Tragedies emphasize need for caution when applying pesticides

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Recent deaths of two Utah children are tragic reminders that people who apply pesticides should always read product labels and follow their instructions, says Montana State University Pesticide Education Specialist Cecil Tharp.

Rebecca Toone, 4, and her 15-month-old sister, Rachel, died in February after apparently inhaling fumes from aluminum phosphide, an active ingredient in many fumigants. An exterminator dropped Fumitoxin aluminum phosphide pellets into burrow holes to kill voles in the family's lawn, but Tharp said it's possible that he neglected to read and follow product label instructions about leaving a buffer zone between the poison and the house. Instead of staying at least 15 feet away from the house, he reportedly applied the pellets within seven feet from the front door and three feet from the garage. Phosphine gas seeped into the house and killed the children.

The Utah deaths are not isolated incidents, Tharp said. The same active ingredient killed a South Dakota girl in 2000 and a two-year-old Texas girl in 2007.

"This is nothing new," Tharp said. "There are many products out there that are highly toxic, and we should be aware of this. Many pesticide products should be handled with extreme caution."

A 2009 survey conducted by the MSU Pesticide Education program showed that one in 10 certified applicators don't read the entire product

label before applying pesticides, Tharp said. One in three said they have been at least mildly poisoned during their careers.

People have a variety of reasons for not reading labels, Tharp said. Sometimes they're in a hurry. Sometimes they've applied the pesticide so many times that they're sure they know what they're doing, but they don't realize that the label may have been updated. Sometimes people believe that all pesticides have low toxicity because many low toxicity pesticides are sold over the counter to the general public.

But aluminum phosphide is very dangerous and fast-acting, Tharp said. It can kill within seconds, minutes or hours. It's especially lethal to babies and young children, since they weigh less and have a higher metabolic rate, which cause them to absorb poisons quicker than adults would.

Aluminum phosphide is an active ingredient in many fumigants, which are usually used to manage insect pest or rodent populations, Tharp said. Besides Fumitoxin, examples of other brands that contain aluminum phosphide are Gastoxin, Fumex and Phostoxin.

People who want to hire pesticide applicators to kill insects or rodents in or adjacent to their homes should hire only certified commercial applicators who are certified in the category of "Industrial, Institutional, Structural and Health Related Pest Control," Tharp said.

"A homeowner can apply these products, but they need to obtain a private applicator license," Tharp said.

Tharp urged Montanans to read and follow product labels, be aware of fumigant management plans and know the symptoms of pesticide poisoning. Mild inhalation of phosphine gas causes feelings of sickness, ringing ears, fatigue, nausea and pressure in the chest. Symptoms of

moderate poisonings are weakness, vomiting, pain above the stomach, chest pain, diarrhea and difficulty breathing. Severe poisonings include fluid in the lungs, blue or purple skin color, unconsciousness and death.

People should call 911 or an ambulance if someone has difficulty breathing, Tharp said. They should always call a doctor or poison control center for further advice, even if symptoms are mild. They should call 1-800-308-4856 for assistance with human or medical emergencies.

"Vigilance is needed, not only with homeowners, but certified applicators," Tharp said.

Provided by Montana State University

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