



First American Pig Confirmed with H1N1

H1N1 virus presents minimal health risk to pigs but farmers should take precautions.

October 22, 2009

Courtesy USDA/ James Fosse Agricultural Research Services veterinary medical officers Kelly Lager (left) and Amy Vincent collect a nasal swab from a piglet to test for novel H1N1 influenza virus. The highly publicized H1N1 virus, more commonly known as the “swine flu,” has had people across the U.S. vigorously washing their hands and applying hand sanitizer after every cough and sneeze. However, no case of H1N1 has been detected in American pigs—that is, until this week.

On Monday, the USDA’s National Veterinary Services Laboratory confirmed the first case of the H1N1 influenza virus in an American pig. The sample was collected from a show pig at the Minnesota State Fair at the end of August and tested as part of a research study done between the University of Iowa and the University of Minnesota, documenting cases of the flu in places where pigs and humans converge.

The H1N1 flu virus is a respiratory disease that affects pigs similarly to how it affects humans, says Peter Davies, a professor in the College of Veterinary Studies at the University of Minnesota. Symptoms include a fever, sneezing and coughing; however, some infected pigs might show no signs at all, such as the case with the Minnesota fair pig.

Although H1N1 will spread quickly when introduced to a herd, sick pigs will show symptoms for seven to 10 days and then recover. There is little risk for mortality, Davies says.

“It doesn’t appear to be any more problematic than the influenza that has been in the industry for decades,” he says. However, the USDA, along with veterinarians and the National Pork Board, has been urging pork producers to intensify their biosecurity measures to prevent the spread of H1N1 among livestock. According to Davies, this means taking the same precautions that humans take when trying to avoid the disease.

He tells small farmers to implement sick leave policies to keep infected people off farms. Pigs are most at risk of contracting the virus from infected humans. Also, farmers should restrain from sending sick pigs to other farms or to slaughter in order to protect animal transporters and animal handlers from contracting the virus and spreading it to other livestock. (Contact the USDA for guidelines on how to slaughter sick pigs.)

“Once the virus is introduced to the herd, there’s nothing you can do,” Davies says. “It’s like having it in the high school.”

Most anti-virals are too expensive to treat sick pigs with and are not licensed for use on pigs, he says. Antibiotics can be used to prevent secondary diseases like pneumonia from occurring, but usually farmers do not administer any treatment. Even preventative measures, such as vaccinations, do not seem to give significant protection, he says, because H1N1 is not a significant threat to pig health.

The USDA and other health organizations continue to iterate that H1N1 poses no food safety risks.

“I want to remind people that they cannot get this flu from eating pork or pork products,” Agriculture Secretary Tom Vilsack says.

Although, this is the first confirmed case of H1N1 in a pig in the United States, other countries, including Canada, Argentina and Australia, have reported seeing the strain in their livestock.

The virus became known as “swine flu,” Davies says, because the H1N1 strain has elements of genome found in two different swine viruses, but it also contains elements of avian and human influenzas.

“Whether the new virus—the hybrid virus—originated in swine or people, we will probably never know,” he says.