Northern Lincolnshire and Goole Hospitals NHS
NHS Foundation Trust

Directorate of Operations
Community & Therapy Services

HEAD LICE GUIDELINES POLICY

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Contents

1.0 Purpose

1.1 To educate relevant professional staff and the public on the detection, treatment and prevention of head lice infestations.

1.2 To encourage parental or self-inspection of hair for early identification of infestation.

1.3 To minimise the social stigma associated with infestations.

1.4 To ensure that consistent information and advice is available.

1.5 To provide accurate information on head lice and methods of control to the public.

2.0 Area

This policy aims to provide guidance on the detection, treatment and prevention of head lice infestations and to co-ordinate control measures within the North Lincolnshire area.

3.0 Duties, Roles and Responsibilities

3.1 The Role of the Consultant in Communicable Disease Control

3.1.1 To provide advice, based on the evidence for the PCT and then revise/develop policies.

3.1.2 To formulate a policy in consultation with others and disseminate the policy

3.1.3 To maintain and update the policy as necessary.

3.1.4 The consultant in communicable disease control will not routinely undertake operational activity to control head lice.

3.2 The Role of the School Health Service

3.2.1 To ensure that approved local policies are followed.

3.2.2 To avoid promoting advice or action that is not locally approved.

3.2.3 To ensure that the school nursing service is contactable during normal working hours by parents and the school for information, advice and support.

3.2.4 To ensure that training programmes are in place to enable staff concerned to be kept fully informed and up to date with current knowledge and practice.

3.3 The Role of the School Nurse

3.3.1 To ensure that locally approved policies are followed.

3.3.2 To avoid promoting advice or action that is not locally approved.

3.3.3 To ensure that he/she is fully informed and up to date with current knowledge and practice.

3.3.4 To give consistent advice to parents, children and school staff and make them aware of means of transmission and of current treatment.

3.3.5 To discourage unnecessary or inappropriate treatment.

3.4 The Role of Schools

3.4.1 To ensure that locally approved policies are followed.

3.4.2 To avoid promoting advice or action that is not locally approved.

3.4.3 To work with the health services towards preventing ill-health and minimising the effects of ill-health on school children and their education.

3.4.4 To disseminate information to schools in order that school staff are aware of locally approved policies in connections with lice infestations.

3.4.5 To ensure that locally agree policies are followed within schools.

3.4.6 To avoid promoting advice or action that is not within the locally approved policy.

3.4.7 To assist the school nurse in disseminating advice to parents and pupils. This should be an on-going, routine part of school life and preferably be part of dealing with other health issues.

3.4.8 To support the school health service in any health promotion events they wish to hold in school. Parents, pupils and staff should be encouraged to attend.

3.4.9 To guide concerned parents to the most appropriate agency for dealing with their concerns. Professional advice is available from the school nurse, general practitioner or local pharmacist.

3.4.10 To maintain confidentiality of health information on children and encourage the same in other staff.

3.4.11 A SPECIAL WORD ON SCHOOLS

3.4.12 "It's the school's fault!"

Head lice are not primarily a problem of schools but of the community. Stigma and tradition, however, combine with inadequate public and professional knowledge to continue to hold schools responsible.

3.4.13 The "Nit Nurse"

Routine head inspections, usually performed by the school nurse, are without value as a screening measure and should not be done, though examination of an individual (not necessarily in school) may be indicated to establish the presence of infection in a specific population group. Before the effective control of head lice became possible with chemical lotions, severe cases of infection occurred and head inspections served to detect the very worst and, therefore, most obvious of them. Nowadays, such gross infections rarely occur. Most active infections are of only a few lice and routine head inspections are ineffectual at identifying these.

3.4.14 "Alert letters"

One of the principal causes of unnecessary public alarm is the "alert letter" sent out by head teachers, typically warning parents that "we have head lice in the school". This is an illogical and unnecessary reaction.

3.4.15 Exclusion from school

- Exclusion should **not** be used because:
  - It cannot ensure the elimination of infection from the family of a child
  - It is an unproductive and undesirable overreaction to a problem that is not a public health threat
  - It is inappropriate, being in fact simply an admission of the failure to deal with infection by the community and its professional advisers, but does not contribute to a solution
- Families with continuing or recurring infection with head lice should be assisted and supported, as they would be with any other infection, by the concerted support and help of the community (including the school) and health professionals (including, for example, visits by the school nurse to the family home)

3.5 The Role of Primary Care Teams

3.5.1 To ensure that locally approved policy is followed.

3.5.2 To avoid promoting advice or action that is not locally approved.

3.5.3 To provide advice on the management of lice infestations. Those advising should be knowledgeable and competent on the subject and be able to teach clients the technique of detection combing.

