

Canine Parvovirus (CPV) Sample Protocol

This is intended only as a sample.

Every shelter is unique and SOPs must be developed that are relevant to the particular facility

General information:

Canine parvovirus is highly contagious, durable in nature, and capable of producing severe or life-threatening disease in dogs. Inevitably, parvovirus will be introduced into shelters from the surrounding community from time to time. It is critical that our shelter follows this protocol to appropriately identify and care for infected animals in order to protect other dogs within the shelter:

Who it affects:

Puppies less than 6 months of age are most likely to get severe disease, however adult dogs can also be affected. Affected dogs may have mild to severe diarrhea (often bloody), may be dehydrated, lethargic, or anorexic, have vomiting, or can develop severe to fatal secondary bacterial infections. Young puppies who acquire parvovirus will often die without aggressive medical treatment. The virus is shed mainly in feces and is very hardy and can live in the environment for long periods of time without proper disinfection.

Disease Transmission:

- CPV is spread from dog to dog mainly through exposure to contaminated feces
- It is also spread through contact with fomites (contaminated objects). Common fomites include hands, instruments, clothing, food and water dishes, toys and bedding
- Insects and rodents can also provide a means for disease spread
- The virus can remain on a dog's hair coat (even if they do not become ill) and serve as a means of transmission long after dogs have recovered from clinical disease

Incubation and Shedding:

- The incubation period, or period between contact with the virus and the appearance of symptoms varies between 3 days and two weeks but is usually 4-6 days
- Parvovirus can be shed in the feces 3-4 days after infection with the virus, which is generally before clinical signs of illness appear. The virus will also be shed in the feces for around 14 days post infection

Sanitation:

- Not all disinfectants are parvocidal. Bleach will kill parvovirus, but only at correct dilutions (1:32) and only if there is no organic matter (i.e. dirt, grass, feces, food particles, etc.), which inactivates the bleach
- Trifectant or Accel are other parvocidal alternatives
- Quaternary ammonium products are not considered reliable

Preventative Measures

- Control centers around preventive measures such as vaccination on intake, risk assessment, recognition, diagnosis, treatment and isolation of confirmed cases
- Vaccination usually prevents disease in adult dogs that have received the full series of vaccines, but does not prevent them from carrying the virus on their fur if they are exposed
- Puppies between 6-16 weeks of age may not be protected fully by vaccination. The following guidelines will help to minimize the impact of this disease in our shelter

Shelter Policy on CPV

Dogs and puppies with suspected/confirmed parvo are considered to have a treatable condition at our shelter as long as prompt isolation and treatment at a veterinary clinic in keeping with this protocol can be provided.

CPV Recognition **Most common clinical signs**

- Vomiting
- Profuse diarrhea (with or without blood)
- Affected dogs/pups are usually anorexic, febrile, and dehydrated
- Clinical signs may be worse in young puppies or those with concurrent disease/parasites/stress
- Sudden death

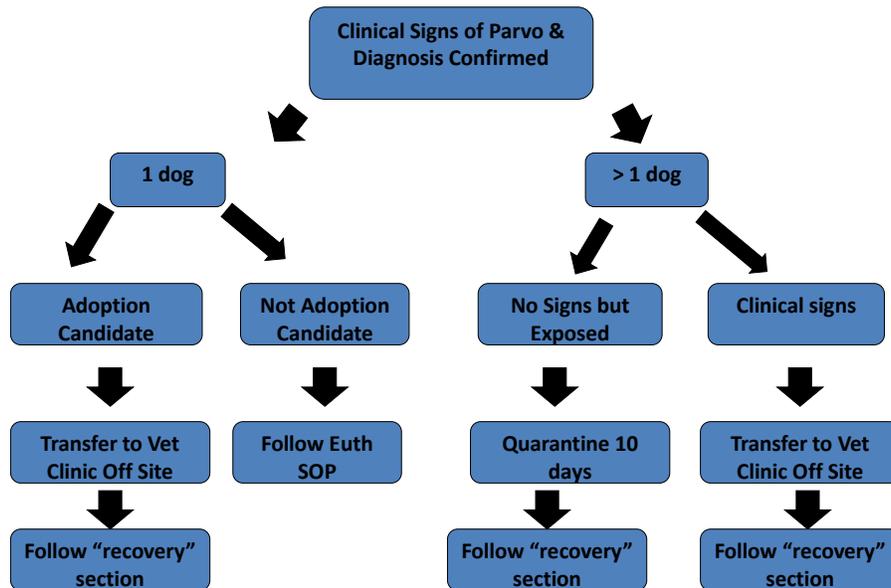
*Diarrhea in an otherwise bright, alert, eating, drinking dog is more likely due to diet change, stress, parasites, or dietary indiscretion

