NHS
Calderdale

Head Lice

Management Guidelines

CONTENTS

1.0 SCOPE OF THE GUIDELINES

This document is intended as a resource for health care workers and others involved in the prevention and management of head lice infections.

The overall aim of the guideline is to control head lice using appropriate treatment for affected individuals while preventing the unnecessary use of insecticides in the wider community. This will be achieved by:

- Collaborative working between health care professionals, community pharmacists, schools, parents and the general public in the detection, management and treatment of head lice infections.
- Actively encouraging parents and the general public to accept responsibility for the detection, management and treatment of head lice infections within their own households.

2.0 CONTRIBUTORS

The original guidelines (2004) were developed by a multidisciplinary team including pharmacists, Health Visitors, School Nurses, Infection Prevention and Control, Medicines Management, Communications and nursing managers, Schools Improvement Officer and the Education Welfare Service. The working group acknowledge the Wiltshire Health Authority Headlice Strategy (2000), some of the content of which has been used in or has influenced these guidelines.

Subsequent guideline reviews have been jointly by Medicines Management and Infection Prevention and Control of NHS Calderdale.

2.1 RESPONSIBILITIES

Employees of NHS Calderdale, pharmacists who deliver the head lice programme and GPs who may advise or support individuals or families with head lice and must ensure they are familiar with this guideline to ensure a consistant approach to the management of head lice in Calderdale.

3.0 INTRODUCTION

Infection with head lice is a non-life threatening problem, which is most common amongst children. This is because children are sociable, sit close together reading, talking or whispering with others and are liable to be hugged and kissed frequently by lots of people (parents, grandparents, siblings and friends etc). This provides plenty of opportunity for head lice to spread within families and among groups of friends. As children grow up, these close contacts reduce and so head lice are less likely to occur.

Head lice is a problem for the whole community, rather than a problem for individual institutions such as schools and care homes. Individuals need to be responsible for the control of head lice within their own household / family.

Families can prepare for these infections by becoming informed, taking action when necessary in their own families, and informing others to prevent spread outside the family.

Certain cases of severe infection are identified visually, but many other cases will be present in the community with no indications at all. Sometimes head lice will become a chronic problem for a period of time, which requires persistence and patience to overcome. Affected families need to be reassured that the condition will eventually go away. In these cases the individual affected may suffer secondary sensitisation causing a general systemic reaction in which the individual experiences a feeling of malaise and generally feels debilitated (lousey).

Within these guidelines there are three forms of treatment for head lice – insecticides, wet combing or dimeticone. Insecticides are proven to work, if used according to the manufacturers' instructions. However, over-use can lead to the development of resistance to the product. Some people prefer not to use chemicals, and in these cases wet combing **may** be effective, though this can be time-consuming and labour intensive. In situations where the problem has become chronic, it may be preferable to use the wet combing method rather than frequent applications of chemicals.

Main Points

- Head lice are most common amongst children aged 4 – 11.
- Head lice make no distinctions between social class, age or personal hygiene.
- Itching is a reaction to the saliva of the insect when it bites/feeds. Reaction can by immediate, delayed or there can be no reaction – therefore no itching.
- If it does occur, itching may take three months to occur.
- **Most** cases of head lice infection are sympromless.
- Spread requires direct head to head contact.
- Treatment must only be used on individuals on whom a **living louse** has been found.
- Whatever treatment method is used - compliance with treatment guidelines is essential for success.