3.5.4 To discourage unnecessary or inappropriate treatment.

3.6 Role of Community Pharmacists

3.6.1 To ensure that locally approved policy is followed.

3.6.2 To avoid promoting advice or action that is not locally approved.

3.6.3 To promote advice on management of lice infestations. Those advising should be knowledgeable and competent on the subject and also be able to teach the technique of detection combing.

3.6.4 To discourage unnecessary or inappropriate treatment.

3.7 The Role of Parents / Guardians

3.7.1 The primary responsibility for the identification, treatment and prevention of head lice in a family has to lie with the parents, if only for reasons of practicality.

3.7.2 Parents, however, cannot be expected to diagnose current infection, or to distinguish it from successfully treated previous infection or other conditions, if they are not adequately instructed and supported by the following professionals.

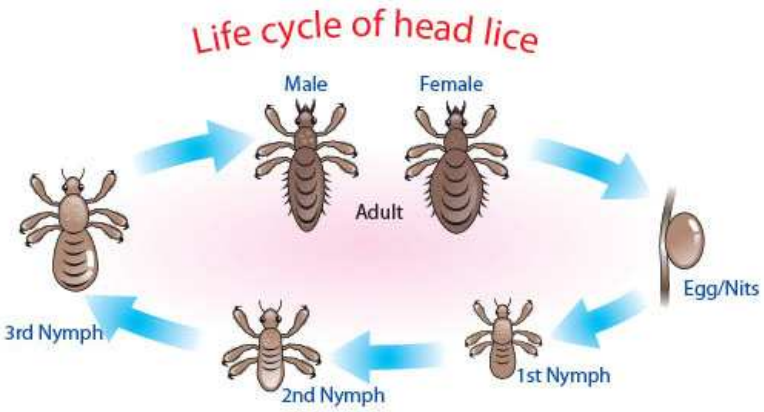
3.7.3 Notes on the detection and treatment of head lice for families are given in sections 6.0 and 7.0 below.

4.0 Head Louse Infestation

4.1 Head Lice

4.1.1 Head lice (pediculus humanus capitis) are flesh coloured insects about 3mm long whose bodies darken after feeding. They can only be passed from one host to another by direct, still and prolonged head to head contact. They cannot fly, jump or swim and are found on all types of hair. Spread is likely to occur from contact with other household or close family members rather than by social contact (i.e. school friends or work colleagues).

Table 1.0



4.1.2 Head lice feed on human blood by biting into the scalp but no report of any blood borne infection such as Hepatitis B and C or HIV has been recorded by the spread of head lice. Head lice infestations may cause itching (pruritis), redness (erythema) and swelling (oedema) of the scalp. However these signs are also seen in other scalp conditions such as dandruff and eczema.

4.1.3 Head lice stay and lay their eggs close to the scalp. This provides the warmth, which the eggs need to incubate. Live eggs are very small, dull and flesh coloured; they are attached to the hair shaft just above the root. The incubation period is 7-10 days after which the young louse emerges. By the time the hair has grown 1cm the eggs have either hatched or died. Old egg shells known as “nits” are usually white and shiny and are harmless.

4.1.4 The presence of nits does not necessarily mean there is a live infestation on that head.

4.2 Prevalence and risk factors

Although head louse infection is an infectious disease, many of the problems associated with it are due to society's reaction to the infection rather than the organism itself. There is limited research matter on true prevalence of infection, but is probably much lower than the public and professional perception. A recent review found no evidence to support the theory that head lice prefer clean hair to dirty hair Head lice are however commoner in girls than boys. The peak age for infestation is 7-8 years.

4.3 Health Implications

4.3.1 Head lice are not a serious health problem in this country. They rarely cause physical symptoms other than itching of the scalp. Sensitisation reactions to louse saliva and faeces may result in localised irritation and erythema. Skin may become infected as a result of scratching. Lice have been identified as primary mechanical vectors of scalp pyoderma caused by streptococci and staphylococci usually found on the skin.

4.3.2 Adverse health effects mainly derive not from lice themselves, but from the human perception of them. Excessive public and professional reactions lead to an inflated perception of prevalence, to unnecessary, inappropriate or ineffective action, and to a great deal of unwarranted anxiety and distress. These actions and reactions in themselves cause problems, especially from the misuse and overuse of treatments.

5.0 Prevention Methods

5.1 Good hair care as part of personal hygiene and grooming should be encouraged, although there is no evidence with regard to its effectiveness in prevention. Insect repellent sprays and electronic combs should not be used as a means of preventing or controlling infestations.

5.2 The use of school nurse time to detect infestations has been discontinued for some years because it has been shown to be ineffective in the control of infestations. Head lice are a community problem, not an educational problem, and parents should take responsibility for being aware of any problems with their children's hair in the same way as they are over any other health problem.

5.3 Good hair care would seem to be sensible in terms of personal and social education and hygiene, and grooming should be encouraged. Thorough, regular grooming using a fine-toothed pocket comb has often been recommended as a means of preventing, reducing the prevalence of, and even treating head lice, but there is little evidence supporting the efficacy of this practice. Proprietary products that are claimed to repel lice are not recommended. Even if they were effective in protecting the individual from infection, they do not deal with the control of lice in the population and do not treat existing infections.

