

## WHAT EMPLOYEES NEED TO KNOW ABOUT 2009 H1N1 FLU VIRUS

### WHAT IS THE 2009 H1N1 FLU VIRUS?

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The 2009 H1N1 flu virus (sometimes called “swine flu”) is a new virus that was first detected in people in the United States in April 2009. This virus has now spread from person-to-person throughout the US and countries around the world with activity levels varying, depending on location. It is expected that illnesses may continue for some time.

### WHERE IS H1N1 ACTIVE?

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As of October 31, 2009, influenza transmission is geographically widespread and continues to increase in the U.S. with 48 states reporting widespread influenza activity. Levels of illness are higher than normal for this time of year.

According to Centers for Disease Control and Prevention (CDC), from August 30 – October 31, 2009, there have been 17,838 laboratory-confirmed influenza associated hospitalizations and 672 laboratory-confirmed influenza associated deaths. Since April 2009, there have been 129 cumulative laboratory-confirmed pediatric deaths. Two thirds of the children who died had underlying conditions.

As of November 1, 2009, according to the World Health Organization (WHO), worldwide there have been more than 482,300 laboratory confirmed cases of H1N1 flu and at least 6,074 deaths.

### HOW IS H1N1 VIRUS SPREAD?

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H1N1 flu is mainly spread through large-particle respiratory droplet transmission (coughs and sneezes). This transmission requires close contact between each contact because droplets do not remain suspended in the air and generally only travel up to six feet. Transmission can also happen by touching infected objects and then touching your nose or mouth.

### WHO IS AT HIGH RISK?

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- ◆ Children under five years of age
- ◆ Children and adolescents (under 18 years) who are receiving long-term aspirin therapy
- ◆ Pregnant women (CDC scientists found them more than four times as likely to be hospitalized with the virus)
- ◆ Adults and children who have asthma, chronic pulmonary, cardiovascular, renal hepatic, hematological, neurologic, neuromuscular, or metabolic disorders such as diabetes
- ◆ Adults and children who have immunosuppression (including those caused by medications or HIV)

Adults 65 years of age and older may have some partial immunity due to previous epidemic exposure.

## SYMPTOMS

The symptoms of H1N1 flu are similar to those of regular seasonal influenza and usually appear 1-4 days after a person is exposed. Symptoms include a fever accompanied by one or more of the following: coughing, sneezing, runny nose, sore throat, headaches, chills, lack of appetite, lethargy, muscle aches, nausea, vomiting and diarrhea. Stomach symptoms are more common in children than adults. Serious complications of influenza that need urgent medical attention include:

- ◆ Difficulty breathing or shortness of breath
- ◆ Pain or pressure in the chest or abdomen
- ◆ Sudden dizziness
- ◆ Confusion
- ◆ Severe or persistent vomiting
- ◆ Flu-like symptoms improve, but then return with high fever and worse cough

## HOW DO YOU KNOW IF YOU HAVE H1N1 FLU?

A person cannot tell if they have the H1N1 flu just by having the symptoms listed above, as these symptoms are also found in regular seasonal influenza. However, if you have been in an area where the H1N1 flu has been confirmed or if you have been exposed to a person with the flu, then any flu-like symptoms should be treated by a doctor.

The CDC has developed a PCR diagnostic test kit to detect the H1N1 flu and has distributed test kits to all states in the US, the District of Columbia, and Puerto Rico. The test kits are being shipped internationally as well. This will allow states and other countries to test for the virus.

## HOW TO AVOID CONTRACTING THE H1N1 VIRUS AND SPREADING IT TO OTHERS

- ◆ The best way to avoid getting the flu, whether the H1N1 flu or any other type, is to avoid exposure to the virus, which is transmitted by respiratory droplets (coughing or sneezing) or touching infected objects. If contact with another worker with influenza-like symptoms is necessary, be sure to maintain a distance of six feet or more.
- ◆ Wash your hands frequently with soap and water, especially after coughing or sneezing. An alcohol-based hand gel containing at least 60% alcohol can also be used if soap and water are not available.
- ◆ Avoid touching your eyes, nose and mouth.
- ◆ Cover your nose and mouth with a tissue when coughing or sneezing. Dispose of the tissue after each use.
- ◆ If a tissue is not available, sneeze or cough into your upper arm sleeve. Do not use your hands.
- ◆ Disinfect common workplace surfaces (work stations, phones, doorknobs, bathrooms, etc.) using antibacterial wipes.
- ◆ Notify your company's EHS manager, medical department and/or personal healthcare provider if you think you have influenza-like symptoms.
- ◆ Follow your company's recommended procedures for reporting symptoms, sick leave, etc.
- ◆ It is recommended that an employee with the H1N1 flu or any influenza-like illness should stay home from work until the fever has been gone for 24 hours without the use of fever-reducing medicine.
- ◆ Healthy employees who have an infected family member at home can go to work as usual, but should monitor their health everyday and stay home if they become ill.
- ◆ Follow all local health recommendations.

