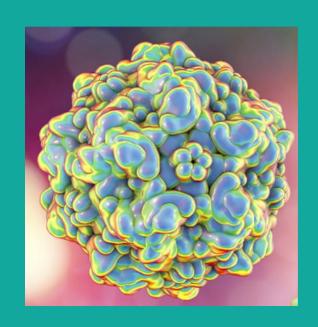
When Parvo Strikes:



How to Recognize, Prevent, Manage and Recover from Canine Parvovirus Outbreaks

Pearland Parvo Recovery Center
Daran Bishop
Jeanette Savage
Candice Goode

Caring Hands Humane Society back

open after parvovirus outbreak Animal rescue groups in NWLA battle parvo outbreak

Jamie Ostroff Jun 6, 2019 🗪

Vet hospital warns of Parvo virus outbreak Spike in parvo virus cases across Las Vegas Valley

2 April 27, 2019 Richmond County Daily Journal News, Top Stories

Alexandra de Leon

Posted Nov 6, 2019 | • 0

AWLA Kennels Closed Due to Dog Disease Outbreak

ARLnow.com November 8, 2019 at 2:15pm

Parvo outbreak forces Humane Society of Houston County to temporarily close

already died.

At least six dogs have been infected will Humane Society of Henderson Co. closed due to parvo outbreak

Parvovirus detected in local dogs; Mikey's Chance saying it's their worst season yet

Kaitlyn Karmout Aug 26, 2019

Deadly virus impacting thousands of dogs, Indianapolis animal shelters, clinics say

Posted: 6:36 PM, May 27, 2019 Updated: 5:36 PM, May 27, 2019

What is Parvo?

- Highly contagious viral disease
- Relatively new first appeared in dogs in 1978
- First vaccine developed in 1981
- Extremely resilient
- Affects gastrointestinal and immune systems
- No cure
- Treatment is supportive (i.e., treat the symptoms)
- Parvo 'season' = puppy season



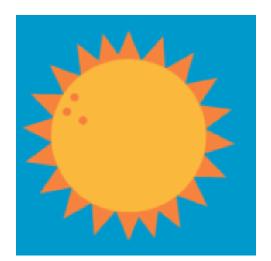
How Parvo Spreads

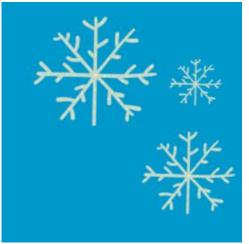
Dog's can catch Parvo whenever they come into direct contact with the virus, not just the infected dog



CanineParvovirus.org©

Parvo is Highly Resistant









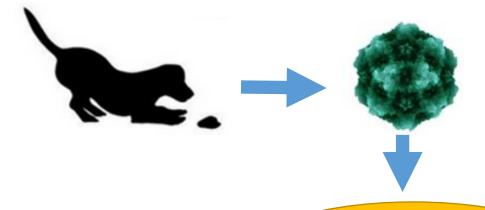
Resistant to:

- Heat (under 212 degrees F)
- Sunlight
- Cold / Snow
- Humidity / Dryness
- Water
- Some Household Cleaners

 - S Lysol
 - Spic and Span
 - Clorox Wipes / Lysol Wipes



Stages of Parvo

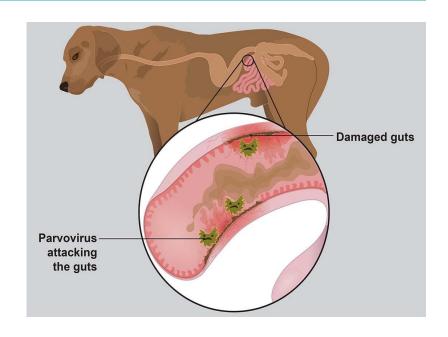


Attacks lymph nodes at back of throat (invades white blood cells & replicates)

Enters blood stream

Attacks bone marrow (weakens immune system)

Attacks lining of small Intestines (releases gut bacteria into bloodstream)



