

HEAD LICE

(Revised Dec 2010)

RATIONALE:

Head Lice are a major health problem with an estimated one in ten children affected each year. Whilst they do not transmit disease, they are a cause of frustration and anxiety. Head Lice can be found on the cleanest hair, are caught by head to head contact and spread very quickly. Teachers can alert parents of an individual or general outbreak in the classroom, however, the prevention and treatment is the responsibility of the parent or guardian.

AIMS

- The school will make effort to identify and inform parents of the presence of head lice to ensure the lice are treated and removed.
- The School Nurse will support the school.

IMPLEMENTATION

1. Where a child is identified as having untreated Head Lice/Nits the parents will be contacted to ensure that an appropriate treatment is completed before the child returns to school.
2. All children in the class will receive a note indicating the presence of lice.
3. **Children may return to school once the hair has been treated with an appropriate product.**
4. Parents are advised that relevant information brochures are available from the office and that the School Nurse is available to discuss and advise on current treatments and preventive measures where there are repeated infestations.
5. To help prevent transmission of lice all children with long hair will be required to wear their hair tied back at school to reduce the chance of infestation.

NOTES FOR THE PARENTS

Easy Preventative Measures

- ↳ Head Lice/Nits are easily injured so brushing/combing twice a day every day may reduce the chance of infestation.
- ↳ Shampoo hair at least once a week with a normal shampoo.
- ↳ Long hair must be tied back or plaited while at school.
- ↳ Check hair regularly, at least once a week for Lice and Nits. Friday is a good day so that if treatment is necessary no time will be lost from school.

Treatment

If you find Head Lice or Nits (live eggs):

- ↳ Check all family members and treat if necessary.
- ↳ Use an appropriate insecticidal preparation.
- ↳ Read and follow instructions carefully. Do not use a hairdryer to dry hair after treatment as heat can destroy the effectiveness of the insecticide.
- ↳ Remove all Nits after treatment – Use either a fine toothed comb or finger nails to do this.
- ↳ Check hair daily after treatment and continue to remove nits until they are all gone.
- ↳ Head Lice have a life cycle of three weeks - keep checking for 3 weeks to ensure reinfestation does not occur.
- ↳ Continue the routine of twice daily hair brushing as this helps to damage the eggs and prevent reinfestation.

What to do if reinfestation occurs:

- ↳ Check that all contacts have been treated.
- ↳ The treatment may have been ineffective and it may be necessary to use a different insecticidal preparation due to resistance of the Head Lice to a particular chemical.
- ↳ Follow instructions exactly.
- ↳ Contact your local Doctor, Community Nurse, Pharmacist or Shire Office for further information and advice.

Attached in Reference:

Head Lice: Fact Sheet, Disease Control Service, 1996

WA Health Department

APPENDIX 1 – HEAD LICE NOTE HOME TO PARENTS



Secret Harbour Primary School

Dear Parent

It has been reported that there has been an outbreak of head lice in your child's class and your child may have contracted the condition. We are asking that all parents examine their child's hair for signs of lice infestation. The lice themselves are often hard to find because they move around the head. Therefore, you should be looking for the eggs or nits. These appear as tiny silvery white specks attached to the hair shaft near the scalp. Dandruff and hairspray may look similar but these are easily brushed away, the eggs are not. Other signs of lice infestation may be a red rash and scratch marks on the scalp, nape of the neck or behind the ears.

If your child has contracted head lice do not be alarmed. Although the condition is unpleasant, it is easily treated with specialised treatments, which are available from your local chemist. After treating hair, use a fine tooth comb to remove the dead lice and eggs. Any articles that may harbour lice such as clothes, towels and bed linen should be washed in hot water and detergent. Combs and brushes should also be washed in hot soapy water.

Please remember that parents are responsible for checking their child's hair (it is recommended that this be done weekly) and following treatment a further inspection is advised to ensure all nits and eggs have been removed before your child returns to school. As head lice are highly contagious it is suggested that you examine and treat all members of the family at the same time.

