

Why is cholecalciferol used for possum and rodent control?

All pest control toxins have advantages and disadvantages that should be considered when deciding the appropriate control method to use. These are summarised for cholecalciferol below.

Advantages	Disadvantages
Available to general public	Expensive (relative to other toxins)
Rapidly reduces possum numbers	Treatment of accidental poisoning is complex
Low risk of secondary poisoning	
Low toxicity to birds	
No long-term residue risks	

What are the restrictions on the use of cholecalciferol?

A Controlled Substances License is not required for the purchase and use of cholecalciferol baits. Users are legally obligated to display warning signs for at least 3 months after baits have been retrieved.

How does cholecalciferol kill animals?

Cholecalciferol causes calcification of body tissues and organs. Death occurs within about 3-7 days from heart and renal failure.

Possums and rats that receive a lethal dose of cholecalciferol usually die within a week. Symptoms include loss of appetite and lethargy. The speed of onset and severity of poisoning symptoms is dose-dependent. Baits are designed with the appropriate concentration of cholecalciferol to ensure maximum potency and as swift a death as possible in possums and rats.

The symptoms reported in cats and dogs include nausea, vomiting and diarrhoea, but these do not occur in possums or rats. Cats and dogs must not be exposed to bait as even low doses cause anorexia and unpleasant symptoms prior to death.

What is cholecalciferol?

Cholecalciferol is a form of Vitamin D3 which is used to poison animals by raising calcium levels in the blood to induce a heart attack.

Its use as a poison is relatively new. It was developed in the 1980s in the USA to kill rats and mice and was introduced in New Zealand in 1995 for possum control.

Vitamin D3 is naturally occurring but that does not mean cholecalciferol baits are 'safe'. All bait containing cholecalciferol must be treated as poisonous to non-target species and must be handled and dispensed as carefully as other types of toxic bait.

Who uses it and why?

Pest control professionals, farmers, community groups and members of the public use cholecalciferol baits as they are readily available and there is a low risk of secondary poisoning of dogs. They are also favoured by users concerned about residues from the use of anticoagulant poisons such as brodifacoum.

More information

For further advice about cholecalciferol, contact National Possum Control Agencies (NPCA)

- phone 04-499-7559

To learn how to use cholecalciferol, see the NPCA publication (Code A3) "Private Landowners' Guide to Possum Control", available from:

- www.npca.org.nz, publications section, or
- phone NPCA 04-499-7559.

**In an Emergency contact the National Poisons Centre
0800 POISONS (0800 764 766)**

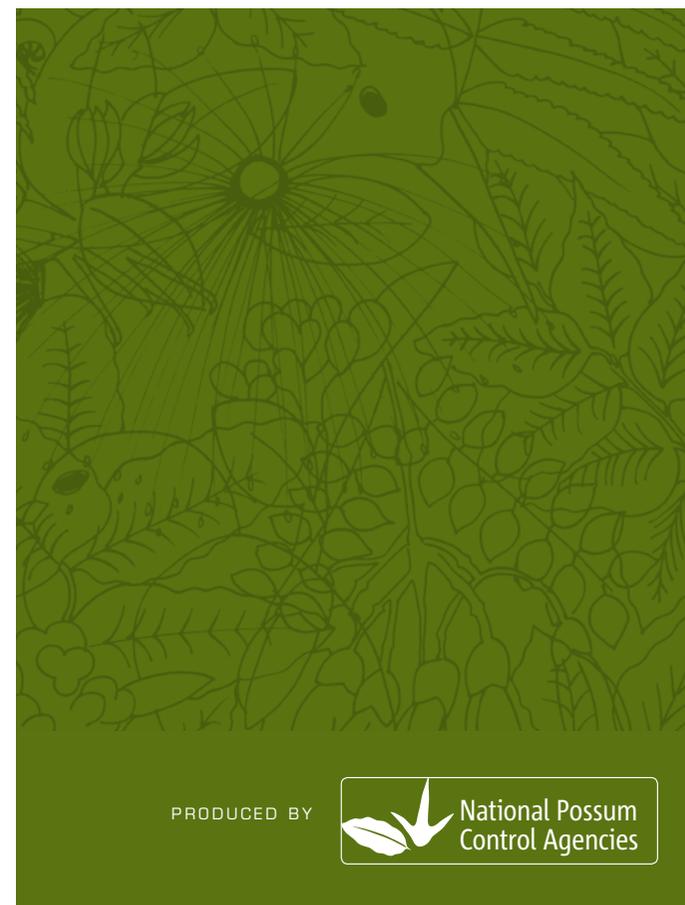
If you are concerned about the use of cholecalciferol in your area, whether by professional pest control operators or others, contact either:

