

Guidance on handling native wildlife in areas where zinc phosphide has been deployed

Experts in necropsy and toxicology have strongly advised not to touch dead or distressed native wildlife, specifically grain feeding birds, suspected to be affected by the mouse baiting program currently being rolled out in western and central NSW.

In order to protect your health, you are strongly advised not to touch wildlife in these locations until further information comes to hand.

Zinc phosphide risks

Wildlife deaths have been reported that coincide with the distribution of the registered rodenticide, zinc phosphide pellets, being used for the control of mice in crops. The native wildlife mortality events may be due to unapproved use of the chemical within baited seed. Toxicological analysis of samples from affected native birds is being undertaken to determine their cause of death.

Zinc phosphide reacts with moisture or with the acidic conditions of an animal's stomach. This can release the highly toxic phosphine gas which directly damages the lungs, kidneys and blood vessels. While rodent remains are unlikely to contain significant residual toxin, a bird's crop

(part of the digestive system) may store enough undigested zinc phosphide to expose a person to risk during procedures such as dissection because they are likely to have undigested pellets in their crop. In addition, predatory and scavenging native wildlife may also be impacted directly by the poison.

Clinical signs in native wildlife

After ingestion of lethal doses of the rodenticide, death is sudden, resulting from heart failure, pulmonary oedema and kidney failure. Anorexia, debility and death in animals may occur from 15 minutes to hours after ingestion but may be delayed for up to 18 hours.

Reporting wildlife that you suspect has been poisoned

If you find more than 5 native animals affected report the event to Environment Line on 131 555.

Bury the animal(s) according to the [Animal carcass disposal fact sheet](#), unless otherwise advised by officers from the Department of Primary Industries.

If you have touched a carcass without adequate personal protective equipment and experience nausea, vomiting, diarrhea, abdominal pain, coughing and/or shortness of breath seek urgent medical treatment. If concerned about possible exposure, contact the Poisons Information Centre on 13 11 26 or go to www.poisonsinfo.nsw.gov.au.

Anyone with a concern, or knowledge of an incident involving pesticide misuse in their local area, should contact Environment Line on 131 555.

Minimise risks – veterinary staff and wildlife rehabilitators

Exercise extreme caution if presented with native wildlife suspected of zinc phosphide poisoning. The major route of exposure is inhalation of the

highly toxic phosphine gas, which forms when zinc phosphide mixes with moisture or an animal's stomach acids and may be released if the body cavity is opened. Phosphides may also be absorbed through broken skin and can be toxic.

If you have handled a carcass without adequate personal protective equipment and experience nausea, vomiting, diarrhoea, abdominal pain, coughing and/or shortness of breath, or drowsiness seek urgent medical treatment.

If you suspect zinc phosphide may be present, clearly communicate this when handing over animals or animal samples to veterinarians, laboratories, researchers or others.

Minimise risks – if sick wildlife presented

Regurgitated material from native wildlife that have ingested zinc phosphide may be a source of exposure for people. Keep affected wildlife in well ventilated areas. Wear personal protective equipment when handling regurgitated material and quickly double bag the material for disposal in outdoor general waste (red lid) bins. Bin lids need to be secured to prevent access by other animals.

Minimise risks – if collecting native wildlife remains

While it is recommended carcasses be left in situ, if you are in a situation where you are collecting wildlife remains, wear protective clothing.

A long-sleeve shirt, long pants, shoes, socks, waterproof gloves and eyewear should be worn so that dust is not absorbed through cuts or abrasions. Wear a full faced respirator with an Australian Standard number and a filter approved for short term exposure to phosphine (type B for inorganic gases) to reduce the risk of phosphine gas inhalation. Follow manufacturer's instructions and adhere to expiry dates.

Exercise caution and do not venture into poorly ventilated spaces where animal carcasses are present. If concerned about possible exposure, contact the Poisons Information Centre on 13 11 26 or go to www.poisonsinfo.nsw.gov.au.

Minimise risks – post-mortem examinations

Do not conduct post-mortem examinations on wildlife from mouse plague areas unless appropriate safety measures are available. These

examinations should only be conducted by personnel in positive pressure filtered respirators or those working in a chemical fume hood.

Other rodenticides

Other commonly used rodenticides are the anticoagulant rodenticides (ARs). ARs are classified as first generation or second-generation products.

First generation poisons are less toxic and require several feeding events over several days to kill a rodent, whereas second generation anticoagulant poisons, such as bromadiolone, are much more toxic and may kill a rodent after only one feed.

Wild birds, domestic cats and dogs and other scavenging and predatory species, that naturally eat rodents, may easily consume multiple poisoned rodents, in turn becoming poisoned themselves by first- or second-generation products.

As with any carcass where cause of death is uncertain, personal protection equipment should be used as a precaution as outlined in the [AVA Guidelines for Veterinary Personal Biosecurity](#) and the [National Wildlife Biosecurity Guidelines](#).

Carcass disposal

Disposal of waste from veterinary examination of zinc phosphide and bromadiolone affected animals (carcasses, body parts, PPE) can be disposed of via normal veterinary clinic waste disposal methods or to general waste (red lid) bins where there is a council waste collection service. Where there is no waste collection service, carcasses can be buried according to the Department of Primary Industries' [Animal carcass disposal fact sheet](#).

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