

Head Lice in Primary Schools Kit

Presenters Notes



A Health
Promoting Schools
approach to
managing head lice



Queensland Government
Queensland Health
Education Queensland

Managing head lice in primary schools

Using a Health Promoting Schools approach

From the Head Lice in Primary Schools Kit



Presenter's Notes

Today we will discuss:



- what are head lice?
 - detection
 - treatment
- where can I get help?
- our school's commitment to managing head lice

What are head lice?

Head lice:

- are tiny egg laying insects
- can only survive on human heads
- grow to about 3.5mm (the size of a sesame seed or pinhead)
- have no wings, so they cannot fly
- are a nuisance *NOT* a health hazard
- have 6 legs with strong claws which are designed for holding tightly onto hair - these claws also prevent the lice from jumping
- **HEAD LICE DO NOT JUMP!!**

Head Lice in Primary Schools Kit - OHT Masters

4

Queensland Health • Education Queensland

Head lice:

- are tiny egg laying insects
- can only survive on human heads; they live on the hair and suck blood from the scalp; head lice must feed every 6 hours or they will die from dehydration
- grow to about 3.5mm
- have no wings, so they cannot fly
- are a nuisance *NOT* a health hazard; head lice do not cause any type of illness or disease
- head lice have strong claws and swing from hair to hair - **they cannot jump!**

Figure A

A head louse using its powerful claws
to grasp a hair shaft



**Source: Sally Speare and Rick Speare ©, School of Public Health and Tropical Medicine,
James Cook University, Townsville, 1998.**

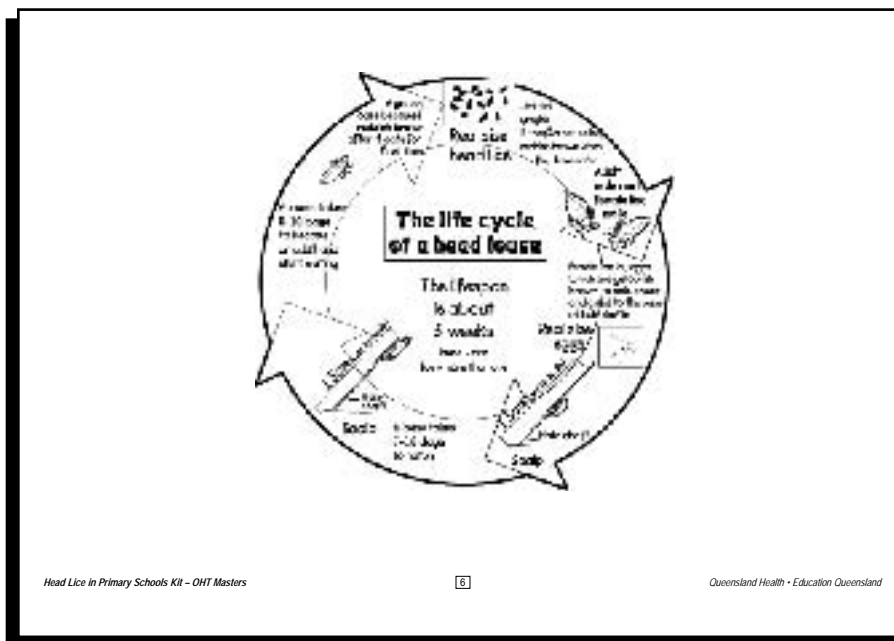
Head Lice in Primary Schools Kit – OHT Masters



Queensland Health • Education Queensland

Figure A

A head louse using its powerful claws
to grasp a hair shaft



- A head louse lives for approximately 5 weeks.
- 6 to 10 days after hatching, the louse is an adult and starts mating.
- The female only needs to mate once to fertilise all her eggs.
- She will then lay 5 to 12 eggs every day, totalling up to 300 in her lifetime.
- The eggs are laid near the scalp (up to 1.5cm).
- Eggs found on hair more than 1.5cm from the scalp will be hatched or dead because these eggs do not have the warmth and moisture needed to survive.
- Young head lice are called nymphs.
- At any one time it is possible to have live adult head lice, young head lice and eggs.
- Anyone can get head lice - they have no preference for cleanliness, hair colour, hair type 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 **do not** cause disease or illness.

