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Veterinary Connections

*News about Animal Health, Food Safety, and One Health.
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Protect the Ones You Love from Bugs

Insects abound in our world. It doesn't matter where you are on the planet, insects are there sharing the environment with you and your pet. While butterflies are beautiful and ladybugs are cute, some other insects can share far more than joy. They can carry diseases that can infect you and your pet. These types of insects are known as "vectors," and the diseases they carry are called "vector-borne diseases."

The vector-borne diseases that exist in your part of the world depend on which insects live in the region. Common insects capable of transmitting diseases include ticks, fleas, mosquitos, and flies/sandflies. In some areas the triatomine or reduvid "kissing" bug may also transmit disease. Insects typically spread disease-causing organisms by biting or taking blood from you or your pet.

Some vector-borne diseases you may have heard about include Lyme disease, Rocky Mountain Spotted fever, plague, tularemia, West Nile virus, leishmaniasis, and Chagas disease. This is only a small list; there are many more vector-borne diseases that can infect dogs, cats, and humans.

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“Ensure that your pet is protected from insects by using a veterinary-approved product”



Protect the Ones You Love from Bugs

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Think of the impact that even one vector-borne disease could have on your household: veterinary bills, doctor visits, sick leave, and most importantly the symptoms of the disease itself.

The good news is that vector-borne diseases CAN be prevented! Ensure that your pet is protected from insects by using a veterinary-approved product.

There are numerous biting insect preventives available, so many in fact that they are too numerous to list in this article. Preventives come in many different forms, from collars, to topicals applied to the pet's skin, to pills

that work from the inside out. Most products are effective against more than one type of vector. However, depending on where you and your pet live, you may need to use more than one type of preventive. Talk with your veterinarian about appropriate vector control for your pet.

Consult with your veterinarian about a comprehensive pet protection plan to keep your pets safe year round. Always remember to protect yourself and your family from insect bites, too. Learn more at: <http://wwwnc.cdc.gov/travel/page/avoid-bug-bites>.

IMPORTANT: Never use a dog preventive on/in cats. Never use a cat preventive on/in dogs. Preventives that are safe for dogs are toxic to cats!

Always remember that proactive prevention is much less costly in terms of dollars, time, and emotions than dealing with a vector-borne disease.



Canine Influenza Virus

Canine influenza virus (CIV), or the "dog flu," is not the same as human influenza. Canine influenza viruses are relatively new, so most dogs are likely to become infected when they are exposed because they have not developed a natural immunity. The H3N8 strain was first discovered in 2004 in Florida in racing greyhounds. Later studies determined that the virus had been circulating in the dog population since at least 1999. In 2015, an outbreak of canine influenza in Chicago was traced to the H3N2 strain that previously had only been reported in South Korea and parts of China.

Generally, dogs with CIV infections have a mild illness, but some dogs can get very sick and a few deaths have been reported. Dogs of any breed, age, sex, or health status are at risk of infection when exposed to the virus.

Canine influenzas are highly contagious and easily spread from infected dogs to other dogs through direct contact, nasal secretions (barking, coughing, or sneezing), contaminated objects (kennel surfaces, food and water bowls, collars, and leashes), and by people moving between infected and uninfected dogs. Dogs are most contagious during the 2 to 4 days following exposure and before developing symptoms.

Canine influenza infections may be confused with kennel cough. Be alert for the following signs, which are commonly seen with both infections. If your dog exhibits any of these symptoms, seek veterinary care.

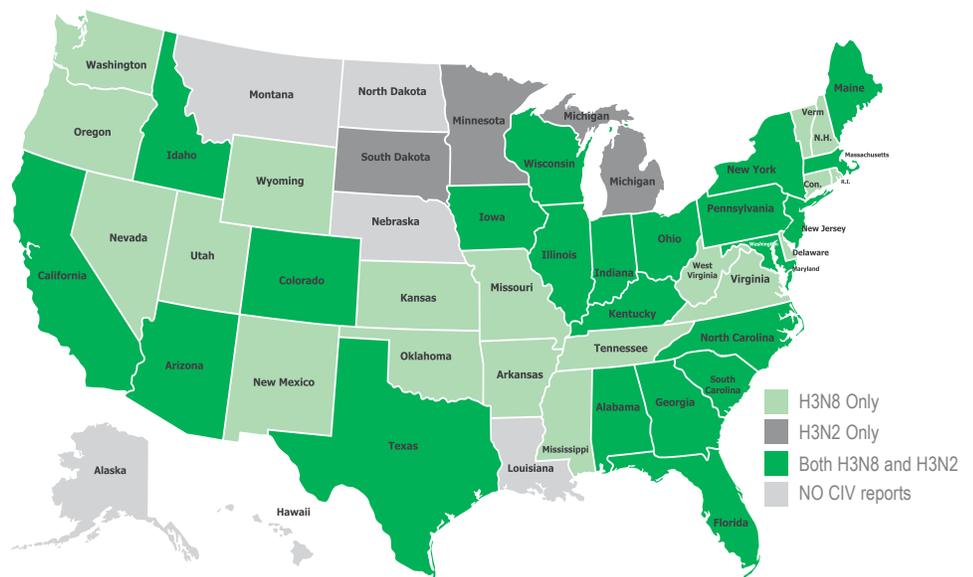
- Fever (103-105°F)
- Lethargy
- Loss of appetite
- Coughing and sneezing
- Runny nose with clear secretions at first that may later change to a thick and yellow and/or pink-tinged color

