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## **IPM for Microorganisms – Focus on Flu Part 2**

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### **Flu is widespread across the U.S.**

The Centers for Disease Control and Prevention (CDC) report that although we are only about halfway through flu season, the influenza virus is already widespread in 48 states, and tragically at least 53 children have died.



It's well known that the severity and length of a flu season varies every year, and the CDC say that your best shot at avoiding illness is to get a flu shot.

Current U.S. statistics indicate that the flu vaccine is reducing the risk of illness by 40 to 60 % (CDC), and even if you do get the flu after receiving a flu shot, the illness may be milder.

Flu comes every year, but the health impacts differ depending on when, and which strains start circulating. In recent years, flu related deaths have ranged from a low of about 3,000 to a high of about 49,000 people per year. Hospitalizations also range between 140,000 and 710,000 annually (CDC).

**Flu is a serious disease and can be life threatening.**

**Any person experiencing chest pain or breathing complications should seek immediate medical assistance.**

Information about flu can be found on the CDC website <https://www.cdc.gov/flu/index.htm>, and our previous newsletter covered some flu basics <https://cals.arizona.edu/apmc/docs/2018JanuaryAZschoolandhomeIPMNewsletter.pdf>.

The CDC recommends that people who are very sick or who are at high risk of serious flu complications, and get flu symptoms be treated with antiviral drugs as soon as

possible. Guidance to determine if you are at high risk of complications can be found at: [https://www.cdc.gov/flu/about/disease/high\\_risk.htm](https://www.cdc.gov/flu/about/disease/high_risk.htm).

### The flu vaccine

Flu viruses change constantly and several strains circulate each year, which partially explains why vaccines never provide 100 % protection.

People who are already ill are usually advised to recover before getting the vaccination, but it is wise to confirm with your primary care physician to determine if the flu vaccine is right for you.



People who have previously had a severe allergic reaction to the influenza vaccine or any of its ingredients should not be vaccinated.

### My dog has the flu

Humans are not the only creatures suffering from influenza this year, canine influenza has been reported in 46 states.

The American Veterinary Medical Association (AVMA) reports that dog flu is very infectious to other canines, and nearly all dogs exposed will become infected, with about 80% becoming ill. Symptoms are similar to those seen in humans and include fatigue, cough, sneezing, and a runny nose. Dog flu is generally a mild illness but can be lethal for some dogs.

According to CDC two common strains of influenza A cause the flu in dogs: H3N2 and H3N8. You may be aware that the most common human flu strain circulating this year is also H3N2. However, the human adapted H3N2 and the canine adapted H3N2 are not the same. **There are no known cases of humans catching the flu virus from their dogs.**



There have been documented cases of flu viruses that transfer between humans, pigs, and birds, but as of this writing, there have been no scientific studies that show influenza transferring between people and our canine best friends.

The AVMA recommends vaccinating dogs against influenza if your dog routinely interacts with many other dogs, in kennels, canine daycare, or in dog parks.

**You cannot infect your cat or dog with human flu.**

**You cannot catch flu from your cat or dog.**

## Good Health Habits

**Avoid close contact** with people who are sick. When you are sick, keep your distance from others and consider wearing a mask when contact is required.

**Stay home** from work, school, and errands when you are sick. This will help prevent spreading your illness to others.

**Clean your hands** by washing often and thoroughly with soap and warm water.

**Avoid touching your face**, especially eyes, nose or mouth.

**Clean and disinfect surfaces and objects.** Flu viruses and other germs spread when a person touches a surface or object that is contaminated with germs and then touches their eyes, nose, or mouth.

Here are five important things to know as you combat the flu virus.

1. Know the difference between cleaning, disinfecting, and sanitizing.

- **Cleaning** removes some germs, debris, and dirt from surfaces or objects. Soap and water significantly improves the physical removal of germs from surfaces.
- **Disinfecting** kills germs on surfaces or objects. Disinfecting alone will not clean dirty surfaces but disinfecting after cleaning further lowers the risk of spreading infectious germs.
- **Sanitizing** lowers the number of viable germs on surfaces or objects to safe levels, determined by public health requirements.



2. Clean surfaces and objects that are touched often.

- Daily sanitize surfaces and objects that are touched often, such as desktops, countertops, door handles, computer mouse and keyboards, faucets, and phones.
- Use gloves when handling surfaces and items contaminated with bodily fluids, and throw soiled items away after proper disinfection.

- **The flu virus can remain in an infectious form on a surface for up to 48 hours.** It is not necessary to close work places, childcare facilities or schools to clean or disinfect because of flu. If facilities are closed due to staff shortages or student absenteeism during a flu outbreak, it is not necessary to do extra cleaning and disinfecting. Normal cleaning and disinfection practices are sufficient to remove or kill flu viruses.

