

BUILD TRUST / ADD VALUE

US Swine Industry Perspective on the Novel H1N1 Influenza A virus Pandemic

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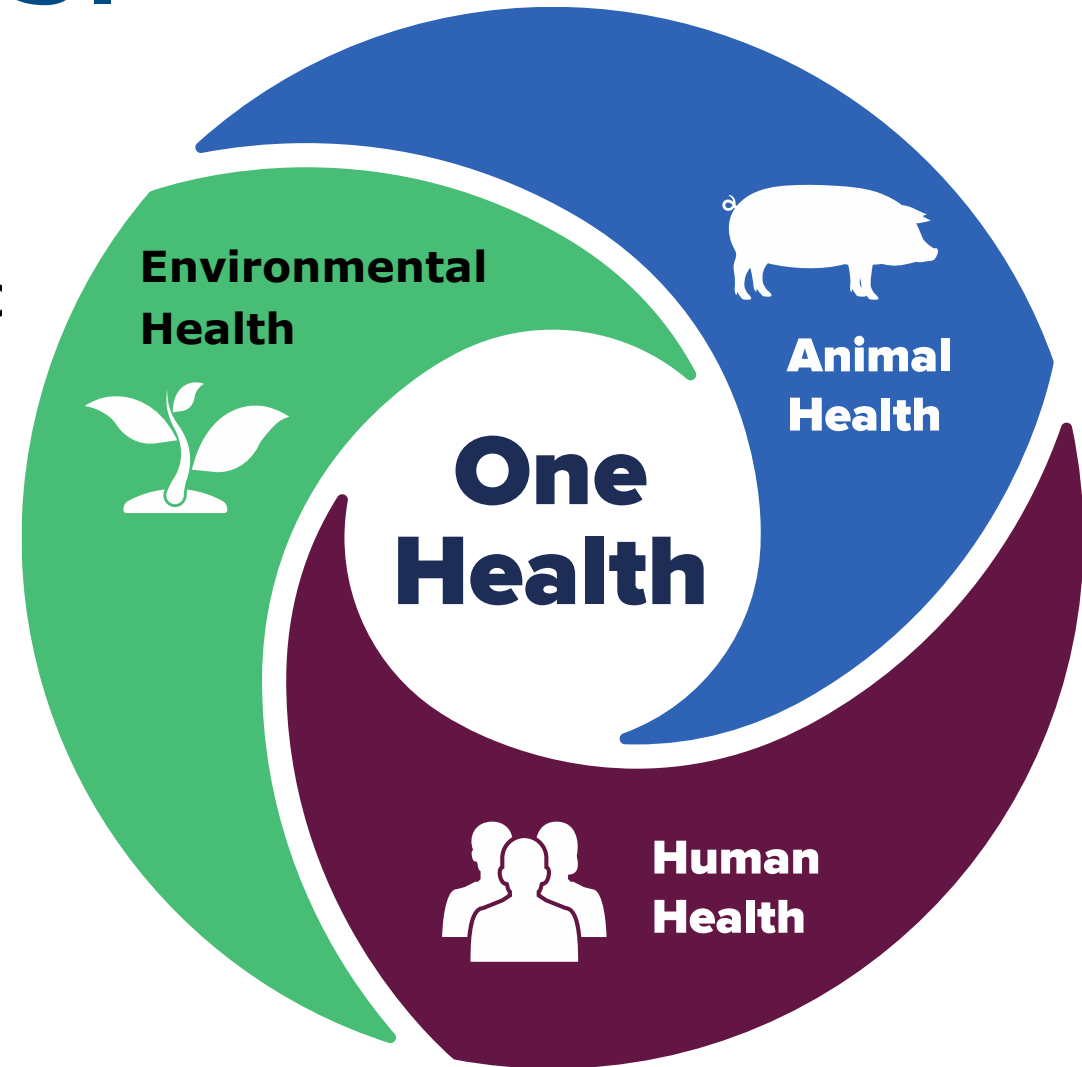
Background

- Public Health Veterinarian
- Occupational Safety and Health Researcher
- One Health Champion
- National Pork Board, Director of Producer and Public Health