6.0 Detection of Head Lice

6.1 The diagnosis of infestation can only be made when live, moving lice are identified.

6.2 Finding apparent nits is insufficient evidence of infestation. Wet combing is the preferred method of detection.

6.3 The only reliable method of diagnosing current, active infection with head lice is by detection combing (B). A study, published in 2008, found that detection combing was 3.84 times more effective than visual inspection for finding live lice. The technique should be carefully described in protocols for the public and professionals. There may be other clues to the presence of live lice, such as pillows being dirtier than usual in the morning. If detection combing is not used as the diagnostic criterion, a misdiagnosis may be made, commonly due to the factors listed below in the section of "Imaginary lice".

6.4 Many combs sold as louse detection and removal combs are unsuitable for the purpose. Only those with flat-faced, parallel-sided teeth less than 0.3mm apart are appropriate. Amongst the best known of these are the combs included in the "BugBuster" pack, which are designed for wet-combing with conditioner.

6.5 See appendix.B.

7.0 Treatment

7.1 Treatment Evidence

7.1.1 Please refer to the "Head Lice: Evidence – Based guidelines". The Stafford Report 2012 update produced by public health medicine environmental group.

7.1.2 The new evidence base and guidelines (see above) have informed the reason for adopting the policy.

7.1.3 Both insecticide application and "Bug Busting" require a commitment by the person responsible for treating and it is likely that both will fail when families with multiple social problems are the target.

7.2 Chemical Treatments

With all chemical treatments for head lice it is vitally important that products are selected to be a formulation that contain sufficient active agent and provide a sufficient contact time to allow the active agent to work. Section 7.6, table 2.0 below outlines the currently available licensed medical products and formulations and which of those are recommended by the British National Formulary. In general, formulations such as mousses and shampoos are not recommended for use. Chemical treatments must be used in accordance with the manufacturer's instructions, with particular regard to the need to administer a 2nd application at an interval (usually 7 days) after the 1st. It is likely that many apparent treatment failures or reinfections are really a result of a failure to use chemical treatments properly.

7.3 Effectiveness of chemical treatments

Chemical treatment has been shown to be effective by a number of recent reviews. A summary of recent clinical effectiveness information for the main chemical agents is provided in table 2.0. Chemical treatment should be used when current infection is definite, since this is the only method that has been scientifically demonstrated to be effective.

7.4 Cardinal rule before chemical treatment

Chemical preparations for head louse infection should never be recommended or used unless a living, moving louse has been found on the head of at least one household member. Ideally, if one member of the household has a current infection, detection combing of all members should be undertaken, and only those found to be infected should be treated.

7.5 Chemical treatment options

More recently, products based on Dimeticone have become available. Dimeticone creates a physical barrier around the louse that eventually kills it, but does not act on the insect nervous system and is thus unlikely to be affected by resistance to other chemicals. In general, a course of treatment for head lice should always be 2 applications of product at least 7 days apart to prevent lice emerging from any eggs that survive the first application.

7.6 Currently available preparations

Table 2.0 – Licensed Medical Products

Agent	Product	Comments
Dimeticone	Hedrin®	Lotion, dimeticone 4%
Malathion	Derbac-M®	Liquid, malathion 0.5% in an aqueous base
	Prioderm®	Lotion, malathion 0.5%, in an alcoholic base (Also available is Cream shampoo containing 1% Malathion which is not recommended as product too diluted in use and insufficient contact time)
	Quelleda®	Liquid, malathion 0.5% in an aqueous base (Also available is Cream Shampoo - 1% Malathion which is not recommended as product is too diluted in use and insufficient contact time)
Phenothrin	Full Marks®	Liquid, phenothrin 0.5% in an aqueous basis Lotion, phenothrin 0.2% in basis containing isopropyl alcohol (Also available is Mousse containing phenothrin 0.5% in an alcoholic basis which is not recommended for head lice due to insufficient contact time)
Permethrin	(Lyclear)	Permethrin is active against head lice but the formulation and licensed methods of application of the current UK products make them unsuitable for the treatment of headlice27

8.0 Safety of chemical treatment and contraindications

No adverse reactions for products containing Dimeticone have yet been reported to Medicines and Healthcare Products Regulatory Agency. One study comparing 0.5% phenothrin (aqueous liquid) with 4% dimeticone found that 9% of subjects treated with phenothrin experienced scalp irritation compared to 3% of those treated with dimeticone.

9.0 Contraindications

9.1 Chemical anti-head lice treatments should only be used in children under 6 months with medical supervision. Preparations with an alcohol base should not be used in very young children (under 5 years of age).