Figure B

Head lice eggs on hair
and head louse on fingernail



Photo courtesy of Foundation Studios

Head Lice in Primary Schools Kit – OHT Masters



Queensland Health • Education Queensland

Figure B

Head lice eggs on the hair and a head louse
on the fingernail

Figure C

Live unhatched head louse egg attached to a hair shaft



Source: Sally Speare and Rick Speare©, School of Public Health and Tropical Medicine, James Cook University, Townsville, 1998.

Head Lice in Primary Schools Kit – OHT Masters

8

Queensland Health • Education Queensland

Figure C

Live unhatched head louse egg attached to a hair shaft.
This egg will be found within 1.5cm of the scalp.

- Notice how well attached the egg is to the hair shaft. The egg is glued onto the hair making them very difficult to remove.
- It is not necessary to worry about removing these eggs because effective treatment (using the conditioner and combing technique every 2 days) will ensure young lice hatching from these eggs will be removed.
- Eggs further than 1.5cm from the scalp are dead or hatched. You don't need to worry about dead or hatched eggs - they don't pose any health risks.

How do head lice spread?

- Head lice are like trapeze artists
 - they swing from hair to hair using their strong claws.
- Head lice need close head-to-head contact to spread from one person to another.
- Electrostatic charge from combing dry hair can fling head lice up to 1 metre.
- Only the young lice and adult lice can move from one head to another.



Head Lice in Primary Schools Kit – OHT Masters

9

Queensland Health • Education Queensland

- Head lice are like trapeze artists as they swing from hair to hair using their strong claws.
- They need close head-to-head contact to spread from one person to another. Heads need to be close together so that **the hair from one person touches the hair from another person**. You cannot get head lice by just standing next to someone with head lice.
- If a person with head lice combs their hair very fast (when the hair is dry), an electrostatic charge can be created which may throw head lice up to a metre away. This doesn't happen with wet hair, **only with dry hair**. This may be why some people think that head lice can fly but it's not true.
- Only the young lice and adult lice can move from one head to another. Eggs cannot spread from head to head.

Who gets head lice?

- We can ALL get head lice.
- They have no preference for particular groups.
- Young children attract them more easily because of head-to-head contact during play.
- Adults can get head lice from children and can re-infect children.



Head Lice in Primary Schools Kit – OHT Masters

10

Queensland Health • Education Queensland

- We can all get head lice.
- It is very common. In one area of Queensland, research has shown that 24% of school children have head lice at any one time.
- Some people try to blame someone for getting head lice and often people point the finger at someone who they think has poorer hygiene than themselves. But we know that this is not the case.
- There is no evidence to suggest that head lice themselves have any preference for particular groups of people.
- Young children tend to attract head lice more easily because the way they play often involves **close hair-to-hair contact**.
- Parents can get head lice from their children. If only the children are treated, the parent may keep re-infecting the children because of the close head-to-head contact that parents and children have.

Detection of head lice

Early detection helps to break the head lice cycle and enables effective management to start as soon as possible.

Many people do not know they have head lice and do not know how to find them.



Head Lice in Primary Schools Kit – OHT Masters

11

Queensland Health • Education Queensland

Early detection helps to break the head lice cycle and enables effective management to start as soon as possible.

Many people do not know they have head lice and do not know how to find them.

This presentation will assist you to be more aware of how and when to detect and treat head lice.

Do I have head lice?

- Itching is not always a reliable sign of head lice.
- They can be difficult to see if looking at the hair while it is dry.
- Eggs may be easier to see, but are only important if they are found 1.5cm from the scalp.
- Conditioner and combing is the only proven reliable way of detecting head lice.