Of the dogs exposed to CIV:

- 80% to 90% will develop symptoms.
- Up to 20% of dogs may develop a more severe form, with a high fever (104°F-106°F) and pneumonia. These dogs are usually admitted to the veterinary clinic for treatment.
- 8% to 10% of infected dogs may die from complications of CIV.

There are vaccines against both the H3N8 and H3N2 strains of canine influenza. The CIV vaccinations are considered a "lifestyle" vaccination, recommended for dogs at risk of exposure due to their increased contact with other dogs. Common sources of exposure are boarding kennels, grooming facilities, dog parks, and anywhere dogs freely socialize. If your dog regularly participates in these activities, it is recommended that they be vaccinated against the CIV prevalent in your locale and against the other common respiratory diseases (Bordetella bronchiseptica, parainfluenza virus, and adenovirus type-2).

Contact your veterinarian for additional vaccine information.



Summer Picnic Safety

Picnic and barbecue season offers lots of opportunities for outdoor fun with family and friends. But these activities can also present opportunities for foodborne illness. To protect family, friends, and yourself from foodborne illness during warm-weather activities, follow these simple food safety guidelines for planning, preparing, transporting, and serving it safely once you've arrived.

Planning the Menu

- Prepare and take only the amounts of food you'll eat.
- Most foods are safe for short periods when stored with ice or frozen gel packs in a proper cooler.
- If you do not have a cooler, plan your menu using the following items:

Fruits	Dry cereal
Vegetables	Bread
Hard cheese	Peanut Butter
Canned/dried meats or fish	Crackers

Prepping for the Picnic

- Wash hands, work area, and all utensils before, during, and after preparing food.
- Do NOT thaw frozen items at room temperature. Always thaw foods in the refrigerator. Completely thaw meat and poultry before grilling so it cooks more evenly.
- Always marinate food in the refrigerator. Do not reuse marinades. If the marinade is to be used as a sauce for cooked foods, separate some and store in a separate container BEFORE adding remaining marinade to raw meat, poultry, or seafood.
- Always rinse and clean your fresh fruits and vegetables under cold running water before cutting or packing into a cooler.

Pack and Transport

- Find out if there's a source of clean water at the picnic site. If not, then bring water for preparation and cleaning. Pack clean cloths and moist towelettes for cleaning surfaces, utensils, and hands.

- Always use a clean, insulated cooler with a cold source, such as ice or frozen gel packs, to keep the food at 40° F or below. Inspect the cooler for damage, cracks, non-sealing lid, and cleanliness before each use. Inspect gel packs to ensure they are intact and do not leak.
- Pack cold food first, right from the refrigerator.
- Creamy or custard foods and salads using store-bought mayonnaise are safe if kept cold in a cooler that is maintained at the proper temperature.
- Replenish ice or frozen gel packs if they start to melt. Drain excess water and repack with fresh, clean ice.
- Meat, poultry, and seafood may be packed while still frozen so that they stay colder longer. Do not thaw on a picnic table or in the hot sun.
- Plan to keep hot foods hot. Use a separate cooler, thermos, or insulated dish for hot foods. Do not mix hot and cold foods in the same cooler.
- Don't forget to pack paper towels, hand sanitizer, soap and water, and most importantly a food thermometer.

Picnic Setup and Grilling

- Keeping food at proper temperatures—indoor and out—is critical in preventing the growth of foodborne bacteria. Never let your picnic food remain in the "Danger Zone"—between 40° F and 140° F—for more than 2 hours, or 1 hour if outdoor temperatures are above 90° F.
- Keep food cold until ready to cook.
- Cook meat and poultry thoroughly to their safe minimum internal temperatures.

Safe Minimum Internal Temperatures

- Whole poultry: 165° F
- Poultry breasts: 165° F
- Beef, pork, lamb, and veal (steaks, roasts, and chops): 145° F and allow to rest at least 3 minutes
- Shrimp, lobster, and crabs: cook until pearly and opaque
- Clams, oysters, and mussels: cook until the shells are open
- Ground poultry: 165° F
- Ground meats: 160° F

- Do not cross-contaminate raw and cooked products. Use a fresh, clean plate for serving cooked food, and never let raw meat juices touch other food.
- Follow these simple rules for keeping cold foods cold and hot foods hot.