4.0 HEAD LICE

4.1 What are head lice?

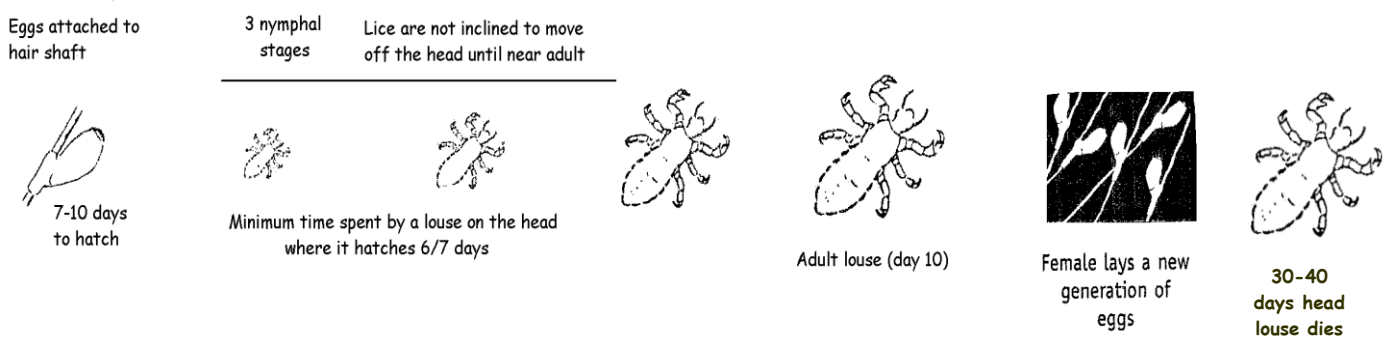
Head lice are flat-backed, greyish insects that live **only** on the scalp. They are often not much bigger than a pinhead when newly hatched, but may be as big as a sesame seed (2mm) once adult. They feed by biting the scalp and sucking blood which they need to do frequently and for prolonged period of time to avoid dehydration.

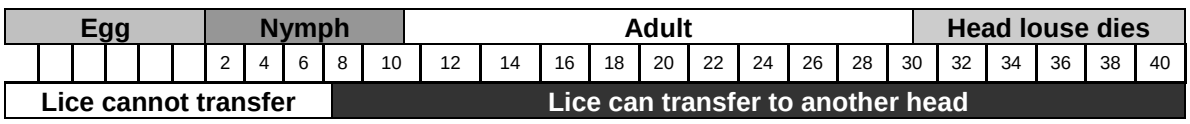
Once adult, the female head louse soon starts laying between five and eight grey, oval-shaped eggs each night. In her lifetime, she will lay up to 150 eggs. She glues them to the **base** of the individual hairs. Each egg is attached very close to the scalp where the temperature is most favourable to incubation (30/31^{0}C). The most likely sites for eggs are behind the ears and at the nape of the neck.

7 to 10 days later the eggs hatch, depending on temperature. There are three nymphal stages of development which take 9 to 10 days to complete. As lice are not inclined to move off the head until near the adult stage the minimum time spent by a louse on the head where it hatches is 6/7 days. The third nymphal moult gives rise to either an adult male or female. After the nymph emerges from the egg, the empty white egg shell (nit) remains fixed to the hair until physically removed by abrasion, physical removal or until it slowly disintegrates, which may take months or years.

As the reproduction cycle of the louse is short – egg to egg is only about 17-20 days – the spread of infection can only be prevented by early detection together with quick and effective eradication.

<u>The life-cycle of a head louse</u> – (30-40 days)





4.2 More facts about Head lice

- Head lice can only live on human beings – they cannot be caught from animals.
- Nits are not the same as lice. Nits are **empty** white egg cases.
- Nits do not always mean a current infection. When you have got rid of all the lice, the nits will still be stuck to the hair.
- You only have head lice if you find a living, moving louse on the scalp.
- Anybody can get head lice, not just children.
- Infections may be caught from close family and friends in the home and community, not only from school.
- Head lice do not care whether hair is clean, dirty, long or short.
- Head lice cannot swim, fly or jump.
- A head lice infection may not produce an itchy scalp (if at all) for as long as two months after infection – it is not an instant reaction.
- Impetigo may present as a secondary infection of head lice infection.
- In most infections, there are not more than a dozen or so lice on the scalp at any one time making head lice difficult to detect.
- Young lice and eggs are most commonly found behind the ears and at the nape of the neck.

5.0 THE CALDERDALE MANAGEMENT GUIDELINES

The guidelines identify the following elements as essential to the control and management of head lice:

- Prevention through
  - Information
  - Vigilance
- Treatment
- Support

5.1 PREVENTION

5.1.1 Prevention through information

Head lice can present at any time of life, but the condition is particularly common in young children. The provision of information can help to prepare people for this eventuality, tell them of action that can be taken to control head lice and provide details of where further information can be obtained. Therefore, public information should be available for all age groups in a variety of settings.

A booklet is available which supports these guidelines. (see Appendix A for the main sections of the booklet in A4 format)

This information, in either booklet or A4 format, are available from the following key providers of information, to promote the public health message.

