### FAST FACTS

# What is influenza and what causes it?

Influenza, also called the "flu", is a viral disease that affects humans and many animals. It most commonly causes a fever and respiratory problems. There are three groups of influenza viruses, called type A, B, or C. Influenza type A is the primary group affecting both humans and animals. Influenza A viruses also have many different subtypes. Most only infect a single species (e.g., birds or pigs), while other subtypes can affect more than one species (e.g., birds, pigs and humans). Influenza A viruses can undergo rapid genetic changes (antigenic shift) which then allows them to infect new species of animals.

#### What animals get influenza?

Birds, pigs, horses, ferrets, dogs, and cats can all be infected with various strains of the influenza virus. Influenza in birds is often referred to as avian influenza, in pigs as swine influenza, in horses as equine influenza and so on. Influenza in humans is often referred to as the seasonal flu. Waterfowl are important reservoirs for many subtypes of influenza.

### How can my animal get influenza?

In mammals, the influenza virus is transmitted through the air (**aerosol**) by coughing and sneezing, by **direct contact** with nasal discharges or by objects contaminated with the virus (**fomites**).

In birds, the virus is shed in the feces as well as saliva and nasal secretions; **fecal-oral** transmission is the most common means of spread for avian influenza (bird flu).

# How does influenza affect my animal?

In mammals, the most common clinical signs of influenza include, fever, cough, nasal discharge ("runny" nose) and difficulty breathing. In severe cases, death can occur.

Infected waterfowl do not usually show signs of illness. Poultry however, do get sick with the avian form of influenza. In these birds, respiratory signs are common as well as decreased egg production and diarrhea.

#### Can I get influenza?

Yes. Humans can become infected with influenza. Most viral subtypes are animal specific, but humans can be infected with some swine strains and less frequently avian strains.

Exposure typically occurs through the air (**aerosol**), **direct contact** with nasal discharges or contact with contaminated objects (**fomites**). Signs of illness include fever, muscle pain, headaches, sneezing, runny nose, sore throat, cough, dizziness, and drowsiness.



Influenza (the FLU) is a respiratory viral disease that can affect animals and humans.

Left (circle): Electron micrograph of influenza virus. Right: Sneezing can spread influenza viruses. Avian influenza can cause mild signs in people including redness and mild swelling around the eyes (conjunctivitis). In some cases the more severe avian virus strain can cause severe breathing problems including death.

## Who should I contact, if I suspect influenza?

**In Animals** – Contact your veterinarian immediately. **In Humans** – Contact your physician immediately.

# How can I protect my animal from influenza?

Vaccines are available for pigs, horses, and dogs. If your animal becomes infected with influenza, contact your veterinarian; proper medical care can improve recovery and help minimize secondary complications.

#### How can I protect myself from influenza?

The best way to prevent human influenza is to be vaccinated for influenza each year. Proper sanitation is also important. Cover your mouth and nose when sneezing, wash your hands regularly, and avoid close contact with anyone sick. Wear protective clothing, gloves, and masks when in contact with pigs or birds which may be infected with influenza.

#### **For More Information**

- CFSPH Technical Fact Sheets. Influenza at http://www.cfsph.iastate.edu/ DiseaseInfo/default.htm
- CDC website. Influenza at http://www.cdc. gov/flu

