



The Michigan Department of Community Health has become aware of two situations where veterinary clinic staff became sick while treating dogs that had eaten zinc phosphide pellets. Phosphine gas was produced when the pellets reacted with acid and water in the dog's stomach. Clinic staff developed headaches, shortness of breath, nausea, and dizziness after the dogs vomited in the examination room.

Zinc phosphide is used to kill rats, mice, moles, and gophers. It is sold as a dark gray powder or as a pellet. Trade names include Arrex, Commando, Dexol, Kilrat, GophaRid, Phosvin, Ridall, Ratol and Sweeney's Poison Peanuts. The chemical may smell like fish or garlic, but you should not rely on odor as a warning that phosphine is in the air. It may be at toxic levels before you notice an odor.

The following information is important for veterinarians and pet owners to avoid becoming sick while providing treatment to pets that have eaten zinc phosphide powder or pellets.

- Check to see if the dog has eaten a product that contains zinc phosphide.
- If the product does contain zinc phosphide, have the dog vomit outdoors, where there is plenty of air and the area can be hosed down with water.
- Stand upwind of the dog.
- Do not lower your head down to the dog. Phosphine is heavier than air and will sink to the ground.
- After the dog has finished vomiting, move it away from the vomit.
- Hose down the area with lots of water while standing upwind of the vomit. It can be washed down a storm sewer or off a hard surface onto grass. There will be enough air movement outdoors to prevent the phosphine from reaching levels that can harm humans or pets.
- Make sure the vomit is diluted enough so it does not attract other dogs or animals. The poison in any remaining pellets in the vomit will be released by the water, making them non-toxic.

**If the dog vomits indoors:**

- If the dog vomits indoors, the phosphine gas may reach levels that could be harmful to people. Remove people and pets from the area and open doors and windows to ventilate the area.
- Run a fan at floor level. The gas is heavier than air and will sink to the floor. Running the fan will help move the gas out of the area.
- Call 911 to reach your local fire department. Most fire departments can determine whether or not the air is safe.
- Exposure to phosphine gas can cause:
  - Headaches
  - Nausea, diarrhea, stomach pain, and vomiting
  - Chest tightness, difficulty breathing, and soreness or pain in the chest
  - Dizziness and staggering

If anyone has these symptoms after exposure to the dog vomit, have them get medical attention right away.

For more information, contact your Poison Control Center at (800) 222-1222 or go to the Agency for Toxic Substances Disease Registry web site, <http://www.atsdr.cdc.gov/substances/toxsubstance.asp?toxid=214>.