Hello, Ashtabula County

The Ashtabula County Ag Society released information this afternoon about the preliminary confirmation of swine flu (Influenza A H3N2v) in some of the pigs that were exhibited at the Ashtabula County fair last week. At this point of time there have been no confirmed cases of swine flu in humans in Ashtabula County. If 4-H members, parents, and other individuals have flu-like symptoms they should visit their primary care physician for further evaluation.

Enclosed in this edition is more information on Influenza A H3N2v. We appreciate the support of the Ashtabula County Health Department and the Ohio Department of Agriculture in this situation.

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Swine Flu Confirmed at Ashtabula County Fair
Source: Ashtabula County Ag Society

Last week, pigs at the Ashtabula County Fair showed symptoms of influenza including runny nose, decreased appetite, lethargic movement, and fever. Recognizing that the welfare of the animals and wellbeing of our exhibitors and guests is of utmost importance, Dr. Cheryl Beinhardt DVM, the fair veterinarian, examined the pigs, as is protocol for any animal health issues arising at the fair. Many pigs were found to have fevers. Some pigs had been sent home for treatment and the pigs at the fair were treated with aspirin to help bring their fevers down. In consultation with Dr. Forshey, State Veterinarian, and Dr. Hans, the local USDA Veterinary Medical Officer USDA, testing was performed on Saturday and the test results returned on Monday confirmed that the pigs were positive for H3N2.

Flu viruses are constantly changing in both the animal and human population. Variant influenza A viruses, such as H3N2v, that contain components of human, avian, swine and H1N1 influenza are not unusual. Movement of these viruses between humans and animals also is not unexpected. Although this is not an expected event, similar events like this have occurred at exhibitions and fairs before. A few children who had attended the Ashtabula County Fair have shown preliminary signs of the virus, but none have been diagnosed with the strain. Individuals experiencing symptoms should inform their health care provider about their exposure to swine.

Agricultural exhibitions provide valuable educational opportunities for the public. Equally important, livestock shows are an important learning experience for thousands of 4-H and FFA youth across the United States. For these youth, exhibiting at their county or state fair is the culmination of many months of work dedicated to the care and training of their animals. The Ashtabula County Fair is proud of each exhibitor who participated in this year’s fair and we look forward to working with them in the future.

Additional information regarding influenza is available at www.pork.org/flu. Any human health related questions should be directed to the Ohio Department of Health or to the Ashtabula County Health Department. Animal health questions should be directed to the Ohio Department of Agriculture at 614-728-6220 or e-mail animal@agri.ohio.gov.

Influenza A H3N2v
Source: http://www.odh.ohio.gov/features/odhfeatures/H3N2v%20influenza/H3N2v%20Influenza.aspx

During Ohio’s 2016 agricultural fair season, the Ohio Departments of Health (ODH) and Agriculture (ODA) are reminding Ohioans to practice good hygiene when visiting livestock exhibits. Illnesses, such as influenza viruses, are commonly carried by livestock and can be directly transmitted between animals and humans in the same way those illnesses are often transmitted between people.

Individuals should always wash hands with soap and water before and after petting or touching any animal. Never eat, drink, or put anything in your mouth in animal areas. Parents and caregivers are encouraged to leave strollers outside the animal exhibits and carry small children. Older adults, pregnant women, young children, and people with weakened immune systems should consider avoiding animal areas.

Take Action to Prevent the Spread of Flu Viruses Between People and Swine

- Wash your hands frequently with soap and running water before and after exposure to animals.
- Never eat, drink or put things in your mouth in animal areas, and don’t take food or drink into animal areas.
- Children younger than 5 years, people 65 years and older, pregnant women, and people with certain chronic medical conditions (like asthma, diabetes, heart disease, weakened immune systems, and neurological or neurodevelopmental conditions) are at high risk from serious complications if they get influenza. These people should avoid exposure to pigs and swine barns during this fair season.
- Visitors should not carry toys, pacifiers, spill-proof cups, baby bottles, strollers or similar items into areas with pigs.
- Young children, pregnant women, people 65 and older and people with weakened immune systems should be extra careful around animals.
- If you have animals – including swine – watch them for signs of illness and call a veterinarian if you suspect they might be sick.
- Avoid close contact with animals that look or act ill, when possible.
- Avoid contact with swine if you are experiencing flu-like symptoms.