Thank you for your co-operation.

Yours sincerely



HEAD LICE

FACT SHEET

Introduction

Head lice are responsible for the commonest insect infestation in humans. Head lice infestation occurs throughout the world. In Western Australia, as in many Western countries, it tends to occur mainly in children of primary school age. However, infestation within a family also affects adults.

Biology of the head louse

The adult louse measure 1.5-3.0 mm long and cannot be seen easily with the naked eye. Head lice live on the scalp as they need to feed on blood to survive. They hang onto the hair with special claws. The female adult lays six to eight eggs each day. In seven to 10 days, about 70% of them hatch and it takes another 14 days before the lice are sexually mature and ready to make and lay more eggs. The life span of the head louse is usually about three weeks. The adult louse lays one egg (nit) on each hair shaft, close to the root of the hair, as warmth is needed for the eggs to hatch. They are stuck to the base of the hair with glue-like substance. Hair grows about 0.4 mm per day, therefore the egg is about 3-4 mm from the scalp when it hatches. Eggs further from the scalp then 6-7 mm can be considered dead or already hatched.

Spread of head lice

Head lice can only be caught by head-to-head contact. They do not jump, fly or swim. Any lice found on chairs, clothing or bedding are usually injured or dying and would be incapable of climbing onto another host. Therefore, it is not necessary to treat these articles.

The human head louse cannot be spread to other animals or vice versa because it is specific to humans.

Preventive measures

As head lice are injured easily brushing and combing hair twice daily may reduce the likelihood of infestation. Combing should reach the scalp to provide the best effect. However, treatment with insecticides is often necessary to clear infestation and prevent spread of lice. Dandruff, hair follicles and lacquer have often been mistaken for head lice. Insecticides should only be used if infestation is

confirmed. As head lice do not survive off the head there is NO need to laundry bed clothes to prevent reinfestation.

It is recommended that parents should check the hair of primary school children once a week. It is a good idea to do this on Friday, as the child can be treated on the weekend if required. This saves loss of school time, as children can be set home from school if they have head lice. At this point it is important to inform social contacts and playmates.

Treatment instructions

Head lice are killed by appropriate insecticides. However, these only kill the lice if they are used at the right strength, and if they are in contact with the insects for long enough. Inadequate dosage and too short an exposure time may not produce the required results. Frequent inadequate use may increase the likelihood of lice developing resistance to the particular insecticide.

In Western Australia, Malathion and pyrethrins are the insecticides recommended for the treatment of head lice and all proprietary brands based on these substances are both safe to use and effective. Usually, the products are marketed either as lotion or shampoo. The type of preparation does not appear to be important as long as the manufacturer's instructions are followed closely.

a) *Malathion (maldison) lotion*

Malathion is normally used as a lotion in 0.5 - 1% solution. The hair must be dry, and should not be shampooed before applying the lotion. Twenty millilitres (20 mL) should be applied gently to the scalp and hair, and left to dry naturally. Keep the lotion on for at least 12 hours. Twice the amount (40 mL) may be necessary for very thick hair. It is important to saturate the scalp and roots, but it is not necessary to cover all the ends. The hair can be shampooed later but this should be at least 12 hours after treatment.

Alternatively, a shampoo containing 1% Malathion - can be applied to the hair, rinsed out after 10 minutes and the hair dried without heat. This shampoo can be purchased from pharmacies.

Use only if live eggs or head lice are present. A hairdryer should not be used to speed drying as heat destroys the insecticide.

Malathion kills the adult louse as well as the eggs and its effects may last up to six weeks after treatment. One treatment, properly carried out, is normally sufficient.

When applying the lotion, keep away from flames and lighted cigarettes as the alcohol in which the insecticide is dissolved is flammable.

Malathion is absorbed through the skin, but is quickly broken down in the body. There is a wide safety margin between the amounts applied to the scalp to kill the lice and the amounts which would be toxic. As with almost all chemical preparations, some individuals have allergic-type reactions to Malathion (usually a skin reaction). Poisoning is only likely to occur if a large amount (ie, more than one bottle) is swallowed. In case of suspected poisoning, seek medical advice. Adequate precaution should be taken to protect the skin of any one applying treatment or more than one sufferer.

