

Novel H1N1 Biosecurity Recommendations for Producers

Novel H1N1 virus can infect pigs

The novel 2009 H1N1 virus has now been identified in pig herds in Asia, Europe, North and South America and Australia. This includes positive confirmation in herds in the United States.

With this in mind, U.S. pork producers need to be more vigilant than ever to protect themselves, their workers and their pigs from further spread of this novel virus.

As a reminder to take appropriate biosecurity precautions related to novel H1N1, the National Pork Board is urging producers and veterinarians to:

- Step up on-farm biosecurity practices to prevent the H1N1 virus from entering their swine herd;
- Remain vigilant, carefully monitoring the health of their pigs and take steps to minimize its spread if it enters a production system.

Producers also are asked to follow the recommendations of the U.S. Centers for Disease Control and Prevention (CDC) to prevent further person-to-person spread of the virus [.cdc.gov/h1n1flu](https://www.cdc.gov/h1n1flu).

Ensure Biosecurity Measures are in Place

Follow good biosecurity practices. Because several of the herds that have been infected with the novel H1N1 have reported that ill farm workers likely passed the virus to pigs, your biosecurity practices should place special emphasis on protecting your animals from humans potentially carrying the virus.

Consider the following practices:

- 1. Limit the number of people you allow into your pork production operation.**
 - *Prevent visitors from entering your facilities by limiting the entry of people into your facility to workers and essential service personnel.*
- 2. Develop and implement an enhanced biosecurity protocol for workers, service personnel and all other people and equipment entering your facility.**
 - *Do not allow people exhibiting flu-like symptoms to enter your facility, ask them to report recent contact with others who have developed signs of illness.*
 - *If people who have developed illness, or those that report contact with others who have developed illness, are essential to the operation and must enter the facilities, require their use of properly fitted, valveless N95 respirators, gloves and other personal protective equipment (PPE) while on the farm and limit their contact with the animals.*
 - *Implement a shower-in, shower-out policy where possible for all people entering the facility. If not possible, require that all people entering the facility wash their hands and arms with warm water and soap before entering the facility.*

- *Require the use of farm-specific clothing and footwear for all people entering the facility.*
 - *Encourage all people to wash their hands and arms frequently while on-farm, including before and after handling pigs, before eating, or smoking or touching their faces, mouths, eyes or noses.*
 - *Encourage all people to use hand sanitizer following hand-washing.*
- 3. Establish, implement and enforce strict sick leave policies for workers who have developed influenza-like symptoms, such as a fever, cough, body aches and sometimes vomiting and diarrhea.**
- *Prevent workers who have been diagnosed with or are exhibiting these symptoms from entering swine facilities for at least seven days after they begin signs of respiratory illness, even mild ones, or until symptom free for 24 hours.*
 - *Recommend that workers with respiratory illness follow CDC recommendations about seeking medical care. http://www.cdc.gov/h1n1flu/general_info.htm*
 - *Encourage workers to report if members of their household have developed influenza-like symptoms or have been diagnosed with influenza. Consider restricting the contact that these workers have with the animals for seven days.*
- 4. Follow industry-accepted biosecurity practices, including:**
- ***Require basic hygiene practices.***
 - ***Properly adjust and maintain ventilation.*** *Ventilation systems in production facilities should be designed to minimize re-circulation of air inside animal housing facilities. This is important to reduce the exposure of pigs to viruses from other pigs and to reduce their exposure to human influenza viruses.*
 - ***Provide workers with personal protective equipment and training.*** *Provide basic personal protective equipment (PPE) to the people working in barns. Information on appropriate PPE use can be accessed at <http://www.pork.org/workersafety/>.*
 - ***Recommend that all workers are vaccinated against the seasonal influenza virus.*** *The vaccine is produced on a yearly basis and contains only human, not swine, strains of influenza viruses. Vaccination of swine farm workers will help to prevent human infections from seasonal human influenza strains. Current seasonal influenza vaccination will not protect against the novel H1N1 human outbreak strain. However, vaccination of farm workers will reduce the amounts of viruses they shed if infected during seasonal human influenza outbreaks and will limit the potential for human influenza virus infection of pigs.*
 - ***Review herd health programs with your veterinarian to ensure they are up to date and effective for conditions on your farm***
 - *In consultation with your veterinarian and as appropriate for your operation control pig exposure to people who have had contact with other swine.*

- *Do not share equipment and tools with other farms.*
- *Prevent, limit or plan traffic (vehicles, service trucks, tractors, wagons) through the facilities.*
- *If sharing of equipment, tools or vehicles is essential, ensure that these items are properly scraped, washed, rinsed, dried and disinfected before it enters your facilities.*

Additional Tips to Remember:

Remain vigilant

Producers and their employees should remain vigilant of the health of the animals in their care.

- **Perform daily observation of all of the animals** in your care to assess the health of the animals on the farm and all of the animals transported to other sites or the market.
- **If you suspect influenza in your pigs, contact a swine veterinarian immediately.** Rapid detection of the illness may help reduce the spread of the virus to other herds.

Prompt confirmation of a pig infection with the novel H1N1 flu virus diagnosis on a farm will likely require that specimens (nasal swabs) or tissue samples be sent to a veterinary diagnostic laboratory. This should be done by a veterinarian or under direction of a veterinarian.

If you contact a veterinarian to report a suspected outbreak on your farm:

- Describe the flu-like symptoms you have observed in the pigs.
- Describe the number and age/weight of the pigs affected.
- Inform the veterinarian if the animals affected have received or are receiving any type of animal health product or treatment.
- Report if anybody who has had contact with the animals has reported or has developed influenza-like symptoms.

If tissue samples or swabs are required:

- **Require that all people conducting the collection use appropriate personal protective equipment,** including a properly fitted N95 respirator, gloves and safety goggles.

Additional recommendations to consider if animals on your farm are confirmed positive to the H1N1 influenza virus:

- **On worker health and safety**
 - Require the use of safety goggles, gloves and properly sized and fitted N95 by all persons working with animals that have signs of illness.
- **On swine health**
 - Follow your herd veterinarian's recommendations of treatment and isolation of the clinically affected or at risk animals.
 - Isolate the affected groups as possible:
 - If possible, do not share equipment between affected groups and other animals.

- Implement a program in which workers caring for animals developing illness do not have contact with other animals. If that is not possible, plan to have workers caring for the sick animals to:
 - Work with the ill animals at the end of the day
 - Shower and change clothing before working with animals that do not present signs of illness.
- Your veterinarian will work with state animal health authorities to ensure that animals are allowed to recover before being moved or sent to slaughter
- Take steps to prevent the spread of the virus to other operations or unaffected groups of pigs.
- **On animal well-being**
 - Consider your options before not moving the affected groups/lots results in high animal density in your facilities and impacts animal well-being in your system:
 - Is there the possibility to move animals to an empty facility in the vicinity?
 - If so, consult with your veterinarian and state animal health authorities first
 - Consult with your veterinarian and the state animal health officials for permission to move affected animals for animal well-being reasons before clinical signs have resolved.
- **On public health**
 - Contact your medical care provider if anybody that has had contact with ill pigs or in their households develops flu-like symptoms.