**Subclinical infection IS possible where few signs are able to be noted

CPV Diagnosis

1. Volunteers and staff play a significant role in helping management recognize animals displaying clinical signs of disease at our shelter. If an animal displays any of the symptoms of parvo virus, this **MUST** be documented on the Daily Animal Care Sheet and reported to the Supervisor immediately
2. Medical staff have sufficient Idexx Parvo SNAP tests available for testing
3. The development of suspicious clinical signs warrants testing with the Snap test
 - A positive SNAP test in conjunction with clinical signs is considered Parvo +
 - A negative SNAP test in conjunction with clinical signs may be considered Parvo +
5. Asymptomatic animals are not tested unless they are co-housed with an animal who has been diagnosed with CPV. If co-housed and tested:
 - A positive SNAP test is considered Parvo +
 - A negative SNAP test in conjunction with clinical signs may be considered Parvo +
 - A negative SNAP without clinical signs is considered “exposed”
6. Quarantine may occur before positive test results are obtained (at veterinary, manager or directorial discretion)
7. Diagnosis may include exposure history, clinical signs, or laboratory evidence
8. Necropsy results are confirmatory

CPV Response Isolation Measures and Treatment



Response after parvo is diagnosed in one dog:

1. Patients with parvovirus are not to be treated on site as there is no one here overnight
2. Dogs that are owned by the shelter but not strong adoption candidates are immediately euthanized
 - a. Euthanasia is to be approved and performed by standard euthanasia protocol
3. If diagnosis is prior to stray period ending or adoption candidate:
 - a. Treatment will occur off-site at contract veterinary clinic
 - b. Shelter veterinarian or Executive Director can authorize transport
 - c. Contract clinic will follow "Shelter Veterinary Contract Care Protocol" once patient is admitted
4. Anyone in contact with the suspect dog(s) must follow the "Handling Infectious Animals Protocol"
5. Any kennel the animal was housed in must be cleaned following standard sanitation procedures for three consecutive sanitation cycles
 1. Solid waste will be bagged and removed
 2. Dishes will be bagged for removal to the kitchen
 3. Laundry will be bagged for removal to the laundry
 4. Standard kennel sanitation will follow with use of a parvocidal disinfectant or bleach
 5. The kennel must be left empty for 3 consecutive repeated sanitation cycles
6. The shelter veterinarian will determine based on population and epidemiology whether a 14 day quarantine of the room is appropriate and whether other animals in the building have potentially been exposed

Response after parvo is diagnosed in multiple dogs:

- 1) Staff will be re-educated about parvo, its transmission and symptoms and how to prevent spread with a briefing or mass email
- 2) Adopters and reclaiming parties of any dog who was in the shelter but has been released, sent to rescue or otherwise left the facility within will receive precautionary notices and be given educational information on the disease
- 3) Local veterinarians and media will be alerted
- 4) Symptomatic animals will be tested and a log kept of tests and results
- 5) Animals that test positive will be treated off-site as there is no one here overnight
- 6) Dogs that are owned by the shelter but not strong adoption candidates are immediately euthanized
 - a. Euthanasia is to be approved and performed by standard euthanasia protocol
- 7) If diagnosis is prior to stray period ending or adoption candidate:
 - a. Treatment will occur off-site at contract veterinary clinic
 - b. Shelter veterinarian or Executive Director can authorize transport
 - c. Contract clinic will follow “Shelter Veterinary Contract Care Protocol” once patient is admitted
- 8) Incoming animals will be isolated to the best of building’s ability – the shelter may need to stop admitting dogs/puppies and reroute
- 9) Off site admission may need to occur
- 10) Exposed but not symptomatic animals will be isolated (in situ at times or moved to a special quarantine ward) and closely monitored. Exposed wards will be closed to the public and labeled with a sign “Staff Only to Enter – Parvo Outbreak”
- 11) Exposed animals will ideally not be released during incubation period – 14 days from last breaking case. They can then be released with a medical waiver
- 12) Shelter veterinarian may elect to test some or all incoming puppies during outbreak
- 13) Puppies may be placed immediately into foster homes if this seems in their best interest
- 14) If the number of clinical cases exceeds the ability of the contract clinic to provide treatment and care for, euthanasia will be elected and performed at the shelter

Outcome Decisions

Recovery:

Dogs and puppies will be considered “recovered” and able to move to surgery, adoption or other outcome after all four criteria are met:

- 1) a minimum of 10 days in isolation
- 2) a negative Idexx SNAP test
- 3) a bath
- 4) no clinical signs noted

Euthanasia:

Dogs and puppies diagnosed with CPV may be euthanized for the following reasons:

- 1) No space at veterinary clinic to treat
- 2) Not adoption candidate
- 3) Failure to improve with treatment (defined by shelter veterinary discretion)
- 4) Parvo in addition to other illness