2009 H1N1 in the U.S.

- Pig Health
- Worker Safety and Health
- Addressing Concerns of the Public



https://www.onehealthcommission.org/en/why_one_health/what_is_one_health/



Our Ethical Principles



Environment



Food Safety



Animal Well-being



Our People



Community

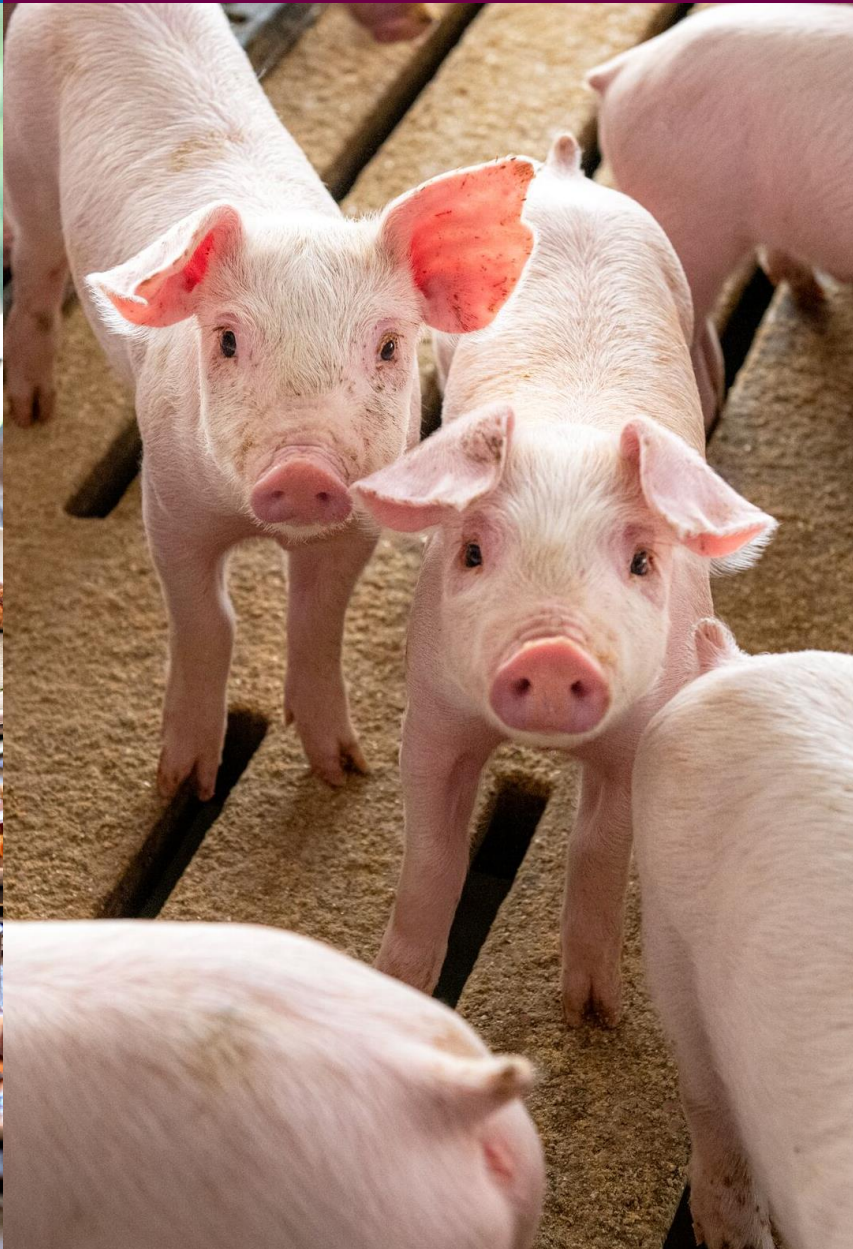


Public Health

People.



Pigs.



Planet.



Practices and Proof

- Quality Assurance Leadership
 - Pork Quality Assurance® Plus
 - Transport Quality Assurance®
- Common Swine Industry Audit

<https://porkcheckoff.org/certification-tools/training-certification/pqa-plus/>



EDUCATION HANDBOOK

Version 4.0



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Industry Issues Management

- Influenza Working Group
- Implement response plan
- H1N1 Crisis Response Team
 - National Pork Board
 - National Pork Producers Council
 - American Association of Swine Veterinarians
 - United States Meat Export Federation
- Collaboration with State and Federal Partners
 - Surveillance Plan
 - Response Guidance
 - Just in Time Research

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Global transmission of influenza viruses from humans to swine

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Response Team Goals and Objectives

- Objective 1 – Reassure U.S. consumers and international trading partners that **Pork is Safe** (when properly handled and cooked)



- Objective 2 -- **Protect the U.S. swine herd** from becoming infected with the virus by encouraging producers to increase biosecurity above and beyond existing measures
- Objective 3 -- **Monitor** communications to identify emerging issues or trends related to the public discussion of this issue
 - Swine Flu vs. H1N1pdm09 virus
- Objective 4 –Transparently share information regarding **modern swine production practices** to stakeholders unfamiliar with the industry

Addressing Misinformation

- Three Audiences
- Producers and Industry partners
 - 90-minute Webinar featuring speakers from the CDC, National Animal Disease Center and National Pork Board and NPPC experts
 - Industry conferences
- Consumers
 - Facts About Pork webpage
 - Social media (NPB-produced YouTube videos, Twitter)
- International Partners and Consumers

The whole truth

- **Pork is Safe.** It is safe to eat properly handled and cooked pork or pork products.
 - According to the Centers for Disease Control and Prevention (CDC), H1N1 flu virus is not transmitted by food. You cannot get H1N1 from eating or from handling pork or pork products.
- Much like people, pigs can get the flu. It is important to note that **no sick pigs enter the food supply.**
- **U.S. pork producers are prepared** to act in the best interest of the public, the animals in their care, their employees and their communities

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Closing the chapter on 2009 H1N1 outbreak