Symptoms of Parvo

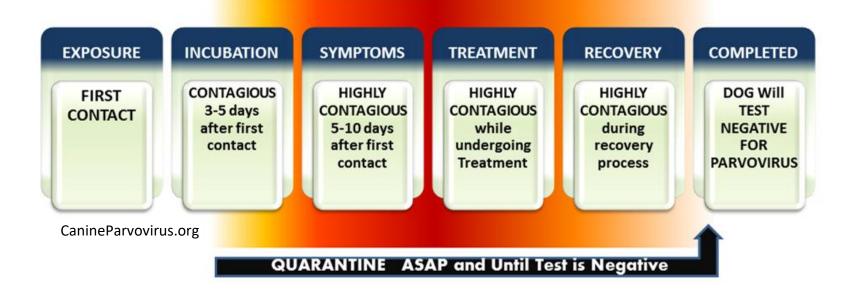
Symptoms:

- Diarrhea, often bloody
- Vomiting
- Lack of appetite
- Lethargy
- Anemia
- Fever
- 'Parvo smell'

Causes of death:

- Dehydration
- Sepsis
- Shock
- In severe cases:
 - hypoglycemia (low blood sugar)
 - hypoprotenemia (low levels of protein in blood)

Parvo Timeline



Incubation *Typically 3-5 days after*

exposure

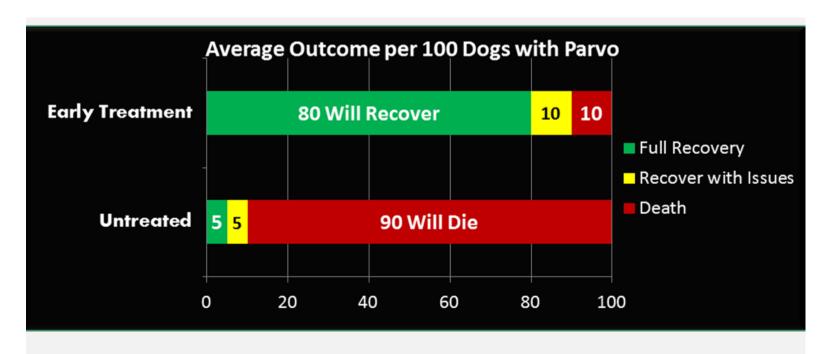
Range is 2-14 days

Death 4-72 hours

Contagious Within 3 days of exposure



Parvo Survival Rate: Treated vs. Untreated





Dogs Have a Great Chance of Surviving Parvo When Symptoms are Treated

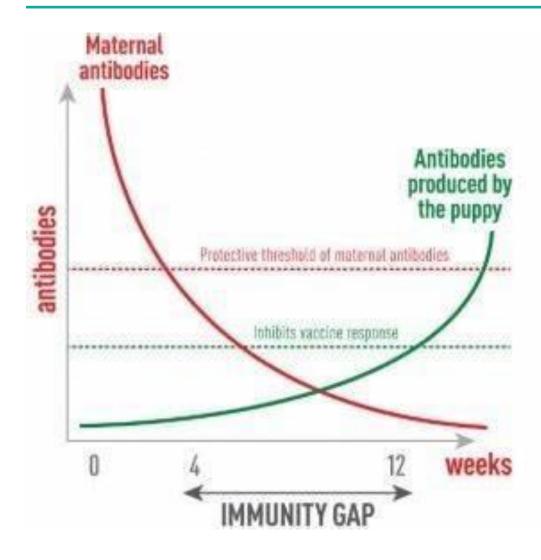


Who is at risk for parvo?

- Any unvaccinated dog of any age
- Any vaccinated dog with impaired immunity
- Puppies 6 weeks 6 months are most susceptible
- Increased risk for 'black and tan' breeds (Rottweilers, Doberman Pinschers, Pit Bulls, German Shepherd, etc.)



Puppies – The Immunity Gap



Implications:

- Vaccinating Pregnant moms is not recommended. Check with a veterinarian before giving any vaccines
- Boarding can increase risk
- Greatest risk to puppies is between
 4-12 weeks
- Important to know vaccine history of any dog that presents with Parvo
- When in doubt, assume no immunity and vaccinate. Before 6 weeks, check with veterinarian first.



