Canine Distemper Virus (CDV) PCR Testing

ABOUT: Canine distemper virus (CDV) is a highly contagious viral disease of dogs and other carnivores. It targets the respiratory, gastrointestinal, and nervous systems, spreading through respiratory droplets and body fluids. Puppies and unvaccinated dogs are at the highest risk.

SYMPTOMS: Clinical signs often start with fever, nasal/ocular discharge, coughing, and lethargy. As the disease progresses, dogs may develop vomiting, diarrhea, weight loss, and neurological signs such as tremors or seizures. Hardened paw pads ("hard pad disease") may also occur.

PREVENTION: Vaccination is the best protection. Isolating sick animals, practicing good hygiene, and limiting contact with unvaccinated dogs help reduce spread.

GETTING TESTED: PCR testing is the most sensitive method for detecting CDV during active infection.

- Preferred specimen: Nasal swab collected in a sterile 10 mL ear notch tube.
- Alternative specimen: Oropharyngeal (throat/tonsillar) swabs or conjunctival swabs may also be used.
- Swab type: Use sterile polyester (Dacron) or nylon flocked swabs with plastic shafts. Avoid cotton, calcium alginate, or wooden shaft swabs.
- -Handling & Shipping: Place swabs into a sterile leakproof tube (with saline or viral transport medium if available; dry swabs are acceptable but less sensitive). Keep refrigerated (2-8 $^{\circ}$ C) until shipping. Ship overnight with ice packs that are separated from the samples by paper towels. Do not freeze samples.

A positive PCR result confirms viral shedding and active infection. Negative results may occur if the viral load is low or samples are collected late in infection; repeat testing may be recommended if suspicion remains high.

CDV PCR tests are processed and results reported on Wednesday.