Malathion lotion is not recommended for children less than six months old or individuals with a scalp disease. Seek medical advice before use on asthmatics.

b) ***Pyrethrins and pyrethroids***

Pyrethrins are insecticides extracted from plants, whereas pyrethroids are their synthetic derivatives. In the fact sheet the term pyrethrins refers to both natural pyrethrins and pyrethroids. The commonest formulation is shampoo which must be used according to the manufacturer's instructions. As a general rule, first wash hair with normal shampoo, then follow with the pyrethrin preparation. Leave on for the full period specified in the instructions. Make sure the preparation does not get into the eyes as pyrethrins are extremely irritating.

Unlike Malathion, pyrethrins do not kill all the eggs and treatment must be repeated three times with an interval of three full days between each application.

c) ***Other preparations***

Other insecticides are commercially available by the Health Department does not recommend them for general use.

A number of these products (eg tea-tree oil, sassafras oil) have been popularised to treat head lice. There is no evidence that these products are

in any way effective, and their use is not recommended.

Follow-up combing

After completions of every insecticidal treatment comb hair with a fine-toothed nit comb to remove as many nits as possible.

Check the hair and remove any eggs found on a daily basis by using a damp cotton will ball, and work from the root of the hair to the end of the shaft, this action will remove the eggs. This is time consuming, however, very effective. Frequent brushing of the hair has been found to damage the eggs.

Treatment of contacts

Treatment of contacts is essential to prevent a child from being continually reinfested. The most important contacts are the immediate family members, relatives and playmates. The fact that children of primary school age tend to be infested more commonly does not mean that all contacts occur at school. Some transmission is also likely from children who live in neighbourhood and are regularly playmates. If all contacts are not treated at the same time, the problem recurs because infestation keeps circulating between family members and close playmates.

Treatment of reinfestation

Reinspect the hair 14 days after treatment to ensure that there is no infection. Reinfestation often occurs at this time if treatment was inadequate or incorrect.

Because resistance to pyrethrins has been reported overseas, and since it is possible that resistance to Malathion may develop in the future, it is good practice to use a different type of insecticide preparation if infestation recurs or if the initial infestation is not cleared adequately. However, ensure that you have used the preparation according to the instructions and all close contacts have also been treated.

Return to school

A child with head lice may be excluded from school under Regulation 19A of the Education Act 1960. The National Health and Medical Research Council of Western Australia recommends that children may return to school after treatment outlined above has been started.

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HEAD LICE INFORMATION SHEET (Information from WA Department of Health)



Head lice can be found on the cleanest of hair. Anyone can catch head lice. It's no disgrace.

How and Why HEAD LICE spread

Head lice live only on human beings. They cannot reproduce on animals or in bedding or carpets. The need frequent blood meals and body heat generated from the scalp to survive.

The lice bite the scalp to suck blood eight to nine times per day. The biting is particularly irritating to children and causes the characteristic scratching which is often the only sign of infestation. Once the lice are biting enough to cause noticeable scratching, the infestation is usually well established. Adults are often desensitised and can carry head lice without realising it. Lice lay eggs on hair very close to the scalp. The eggs, or nits, are much easier to see than the lice themselves.

Human head lice are specific to humans and cannot be spread to or from other animals. It is unlikely that they will ever be completely eradicated from the community. The best that can be done is to treat them as soon as possible and to control them through continual, persistent effort.

Head lice can be caught only by close head-to-head contact. They do not jump, fly or swim. Any lice found on chairs, clothing or bedding are usually injured or dying and are probably incapable of climbing onto another host.

Head lice are not a sign of poor hygiene or of being dirty. They thrive in clean hair. The most effective ways of preventing head lice infestations are to brush hair twice a day – which injures lice and deters them from breeding – and to keep long hair tied back.

