### Pandemic Flu

The World Health Organization and the Department of Health and Human Services continue to voice concern about the possibility of a flu pandemic. In the event that a pandemic does occur, Progress Energy wants you to have access to the most up-to-date, reliable information available. As a company serving approximately 3.1 million customers, it is crucial that employees understand the severity of a flu pandemic, how such an event could impact our service capabilities and what steps you and your family can take to ensure your personal safety.



The goals of this information are to:

- Educate you on the preventive measures you can take
- Provide accurate, real-time information and updates
- Ensure a safe and healthy workplace

### Why is Progress Energy concerned about a flu pandemic

A Flu pandemic has the potential to affect everyone. As a business that supplies power to millions of homes and businesses, we must be prepared to respond in the event of a major health catastrophe. To be able to respond, you must have the knowledge and resources available to act quickly to ensure you and your family are safe and healthy. Learn more about why Progress Energy cares about flu pandemic and how we would respond.

#### **Progress Energy's Pandemic Flu Plan**

In early 2006, Progress Energy's formed a Pandemic Flu Working Group to develop plans for how the company would respond in the event of a pandemic. This planning was incorporated into the company's business critical infrastructure strategy. The company has tested its plans and continues to refine the plans as new information becomes available.

What you can do to prepare for a flu pandemic -

It is crucial that you be prepared and have a plan in place for your family and your workplace if there were to be a flu pandemic. If a pandemic were to occur, it is likely you and your family would be unable to leave your home. Because of this, it is a good idea to have a two week supply of food and water on hand. It may also be difficult to get to work during this time. Learn more about how you can prepare in advance by reading these tips.

### **Questions and Answers**

Understanding what avian influenza (bird flu) is and how it may impact you personally is vital to your safety and well-being. Review this series of questions and answers to learn more about pandemic flu and what could happen as a result.

**Feedback and Questions** Let us know if you have questions about pandemic preparations by sending an e-mail to

PandemicFlu@pgnmail.com. If you have questions regarding your particular department's preparedness plan, please contact your department head.

If you have questions regarding your particular department's preparedness plan or the company's overall plan, please review the information on the department specific page.

### **Additional Resources**

A variety of information is available to help you plan for a flu pandemic. Visit these sites to learn more as you prepare.

- The Centers for Disease Control and Prevention
- The Official Government Web site on Avian Flu
  - o Florida Information
  - North Carolina Information
  - o South Carolina Information
- State of Florida's Action Plan for Pandemic Influenza
- The World Health Organization
- North Carolina Division of Public Health
- North Carolina Department of Health and Human Services
- South Carolina Pandemic Influenza Preparedness

# Why is Progress Energy concerned about a flu pandemic

A Flu pandemic has the potential to affect everyone. As a business that supplies power to millions of homes and businesses, we must be prepared to respond in the event of a major health catastrophe. To be able to respond, you must have the knowledge and resources available to act quickly to ensure you and your family are safe and healthy. Learn more about why Progress Energy cares about flu pandemic and how we would respond.

### Why should Progress Energy be concerned about a flu pandemic?

Like most businesses, if there is a flu pandemic outbreak, Progress Energy realizes a large number of its employees will be impacted. Despite this, Progress Energy will be expected to provide electricity to its customers, including municipalities and medical facilities. This service will be crucial during a pandemic. Working with its many departments, Progress Energy has developed a series of response plans to help employees care for their personal well-being and family needs as well as implementing steps to help ensure its plants have the staff and materials needed to generate power.

### What is Progress Energy's top priority in the event there is a flu pandemic?

The top priority of Progress Energy is the safety and well-being of its employees. In the event of a flu pandemic, Progress Energy will implement a series of steps for employees to take to ensure their safety. These actions will help promote a healthy workforce and ensure the company is able to provide the electrical services needed for its service area.

### What will happen to Progress Energy's operations and infrastructure, especially our nuclear plants, during a flu pandemic?

Progress Energy has adapted emergency plans to protect its operations and infrastructure. The plans are designed to ensure the company is prepared to supply reliable power through any emergency situation.

### How would Progress Energy respond if a hurricane or ice storm were to hit during a flu pandemic?

It is possible that a severe weather event might occur during a flu pandemic. Depending on the severity of the weather event and the severity of the outbreak, it will be determined how to safely move forward with restoring power to customers.

