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Information for

Parents, Schools and Child Care Centres



Head Lice ADVICE

Head Lice Action Pack

www.healthynt.nt.gov.au



CONTENTS

Section 1: Facts about head lice and nits.	1
Section 2: Facts about head lice treatment.	3
Section 3: How to treat head lice.	5
Section 4: Answers to treatment problems.	7
Section 5: Community head lice management.	8
Resources	9



1

Facts about head lice and nits

Pediculus humanus capitis

Head lice

Head lice are wingless insects that vary in colour from cream to brown. They are the size of a match head (2 -3 mm long). They crawl very quickly on the scalp and hair and are difficult to see.

Nits

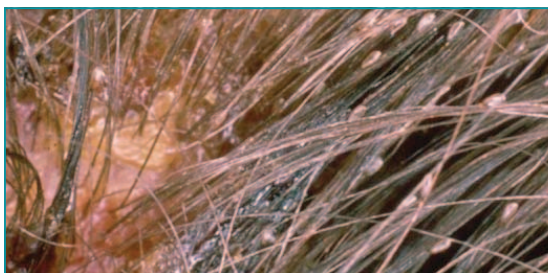
'Nits' is another name for the small eggs that are laid by head lice. They are the size of a grain of salt, yellow-white in colour and are hard and gritty in texture. They are found glued to the hair near the scalp. Common places are behind the ears, the back of the neck and the fringe. Dead nits are often black in colour and are found down the hair shaft well away from the scalp.

Life cycle of head lice

Nits take 7 – 10 days to hatch into head lice. They will only hatch if kept at human body temperature in a moist environment such as the scalp. They die very quickly on furniture, clothes, hairbrushes although in our hot, humid environment they can live longer outside of the hair than in other places in Australia.

How are lice spread?

Lice can spread from person to person. The usual way you catch head lice is from direct hair to hair contact with an infected person (eg. children playing or children or adults hugging). Head lice do not jump but they do walk and can fall from one head to another. Very occasionally, they can be passed on by sharing hats and brushes, but not through contact with furniture or carpets.



Nits



Lice





Irritation

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Health problems

Head lice rarely pose a major threat to health. Common symptoms are itch and irritation causing sleep disturbance and behavioural problems. Scratching can break the skin which can result in complications such as skin and lymph gland infections.

Who is likely to be affected?

Head lice are most often found in primary school children. The whole family and anyone who has had close personal contact with someone who has had head lice should be checked. Cleanliness does not prevent head lice, anyone can catch them.



Skin irritation



Skin irritation

2

Facts about head lice treatments

Treatment types

A new treatment option for eradicating head lice is now available. These **occlusive products** use a physical action to coat the lice and smother them. These products have been shown to work even better than insecticides, are very safe to use and lice do not appear to become resistant to them. They can also be used frequently if children do get reinfected. They are now the recommended treatment for head lice in the NT.

Previously, the main treatment options were **insecticides**. There are a number of licensed insecticidal products available. If used according to the directions insecticide treatments can be effective although increasingly, people have been concerned about using insecticides due to:

- **Irritation:** Mild irritation of the eyes, nose and throat can occur with insecticide head lice treatment. Care is needed with sensitive skin (these people should seek medical advice before treatment).
- **Risk of toxic effects:** Toxic risk increases for insecticidal head lice treatments if they are given more than 3 weeks in a row, or within 7 days.
- **Discomfort:** Alcohol-based products can cause pain or irritation if there are open sores and cuts.
- **Resistance:** This worldwide problem is increasing because head lice and nits are becoming stronger and developing new enzymes and barriers to insecticidal head lice.

Occlusive product, lotion or shampoo?

Occlusive products containing dimeticone are a silicone-based product that is applied to clean dry hair. The lice get smothered in the product, which immobilises and kills them. Follow the directions carefully. Some are left on the hair and washed out after 15 minutes. Spray gel and liquid gel products contain nerolidol which also kills the lice eggs. These are currently the products of choice in the NT.

If insecticidal are used, head lice insecticidal lotions are better than shampoos but not as effective as occlusive products. Check the product directions. Generally insecticidal lotions should be rubbed into the hair and washed out 12 hours later with a regular shampoo.

Gloves should be worn. The minimum amount that should be used is 50ml.

Head lice insecticidal shampoos are not recommended as they are less effective due to dilution.



