

# Mosquito

## response programme

A spraying operation is underway to get rid of the Southern Saltmarsh mosquito *Ochlerotatus camptorhynchus*. This mosquito has been introduced to New Zealand from Australia. It can carry the Ross River Virus which can cause an infective disease in humans.



### Ross River Virus Disease

Ross River virus can cause an infective disease with a wide range of symptoms, the most frequent of which is inflammation of the joints. The disease has been reported from all the states of Australia, as well as from Papua New Guinea, the Solomon Islands and some other Pacific islands.

All cases reported so far in New Zealand have been in people who have travelled from overseas. It has not yet been found in mosquitoes here.

People infected by the Ross River virus may have pain in muscles and joints, and other symptoms including fever, chills, sweating, a headache and tiredness. There may also be a rash on the body and limbs for a short time. The symptoms can only be confirmed by a special blood test.

There is no cure for Ross River virus disease. The symptoms occur mainly in adults, and occur 3-21 days (average 9 days) after being bitten. The symptoms can be relieved by painkillers and usually fade away within weeks. In a few cases they may persist for months or years. Infected children are much less likely to have symptoms.

The only way people can be infected with Ross River virus is through being bitten by a mosquito which is carrying the virus. The virus cannot be spread from person to person.



### 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 mosquito coils
- use sprays indoors when mosquitoes are around.

#### Outdoors

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

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

## **Bti spray - is it safe?**

*Bti* spray is effective against mosquitoes and blackflies (sandflies).

Wide research shows *Bti* is an extremely safe organic spray. It will not affect aquatic plants, organisms or fish, and it has undergone a full health impact assessment which shows that it poses no risk to mammals, including humans.

It does not stay long in the environment after it is applied but breaks down within days. It leaves no residue.

*Bti* has been used extensively in mosquito and biting fly control programmes, especially in Africa, the United States and Germany. Over 40 tons of *Bti* have been applied in West Africa alone with no reported effects to the environment.

## **Spraying with Bti**

Spraying programmes will either be by helicopter or by hand-spraying of affected areas and will not include spraying of homes. Spraying is only carried out over saltmarsh areas.

Similar spraying programmes in New Zealand and overseas have found no increase in illnesses in people living near the areas sprayed.

No special care needs to be taken by the public during the spraying programme. However people with severe or unstable asthma or other respiratory conditions, immune conditions, allergies, or others who have concerns such as pregnant women, can reduce exposure to the spray by avoiding the spray sites.

Continue to take your prescribed medication.

## **What about spray lying on the ground or in the water?**

No health problems are anticipated from the residue.

## **What about spray on fruit and vegetables?**

No health problems are known to arise from eating fruit and vegetables sprayed with *Bti*. Wash all fruit and vegetables in the normal way.

## **What about water?**

The spray is extremely unlikely to enter the drinking water supply. However, contact with sprayed water is not anticipated to cause any health problems.

## **Follow-up**

Further information about the spraying programme can be found on the Ministry of Health's Website – [www.moh.govt.nz](http://www.moh.govt.nz) – under News and Issues.

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