

PARVOVIRAL ENTERITIS

BETTER UNDERSTANDING FOR BETTER ACTION

RAISING THE STANDARD OF PARVOVIRUS CARE TOGETHER



Parvoviral enteritis remains a major challenge in veterinary medicine today. Highly contagious, it primarily affects young unvaccinated animals and requires rapid and rigorous management.

In dogs, the causative agent is **Canine Parvovirus (CPV)**, while in cats it is the **Feline Panleukopenia Virus (FPV)**.

The main clinical signs are similar in both species: **vomiting, diarrhea, dehydration, and leukopenia**, all of which require immediate action.

TRANSMISSION: UNDERSTANDING TO BETTER CONTROL

Transmission occurs mainly via the faecal-oral route, but also via fomites (the environment, equipment and staff).

Practical Overview	CPV (dog)	FPV (cat)
Main route of infection	Primarily fecal-oral transmission.	
Risk of silent infection	Early viral shedding, sometimes before clinical signs appear.	
Critical role of the environment	Prolonged shedding: during illness and for 10–14 days after recovery (or longer).	Shedding is often shorter (1–2 days) but may last several weeks in some cats.
Viral load and contamination sources	Frequent indirect transmission through environment, equipment, and personnel.	
Impact on the immune system	Frequent lymphopenia/neutropenia, which promotes bacterial translocation, sepsis and systemic complications.	Panleucopenia, which is often severe and sometimes profound, is associated with a more guarded prognosis.
Species-specific features	No major vertical transmission described.	In utero transmission possible, leading to fetal or neurological disorders in kittens.
Variable clinical expression	Highly resistant virus with prolonged environmental survival	

RAPIDLY RECOGNIZING CLINICAL SIGNS

Although closely related, CPV and FPV have both similarities and differences.

CPV (dog)			FPV (cat)		
Early and marked vomiting		Upper gastrointestinal involvement		Frequent vomiting, often bilious	
Often hemorrhagic diarrhea		Diarrhea / Intestinal involvement		Variable diarrhea, often non-hemorrhagic	
Rapid progression within 24–48 hours		Disease progression		Acute course (5–7 days), hyperacute in kittens	
Myocarditis possible in very young puppies		Age-related atypical forms		Neurological disease possible in kittens infected in utero	
Lethargy, fever, dehydration		General condition		Profound lethargy, fever followed by possible hypothermia	
Frequent leukopenia		Impact on immune system		Massive destruction of hematopoietic cells	
Risk of septic shock		Severity and systemic complications		Risk of septic shock and complications (DIC, hypoglycemia)	



A key point: CPV most likely evolved from FPV, which explains their biological similarities.

DIAGNOSIS: SPEED AND CLINICAL RELEVANCE

When parvovirus infection is suspected, the challenge is not only to test, but to test appropriately and at the right time. Diagnosis should be considered as soon as the first compatible clinical signs appear, particularly vomiting and diarrhea in a young animal, lethargy, fever, leukopenia, or panleukopenia. **Testing at the initial consultation allows rapid implementation of isolation measures and prompt initiation of treatment and supportive care.**

A diagnosis can be established using **rapid antigen tests**. These tests provide quick results and are useful for clinical triage; however, they are **less sensitive** during the early or late stages of infection. The risk of **false-negative results** is significant when the viral load is low.

➤ **Molecular tests** based on pathogen DNA amplification remain the gold standard for diagnosis. They enable **earlier detection** and offer **greater sensitivity**. Unlike PCR, LAMP technology can be performed directly in the clinic, with results available in as little as **30 minutes**.



