

# Frequently Asked Questions About Avian Flu

This document was developed through the cooperative effort of the Massachusetts Department of Public Health (MDPH), the Massachusetts Department of Agricultural Resources (MDAR), and the Massachusetts Division of Fisheries and Wildlife (MDFW) and other members of the Zoonotic Disease Advisory Committee\*.

This document is divided into four sections:

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## What are the different types of flu?

**Human flu**, also known as seasonal, flu is a viral infection in humans. Human flu is caused by both influenza A and influenza B viruses that are adapted to spread between people. Human flu passes from person to person through respiratory secretions and tends to occur in seasonal outbreaks. Getting a flu shot annually can help prevent seasonal flu.

**Pandemic flu** occurs when a new strain of a human flu virus appears that is very different from the current human flu viruses. Because most people would not have immunity to this new strain of flu virus, it could spread to many people, across the world, over a short period of time. These pandemic viruses can originate from avian influenza A viruses but they have to change (evolve) to become human flu viruses before they can cause a pandemic.

**Avian flu** is a naturally occurring viral infection in birds, primarily waterfowl (ducks and geese) caused by influenza A viruses. Humans who have certain types of exposure to infected birds can sometimes become infected with avian influenza A viruses. When this rare event happens, the person may become very ill; however, the disease does not generally spread to other people.

**Swine flu** is a respiratory disease of pigs caused by type A influenza viruses that regularly cause outbreaks of influenza in pigs. Swine flu viruses do not normally infect humans. However, sporadic human infections with swine influenza viruses have occurred.

**Other flu in animals:** Influenza A viruses are found in many other kinds of animals, including dogs, horses, seals and whales. These viruses do not generally pose a risk to humans.

## I. Risk of Avian Influenza for People

### 1. What is avian flu?

Avian influenza (also known as avian flu or bird flu) is a naturally occurring viral infection of birds caused by influenza viruses adapted to spread in avian (bird) species. There are two generally kinds of influenza viruses, low pathogenic and highly pathogenic.

## **2. What is the difference between low-pathogenicity avian influenza and high-pathogenicity avian influenza viruses?**

Some avian influenza viruses cause no or only mild symptoms in birds. These are called low-pathogenicity avian influenza (LPAI) viruses and are found in birds around the world, including the United States. LPAI viruses only very rarely cause disease in humans.

Some avian influenza viruses cause extremely severe symptoms and death in birds, particularly in poultry. These are called high-pathogenicity avian influenza (HPAI) viruses. HPAI viruses are more likely to make people sick than LPAIs but this is still a rare event.

Although some types of LPAI and HPAI viruses have infected a small number of people, they are still considered avian flu viruses and do **not** generally spread person-to-person. Over time, however, flu viruses can change. If an avian flu virus did change and was able to easily spread from person to person, it could lead to a flu pandemic in the human population.

## **3. Can avian influenza viruses make me sick?**

Human infection with avian influenza viruses is extremely rare. Avian influenza viruses have only been known to infect people who have had a lot of direct contact with the respiratory secretions or droppings of infected birds. Avian influenza viruses rarely spread from person to person.

## **4. Have avian influenza viruses been found in the United States?**

Surveillance indicates that avian influenza viruses are routinely present in wild bird populations. Avian influenza generally causes most concern when it affects commercial poultry flocks (chickens and turkeys raised for food). Since December 2014, there have been several different avian influenza viruses found in wild birds and several commercial poultry flocks in the Midwest and western parts of the United States. [See Question 21].

## **5. How can I protect myself against avian influenza viruses?**

People who have been infected with avian influenza viruses have generally had a great deal of direct contact with infected poultry or with objects or surfaces contaminated with feces from infected poultry. Examples of direct contact would include touching sick or dead poultry, eating raw or incompletely cooked infected poultry, or touching objects heavily contaminated by infected poultry feces.

To protect yourself from avian influenza viruses in general, avoid unnecessary contact with live poultry or wild birds, especially those birds that appear ill. If you work directly with live poultry or wild birds, more information on protection is available from the [Occupational Safety and Health Administration](http://www.osha.gov/dts/shib/shib121304.html) website at [www.osha.gov/dts/shib/shib121304.html](http://www.osha.gov/dts/shib/shib121304.html).

