Exotic mosquitoes

There are over 2500 different species of mosquitoes in the world.

Not all mosquitoes carry or transmit human diseases, attack or come into contact with humans, or have the ability to survive in our temperate climate. However, there are some mosquito species which are competent vectors of disease organisms. These species, if introduced into New Zealand, could have a significant impact on public health.

New Zealand, including the Chatham Islands, supports 15 species of mosquito. Over the last decade there have been a number of interceptions of exotic mosquitoes with the potential to become established in New Zealand.

The exotic mosquitoes currently on the Unwanted Organisms Register include:

All mosquitoes of the genus Anopheles (over 300 species although not all are confirmed as vectors of disease)
Aedes aegypti (yellow fever mosquito) Aedes albopictus (Asian tiger mosquito)
Aedes camptorhynchus (southern saltmarsh mosquito) Aedes japonicas (Japanese rockpool mosquito)
Aedes polynesiensis (Polynesian mosquito) Aedes scutellaris
Aedes togoi

Aedes vigilax (northern saltmarsh mosquito)
Culex annulirostris (common banded Mosquito)
Culex gelidus (frosty mosquito)
Culex pipiens pallens (northern house mosquito) Culex sitiens
Ochlerotatus atropalpus (rockpool mosquito) Ochlerotatus sierrensis (western tree hole mosquito)

Aedine species lay eggs individually above the water line in containers. These eggs are desiccation resistant and can survive for long periods without water. Some species (eg, the northern and southern saltmarsh mosquito) have also been reported to survive as larvae during dry seasons, within damp mud of groundwater habitats.

Key facts about mosquitoes

A single female can lay over 200 eggs at a time.

Some mosquito eggs are desiccation resistant and can survive for months or years.
All mosquitoes need water to complete their life cycle.

Not all species bite humans – some prefer birds, horses, or other animals.
Females require blood feeds to support egg production; males feed only on plant nectar.
Some mosquitoes can fly considerable distances, while others remain close to their larval habitats.
Mosquitoes do not develop in grass or shrubbery, although

adults frequently rest in these areas during daylight hours.

Northern house mosquito

Mosquitoes are responsible for more human deaths than any other living creature.

Life cycle of a mosquito

The mosquito life cycle has 4 stages.

1. The eggs are laid in water. (Southern saltmarsh mosquitoes lay their eggs above the surface of the water and the eggs do not hatch until there is a king tide or heavy rainfall to wet them.)

2. The larvae hatch out and swim in water. The larval stage is when the mosquito is easiest to detect and is most vulnerable to eradication measures.

3. The pupa is the resting stage between larva and adult, and is difficult to detect. 4. The adult is the flying, biting and egg-laying stage of the mosquito's life cycle.