Source: Edison Electric Institute: Straight Talk About Electric Utilities and Pandemic Planning

### What you can do to prepare for a flu pandemic

It is crucial that you be prepared and have a plan in place for your family and your workplace if there were to be a flu pandemic. If a pandemic were to occur, it is likely you and your family would be unable to leave your home. Because of this, it is a good idea to have a two week supply of food and water on hand. It may also be difficult to get to work during this time. Learn more about how you can prepare in advance by reading these tips.

#### Preparing at home

• Store a two week supply of water and food. During a pandemic, if you cannot get to a store, or if stores are out of supplies, it will be important for you to have extra supplies on hand. This can be useful in other types of emergencies, such as power outages and disasters.

• Periodically check your regular prescription drugs to ensure a continuous supply in your home.

• Have any nonprescription drugs and other health supplies on hand, including pain relievers, stomach remedies, cough and cold medicines, fluids with electrolytes, and vitamins.

• Talk with family members and loved ones about how they would be cared for if they got sick, or what

will be needed to care for them in your home.

- Volunteer with local groups to prepare and assist with emergency response.
- Get involved in your community as it works to prepare for an influenza pandemic.
- Limit the spread of germs and prevent infection by:
  - Teaching your children to wash hands frequently with soap and water, and model the correct behavior.
  - Teaching your children to cover coughs and sneezes with tissues, and be sure to model that behavior.
  - Teaching your children to stay away from others as much as possible if they are sick. Stay home from work and school if sick.
- For a checklist to help your family plan, visit the government's official pandemic flu Web site.

#### **Preparing at work**

• Avoid close contact – Avoid close contact with people who are sick. When you are sick, keep your distance from others to protect them from getting sick too.

• Stay home when you are sick – If possible, stay home from work, school, and errands when you are sick. You will help prevent others from catching your illness.

- Cover your mouth and nose Cover your mouth and nose with a tissue when coughing or sneezing. It may prevent those around you from getting sick.
- Clean your hands Washing your hands often will help protect you from germs.
- For additional information on health and safety tips, visit the government's official pandemic flu Health and Safety page.

### **Questions and Answers**

Understanding what avian influenza (bird flu) is and how it may impact you personally is vital to your safety and well-being. Review this series of questions and answers to learn more about pandemic flu and what could happen as a result.

#### What is avian influenza (bird flu)?

Avian influenza is an infection caused by avian (bird) influenza (flu) viruses. These flu viruses occur naturally among birds. Wild birds worldwide carry the viruses in their intestines, but usually do not get sick from them. However, avian influenza is very contagious among birds and can make some domesticated birds, including chickens, ducks and turkeys, very sick and kill them.

Infection with avian influenza viruses in domestic poultry causes two main forms of disease that are distinguished by low and high extreme of virulence. The "low pathogenic" form may go undetected and usually causes only mild symptoms (such as ruffled feathers and a drop in egg production). However, the "highly pathogenic" form spreads more rapidly through flocks of poultry. This form may cause disease that affects multiple internal organs and has a mortality rate that can reach 90 percent to 100 percent, often within 48 hours.

### What is a pandemic?

A pandemic is a global disease outbreak. A flu pandemic occurs when a new influenza virus emerges for which people have little or no immunity, and for which there is no vaccine. The disease spreads easily person-to-person, causes serious illness, and can sweep across the country and around the world in very short time. Currently there is no pandemic flu.

### What is the avian influenza A (H5N1) virus that has been reported in Africa, Asia, Europe and the Near East?

Influenza A (H5N1) virus – also called H5N1 virus – is an influenza A virus subtype that occurs mainly in birds, is highly contagious among birds and can be deadly to them.

Outbreaks of avian influenza H5N1 occurred among poultry in eight countries in Asia (Cambodia, China, Indonesia, Japan, Laos, South Korea, Thailand, and Vietnam) during late 2003 and early 2004. At that time, more than 100 million birds in the affected countries either died from the disease or were killed in order to try to control the outbreaks. By March 2004, the outbreak was reported to be under control.