To protect yourself from all flu viruses (human or avian), it is important to practice good hand hygiene as follows:

- Scrub your palms, between your fingers, under your fingernails and the backs of your hands for at least 20 seconds.
- Use regular soap. Antibacterial soaps are not necessary.
- After rinsing, dry your hands with a paper towel. Use the same paper towel to turn off the water and open the restroom door.
- Remember that liquid hand disinfectants are not a substitute for handwashing, though they may be used as a supplement.

For more information, visit the [MDPH Handwashing Website](http://www.mass.gov/dph/epi) which can be accessed from [www.mass.gov/dph/epi](http://www.mass.gov/dph/epi) and the [MDPH—Influenza](http://www.mass.gov/dph/flu) website at [www.mass.gov/dph/flu](http://www.mass.gov/dph/flu).

## **6. Can I be vaccinated against avian influenza viruses?**

Research is ongoing and some experimental vaccines have shown promising results, but at this time there are no readily available vaccines for avian influenza viruses for people.

Seasonal flu vaccine is recommended yearly for everyone 6 months of age and older. For information about the vaccine for human (seasonal) flu, visit the [MDPH—Influenza](http://www.mass.gov/dph/flu) website at [www.mass.gov/dph/flu](http://www.mass.gov/dph/flu).

## **7. I am feeling sick. Should I be tested for avian influenza virus infection?**

If you are sick, talk with your health care provider who will decide what type of testing is right for you. At this time, testing for any avian influenza virus infection would not be done except in cases where an ill person had been in an area heavily affected by an avian influenza virus that has been shown to cause disease in people AND had close exposure to infected birds or people. Information on avian influenza viruses that have been identified in the United States in birds is available from the [United States Department of Agriculture's Avian Influenza](http://www.aphis.usda.gov/animal_health/avian_influenza/) page.

## **8. If I am diagnosed with an avian influenza virus infection, what medical treatments are available?**

You should consult your health care provider about the appropriate treatment for your illness. Currently, two drugs, oseltamivir (commercially known as Tamiflu®) and zanamivir (commercially known as Relenza®) are approved for the treatment of human cases of flu caused by avian influenza viruses. These drugs are also used to treat cases of seasonal influenza and have been shown to be effective in reducing the severity and duration of illness, especially if administered soon after the onset of illness. More information about the use of antiviral drugs in the treatment of avian influenza is available through the [CDC Avian Influenza](http://www.cdc.gov/flu/avianflu/novel-av-treatment-guidance.htm) website at <http://www.cdc.gov/flu/avianflu/novel-av-treatment-guidance.htm>.

## **9. I am traveling to an area where an avian influenza virus has been found to cause human disease. How can I protect myself?**

CDC has not recommended that the general public avoid travel to any area affected by avian influenza viruses. General recommendations for travel to areas with significant outbreaks of a particular avian influenza virus shown to cause human disease are to:

- Avoid all direct contact with birds, including domestic poultry (such as chickens and ducks) and wild birds.
- Avoid places such as poultry farms and bird markets where live birds are raised or kept.
- Avoid touching surfaces contaminated with poultry feces or secretions.
- Wash your hands often with soap and water. Waterless alcohol-based hand gels (containing at least 60% alcohol) may be used when soap is not available and hands are not visibly soiled.
- Cook all foods from poultry, including eggs, thoroughly. Egg yolks should not be runny or liquid. The cooking temperature for poultry meat should be 74°C (165°F).
- If you become sick with symptoms such as a fever plus a cough, sore throat or have trouble breathing, or if you develop any illness that requires prompt medical attention, a U.S. consular officer can assist you in locating medical services and informing your family or friends. Inform the health-care provider of any possible exposures to avian influenza, such as exposures to ill or dead birds.

If you become ill with a fever plus a cough, sore throat or have trouble breathing within 10 days of traveling to a place with a significant avian influenza outbreak that has been associated with human illness, consult a health-care provider. Before you visit a health-care setting, tell the provider the following: 1) your symptoms, 2) where you traveled, and 3) if you have had direct contact with poultry or close contact with a severely ill person.