Eggs/Nits

- ❖ Are found glued to the hair shaft.
Newly laid eggs are usually within 1.5cm of the scalp (eggs found further along the hair shaft are probably old, hatched or dead)
- ❖ Are about the size of grains of salt and feel gritty to the touch when fingers are run through the hair
- ❖ Are easier to see than the lice themselves
- ❖ Hatch about 7-10 days after being laid
- ❖ Vary in colour from skin-tone to brown
- ❖ Are difficult to see in the hair
- ❖ Reproduce two weeks after hatching
- ❖ Feed on human blood
- ❖ Do not jump or fly

Old Eggs

- ❖ Are shiny, whit and flat
- ❖ Are clearly visible
- ❖ Remain stuck to the hair as it grows.

Lice:

- ❖ Are small wingless insects

Check for head lice weekly

It is important to carry out a weekly check of children's hair for head lice. Finding head lice can be difficult. The important thing is to be in good light and to be very systematic in examining all of the hair, section-by-section, using a metal, fine-tooth comb.

Some people prefer to dampen the hair and apply hair conditioner before combing with a fine-tooth comb. Residue from the comb is then wiped onto a tissue and examined for lice and eggs.

If you find lice, your child should be treated and everyone else in the family checked. Inform all close contacts, including playmates, schoolmates and relatives so that they too can be checked for head lice.

If a child or adult has not been treated for head lice before, and you only find eggs, you should treat for head lice since lice may be hiding in the hair.

If a child or adult has been treated recently, and you find only eggs, but not lice, you may not need to treat since the eggs could be from the old infestation. In this situation check hair daily for 21 days, removing eggs. Only re-treat if live lice are found.

Treatments

There are a number of head lice treatments available from pharmacies. The Health Department of WA recommends that all treatment options be discussed with your local pharmacist. Insecticidal treatments contain chemicals that may not be suitable for everyone. In the following cases, a doctor or pharmacist should definitely be consulted before insecticides are used:

- ❖ Babies under six months of age
- ❖ Asthmatics or people suffering from a scalp condition
- ❖ Pregnant or breastfeeding women

Treatment method

- ❖ Choose a recommended head lice insecticide.
- ❖ Read and follow instruction carefully.
- ❖ If you are using lotions, apply the preparation to dry hair. For shampoos, wet the hair, but use the least amount of water possible.
- ❖ For long hair, layer into sections, apply the treatment to the scalp and then use an ordinary comb to carry the preparation down the length of the hair to the tip. Repeat the process several times obtaining an even coverage over the head. Leave in for the recommended period.
- ❖ Do not use a hair drier (heat destroys the insecticide).
- ❖ After washing out treatment, layer hair into sections and comb through with a fine-tooth comb, removing eggs and lice.
- ❖ Repeat until all the hair had has been combed through at least twice.
- ❖ Repeat treatment only as recommended in the product information.

Alternative Remedies

There are a number of alternative products on the market, such as tea-tree oil and sassafras oil. These have varying degrees of effectiveness. Further advice on these products is available from pharmacists. All preparations are capable of causing some irritation, particularly if overused.

The use of kerosene or fly-spray is strongly discouraged.

Has the treatment killed the lice?

If all head lice are dead (no movement at all) the preparation has worked. If some lice are inactive (louse is stationary but moving legs or antennae) but alive, the lice may be partially resistant to the treatment. If some lice are active, resistance to the treatment is probable.

If the treatment is unsuccessful or reinfestation occurs

- ❖ Check that you have informed all possible contacts and that they have been treated as necessary.
- ❖ Repeat treatments only as recommended in the product instructions. If a particular treatment fails twice, try a product with a different insecticide. If the second preparation fails, the only way to control your child's head lice is to brush hair daily, combing, pulling or cutting out eggs as they are found. The procedure is tedious, but if followed strictly it will eventually clear the hair of lice. Regular hair brushing should be part of your child's routine for life.

Exclusion from school

A child with lice may be excluded from school. The Health Department of WA recommends that children be excluded from school until treatment has been used and live lice removed.