Puppy Vaccine Schedule

- DHPP, DAPP, DA2PP, and DAPPC all cover parvo
- Start at 6-8 weeks
- Vaccines given while nursing may be less effective due to maternal antibody interference.
- Re-vaccinate every two weeks for a total of three vaccinations or until puppy is 12-16 weeks
- 2-3 weeks are required for a puppy to mount a sufficient immune response to a vaccination

Detecting Parvo

Fecal test

- Detects parvo antigens in feces
- IDEXX SNAP Parvo Test ~80% accurate
- False negatives?

 If test given during incubation period
 (prior to symptoms)
- False positives?
 - Depends on who you ask...
 - If vaccines given recently
- IF TEST IS POSITIVE, ASSUME IT'S PARVO!



Treating Parvo – Mild to Moderate Symptoms

When: no bloody diarrhea, not lethargic

Use:	To:
Subcutaneous fluids	Prevent dehydration
Antibiotics	Prevent secondary infections
Anti-nausea medications	Stimulate appetite & prevent dehydration
Anti-diarrheal medications	Prevent dehydration
Injectable vitamins (B&C)	Boost immune system
Force feed High calorie, easily digestible food	Provide nutrition



Remember – Treatment for parvo is <u>supportive</u> care



Treating Parvo – Severe Symptoms

When: bloody diarrhea, lethargic, severe dehydration

Use:	To:
Potassium & dextrose (via IV fluids)	Maintain blood sugar and electrolyte balance as well as prevent dehydration
Subcutaneous fluids	Prevent dehydration
Antibiotics	Prevent secondary infections
Anti-nausea medications	Stimulate appetite & prevent dehydration
Anti-diarrheal medications	Prevent dehydration
Injectable vitamins (B&C)	Boost immune system
Force feed (if possible) High calorie, easily digestible food	Provide nutrition Prariand Parvo Voluntier Based None

Parvo Recovery (Quarantine!!)

- Begins when eating resumes and solid poop begins to form
- Ends with negative fecal test
- Dogs continue to shed parvo for at least 10-14 days after recovery
- Due to **compromised immune system**, recovery dogs are susceptible to many secondary infections: skin conditions, giardia, coccidia, etc.
- Recovering dogs need:
 - high quality nutrition
 - rest
 - careful observation
- Continue (or begin) vaccines and deworming
- Last step of recovery, thoroughly bathe the dog



In Home Parvo Recovery Requirements

See https://canineparvovirus.org/canine-parvovirus-isolation/

- Other dogs/pets MUST BE VACCINATED
- Isolated space (spare bedroom or bathroom or partitioned area)
- Warm, quiet, comfortable
- PPE (i.e., gloves, old shoes or shoe covers, old clothes)
- Parvicide cleaner to disinfect
- Designated spot in yard for elimination

When infected dogs shed the parvovirus, they can shed 20-40 million viral particles per ounce of feces.



Disinfecting after Parvo

- Products must specify that they "KILL" parvo
 - Chlorine Bleach ½ cup per gallon (1:32 dilution)
 - Rescue (formerly Accel)
 - Sniper
 - F10
 - Trifectant
 - Virkon
 - Performacide
 - Steam Cleaning
- Disinfect daily during home treatment of parvo
- Disinfect everything at least 3 times after recovery
- Product comparison
 <u>https://canineparvovirus.org/what-kills-parvo-besides-bleach/</u>



Most household cleaners won't kill parvo



How Long Does Parvo Remain in the Environment?

Indoor Environments: 30-90 days

Outdoor environments: 6 months to one year

If your home has been compromised:

- Limit canine visitors fully vaccinated dogs only
- Limit canine fosters fully vaccinated dogs only
- No young puppies
- Alternative: foster recovering parvo puppies



Parvo Prevention – The Three "Ates"

Parvo can be PREVENTED **VACCINATE!** Parvo can be SPREAD **ISOLATE! DECONTAMINATE** Parvo can SURVIVE

Parvo Resources

- For a list of additional resources on parvo: https://parvorecoverycenter.org/resources/
- For a question about this presentation, email: info@parvorecoverycenter.org
- To view this presentation online: <u>https://parvorecoverycenter.org/wp-</u> content/uploads/2020/04/When parvo strikes.pdf

