AEROSCOPIC ENVIRONMENTAL, INC

# How to Reduce Instances of Colds and Flu in the Workplace

**(including the H1N1 "Swine Flu" Virus)**

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This document is prompted by the recent interest in environmental hygiene created by the H1NI "Swine Flu" pandemic. It is designed to raise awareness and offer basic recommendations. For more detailed information, it is recommended that your local health department and the Centers for Disease Control and Prevention (CDC) be consulted. Information from the CDC can be readily gained from their website at www.cdc.gov.

## Background[1]

On June 11, 2009, the *World Health Organization* (WHO) raised the worldwide pandemic alert level to *Phase 6* in response to the ongoing global spread of the novel influenza A (H1N1) virus. A *Phase 6* designation indicates that a global pandemic is underway. More than 70 countries are now reporting cases of human infection with novel H1N1 flu. This number has been increasing over the past few weeks, but many of the cases reportedly had links to travel or were localized outbreaks without community spread. The WHO designation of a pandemic alert Phase 6 reflects the fact that there are now ongoing community level outbreaks in multiple parts of world. WHO's decision to raise the pandemic alert level to Phase 6 is a reflection of the spread of the virus, not the severity of illness caused by the virus.

Novel influenza A (H1N1) is a new flu virus of swine origin that first caused illness in Mexico and the United States in March and April, 2009. It's thought that novel influenza A (H1N1) flu spreads in the same way that regular seasonal influenza viruses spread, mainly through the coughs and sneezes of people who are sick with the virus, but it may also be spread by touching infected objects and then touching your nose or mouth. Novel H1N1 infection has been reported to cause a wide range of flu-like symptoms, including fever, cough, sore throat, body aches, headache, chills and fatigue. In addition, many people also have reported nausea, vomiting and/or diarrhea.

[1] Centers for Disease Control and Protection (CDC), Website Posting June 19, 2009, 4:00 PM ET, www.cdc.gov/h1n1flu/update.htm

The first novel H1N1 patient in the United States was confirmed by laboratory testing at CDC on April 15, 2009. The second patient was confirmed on April 17, 2009. It was quickly determined that the virus was spreading from person-to-person. On April 22, CDC activated its Emergency Operations Center to better coordinate the public health response. On April 26, 2009, the United States Government declared a public health emergency and has been actively and aggressively implementing the nation's pandemic response plan.

Since the outbreak was first detected, an increasing number of U.S. states have reported cases of novel H1N1 influenza with associated hospitalizations and deaths. By June 3, 2009, all 50 states in the United States and the District of Columbia and Puerto Rico were reporting cases of novel H1N1 infection. While nationwide U.S. influenza surveillance systems indicate that overall influenza activity is decreasing in the country at this time, novel H1N1 outbreaks are ongoing in parts of the U.S., in some cases with intense activity. CDC is continuing to watch the situation carefully, to support the public health response and to gather information about this virus and its characteristics. The Southern Hemisphere is just beginning its influenza season and the experience there may provide valuable clues about what may occur in the Northern Hemisphere this fall and winter.

# How Colds and Flu are Spread

Infections related to colds and flu are typically spread from person to person through touching, kissing, hugging, sneezing and coughing. However, disease causing organisms can also be passed along by deposits left [by infected persons] on environmental *shared-contact* surfaces, such as doorknobs, keyboards, pens, touch-pads, faucet handles and the like. Once these deposits are picked-up, disease-causing organisms can be introduced to the body by the touching of eyes, nose and mouth. In addition, aerosols (in the form large and small droplets) created by coughing or sneezing can be discharged into the air (traveling up to six feet) where they are inhaled or settle-out on shared-contact surfaces.

Flu symptoms typically include fever, headache, tiredness, dry cough, sore throat, nasal congestion and body aches. Common cold viruses (rhinovirus, coronavirus and many others) cause symptoms that may include runny nose, nasal congestion, cough, headache and weakening of the immune system. Secondary bacterial infections often lead to middle ear, sinus, throat, bronchial and lung infections that linger. Remember, when it comes to health and safety, there is no substitute for sound medical advice; if you are ill, call your doctor!

