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## Avian Influenza (Bird Flu): Questions and Answers for 4-Hers

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### **Q: What is “Influenza”?**

Influenza is a disease caused by a virus. Viruses are extremely small germs that can cause illness in people and animals. The common cold is another example of an illness caused by a virus. Most viruses only infect particular animal species (including people)—and often only one part of their body.

There are many different influenza viruses. Most of them are generally pretty choosy about the species or part of the body they like to infect. For example, some influenza viruses mainly infect only pigs. In rare instances these same viruses can jump to other species, like birds or people.

Influenza viruses usually infect the respiratory tract (nose, airways, and lungs) of their “hosts” (the animals or persons they have infected). The resulting illness (“influenza”) has symptoms such as fever, chills, and aches. Every year, many people get influenza in the United States. Most people recover from it, but some people (especially the elderly or people who don’t have a healthy immune system) can die from it.

### **Q: What is “Avian Influenza”?**

“Avian influenza” is also called “bird flu” (“avian” means “of birds”). It refers to any influenza virus that can infect birds. It is interesting to know that birds are the “reservoirs,” or carriers, for most influenza viruses,

even some of those that mostly infect people. Many times the birds that carry these viruses won’t seem sick at all. Other times, they can show flu symptoms just like people – sneezing, poor appetite and runny nose.

### **Q: Why is everyone talking about avian influenza now?**

Some influenza viruses (including avian influenza viruses) are more likely to cause disease than others. People refer to these differences in viruses as “strains.” For example, a mild “strain” of the virus may cause little to no symptoms in the people or animals it infects, while a “virulent” strain could cause severe illness and even death in the people or animals it affects.

Right now, in other parts of the world, a “virulent” strain of bird flu has been noticed that is very deadly to poultry. You may have heard it called “H5N1.” This is a way of naming a virus strain based on structures on the outside of the virus that scientists can find. It’s also referred to as “highly pathogenic,” meaning that it easily can infect a bird and cause very severe symptoms, even death.

This strain of the bird flu has not been seen in the United States yet. It has been found in Asia, Europe, and Africa.

A big reason that people are talking so much about the bird flu is that in some countries where it has shown up, especially countries in Asia, the virus has made people sick too, and some people have even died from it. In all of these cases, the people who became sick were work-

ing very closely with birds that were sick or that died from this “highly pathogenic” strain of bird flu. Scientists are not yet sure whether this virus can spread from person-to-person.

The other thing about influenza viruses is that they can change from one strain to another much more easily than most other germs. So people are worried that this bird flu strain could change into a strain that infects people easily. But so far this hasn’t happened.

**Q: Could my 4-H project birds catch bird flu?**

Right now, it’s not very likely. So far we have not found this bird flu strain in the United States. The scientists who study bird flu think that the way it could get to the U.S. is through wild waterfowl, like ducks and geese, which may come from other countries that have had bird flu. Some of these birds have been found to carry this strain of bird flu but not be sick, meaning that possibly they could fly to other places and spread the virus to other birds. There are many scientists looking for this virus in wild birds, even right here in South Dakota.

**Q: If bird flu ever showed up in the U.S., how would my birds catch it?**

Your 4-H project birds would have to catch it from another bird. This could be a wild duck, goose, or other wild bird that visits your project birds. Or your bird could catch it if it had contact with a bird that was infected at your neighbor’s or friend’s house. Another less likely way is if a person who was working with birds infected with bird flu came to your house and handled your birds without washing hands or changing clothes.

**Q: What symptoms would my birds have if they caught bird flu?**

In countries where this particular strain has infected poultry, many times it acted so suddenly that people would simply find their birds dead without any symptoms. Symptoms of avian influenza (the highly pathogenic or virulent strain) would be:

- Decreased appetite
- Sluggishness or tiredness
- Swelling of the head, eyelids, comb, wattles, and hocks
- Purple-colored wattles, combs and legs
- Runny nose, coughing, sneezing
- Diarrhea

**Q: How can I know if it’s bird flu that’s causing a problem with my bird?**

The symptoms of bird flu are very much like symptoms of other diseases, so you can’t tell just by looking at the birds. If you think there’s a problem, tell your parents, and they should call your veterinarian, the South Dakota Animal Industry Board (605-773-3321), or USDA Veterinary Services (1-800-536-7593). They will help you determine if there’s a problem or not.

