

# Canine Parvovirus Exposure

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A 4-month-old intact male crossbreed puppy was presented with acute onset of lethargy, inappetence, and soft stools.

## History

The puppy had been purchased at a flea market 4 days before presentation. According to the clients, who were new to the practice, the puppy had been vaccinated and dewormed, but no other details were available.

## In-Clinic Findings & Procedures

At examination, the puppy was quiet but responsive. Excessive salivation was noted. Mucous membranes were moist but mildly hyperemic. No other abnormalities were noted.

The puppy passed a small amount of diarrhea during rectal temperature measurement, at which time the clients reported

that it had had a fecal accident in the waiting room but they had not notified front office staff. In the waiting room, diarrhea was present near a client with a 13-year-old dog and 6-month-old puppy.

The result of rapid in-house ELISA of the fecal sample was positive for canine parvovirus; infection control response was immediately initiated (see **Infection Control Response**).

Although all infection control procedures were completed, disruption to the practice was significant, including evaluation of the 2 dogs exposed to the virus while in the waiting room and calming the owner accordingly.

## Infection Control Response

- The puppy was admitted to isolation for further evaluation and treatment.
- The diarrhea was immediately removed from the waiting room; parvocidal disinfectant (accelerated hydrogen peroxide) was used.
  - Appropriate contact time (5 minutes in this case) was observed.<sup>1</sup>
- The examination room was closed to other patients pending thorough cleansing and disinfection.
- Other areas of the practice that could have been contaminated were identified.
- Potentially contaminated equipment (eg, thermometer, stethoscope) was identified, cleansed, and disinfected.
- Practice personnel were instructed to remove outerwear that might have been contaminated.
- Practice personnel were also instructed to wash their hands thoroughly with biocidal soap and water.
- The owner of the 2 dogs exposed while in the waiting room was advised that the potential for disease was limited because of the animals' vaccination status.

## Ask Yourself



To avoid similar situations, initiation of which of the following would be most appropriate?

- A. Admit all new patients directly to isolation.
- B. Better educate front office staff about monitoring the waiting room area for fecal accidents.
- C. Implement syndromic surveillance measures that identify high-risk patients.
- D. No procedure can lower the risk for similar situations.

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## Best Answer

C. Implement syndromic surveillance measures that identify high-risk patients.

Syndromic surveillance<sup>2</sup> is a simple method that takes advantage of identifying basic infectious disease risk indicators (eg, vomiting, diarrhea, cough) that are readily recognizable by owners and lay personnel (see **Syndromic Surveillance Plan**). Although not all animals displaying a selected indicator are infectious, some basic signs can suggest an increased risk and the need for further action.

Admitting all new patients directly to isolation is impractical, is almost always unnecessary, and may leave a poor impression with clients. Bettering the education of front-office staff about monitoring the waiting room is important but would be a reactive measure that identifies problems early in the process rather than preventing them.

Although infectious diseases are an inherent risk in all practice settings, practical measures can be implemented to lower the risk for pathogen transmission. ■ **cb**



### Syndromic Surveillance Plan

- Provide front office staff with a list of signs that indicate a patient needs to be flagged (eg, vomiting or diarrhea in a puppy, nonspecific illness in a young animal, sudden onset of coughing); post the list in a prominent location.
- Create a policy in which the condition of flagged patients is discussed with a clinician before admission or examination in order to avoid exposure to patients and personnel.
- Notify owners to call the front office before bringing the flagged patient into the clinic or to enter the clinic while the patient remains outside.
- Notify relevant staff that a flagged patient will be arriving.
- Admit flagged patients directly to an examination room or isolate in a manner that avoids contact with other patients or personnel.
- Use enhanced contact precautions (eg, gloves, gown, dedicated laboratory coat) on arrival of flagged patient, then determine whether the patient may be infectious and further measures are required.

### The Take-Home



- Prompt identification of infectious disease risks is critical for early intervention and to minimize widespread exposure and environmental contamination.
- Although not all infectious patients are readily identifiable, some basic clinical signs are indicative of infectious agents and the increased risk for shedding.
- Ensuring that practice policy includes a viable syndromic surveillance plan is essential to avoid and/or minimize animal and human contact with high-risk patients.

See **Aids & Resources**, back page, for references & suggested reading.