9.2 Preparations with an alcohol base are contraindicated for people with scalp dermatitis or asthma. Pyrethroid based preparations (permethrin and phenothrin) are contra-indicated in persons with an allergy to chrysanthemum flowers, as these flowers contain a natural pyrethroid.

10.0 "Reinfection" or "treatment failure"

10.1 Although true resistance does occur, other causes of apparent "resistance" may be more likely to be due to ovicidal failure, misdiagnosis, faulty treatment technique or possibly failure to eradicate imaginary lice. The often arduous process of determining whether there was a true active infection and whether "treatment failure" was due to misdiagnosis or inappropriate/inadequate treatment is, therefore, necessary.

10.2 Many cases of "reinfection" are due to one of the following:

- imaginary lice
- inadequate or inappropriate treatment
- misdiagnosis, for example itch or nits still present after successful eradication of living lice
- the finding of young lice that have not been killed whilst in the egg after the first and before the second application of lotion
- True reinfection is usually from a close contact in the community rather than specifically from a school contact. Where some carriers of lice are likely not to be aware that they are infected, others may have struggled for some time despite treatment

11.0 Cardinal rule after chemical treatment

11.1 Inappropriate use of chemical treatments can lead to a failure to bring a head lice infection to an end, and may increase the risk of resistant lice. In general the following points should be borne in mind to avoid inappropriate use, particularly when considering a possible treatment failure.

11.2 Chemical preparations should not be used for more than one complete treatment (i.e. two applications, seven days apart) unless a careful assessment has been made, including:

- Was there in fact a true infection before application?
- Is there in fact a current active infection now?
- Are the detected lice simply those that have hatched after a first application? This is more likely to be the case if the lice found following the suspected treatment failure are predominant young or baby lice
- Did the first treatment (two applications) fail?
- If it did, why? (Enough lotion? Properly applied? All infected contacts treated? etc)
- Is it more probable that the first infection was cleared, but reinfection has occurred? This is more likely to be the case if the lice found following the suspected treatment failure are predominantly adult

12.0 Management of true reinfections/treatment failure

If it is certain that chemical treatment has failed for an individual or a particular family, then the following actions should be considered:

- retreatment with the same preparation but ensuring that it is undertaken adequately and for all contacts simultaneously
- retreatment using a different preparation
- further thorough attempts to define if there may be a source of recurring infection, for example, a “best friend”, and attempts to reduce the likelihood of reinfection of the case/family
- if the problem remains, consider teaching the process of continued physical removal of lice

13.0 Resistance to chemical agents

The policy of rotating chemical agents on a district-wide basis is now considered outmoded. To overcome the development of resistance, a mosaic strategy is required whereby, if a course of treatment fails to cure, a different insecticide is used for the next course.

14.0 Alternative Approaches to Treatment

14.1 General points

Parental concerns over use of chemical preparations to treat head lice are common and a number of products based on alternative approaches are currently on the market. In addition, chemical preparations are most often purchased without a prescription and the cost of repeatedly purchasing such items may be prohibitive, particularly for low income families. Parents may be drawn to less costly approaches for financial reasons, perhaps being unaware that their GP can prescribe head lice treatments.

14.2 Mechanical removal of head lice ("Bug Busting")

There is some evidence that, if performed rigorously and according to the instructions provided with Bug Busting kits, wet combing can be effective in a proportion of cases, but the level of effectiveness is generally much lower than that seen with chemical preparations

14.3 Bug Busting as a treatment option

14.3.1 There are some circumstances in which Bug Busting may be an appropriate option for families. When a health adviser is quite sure that appropriate and thorough conventional treatment of a definitely diagnosed case of active current infection has failed, mechanical removal might be tried for individual cases and their families. It may also be considered when patients refuse to accept conventional treatment with chemical treatments because of concern about their safety.

14.3.2 Appendix B provides more information on how to perform wet combing.

14.4 Other means of mechanical removal

In general electronic devices are expensive and their incorrect usage may present a safety risk. The current recommendation is that these devices are not suitable for general use.

14.5 Herbal and essential oils

A number of products containing essential oils such as tea tree and eucalyptus oil are marketed as "natural" remedies for head lice. There is little evidence available on which to assess the effectiveness or safety of such products.

14.6 Other medical devices and alternative cures

A number of fluid preparations are marketed as medical devices for the eradication of head lice. Products which claim to have a physical action on head lice are coming onto the UK market, including Full Marks Solution™, Lyclear Spray Away™, and Nice 'n Clear™ head lice lotion. There is as yet insufficient evidence available on which to assess the effectiveness of these new products. Home remedies have not been proven to prevent or treat.

15.0 Management of Contacts

If a person is found to be infested then all close contacts should be informed and examined for evidence of infestation by the responsible adult (usually a parent) and treated as described if live, moving lice are found i.e. by the wet combing method.

16.0 Identified Risks / Barriers to Implementation

There may be financial implications regarding the cost of treatment.