For the most current travel recommendations, visit the [CDC Travel Health Notices](http://wwwnc.cdc.gov/travel/notices) website at <http://wwwnc.cdc.gov/travel/notices>.

## **10. Is it safe to cook and eat chicken, other poultry and eggs?**

There have been no documented cases of avian influenza virus infections in humans caused by eating properly cooked poultry products. Poultry products should always be properly handled and cooked to prevent the spread of other illnesses such as *Salmonella*. Egg yolks should not be runny or liquid. The cooking temperature for poultry meat should be 74°C (165°F). More information about safe food handling can be found at the [USDA Safe Food Handling Fact Sheets](http://www.fsis.usda.gov/wps/portal/fsis/topics/food-safety-education/get-answers/food-safety-fact-sheets/safe-food-handling) website at <http://www.fsis.usda.gov/wps/portal/fsis/topics/food-safety-education/get-answers/food-safety-fact-sheets/safe-food-handling>.

## **11. My neighbor raises chickens and I'm worried about catching an avian influenza virus. What should I do?**

Residing near backyard poultry has not resulted in any human infections with any avian influenza viruses anywhere in the United States. To protect yourself from all flu viruses, remember to always practice good hand hygiene.

When any strain of HPAI, those types of avian influenza strains that are most likely to cause disease in humans, infects poultry, it is generally a noticeable event since it causes most of the birds to die very quickly. In areas where HPAI infection is present in birds, the people who become infected by the virus had a great deal of direct contact with infected poultry or with objects or surfaces contaminated with feces from infected poultry. Examples of direct contact would include touching sick or dead poultry, eating raw or incompletely cooked infected poultry, or touching objects heavily contaminated by infected poultry feces.

Even in areas without avian influenza, birds may carry other bacteria, viruses or parasites in their droppings. You should avoid direct contact with bird droppings, if possible, and always wash your hands after contact with bird dropping or surfaces contaminated with bird droppings.

## **12. Is it safe to go to fairs or other settings where there are large numbers of birds?**

Precautions are in place to help make sure that poultry being shown in public settings are free of diseases. Poultry flocks must be tested for disease before they leave their home farm to be shown in another location.

Flock owners may visit fairs, farms, or other settings where there are large numbers of birds provided that appropriate biosecurity measures (precautions taken to reduce the chance of a disease being transported from one place to another) are used before and after such visits.

There are things people should do to make sure that viruses and other germs are not carried away from an infected location on clothes, shoes, vehicles or other items. Changing clothing and footwear is important; the same clothing should not be worn from one location where birds are housed to another. Vehicles and

equipment should also be disinfected. For more information on the national campaign to promote avian health through biosecurity, visit the [USDA – Biosecurity for the Birds](http://www.usda.gov/biosecurity/birds) website at [www.aphis.usda.gov/animal\\_health/birdbiosecurity/](http://www.aphis.usda.gov/animal_health/birdbiosecurity/).

### **13. There are a lot of Canada geese around my child's school and/or sports field. Can my child catch avian influenza from them?**

There have not been any cases of avian influenza infection in people acquired from Canada geese in the United States. You should teach your child to always enjoy wildlife from a distance. Not only are there viruses, bacteria (such as *Salmonella*), and parasites that can spread through their droppings, but approaching them interferes with their normal behavior and can cause conflict between you and them. For more information on Canada geese in Massachusetts, visit the [MassWildlife Canada Geese](http://www.mass.gov/eea/agencies/dfg/dfw/fish-wildlife-plants/mammals/canada-geese.html) website at <http://www.mass.gov/eea/agencies/dfg/dfw/fish-wildlife-plants/mammals/canada-geese.html>.

### **14. My child's class is hatching chicks in the classroom. Is my child at risk for catching an avian influenza virus?**

Hatching chicks in classrooms has not resulted in any human infections with an avian influenza virus. In order to protect against other diseases that may be spread through contact with poultry (such as salmonellosis), children should be instructed to wash their hands after handling chicks, their cages or food dishes. For more information about safely keeping animals in classrooms, view the document [Animal Contact Compendium](http://www.nasphv.org/Documents/AnimalContactCompendium2013.pdf) which can be accessed at <http://www.nasphv.org/Documents/AnimalContactCompendium2013.pdf>.

