

# Mushroom Poisonings

**THIS ARTICLE CONTAINS EXCERPTS:** from: [http://www.marini.com/marinnews/ci\\_26569053/canine-mushroom-poisonings-concern-marin-veterinarians](http://www.marini.com/marinnews/ci_26569053/canine-mushroom-poisonings-concern-marin-veterinarians) (submitted by Crystal KimHan of VegasPigPets)

**Editor's Note:** This article was written mainly regarding dogs, but can pertain to pigs also. Crystal had sent me this article a couple weeks ago, then at The Furry Friends Festival, a visitor to our booth told me her pig actually died due to mushroom poisoning. She drove for three hours with her pig in the car going from one vet to another. She could not find a vet that would treat her pig. Her pig died within three hours. There is a vet list on the SCAMPP website with a list of vets that reportedly treat potbellied pigs. Please keep that list at your fingertips and if you know of any vets that can be added, please let us know. It pays to be prepared in case of emergency. ~Peggy W.

Foraging for mushrooms can be a fun activity for those well-versed in toadstool identification, but for dogs the ingestion of certain fungi can be deadly. Dogs have been known to gobble up mushrooms, but a small percentage of mushrooms that grow in Marin County can cause liver failure. Dr. Peter Bowie, veterinarian at Pet Emergency and Specialty Center of Marin in San Rafael (CA), said he's seen an uptick in cases this year of dogs sickened by mushrooms from the amanita genus — including poisonous death cap mushrooms. There are over 100 varieties of amanita mushrooms (see <http://www.mushroomexpert.com/amanita.html>). These are just a few.



*Amanita Phalloides*  
(known as the Death Cap Mushroom)



*Amanita Muscaria*



*Amanita Pantherina*



*Amanita Virosa*  
(known as the Destroying Angel)

"We had 25 confirmed cases in the last three to four years of mushroom toxicity and maybe twice as many cases in which we thought dogs had mushroom toxicity," Bowie said. "We've seen 17 confirmed cases just this year."

These mushrooms are typically found from mid-fall to late winter. So to see so many cases already is of concern to Bowie, who has practiced in Marin since 1999. He said published medical journal studies show a 90 percent mortality rate for dogs who eat toxic mushrooms.

"A known ingestion of a mushroom should be an immediate visit to your veterinarian," Bowie said. "Puppies seem to be more likely to get involved in it than an older dog."

No one knows for sure why dogs eat mushrooms, but most chalk it up to curiosity. Death caps can look like non-toxic mushrooms as they come in a variety of sizes and colors. It's also possible dogs are attracted to them because of their fishy odor, according to the North American Mycological Association.

## **SYMPTOMS, TREATMENT**

Bowie said poisoning symptoms include vomiting accompanied by progressive depression, lethargy and a loss of appetite. Symptoms can get worse with time and typically don't present for many hours, eventually evolving into diarrhea, a yellowing of the skin and eyes known as jaundice and even seizures.

Whenever we have a dog come in with elevated liver values, we always ask people to check their yards for mushrooms. The mushrooms actually start to kill off the liver cells. If dogs are seen by a veterinarian early enough, she said the prognosis is typically good. If seen within 30 minutes, we can make them vomit and get the mushrooms out. Then we can get them on supportive care like fluids. Sometimes we'll also give them activated charcoal and that binds toxins in the bloodstream.

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Those canines unable to be seen right away are typically hospitalized and given massive amounts of drugs and supplements to support the liver. Canine blood plasma and dextrose are given intravenously, and anti-vomiting medications are also part of the protocol.

Bowie said a human in a similar situation would be extremely ill. In humans, they'd be treated with dialysis followed by a liver transplant.

## IDENTIFYING MUSHROOMS

Dr. Bob Poppenga, a veterinarian and specialist in veterinary toxicology at the California Animal Health and Food Safety Laboratory at University of California at Davis, said the laboratory has examined more submissions this year that link animal illnesses to toxic mushrooms than in years past. He said the diagnostic lab is one of the few that has developed a method to detect mushroom toxins in animals.

"Most of the time we'll use urine and if it's an animal that unfortunately dies we can look at the tissue for the presence of the toxin amanitin," Poppenga said. "There are other things that can cause liver damage, so this allows us to confirm a cause."

In addition to the death caps, known as *Amanita phalloides* in the scientific community, Poppenga said the lab also sees samples showing animals often ingest *Amanita ocreata* mushrooms, known as the Western North America destroying angel.



*Amanita Ocreata*

These mushrooms can be difficult to identify, but the death caps look like a typical grocery store mushroom that has grown to about the size of an adult hand. The caps are slightly yellow, green or tan in color and like to grow under oak trees, according to the Bay Area Mycological Society. These mushrooms are extremely toxic to humans and are responsible for the most mushroom poisoning deaths in the state and nation. The destroying angel mushroom looks very similar, but typically has a whiter cap with yellow, tan or light brown coloration in the center.

All the doctors agreed the best way to keep dogs from eating mushrooms is to remove and dispose of any mushrooms growing where a dog may roam. Pet parents who suspect poisoning are encouraged to get their canine friends to a veterinarian as soon as possible.

"It is best to remove mushrooms from your yard when possible, particularly with puppies who of course test everything with their teeth," Bowie said.

*Editor's Note:* If you must take your pet to a vet, always try to take a sample of the mushrooms that your pet may have ingested so the vet can identify the type of mushroom. I found a great website that identifies mushrooms by category (poisonous, edible, etc), go here: <http://www.naturephoto-cz.com/poisonous-mushrooms.html> There is also a ton of mushroom types & photos here: <http://americanmushrooms.com/toxicms.htm>

**Most importantly,** should you suspect your pet has eaten anything toxic, contact your family veterinarian or Pet Poison Helpline **immediately** at 800-213-6680 or [petpoisonhelpline.com](http://petpoisonhelpline.com) (there is a \$39 per incident fee, but they are available 24 hrs. a day!). ~ Peggy W.