Head Lice in Primary Schools Kit – OHT Masters

12

Queensland Health • Education Queensland

- Itching is not always a reliable sign of head lice. A study in Queensland found that only 30% of children with head lice itched. The reason that a small number of people itch is that when the lice suck blood from the scalp, they leave saliva. Most people are not allergic to the saliva so they do not itch. Other studies have shown that children who complain of itching often don't have head lice.
- By looking at the hair when it is dry, you may see only a small number of lice, if any. They can be difficult to see because they are tiny, move quickly and may be close to the scalp. They may easily blend in with the hair because of their colour.
- Eggs may be easier to see, but knowing if they are dead or alive has important implications for management. If they are more than 1.5cm from the scalp they will be hatched or dead eggs.
- Research has shown that by applying hair conditioner thoroughly to dry hair, and then combing carefully through all the hair, head lice can be physically removed from the hair. This is called the **conditioner and combing technique**. Conditioner and combing is the only proven reliable way of detecting head lice.

The conditioner and combing technique is:

- the most effective way of detecting head lice

AND

- also an effective way of treating head lice

- for mild head lice conditions
- when chemicals are not effective due to resistance
- when a cheaper option is preferred
- to avoid the use of chemicals (insecticides)
- for children to learn and do themselves under adult supervision
- in between chemical treatments
 - use every 2 days to remove young lice as they hatch from the eggs

- The conditioner and combing technique is the most effective way of detecting head lice.
- AND is also an effective way of treating head lice:
 - for mild head lice conditions
 - when chemicals are not effective due to resistance
 - when a cheaper option is preferred
 - to avoid the use of chemicals (insecticides)
 - for children to learn and do themselves under adult supervision
 - in between chemical treatments - use every 2 days to remove young lice as they hatch from the eggs

Conditioner and combing

A suitable technique for detection and/or treatment

1. Untangle dry hair with an ordinary comb.
2. Apply hair conditioner to dry hair.
3. Use the comb to evenly distribute conditioner and divide the hair into 4 or more sections using hair clips.
4. Change to a head lice comb.
5. Start with a section at the back of the head.
6. Comb the hair from the roots through to the tips.



1. Untangle dry hair with an ordinary comb.
2. Apply the hair conditioner to **dry hair**. The conditioner works by stunning the lice and this happens best when the conditioner is thick. Use enough conditioner to thoroughly cover the whole scalp and all hair from the roots to tips.
3. Use the ordinary comb to evenly distribute conditioner and divide the hair into four or more sections using hair clips. A mirror helps if combing yourself.
4. Change to a head lice comb.
5. Start with a section at the back of the head.
Place the teeth of the head lice comb flat against the scalp.
6. Comb the hair from the roots through to the tips.

Conditioner and combing

A suitable technique for detection and/or treatment

7. Wipe the comb on a tissue/material after each stroke.
8. Comb each section twice until you have combed the whole head.
9. If you find lice or eggs, decide on a treatment option.
10. If you choose conditioner and combing as a treatment, keep combing whole head until all the hair conditioner is gone.
11. Repeat the conditioner and combing technique every 2 days until you find no more head lice for 10 consecutive days. You will be removing all the adult lice and any young lice that hatch from the eggs.

7. Wipe the comb on a tissue/material after each stroke. In good light, check for head lice and eggs. A magnifying glass will help. Adult lice are easier to see - newly hatched young lice are difficult to see. You may see some eggs.
8. Comb each section twice until you have combed the whole head. If the comb becomes clogged, use an old toothbrush, dental floss or a safety pin to remove the head lice/eggs.
9. If you find head lice or eggs, decide on a treatment option.
10. If you choose the conditioner and combing as a treatment, keep combing the whole head until all the hair conditioner is gone.
11. Repeat the conditioner and combing technique every 2 days until you find no more live head lice for 10 consecutive days. You will be removing all the adult lice and any young lice that hatch from the eggs.

Treatment options

It is recommended that you use:

- the conditioner and combing technique as 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. Some head lice are resistant to some chemical products.

- 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. Some head lice are resistant to some chemical products (this will be discussed further).

Choosing a chemical treatment

- The two most important things to think about when choosing and using chemical treatments are safety and effectiveness.
- 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.
- Chemical treatments are grouped according to the active ingredient.
- If you use a chemical treatment and it does not kill the head lice, choose a product with a different active ingredient (use a Personal Record to keep track).

