



Canine Influenza: Pet Owners' Guide

Canine influenza (CI, or dog flu) in the U.S. is caused by the canine influenza virus (CIV), an influenza A virus. It is highly contagious and easily spread from infected dogs to other dogs through direct contact, nasal secretions (through coughing and sneezing), contaminated objects (kennel surfaces, food and water bowls, collars and leashes), and by people moving between infected and uninfected dogs. Dogs of any breed, age, sex or health status are at risk of infection when exposed to the virus.

Unlike seasonal flu in people, canine influenza can occur year round. So far, there is no evidence that canine influenza infects people. However, it does appear that at least some strains of the disease can infect cats.

Canine influenza symptoms and diagnosis



CIV infection resembles canine infectious tracheobronchitis ("kennel cough"). The illness may be mild or severe, and infected dogs develop a persistent cough and may develop a thick nasal discharge and fever. Other signs can include lethargy, eye discharge, reduced appetite, and low-grade fever. Most dogs recover within 2-3 weeks. However, secondary bacterial infections can develop, and may cause more severe illness and pneumonia. Anyone with concerns about their pet's health, or whose pet is showing signs of canine influenza, should contact their veterinarian.

CIV can be diagnosed early in the illness (less than 4 days) by testing a nasal or throat swab. The most accurate test for CIV infection is a blood test that requires a sample taken during the first week of illness, followed by a second sample 10-14 days later.

Transmission and prevention of canine influenza

Dogs are most contagious during the two- to four-day incubation period for the virus, when they are infected and shedding the virus in their nasal secretions but are not showing signs of illness. Almost all dogs exposed to CIV will become infected, and the majority (80%) of infected dogs develop flu-like illness. The mortality (death) rate is low (less than 10%).

The spread of CIV can be reduced by isolating ill dogs as well as those who are known to have been exposed to an infected dog and those showing signs of respiratory illness. Good hygiene and sanitation, including hand washing and thorough cleaning of shared items and kennels, also reduce the spread of CIV. Influenza viruses do not usually survive in the environment beyond 48 hours and are inactivated or killed by commonly used disinfectants.

There are vaccines against the H3N8 strain of canine influenza, which was first discovered in 2004 and until 2015 was the only strain of canine influenza found in the United States. However, a 2015 outbreak of canine influenza in Chicago was traced to the H3N2 strain – the [first reporting](#) of this strain outside of Asia – and it is not known whether the H3N8 vaccine provides any protection against this strain. Used against H3N8, the vaccines may not completely prevent infection, but appear to reduce the severity and duration of the illness, as well as the length of time when an infected dog may shed the virus in its respiratory secretions and the amount of virus shed – making them less contagious to other dogs.

The CIV vaccination is a "lifestyle" vaccination, recommended for dogs at risk of exposure due to their increased exposure to other dogs – such as boarding, attending social events with dogs present, and visiting dog parks.