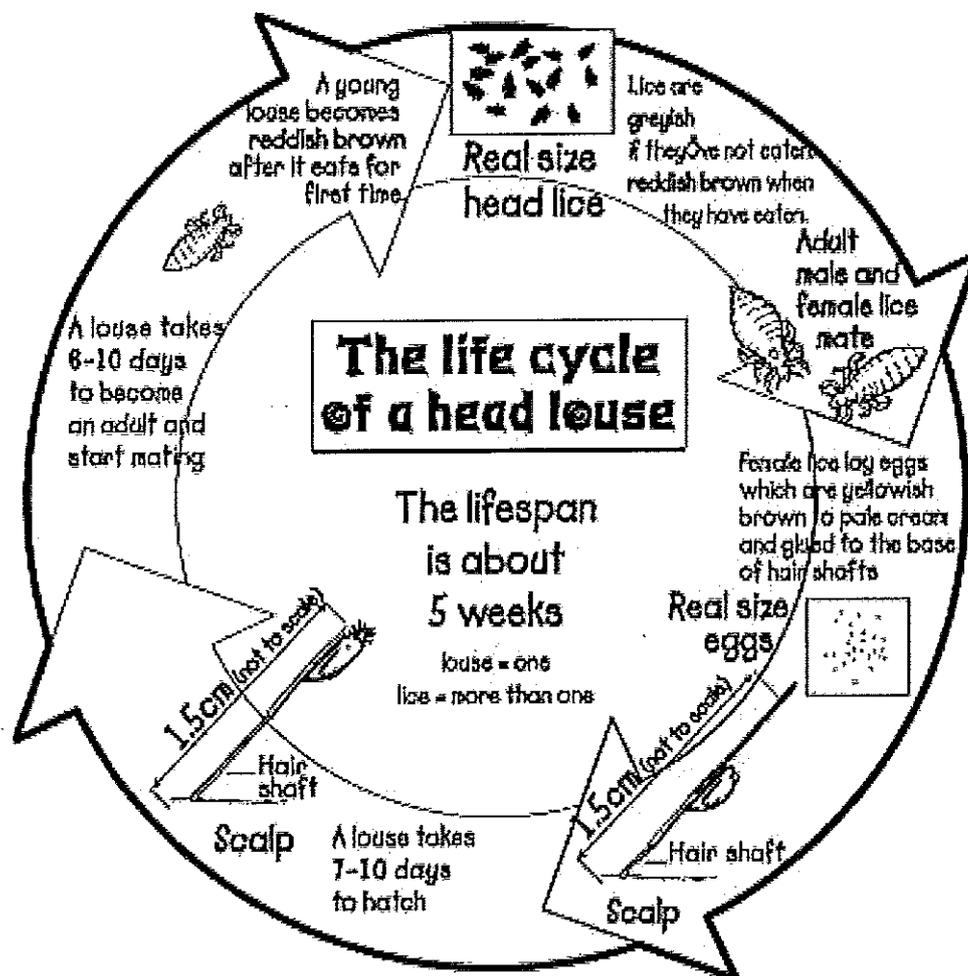


# Head lice: the facts



## Some facts about head lice:

- 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**.
- Head lice can only survive on **human heads**. They live on the hair and suck blood from the scalp. Head lice must feed every six hours or they will die from dehydration.
- Head lice can only be spread from one person to another by direct head-to-head contact.
- The female louse lays five to 12 eggs per day (up to 300 in her life time). Eggs remain strongly glued to the hair, even after hatching. Eggs are sometimes called nits.
- Live eggs need the warmth and moisture of the scalp to hatch and will be found up to 1.5cm from the scalp.
- Eggs that are further than 1.5cm from the scalp are either dead or hatched and do not require further treatment.
- At any one time, it is possible to have adult head lice, young lice and eggs.
- Anyone can get head lice – they have no preferences for cleanliness, hair colour, hair type, ethnicity or age.
- Only the insects (adults and young lice) can move from one head to another. Eggs cannot spread.
- Dandruff and hair particles can be mistaken for eggs.
- Head lice are a nuisance but they do **not** cause disease or illness.

## Detection (finding the head lice)

Itching is often the first thing that raises concern about head lice, however it is not a reliable sign of head lice.

### Why check for head lice?

You can have head lice and not know. Lice move fast in dry hair and are easy to miss. Itching is not a reliable sign. Most children who itch **do not** have head lice. If you find head lice early, they are easier to treat.

### Who should be checked for head lice?

Everyone in the family - adults and children.

### When to check for head lice?

Check everyone once a week. If a close contact has head lice, keep checking every 2 days until no lice are found for 10 consecutive days.

### How to check for head lice?

Using hair conditioner and combing is the most effective way of finding head lice. Conditioner and combing can be used for detection and/or treatment. (For more information see *Conditioner and combing; a technique for detection and/or treatment of head lice*).

### What exactly am I looking for?

Adult and young head lice.

