

Patients and clients of Haslett Animal Hospital and Williamston Animal Clinic. We will now be requiring the Canine Influenza Vaccine (CIV) when boarding and or grooming in our facilities. The CIV is administered for canines that are 8 weeks or older. The vaccine is a two dose series with the second booster being given 3 weeks after the first. We understand that getting your dog to the veterinarian twice can be cumbersome, so this vaccine will not be required until **December 14, 2018**

We are requiring this vaccine so that we can better protect your loved ones when he/she is at our facility and may be in contact with other canines.

Canine influenza is transmitted through droplets or aerosols containing respiratory secretions from coughing, barking and sneezing. Dogs in close contact with infected dogs in places such as kennels, groomers, day care facilities and shelters are at an increased risk of infection. Canine influenza can be spread indirectly through objects (e.g., kennels, food and water bowls, collars and leashes) or people that have been in contact with infected dogs. It is important to clean and disinfect objects that have been in contact with an infected dog to avoid exposing other dogs to the virus. Likewise, people who have been in contact with an infected dog should wash their hands and clean their clothing to avoid spreading the virus.

The virus can remain viable (alive and able to infect) on surfaces for up to 48 hours, on clothing for 24 hours, and on hands for 12 hours. It is important to implement biosecurity protocols and disinfection procedures to reduce the risk of disease transmission.



For More information on CIV please see the back

Canine influenza (CI), or dog flu, is a highly contagious viral infection affecting dogs and also cats. Influenza viruses belong to the family Orthomyxoviridae. Canine influenza is a Type A influenza virus and is further identified based on the composition of two specific proteins in the lipid outer layer of the capsid: hemagglutinin (HA) and neuraminidase (NA). At present, two strains of canine influenza virus have been identified in the United States: H3N8 and H3N2.

Influenza viruses are able to quickly change and give rise to new strains that can infect different species. Both strains of canine influenza identified in the U.S. can be traced to influenza strains known to infect species other than dogs. At some point, these viruses acquired the ability to infect dogs and be transmitted from dog to dog.

Canine H3N8 influenza was first identified in Florida in 2004 in racing greyhounds. It is thought this strain developed from an equine H3N8 influenza strain that jumped from horses to dogs. Since being detected in 2004, canine H3N8 influenza has been identified in dogs in most U.S. states and the District of Columbia.

Canine H3N2 influenza was first identified in the United States in March 2015 following an outbreak of respiratory illness in [dogs in the Chicago area](#). Prior to this, reports of canine H3N2 influenza virus were restricted to South Korea, China and Thailand. It was initially identified in dogs in Asia in 2006-2007 and likely arose through the direct transfer of an avian influenza virus – possibly from among viruses circulating in live bird markets – to dogs.

Following the initial diagnosis in Chicago, additional cases of canine H3N2 influenza were reported in a number of states. In early 2016, a group of [shelter cats in Indiana were diagnosed with H3N2 canine influenza](#). It is believed the virus was transmitted to them from infected dogs.

In May 2017, canine H3N2 influenza was diagnosed in dogs in Florida, Georgia, North Carolina, South Carolina, Texas, Kentucky, Tennessee, Missouri, Louisiana, and Illinois. This was the same strain of H3N2 involved in the 2015 outbreak in Chicago.

There is no evidence that either strain of canine influenza (H3N8 or H3N2) can infect humans.

## Pathology and Clinical Signs

Canine influenza virus (CIV) infects and replicates inside cells in the respiratory tract from the nasal lining to the terminal airways. The inflammatory response to the infection results in rhinitis, tracheitis, bronchitis and bronchiolitis. The pathologic process results in death of the epithelial cells lining the respiratory tract, exposing the underlying basement membrane. This predisposes the respiratory tract to secondary bacterial infections that contribute to nasal discharge and coughing.

Virtually all dogs exposed to canine influenza virus become infected, with approximately 80% developing clinical signs of disease. The approximately 20% of infected dogs that do not exhibit clinical signs of disease can still shed the virus and spread the infection.

Like other mammalian influenza viruses, canine influenza virus causes an acute respiratory infection in dogs. There is no “season” for canine influenza, and infections can occur any time of the year. Canine influenza virus infection often resembles canine infectious tracheobronchitis (“kennel cough”), which is caused by one or more bacterial or viral infections, including *Bordetella bronchiseptica* and parainfluenza virus.

The majority of infected dogs exhibit the mild form of canine influenza. The most common clinical sign is a cough that persists for 10 to 21 days despite treatment with antibiotics and cough suppressants. Affected dogs may have a soft, moist cough or a dry cough similar to that induced by kennel cough. Nasal and/or ocular discharge, sneezing, lethargy and anorexia may also be observed. Many dogs develop a purulent nasal discharge and fever (104-105°F). The nasal discharge is usually caused by secondary bacterial infections, including *Pasteurella multocida* and mycoplasma species.

Some dogs are more severely affected and exhibit clinical signs of pneumonia, such as a high-grade fever (104°F to 106°F) and increased respiratory rate and effort. Thoracic radiography (chest x-rays) may reveal consolidation of lung lobes. Although most dogs recover without incident, deaths due to H3N2 have been reported.

[Cats infected with H3N2](#) display signs of upper respiratory disease, including nasal discharge, congestion, malaise, lip smacking and excessive salivation.