



Biogal Tips

Canine Distemper

(Hard Pad Disease)

Introduction:

- Canine distemper (CDV) is a transmissible disease with varied degrees of morbidity and mortality.
- CDV is caused by the RNA paramyxovirus.
- Signs of CDV can vary greatly and frequently mimic other diseases.
- Infection occurs naturally through airborne and droplet exposure.
- Puppies who have not completed their core vaccination schedule, as well as non-immunized and immunocompromised older dogs are more susceptible to CDV infection.
- Distemper is often fatal, and dogs who survive can suffer from severe, irreversible nerve system damage.

Did you know?

- The acute generalized form of distemper has a high death rate; disease duration and severity depend on the animal's age, immune status, and the virulence of the infecting virus strain.
- CDV affects several body systems, including gastrointestinal and respiratory tracts, spinal cord, and the brain.
- Differential diagnosis is complicated by the presentation of respiratory signs comparable to kennel cough or gastrointestinal signs that can be misdiagnosed as parvovirus, corona virus, internal parasites or poisoning.
- CDV is shed in all secretions and excretions as early as 5 days post infection (before the onset of clinical signs). Shedding of virus can continue for up to 4 months, but usually resolves within 2 weeks. The virus can be transferred transplacentally to the fetuses.
- CDV infections can induce immunosuppression .
- CDV can infect the central nervous system producing an acute or chronic form of disease. A rare, progressive inflammatory disease of the cerebral hemispheres and brainstem, "Old dog encephalitis", has been observed in fully vaccinated immunocompetent adult dogs without a history of systemic CDV and is thought to be associated to the persistence of CDV in nervous tissue.
- "Hard pad disease" (nasal or digital pad hyperkeratosis) is a dermatological feature related to Canine Distemper Disease.

Know these points before testing for Canine Distemper Virus

1. Canine distemper

Should be considered in the diagnosis of any dogs exhibiting respiratory involvement, fever, bilateral serous and nasal ocular discharges and conjunctivitis.

2. Early warning signs

GI and respiratory signs prior CNS signs.

3. Diagnostic challenge

Early diagnosis is difficult due to the broad spectrum of signs. Diagnosis should be based on history (vaccination and exposure)and clinical signs (respiratory, gastrointestinal, neurological and dermatological).

Confirmation of Canine Distemper should be made on the basis of laboratory test results.

4. Serology

Biogal's **IgM** and **IgG** in-house test kits are valuable tools for point-of-care analysis of the immune status of the patient. When employing all antibody test kits, the user must be aware that these tests may not differentiate between current infections, maternal antibodies and those generated from recent vaccination. **IgM** antibody testing provides a good indication of present disease in symptomatic patients if used in the time period after maternal antibodies have diminished, at completion of the core vaccination period and with unvaccinated dogs.

Antibody testing is indicated as an additional method of diagnosing canine distemper and should be used in parallel with additional laboratory tests.

5. PCR assays

The sample tissue utilized in PCR tests will differ depending on the stage of the disease and clinical signs.

Febrile Period: Whole blood.

Nasal/ocular discharge and/or respiratory signs: Nasal and conjunctival swabs.

Gastrointestinal signs: Rectal swabs or feces.

Neurological signs: Urine

PCR testing is the most accurate, sensitive and specific method for diagnosing CDV.

6. Treatment

There are no antiviral drugs to treat CDV-induced disease.

Treatment is supportive with fluids, expectorants, antiemetics, and antibiotics.

Vaccinations and yearly titer testing are the most effective to prevent infection with CDV.

Biogal Galed Labs offers a comprehensive range of diagnostic tests for canine distemper.



PCRRun
by Biogal Galed Labs.

Distemper RNA Detection Kits

Product code:
30CDR108
30CDR116
30CDR148

Packing units:
8-16-48 Tests



ImmunoRun
by Biogal Galed Labs.

Distemper Virus Ag Detection Kits

Product code:
80CDV205
80CDV250

Packing units:
5-50 Tests



ImmunoComb
by Biogal Galed Labs.

Parvo & Distemper IgM Ab Test Kits

Product code:
55CPD301
55CPD210

Packing units:
12-120 Tests



VacciCheck
by Biogal Galed Labs.

VacciCheck IgG Ab Detection Kits

Product code:
50CVV201
50 CVV110

Packing units:
12-120 Tests