While children are at school many families will have contact with head lice. The information contained here will help you treat and control head lice.

Catching head lice
Head lice have been around for many thousands of years. Anyone can get head lice.

Head lice are small, wingless, blood sucking insects. Their colour varies from whitish-brown to reddish-brown. Head lice only survive on humans. If isolated from the head they die very quickly (usually within 24 hours).

People get head lice from direct hair to hair contact with another person who has head lice. This can happen when people play, cuddle or work closely together.

Head lice do not have wings or jumping legs so they cannot fly or jump from head to head. They can only crawl.

Finding head lice
Many lice do not cause an itch, so you have to look carefully to find them.

Head lice are found on the hair itself and move to the scalp to feed. They have six legs which end in a claw and they rarely fall from the head. Louse eggs (also called nits) are laid within 1.5 cm of the scalp and are firmly attached to the hair. They resemble dandruff, but can't be brushed off.

Lice can crawl and hide. The easiest and most effective way to find them is to follow these steps:

Step 1 Comb any type of hair conditioner on to dry, brushed (detangled) hair. This stuns the lice and makes it difficult for them to grip the hair or crawl around.

Step 2 Now comb sections of the hair with a fine tooth, head lice comb.

Step 3 Wipe the conditioner from the comb onto a paper towel or tissue.

Step 4 Look on the tissue and on the comb for lice and eggs.

Step 5 Repeat the combing for every part of the head at least four or five times.

If lice or eggs are found, the hair should be treated.

If the person has been treated recently and you only find empty hatched eggs, you may not have to treat, as the empty eggs could be from a previous episode.

Treating head lice
Treating head lice involves removing lice and eggs from the hair. There are two ways you can do this:

1. Buying and using a head lice lotion or shampoo, following the instructions on the product
2. Using the conditioner and comb method (described under ‘finding head lice’) every second day until there have been no live lice found for ten days.

If you choose to use a head lice product always read and follow the instructions provided with the product carefully. The following points may also be helpful:

- Head lice products must be applied to all parts of the hair and scalp.
- No treatment kills all of the eggs so treatment must involve two applications, seven days apart. The first treatment kills all lice; the second treatment kills the lice that may have hatched from eggs not killed by the first treatment.
- Cover the person’s eyes while the treatment is being applied. A towel is a good way to do this.
- If you are using a lotion, apply the product to dry hair.
- If you are using a shampoo, wet the hair, but use the least amount of water possible.
- Apply the treatment near the scalp, using an ordinary comb to cover the hair from root to tip. Repeat this several times until all the hair is covered.

There is no need to treat the whole family - unless they also have head lice.

Concentrate on the head - there is no need to clean the house or the classroom.

Only the pillowcase requires washing - either wash it in hot water (at least 60°C) or dry it using a clothes dryer on the hot or warm setting.
Testing resistance

Head lice products belong in one of the following categories depending on the active compound they contain:

- pyrethrins
- synthetic pyrethroids (permethrin, bioallethrin)
- organophosphates (malathion or malathion)
- herbal with or without natural (non-chemical) pyrethrins.

Insecticide resistance is common, so you should test if lice are dead. If they are, treat again in seven days using the same product. If the lice are not dead, the treatment has not worked and the lice may be resistant to the product and all products containing the same active compound. Wash off the product and treat as soon as possible using a product containing a different active compound. If the insecticide has worked, the lice will be dead within 20 minutes.

Any head lice product could cause a reaction and should be used with care by women who are pregnant or breastfeeding, children less than 12 months old and people with allergies, asthma or open wounds on the scalp. If you are unsure, please check with your pharmacist or doctor.

Head lice eggs

Head lice eggs are small (the size of a pinhead) and oval. A live egg will ‘pop’ when squashed between fingernails.

Dead eggs have crumpled sides and hatched eggs look like tiny boiled eggs with their tops cut off.

Regulations

According to the Public Health and Wellbeing Regulations 2009, children with head lice can be readmitted to school or children’s service centres after treatment has commenced.

The department recommends a child with head lice can be treated one evening and return to school or children’s service centres the next day, even if there are still some eggs present. There is no need to miss school or child care because of head lice.

Preventing head lice

Check your child’s head regularly with comb and conditioner. There is no research to prove that chemical or herbal therapies can prevent head lice.

Further information

The following website offers further information:

The life cycle of head lice

Pediculus humanus captis

1. Egg is laid on hair shaft. Egg is called a “nits”
2. Louse emerges after six to seven days
3. First moult two days after hatching
4. Second moult five days after hatching
5. Third moult 10 days after hatching
6. Emerging from their third moult as adult lice, the female and slightly smaller male begin to reproduce
7. Female lays first egg one or two days after mating
8. Female can lay approximately three to eight eggs per day for the next 16 days
9. Having lived 32 to 35 days the louse dies
10. 0 days
11. 6 to 7 days
12. 8 to 9 days
13. 16 to 17 days
14. 17 to 19 days
15. 19 to 35 days
16. 32 to 35 days

The information in this pamphlet is based on the research conducted and written by Associate Professor Rick Speare and the team of researchers at School of Public Health and Tropical Medicine, James Cook University.

Cover concept by students from St. Patrick’s Primary School, West Geelong. Life cycle diagram courtesy of Nitpickers Qld.

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