## **WHO SHOULD WEAR A FACE MASK OR PROTECTIVE GOGGLES?**

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According to the CDC, the use of N95 respirators or facemasks is generally not recommended for employees in non-healthcare occupational settings and general work activities. In the occupational healthcare setting, respiratory protection *is* recommended. If masks are worn, proper use and disposal is essential to ensure they are effective. Using a mask incorrectly may actually increase the risk of transmission.

### **Surgical Masks or N95 Respirators?**

According to the results of a study in JAMA, N95 respirators offer no better protection than standard surgical masks. While the N95 respirators can catch a much wider range of airborne pathogens, they are more expensive and in much shorter supply than surgical masks, which can be a problem during a flu pandemic. The study involved 446 nurses who were assigned to wear either an N95 respirator or a surgical mask while treating patients with respiratory illness and fever over a three month period. By the end, 22.9% of nurses who wore the N95 respirator got the flu compared to 22.9% of nurses who wore the surgical mask.

Another source for respiratory protection is through GlaxoSmithKline Plc (GSK), a pharmaceutical company based in the UK. GSK is selling Actiprotect<sup>®</sup>, an innovative new respirator mask specifically designed to help protect individuals from pandemic influenza. This medicated face mask has an antiviral coating that helps block more than 99% of flu viruses by killing them on contact. Currently, GSK is producing these masks for government supply only, but hopes to soon make them available to the general public.

## **TREATMENT USING ANTIVIRAL MEDICATION**

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H1N1 flu is treated in the same way as regular flu – with good hygiene and plenty of rest at home.

Treatment may also include an antiviral medication, if started early and prescribed by a physician. The medications useful for preventing and treating this strain of H1N1 flu are Relenza<sup>®</sup> (zanamivir) and Tamiflu<sup>®</sup> (oseltamivir). These prescription drugs fight against the H1N1 flu by keeping the virus from reproducing in the body. However, as with all medications, a doctor is needed to evaluate whether this is appropriate for any specific individual given their personal health issues. If your doctor prescribes an antiviral to treat your flu, you will need to take it for five days.

## **2009 H1N1 FLU VACCINE**

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There are two types of H1N1 flu vaccines: The H1N1 flu shot and the H1N1 nasal spray.

### **H1N1 Flu Shot**

The H1N1 flu shot is an inactivated vaccine (containing killed virus) that is given with a needle, usually in the arm. The same manufacturers who produce seasonal flu shots are producing H1N1 flu shots for use in the US. The CDC Advisory Committee on Immunization Practices (ACIP) has recommended the vaccine for the following five target groups because of their increased risk of H1N1 infection due to complications or their contact with vulnerable people:

- ◆ Pregnant women
- ◆ Household contacts of babies under 6 months of age
- ◆ Healthcare and emergency medical services (EMS) workers
- ◆ Children and young people aged 6 months through 24 years
- ◆ People between 25 and 64 years who have chronic medical conditions

Once providers meet the demand for vaccine among persons in these initial target groups, vaccination is recommended for all persons 25

through 64 years of age. The US government has purchased enough 2009 H1N1 flu vaccines for all those who choose to get vaccinated.

### **H1N1 Nasal Spray**

The H1N1 nasal spray is made with live, weakened viruses that do not cause the flu. The indications for who can get the H1N1 nasal spray are the same as for seasonal nasal spray – it is approved for use in healthy people 2-49 years of age who are not pregnant. The nasal spray is being made by MedImmune, the same company that makes the seasonal nasal spray called “FluMist®.”

The H1N1 nasal spray can be given to people with minor illnesses, but if nasal congestion is present, delivery of the vaccine to the nasal lining might be limited. In that case, delaying of vaccination until the nasal congestion is reduced should be considered. Also, people who received the flu shot last year can get the H1N1 nasal spray this year.

### **WHO SHOULD NOT BE VACCINATED?**

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There are some people who should not get *any* flu vaccine without first consulting a physician. These include:

- ◆ People who have a severe allergy to chicken eggs
- ◆ People who have had a severe reaction to an influenza vaccination.
- ◆ People who previously developed Guillain-Barré syndrome within six weeks of getting an influenza vaccine
- ◆ Children younger than six months of age (influenza vaccine is not approved for this age group)
- ◆ People who have a moderate-to-severe illness with a fever (they should wait until they recover to get vaccinated.)

### **VACCINATION DOSES**

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The US Food and Drug Administration (FDA) has approved the use of one dose of H1N1 flu vaccine for persons 10 years of age and older. All children 2-9 years of age will need two doses of the H1N1 flu vaccine. The first dose should be given as soon as the vaccine becomes available. The second dose should be given 28 or more days after the first dose. Infants younger than 6 months of age are too young to get the H1N1 and seasonal flu vaccines.

