



## 1080 poison baiting – the facts

### What is it?

### How safe is it?

### Why do we use it?

### How does it work?

### What is it?

Sodium fluoroacetate, better known as 1080 (pronounced “ten eighty”), is an odorless, tasteless white powder that is diluted with water to concentrations specific for the species being targeted. The solution may have a special dye or marker added for identification of the toxin. It is used for poisoning of wild dogs and other introduced predators by incorporating it into fresh, dried or processed meat baits. In Australia, 1080 is not available to the public in its concentrated powder form.

### How safe is it?

#### • Human Health

- Access to 1080 is highly restricted and not available to the general public in the concentrated powder form.
- 1080 is only available in Australia in diluted, premixed solution at concentrations applicable to the pest species being targeted.
- Only authorised and properly trained operators are permitted to handle 1080 and prepare baits.
- Landholders and land managers are not permitted to handle 1080 solution in most states and can only access 1080 in a prepared bait, fresh meat or manufactured meat bait.
- The concentrations used for vertebrate pest management and particularly wild dogs are extremely low and not lethal to humans.
- The concentrations of 1080 used for vertebrate pest management are extremely low for wild dogs. For an 90kg adult human to be poisoned, they would need to eat 9.5kg of poisoned meat in one meal (equivalent to almost 40 baits) and a 20kg child would need to consume 1.5kg of poisoned meat in a single meal.
- The Australian Pesticides and Veterinary Medicines Authority Review clearly demonstrated there was no case to answer in terms of the use of 1080 and, in fact, commended the responsible manner in which it is regulated and used throughout Australia.

#### • Non-target impacts and its effect on the environment

- There is no threat from 1080 baiting, used to control wild dogs, foxes and feral cats, to all of the populations of native animals that have been studied, including 29 species of native birds, 7 species of native reptiles and amphibians and 44 species of native mammals (including carnivorous marsupials such as the Spotted Tail Quoll).
- Many Australian native animals are tolerant to 1080 because over 30 Australian native plants naturally produce sodium fluoroacetate which is found in 1080 baits and the synthetically manufactured 1080 is identical to, and retains all the properties of, the natural sodium fluoroacetate poison found in these Australian native plants.
- 1080 is highly soluble and biodegradable. This means it breaks down in water, soil and in carcasses over time (in hot, humid weather, it only takes a few days) and has limited impact on the environment.

- 1080 baits can kill domestic and working dogs if they eat a lethal dose, therefore it is imperative they are restrained from roaming freely, and/or muzzled if and when working, and owners heed warning signs when baiting is occurring.
- 1080 poison baiting is a best-practice, target-specific method for pest animal control because it remains the only poison to which Australian native wildlife have some tolerance and it is used in a way that minimises the opportunity for wildlife to encounter a bait or eat it.

### Why do we use it?

- To date, 1080 is the most efficient, humane and species-specific pesticide available for declared pest animal control in Australia.
- Controlling pest animals is essential for the conservation of endangered native animals and for minimising their impact on native flora and fauna and farmed livestock.
- All Australian states and territories endorse 1080 baiting as part of an integrated approach to pest animal management.
- In Australia, 1080 supply and use is highly regulated. It is a restricted (S7) chemical product and can only be supplied to persons who are authorised to use the product under the laws of a state or territory
- Each Australian state and territory has strict regulations for the manufacturing, labelling, handling, storage, supply, use, retrieval and disposal of 1080 baits.
- 1080 baits are formulated to be lethal for target pest species yet minimise the impact on non-target species such as native wildlife.
- 1080 baiting programs are intensively managed. Before 1080 baiting occurs, pest animal managers need to consider lethal poison dosage, pest specific poison carrier palatability, pest specific bait size, time of year and seasonal conditions when used, where and how the bait is placed, buried or tethered, the density of baits placed and when they must be retrieved.
- Aerial baiting for wild dogs using 1080 poisoned meat baits is undertaken at strategic times of the year, is highly targeted to areas with limited access and where pests are known to travel and is highly regulated by state agencies. Permits and authorisations are required by land managers prior to programs being undertaken.
- Aerial 1080 baiting locations are mapped by local community planning groups which include public and private land managers and owners. Travel corridors are identified from local knowledge and often confirmed from satellite radio collaring.
- All aerial bait lines are mapped within management plans and bait drops are tightly regulated using aircraft navigation and recording systems on both private and public land.

### How does it work?

- 1080 will kill pest animals if a lethal dose is eaten as it starves calcium and energy from cells. Disruption to the central nervous system then leads to unconsciousness.
- 1080 must be digested before it becomes toxic and, in a dog or fox, this can be between 30 and 180 minutes after the bait is eaten. The time depends on the dosage consumed, digestion rates and body and ambient temperature.
- After the toxin takes effect, the dog is initially disorientated and then becomes unconscious and while unconscious it cannot perceive pain.
- No research studies have either proved or disproved the distress or pain of herbivores and omnivores poisoned by 1080.

### Further information

<http://www.pestsmart.org.au/1080/>

[www.pestsmart.org.au/pest-animal-species/wild-dog/](http://www.pestsmart.org.au/pest-animal-species/wild-dog/)

[www.nationalwilddogactionplan.org.au](http://www.nationalwilddogactionplan.org.au)