

Brodifacoum

Brodifacoum is a second-generation anticoagulant poison. As an anticoagulant, it prevents blood clotting, thereby causing death from internal bleeding. Unlike most other anticoagulants that require multiple feeds before being fatal, brodifacoum can be fatal after just one feed. It does not require a licence to use and can be used by landowners to control rats and possums on their land.



Above: Brodifacoum pellets

Brodifacoum baits are dyed blue and are used to control possums and rodents, which prey on native animals and eat the fruit, seeds and leaves of native plants, causing immense damage to our ecosystems and threatening the survival of our taonga species.

Trade names include: Pestoff, Talon®.

Safe usage

Brodifacoum must only be used in bait stations. To ensure that it is being used safely always read and follow label instructions for the product you are using. This will generally include:

- Bait must be stored in a dry area away from foodstuffs or food preparation areas
- Bait must be stored in its original container in areas inaccessible to children or pets
- Warning signs must be placed at public accessways where bait stations have been placed
- Bait stations must be out of reach of children, pets and stock
- Wear suitable protective gear when handling bait

- Do not eat, drink, smoke or vape when handling the bait
- · Wash hands after working with bait

Risks

What are the risks to humans?

The risk to humans is very low because a significant amount needs to be ingested to cause illness. However, repeated ingestion of even small amounts of brodifacoum can negatively impact human health, so measures must be taken to minimise exposure.

Toxicity symptoms common to anticoagulant poisons may include:

- Bleeding gums and excessive bleeding from cuts.
- Greater tendency to bruise.
- Blood in urine and faeces.
- Nausea and vomiting shortly after ingestion.

If brodifacoum bait has been consumed, seek medical attention or contact **National Poisons Centre 0800 764766.**

What are the risks to non-target animals?

Non-target animals, such as native birds, livestock, domestic pets, and feral animals, are at low risk of lethal or sub-lethal poisoning from directly eating the baits (primary poisoning), if brodifacoum is used responsibly and only in appropriate bait stations.

Research indicates that anticoagulant toxins can persist in the liver for many months or even years, posing a risk of secondary or even tertiary exposure through scavenging carcasses of animals killed by brodifacoum or consuming meat or dairy products from exposed livestock or feral animals.

Preventing pets eating the bait and/or scavenging carcasses is the most effective way to keep them safe. This means:

- Keeping dogs on a lead in area where toxin is being used
- Do not allow pets to scavenge dead animals
- Keeping bait within the bait stations, and not allowing it to fall on the ground
- · Safely disposing of dead animals by burying

If poisoning is suspected in your dog, take it to the vet immediately. A vet can administer Vitamin K as an antidote. Cats are unlikely to be attracted to the cereal-based bait but may scavenge on carcasses.

All practical measures must be taken to minimise access to baits by livestock, pets, and other non-target species. Furthermore, access to poisoned carcasses by livestock and other non-target species must be prevented by removing and burying or burning them, if practical.

Livestock that have been exposed to brodifacoum should not be sent to slaughter or sold. If you suspect that livestock has been exposed to brodifacoum bait, seek advice Ministry for Primary Industries (MPI). MPI may investigate and determine which livestock can be sent for slaughter, or any other actions that should be taken.

Harvesting wild animals

It is recommended that recreational hunters follow the same rules as commercial hunters. Deer and goats should not be taken to eat within 2 km of the boundary of an area where brodifacoum is laid, and pigs should not be taken to eat within 5 km of the boundary. This restriction remains in place for three years after the poisoning program has ended.

What are the risks to the environment?

Brodifacoum has very low solubility in water and binds strongly to soils, making it almost immobile and unlikely to leach into watercourses or water supplies. It is biodegradable but degrades slowly over weeks to months, depending on soil type, temperature, and the presence of microorganisms that help break it down. Plants are unlikely to absorb brodifacoum due to its low water solubility. Although residues can accumulate in the liver tissue of living animals, brodifacoum is used at very low levels in bait. In recent years, less than four kilograms of pure brodifacoum has been used annually for possum control across New Zealand.

Disposal

Surplus or spoiled bait should be disposed of as per label instructions.