3. Always follow label directions on cleaning products and disinfectants.

- Wash surfaces with a detergent to remove dirt.
- Rinse with water.
- Apply an EPA-registered disinfectant that is approved to kill influenza A virus, following label directions exactly. Disinfection usually requires the product to remain on the surface for a certain period of time (e.g., letting it stand for 3 to 5 minutes), and may need to be removed with clean water. **Follow label directions exactly.**

4. Product safety.

- Products have specific directions on labels and hazard warnings. Chemically protective gloves and eye protection is advisable and may be legally required.
- Never allow children to use disinfectants.
- Do not mix detergents with disinfectants unless the label explicitly states that it is safe to do so. **Combining products can result in serious injury or death. Mixing chlorine bleach and ammonia cleaners produces a lethal chlorine gas.** Commonly used products contain bleach (hypochlorite) and ammonia e.g., toilet bowl cleaners often contain bleach, and window cleaners often contain ammonia.
- Ensure that anyone using cleaners and disinfectant products have access to labels in a familiar language, and can read and understand the labels.

5. Solid waste handling.

- Follow standard institutional procedures for handling waste, which may include wearing gloves. Place no-touch wastebaskets where they are easy to use. Avoid touching used tissues when emptying wastebaskets, or wear gloves if tissues must be handled. Wash your hands with soap and water after processing waste and dispose of gloves.
- **Stay home if you are a sick and work as a food handler.** Influenza viruses from sick food workers can contaminate food if workers do not wash their hands properly, cough, sneeze, or talk over food that will not be cooked (e.g., salads or sandwiches). People who eat contaminated food can then get sick.



## Citations

Antimicrobial products <http://npic.orst.edu/factsheets/antimicrobials.html>

Canine Influenza. American Veterinary Medical Association  
<https://www.avma.org/KB/Resources/Reference/Pages/Canine-Influenza-Backgrounder.aspx>

Key Facts about Canine Influenza (Dog Flu). Centers for Disease Control and Prevention  
<https://www.cdc.gov/flu/canineflu/keyfacts.htm>

Centers for Disease Control and Prevention.  
[https://www.cdc.gov/flu/about/disease/us\\_flu-related\\_deaths.htm](https://www.cdc.gov/flu/about/disease/us_flu-related_deaths.htm)

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## Webinars and Events

Please join in for the [2018 All Bugs Good and Bad Webinar Series](#), which provides information about good and bad insects. Webinars are free and open to everyone. Webinars will be on the **first Friday of each month at 2 p.m. Eastern time.**

Upcoming webinars include:

1. Misidentified Pests in the Landscape – March 2, 2018  
<https://learn.extension.org/events/3254>
2. The Argentine Ants and Others – April 6, 2018  
<https://learn.extension.org/events/3255>
3. Everything You Must Know About Fleas - May 4, 2018  
<https://learn.extension.org/events/3256>
4. Attracting Pollinators to Our Yards - June 1, 2018  
<https://learn.extension.org/events/3257>
5. Bees, Wasps, and Hornets, Oh My! – August 3, 2018  
<https://learn.extension.org/events/3258>

For more information about upcoming and past School IPM webinars:  
<http://articles.extension.org/pages/74590/2018-all-bugs-good-and-bad-webinar-series>.

## EPA Integrated Pest Management Webinars

Upcoming IPM webinars include:

1. Why You Should Kiss and Tell About This: Kissing Bugs and Chagas Disease – February 13, 2018 <https://register.gotowebinar.com/register/8549041943024161539>
2. Managing Mosquitoes Around the Home – March 6, 2018
3. Integrated Mosquito Management in an Urban Environment – March 20, 2018
4. Pesticide Resistance Testing to Improve Mosquito Management – April 10, 2018
5. Using GIS to Improve Integrated Mosquito Management – April 24, 2018
6. Managing Canada Geese and Pigeons – May 15, 2018

For more information about upcoming and past IPM webinars: <https://www.epa.gov/managing-pests-schools/upcoming-integrated-pest-management-webinars>

For more information about the EPA Schools program, visit:  
<http://www.epa.gov/schools/>

For more information about Community IPM, visit:  
<http://www.extension.org/pages/23359/urban-integrated-pest-management-community-page>



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To view all our previous newsletters, visit:

- <https://cals.arizona.edu/apmc/public-health-IPM.html#newsletter>
- <https://cals.arizona.edu/apmc/westernschoolIPM.html#newsletter>

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