- Local pharmacies
- Health visitors
- School nurses
- General practices
- Health promotion units

Other agencies provided with information are:

- Local hospitals
- Care Homes
- Children's Homes
- Social Services
- Schools, pre-schools, nurseries etc
- Hostels and refuges.
- Dental services

The public should be encouraged to seek advice from their local participating pharmacist regarding the management of head lice. It is important that health professionals offer consistent advice. Other staff who may be asked for advice, such as GP receptionists, must also provide the same information.

Parents should be prepared for the possibility of head lice infection occurring when their children begin to mix with a larger social group at school. An information pack including a detection comb will be offered at school during a child's first term. How this is managed will be negotiated between the school and the school nurse.

In schools it is recommended that general information is provided periodically, such as the beginning of term **(see example letter 1, Appendix B).**
It is not recommended to issue "alert letters" when an individual case has been identified[1]. This is because:

- It can stigmatise the child with head lice
- Classmates may be inappropriately treated 'just in case' when there has been no direct contact.
- It may give the impression of an outbreak that is uncontrollable, rather than the normal expected incidence of cases.

Wherever possible, individuals who are identified as contacts (see definition below) should be notified while maintaining the confidentiality of the index case **(see example letter 2, Appendix B).**

5.1.2 Prevention through vigilance

In situations where head lice infection is likely to occur (households with young children, hostels for the homeless etc), regular observation for the presence of living head lice should be undertaken by everyone. Anyone, who has been identified as a close contact of a case should undertake detection combing, and if a living louse is found, be treated.

A contact is defined as anyone with whom the case has had direct head-to-head contact.

Detection combing

Detection combing should be carried out regularly, ideally once a week. A fine-tooth plastic **detection** comb and an ordinary comb are required for this procedure. **(for method see Appendix A)**

In hostels for the homeless or women's refuges etc, where there is a continuous influx of new families, it is advisable to encourage detection combing to be carried out regularly because it can help to prevent outbreaks through early detection and treatment. However, no one should be excluded from the home for refusing to carry out detection combing.

In schools, the periodic examination of children's hair for the presence of head lice at school is NOT recommended. There is no evidence that this is an effective method of managing head lice infection.

Children with known or suspected head lice **must not** be sent home early from school **or** excluded[1, 2.]

- By sending a pupil home early, they are identified to others as having a problem. This may put the child under pressure from peers.
- Exclusion is an unproductive and undesirable overreaction to a problem that is not a public health threat[1].

If the school suspects a case of head lice, only the parent/guardian of the affected child should be informed and confidentiality maintained. Contacts may then be identified and approached individually **(see example letter 2, Appendix B**)

5.2 TREATMENT - See Appendix C for an algorithm of head lice management

Treatment is only required for those individuals on whom a moving, living louse has been found. It is essential that health care workers encourage individuals and families to provide samples of lice for the pharmacist or whoever is to prescribe the treatment. This helps them decide at what stage the infection is at, especially if a treatment has been tried and failed. Also, it confirms the diagnosis for the prescriber.

Treatment may be one of the following:

- using an insecticide
- wet combing
- dimeticone

Some individuals may be able to undertake the sustained effort required to eradicate head lice using the wet combing method. Others will not. Even within families it may be necessary to employ different methods or products for certain individuals. Very young children may not tolerate wet combing on the regular basis required.

Conversely, some individuals may not be prepared to apply chemical treatments, particularly if they are currently experiencing frequent re-infection.

The decision on which method to chose must be that of the individual affected or their parent/guardian. However, such a decision must be an informed one.

Although most of the topical treatments can be purchased from chemists, they can be very expensive especially for larger families on a small income. The pharmacy programme intends to make this less of a burden as only non-exempt adults are charged for the products. This charge is at the normal prescription rate.

5.2.1 Treating with pharmaceutical products[4]

- Children under six months must only be treated under medical supervision.
- All liquid/lotion preparations used should be reapplied seven days after the first treatment. **Always follow the manufacturers instructions.**
- It is most important to use the full quantity of liquid or lotion; otherwise the product may not be effective. At least 50ml is required for each application. Some patients with thick hair may require up to 150ml per application.
- Families provided with mulidose bottles need to be advised of appropriate quantities to be applied.
- Should a course of treatment fail, 14 days wet combing should be recommended to separate different pharmaceutical treatments while also reducing the louse load and possibly eradicating the infection. An alternate product should then be used.
- Shampoo formulations are not recommended, as the product is diluted too much when used to be effective.
- Laboratory evidence has shown that the alcohol based 2-hour treatments kill lice and eggs, but clinical experience indicates that the 12-hour treatments are more effective[5]. Insufficient contact times are the reasons for the withdrawal of Lyclear crème rinse and Full Marks mouse from the recommended list of products for the treatment of head lice.
- Dimeticone contains no insecticides; instead it affects the louses ability to excrete surplus water, killing the louse. It does not affect eggs, therefore a second application 1 week later is **essential** for the treatment to be successful.