### About the eggs ...

- Eggs will be glued to the hair. Those found within 1.5cm from the scalp mean an active condition. They will hatch and will need to be treated. If you find only eggs more than 1.5cm from the scalp and no adult or young lice, the condition is inactive and does not require treatment.

### About head lice combs ...

- Head lice combs are very fine toothed, made from plastic or metal and are designed to remove head lice. Some combs also remove some eggs.
- There are different types available: plastic, metal and electronic. Metal head lice combs with cylindrical teeth remove head lice and eggs better than combs with flat teeth. (For more information see – *Choosing a head lice comb*)

### Tips:

- Checking for head lice is easier to remember if you do it on the same day each week.
- Use the *head lice record* in this package to help you track the detection and treatment of head lice. If you need more copies of the record, contact the school.

We found head lice. As our children play together, you may like to check your child.



## Conditioner and combing : a technique for the detection and/or treatment of head lice

- Conditioner and combing is the most effective way of finding head lice.
- Conditioner and combing is also an effective way of treating head lice, particularly mild conditions.
- The conditioner stuns the lice for some minutes so they can be easily removed.
- Conditioner and combing is cheap. It also avoids the use of head lice chemicals (insecticides).
- Conditioner and combing is easy for older children to learn to do for themselves.
- Using conditioner and combing every two days between chemical treatments removes young lice as they hatch from the eggs. No insecticide will kill the eggs.

### For conditioner and combing you will need:

- white hair conditioner
- an ordinary comb
- a fine tooth comb
- hair clips
- white tissues or material
- good light
- a magnifying glass
- a mirror if combing yourself
- a plastic container
- an old toothbrush, safety pin or dental floss



# Treatment

It is recommended that you use:

- The conditioner and combing technique as a treatment alone or
- The conditioner and combing technique in between the use of a chemical treatment.

It is essential to check for effectiveness after each application of a chemical product (refer to instructions below). Some head lice are resistant to some chemical treatments. This means that this treatment will not be effective in killing head lice.

## Using Chemical Treatments:

- Use only chemicals designed to treat head lice.  
(Refer to Choosing and using chemical treatments safely and wisely)
- Apply chemical only if you actually find live head lice.
- Cover the child's eyes.
- Apply product to **dry hair** (if wet hair is advised in the instructions, use the least amount of water).
- Apply product thoroughly to scalp and all hairs from roots to tips.
- Comb through to spread evenly. Comb several times if hair is long.
- Leave product in hair for the time recommended by the manufacturer.
- **Check for effectiveness** – use a fine tooth head lice comb to comb all of the hairs from roots to tips. If product has dried, apply some water to moisten the hair. After each sweep, wipe the combings onto a tissue. Repeat until all hair has been combed at least twice.
- Wait 5 minutes for the head lice to dry off. Observe the lice for movement and decide if the treatment is effective or not.

### Ineffective:

Some lice run around or wave their legs and antennae.



Select a product with a **different active ingredient**. See Table of Products. Show the pharmacist your head lice record and request advice on choosing an alternative treatment or consider using the conditioner and combing

### Effective:

All lice are dead.



Apply same product every 7 days (maximum 3 times) to kill the lice hatching from the eggs. **Use conditioner and combing every 2 days** in between to improve the effectiveness of the treatment.

**After first application:** eggs will be present. In 7 days use conditioner and combing to detect lice. If lice are found apply product again.

**After second application:** if there are still lice, apply product again in 7 days.

**After third application:** if lice are still present, continuing using conditioner and combing only.

### Remember:

- anyone can get head lice
- check weekly, treat quickly and tell the school



# Choosing and using chemical treatments safely and wisely

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

## Choosing a chemical treatment product

- Choose only chemical treatments 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.

## Four group concept

Chemical treatments are grouped according to the active ingredient (which is responsible for killing the head lice). If you use a chemical treatment and it does not kill the head lice, choose a product with a different active ingredient; that is, one from a different group (see table at right). Products from the same group will probably not work as the active ingredient will be the same. The Table of Products lists *some* chemical treatments currently available. New treatments continue to come on to the market. Your pharmacist can help you choose a product.

## Using chemical treatments

- Chemical treatments are **insecticides** (poisons) and need to be used with caution.
- Check for safety warnings about pregnancy, breast feeding and young children. If you have any questions about safety, check with your pharmacist.
- Use a chemical treatment only when you actually find head lice. This avoids unnecessary exposure to chemicals. Use the conditioner and combing technique to find lice.
- Chemical treatments do not repel head lice. They should not be used to prevent head lice.
- Chemical treatments are only safe when they are used as directed on the label. Overuse can damage the scalp.
- Many chemicals can be absorbed through the skin.
- Any chemical treatment may cause allergy or irritation. Discuss any concerns about side effects with your pharmacist.
- A chemical treatment is effective when it actually kills the head lice. To work properly, the chemical treatment must be in contact with the head lice at the right concentration and for the right amount of time. Make sure you follow the instructions carefully.
- No one chemical treatment will work for everyone. It is essential to check for effectiveness every time you use a chemical treatment.
- **No chemical treatment 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 technique can be used in between to help remove lice that are hatching.
- 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 (for more information see *Treatment*).
- If chemical products don't work or you have concerns about their use, conditioner and combing can be an effective treatment if used every 2 days until no head lice are found for 10 consecutive days.