Beginning in June 2004, however, new outbreaks of influenza H5N1 among poultry and wild birds were reported in Asia. Since that time, the virus has spread geographically. Reports of H5N1 infection in wild birds in Europe began in mid-2005. In early 2006, influenza A (H5N1) infection in wild birds and poultry were reported in Africa and the Near East.

Human cases of influenza A (H5N1) infection have been reported in Azerbaijan, Cambodia, China, Egypt, Indonesia, Iraq, Thailand, Turkey, and Vietnam. For the most current information about avian influenza and cumulative case numbers, see the World Health Organization Avian Influenza website.

#### How do people become infected with avian influenza viruses?

Most cases of avian influenza infection in humans have resulted from direct or close contact with infected poultry (e.g., domesticated chicken, ducks, and turkeys) or surfaces contaminated with secretions and excretions from infected birds. The spread of avian influenza viruses from an ill person to another person has been reported very rarely, and transmission has not been observed to continue beyond one person. During an outbreak of avian influenza among poultry, there is a possible risk to people who have direct or close contact with infected birds or with surfaces that have been contaminated with secretions and excretions from infected birds.

# How will we know if the virus starts spreading from person to person and becomes a pandemic?

If there is a pandemic, it would be everywhere, not in just one city or one country. To detect such an event as early as possible there is an international surveillance system, involving more than 150 countries, that searches for signs that a new flu strain is taking hold in humans. One hallmark of a pandemic flu would be an unusual pattern of illnesses -- lots of cases, possibly cases that are more severe than normal and, possibly, flu infections outside the normal flu season.

Ordinary human flu viruses, for reasons that are not entirely understood, circulate only in winter. But pandemics can occur at any time. A pandemic would also involve a flu virus that was new to humans, meaning that no one would have immunity from previous infections.

### If bird flu reaches the United States, where is it likely to show up first?

Although health officials expect bird flu to reach the United States, it is impossible to predict where it may show up first, in part because there are several routes it could take. If it is carried by migrating birds, then it may appear first in Alaska or elsewhere along the West Coast.

But if the virus lurks in a bird being smuggled into the United States as part of the illegal trade in exotic birds, it could land in any international airport. Bird smuggling is a genuine problem: in 2004, a man was caught at an airport in Belgium illegally transporting eagles from Thailand, stuffed into tubes in his carry-on luggage. The birds turned out to be infected with A (H5N1), and they and several hundred other birds in a quarantine area at the airport had to be destroyed.

In theory, an infected human could also bring bird flu into the United States, and that person could fly into just about any international airport and go unnoticed if the virus had yet to produce any symptoms.

### Does bird flu affect all birds?

No one knows the full story. Scientists say A (H5N1) is unusual because it can infect and kill a wide variety of birds, unlike a vast majority of bird flus, which are usually found in wild birds, not domestic fowl, and which cause few symptoms.

Some researchers suspect that wild ducks, or perhaps other wild birds, are impervious to A(H5N1), and may be the Typhoid Marys of bird flu -- getting the virus, spreading it to other birds but never becoming ill themselves. No one has good evidence of this yet, but that may be because the way scientists discovered A (H5N1) infections was by finding birds that had gotten the flu and died.

As virologists like to point out, dead birds don't fly. So migratory birds cannot spread the virus if they are dying shortly after being infected. That is why some researchers say that if wild birds are spreading the A (H5N1) virus, it must be a bird species that can be infected but does not become ill.

### When people die from avian flu contracted from birds, what kills them?

Like victims of severe pneumonia, many patients die because their lungs give out. The disease usually starts with a fever, fatigue, headache and aches and pains, like a typical case of the flu. But within a few days it can turn into pneumonia, and the patients' lungs are damaged and fill with fluid.

In a few cases, children infected with A (H5N1) died of encephalitis, apparently because the virus attacked the brain. A number of people have also had severe diarrhea -- not usually a flu symptom -- meaning that this virus may attack the intestines as well. Studies in cats suggest that in mammals the virus attacks other organs, too, including the heart, liver and adrenal glands.

But more detailed information about deaths in people is not available because very few autopsies have been done. In some countries, like Vietnam, where many of the deaths occurred, autopsies are frowned upon. Researchers say they may glean useful information from autopsies, but fear that pressing for them would alienate the public in some areas.