Pharmaceutical treatments available are[4]

Generic name	Proprietary name	Special Instructions
Malathion	Derbac M® -0.5% Liquid, aqueous base	12 hour treatment
Dimeticone	Hedrin®- 4%	8 hour treatment MUST be repeated in 7 days.

5.2.2. Additional information for PRESCRIBERS

Many of the products available for head lice treatment have been discontinued and many new products are available some of which claim to be ovicidal, most of which are classed as medical devices and therefore do not have product licenses, are not

included in the BNF and have a limited evidence-base. In addition many preparations are considered to be less suitable for prescribing by the BNF as the formulation is not effective including shampoos and mousse preparations (e.g. Prioderm cream shampoo, Quellada cream shampoo, lyclear cream rinse, full marks mousse)

Product information

NB the information provided here is a summary of the product details. Pharmacists must be aware of the complete product details as provided by the manufacturer including clinical particulars, pharmaceutical properties and pharmacological particulars.

Derbac M

Malathion is an organophosphate with anticholinesterase activity, and insects are probably killed by inhibition of acetylcholinesterase present at synaptic junctions in the nervous system. Malathion is rapidly hydrolysed in humans by plasma carboxylesterases, and it is therefore unlikely that any clinical pharmacological adverse effects would be seen in normal use. Following application to hair, it is adsorbed onto keratin, a process that requires contact for about six hours. The adsorbed malathion confers a residual protective effect against re-infection, which lasts about six weeks. Although this may be of benefit, there is concern that, as the level of insecticide gradually lessens, exposure of lice to a low concentration might encourage development of resistance.

Recently there has been concern over possible neurotoxicity resulting from use of malathion containing head louse treatments, but a distinction must be made between adverse effects associated with agricultural-grade organophosphate insecticides and the pharmaceutical grade malathion used in proprietary medicines.

Malathion is safe if used appropriately.

Application

Apply to dry hair. Rub the liquid into the scalp until all the hair and scalp is thoroughly moistened. Leave the hair to dry naturally in a warm but well ventilated room. After 12 hours, or the next day if preferred, shampoo the hair in the normal way. A second treatment, seven days after the first is required.

Malathion should be used not more than once a week and for not more than 3 consecutive weeks. Malathion is not to be used in infants less than 6 months old. Malathion is oxidised and broken down by chlorine. If a client has been swimming on the day of treatment, the hair should be shampooed and dried before applying the treatment.

The specific product characteristics can be accessed at
http://emc.medicines.org.uk/document.aspx?documentId=18995

Hedrin[1]

Hedrin active ingredient is dimeticone carried in Cyclomethicone 5, a volatile silicone. The mode of action appears to be related to a disruption of the water balance mechanism in the lice, leading to rupture of gut.

The adverse events related to Hedrin were scalp pruritis and transient mild eye irritation following accidental exposure.

Application
Apply sufficient lotion to cover dry hair from the base to the tip to ensure that no part of the scalp is left uncovered. Work into the hair spreading the liquid evenly from roots to tips. Allow hair to dry naturally. Hedrin should be left on hair for a minimum of 8 hours or overnight. Wash out with normal shampoo, rinsing thoroughly with water. Repeat the treatment after seven days.
Children under the age of six months should only be treated under medical supervision.

Warning: hair should be kept away from naked flames, cigarettes and other sources of ignition while treatment with hedrin is underway. Hedrin is not water based and will not prevent hair from burning. Take care if accidentally spilled as hedrin may cause a slip hazard.

5.2.3 Treating with wet combing

Wet combing physically removes the lice from the hair before they are mature enough to reproduce or spread. **(see Appendix A for method)**

- A small amount of conditioner, vegetable oil or baby oil is applied to wet hair.
- A detection comb is used to comb the hair in the same way as for detection combing. To remove all the lice can take **30 minutes** or more.
- Lice or eggs adhere to the comb for removal.
- The process is repeated every three or four days, for at least two weeks, until no living lice have been found for three combing sessions.
- If fully grown lice are found at any time after the first session, this indicates a new head lice infection
- Once the head is clear of head lice, regular detection combing sessions should be continued.