## Table of Products

approved in Australia by the Therapeutic Goods Administration to April 2001.

| Active Ingredient                                      | Product Names   |
|--|---|
| 1. Pyrethrins  | Amcal Head Lice Foam<br>Banlice Mousse<br>Delva Formula PCT<br>Lyban Foam<br>Meditox Foam<br>Pyrenel<br>Pyrifoam Lotion   |
| 2. Synthetic Pyrethroids<br>(bioallethrin, permethrin) | Orange Medic<br>Orange Medic Plus<br>Paralice<br>Pyrifoam Head Lice Treatment<br>Quellada Creme Rinse<br>Quellada Head Lice Treatment   |
| 3. Organophosphates                                    | Cleansheen<br>Exolice Medicated Foam<br>HL 7<br>HLT<br>KP24 Foam<br>KP24 Lotion<br>Lice Rid<br>LX Medicated Foam  |
| 4. Combinations<br>Herbal<br>&<br>Essential Oils       | Herba Lice<br>Herbs for Headlice<br>Lice Attack<br>Lice Blaster New Improved<br>Lysout Gel<br>Lysout Spray<br>Natural Head Lice Treatment<br>Neutra Lice<br>Quit Nits Natural Head Lice Treatment<br>Sunspirit Aromatherapy Lice Scents to Kill<br>Tea Tree Lice Foam<br>Wild Child All Natural Head Lice Treatment |



## When treatment does not seem to work

It is very frustrating when you are doing everything that is recommended and nothing seems to work. Some possible reasons for this may include:

### Poor application of the product

- Whether using a hair conditioner or a chemical treatment, the product must be applied to all hairs, from the roots to the tips.
- If using a chemical product, it must be in contact with the head lice for the right amount of time. Leave the product on the hair for the time stated on the label.

### Applying only one treatment

- Applying any treatment only once will fail (conditioner and combing or chemical treatments). Even if the lice are killed or removed, the eggs will continue to hatch.
- If choosing the conditioner and combing treatment repeat every two days until there are no head lice found for 10 consecutive days.
- If choosing chemical treatments reapply usually one week later, paying careful attention to the instructions on the package.

### Resistance to chemical treatments

- Resistance is when the chemical treatment does not kill the head lice.
- You will not know if the head lice are resistant to the chemical treatment you are using before

you try it. The only way to know is to check for effectiveness after you have used it (see *Treatment*).

- Resistance can be a complex issue. Some lice don't die, some take longer to die.
- The best way of addressing resistance is to check for effectiveness at each treatment (See *Treatment*). Conditioner and combing is an effective method to use if resistance is a problem.
- The use of smaller doses of chemical products for prevention doesn't work and increases resistance.

### Catching head lice again

- Sometimes the treatment has worked, but you may have head lice again. This is a new head lice condition.
- By checking every week you will be able to manage a new head lice condition easily with conditioner and combing because you have caught the condition early and there will be fewer lice present.

Assistance is available. See information sheet *Who can help me?* and please contact the school administration with any concerns.



## What about the house and personal belongings?

Head lice need to spend their entire life on human heads to survive. They feed on the scalp by sucking blood and lay their eggs on the hair close to the scalp. Head lice will die from dehydration within 6 to 24 hours when removed from the human head, depending on humidity and when they last fed.

Recent scientific research in Queensland has clarified the following concerns:

### Hats

- Sharing hats presents no risk. It does not increase the chance of getting head lice.
- Researchers examined the hats worn by 1000 school children and found **no** head lice even when many head lice were found on the children's heads.

### Combs and grooming implements

- Place hair grooming implements in a container of very hot water (just after boiling) for at least 30 seconds. This will kill any head lice caught in the comb after grooming. It should be done by an adult.

- Be aware hot water burns like fire; be sure your child cannot reach their comb while it is in the container of hot water.

### Floors

- Researchers examined 118 carpeted classroom floors and found no head lice or eggs. When the students from those classrooms were examined, they had a total of 14 563 live head lice on their heads.

### Bed linen

- The pillow cases of people with head lice are a **very low risk** in spreading head lice. Any head lice found on pillow cases will die within 6 to 24 hours. Although pillow cases are a **very low risk**, you may want to use a hot wash or soak in hot water (just after boiling) for at least 30 seconds or place in a hot clothes dryer for 15 minutes.

There is no evidence to indicate that other household items are a risk of spreading head lice.

Time is precious – we are a busy family.  
We are using our time wisely by  
concentrating on our heads.

