all situations".

In a series of tests a contact time of four minutes was needed for the hand sanitizer to kill the influenza A virus. This is a much longer duration than typical use. After two minutes the virus was still active. The reason? Researchers say that there is a layer of mucus that acts as a protective coating for the virus which cannot be deactivated by ethanol-based disinfectants until the mucus is dry.

Currently, the CDC and World Health Organization (WHO) recommend hand hygiene practices that includes using ethanol-based disinfectants that contain at least 60% alcohol for 15-30 seconds in healthcare settings. Findings such as the ones published in this new study could be a game changer for current procedures.

In contrast to testing the efficacy of hand sanitizer, researchers performed hand hygiene with soap and running water and with running water only (no soap used). When soap and running water was used the influenza A virus was deactivated in 30 seconds.

Initially it was believed that performing hand hygiene with only running water was going to be a limitation to this study. However they were surprised to find that when hand washing was practiced in this manner the influenza A virus was still deactivated within 30 seconds!

At the end of the study researchers concluded that even though both handwashing methods worked to deactivate the flu, using soap is obviously effective and further increases in disinfection can be expected when soap is used.

Summary

So what can you take away from this article? As we gear up for Halloween this season let us not forget about flu prevention! Washing your hands with soap and water will help reduce your risk of contracting or spreading the virus. If you work in a healthcare setting this could be a good time to re-evaluate your policies on hand hygiene between patients. In a realistic medical setting where a four-minute contact time is not feasible with hand sanitizer to be effective, maybe there should be procedural changes to include the washing of hands with at least running water between patients.

References

<https://www.cdc.gov/handwashing/index.html>

<http://www.cidrap.umn.edu/news-perspective/2019/09/hand-sanitizer-shown-less-effective-hand-washing-against-flu>

■ Submitted by: Anna Liddicoat
Industrial Hygiene Consultant, NCSLPH