### If I got bird flu, how would I know?

There is no reason to suspect the disease unless you may have been exposed to it. Since the virus has not reached North America, doctors do not look for bird flu in people unless they have traveled to affected regions or have been exposed to sick or dead birds.

The early stages of the illness in people are the same as those of ordinary flu: fever, headache, fatigue, aches and pains. But within a few days, people with bird flu often start getting worse instead of better; difficulty breathing is what takes many to the hospital.

In any case, patients with flulike symptoms that turn severe or involve breathing trouble are in urgent need of medical care.

#### Can I be tested for avian flu?

There is no rapid test for bird flu. There is a rapid test for Type A influenza viruses, the group that A (H5N1) belongs to, but the test is only moderately reliable, and it is not specific for A (H5N1).

State health departments and some research laboratories can perform genetic testing for A (H5N1) and give results within a few hours, but they do not have the capacity to perform widespread testing.

Because of the limited availability of testing and the extremely low probability of A (H5N1) in people in the United States, the test is recommended only for patients strongly suspected of having bird flu, like travelers with flulike symptoms who were exposed to infected birds.

#### Do any medicines treat or prevent bird flu?

Two prescription drugs, Tamiflu and Relenza, may reduce the severity of the disease if they are taken within a day or two after the symptoms begin. But Relenza, a powder that must be inhaled, can irritate the lungs and is not recommended for people with asthma or other chronic lung diseases.

Both drugs work by blocking an enzyme -- neuraminidase, the "N" part of A (H5N1) -- that the virus needs to escape from one cell to infect another. But just how effective these medicines are against A (H5N1) is not known, nor is it clear whether the usual doses are enough. Also unknown is whether the drugs will help if taken later in the course of the disease. Although government laboratories and other research groups are trying to develop vaccines to prevent A (H5N1) disease in people, none are available yet.

### Should I wear a surgical mask to prevent exposure to avian influenza?

Currently, wearing a mask is not recommended for routine use (e.g., in public) for preventing influenza exposure. In the United States, disposable surgical and procedure masks have been widely used in health-care settings to prevent exposure to respiratory infections, but the masks have not been used commonly in community settings, such as schools, businesses, and public gatherings.

### Is there a risk for becoming infected with avian influenza by eating poultry?

There is no evidence that properly cooked poultry or eggs can be a source of infection for avian influenza viruses. For more information about avian influenza and food safety issues, visit the World Health Organization website.

The U.S. government carefully controls domestic and imported food products, and in 2004 issued a ban on importation of poultry from countries affected by avian influenza viruses, including the H5N1 strain. This ban still is in place. For more information, see Embargo of Birds from Specified Countries.

# What precautions can be taken to reduce the risk for infection from wild birds in the United States?

As a general rule, the public should observe wildlife, including wild birds, from a distance. This protects you from possible exposure to pathogens and minimizes disturbance to the animal. Avoid touching wildlife. If there is contact with wildlife do not rub eyes, eat, drink, or smoke before washing hands with soap and water. Do not pick up diseased or dead wildlife. Contact your state, tribal, or federal natural resource agency if a sick or dead animal is found.

### What precautions can hunters take to reduce the risk for infection when hunting birds in the United States?

Hunters should follow routine precautions when handling game, including wild birds. The National Wildlife Health Center recommends that hunters:

- Do not handle or eat sick game.
- Wear rubber or disposable latex gloves while handling and cleaning game, wash hands with soap and water (or with alcohol-based hand products if the hands are not visibly soiled), and thoroughly clean knives, equipment and surfaces that come in contact with game.
- Do not eat, drink, or smoke while handling animals.
- Cook all game thoroughly.

# Can a person become infected with avian influenza A (H5N1) virus by cleaning a bird feeder?

There is no evidence of H5N1 having caused disease in birds or people in the United States. At the present time, the risk of becoming infected with H5N1 virus from bird feeders is low. Generally, perching birds (Passeriformes) are the predominate type of birds at feeders. While there are documented cases of H5N1 causing death in some Passeriformes (e.g., house sparrow, Eurasian tree-sparrow, house finch), in both free-ranging and experimental settings, most of the wild birds that are traditionally associated with avian influenza viruses are waterfowl and shore birds.

Sources: Centers for Disease Control, New York Times