17.0 Monitoring Method

The guidance as to if lotions are being prescribed is monitored by reviewing PACT data. This is information that is provided on a periodic basis to all prescriber's and allow them to monitor their own prescribing trends. As well as this, an accountable manager also receives the same data to ensure that lotions that are being prescribed can be monitored.

18.0 Monitoring Compliance and Effectiveness

18.1 The group/directorate management teams will maintain the application of this Policy.

18.2 The ICC/Site specific infection control groups and the Children's and Young People Community therapy Service will be responsible for monitoring non-compliance and assessing the effectiveness of the policy.

19.0 Associated Documents

19.1 NLAG Hand Decontamination Policy.

19.2 NLAG Glove Usage Policy.

19.3 NLAG Guidelines for wearing of personal protective equipment.

19.4 NLAG Infestation Policy: Lice and Fleas.

19.5 Public Health Medicine Environmental Group-Head Lice Evidence Base.

19.6 NLAG Non-Medical Prescribing Policy.

20.0 References

The Stafford Group. Head lice: evidence-based guidelines based on the Stafford Report. J Fam Health Care.2012.

21.0 Definitions

21.1 **Detection comb** – A special plastic comb which should have rigid teeth no further than 0.3 mm apart, each tooth preferably having at least one flat surface. Metal combs are too harsh and may pull out hair.

21.2 **Hair muffs** – Rings of debris from the hair follicle that surround the hair shaft and grow out with it. They may be mistaken for nits but, unlike nits, they can be easily slid along the hair shaft.

21.3 **Head louse** – An insect parasite, Pediculus capitis, which can only survive on the human scalp and has a needle-like mouthpart with which it pierces the scalp to feed on blood.

21.4 **Incidence** – The proportion of people who develop new infection in a given group over a period of time, usually one year (compare "prevalence").

21.5 **Nit** – The empty eggshell of the head louse left stuck to a hair shaft after the insect has hatched.

21.6 **Prevalence (point prevalence)** – The proportion of people with active infection in a given group at a given time (compare "incidence").

21.7 **Terminology**

The following terms are recommended for use in policies and leaflets:

- **Head louse (singular)/head lice (plural)** – The form head louse/head lice is non-standard
- **Infection** – "Infestation", though correct, has unpleasant overtones and tends to reinforce social stigma. "Infection" is generally a more helpful term when dealing with head lice
- **Lotion** – For simplicity, the term lotion used in this document includes all types of licensed products, except shampoos (which are ineffective). However, commercial products for treatment of head lice are normally described as lotion (alcohol base) and liquid (aqueous base)

22.0 Consultation

22.1 The review and development of these guidelines has been by the Clinical Development and Assessment Coordinator for Children and Young people's Community services in conjunction with the Patch Team Leader for School Nursing and the Infection Control Specialist Nurse.

22.2 Circulated for comments to:

- Patch Team Leader for School Nursing
- Head of Medicines management
- Clinical Development Co-ordinator
- Public Health Department
- Infection Control Specialist Nurse
- Patch Team Leader for Health Visiting
- Operational Matron for Children and Young People's Community Services
- Assistant General Manager for Community and Therapy Services

22.3 The views of service users have not been sought for the purposes of this guidance.

The electronic master copy of this document is held by Document Control, Directorate of Clinical and Quality Assurance & Trust Secretary, NL&G NHS Foundation Trust.

Appendix A

NOTES FOR FAMILIES – HAVE YOU GOT HEAD LICE?

Detection combing – how to do it

You need:

- Plastic detection comb (from the pharmacist)
- Good lighting
- Ordinary comb

Wash the hair well and then dry it with a towel. The hair should be damp.

Make sure there is good light. Daylight is best.

Comb the hair with an ordinary comb.

Start with the teeth of the detection comb touching the skin of the scalp at the top of the head.

Keeping in contact with the scalp as long as possible, draw the comb carefully towards the edge of the hair.

Look carefully at the teeth of the comb in good light.

Repeat over and over again from the top of the head to the edge of the hair in all directions, working round the head.

Do this for several minutes. It takes 10 to 15 minutes to do it properly for each head.

If there are head lice, you will find one or more lice on the teeth of the comb.

Head lice are little insects with moving legs. They are often not much bigger than a pin head, but may be as big as a sesame seed (the seeds on burger buns).

Clean the comb under the tap. A nail brush helps to do this.

If you find something and aren't sure what it is, stick it on a piece of paper with clear sticky tape and show it to your school nurse or family doctor. There can be other things in the hair that are not lice.

Notes

You can buy a plastic detection comb from the pharmacist. Many combs sold as louse detection and removal combs are unsuitable for the purpose. Only those with flat-faced, parallel-sided teeth less than 0.3mm apart are appropriate 17.

Amongst the best known of these are the combs included in the "BugBuster" pack, which are designed for wet-combing with conditioner.