5.2.4 Combs information based on DTB Vol 45 No 7 July 2007

The most effective way of making an initial diagnosis of infection is to use a detection comb.

Plastic combs
Many combs sold as louse detection and removal combs are unsuitable for these purposes. Only those with flat-faced, parallel-sided teeth less than 0.3mm apart are appropriate.

Metal combs
There are various forms of metal combs with wire pin teeth that are close enough together to force louse eggs to slide along hairs so that they can be removed. There appear to be no published randomised trials on whether they are effective.

Electronic and mechanical combs
Most electronic combs have fairly widely spaced teeth so they may not come into contact with all stages of lice during combing. There appear to be no published

randomised trials on whether they are effective. As such, these should not be recommended.

The combs supplied as part of the head lice service are made of resilient plastic and have parallel-sided teeth with a space between them of 0.3mm or less. These combs are easily drawn through the hair, unless it is tightly curled, without the excessive discomfort or damage to the hair that can be caused by some metal combs, and can remove even the smallest first instar nymphs.

5.2.5 Alternative products

Teatree oil may have some insecticidal activity, and certainly antiseptic activity which may prevent secondary bacterial infections, however safe and effective strengths of this potentially toxic product have not been tested scientifically, and therefore Tea-tree oil is not recommended in the treatment of headlice[5]. In addition, tea-tree oil, bark and other alternate therapies **should not be recommended by healthcare workers** as treatment for head lice as they are untested and unregulated.

5.2.6 Likely reasons for treatment failure.

Clients should be encouraged to examine the head with the detection comb three days after the final application of insecticide to check treatment success**.**

Treatment should be considered to have failed only if live lice are present (as assessed by a healthcare professional). The presence of nits or eggs does not indicate treatment failure. Apparent treatment failure should be carefully investigated, as it is only rarely caused by resistance of lice to a pharmaceutical treatment.

a) In all cases of potential resistance, bear in mind:
    - Is it really a head lice infection?
    - Is the patient using the product correctly?
    - Is the patient using sufficient lotion?
    - Has the patient carried out contact tracing and ensured all those infected are treated?
    - If lice at all stages are present, it is likely to be treatment failure (this could be because of resistance or lack of concordance)
    - If only 3rd instar or adult lice are present, it is more likely to be re-infection.

Genuine insecticide resistance will be seen when both young and adult **live** lice are seen 24 hours after **correct** pharmaceutical treatment use. As some eggs may hatch after the use of an pharmaceutical treatment, the presence of young lice only does not indicate resistance. If only adult lice are seen re-infection from an unidentified contact is likely.

It is more likely that failure of treatment is due to one of the following:

1) Initial misdiagnosis
2) Inadequate or incorrect treatment application
3) Re-infection – often due to inadequate contact tracing
4) Use of an ineffective insecticide formulation, e.g. shampoo.
5) The existence of long-standing infection

5.3 SUPPORT

The underlying principle of this guideline is that head lice infection is a normal part of life, which can affect anybody but especially young children and their contacts. As such, the management of head lice should not receive special attention, but information regarding head lice infection should be widely available and consistent no matter who is providing it.

Some individuals and groups will only require clear information to help them to manage head lice infection in their households. Others may need practical assistance, demonstrations or continued support. Local Health Care Workers are well placed to identify and meet these individual needs.

Support for the public, for school staff and for health and social care professionals can be obtained from a variety of sources. It is important that everyone providing support and information should give a consistent message.

5.3.1 Pharmacies

Pharmacies are one of the main providers of information. They can recommend and sell head lice products over the counter, as well as dispense preparations that have been prescribed.

In addition, there is also a pharmacy led scheme for the treatment of head lice for those registered with a Calderdale GP. **(See Appendix D)**.

This service is available in participating pharmacies only. A list of pharmacies signed up to the scheme is available on the Calderdale PCT web site www.calderdale-pct.nhs.uk

They may refer the infected person to their GP if secondary infection is present or for repeated failures, the pharmacist may contact a relevant healthcare professional to discuss the onward management of the client.

