

Despite reduced dog poisonings from slug baits, researchers are warning of a new hazard

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Stronger warning labels on slug and snail baits containing metaldehyde may have led to a huge drop in calls to a national pesticide hotline about possible dog poisonings, according to Oregon State University.

The toll-free hotline, operated by the university's National Pesticide Information Center (NPIC), received more than 200 calls in 2005 about dogs that had been exposed to metaldehyde baits, said an OSU study, which was published this month in the *Journal of the American Veterinary Medical Association*. Since then, metaldehyde-related calls have decreased each year – reaching a new low of 21 in 2011.

At the same time, a relatively new type of bait containing <u>iron phosphate</u> was marketed as a safer alternative to metaldehyde, but it can still lead to iron poisoning in children, pets and wildlife, said Dave Stone, the center's director and co-author of the study. The NPIC received its first call about dogs encountering the iron phosphate baits in 2005. Subsequent reports have increased each year, rising to 69 calls in 2011.

Slug and snail baits are sprinkled as pellets or granules and kill the slimy invertebrates when ingested. Many baits are flavored with molasses or peanut butter, and dogs will eat them, even seeking them out.

In 2007, the U.S. <u>Environmental Protection Agency</u> mandated stronger cautionary language on metaldehyde baits. The chemical acts as a



<u>neurotoxin</u> and can cause seizures, <u>hyperthermia</u> and muscle tremors in animals and can be fatal without treatment.

"Before the new labels, it was common to receive calls about dog poisonings and somewhat common to hear about dog fatalities," said Stone, a toxicologist with OSU Extension. "We interpret the data to show that new labels that alert pet owners to these dangers may have contributed to the decrease in reported incidents with dogs."

More than 80 percent of the calls in the NPIC's study came from Washington, Oregon and California, where the coastal climate favors slugs and snails.

Reported incidents to NPIC involving iron phosphate baits have been less severe, compared with those with metaldehyde baits. No dog deaths were reported following contact with iron phosphate baits, but the NPIC documented 56 cases involving 61 dogs showing signs compatible with iron toxicosis, including lethargy, vomiting and diarrhea.

"Slug and snail baits with iron phosphate carry risk," said Kaci Buhl, project coordinator for the NPIC and co-author of the study. "They might be advertised as 'safe' and some are registered as organic. That may give the impression of safety, but these are still pesticides and need to be treated with the proper care and respect."

The NPIC advises pet owners to store slug and snail baits out of reach from dogs and other animals. About half of the cases reported to the NPIC took place after baits were applied outdoors, while 20 percent occurred when the product was insecurely stored in garages or sheds.

NPIC also encourages growers and gardeners to explore alternatives to pesticides, including installing copper barriers and strips, which slugs and snails will not touch.



The OSU Extension Service has more recommendations in its online guides "Using Home Remedies to Control Garden Pests" at bit.ly/OSUExtension_SlugBulletin and "Keep Pets Safe Around Pesticides" at bit.ly/OSUExtension_PetsSafePesticides.

More information: bit.ly/OSU IronPhosphateInfo

Provided by Oregon State University

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