If you need help and advice, ask your local pharmacist, health visitor, school nurse or family doctor.

Don’t treat unless you are sure that you have found a living, moving louse.

Appendix B

NOTES FOR FAMILIES – HOW TO TREAT HEAD LICE

Please read NOTES FOR FAMILIES – HAVE YOU GOT HEAD LICE?

Don't treat unless you are sure you have found a living, moving louse.

Never use head louse lotions on your family "just in case". It's never a good idea to use chemicals if they aren't really needed.

If you are sure you have found a living louse:

Check the heads of all the people in your home.

Only treat those who have living, moving lice.

Treat them all at the same time with a head lice lotion (not shampoo).

Ask your local pharmacist, school nurse, health visitor or family doctor which lotion to use and how long to leave it on.

Always follow manufacturer's instructions when applying a lotion.

Put the lotion on to dry hair.

Use the lotion in a well-ventilated room or in the open air.

Part the hair near the top of the head, put a few drops on to the scalp and rub it in. Part the hair a bit further down the scalp and do the same again. Do this over and over again until the whole scalp is wet.

With long hair you don't need to apply lotion down any further than where you would put a ponytail band (except when applying Dimeticone which should fully cover hair).

Use enough lotion – at least one small bottle for each head and more if the hair is thick. Use all the lotion up.

Keep the lotion out of the eyes and off the face. One way is to hold a cloth over the face.

Let the lotion dry on the hair. Some lotions can catch fire, so keep well away from flames, cigarettes, stoves and other sources of heat. Don't use a hair dryer.

Repeat the treatment in seven days' time for all of those receiving the first treatment.

Check all the heads a day or two after the second treatment. If you still find living, moving lice, ask your local pharmacist, health visitor, school nurse or family doctor for advice

Appendix C

NOTES FOR FAMILIES – HEAD LICE: THE TRUTH AND THE MYTHS

The lice

Head lice are small insects with six legs. They are often said to be "as large as a match head"; in fact, they are often not much bigger than a pin head and rarely bigger than a sesame seed (the seeds on burger buns).

They live on or very close to the scalp and don't wander far down the hair shafts for very long.

The louse's mouth is like a very small needle. It sticks this into the scalp and drinks the blood.

They can only live on human beings; you can't catch them from animals.

Nits are not the same thing as lice. Lice are the insects that move around the head. Nits are egg cases laid by lice, which are glued onto hair shafts; they are smaller than a pin head and are pearly white.

If you have nits it doesn't always mean that you have head lice. When you have got rid of all the lice, the nits will stay stuck to the hair until it grows out.

You only have head lice if you can find a living, moving louse (not a nit) on the scalp.

Who and where?

Anybody can get head lice, but they are much rarer in adults.

Head louse infection is a problem of the whole community, not just the schools.

Infection is common during school holidays as well as during term time. Parents start to worry more about lice when children go back to school because they think the lice are being caught there.

A lot of head louse infections are caught from close family and friends in the home and community, not from the school.

It's not just children who have head lice; adults get them too.

It's often said that head lice prefer clean, short hair. In fact, they probably don't much care whether hair is dirty or clean, short or long.

How you get them

Head lice can walk from one head to another when the heads are touching for some time.

You are very unlikely to pick up head lice from brief contact with other people. The longer you have head-to-head contact with someone who has lice, the more likely it is you will get them too.

They can't swim, fly, hop or jump. The idea that they can jump may have come from the fact that, when dry hair is combed, a head louse caught on the teeth of the comb is sometimes flicked off by static electricity (this is one reason why detection combing should be done with the hair damp).

You don't get them from objects such as chair backs. Although it's just possible that a louse might get from one head to another if a hat is shared, this is very unlikely. It's not the way infection is usually caught.

What happens next

If you catch two or more lice, they may breed and increase slowly in number. At this stage, most people don't have any symptoms and won't know they have lice unless they look very carefully for them.

For the first two or three months, there is usually no itch, but then the scalp may start to itch badly. This is due to an allergy, not to the louse bites themselves.

Most people only realise they have head lice when this itch starts. By then they've had lice on their head for two or three months without knowing it.

In most infections, there aren't more than a dozen or so lice on the scalp at any one time.

Some people never get the itch, including adults. They may have a few lice on their heads for years without knowing it and can pass them to other people.

Louse droppings may fall on to the pillow during the night. Pillows may then get dirty more quickly than usual.

Prevention – can you stop them?

Combing is an important part of good personal care but head lice are not easily damaged by it. Good hair care may help to spot lice early and so help to control them. There is no evidence that the old slogans "break its legs, so it can't lay eggs" or "a legless louse is an eggless louse" have any truth in them.

The best way to stop infection is for families to learn how to check their own heads. This way they can find any lice before they have a chance to breed. They can then treat them and stop them going round the family.

The way to check heads is called "detection combing". It can be done as often as families want to.

