

Pandemic Planning

By Dennis Forrest

“By failing to prepare, you are preparing to fail.”

Benjamin Franklin (1706 – 1790)

For years now the World Health Organization (**WHO**) has been working to prepare us for an “avian flu” virus that never mutated over to humans. Recently however, the swine flu virus has resurfaced and may potentially be as big a threat. While on the surface this would seem like a remote world event, in recent days over 105 people nationwide in 11 states have been diagnosed with the swine flu. Should this become an epidemic as the WHO is suggesting, facilities professionals will be faced with an obligation to protect the workplace and help to mitigate the potential damage/illness that will result.

What are we dealing with:

Flu pandemics occur whenever a new strain of the virus arises to which most people have no natural immunity. Experts believe they have been occurring at irregular intervals since at least the 16th century. Scientists classify flu viruses according to their surface proteins: H for hemagglutinin and N for neuraminidase. There are 16 different H types and 9 different N types, but numbers merely differentiate the strains and do not indicate greater severity.

During the 20th century there were three flu pandemics and we are overdue for another one. A synopsis of the last three pandemics is as follows:

- **1918** The Spanish flu pandemic started in 1918 and was possibly the deadliest outbreak of all time. This flu was an **H1N1** strain – different from the one currently affecting Mexico and the U.S. Experts estimate this caused at least 675,000 U.S. deaths and up to 50 million deaths worldwide.
- **1957** This pandemic was known as the Asian flu. It was an **H2N2** strain and was first identified in China. There were two waves of illness during this pandemic; the first wave mostly hit children while the second affected the elderly. Experts estimate this caused at least 70,000 U.S. deaths and up to 1-2 million deaths worldwide.
- **1968** The most recent pandemic, known as the Hong Kong flu, was the mildest of the three and was an **H3N2** strain. The people most susceptible to the virus were the elderly. Experts estimate this caused 34,000 U.S. deaths and up to 700,000 deaths worldwide.
- **2009** As of 29 April 2009, nine countries have officially reported 148 cases of swine influenza **A/H1N1** infection. The United States Government has reported 91 laboratory confirmed human cases, with one death. Mexico has reported 26 confirmed human cases of infection including seven deaths. The following countries have reported laboratory confirmed cases with no deaths - Austria (1), Canada (13), Germany (3), Israel (2), New Zealand (3), Spain (4) and the United Kingdom (5).

Pandemic by Definition

A pandemic is a global disease outbreak. An influenza pandemic occurs when a new influenza A virus emerges for which there is little or no immunity in the human population, begins to cause serious illness and then spreads easily person-to-person worldwide. When a pandemic influenza virus emerges, its global spread is considered inevitable. Preparedness activities should assume that the entire world population would be susceptible.

The WHO Alert Phases

Phase	Description
I	Low risk of human cases
II	Higher risk of human cases
III	No or very limited human-to-human transmission
IV	Evidence of increased human-to-human transmission
V	Evidence of significant human-to-human transmission
VI	Efficient and sustained human-to-human transmission

On Sunday April 26th the **WHO** alert status was **Phase III**. As of this morning April 30th, the **WHO** alert status has been elevated to **Phase V**. Given this quick change in alert status it is inevitable that we will soon move to an alert status of **Phase VI**.

As facilities professionals I suggest that we all become more cognizant of what is happening relative to the pandemic nationally but more specifically in our own buildings and offices. As a precaution I suggest an office pandemic “task force” to identify the specific risk areas in your offices and begin to identify ways to attack the pandemic proactively. Some things you can do are as follows:

1. Order an adequate supply of facemasks for employees and visitors.
2. Order and stockpile hand sanitizers and disinfectant wipes.
3. Place facial quality tissues and latex gloves in reception areas and conference rooms and instruct staff not to handle any tissues left on surfaces without first putting on a pair of gloves.
4. Develop an enhanced cleaning schedule for all public areas that can be easily implemented with particular attention to telephones and tables in conference rooms, huddle spaces, coffee bars and break rooms.
5. Working with property management, develop a plan to increase the frequency of cleaning in toilet rooms with particular attention to door hardware.
6. Working with building engineering, determine the current fresh air exchange rates and work to have a plan for 100% outside air exchanges if possible.
7. Ensure that property management removes trash from the workspace at least nightly and replace the can liner daily. You may want to increase the frequency in conference rooms and break rooms.