

# Mosquitoes and other biting flies: information for horse owners

A fact sheet prepared by Dr Craig Williams, University of South Australia, for Horse SA

## Why protect horses from biting flies?

Horses are vulnerable to bites from blood-feeding insects, such as mosquitoes, horse flies and ceratopogonid sandflies (a.k.a. no-see-ums, biting midges). This puts them at risk from skin irritation, distress, and diseases. Being very large animals that largely live outside, horses can be hard to protect from insect bite. However, there are some commercially available products and newly developed techniques that could be effective, although little is known about how well they work in different environments.

## Disease risks

In addition to the distress that biting flies cause, horses are also vulnerable to diseases such as, Kunjin, Murray Valley Encephalitis and Ross River fever. All three are caused by viruses spread by mosquitoes. In 2011, hundreds of horses in southern and eastern Australia became ill with infections from these viruses. There are no vaccines to protect animals against these viruses, so mosquito control and biting prevention are the only ways to prevent infection.

## Protection options

- 1. Dressing and/or treating the horse:** a range of garments (some of which are impregnated with insecticide) can be used to cover parts of the horse. Topical applications of insecticide and repellents can also be made, with some products registered especially for use on horses.
- 2. Modification of stables:** recent evidence has become available that the treatment of nearby fencing and vegetation with residual insecticides can reduce biting rates in domestic yards.
- 3. Local environmental management:** breeding sources can be controlled by removal, modification or chemical treatment. This may be up the property owner, or if on public land, then local government staff.

## Further information:

Contact your local government environmental health officer, Primary Industries SA or Craig Williams, Medical Entomologist at the University of South Australia.

## Flies (Diptera) that bite horses



### Mosquitoes (*Culicidae*)

Sources: water in pools, containers, tanks etc



### Horse flies (*Tabanidae*)

Sources: muddy sections of ponds, lakes and wetlands.



### Biting midges (*Ceratopogonidae*)

Sources: wet mud banks of streams, pools and dams



Mare with mesh garments to protect from insect bite.  
Photo: Steff Wilson