**Q: How can I keep my birds from catching bird flu?**

Practice good biosecurity!

**Q: What’s that!?**

“Biosecurity” means the steps you take to prevent new germs or diseases coming to your animals. It means keeping bird flu out, but it also refers to any other disease that could affect your birds.

From what we know about bird flu so far, the most important step to prevent it in your birds would be limiting their contact with wild birds that may carry the virus. Do you keep your birds inside a barn or shed? This is the best method of preventing their contact with wild birds. If they are outside, do you have a solid cover over them? Wild birds infected with the virus would have it in their droppings or nasal fluid, so preventing your birds’ contact with droppings or other body fluids from wild birds is a good move.

So far we haven’t seen this bird flu strain in the U.S. But these are good steps to take in general to prevent other diseases that wild birds may bring in. Other good biosecurity steps to take include:

1. If you purchase new birds to add to the ones you already have, don’t mix them with each other right away. You should keep them isolated from each other for 4 weeks, preferably far away in another building. This allows the new birds to get over any illnesses they may have before they have a chance to spread it to your existing flock.
  - Even though your new birds may look fine, it’s possible that they could carry a new germ that your existing birds have not seen before and can’t fight off themselves.
  - When these new birds are in “isolation,” make sure you don’t carry germs from one group to the

other. Do chores on the new birds last, and make sure to wash your hands and wear clean coveralls between groups.

2. If your friends come over to your house to check out your birds, make sure they have washed their hands and have changed their clothes since they worked with their own birds. The same rule applies if you go to your friend's house to see their project. Wash your hands and wear clean clothes before doing chores with your own birds.
3. If you have to share equipment and cages, make sure they are washed well with soapy hot water and treated with a good disinfectant before your birds have contact with them.

If you do these things, you will be doing what you can to keep new diseases away from your birds! There is a good website about bird biosecurity at [www.aphis.usda/vs/birdbiosecurity](http://www.aphis.usda/vs/birdbiosecurity)

**Q: Isn't there a vaccine for bird flu?**

There is a vaccine for poultry, but it won't be used unless we see a problem here in the U.S.

**Q: What about taking my birds to Achievement Days or the State Fair? Couldn't they catch something there?**

Remember some things: You and your fellow poultry exhibitors know to bring only healthy birds to the fair—they are less likely to harbor any bad germs. Birds' contact with droppings or body fluids from other birds is limited since each bird is in its own cage. And as far as bird flu goes, there is nothing at this time that tells us it's here yet. So take your project to the fair and have a great time!

Another good "biosecurity" move: After you take your birds home from the fair, keep them in a separate location from the rest of your flock for 2 weeks. This is just another step that can help keep your birds healthy in the rare instance that they would catch something at the fair.

**Q: Could I get sick from my own birds?**

Anytime you handle your birds—or any other animal projects—you should do a good job of washing your hands with warm soapy water after you work with them. It is very important to know the proper way to wash your hands—it should be with warm water and soap, for at least 20 seconds! This is the best way to make sure germs (whether they're bird flu or something else) don't get passed from your animal to you.

**Q: Can I get sick from eating chicken or other poultry?**

One thing about the bird flu virus is that it is completely killed by proper cooking. So there is no possibility that bird flu virus would be present in chicken or turkey that has been properly cooked.

The other thing to remember is that any chicken or turkey you buy in a store comes from healthy birds in the first place. If there is any illness in a group of birds, they can't be made into food at all. The places that process poultry meat even check the birds on the farm first to make sure they are not sick before being made into food.

**Q: So what can I do?**

- Be responsible for the health of your birds and take the biosecurity steps mentioned above.
- Keep yourself informed. Right now, this bird flu strain has not been found in the U.S. If it is, depending on where it's found, and in what birds, it may change some of the things we do. There are a lot of people working to monitor bird flu and protect us and our poultry from any of its bad effects. Great websites for you and your parents are:

<http://sdces.sdstate.edu/avianflu>  
[www.cdc.gov/flu/avian](http://www.cdc.gov/flu/avian)  
[www.usda.gov/birdflu](http://www.usda.gov/birdflu)  
[www.sdgifp.info](http://www.sdgifp.info)  
[www.nwhc.usgs.gov](http://www.nwhc.usgs.gov)

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