

Black flies

Black flies (*Austrosimulium* sp.; Family Simuliidae) are aggressive biters that are found in areas around streams and rivers. The simuliid family is widespread in Australia, reaching a considerable distance inland, but the most voracious attacks in north-eastern parts of Australia are caused by *Austrosimulium pestilens*.

The black flies breed in running water, and populations can increase following a flood or heavy rain. Adult flies commonly emerge in immense numbers 10 to 14 days after commencement of flooding and the females viciously attack humans and animals. Once flood water recedes the number of black flies rapidly decreases. While black flies do not transmit disease, allergic reactions and bacterial skin infections may occur from bites and scratching the bites.

Signs and Symptoms:

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:

To prevent skin infections from black fly bites:

- apply calamine lotion or another anti-pruritic preparation to bite areas to prevent itching
- keep affected limbs elevated.
- wash hands before and after touching open wounds.
- watch skin sores for signs of infection.

If the bite areas become inflamed:

- clean with soap and water at least once a day
- apply an antiseptic lotion
- keep covered with a dry dressing.

If skin sores become hot, red, swollen and painful, see your doctor immediately.

Transmission:

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 then late afternoon (4 pm) to sunset.

Female black flies are blood feeders, and the bites can itch and persist for several days.

Black flies inject anticoagulants (blood thinners that stop the blood from clotting) into the bite site. This can cause allergic reactions in sensitive individuals.

Prevention:

Black fly bites can be avoided by:

- applying insect repellent
- using physical barriers, such as nets on prams and cots, to protect babies under three months old
- avoid outdoor activity during the morning and afternoon when possible
- keep your shirt sleeves and front closely fastened (shirts with zippered fronts keep flies out better than buttoned shirts),
- 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.

Personal repellents containing DEET or picaridin tend to last longer than other repellents, depending on the concentration. Always use repellent in accordance with manufacturer's instructions.

Children should not be allowed to apply their own repellents and carers should be cautious not to apply excessive amounts of repellent. Repellents should be applied to the hands of a carer first, and then applied evenly to the child's exposed skin.

Help and assistance:

URL: <http://conditions.health.qld.gov.au/HealthCondition/condition/20/122/814/black-flies>

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- call 13 QGOV (13 74 68) for your nearest [Hospital and Health Service Public Health Unit](https://www.health.qld.gov.au/system-governance/contact-us/contact/public-health-units/default.asp) (<https://www.health.qld.gov.au/system-governance/contact-us/contact/public-health-units/default.asp>)
- call 13 HEALTH (13 43 25 84) for practical health advice
- read the [insect repellent guidelines](http://www.qld.gov.au/health/conditions/all/prevention/mosquito-borne/index.html) (<http://www.qld.gov.au/health/conditions/all/prevention/mosquito-borne/index.html>) from the University of Sydney.