If you must come in contact with swine while you are sick, or if you must come in contact with swine known or suspected to be infected, or their environment, you should use appropriate protective measures (for example, wear protective clothing, gloves, masks that cover your mouth and nose, and other personal protective equipment) and practice good respiratory and hand hygiene.

Although there is no reason to avoid state or county fair activities, you are encouraged to take precaution especially in the animal exhibit areas.

What is the Origin of the H3N2v Flu Virus?
Type A influenza viruses, including H3N2 and the variants, commonly infect swine, causing outbreaks among swine herds. Most of the type A influenza viruses that infect swine are genetically very different from human (seasonal) influenza viruses. While these variant influenza viruses seldom infect humans, such infections can and do occur. In fact, influenza viruses can spread both from swine to humans and from humans to swine.

How Are Variant Influenza Viruses Spread?
When a human is infected with a flu virus that normally circulates in swine, this virus is called a “variant virus” because it is different from seasonal influenza viruses. These infections have been most likely to occur when people are in direct contact with infected swine, such as in swine barns and livestock exhibits housing swine at fairs. This kind of transmission is thought to occur in the same way that seasonal flu transmits in people, which is mainly through coughing or sneezing by people who are infected. People also may become infected by touching something with flu viruses on it and then touching their mouth or nose. It’s important to note that in most cases, variant flu viruses have not shown the ability to spread easily and sustainably from person-to-person.

Is It Safe To Eat Pork?
Yes. H3N2 variant has not been shown to be transmissible to people through eating pork or other products derived from swine.

What Symptoms Do People Have When They are Infected With Variant Viruses?
People who have been infected with variant viruses have had symptoms similar to the symptoms of regular human seasonal influenza. These include fever, tiredness, lack of appetite and coughing. Some people also have reported runny nose, sore throat, eye irritation, nausea, vomiting and diarrhea.

If You Get Sick
- Flu symptoms usually include fever and respiratory symptoms, such as cough and runny nose, and possibly other symptoms, such as body aches, nausea, or vomiting or diarrhea.
- If you live in an area where H3N2v or other variant virus infections have been identified recently and develop flu-like illness, contact your health care provider (a doctor, physician’s assistant, nurse practitioner, etc.). Tell them if you have had contact with swine or with other sick people.
• Whenever you have flu symptoms and are seeing a health care provider, always remember to tell them if you have asthma, diabetes, heart disease, neurological and neurodevelopmental conditions, are pregnant, or are older than 65 or younger than 5 years. These conditions and age factors (and others) put you at high risk of serious complications if you get the flu. Health care providers will determine whether influenza testing and possible treatment are needed.
• Most of the people who have been infected with H3N2v so far have been children.

What People Who Raise Pigs Need To Know About Influenza (Flu)
Source: http://www.cdc.gov/flu/swineflu/people-raise-pigs-flu.htm

Introduction
As someone who raises pigs, whether for show (e.g. 4-H or Future Farmers of America [FFA]) or as part of a farming operation (i.e. commercial pork producer), you may have questions about influenza (the flu) in both pigs and people. This document addresses what is known about flu viruses in pigs and people and what people in contact with pigs can do to reduce the risk of getting sick or of getting their pigs sick.

Influenza Virus Infections in Pigs and People
There are many causes of respiratory disease in pigs, including influenza. Among influenza types, only type A influenza viruses are known to infect pigs. Most of the influenza viruses circulating in swine are different from those circulating in people. When viruses that normally circulate in pigs infect humans, they are termed “variant” viruses.

