

# **Biting Midges - FAQ**

Biting midges **do not** transmit diseases to humans, however, the nuisance caused by these tiny inspects can be severe, especially in areas near floodplains, wetlands, and other water bodies.

## What are biting midges?

Biting midges are a group of biting flies that belong to the family Ceratopogonidae. Adult biting midges are typically very small (usually less than 4 mm long) and a dark colour. Their lifecycle from egg to adult is up to eight weeks.

Only the female midge bites and requires a blood meal to fertilise their eggs. They are attracted to human habitation, resting on screens, fences and vegetation while waiting to feed. Some species can travel up to three kilometres from the breeding sites in search of this meal. Female midges will bite on areas of exposed skin, often on the face, scalp, and hands.

Midges breed in thin films of water, laying their eggs in wet soil, such as mud and sand. This protects the developing larvae from chemical treatment and predators. The whole life cycle from the laying of eggs to hatching of adults can take 3-10 weeks, depending on species and environmental conditions, particularly temperature.

### Where are they most active?

- Around dusk and dawn
- when weather becomes warmer at 27°C and above
- As wind increases
- With humidity, except when it is raining
- During warmer summer months
- It is thought that adults emerge from the mud all at once in response to the moon cycle

#### **Treatment and Control**

Biting midges are believed to be one of the most complicated pest species to control and eliminate. This is because there are no midge-specific insecticides available. When chemical control is applied in the natural environment to treat the larvae they are almost impossible to reach when protected in the mud.

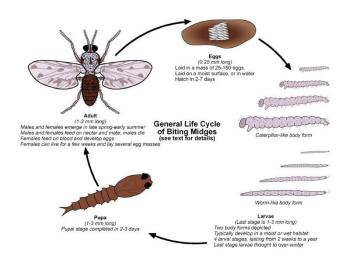
Chemical treatment of adult midges is available through barrier treatment and fogging. Both of these methods are short term and not 100% effective. Fogging will only affect the midge when it comes into contact with the mist and can kill all insects.

Barrier treatments with a residual insecticide applied to walls, screens and vegetation is more effective and can be applied around the home with a residual insecticide. As the midges land on the treated walls and screens they pick up a lethal dose of insecticide. Similar to fogging, barrier treatments can kill many other insects around the home.



#### **Household and Personal Protection**

- Flyscreens Biting midges can penetrate ordinary flyscreens in search for blood meals. Spraying a residual (surface) insecticide on flyscreens can help keep midges out of the home. Fine mesh flyscreen is available to keep midges out
- Fans Electric fans inside the home and outside entertainment areas can be used to increase air movement as midges prefer still conditions
- Lighting Midges are attracted to lights, LED or yellow lights are recommended.
- Barrier treatments A residual insecticide can be applied to external surfaces such as house walls, solid fences, and garden vegetation. This can reduce midge numbers for up to six weeks, but it is reliant on the midge resting on the surface
- Repellents Mosquito coils, lanterns and space sprays can be effective in controlling midges provided there is little air movement. Personal insect repellents should also be applied
- Protective clothing Long sleeves and long trousers will give good protection as well as wearing a hat and gloves when gardening
- Gardens Avoid watering your garden around sunset as it can create humid conditions that will attract midges. Keep lawn mowed and garden maintained to reduce areas where they can rest.



### Hints for around the home:

- Install Led or dull house lights
- Increase air movement
- Avoid watering the garden around sunset
- Use insect repellents and cover up at dusk and dawn
- Reduce vegetation around the home
- Check flyscreens on windows and doors
- Barrier treatment with a residual insecticide spray