



Infectious disease profiles of pathogens in a shelter environment

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Parvo (canine parvoviral enteritis)

Disease name:	Parvo (canine parvoviral enteritis)		
Agent:	Canine parvovirus (unenveloped DNA virus)		
Susceptible domestic species	Dogs, cats (feline infection with CPV strains uncommonly reported in U.S., but is possible [1])		
Zoonotic?	No		
Diagnostic aids:	ELISA test for fecal antigen	CBC: leukopenia-lymphopenia	In-house necropsy: enteritis, thickening of distal duodenum and jejunum
Test Sensitivity (false negatives)	Good in first 5-7 days of disease (estimates range from 69% - 95.8%[2-5])	Moderate – more common in severe disease	Good during acute disease
Test specificity (false positives)	Very good (estimates range from 93%-100% - caution in recent vaccinates [2-5])	Moderate – may also be seen with Canine Distemper, others	Moderate – mild cases indistinguishable from enteritis of other causes
Test comments:	False positive possible (though uncommon) 5-12 days after MLV vaccine. Usually weak if present.		Histopathology performed by commercial lab is gold standard
Vaccine available?	Yes: modified live subcutaneous.		
Vaccine efficacy:	Excellent in dogs >16 weeks (maternal antibody interference possible in dogs < 12-16 weeks)		
Excreted in:	Feces –shedding often precedes clinical signs by a couple of days.		
Mode of transmission:	Readily spread due to extreme environmental resistance – direct contact, fomites, mechanically spread by rodents and insects, can be aerosolized by high pressure sprayers		
Disinfection:	THOROUGH cleaning followed by bleach 1:32 or potassium peroxymonosulfate. No way to fully decontaminate unbleachable materials/organic matter such as grass or dirt yards. May persist for months or years, especially in dark, cool environments.		
Incubation:	3 -14 days (usually 4 -7 days, occasionally up to 21 days)		
Post recovery shedding?	Usually <2 weeks		
Carrier state?	No, but mild or inapparent infection is common, especially in adults		

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