Use an occlusive product



Smother the hair with an occlusive product



PRODUCTS

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Types	Active component	Product examples	Description
<p>Occlusive products – Kill the head lice by physically smothering. Products with dimeticone as the active component are currently the treatment of choice in NT as they:</p> <ul style="list-style-type: none"> • are effective • have no evidence of resistance • are safe • are able to be used repeatedly • kill eggs*. 	<p>Dimeticone 4% with nerolidol*</p> <p>Dimeticone 4%</p>	<p>Hedrin 15</p> <p>Hedrin¹</p>	<p>Occlusive products are a relatively new head lice treatment and they are now the recommended treatment for head lice in the NT. They use a physical action to coat the lice and smother them. Newer products which contain nerolidol also kill the eggs. These products should be used as first intervention or if insecticide treatment fails.</p>
<p>Conditioner</p>	<p>No active component</p>	<p>Use any white hair conditioner to make it easier to see lice or nits</p>	<p>Hair conditioner can also be used to “stun” lice to assist combing out. Conditioner immobilises head lice for approximately 20 minutes but is not as effective as using products containing active components such as dimeticone which kills the lice.</p>
<p>Insecticidals - Kill the head lice chemically. These products can be toxic to people, and repeated usage can be dangerous. There is also evidence lice become resistant to these products. Pregnant or breast feeding women, people with sensitive skin and parents of babies less than 12 months of age should consult a doctor before applying insecticidal head lice treatments.</p>	<p>Permethrin least toxic to people</p>	<p>PyriFoam, Quellada, Lyclear</p>	<p>We no longer recommend the use of insecticidals, given the new occlusive products now available but if used, 1% permethrin remains the preferred insecticidal head lice treatment based on toxicity profiles and product safety.</p>
	<p>Pyrethrin moderately toxic to people</p>	<p>Lyban, Banlice, Paralice</p>	
	<p>Malathion most toxic to people</p>	<p>KP24, Lice Rid, HL7</p>	<p>0.5% Malathion in an alcohol base should only be used for heavy infestations. It is the most toxic insecticide. Directions need to be followed carefully, and repeated use avoided.</p>
<p>Natural Products</p>		<p>Ti-tree oil, kerosene, eucalyptus oil or products containing these ingredients</p>	<p>We do not recommend the use of ‘natural’ products as they are not known to be safe or effective. ‘Natural’ products have some efficacy but can be more harmful than standard head lice treatment. They are more likely to burn skin and cause death if swallowed.</p>

¹ This product is being gradually phased out in public pharmacies in the NT as it is not as effective at killing lice eggs as Hedrin 15 products

How to treat head lice

Manual removal of head lice – wet combing with a nit comb

If you are concerned that your child has lice or nits, use a fine tooth metal nit comb to:

- Check if there are any live lice, and
- Manually remove lice and nits.

Combing is best done with an occlusive product as you can treat as you check with no risk to yourself or your child. If occlusive products are not available, use normal hair conditioner.

First wash and towel dry hair and scalp to remove sweat and grease that may create a barrier between the product and the insects. Apply occlusive product or conditioner to dry hair to cover each hair from root to tip. Comb one section of hair at a time and wipe the product or conditioner onto a tissue to check for lice and nits.

Do not use conditioner at the same time as an insecticide treatment as the conditioner may protect the lice.

Prevention

Head lice treatments do not prevent head lice and prevention sprays are expensive and have not been proven to work.

Some measures that do work are:

- Check hair and scalp weekly for all family members suspected of having head lice or nits. The best method is to comb occlusive product or conditioner through hair with a nit comb and wipe the product or conditioner onto a tissue to check for lice and nits.
- Do not share brushes, combs, hats or pillows.
- Wash hair brushes and combs at least once a week in hot soapy water.
- Keep long hair tied back, preferably braided, or consider keeping hair short.
- Treat all family members with live head lice at the same time.

