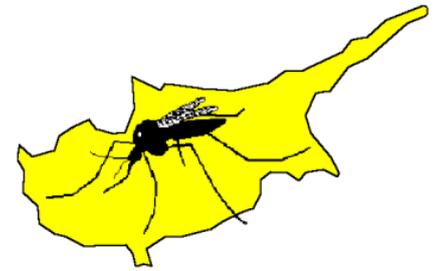




# Joint Services Health Unit

## RAF Akrotiri Mosquito Control and Bite Prevention Information



### Introduction

The Eastern Mediterranean is a haven for biting insects such as sand flies, midges and mosquitoes. The Akrotiri peninsula is over 100 square kilometres, mainly consisting of Salt Lake, salt marshes, coast line, forest and vast open bondu; all of which are excellent breeding and hibernating grounds for mosquitoes.

### Why are we interested in mosquitoes?

Although mosquitoes are predominantly a biting nuisance in Cyprus, in other countries they can spread some debilitating diseases such as Malaria and West Nile Virus.

### Types of Mosquito in Cyprus

There are over 23 species of mosquito in Cyprus. In the WSBA we are primarily concerned with 3 species; the Saltmarsh Mosquito, the Marine Mosquito and the Domestic Mosquito. In and around our community we mainly find the Domestic Mosquito whereas along the Akrotiri and Limassol coast line and inner peninsula we mainly find the Marine Mosquito and Saltmarsh Mosquito.



Figure 1. Native adult mosquito



Figure 2. Native mosquito larvae

### What measures are being taken by JSHU to control mosquitoes?

JSHU undertake an extensive mosquito control programme throughout the year across the entire peninsula, **including throughout the current Covid-19 pandemic**. The majority of our work is undertaken out of sight, both geographically (salt marsh species of mosquito can fly up to 40 miles) and during unsociable hours.

Adult mosquito surveillance is undertaken at over 2,000 locations across the Akrotiri peninsula. During the peak breeding season (January-May) a further 1,500 larval (infant stages) monitoring locations are also surveyed.

Data is collected and analysed by the JSHU Entomologist who can tell us the species and GPS location of any hot spot breeding. This information informs and adapts our control programme. As an average, JSHU undertake over 250 mosquito treatments a week.

JSHU No.1 Detachment (RAF Akrotiri) have 23 trained pest controllers and 8 vehicles for the treatment of the peninsula. Three of these vehicles have mounted liquid and mist sprayers designated for treating all mosquito breeding and harbourage locations. This includes applying larvicide to standing water where mosquitoes breed and using insecticidal mists to kill adult mosquitoes in and around domestic and working accommodation. Both measures significantly reduce the amount of biting insects and mosquitoes, but they will never be 100% effective given the way in which mosquitoes have adapted to both the natural and manmade environments in Cyprus. Therefore, we all have a responsibility to help with the battle against biting insects and the mosquito.



*Figure 1. Vehicle mounted liquid sprayer treating Akrotiri Salt Lake*

### **What can you do to help yourself and JSHU?**

Mosquito breeding is prolific. The female mosquito can lay over 200 eggs following a bloodmeal, the life cycle is then usually complete within 8-10 days. We will never completely eradicate mosquitoes due to the topography and climate of the peninsula, but we can significantly reduce the population size by taking some very simple measures. Help us to help you!

- Remove standing water following rainfall (plant pots, bins, children's toys and any other items that may contain water in your garden and workplace). Mosquitoes need water to lay their eggs and for their larvae to develop.
- Dismantle and store your swimming pool at the end of summer. Pools that are not maintained or liners left on the floor accumulate stagnant water. A couple of centimetres of water is sufficient to breed hundreds of thousands of mosquitoes.

- Report blocked drains and broken drain lids. Mosquitoes will use any amount of standing water for breeding.
- Keep your garden well maintained. Mosquitoes hibernate in long grass and overgrown shrubs. Shelter of this nature also prevent them from dehydrating and dying at an earlier stage.
- Maintain fitted fly screens on doors and windows. Report defects to the CSP helpdesk for repair if required.
- Use insecticidal aerosols inside the house especially before bed time as this will kill any mosquitoes that have entered throughout the day. Remember to follow the manufacturer's instructions.
- Avoid being outdoors at dusk and dawn (mosquitoes are most active at this time). If you must go out, cover as much of the skin as possible with clothing and apply a repellent to any remaining exposed skin. Repellents containing DEET are more effective.
- When applying repellents, use them frequently, especially in the warmer months when you perspire.
- Although less common, some mosquito species do bite throughout the day, so remember to adopt your protection measures when walking through areas that are wooded or contain dense vegetation (up on the cliffs and bondu areas).
- Please remember it's not just mosquitos that bite and the bite prevention measures given above are just as relevant for also protecting you against biting sand flies and midges.

### **Further advice**

Further advice is available from No.1 Detachment, JSHU. Phone number +357 2527 6397