

Mosquito

response programme

S-methoprene is being used to get rid of the Southern Saltmarsh mosquito *Ochlerotatus camptorhynchus* in affected areas in New Zealand.

What is S-methoprene

S-methoprene is an insect growth regulator which stops the normal development of insects. It stops the mosquito pupae hatching into adults.

S-methoprene has been used extensively overseas to control mosquitoes and other insects. Compared with *Bti* which breaks down very quickly when it is applied, S-methoprene can be applied in a slow-release form. This means it can be effective for 21 days or longer in water, and fewer applications are needed.

How is it applied?

S-methoprene will not be used as a spray but as slow release pellets, granules or briquettes. These will be applied to the affected saltmarsh areas by helicopter or by hand.

Is it safe?

Extensive studies have shown that S-methoprene breaks down quickly in the environment. The Environmental Protection Agency (EPA) in 1991 reported it had low toxicity, and posed little hazard to humans and most non-target species.

S-methoprene is believed to be environmentally safe for use in New Zealand. Even at many times greater than the dosage for mosquito control it is not toxic to most fish or animals.

What about people?

There has been no increase in illnesses in people living in areas where S-methoprene has been applied. No special care needs to be taken by the public. People with severe or unstable asthma or other respiratory conditions, immune conditions, allergies, or others who have concerns, such as pregnant women, can reduce any exposure by avoiding the areas where S-methoprene is applied.

What about S-methoprene on the ground or in the water or on food?

No health problems are anticipated from the residue in water or food. Because S-methoprene is not a spray, spraydrift does not occur. However, all fruit and vegetables should be washed in the normal way to remove any sprays used in their normal cultivation. S-methoprene is extremely unlikely to enter the drinking water supply but even if it should there would be no reason for concern as the World Health Organization (WHO) has recommended the use of S-methoprene to control mosquitoes breeding in drinking water.

Avoid being bitten

Most mosquitoes are active at dawn, around late afternoon and just after dusk. However, the Southern Saltmarsh mosquito is more active in the morning and during the day. The risk of being infected with Ross River virus is low, but to avoid the nuisance of bites which can be uncomfortable:

At home

- put screens on windows and doors
- use sprays indoors when mosquitoes are around.
- use mosquito coils

Outdoors

- wear a repellent cream or spray
- use an insect screen on tents
- wear protective clothing
- avoid places where mossies are most active, such as swampy areas.

If insect repellents are a concern use non-allergenic products.

Follow-up

Further information about the mosquito control programme, including a report for the Ministry of Health regarding the environmental impact of S-methoprene, can be found on the Ministry of Health's Website – www.moh.govt.nz – under News and Issues. Copies of the report, *Environmental and health impacts of the insect juvenile hormone analogue S-methoprene*, March 1999, have also been sent to all public libraries.

Contact your doctor or other health advisor in the usual way if you have any health worries.