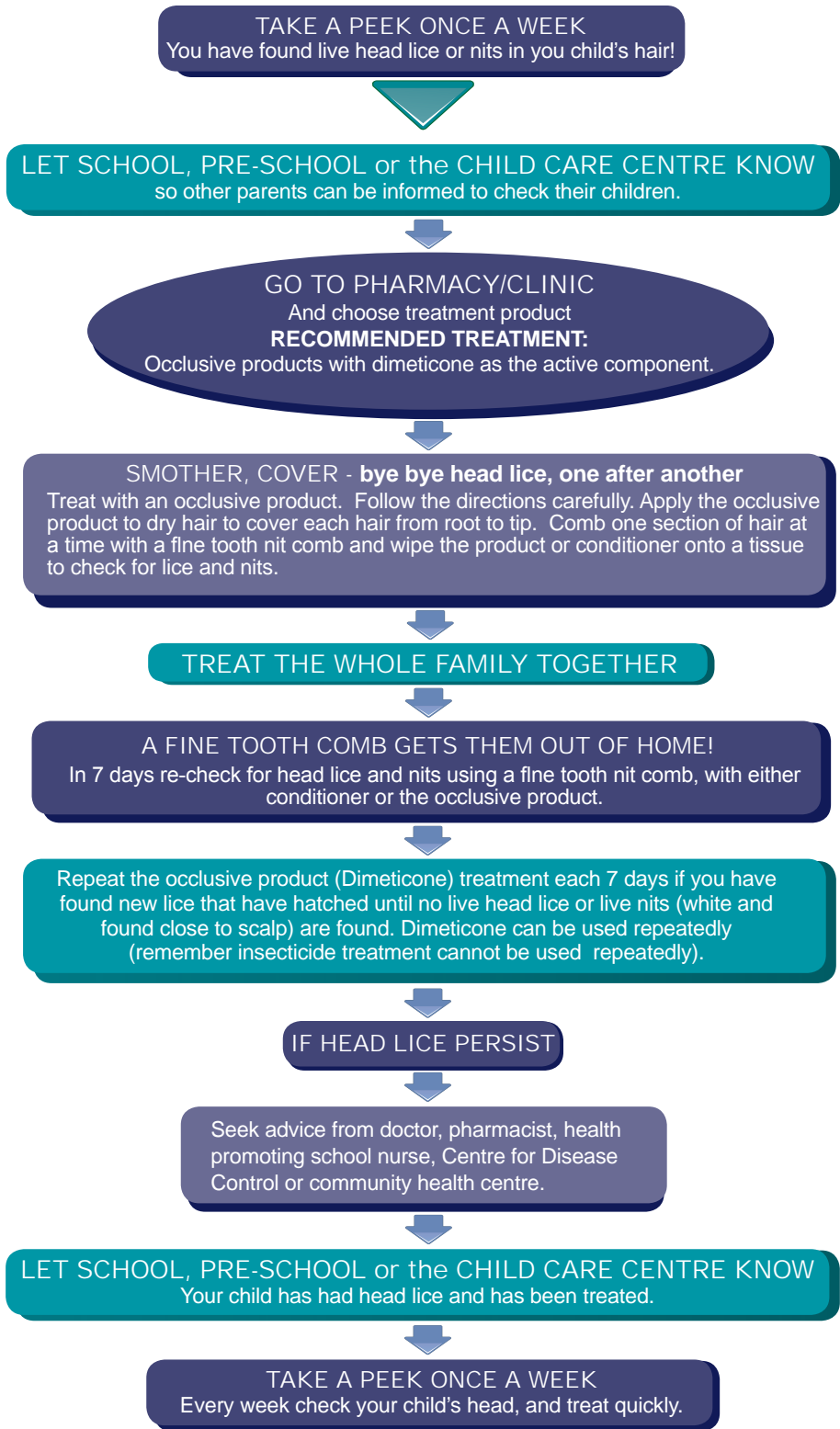


Check the chair with a fine-toothed comb



Tie back long hair

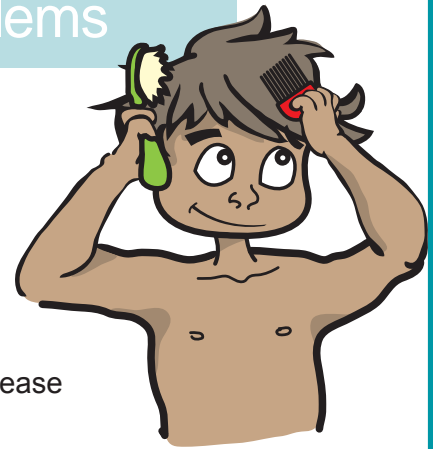
3 Facts How to treat for head lice



If you have chosen an insecticide or natural product to treat for head lice, follow the instructions carefully, but only use for two treatments and if live lice or nits are still found, seek advice from your doctor, pharmacist, health promoting school nurse or community health centre about what product to change to.