Head Lice in Primary Schools Kit – OHT Masters

17

Queensland Health • Education Queensland

- Two most important things to think about when choosing and using chemical treatments are safety and effectiveness.
- 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 in Australia. This means they are approved for safety. Be wary of chemical treatments which are not officially approved.
- 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 on next overhead). Record the treatment on the Personal Record provided in the *Managing head lice at home package* to ensure you don't get confused about what you have already used.

The four groups and some chemical treatments currently available

Table of Products <small>approved in Australia by the Therapeutic Goods Administration to April 2001.</small>	
Active Ingredient	Product Names
1. Pyrethrins	Amical Head Lice Foam Banlice Mousse Delva Formula PCT Lyban Foam Medtox Foam Pyrenei PyriFoam Lotion
2. Synthetic Pyrethroids (bioallethrin, permethrin)	Orange Medic Orange Medic Plus Paralice PyriFoam Head Lice Treatment Quellada Creme Rinse Quellada Head Lice Treatment
3. Organophosphates	Cleensheen Evoxlice Medicated Foam HL 7 HLT KP24 Foam KP24 Lotion Lice Rid LX Medicated Foam
4. Combinations Herbal & Essential Oils	Herba Lice Herbs for Headlice Lice Attack Lice Blaster New Improved Lysout Gel Lysout Spray Natural Head Lice Treatment Neutra Lice Quit Nits Natural Head Lice Treatment Sunspirit Aromatherapy Lice Scents to Kill Tea Tree Lice Foam Wild Child All Natural Head Lice Treatment

Head Lice in Primary Schools Kit – OHT Masters

18

Queensland Health • Education Queensland

- There are a wide range of chemical treatments on the market which can be categorised into four groups according to their active ingredient:
 1. Pyrethrins
 2. Synthetic pyrethroids
 3. Organophosphates
 4. Combinations
(natural/herbal/essential oils)
- This is a current table from the Therapeutic Goods Administration (TGA) which gives you an idea of some of the products within each category.

Using chemical treatments

- Use only chemicals designed to treat head lice.
- Apply chemical only if you actually find head lice.
- Cover the child's eyes.
- Apply product to **dry hair**.
- Apply product thoroughly to scalp and all hair from roots to tips.
- Comb through to spread evenly.
- Leave product in the hair for the time recommended by the manufacturer.
- Check for effectiveness.



Head Lice in Primary Schools Kit – OHT Masters

19

Queensland Health • Education Queensland

- Use only chemicals designed to treat head lice.
- Apply chemical only if you actually find 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 hair from roots to tips.
- Comb through to spread evenly. Comb several times if hair is long.
- Leave product in the hair for the time recommended by the manufacturer.
- **Check for effectiveness** (this will be discussed in further detail in a few minutes).

Checking for effectiveness

After the chemical product has been on the head for the recommended time and before washing it off:

- use a fine tooth comb to comb all of the hairs from roots to tips;
- if the chemical 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 done at least twice;
- wait 5 minutes for the head lice to dry off;
- observe the lice for movement and decide if the treatment has been effective or not.



Head Lice in Primary Schools Kit – OHT Masters

20

Queensland Health • Education Queensland

After the chemical product has been on the head for the recommended time and before washing it off:

- use a fine tooth comb to comb all of the hairs from roots to tips. It is best to do this in sections;
- if the chemical product has dried, apply some water to moisten the hair. You only need enough water to make combing through the hair easier;
- after each sweep, wipe the combings onto a tissue/material;
- repeat until all hair has been done at least twice;
- wait 5 minutes for the head lice to dry off;
- observe the lice for movement and decide if the treatment has been effective or not.

If the product is effective?

- The product you have used is effective if all the lice are dead.
- Apply the same product every 7 days (maximum 3 times) to kill the lice hatching from the eggs.
- Use the conditioner and combing technique every 2 days in between to improve the effectiveness of the treatment.