Tips for Treatment

- ❖ Treat lice if detected
- ❖ Inform all contacts so measure can be taken to stop the spread
- ❖ DO NOT treat 'just in case'
- ❖ Use a recommended insecticide
- ❖ Follow the instructions carefully
- ❖ Use enough solution to saturate the hair
- ❖ Layer the hair and divide into sections when applying insecticide, and do so again when combing out nits after treatment
- ❖ Inspect the hair every day up to 21 days after treatment
- ❖ Remember, head lice cannot survive for long off human hosts. Regular washing of bed linen and personal articles such as hats and combs in hot soapy water may help keep lice under control
- ❖ DO NOT share brushes, helmets or hats

Prevention Checklist

- ❖ **L** Look in school-age children's hair weekly
- ❖ **I** If you find head lice treat with a recommended insecticide
- ❖ **C** Comb or brush hair twice a day, and tie long hair back
- ❖ **E** Educate your family and friends

ALTERNATIVE TREATMENTS

Hair Conditioner Treatment

Head lice can be more easily removed by applying conditioner to the hair and combing to remove lice and eggs (nits). As well as making combing easier, the conditioner works by slowing down the head lice for about twenty minutes, so that it is easier to trap the lice in the comb.

To remove lice:

- ❖ Apply plenty of hair conditioner to the dry hair, leave for 10mins to set and then comb through with an ordinary brush/comb to remove tangles
- ❖ Comb hair thoroughly with a metal nit comb in 4 directions – forwards, backwards, to the left, to the right

- ❖ Wipe the comb onto a white paper towel to check that the dark coloured adult lice or pale-coloured hatchlings are being removed. Hatchlings may emerge from any missed eggs. You may need to use a good magnifying glass to see the lice.
- ❖ Rinse conditioner off and dry the hair
- ❖ Repeat this process daily for the 21 days of the head lice life cycle
- ❖ Repeat weekly after that if you wish to check for and prevent re-infestation.

To remove eggs:

- ❖ Some eggs will be removed by combing, but others will be harder to detach. You will need to use your fingernails or tweezers to remove as many eggs as possible from the base of the hair shaft – remember only those within 1 cm of the scalp will hatch. Those further along the hair shaft will be already hatched or dead.

Note:

- ❖ After combing, soak the brush/comb in hot soapy water to kill any trapped eggs or lice
- ❖ Any type of hair conditioner may be used

For further information please contact the Community Health Nurse at your school or the nearest Community Health Centre (see phone directory).

Olive Oil Treatment

The olive oil treatment is a safe and effective way to kill head lice. Olive oil, or cooking oil, smothers and kills adult head lice and makes them easier to comb out. The oil also makes it easier to comb out the eggs (nits) which are glued to their hair shafts near the scalp. Regardless of the treatment used, daily inspection for and removal of eggs for 3 weeks is necessary to prevent reinfestation.

The Treatment:

- ❖ Apply enough oil to the hair to coat all of it thoroughly. Be generous! Leave on for at least 8 hours or overnight
- ❖ The next day, comb out any dead lice and eggs with a nit comb. Layer the hair into sections and carefully comb the entire scalp. After combing, wash out the oil with regular shampoo.
- ❖ Check dry hair under a bright light for any eggs you may have missed.

Environment:

- ❖ Head lice cannot survive for long away from the scalp (1 and 2 days). Regular washing of bed linen and brushes and combs in hot soapy water will kill any remaining lice. Hats and caps can either be washed in hot soapy water or left for 1 week in order to give any attached lice time to die.

Note:

- ❖ To kill the lice which may hatch from remaining eggs the oil should be applied according to the following schedule: Days 1, 2, 5, 9, 13, 17, and 21.
- ❖ The treatment days coincide with the life cycle of the louse. You may do the treatments more often if you like, but try not to miss any of these days.
- ❖ This treatment can also be started with an insecticide, which would be washed out before applying the oil. In this case, Day 2 can be omitted from the schedule.