- Treatment failure due to resistance should be discussed with the infection control team. It is essential that the history of treatment is documented thoroughly on the referral form.
- For support with wet combing, detection combing, treatment application or social support the pharmacist should refer to the community nurse.
- The pharmacist must also consider if a referral to the Safeguarding Children team is appropriate. Any concerns or uncertainties about any child protection issue, including neglect, should be discussed with the Named Nurse for Child Protection.

It is essential that the history of treatment is documented thoroughly in addition to details of any difficulties encountered. This referral must be discussed with the client unless it is felt by the pharmacist that informing the parent/carer would increase the risk to the child (this decision must be clearly documented).

5.3.2 Community Nursing Staff

Community nursing staff (school nurses, district nurses and health visitors) have the skills and training to educate, inform, guide and support those affected by head lice. It is essential that everyone in community teams are aware of the guidelines and the need to give consistent advice. The responsibilities of the community nursing staff are to: -

- Provide consistent, accurate information in order to empower and educate parents, the public and carers on the management of head lice.
- Support individuals and families to make a definite diagnosis of a living, moving louse.
- Base treatment choice upon individual assessment
- Where prescribing treatment, it will be in line with local policy.
- Reinforce the importance of contact tracing with parent, carer, and wider community.
- Reinforce the parent/carer and public of their responsibilities in the detection and management of head lice.

Where problems occur a collaborative approach may be appropriate:

- Work in partnership with all school staff, parents and carers to provide targeted educational information to diffuse problem situations.
- Use practical demonstration as appropriate, with patient/carer informed consent, where a need has been identified by individual assessment.
- Be prepared to offer a domiciliary visit where a family has recurrent problems
- Liaise with Educational Welfare Officer to consider/discuss a joint domiciliary visit where a persistent problem has been identified using individual assessment.
- The community nurse may contact the Infection Prevention and Control Team for advice, particularly for problematic situations i.e.
  - where resistance to insecticides is suspected
  - where additional information to help healthcare workers support families managing head lice is required

5.3.3 Health Promotion Service

Work to improve the health of local communities by working in partnership with agencies and the public and by acting as a resource to the public and professionals e.g. issuing of information leaflets as required.

6.0 MANAGEMENT OF THE SCHEME

NHS Calderdale manages the pharmacy scheme in Calderdale.

6.1 SURVEILLANCE

Surveillance of the scheme will be improved, using data from the users of the scheme to identify areas of high incidence, age groups, etc. This will aid in the allocation of resources for support.

6.2 AUDIT

Audit of the scheme will identify where the scheme is working well and where improvements could be made.

7.0 EVALUATION

Since the epidemiology of head lice infection is little known, the evaluation of the strategy is problematic.
Evaluation will be achieved from a number of angles.

- Reports of resistance
- Customer satisfaction survey / feedback forms
- Data collected via pharmacy scheme – success of treatments, ages affected etc

Comments are welcomed from all those involved and should be sent to the Infection Control Team at NHS Calderdale, c/o F Mill, Dean Clough. These comments will be taken into account when these Head Lice Management Guidelines are reviewed.

8.0 IMPACT ASSESSMENT

The guidelines have been impact assessed and no areas of concern were identified.

9.0 REVIEW DATE

The Head Lice Management Guidelines will be reviewed in 2013 or if significant new evidence is published.

10.0 REFERENCES

1. Public Health Medicine Environment Group (1998) **Head Lice: A report for Consultants in Communicable Disease Control (CCDCs)** www.phmeg.org.uk

2. Department of Health, Department of Education and employment and PHLS (1999) **Guidance on Infection Control in Schools and Nurseries**. www.wiredforhealth.gov.uk

4. Joint Formulary Committee (2009) **British National Formulary Issue 58**. (refer to the latest version for current advice)

5. Duncan C (editor) (2003) **Monthly Index of Medical Specialities- MIMS**. London: Haymarket

Further advice and information is available from:

NHS Direct ☏ 08454647

Roberts RJ, Casey D, Morgan DA, Petrovic M (2000) Comparison of wet combing with malathion for treatment of head lice in the UK: a pragmatic randomised controlled study. **The Lancet** 356: 540 -543

NHS Centre for Reviews and Dissemination (1999) Treating head lice and scabies**. Effectiveness Matters**. York: University of York

Public Health Laboratory Service (2000) **Lice and Scabies: A health professional's guide to epidemiology and treatment.** London: PHLS

APPENDIX A

The following pages contain some of the most useful sections in the pharmacy scheme leaflet.