The way to do it is described in NOTES FOR FAMILIES – HAVE YOU GOT HEAD LICE?

If a living, moving louse is found on one of the family's heads, the others should be checked carefully.

Then any of them who have living lice should be treated at the same time.

How to treat head lice

You should only ever treat someone for head lice if you have found a living, moving louse.

The best treatment is to use lotion (not shampoo) from the pharmacist or your local doctor's surgery.

The way to use the lotion is given in NOTES FOR FAMILIES – HOW TO TREAT HEAD LICE.

If you are sure you have found living lice after proper treatment, don't keep putting more lotion on; ask advice from the local pharmacist, the health visitor, your family doctor or the school nurse.

If the problem won't go away

The problem may not be head lice at all. Often we think there are lice when there aren't really any there. We all start to itch as soon as head lice are mentioned.

There are other causes for itching of the scalp. Using head louse lotion can make these worse.

Using lotion over and over again can cause skin irritation, which itself makes the head itch.

When living, moving lice are found, they can almost always be cleared by using the right lotion. This will only work if enough of it is used, if it is put on in the right way, and if any other family members or close friends who have lice are properly treated at the same time.

A day or two after using the lotion, you sometimes find little lice still there. These have hatched out of the eggs since you put the lotion on and will be killed if you put the lotion on again after seven days.

When you have got rid of the lice, you may still itch for two or three weeks. This doesn't mean you still have lice. Check the head carefully. Remember, you don't have head lice if you can't find a living, moving louse.

When you have got rid of all the lice, the nits (empty egg cases stuck on the hairs) will still be there. This doesn't mean you still have lice and you shouldn't treat again no matter how many nits there are if you can't find a living louse.

People who think their children keep on getting head lice may have made the mistakes listed above and may keep be "treating" lice that have long since been cleared, or were never even there in the first place.

If children do really keep on having living lice, this is most likely to be due to not doing the treatment properly and not treating all those close contacts who have also been found to have lice. Remember, if infection really does keep on happening, it is almost always from a member of the family or a close friend. It is rarely from other children in the classroom, except from a "best friend".

If you still have problems, ask your family doctor, health visitor, local pharmacist or health visitor if a wet-combing method to remove the head lice might help.

What the schools can do

Schools must remember that most lice are caught in the family and the local community, not in the classroom.

"Alert" letters should not be sent out. These can cause an "outbreak" of imaginary lice.

Children who may have lice should not be excluded from school; if they do have lice, they will probably have been there for weeks already. The school nurse can help the parents to know how to detect whether there really are lice there and how to get rid of them if they are.

The school should give information on lice for parents and staff, including the importance of regular detection combing and how to do it. Provision of information should be on a regular basis, not just when there is thought to be an "outbreak" and should be done in conjunction with the school nurse.

Talks for parents by the school nurse can be helpful.

What families can do

Make sure that all family members know about good hair care, including regular, thorough combing.

The only way to control head lice that works is for the family to check their own heads.

Check all the family's heads every now and then with a special plastic detection comb from the pharmacist's shop. Read NOTES FOR FAMILIES – HAVE YOU GOT HEAD LICE?

All the family means everyone (adults as well as children) in the same household.

Only if you are sure you have found living, moving head lice in your family or household, tell your relatives and close friends so that they can check their own heads.

Appendix D

HEAD LICE: NOTES AND GUIDANCE FOR THE PRIMARY CARE TEAM

General

Please read the attached Report carefully.

Head louse infection is not primarily a problem of schools but of the wider community.

As for any other infectious conditions that occur in their patients, primary care teams should be knowledgeable and competent in the control of head lice. They should be able to teach patients the technique of detection combing and be prepared to advise appropriate treatment when there is confirmed infection.

Health professionals should make sure that they are able to identify a louse at all stages of its development. It helps to have a magnifying glass to hand.

Patients should be made aware that head lice are only transmitted by direct, prolonged, head-to-head contact.

Specific

DO…

- Do consider nominating a member of staff to be responsible for advising patients on head louse problems. This may be a practice nurse or health visitor, but other non-clinical staff may be appropriate as a first contact. If examination is thought necessary, referral can then be made

- Do liaise, as appropriate, with local pharmacists, school nurses, health visitors, head teachers, infection control nurses and the consultant in communicable disease control. Only a concerted approach can be effective

- Do adhere to the following principles of control:

    - Definite diagnosis, i.e. a living, moving louse found by detection combing

    - Listing and examination of contacts

    - Simultaneous thorough and adequate treatment of all confirmed cases with one of the standard chemical lotions

    - Repeat the treatment after seven days

- Do make sure that the patients are provided with information, advice and support. At a first consultation, it may be sufficient to ensure that they know how to undertake detection combing and what to do if there are head lice present. See NOTES FOR FAMILIES – HAVE YOU GOT HEAD LICE?; HOW TO TREAT HEAD LICE; and HEAD LICE: THE TRUTH AND THE MYTHS

