

# Black flies—a public health risk after a flood

The number of black flies (*Austrosimulium*) can increase following a flood or heavy rain, particularly in inland areas. While black flies do not transmit disease, allergic reactions and bacterial skin infections may occur from bites and scratching the bites.

Black flies are aggressive biters that are found in areas around streams and rivers. They breed in running water—but once flood water recedes the number of black flies rapidly decrease. Black flies are active only during the day and do not bite at night. Their peak activity period tends to occur from sunrise to mid-morning (10 am) and late afternoon (4 pm) to sunset.

Female black flies are blood feeders—their bites can itch and persist for several days. Anticoagulants—a blood thinner that stops the blood from clotting—injected into the bite site by black flies can cause allergic reactions in sensitive individuals.

## Signs and symptoms

The range of signs and symptoms associated with bites can include:

- painful, itchy bite lesions
- urticaria (itchy raised skin rash)
- cellulitis (hot, red, swollen and painful skin and underlying tissue infection).

## Treatment

Black fly bites should be managed to prevent secondary skin infections:

- Apply calamine lotion or another anti-pruritic preparation to bite areas to prevent itching.
- If bite areas become inflamed, clean with soap and water at least once daily, apply an antiseptic lotion and keep covered with a dry dressing.
- Keep affected limbs elevated.
- Wash hands before and after touching open wounds.
- Observe skin sores.
- If skin sores become hot, red, swollen and painful, seek medical attention immediately.

## Prevention

Black fly bites can be avoided by:

- applying insect repellent in accordance with manufacturers recommendations. Personal repellents containing DEET or picaridin tend to last longer than other repellents depending on the concentration. Repellents containing less than 10 per cent DEET or picaridin are considered safe for children, however the use of topical repellents is not recommended for infants under three months of age. Young children should not apply repellents themselves. Repellents should be applied to the hands of a carer first, and then applied evenly to the child's exposed skin.
- using physical barriers, such as nets on prams and cots, to protect infants less than three months of age.

It is recommended:

- Where possible, avoid outdoor activity during the morning and afternoon.
- Wear light coloured loose fitting clothing when contact with black flies is likely.
- Keep shirt sleeves and your shirt front closely fastened (shirts with zippered fronts keep flies out better than buttoned shirts), and tuck trousers inside socks or high boots.
- Ensure insect screens on doors and windows are intact.
- Use a knock-down insect spray in living areas.

## Further information:

- Queensland Health  
[www.health.qld.gov.au/goodhealthintnq/topics/wound.asp](http://www.health.qld.gov.au/goodhealthintnq/topics/wound.asp)  
[www.health.qld.gov.au/disaster](http://www.health.qld.gov.au/disaster)
- Department of Medical Entomology  
<http://medent.usyd.edu.au/arbovirus/mosquit/mosquitoes.htm>
- Contact your nearest Public Health Unit.

## For general information, contact your local Public Health Unit.

Brisbane South  
Bundaberg  
Cairns  
Charleville  
Darling Downs  
Gold Coast

Tel: 3000 9148  
Tel: 4303 7500  
Tel: 4226 5555  
Tel: 4656 8100  
Tel: 4631 9888  
Tel: 5668 3700

Hervey Bay  
Mackay  
Metro North  
• Brisbane Office  
• Moreton Bay  
Mount Isa

Tel: 4184 1800  
Tel: 4911 0400  
Tel: 3624 1111  
Tel: 3142 1800  
Tel: 4744 9100

Rockhampton  
Sunshine Coast  
Toowoomba  
Townsville  
West Moreton

Tel: 4920 6989  
Tel: 5409 6600  
Tel: 4631 9888  
Tel: 4753 9000  
Tel: 3413 1200