

Head lice and nits

What are head lice?

Head lice are tiny wingless insects (2-3mm long) that live in hair and feed on human blood after biting the skin. They vary in colour from cream to brown/black. They crawl quickly on the scalp and are difficult to see. They can only survive on humans.

What are nits?

'Nits' is the common name for the small eggs that are laid by head lice. They are the size of a grain of salt, yellow-white in colour and are found firmly attached to the hair close to the scalp. Nits can be found behind the ears, the back of the neck and the fringe. Dead nits are often black in colour and are found away from the scalp.

Life cycle of head lice

Nits are laid on the hair shaft (an area within 1cm of the scalp where the hair comes out from) and take about 7-10 days to hatch into head lice. They will only hatch in a moist, warm environment such as the scalp. If the lice are not on the head they die very quickly, generally within 24 hours, although in the NT's hot environment they can live longer than in other places in Australia.

How are head lice spread?

Head lice are spread by direct hair to hair contact with another person who has head lice. Anyone can catch head lice; regardless of cleanliness. Head lice cannot jump or fly from head to head but may be passed on by sharing hats, brushes and combs. Head lice are unlikely to be spread through bedding, furniture or carpets.

Head lice are commonly found in primary school-aged children because of their frequent close, personal contact with each other.

What are the symptoms?

Head lice may cause itch and irritation of the scalp, leading to sleep disturbance and behavioural problems. People with head lice may not always have symptoms, therefore it is important to routinely inspect for head lice. Head lice do not spread any infectious diseases; however, scratching resulting in skin breakage may lead to skin infections.

Treatment of Head Lice

The management of head lice is a two-step process, the manual removal of head lice and treatment with synthetic or natural insecticides or other chemicals.

Treatment should only be applied when live lice are found on the head. If more than one person in your family or household has been infested with head lice, treatment should be applied at the same time to the rest of family of household to break the cycle.

If a child is found to have head lice, their school, play group and child care centre etc. should be notified so that other children can be checked and treated if necessary.

Manual removal of head lice

You will need a general comb and a fine tooth head lice comb to manually remove the lice. Eggs may be removed by the combing process or can be picked off by hand but some may be missed. The wet combing technique (see the technique below) is recommended for the manual removal of lice.

A silicone based occlusive product is recommended to manually remove lice. Only 1 treatment is needed and another should be applied again in 7 days when an occlusive silicone based agent is used. Occlusive products are effective in killing eggs (if they contain nerolidol).

Hair conditioner can be used but is less effective and is not effective against eggs. Conditioner immobilises lice so that they can be combed out and manually removed, it does not kill the lice. If using conditioner, this technique should be carried out every second day until no live head lice have been found for 10 consecutive days

The wet combing technique:

1. Apply occlusive product or conditioner to dry hair – use enough to cover the whole scalp and all hair from roots to tips.
2. Use a normal comb to remove tangles and comb product evenly throughout the hair.
3. Use a fine tooth/head lice comb to comb hair from scalp to tips.
4. Wipe the comb onto a tissue after each stroke to remove immobilised lice.
5. Comb all hair at least twice and leave product in hair for recommended timeframe (see product instructions).
6. Thoroughly wash remaining product from hair.

Treatment with synthetic or natural insecticides or other chemicals

Silicone based occlusive products are the safest and most effective at killing head lice and are now the recommended head lice treatment in the NT. All preparations must be applied strictly according to the manufactures' instructions. If a product doesn't seem to work, speak with your chemist about a product with a different active ingredient. Be aware no treatment kills all the eggs.

When using a synthetic or natural insecticide or other chemicals:

- Apply the first treatment to clean, dry hair.
- A second treatment should be applied 7-10 days from the first treatment to kill the young lice that have hatched from the eggs remaining after the first treatment

If treatment does not work

If live lice are found immediately after treatment, the treatment has not worked / it has failed.

Treatment failures may be caused by:

- inappropriate treatment technique,
- hatching of lice from eggs since the last treatment,
- resistance of head lice to a particular treatment product,
- re-infestation from others who have been inadequately or not treated.

Eggs found more than 1 cm from the scalp do not represent treatment failure, they are usually dead or hatched eggs. Dead nits are dark/black in colour.

If treatment does not work, you can:

- change to a different category of treatment product. If you have used an insecticidal product, change to an occlusive product.
- Increase the frequency of fine combing (e.g. twice daily).
- Seek advice from a doctor or pharmacist.

Prevention of head lice

There are no products available to prevent head lice. When lice are present in the community, simple strategies for prevention include:

- weekly hair and scalp checks,
- wet combing frequently with nit combs,
- avoid sharing brushes, combs, hats, pillows,
- washing brushes and combs once a week in hot soapy water, and
- keeping long hair braided or tied back.

It is recommended that all children have their hair and scalp checked for head lice 1 week prior to returning to school. Effective monitoring and treatment during school holidays reduces the spread of head lice throughout the community.

Contact

For more information contact the [Centre for Disease Control](#).

Location	Phone
Darwin (Top End Region)	(08) 8922 8044 1800 008 002
Katherine (Big Rivers Region)	(08) 8973 9049
Tennant Creek (Central Australia Region)	(08) 8962 4259
Alice Springs (Central Australia Region)	(08) 8951 7540
Nhulunbuy (East Arnhem Region)	(08) 8987 0357

Resources

- [head lice advice \(pdf\)](#)
- [kid's nit booklet \(pdf\)](#)
- [head lice advice posters \(pdf\)](#)
- [head lice advice posters \(docx\)](#)