



# COMMUNITY HEALTH AND WELL-BEING

## FACT SHEET 6

### Q & A DOES THE USE OF BRODIFACOUM POSE HEALTH RISKS TO HUMANS?

What approvals are required to carry out a rodent eradication program on Lord Howe Island?

The poison to be used for the proposed eradication of rodents on LHI is brodifacoum. As with all rodenticides, the use of brodifacoum is strictly regulated to ensure safe use. Brodifacoum cannot be used for broadscale application without an approval permit that specifies exactly how it will be used. Before any broadscale use of brodifacoum on Lord Howe Island could take place, the LHI Board would need approval from the NSW Government and Australian Government agencies.

Is Talon to be used for the proposed eradication of rodents on Lord Howe Island?

No, the product proposed to be used if an eradication program takes place on Lord Howe Island is Pestoff 20R which contains 60% less brodifacoum than Talon. Whereas Talon contains 50mg of brodifacoum per kilogram of bait; Pestoff 20R contains only 20 mg of brodifacoum per kilogram of bait. The reason for the lower concentration is to reduce the risk to humans and non-target species. Unlike Talon, Pestoff 20R is manufactured specifically for aerial and hand broadcasting operations, and is licensed for this purpose in New Zealand.

What are the possible pathways identified for humans to be affected by brodifacoum?

There are four possible pathways for humans to be affected by brodifacoum: (i) direct ingestion of brodifacoum baits, (ii) ingestion of contaminated food, (iii) inhalation of brodifacoum laden dust, and (iv) absorption of brodifacoum through the skin. In the proposed operation to eradicate rodents from Lord Howe Island the only pathway that poses any significant health risk to residents or tourists is direct ingestion of multiple brodifacoum baits. The high number of baits that would need to be ingested to result in accidental poisoning make the likelihood of such an event highly improbable.

What steps can be taken to minimise the accidental ingestion of bait pellets?

Infants are most at risk of accidental ingestion of bait pellets, although any infant would need to eat numerous baits to be affected. Parents will need, as they do now, to supervise their children during the course of the operation to ensure they do not have access to baits. The community and the Lord Howe Island Board can work together with other experienced community groups and researchers to develop a plan to raise awareness about the short-term risk posed by the poison baits.

Q

# Our rodent control program for the past 50 years has been poisoning our future

A

What happens to the baits on the ground and does brodifacoum enter plants and vegetable crops?

When the bait pellets have been exposed to rain or soil moisture, they begin to break down relatively quickly, and have been found to disintegrate within 100 days on LHI. The brodifacoum binds to soil particles, and is broken down by microbes in the soil into harmless compounds. Tests will be conducted on Lord Howe Island to confirm how brodifacoum responds to local soils and the results will be published. Brodifacoum does not dissolve in water, and as plants only absorb nutrients dissolved in water, insoluble chemicals such as brodifacoum are not absorbed.

Will pets be at risk from a rodent eradication program using brodifacoum?

Dogs can be affected by ingesting brodifacoum. However due to the low concentration of brodifacoum in the pellets used, accidental poisoning is highly unlikely. Nonetheless, as a precaution, an antidote and veterinarian would be available during an eradication program on Lord Howe Island. Dog owners already need to take precautions on Lord Howe Island, as Talon (containing brodifacoum) is used as a rodent control around the settlement.

Will cattle and chickens be at risk from a rodent eradication program using brodifacoum?

To ensure all rodents receive poison baits, pellets need to be broadcast across the whole island, including paddock areas and chook yards. The risk of harm to cattle from consuming baits is negligible though some pellets may be eaten. If this beef is then consumed it may contain brodifacoum residues. Consequently, beef cattle will be removed before any rodent eradication and replaced after the program to eliminate risk. Chickens are at risk from eating baits; more importantly, their feed provides alternative food resources for rodents, risking the success of the eradication. For this reason all chickens will need to be removed in the lead up to an eradication.

Is brodifacoum soluble in water and will it enter our streams and ground water in the event of a rodent eradication program?

Brodifacoum does not dissolve in water, and does not contaminate water bodies. Bait pellets that drop into streams will sink and quickly disintegrate. As they disintegrate the brodifacoum will attach to soil particles where it will be broken down by microbes into non-toxic compounds. Comprehensive studies involving testing of stream water samples on Lady Alice and Little Barrier islands and at Maungatautari in New Zealand confirmed no trace of brodifacoum in periods ranging from one hour to three months after rodent eradication using brodifacoum.

How can we ensure the safe use of baits during the proposed rodent eradication program?

With the community and the Lord Howe Island Board working closely together, individual property baiting plans will be developed to provide the safest procedures for each lease. These plans will detail how baits will be broadcast and outline any specific measures required. As rodenticides are currently being used on Lord Howe Island, it is up to all of us who use these products to be informed about their use and use them with care.



We have a unique opportunity to eradicate now and ensure a rodent and poison free future for our grandchildren and those Islanders yet to come.