At this time, there are three main flu viruses that circulate in U.S. pigs: H1N1, H1N2 and H3N2. These viruses do not usually infect people and are genetically different from the H1N1 and H3N2 viruses that commonly circulate in people. When the flu viruses circulating in pigs are very different from the human flu viruses causing illness in people, people may have little to no immune protection against the viruses circulating in pigs. Also, human flu vaccines probably would not offer protection against the viruses that are found in pigs. Flu viruses commonly infect pigs and pig herds and can result in high rates of illness among pigs, but few deaths.

Signs of influenza in pigs include:
• Coughing (“barking”)
• Sneezing
• High fevers
• Breathing difficulties
• Discharge from the nose
• Going off feed

However, pigs also may become infected with flu viruses from people and from birds. This cross-species spread and possible mixing of flu viruses can lead to new and very different flu viruses that might gain the ability to spread easily between people.

Questions & Answers about Influenza in Pigs
Q. How does influenza spread among pigs?
A. Flu viruses are thought to spread among pigs in the same way that human influenza viruses spread among people. That is mainly through close contact between infected and uninfected pigs and possibly from contact by an uninfected pig with an object contaminated by an infected pig. Pigs also can be infected by flu viruses from their human caretakers.

Q. Can influenza virus infections be prevented in pigs?
A. It may be possible to lessen the risk of infections in pigs and/or severity of disease by following these management strategies:
• Vaccinating herds
Using good biosecurity measures
Practicing good hygiene
Vaccinating pig caretakers with seasonal influenza vaccine
Using proper ventilation systems

Q. What about flu vaccines for pigs?
A. Flu vaccines for pigs can help, but are not 100% effective. Sometimes the vaccine used may not protect against the virus or viruses circulating. In addition, current vaccines may not be effective in young pigs due to interference from antibodies received from the sow. Generally, protection of young pigs is achieved by vaccinating sows; however, those maternal antibodies are not fully protective for the young pig and decrease by the time they are 10 to 13 weeks old or sooner. Producers may vaccinate their animals after maternal antibodies decrease.

Q. How can veterinarians help?
A. You should work together with your veterinarian to develop management strategies to reduce the spread of influenza among herds and to prevent the introduction and spread of flu viruses between pigs, people, and birds.

Q. Can people get influenza from eating pork?
A. Flu viruses in pigs have not been shown to be transmissible to people through eating properly handled and prepared pork (pig meat) or other products derived from pigs. For more information about the proper handling and preparation of pork, visit the USDA website fact sheet Fresh Pork from Farm to Table.

Q. What about 2009 H1N1?
A. The 2009 H1N1 flu virus was first detected in people in the United States in April 2009. It was a new influenza virus among humans which was able to spread easily from person-to-person, causing the first influenza pandemic in more than 40 years. This virus had two genes from flu viruses that normally circulate in pigs in Europe and Asia, three genes that normally circulate in North American pigs, and genes from flu viruses from birds and people as well. This particular virus, however, had not been detected in North American pigs before April 2009. The 2009 H1N1 flu virus is now considered a human influenza virus.
In October 2009, the first case of 2009 H1N1 flu virus infection in a pig in the United States was confirmed. Pig infections with the 2009 H1N1 flu virus also have been found in other countries, including Canada, Australia and Argentina. USDA and other researchers conducted studies in pigs that showed that the 2009 H1N1 virus caused illness in swine similar to those of other well-known, circulating swine flu viruses.

Q. How common are variant infections in people?
A. Human infections with influenza A viruses normally found in swine (now called variant viruses) are rare events, but the frequency of such detections has increased in recent years. This could be occurring for a number of reasons including: improved laboratory methods for testing for these viruses in the United States, increased surveillance in the United States for influenza, or it is possible that the increased frequency of detection of variant viruses represents a true increase in the number of such cases, possibly occurring from exposure to infected swine or through subsequent, limited human-to-human transmission.