# Basic Recommendations

- If you're sick, stay home. If you suspect someone else is sick, suggest they go home. Policies related to infection control in the workplace should be created before their need arises.
- Cover your mouth when you cough or nose when you sneeze. If you see someone else cough or sneeze without covering-up, politely remind them that they could be spreading

disease. If you use a tissue to blow your nose, dispose of it immediately in the trash. Think about others and always wash your hands and face after *cover-up* coughing and sneezing or blowing your nose. If you are ill and must go out in public, where a surgical mask or bandana to prevent yourself from accidently discharging aerosols when you cough or sneeze.

- Wash or sanitize your hands often. Markets and pharmacies sell sanitizing skin gels and wipes that you should always keep handy. Use them regularly! It is also a good idea for employers to have these personal hygiene products strategically placed and readily available for their employees to use.
- Keep shared-contact surfaces such as doorknobs, faucet handles, phone handsets and keypads, desktops, break-tables, chairs, countertops, coffee pot handles, copy machine control panels, etc. clean. Keep sanitizing wipes and spray cleaners (with disposable towels) readily available and encourage their proactive use on shared-contact surfaces.
- Don't share food, drinks or personal items (including pens). Don't let sick children share their toys with other children.
- Keep small containers of sanitizing skin gel handy for use while out in public and running errands.
- Try to avoid crowds during times of heightened alert. Increase the spatial distance between workers and minimize the need to congregate in small areas for meetings and breaks.
- If you are caring for an ill person, cover your mouth and nose with a mask when you are near them and clean your hands and face often. Follow expert advice for patient care and caregiver safety.

# Professional Environmental Hygiene Services

Professional cleaning and sanitizing services for cold and flu mitigation are not generally recommended by healthcare professionals and should not be used as a substitute for common sense and risk-reducing measures. However, if the situation dictates that the environment be hygienically cleaned to calm nerves or reduce the risk of disease spread, a professional service may be warranted. This service provider should be aware of the potential risk to their employees and have them trained in the specialized methodologies required. Worker protection should include disposable suits, gloves and N-95 respirators. Along with dust control measures, such as negative pressure ventilation and/or HEPA air purification, HEPA filtered vacuums should be used to clean porous and fibrous surfaces. Disinfectant-type cleaners should be used on all hard, inanimate shared-contact surfaces in accordance with their manufacture's label instructions. Generally speaking, single-use disposable towels saturated with the disinfectant-cleaner are more effective than spray-type disinfectants used with dry-wiping, disposable towels. Since some disinfectants (when used in accordance with manufacturer's instructions for dwell time) can leave spots or streaks, it may be necessary for esthetic purposes to follow disinfectant-type cleaning with more suitable finish cleaning (e.g., complete the cleaning process with the application of furniture polish and cabinet, stainless and glass cleaners).

The most important surfaces to clean are those that people contact regularly. Examples of these surfaces in the workplace include the following:

- Doorknobs
- Door push-bars
- Desks
- Drawer pulls
- Chair arms & backs
- Computers
- Keyboards & mice
- Printers
- Telephones
- Calculators
- Pens & staplers
- Fax machines
- Copiers
- Scanners
- Paper shredders
- Trash can lids
- Toilets & stall doors
- Faucets
- Towel dispensers
- Light switches
- Counters
- Refrigerator pulls
- Coffee pot handles
- Stair railings

Start clean and stay clean. Stay home if you're sick. Send people home if they start to get sick at work. Keep yourself fit. Get plenty of rest and eat well. Respect those around you by covering-up when you cough or sneeze (and remember to wash your hands and face). A little effort goes a long way towards protecting yourself and those that work around you. We may not be able to prevent a pandemic, but we can work to minimize its impact on our community.

Ian Spiszman is President of AEROSCOPIC ENVIRONMENTAL, INC. He has been working in the environmental hygiene field for over for over forty years and is a *Council-Certified Indoor Environmental Consultant, Certified Environmental Specialist, Registered Environmental Assessor, Certified Asbestos Consultant, Air System Cleaning Specialist, Certified Mechanical Hygienist, Certified Business Continuity Planner, Ventilation System Mold Remediator, and a California licensed General Contractor.*

June 26, 2009