These pages may be photocopied and used

to support and inform those dealing

professionally or personally

with head lice infection.

What are head lice?

What are head lice?
Head lice are small insects, about the size of a sesame seed (the one you find on burger buns)

Where do they live?
They live on the head, keeping close to the scalp to stay warm. They do not move far away from the scalp. They only live on human beings. You can't catch them from household pets.

What are nits?
Nits are not head lice. Head lice are the insects that move around the head. Head lice lay eggs which they glue to the hair. When the egg hatches, it turns white but remains stuck to the hair. A nit is this empty eggshell. If you find nits, it does not mean you currently have head lice. The nit may stay stuck to the hair until it grows out.

Have I got head lice?
You only have head lice if you find a living, moving louse in your hair.

Who gets head lice?
Anybody can get head lice. Children may get them more often as they spend more time with their heads together. Adults can get them as well.

Where and how do you catch head lice?
Head lice are passed when heads are touching. The longer and more often you have head to head contact with someone who has head lice, the more likely it is that you will get them too.
This is most often between close family and friends and during times of play at home and in school. Parents start to worry more about head lice when children go back to school as they think head lice are only caught there. Yet head lice are as common during school holidays as during term time. Head lice are not caught from objects that hair touches such as a chair back. It is unlikely that head lice could be caught from combs, hats or scarves however it is advisable for an infected person not to share hats etc. Combs are safe provided any lice are washed off.

Do head lice cause itching straight away?
It usually takes two to three months for people to get an itch due to head lice. The itch is due to an allergy to the head lice and some people will never suffer from itching. Most people only look for head lice if they start itching. By then they may have had head lice for two to three months. You should check every week for head lice.

Can you prevent head lice?
The best way to combat head lice is for families and households to check their own heads regularly. This way they can find head lice quickly, treat them and make sure that you don't pass them on to family and friends. The way to check heads is called "detection combing". It should be done once a week, or more often if you want – many people detect comb on bath night, making it a fun activity for children. If a living, moving louse is found on someone's head, check other members of the household as well. Treat everyone who has head lice at the same time. Don't treat anyone who hasn't got head lice, it won't help. You should also think back to who has been in contact with you, so that you can let them know and they can check for lice as well.

How to spot head lice

How do I spot lice?

1. Wash or dampen the hair thoroughly – apply conditioner or olive/vegetable oil
2. Make sure there is good lighting
3. Comb the hair with an ordinary comb to detangle
4. Using the special detection comb:

   Begin at the top of the head and making sure that the comb is touching the scalp comb slowly towards the end of the hair.
5. Check the teeth of the comb carefully.
6. Repeat steps 4&5, working your way around the head.

What should I do if I find lice?

If you find lice, or something you are unsure about, stick it on the box above, or on a piece of paper, with clear sticky tape. Mark clearly which individual the lice have come from.
Take this leaflet, or the piece of paper with the lice attached, to a pharmacy displaying the logo at the top of this sheet, especially if you wish to take advantage of the free treatment.
The pharmacist will supply you with a special lotion to kill the lice and will explain how you should use it.

This helps the pharmacist decide at what stage your infection is, especially if you have already tried a treatment and it has failed. See the algorithm in your booklet.

Stick all your head lice on a piece of white paper – for assessment by the pharmacist

Remember:

- The best way to stop infection is to use the special detection comb regularly and treat when you find living lice.
- DO NOT use head lice liquids or lotions just in case. They won't prevent infection.
- Whenever you need help, ask your pharmacist.
- You will need to find out where the lice came from or you may be re-infected. The source of the infection is likely to be a family member or a close friend.

Head lice contacts checklist

Make sure you get in touch with **everyone** who has had head-to head contact with the infected person.

	Name(s)	Contacted (✓)
Parents/Carers		
Grandparents		
Brothers/ sisters		
Sons/ daughters		
Aunts/ Uncles		
Cousins		
Nieces/ nephews		
Babysitter		
School/ nursery		
Friends		
Clubs		
Guides/Scouts		
Others		

All the people on your list should check themselves for head lice using a detection comb. Anyone who finds living lice should check the rest of their family and be treated.

How to wet comb

Wet combing is used:

- To find lice
- If you do not want to use chemical treatments
- When a chemical treatment has not been effective

Wet combing takes a lot of time and needs to be done regularly to be successful. If you are going to wet comb, ask your pharmacist for advice to make sure that you do it the best way.