- Pig Health
 - Biosecurity
 - Surveillance
 - Diagnostics
- Worker Safety and Health
 - PPE use
 - Worker vaccination
- Monitor human cases
- Monitor pork consumption

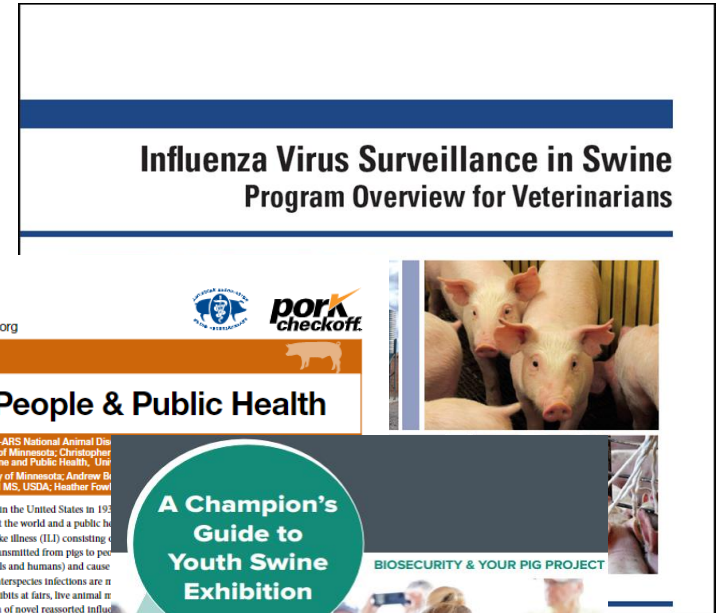


Economic Impacts

- Loss of equity
- Irregular seasonal dips
- Export disruptions
- Revenue reduction of over \$2 billion

Maintaining One Health Relationships

- USDA-National swine influenza virus surveillance program
 - Multiagency communication and collaboration
- Influenza research
 - Viral evolution
 - Diagnostic and vaccine development
- Federal partnerships and information sharing
- Education and outreach



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Public Health Fact Sheet

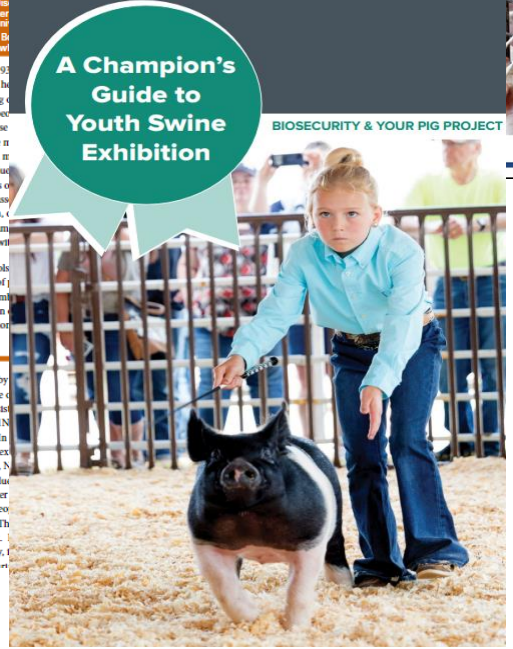
Influenza: Pigs, People & Public Health

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Influenza A viruses (IAV) were first isolated from swine in the United States in 1930, an important cause of respiratory disease in pigs throughout the world and a public health concern in both species. Influenza viruses can be directly transmitted from pigs to people, transmitted from animals to humans or shared by animals and humans, and cause people can also infect and cause disease in pigs. These interspecies infections are not limited to swine and humans, but can also occur between pigs and humans in close proximity with one another, such as during livestock exhibits at fairs, live animal markets, and farm visits. Finally, pigs can serve as intermediaries in the generation of novel reassorted influenza viruses with the potential to be transmitted to people. Importantly, reassorted influenza viruses may contain new combinations of human, avian, and swine influenza virus genes. These novel viruses may contain new combinations of genes that allow them to transmit to, infect and cause disease in people even without reassortment with a human influenza virus.


Veterinarians can help pig producers design farms, develop management protocols of IAV between pig populations. Protocols regarding the frequency and source of quarantine of newly introduced animals may have the potential to reduce the number of animals that become infected. Therefore, veterinarians are uniquely positioned to provide advice and interventions to reduce the risk of IAV to both swine and humans.

Background: Influenza viruses exist in four "types," designated A, B, C, and D. Of these, only influenza A viruses are significant concerns for the health of pigs, whereas influenza A and B are of concern to people. There are a large number of different "subtypes" of influenza A viruses. These subtypes are classified by the hemagglutinin (H) or neuraminidase (N or NA) proteins of the virus. These are also the proteins against which the host directs antibodies that can neutralize the virus, and are, therefore, the major target of vaccines. Of practical significance, antibodies against one IAV subtype provide limited cross-protection to IAV of different subtypes. There are at least 18 different subtypes of hemagglutinin and



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What Questions Do You Have?

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