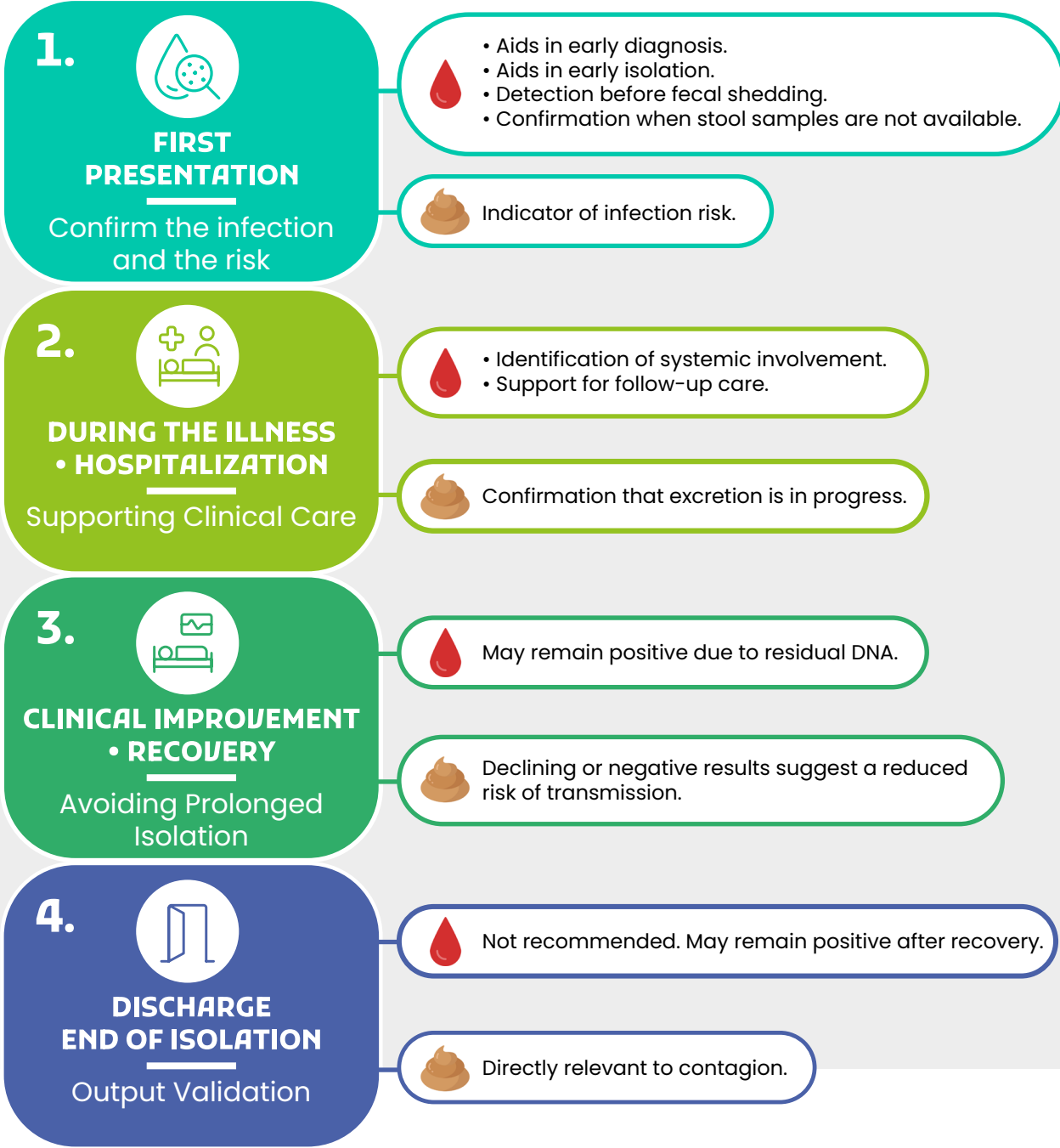
In **recently vaccinated animals**, a positive result should be interpreted in light of the clinical context, as transient shedding of the modified live vaccine virus may occur.

WHY TEST BLOOD OR FECES?
A KEY LEVER FOR EARLIER AND MORE RELIABLE DIAGNOSIS

Astéria® Parvovirus Feces and Astéria® Parvovirus Blood tests enable detection of parvovirus from either fecal or blood samples. This dual testing option offers a major clinical advantage: it allows diagnosis to be adapted to the stage of disease and the patient's profile.



HOW TO CHOOSE THE RIGHT SAMPLE?



CPU / FPU ISOLATION CHECKLIST

OBJECTIVE: LIMIT CONTAMINATION AS SOON AS A CASE IS SUSPECTED

1



Admission (Immediate Triage)

- ☐ Quickly identify any animal presenting with vomiting, diarrhea, or lethargy
- ☐ Ask about vaccination status
- ☐ Minimize waiting room time
- ☐ Direct the animal immediately to a dedicated area

2



Diagnosis: A Key Tool

- ☐ Test rapidly whenever parvovirus is suspected
- ☐ Interpret results in context (age, vaccination status, clinical signs)
- ☐ Confirm if necessary with molecular testing
- ☐ Use the result to initiate or discontinue isolation

3



Patient Isolation

- ☐ Place the patient in a dedicated isolation area
- ☐ Avoid any contact with other animals
- ☐ Use strictly dedicated equipment (food bowls, thermometers, litter boxes, etc.)
- ☐ Display clear "ISOLATION" signage

4



Team Protection

- ☐ Wear PPE: gloves and gowns (with shoe covers if necessary)
- ☐ Wash/disinfect hands before and after handling
- ☐ Limit the number of staff involved
- ☐ Follow a directional workflow: healthy animals > suspected animals > infected animals

5



Care and Procedures

- ☐ Perform care procedures last during rounds
- ☐ Limit patient movement
- ☐ Use disposable equipment whenever possible
- ☐ Group procedures to reduce entries and exits

6



Cleaning and Disinfection

- ☐ Clean first, then disinfect using an effective parvocidal disinfectant (3% sodium hypochlorite bleach solution or 2% formaldehyde)
- ☐ Respect the disinfectant contact time
- ☐ Disinfect all surfaces (floors, cages, handles, equipment, etc.)
- ☐ Dispose of heavily contaminated porous materials when necessary

7



Management of Equipment and Traffic Flow

- ☐ Separate waste and laundry circuits
- ☐ Dedicated laundry process for isolation cases
- ☐ Disinfect transit areas
- ☐ Pay attention to fomites (shoes, clothing, hands, etc.)

8



After Hospitalization (Often Underestimated)

- ☐ Maintain isolation throughout the entire clinical phase
- ☐ Inform owners that the animal may remain contagious after recovery
- ☐ Advise on hygiene measures at home
- ☐ Adapt management of follow-up visits and rehospitalizations

**IF YOU'D LIKE
TO LEARN MORE**
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bibliography on the webpage