COLD FOOD

- Cold, perishable food should be kept in a cooler at 40° F or below until serving time.
- Once you've served it, cold foods should not sit out for longer than 2 hours or 1 hour if the outdoor temperature is above 90° F. If it does, then discard it.
- Foods like chicken salad and desserts in individual serving dishes can be placed directly on ice or in a shallow container set in a deep pan filled with ice. Drain off water as ice melts, and replace ice frequently.

HOT FOOD

- Hot food should be kept hot, at or above 140° F.
- Wrap hot foods well and place them in an insulated container until serving.
- Just as with cold food, these foods should not sit out for more than 2 hours or 1 hour in temperatures above 90° F. If food is left out longer, throw it away to be safe.

Going Home

- Refrigerate any leftovers promptly in shallow containers. Discard any perishable food left out for more than 2 hours (1 hour if temperatures are above 90° F).
- If there is still ice in the cooler when you get home and the food did not sit out at the picnic, the food is still safe to store in the refrigerator.

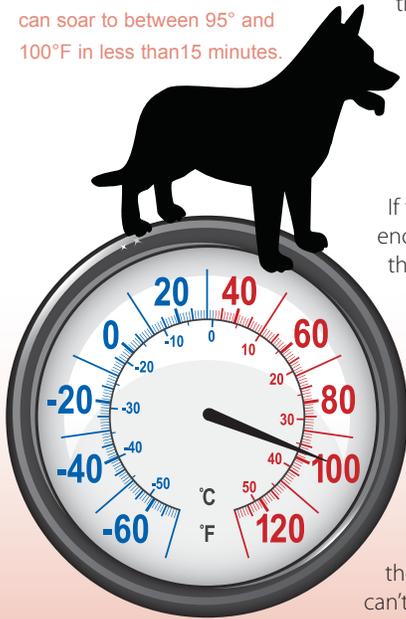
Picnic and barbecue season offers lots of opportunities for outdoor fun with family and friends



Pets and Parked Cars Don't Mix

Parked cars are potential deathtraps for pets, even when they are left alone for "just a minute" while the owner runs an errand. Every year, pets suffer and die when owners leave them in parked cars during the warmer months. Most people do not realize how quickly it can become unbearably hot in a parked car on a balmy day. On a 78° F day, the temperature inside a parked car can soar to between 95° and 100° F in less than 15 minutes. On a 90° F day, the interior temperature can reach well over 120° F in less than 15 minutes. It takes only minutes for a pet left in a vehicle on a warm day to feel the effects; the result can be heatstroke, suffocation, and death.

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This can happen even on a day that doesn't seem hot to you. Unfortunately, cracking the windows will make little difference. Leaving the windows cracked only decreases the internal car temperature by 5-10° at best. If the windows are rolled down enough to provide more air flow, the pet can easily escape the vehicle and become lost or hit by a car.

An important point to remember is that our pets do not sweat like we do. They cool themselves by panting and sweating through their paws. If the air they breathe is warmer than their body temperature, they can't cool themselves effectively and are likely to overheat, collapse,

suffer brain damage, and possibly die of heatstroke. Just 15 minutes can be enough for your pet's core body temperature to rise from a normal 101.5° F to deadly levels that may damage the brain and other vital systems, often leaving your pet comatose, dehydrated, and at risk of permanent impairment or death.

You may think about leaving a pet in the car with the air conditioning running. People often do this, thinking their pet will be safe. However, there are cases year after year of pets dying after the car air-conditioning (AC) shuts down and begins to blow just hot air. When the engine gets too hot, the air system's compressor can shut off. Many cars, including newer models with computerized functions, are prone to the same problem.

Hot cars aren't the only danger to your pets on warm days. Did you know that on a mild 86° F day, the asphalt temperature can easily exceed 135° F? While it may not be hot enough to fry an egg, it is certainly hot enough to burn your pet's sensitive foot pads! Hot sidewalks, pavement, and parking lots not only burn paws, but they also reflect heat onto your pet's body, increasing their risk of heat injury. Always test the pavement with your hand before you head out. If it is too hot to touch, then it is too hot to walk your pet. A good tip is to schedule your walks early in the morning or later in the evenings when the temperatures are cooler.

Remember to carry plenty of water for yourself and your pet. They need to stay hydrated, too! On longer walks, be sure to take frequent breaks in shady spots, and turn around to head home before they get too tired or hot.

If you notice your pet exhibiting any of the following signs, immediately move them to a cool location and seek veterinary care:

- Excessive uncontrolled panting
- Increased salivation, especially thick, sticky saliva
- Bright red tongue
- Increased heart rate

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Veterinary Connections

Goal of publication:

- Veterinary Connections is a quarterly publication written by Army Veterinary Services personnel and published by the Army Public Health Center (Provisional) to inform and educate Service members, beneficiaries, and retirees about Animal Health, Food Safety, and One Health.
- One Health refers to the intersection and overlap between animals, humans, and the environment.
- Army Veterinary Services personnel serve around the world supporting the Department of Defense as proponents for Animal Health and Food Protection.

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Locate your local Veterinary Treatment Facility at <https://tiny.army.mil/r/JG66r/VTFs>



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