Sodium fluoroacetate/1080 is a highly toxic pesticide used in the control of pest species such as foxes, wild dogs and feral pigs in rural areas. Its use is especially common around lambing and calving season to reduce the number of predators that prey on livestock. It is highly effective and very target-specific compared with other poisons and dogs and other canids are extremely susceptible to it. An average human would require twenty times the dose per kilogram bodyweight that a dog would to have fatal effects. There is no specific antidote to 1080 and it does not discriminate between wild dogs, foxes or pets. As a result, accidental poisonings with 1080 do occasionally occur at this time of year.

1080 is odourless, tasteless, water soluble and is generally mixed with dried, fresh or processed meat baits. Pet dogs can access baits directly in areas where baits are laid, ingesting baits moved by birds or other wildlife, ingesting vomit containing 1080 and potentially from eating rabbits or wildlife (eg wallabies) that have been poisoned. While poisonings generally occur following ingestion of a bait, 1080 can also be absorbed via the respiratory tract or through abrasions and cuts. It acts by disrupting cell respiration and causes central nervous system, cardiovascular system and/or respiratory system failure. Clinical signs may be seen within 30 minutes up to 20 hours after ingestion of a bait and include anxiety, vomiting, shaking, frenzied behaviour, seizures, convulsions, collapse and death. Veterinary assistance should be sought immediately if any signs are observed or if a dog has been sighted ingesting or mouthing a bait regardless of whether any clinical signs are seen.

Diagnosis is based on history of ingestion or access to baits and clinical signs. Immediate treatment involves controlling seizures by anaesthetising the animal, intravenous fluid therapy to maintain hydration, oxygen therapy and intensive nursing and monitoring. Animals are generally kept anaesthetised for 24-48 hours and, if treatment is successful, may be released after about 5 days. The highly fatal nature of the poison and the lack of antidote make early detection and prompt veterinary intervention essential in giving a dog the best possible chance of survival. Preventing access of working dogs and pets to areas where baits are laid is highly advisable and dogs should be muzzled if free-ranging or tied up at all other times on properties during baiting season. Non-working dogs should be kept on a lead at all times when visiting properties or nature strips. Please seek immediate veterinary advice if you think your dog may have come into contact with or ingested a bait.