4

Answers to treatment problems



1. The treatment does not work

Suggested management

- Check that you are performing the treatment correctly, according to product directions.
- Ensure hair and scalp is washed to remove sweat and grease which may have blocked the product smothering the lice.
- Examine the scalp and hair carefully. Dead nits that don't need treatment are attached to the hair well away from the scalp and are black/ dark in colour.
- If, after all of the above and head lice are still felt to be resistant, change to an occlusive product and repeat treatment weekly.
- If you previously used 1% permethrin and lice seem resistant, and you prefer to use an insecticide, change to a stronger insecticide such as 1% malathion.
- If you previously used 1% malathion and lice seem resistant, and you prefer to use an insecticide, change to 0.5% malathion in an alcohol base.
- Check with your doctor, pharmacist, Community Health Centre, Centre for Disease Control or your school health promoting nurse if you are unsure.

2. The lice do get killed and go away, but they come back very quickly.

Your child may be getting reinfected by another family member or another child at school.

- Check and treat all family members at the same time.
- Increase combing with nit comb and occlusive product.
- Consider tying hair back, possibly in braids, for school or cutting hair short.
- Let the school, pre school or child care centre know that your child has had head lice so they can let other parents know to check and treat their children.

3. We are using a lot of head lice treatments that are very expensive.

- Check that you are performing the treatment correctly, according to product directions.
- If your child still has live head lice after three weeks of treatment, change to a different type of head lice treatment (refer to products page).
- Check with your doctor, pharmacist, Community Health Centre, Centre for Disease Control or your school health promoting nurse if you are unsure.

5

Community Head Lice Management

Head lice management is considered to be a joint responsibility between parents/guardians, the Department of Education and Training, non government schools, child care centres and the Department of Health.

Parent/guardian responsibility

- To check and treat their children for head lice.

Schools/pre schools/child care centres responsibilities

- To let parents know when an outbreak occurs and to notify a parent / guardian at the end of the day if head lice are suspected or noticed (refer to Department of Education and Training letter templates) or for secondary students who move class regularly, provide verbal instruction to students to check their hair after school.
- Staying home from school is NOT necessary if effective treatment is commenced prior to the next day of school.
- Government Schools should follow Department of Education and Training Policy on Head Lice Management. School staff can only perform visual checks of children's hair if parental consent is given.

Department of Health responsibilities

- To provide up to date medical information, printed resources and on site education at community health centres.
- To provide education and support to schools, day care centres, or community groups if requested.
- Head lice treatment is provided free of charge for all persons with a health care card at community health centres.



resources

Information for
parents, schools
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centres

Centre for Disease Control http://www.health.nt.gov.au Centre for Disease Control Fact Sheet on Head lice and nits	Darwin	8922 8044
	East Arnhem	8987 0357
	Katherine	8973 9049
	Tennant Creek	8962 4259
	Alice Springs	8951 7540

Your local resources

Community Health Centres		
The Health Promoting Nurse at the School		
School/Pre school/Child Care centre		
Doctor		
Pharmacist		

References

1. Roberts RJ, Cassey D, Morgan DA, Petrovic M. Comparison of wet combing with Malathion for treatment of headlice in the UK: a pragmatic randomised trial. *The Lancet* Vol356 12th Aug 2000).
2. Burgess I F, Brown C M, Lee P N. Treatment of head louse infestation with 4% dimeticone lotion: randomised controlled equivalence trial. *BMJ*, Vol.330, 18th June 2005.
3. Burgess IF, Lee PN, Matlock G. Randomised, controlled, assessor blind trial comparing 4% dimeticone lotion with 0.5% malathion liquid for head louse infestation. *PLoS ONE* 2007, 2(11):e1127.

6 Head lice Posters

1. Take a peek, once a week

Every week, check hair and scalp of all family members for live lice and nits.

2. A fine tooth comb gets them out of home

Apply an occlusion type lice product generously to dry hair to cover each hair from root to tip. Comb one section of hair at a time from the roots with a metal nit comb. Wipe the product or conditioner on a paper tissue and look for lice and nits.

If you decide to use an insecticide treatment do not use conditioner at the same time, as the conditioner may protect the lice.

3. Smother, cover – bye bye lice, one after another

Use occlusive head lice products to kill lice as well as combing with a nit comb. Follow the directions carefully. Do not use insecticidal chemicals more than once a week or for more than three weeks in a row.

4. Nits the pits, head lice advice

Speak with the Health Promoting Nurse at your school, Community Health Centre staff, your pharmacist or doctor for more information or contact the Centre for Disease Control for copies of Nits the Pits, Head Lice Action Pack.