### **15. I have a bird feeder which attracts wild birds to my yard. Am I at increased risk for catching an avian influenza virus?**

Having a backyard feeder has not resulted in any human infections with an avian influenza A. However, since wild birds may carry other bacteria, viruses or parasites in their droppings, you should avoid exposure to bird droppings, if possible, and always wash your hands after handling your bird feeder.

### **16. Is it safe to hunt, field dress and eat wild game birds?**

There are no recommendations against hunting, field dressing or eating game birds in Massachusetts. As a general precaution, hunters are always advised to wear gloves when skinning and preparing any game meat (this includes both birds and mammals) and to cook meat thoroughly before eating it.

### **17. Is it safe to use products made from bird feathers?**

There are no known cases of avian influenza viruses being spread to humans by processed bird feathers in items such as down comforters, down coats, feather dusters, etc.

### **18. There are a lot of ducks and geese in our local pond. Is it safe to swim in?**

There is limited information available on the risk of contaminated water spreading avian influenza viruses to humans. While theoretically possible, there have been no cases of human infections with avian influenza viruses definitively linked to swimming in bodies of water used by waterfowl. At this time, no humans have become infected with avian influenza by swimming in bodies of water used by waterfowl.

If you are concerned about the conditions of a local pond or lake used for swimming, swim at a bathing beach where regular bacterial monitoring is conducted by the local public health agency or the Department of Conservation and Recreation. These agencies will test the water to make sure it has not been polluted by human or animal waste. At this time, there is no water testing done specifically for the avian influenza viruses. Contact your local health department to find out about regulated bodies of water.

in your community. For information on bathing beach test results at marine beaches, visit the [MDPH Beach Water Quality Locator](http://mass.digitalhealthdepartment.com/public%5F21) at [mass.digitalhealthdepartment.com/public%5F21](http://mass.digitalhealthdepartment.com/public%5F21).

It is a good idea to wash your hands and take a shower before and after swimming or playing in the water. Take care not to drink the water while swimming. Also, since birds may carry a variety of bacteria, viruses or parasites in their droppings, you should avoid exposure to bird droppings that may be on the shore, if possible.

## **19. Am I at risk of catching avian influenza viruses from bird droppings in my garden?**

The majority of people infected by any avian influenza virus have had a great deal of direct contact with infected poultry or with objects or surfaces contaminated with feces from infected poultry. Examples of direct contact would include touching sick or dead poultry, eating raw or incompletely cooked infected poultry, or touching objects contaminated by infected poultry feces.

Limited exposure, such as in a backyard, to a wild bird's droppings in Massachusetts would not be considered a risk for avian influenza virus infection.

However, since wild birds may carry other various bacteria, viruses or parasites in their droppings, you should avoid exposure to bird droppings, if possible, and always wear gloves and wash your hands after gardening.

## **20. I found a dead bird in my pool. Is it safe to swim in it?**

There is no evidence of avian influenza viruses spreading to people through chlorinated water. To protect yourself from many diseases, you should keep up with the chemical maintenance requirements of your pool, particularly when a dead animal has been in the water.

## **II. Avian Influenza in Wild Birds**

**For a list of wild bird species found in Massachusetts, see the Massachusetts Division of Fisheries and Wildlife (MDFW) website at:**

<http://www.mass.gov/eea/docs/dfg/dfw/bird-list1.pdf>

## **21. How do you know that there are no avian influenza viruses in Massachusetts?**

It is possible that wild birds especially waterfowl (ducks or geese) in Massachusetts can be infected with avian influenza viruses. However, wild birds have not generally been shown to pose a risk for human infection. Surveillance programs for the early detection of significant HPAI viruses, those most likely to cause disease in humans, in Massachusetts are primarily aimed at screening domestic poultry from live bird markets as well as commercial and backyard flocks and identifying appropriate signs in domestic poultry.

Surveillance for avian influenza viruses in domestic birds in Massachusetts is directed by the Massachusetts Department of Agricultural Resources (MDAR) in cooperation with the United States Department of Agriculture (USDA). MDAR has been screening domestic poultry from live bird markets as well as commercial and backyard flocks in Massachusetts for any avian influenza infection since 1983. For more information, please go to the [MDAR](http://www.mass.gov/agr) website at [www.mass.gov/agr](http://www.mass.gov/agr).

