

## Head Lice Information

(taken from *Staying Healthy in Child Care*, 4<sup>th</sup> Edition)

### DESCRIPTION

Head lice are tiny insects. They do not have wings, so they cannot fly. Head lice have strong claws and swing from hair to hair – they cannot jump. They live on the hair and suck blood from the scalp. Head lice can only be spread from one person to another by direct head-to-head contact.

Anyone can get head lice – they have no preferences for cleanliness, hair colour, hair type, ethnicity or age. Itching is often the first thing that raises concern about head lice; however it is not a reliable sign of head lice.

Head lice need to spend their entire life on human heads to survive. Head lice will die from dehydration within 6 – 24 hours when removed from the human head, depending on humidity and when they were last fed. Research has shown:

- Sharing hats does not spread or increase the chance of getting head lice. Researchers examined hats worn by 1000 school children and found no head lice even when many head lice were found on the children's heads.
- Placing hair grooming implements in a container of very hot water (60 deg C) for at least 30 seconds will kill any head lice caught in the comb after grooming. A domestic hot water service usually does not reach this temperature. If you do not have a thermometer, it may be easiest to use water shortly after it has gone off the boil.
- Head lice do not live in carpet – researchers examined 118 carpeted classroom floors and found no head lice or eggs. When the students from those rooms were examined, they had a total of 14,563 live head lice on their heads.

### INCUBATION PERIOD

The head louse starts as a small egg about the size of a grain of salt which the female louse glues to the base of the hair shaft. Most of these eggs (nits) are found in the hair behind the ears, at the back of the neck, or around

the crown and under the fringe. The eggs hatch in 7 – 10 days. They mature into an adult louse, which is a wingless insect 2 – 3 mm long with a flat body and six legs. The adult louse is capable of laying eggs 6 – 10 days after hatching.

### INFECTIOUS PERIOD

Head lice are contagious as long as the eggs or lice are alive. Live eggs are glued to the hair shaft, usually within 1.5cm from the scalp. (Nits found further than this away from the scalp are dead/already hatched.) Head lice can only survive on human heads, and they must feed every 6 hours or they will die from dehydration. Eggs must be on the head to hatch.

### DETECTION

Itching is often the first thing that raises concern about head lice; however it is not a reliable sign of head lice. You can have head lice and not know. Lice move fast in dry hair and are easy to miss. If you find head lice early, they are easier to treat. Everyone in the family (adults and children) needs to be checked.

Check everyone's head once a week. If a close contact has head lice, keep checking every 2 days until no lice are found for 10 consecutive days. If you find head lice you need to decide on a treatment option

### TREATMENT OPTIONS

The two most important things to think about when choosing and using treatments are safety and effectiveness.

#### Conditioner and Combing Treatment

Using hair conditioner and combing is the most effective way of finding, and treating, head lice. Conditioner and combing can be used for detection and/or treatment. The conditioner stuns the lice for some minutes so they can be easily removed. Conditioner and combing is reasonably inexpensive. It also avoids the use of head lice chemicals.

#### Technique

1. Untangle dry hair with an ordinary comb.
2. Apply hair condition to dry hair (white conditioner makes it easier to see the nits). Use

enough conditioner to thoroughly cover the whole scalp and all hair from roots to tips.

3. Use the ordinary comb to evenly distribute conditioner and divide the hair into four or more sections using hair clips.
4. Change to a metal head lice comb.
5. Start with a section at the back of the head. Place the teeth of the head lice comb against the scalp. Comb the hair from the roots through to the tips.
6. Wipe the comb clean on a tissue after every stroke. In a good light, check for head lice. Adult lice are easier to see – young lice can be difficult to see. A magnifying glass will help. You may see some eggs.
7. Comb each section twice until you have combed the whole head. If the comb becomes clogged, use an old toothbrush, dental floss or safety pin to remove the head lice or eggs. Continue combing the whole head until all the conditioner is gone.
8. Repeat the conditioner and combing every second day until you find no more head lice for 10 consecutive days. It is important to continue for 10 days to remove all the adult lice and any young lice that hatch from the eggs, before they can reproduce.

### Chemical Treatment

When choosing a chemical treatment product, ensure you only choose chemical treatments that are designed specifically to treat head lice. Choose only chemical treatments which have an 'Aust. L' or 'Aust. R' number on the label. These products are licensed or registered with the Therapeutic Goods Administration (TGA) in Australia. This means they are approved for safety. Be wary of chemical treatments which are not officially approved.

Chemical treatments are divided into 4 groups according to the active ingredient. These groups are: Pyrethrins, Synthetic Pyrethroids, Organophosphates and Herbal and Essential Oils.

If you use a chemical treatment and it does not kill the head lice, choose a product with a different active ingredient from a different group. Products from the

same group will probably not work as the active ingredient is likely to be the same. Your pharmacist can help you choose a product.

There is no chemical treatment that will kill eggs. The eggs will continue to hatch after the treatment. Therefore it is essential to apply the second treatment one week later to kill any young lice that have hatched. The conditioner and combing treatment can be used in between to help remove lice that are hatching.

There is no chemical treatment that will work for everyone. Resistance to chemical treatments is a problem in Australia. Research into this problem is continuing. The only way of dealing with resistance is to check for effectiveness every time you use a chemical treatment.

**Effectiveness** To check for effectiveness after treating for head lice, use a metal, fine tooth head lice comb to comb all of the hairs from roots to tips. After each sweep, wipe the combings onto a tissue. Repeat until all the hair has been combed at least twice. Wait 5 minutes. Observe the head lice for movement.

If all the head lice are dead the treatment has been effective. Continue to apply the same product every 7 days of a maximum of three times, to kill the lice hatching from the eggs. After third application, if lice are still present, continue using conditioner and combing treatment only.

If some lice run around or wave their legs and antennae, the treatment has not been effective. Select a product with a different active ingredient. Show the pharmacist your current treatment and request advice on choosing an alternative treatment, or consider using the conditioner and combing technique.

### Electric Comb Treatment

Fine tooth combs with a small electric current running through them are also available. The electric current electrocutes the lice, and the comb removes them. This treatment is done on dry hair. Like the other two treatments, the hair must be thoroughly combed, in sections, every two days until live head lice have not been seen for 10 consecutive days, to break the head lice lifecycle.