The Flu Can Spread from Pigs to People and from People to Pigs
- Human flu viruses can infect pigs and can introduce new flu viruses into the swine population.
- The flu viruses that normally circulate in pigs can infect people, but this is not common.
- In 2005 and 2006, three cases of infection with flu viruses that normally circulate in swine (“variant viruses”) were reported in people.
- Beginning in 2007, about three to four of these cases were reported per year. This increased reporting may partially be because human infection with novel (non-human) flu viruses became nationally notifiable in 2007. That means that when a human infection with a non-human influenza virus is detected in people, it must be reported to federal authorities.
- In 2012, 313 variant cases were reported to CDC, the largest number of cases reported in a single year.
• See Reported Infections with Variant Influenza Viruses in the United States since 2005 for the most up to date information about infections with variant viruses that have been reported to CDC.
• The flu viruses that commonly spread in humans are different from the ones that spread in pigs.
• People who get vaccinated annually against human influenza can still get sick from swine influenza viruses.
• Pigs that have been vaccinated for swine influenza can still get sick from some human influenza viruses.
• When people are infected with variant flu viruses, the symptoms are basically the same as those caused by illness from human influenza viruses and can include fever, cough, body aches, headaches, fatigue and runny or stuffy nose. There may also be vomiting or diarrhea.
• Most reported cases of human infection with variant viruses have occurred in people who have been near infected pigs in public settings such as fairs or petting zoos, or who work directly with infected pigs.
• Investigations of human cases of infection with variant viruses are routine. These investigations are designed to determine if the flu virus in question is spreading from person to person. It is important to know if flu viruses common among pigs are spreading among people so that cases in other people can be prevented.

Preventing the Spread of Flu Viruses Between People and Pigs
Like everyone else, animal caretakers tending pigs should get annual seasonal influenza vaccines. Although vaccination of people with seasonal influenza vaccine probably will not protect against infection with variant influenza viruses (because they are substantially different from human influenza A viruses), vaccination is important to reduce the risk of transmitting seasonal influenza A viruses from ill people to other people and to pigs. Seasonal influenza vaccination might also decrease the potential for people or pigs to become co-infected with both human influenza viruses and influenza viruses from pigs. Such dual infections are thought to be the source of re-assortment of two different influenza A viruses which can lead to a new influenza A virus that has a different combination of genes, and which could pose a significant public or animal health concern.

Other routine measures to take:
• Wash your hands frequently with soap and running water before and after exposure to animals,
• Avoid close contact with animals that look or act ill, when possible, and
• Avoid contact with pigs if you are experiencing flu-like symptoms.

If you must come in contact with pigs while you are sick, or if you must come in contact with pigs that are known or suspected to be infected, or their environment, you should use appropriate protective measures (for example, wear protective clothing, gloves, masks that cover your mouth and nose, and other personal protective equipment) and practice good respiratory and hand hygiene (see below).

If you or your family members become sick with flu-like symptoms and need medical treatment, take the following steps:
• Contact your health care provider and let them know about your symptoms and that you work with swine. Your doctor may prescribe treatment with influenza antiviral medications and may want a nose and throat specimen collected from you for testing at your state health department.
• Avoid or limit contact with household members and others until you have been fever-free for 24 hours without the use of fever reducing medications, and avoid travel.
• Practice good respiratory and hand hygiene. This includes covering your mouth and nose with a tissue when coughing or sneezing and putting used tissues in a waste basket. If tissues are not available, cough or sneeze into your upper sleeve. Always wash your hands after coughing or sneezing. This is to lower the risk of spreading whatever virus you have to others.
• Avoid or limit contact with pigs as much as possible. Stay away from pigs for 7 days after symptoms begin or until you have been fever-free for 24 hours without the use of fever reducing medications, whichever is longer. (This is to protect your pig(s) from getting sick.)
Almost all influenza cases in humans are caused by human flu viruses, not viruses from swine. However, if you are infected with an influenza virus of animal origin, the health department will want to talk with you about your illness and make sure that other people you live and work with are not sick with the same virus.

For More Information

- CDC Information on Influenza in Swine
- USDA Animal Health: Influenza Surveillance in Swine
- CFSPH Technical Disease Fact Sheet on Influenza in Swine [285 KB, 19 pages]
- The Changing Face of Influenza Virus in Swine

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Centers for Disease Control and Prevention
U.S. Department of Agriculture
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