Surveillance for avian influenza viruses in wild birds in Massachusetts is directed by the Massachusetts Division of Fisheries and Wildlife (MDFW) in cooperation with the USDA. For more information on avian influenza in Massachusetts in wild birds, visit the [MassWildlife Avian Influenza](http://www.mass.gov/eea/agencies/dfg/dfw/fish-wildlife-plants/avian-influenza.html) website at <http://www.mass.gov/eea/agencies/dfg/dfw/fish-wildlife-plants/avian-influenza.html>. To view information on wild bird infections, visit the [USGS National Wildlife Health Center - Avian Influenza](http://www.nwhc.usgs.gov/disease_information/avian_influenza/) website at [http://www.nwhc.usgs.gov/disease\\_information/avian\\_influenza/](http://www.nwhc.usgs.gov/disease_information/avian_influenza/).

Surveillance for influenza viruses (human or avian) in humans is conducted by the Massachusetts Department of Public Health (MDPH) in close cooperation with health care providers in Massachusetts. For more information, visit the [MDPH—Influenza](http://www.mass.gov/dph/flu) website at [www.mass.gov/dph/flu](http://www.mass.gov/dph/flu).

## **22. How do we know that wild birds are not bringing avian influenza viruses into Massachusetts? Who is keeping track of these birds?**

It is possible that wild birds, especially waterfowl (ducks or geese) in Massachusetts could be carrying an avian influenza virus. Surveillance programs for the early detection of significant HPAI viruses, those most likely to cause disease in humans, in Massachusetts exist. Surveillance of wild birds in Massachusetts for avian influenza viruses is conducted by the MDFW in cooperation with USDA when indicated. Most birds do not need to be tested. State and federal agriculture and wildlife agencies consider waterfowl, such as ducks and geese, as the top priority for testing. Avian influenza usually involves migratory waterfowl (ducks and geese) and shorebirds (sandpipers, plovers) or other waterbirds (herons), not backyard birds (songbirds).

## **23. I have a dead wild bird in my yard. Could it have died from an avian influenza virus?**

Avian influenza virus infections do not usually kill wild birds. Therefore, it is extremely unlikely that any individual dead bird in Massachusetts died from an avian influenza virus infection. [If someone is reporting a larger group of dead birds, see Question 26.]

## **24. I have a sick or injured wild bird in my yard. Could it have an avian influenza virus and where can I take it?**

Avian influenza viruses rarely cause disease in wild birds and it is unlikely that any individual bird may be infected with an avian influenza virus. If you find a sick or injured animal, it is important to locate a licensed rehabilitator. Licensed rehabilitators can help you determine if an animal actually needs help and if it does, may be able to provide care with the ultimate goal of appropriate release as a wild animal.

You should contact your local Animal Control Officer for assistance with capturing the animal. You can find a list of licensed wildlife rehabilitators on the [MassWildlife Wildlife Rehabilitators](http://www.mass.gov/eea/agencies/dfg/dfw/fish-wildlife-plants/wildlife-rehabilitation.html) website at <http://www.mass.gov/eea/agencies/dfg/dfw/fish-wildlife-plants/wildlife-rehabilitation.html>.

## **25. How can I safely dispose of a dead wild bird in my backyard?**

While it is highly unlikely that the dead bird may have been infected with an avian influenza virus, it is generally recommended that you not touch any dead bird, or any other wild animal, with your bare hands. To dispose of a dead bird, use a shovel to scoop up the dead bird and put it in a trash bag. Then place that bag into a second bag and place it in your trash. If you must use your hands to put the dead bird in a trash bag, cover them with gloves or plastic bags. After disposing of the bird, wash your hands.

## **26. A large group of wild birds has suddenly died in my backyard or at my local recreation area. What do I do?**

Please report sick, dying, or recently dead waterfowl (ducks and geese), shorebirds (sandpipers, plovers) or other waterbirds (herons) found at any location(s) to the MDFW, Westboro Field Headquarters at 508-389-6300 or the USDA at 413-253-2403.