- **the pest control operator, whose contact phone number should be on the warning signs, or**
- **National Possum Control Agencies Help Desk 04-499-7559.**



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CHOLECALCIFEROL
ITS USE FOR POSSUM
AND RODENT CONTROL



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CHOLECALCIFEROL, ITS USE FOR POSSUM AND RODENT CONTROL

What does it look like?

Baits come in three forms – a peanut butter flavoured paste, pellets and gel. They are coloured green as a deterrent to birds and as a warning to people.

Look out for:



Paste bait dispensed on 'Striker' plates attached to trees or fence posts.



'Feracol'® paste bait or 'Pestoff DECAL Possum Bait'® dispensed in 'Biobags' attached to trees or posts. If these are not retrieved, users are legally obligated to display warning signs for at least 4 months after baiting.



'Pestoff DECAL Possum Bait'® pellets or 'Feracol'® paste dispensed in small or large bait stations attached to trees or posts. Commonly used bait stations are the SENTRY® (top left) and the KILMORE® (top right). The Feracol paste used in bait stations comes in a pail (bottom) and should always be safely disposed of off-site.



'No Possum' Cholecalciferol Gel Bait in purpose-made bait stations attached to trees or posts.

What are the risks to humans and animals?

Humans, livestock, dogs and other pets will be poisoned if they eat bait and between 100-200 gms of bait is fatal to humans. Treatment of cholecalciferol poisoning is difficult so preventing access to bait is critical.

The risk of non-target poisoning is reduced by using cholecalciferol baits in bait stations or other dispensers on trees or posts where they are less accessible to non-target species than baits on the ground.

Can dogs be killed by eating poisoned possum carcasses?

Secondary poisoning following cholecalciferol baiting is unlikely. Studies show that the risk of secondary poisoning with cholecalciferol is low when only a single carcass is eaten. Repeated consumption of poisoned carcasses by dogs over several days will induce poisoning signs such as loss of appetite and lethargy.

'Low risk' of secondary poisoning with cholecalciferol does not imply 'no risk', and all pets and farm dogs should be discouraged from eating potentially poisoned possum carcasses.

How can we keep ourselves safe?

As with all types of toxic bait, cholecalciferol baits are potentially dangerous, and should be handled and dispensed with care. Risks are minimized in the following ways.

If you are using cholecalciferol:

- Ensure bait is correctly placed.
- Exclude children, livestock, dogs and other pets from areas where baits are in use.
- Erect warning signs at all access points to the poisoned area, and around the perimeter. If using bio-bags, keep the signs in place for 4 months after placing the last bait bag. If using bait stations, keep the signs in place for 3 months after retrieving the last baits.
- Do not place bait near a house or public place.
- Retrieve and bury uneaten bait.
- Clean up any spilled baits.

If you are in or near an area where cholecalciferol is being used

- Obey all of the warning signs.
- Do not touch any bait stations or baits.
- Warn children of the danger.
- Keep children and dogs under supervision and, if possible, away from the area.



WARNING POISON CHOLECALCIFEROL

- Will be used in bait stations from:.....
- Do NOT touch bait
- WATCH CHILDREN at all times
- Poison baits or carcasses are DEADLY to DOGS

How can non-target poisoning be avoided?

The potential risk to non-target species can be reduced by:

- identifying the non-target species that could be affected;
- using the cholecalciferol baits in ways that limit or negate the risk e.g. positioning bait stations above the reach of ground-dwelling birds;
- taking care to ensure spilled baits are cleaned up;
- collecting and disposing of poisoned carcasses.

What are the risks to the environment?

Proper use of cholecalciferol baits will limit the contamination of soil. Where bait is spilt from bait stations cholecalciferol will leach out and trace amounts may be found in soil immediately underneath disintegrating baits. These cholecalciferol residues in soil will degrade and are unlikely to present a significant hazard. Cholecalciferol will not get into waterways when used in a proper manner in bait stations or the other dispensing methods shown in this brochure.