Head Lice in Primary Schools Kit – OHT Masters

21

Queensland Health • Education Queensland

- The product you have used is effective if all the lice are dead and you see no movement on the tissue.
- Apply the same product every 7 days (maximum 3 times) to kill the lice hatching from the eggs.
 - After first application: eggs will be present. In 7 days use conditioner and combing technique 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, continue using the conditioner and combing technique only.
- It is recommended that you use the conditioner and combing technique every 2 days in between chemical treatment to improve the effectiveness of the treatment.

If the product is **NOT** effective?

- The treatment product that you have used is ineffective if some lice run around or wave their legs and antennae.
- You will need to select a product with a **different active ingredient**.
- Show the pharmacist your head lice record and request advice on choosing an alternative treatment.



Head Lice in Primary Schools Kit - OHT Masters

22

Queensland Health • Education Queensland

- The treatment product that you have used is ineffective if some lice run around or wave their legs and antennae.
- You will need to select a product with a **different active ingredient** (as discussed in the four groups of chemical treatments - pyrethrins, synthetic pyrethroids, organophosphates and combinations).
- Show the pharmacist your *head lice record* (provided in the *Managing head lice at home* package for families) and request advice on choosing an alternative treatment.

Where can I get help?

- School head lice support volunteer
- School principal
- School administration officer
- Community participation officer
- Parent liaison officer
- School health nurse
- Local pharmacist
- Other parents within the school



Head Lice in Primary Schools Kit – OHT Masters

23

Queensland Health • Education Queensland

- The school head lice support volunteer understands the complex issues surrounding head lice and can provide the latest information about detection and treatment options.
- The school principal is also someone who can provide support to families, and is usually involved in handling more difficult cases. The school principal ensures that information is provided to families in the enrolment package. He/she also oversees the management of head lice outbreaks within the school.
- The school administration officer is often the first point of contact for families experiencing difficulties with head lice. The administration officer will usually refer the families on to the head lice support volunteer.
- Community participation officers (CPO) are located in Education Queensland district offices and assist to enhance the links between the school and families. The CPO will be able to point families in the right direction for accessing further information and support.
- Some schools employ a parent liaison officer who is another point of contact for head lice information and support on managing the problem.
- The school health nurse will have up to date information about head lice and can provide support to families having difficulties.
- The local pharmacist is a great person to provide information and advice about head lice treatments. Take a copy of your head lice record to the pharmacy for advice on different treatment options if you are finding that resistance to chemical treatments is an issue.
- Other parents are probably just as frustrated with the issue of head lice as you are, so talk to each other and problem solve together - great for support!!

Our schools commitment to managing head lice

Our school is committed to managing head lice and uses the strategies outlined in the **Head Lice in Primary Schools Kit** including:

- sending the **Managing head lice at home package** home to all families at the beginning of each school year
- sending home **alert notices** when an outbreak occurs within the school
 - provision of a head lice support volunteer
 - regular school newsletter announcements
 - head lice in the school curriculum
- ensuring all school staff are aware of how the school manages the issue of head lice

Head Lice in Primary Schools Kit – OHT Masters

24

Queensland Health • Education Queensland

- Sending the *Managing head lice at home* package home to all families at the beginning of each school year.
- Sending home *alert notices* when an outbreak occurs within the school - this strategy requires the cooperation of families to ensure that *notification forms* are returned to the school.
- Provision of a head lice support volunteer - the volunteer is available to provide information and support in managing head lice.
- Regular school newsletter announcements - these act as reminders for families to check regularly for head lice to avoid outbreaks at school.
- Head lice in the school curriculum - head lice is covered in the curriculum from years pre-school through to Year 7. This helps children to understand what head lice are and how they can be detected and treated.
- Ensuring all school staff are aware of how the school manages the issue of head lice - this ensures that a comprehensive approach to managing head lice is adopted by the school community.

Head lice CAN be managed if we all work together to detect and treat these pests!!

REMEMBER:



Head Lice in Primary Schools Kit – OHT Masters

25

Queensland Health • Education Queensland