Larger bird die-offs of other species can be reported to the closest district office of the MDFW.

Western Wildlife District in Pittsfield—413-447-9789

Connecticut Valley Wildlife District in Belchertown—413-323-7632

Central Wildlife District in West Boylston—508-835-3607

Northeast Wildlife District in Acton—978-263-4347

Southeast Wildlife District in Buzzards Bay—508-759-3406

## **27. There are several wild birds in my yard. Can I kill them?**

Experts do not recommend the lethal removal of wild birds as a tool for control of avian influenza; it is not practical or environmentally sound. It is unlikely that any individual bird in your yard is infected with an avian influenza virus and there have been no cases of human infection with avian influenza linked to the presence of wild birds. In addition, it is generally illegal to hunt or kill wild birds except for game species during their designated hunting seasons, in designated hunting areas and with appropriate state and federal permits. For more information about migratory bird hunting and other hunting regulations in Massachusetts, view the [Hunting of Migratory Game Birds | MassWildlife](http://www.mass.gov/eea/agencies/dfg/dfw/laws-regulations/plain-lang-sum/hunting-of-migratory-game-birds.html) document at <http://www.mass.gov/eea/agencies/dfg/dfw/laws-regulations/plain-lang-sum/hunting-of-migratory-game-birds.html>.

## **III. Avian Influenza and Pets**

### **28. Is pet food that contains chicken or chicken products safe to give my pet?**

Avian influenza viruses are destroyed by cooking at temperatures above 158°F (70°C). The high temperatures required to make commercial pet food eliminate the risk of infection in pets that only eat these foods. Because uncooked or raw food diets do not go through the same process, the risk of infection is not eliminated in these products. Pets should never be fed uncooked meat or eggs.

### **29. My pet cat or dog had a dead bird in its mouth. Could it catch an avian influenza virus?**

Occasional avian influenza infections in cats have been reported in areas of the world experiencing outbreaks in domestic or wild birds. All of the cases of avian influenza infection in domestic cats are thought to have occurred by the cat eating raw infected birds. Keeping your cat indoors prevents them from having contact with wild birds and reduces their chances of being exposed to any avian flu viruses. Clinical signs in naturally infected cats have not been described, but signs in experimentally infected cats include fever, listlessness, difficulty breathing, conjunctivitis (swelling and redness of the membranes around the eyes) and death. Pet owners should remember that these signs are commonly encountered in cats with other diseases. Any signs of illness in your pet should be discussed with your veterinarian. **There has been no evidence of an avian influenza virus spreading from cats to humans.**

Some research evidence suggests that dogs exposed to certain avian influenza viruses may develop an immune system response against it but that they are unlikely to develop illness. **There has been no**

**evidence of an avian influenza virus spreading from dogs to humans.** Dogs can become infected with dog influenza viruses spread by other dogs. If your pet is ill, talk with your veterinarian about proper diagnosis and treatment.

As a general precaution, pets should not be allowed to feed on dead wild birds. Pets should never be fed uncooked meat or eggs. If your pet is ill, talk with your veterinarian about proper diagnosis and treatment.

For more information on avian influenza in animals, including dogs and cats, visit the [American Veterinary Medical Association](https://www.avma.org/KB/Resources/FAQs/Pages/avian-influenza-FAQs-veterinarians.aspx) website at <https://www.avma.org/KB/Resources/FAQs/Pages/avian-influenza-FAQs-veterinarians.aspx>.

### **30. Are my pet birds at risk for catching avian influenza viruses?**

At this time, the risk of any avian influenza virus infecting indoor pet birds is extremely low. Birds that are legally imported are quarantined (kept away from other birds to observe for signs of illness) and tested upon entry into the United States, before they are made available for purchase. As a general precaution, pet birds should not be allowed to come into contact with wild birds. It is recommended that ill birds or newly acquired birds be isolated (kept away) from other birds for 30 days. If your pet bird is ill, talk with your veterinarian.

For general recommendations on safe handling of pet birds, view the [MDPH – Happy and Healthy: Your Pet Bird and You](http://www.mass.gov/dph/epi) document which can be accessed from [www.mass.gov/dph/epi](http://www.mass.gov/dph/epi).