### **AVAILABILITY OF THE H1N1 FLU VACCINE**

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The CDC reported on November 6, that there are 38 million doses of the H1N1 flu vaccine available to order (the majority being injectable doses) – 11 million more than the previous week. There is twice as much H1N1 vaccine available today as there was two weeks ago. They still don't have enough vaccine, but are toward a path of improvement. States and localities continue to work to get the vaccine to the at-risk groups who need it the most.

The US government has purchased more than 2 million doses of H1N1 vaccine which is enough for all those who choose to get vaccinated. The ACIP recommendations on H1N1 vaccination are not intended to deny the H1N1 flu vaccine to anyone who wishes to be vaccinated. All US states have ordered vaccines and are developing a vaccine delivery plan. Vaccines will be available in a combination of settings, such as vaccination clinics organized by local health departments, healthcare provider offices, schools, and other private settings, such as pharmacies and workplaces. To find out the latest information for each state's distribution of the seasonal or H1N1 flu vaccines, go to [www.flu.gov](http://www.flu.gov).

## ARE THE H1N1 FLU VACCINES SAFE?

The H1N1 flu vaccine is being produced exactly the same way that the seasonal flu vaccines are produced, with exactly the same careful oversight. The clinical trials have not found any red flags in terms of safety. According to Director of the CDC Thomas Frieden, “This flu vaccine is made as flu vaccine is made each year. By the same companies. In the same production facilities. With the same procedures. With the same safety, safeguards. We have had literally hundreds of millions of people vaccinated against flu with flu vaccine made this way. That enables us to have a high degree of confidence in the safety of the vaccine.”

## H1N1 FLU AND PREGNANT WOMEN

Pregnant women who get sick with H1N1 flu can have serious health problems, including early labor and severe pneumonia. A pregnant woman who develops flu symptoms or who has had close contact with someone with the flu should call a doctor right away. As of October 1, 100 pregnant women in the US have required intensive care unit hospitalization for H1N1 flu, the CDC reported. There have been 28 pregnant women who have died from the H1N1 influenza in the US.

Antiviral medicine can be a very important treatment for pregnant women who have respiratory illness. At this time, there have been no reports to show harm to the pregnant woman or her unborn baby. Antiviral medicines can be taken at any stage during pregnancy.

The seasonal flu shot has been given to millions of pregnant women over many years. Flu shots have not been shown to cause harm to pregnant women or their babies. The 2009 H1N1 flu shot is made in the same way and in the same places as the seasonal flu shot. It is very important for pregnant women to get both the seasonal flu shot and the

2009 H1N1 flu shot. The H1N1 flu vaccine nasal spray is not for pregnant woman.

## IS IT SAFE TO TRAVEL?

Yes. As of June 12, 2009, WHO is not recommending any restrictions for travel. Although, people traveling within the US that are susceptible to severe illness from influenza (such as those with diabetes, lung disease, heart disease and the elderly) are encouraged to take antiviral medications. Also, people who are ill should delay travel plans. Returning travelers who become ill should contact their healthcare provider.

## WHAT IS A PANDEMIC?

A pandemic is a global outbreak of a disease that occurs when a new virus appears or emerges in the human population, causing serious illness and spreading easily from person-to-person and continent-to-continent. A pandemic can cause widespread illness, high levels of death, social disruption and economic loss. A pandemic can also have potentially staggering effects on business.

## PANDEMIC ALERT PHASES

On June 11, 2009, WHO raised the worldwide pandemic alert level to phase six in response to the ongoing global spread of H1N1 virus. A phase six is a pandemic which means there are ongoing community level outbreaks in multiple parts of the world. It is a reflection of the spread of the virus, not the severity of illness caused by the virus. Even at phase six, WHO considers the overall severity of the influenza pandemic to be moderate for the following reasons:

- ◆ Most people recover from the virus without the need for hospitalization or medical care.
- ◆ The national levels of severe illness from H1N1 flu appear similar to levels seen during local seasonal influenza periods, although high

levels of disease have occurred in some local areas and institutions.

- ◆ Hospitals and healthcare systems in most countries have been able to cope with the number of people seeking care, although there are some facilities and systems that have experienced stress.

### **CAN THE SEVERITY OF THE PANDEMIC CHANGE OVER TIME?**

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The severity of pandemics can change over time and differ by location or population. WHO is closely monitoring the H1N1 flu and realizes the importance of timely and frequent sharing of information during the pandemic period to determine if future severity assessments are needed. These severity assessments would reflect one or a combination of the following factors: changes in the virus, underlying vulnerabilities, or limitations in health system capacities.

### **WHAT ACTION SHOULD YOU TAKE?**

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Stay informed and updated as the pandemic evolves to learn how to protect yourself. Visit reliable sources, such as the CDC and WHO websites. Community-specific information is also available from local or national health authorities.

The information in this fact sheet was collected from WorkCare physicians, the CDC ([www.cdc.gov/swineflu/](http://www.cdc.gov/swineflu/)) and WHO ([www.who.int/en/](http://www.who.int/en/)). If you have any questions, call WorkCare at 800- 455-6155.