WET COMBING METHOD

- Dampen the hair thoroughly, add a small amount of conditioner, vegetable or baby oil.
- Ensure there is good lighting
- Comb the hair with an ordinary comb
- Using the special detection comb:
  - Begin at the top of the head and making sure that the comb is touching the scalp comb slowly towards the end of the hair.
  - Check the teeth of the comb carefully.
  - Repeat, working your way around the head – this may take up to 30 minutes – until all lice have been removed.

Repeat this procedure **every three to four days** for at least **two weeks**. This will remove any newly hatched lice from the hair.

If you find any fully-grown adults during this time, head lice have been caught again. You must carry on for at least another two weeks and investigate/inform all contacts again.

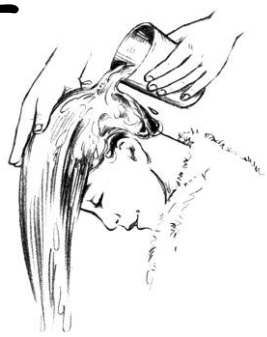
If after two weeks of wet combing living lice are still present, speak to your pharmacist.

The wet combing method, illustrated

1

Wash hair with your normal shampoo

2

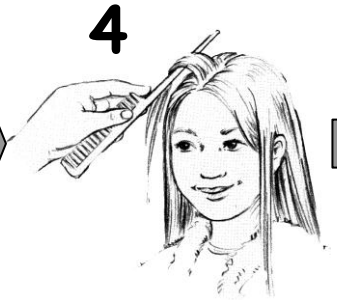


Rinse off

3

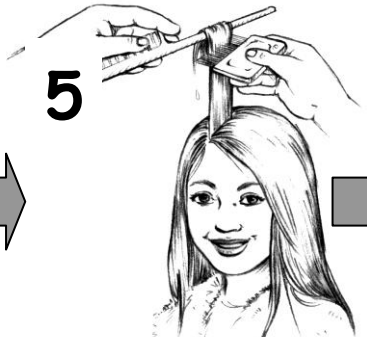
Comb the hair with a normal comb & apply a small amount of oil or conditioner

4



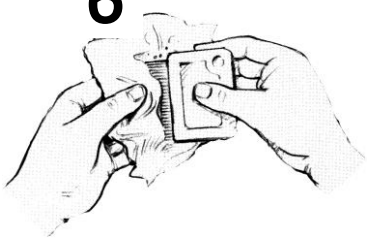
Work through the hair in small sections

5



Comb from the scalp to the ends of the hair

6



Check the comb for lice with each section

7

Each combing session may take 20 minutes

8

Monday ✓	Monday	Monday
Tuesday	Tuesday	Tuesday ✓
Wednesday	Wednesday✓	Wednesday
Thursday ✓	Thursday	Thursday
Friday	Friday	Friday✓
Saturday	Saturday ✓	Saturday
Sunday ✓	Sunday	Sunday

Repeat combing every three or four days for at least two weeks

Illustrations reproduced with permission from Leeds Health Protection Unit (Original illustrator Wendy Hesse)

APPENDIX B

Below is an example of a standard letter, which could be used to remind parents of the need for vigilance throughout the year, and a second letter which could be used to inform identified contacts of an exposure to head lice.

Letter 1 – general reminder

Dear Parent

It is the beginning of another term and we are using this opportunity to remind all parents of the need to be on the look out for head lice.

- Check your children's hair **weekly** using a lice detection comb
- If lice are found, check the rest of the family, including yourselves
- Treat only those found to have head lice
- Identify anyone who may have had direct head to head contact with those affected, they will need to check themselves for head lice.
- It is always useful to inform school or nursery if you find head lice.

Advice on detection and treatment may be sought from your local pharmacist.

Letter 2 – Identified contact notification.

Dear Parent

It has been brought to the attention of the school by a parent that their child has headlice. Your child has been identified as having had direct head to head contact with this pupil and as such you are advised to check their head for head lice as below:

- Check your child's hair using a lice detection comb
- If lice are found, check the rest of the family, including yourselves
- Treat only those found to have head lice
- Identify anyone else who may have had direct head to head contact with those affected, they will need to check themselves for head lice.

Advice on detection and treatment may be sought from your local pharmacist.

APPENDIX C

ALGORITHM FOR THE MANAGEMENT OF HEADLICE.