## **IV. Avian Influenza and Poultry**

### **31. I keep a flock of chickens in my yard. How can I protect myself?**

Flock owners can protect themselves by avoiding face-to-bird contact, employing proper handwashing methods, wearing disposable or designated clothing and shoes in poultry areas and by assuring that items and equipment used in poultry areas are not used in other locations or living spaces unless properly disinfected. Using proven biosecurity measures can minimize risks. These measures include protecting the flock from exposure to potential sources of avian influenza (i.e., wild birds) and limiting access to poultry areas only to people and equipment necessary for the care and maintenance of the flock. For more information on the national campaign to promote avian health through biosecurity, visit the [USDA – Biosecurity for the Birds](http://www.aphis.usda.gov/animal_health/birdbiosecurity/) website at [www.aphis.usda.gov/animal\\_health/birdbiosecurity/](http://www.aphis.usda.gov/animal_health/birdbiosecurity/).

### **32. Can I vaccinate my poultry against avian influenza viruses?**

At the present time, there are no vaccines against avian influenza viruses available for use in backyard/breeder flocks.

### **33. How can I prevent my chickens from becoming infected?**

Do not allow the flock to have contact with wild birds and any waterfowl. Proper enclosures will help with this. Access to poultry, poultry feed and the premises where they are kept should be restricted to people and vehicles necessary to the maintenance of the flock. Prohibit contact with equipment and items that have been in contact with other poultry or potential sources of avian flu. Employ appropriate cleaning and disinfection methods to safeguard against disease. Wear disposable or designated clothing and shoes when in contact with poultry to avoid potential contamination. For more information on the national campaign to promote avian health through biosecurity, visit the [USDA – Biosecurity for the Birds](http://www.aphis.usda.gov/animal_health/birdbiosecurity/) website at [www.aphis.usda.gov/animal\\_health/birdbiosecurity/](http://www.aphis.usda.gov/animal_health/birdbiosecurity/).

### **34. Several of my chickens have suddenly died. Who should I call?**

Flock owners should maintain a good working relationship with their veterinarian. Any time there is illness or sudden death within the flock, owners should contact their veterinarian. In the event that the veterinarian cannot be reached, contact the MDAR, Division of Animal Health at (617) 626-1795.

#### ***FOR MORE INFORMATION:***

**For the latest information on any worldwide HPAI outbreak**, visit the CDC website at [www.cdc.gov](http://www.cdc.gov) or the WHO – Avian Influenza website at [www.who.int/csr/disease/avian\\_influenza/en/index.html](http://www.who.int/csr/disease/avian_influenza/en/index.html)

**For more information about avian flu in wild birds or game birds (quail, pheasants) in Massachusetts**, visit the MDFW website at <http://www.mass.gov/cea/agencies/dfg/dfw/fish-wildlife-plants/avian-influenza.html>.

**For more information about avian flu in domestic birds (chickens) or pets (cats, dogs, pet birds) in Massachusetts**, contact the MDAR, Division of Biosecurity and Regulatory Services at (617) 626-1795 or visit their website at <http://www.mass.gov/cea/agencies/agr/animal-health/poultry/avian-influenza.html>.

**For more information about any type of flu in people or pandemic flu planning in Massachusetts**, contact the MDPH, Division of Epidemiology and Immunization at 617-983-6800 or online at [www.mass.gov/dph/epi](http://www.mass.gov/dph/epi).

\* The Zoonotic Disease Advisory Committee includes representatives from the following agencies:

#### Federal Agencies:

USDA-Veterinary Services  
USDA-Wildlife Services  
Federal Bureau of Investigation

#### Massachusetts State Agencies:

Department of Public Health  
Department of Agricultural Resources  
Division of Fisheries and Wildlife  
Department of Environmental Protection  
Department of Environmental Management  
Emergency Management Agency

#### Private:

Tufts Cummings School of Veterinary Medicine  
Massachusetts Society for the Prevention of Cruelty to Animals  
Cape Wildlife Center  
Massachusetts Veterinary Medical Association  
Cape Cod Rabies Task Force  
Massachusetts Animal Control Officers Association  
Zoo New England