- Do be aware that patients are often mistaken when they believe they have lice. Recurrent scalp problems may be missed if it is simply assumed without evidence that lice are the cause

- Do make every effort to discourage unnecessary or inappropriate treatment with chemical treatments
- Do make sure that patients know that the correct use of chemical lotions is the scientifically confirmed way to treat head louse infections
- Do follow the British National Formulary's recommendation of two applications of lotion (not shampoo) seven days apart
- Do resist the temptation to agree with parents' suggestions that a first course of treatment has failed, that "it must be a resistant strain", and that a further course of treatment should be given. There is no substitute for a proper professional assessment. Page 29
- Do seek the advice of the local health protection team on appropriate chemical lotions
- Do bear in mind that different formulations of the same active ingredient may have different efficacies. When a first treatment has definitely failed, it may be useful to try the same agent in a different formulation

DON'T…

- Don't routinely refer patients to the school nurse
- Don't confirm a diagnosis of head louse infection unless you yourself have seen a living, moving louse, or you have physical evidence from the patients; ask them to stick one of the lice on a piece of paper with clear sticky tape and bring it in
- Don't recommend treatment unless a louse has been clearly identified (as described above). If you do recommend treatment, ensure that it is performed adequately both in the patient and in infected contacts
- Don't assume that "reinfections" or "treatment failures" are truly infections. Make sure that a louse is found or produced
- Don't recommend retreatment without first of all establishing that living, moving lice are still present after two applications of lotion seven days apart and after a full professional assessment as to the ways in which the family may not have complied carefully with the first attempt
- Don't recommend or support any mass action
- Don't support the use of electronic combs, repellent sprays or chemical agents not specifically licensed for the treatment of head louse infections

Appendix E

HEAD LICE: NOTES AND GUIDANCE FOR COMMUNITY PHARMACISTS

General

Please read the attached Report carefully.

Head louse infection is not primarily a problem of schools but of the wider community.

Pharmacists are an important source of advice on the management of head louse infection. They should be knowledgeable and competent on the subject, be able to teach patients the technique of detection combing and be prepared to advise appropriate treatment.

Pharmacists have an especially important role in limiting chemical treatment to true cases of infection, reducing unnecessary and inappropriate treatment and, thereby, reducing the risk of further development of resistant strains of lice.

Health professionals should make sure that they are able to identify a louse at all stages of its development. It helps to have a magnifying glass to hand.

Patients should be made aware that head lice are only transmitted by direct, prolonged, head-to-head contact.

Specific

DO…

- Do consider nominating a member of staff to be responsible for advising patients on head louse problems
- Do liaise, as appropriate, with your local family practices, school nurses, health visitors, head teachers, infection control nurses and the local health protection team. Only a concerted approach can be effective
- Do adhere to the following principles of control:
    - Definite diagnosis, i.e. a living, moving louse found by detection combing
    - Listing and examination of contacts
    - Simultaneous thorough and adequate treatment of all confirmed cases with one of the standard chemical lotions
    - Repeat the treatment after seven days
- Do make sure that the patients are provided with information, advice and support. At a first consultation, it may be sufficient to ensure that they know how to undertake detection combing and what to do if there are head lice present. See NOTES FOR FAMILIES – HAVE YOU GOT HEAD LICE?; HOW TO TREAT HEAD LICE; and HEAD LICE: THE TRUTH AND THE MYTHS

- Do be aware that patients are often mistaken when they believe they have lice. Recurrent scalp problems may be missed if it is simply assumed without evidence that lice are the cause

- Do make every effort to discourage unnecessary or inappropriate treatment with chemical treatments

- Do follow the British National Formulary's recommendation of two applications of lotion (not shampoo) seven days apart

- Do make sure that patients know that the correct use of chemical lotions is the scientifically confirmed way to treat head louse infections. Page 31

- Do resist the temptation to agree with parents' suggestions that a first course of treatment has failed, that "it must be a resistant strain" and that a further course of treatment should be given. There is no substitute for a proper professional assessment

- Do seek the advice of the local consultant in communicable disease control on appropriate chemical lotions. Generally, dimeticone is now considered as first-line chemical treatment and malathion or one of the pyrethroids as second-line treatment

- Do bear in mind that different formulations of the same active ingredient may have different efficacies. When a first treatment has definitely failed, it may be useful to try the same agent in a different formulation

- Do ensure that you provide patients with an effective detection comb. This will have rigid, plastic teeth set not more than 0.3 mm apart

DON'T…

- Don't routinely refer patients to the school nurse

- Don't assume a patient has head lice unless you yourself have seen a living, moving louse, or you have physical evidence from the patients; ask them to stick one of the lice on a piece of paper with clear sticky tape and bring it in

- Don't recommend treatment unless a louse has been clearly identified (as described above). If you do recommend treatment, ensure that it is performed adequately both in the patient and in infected contacts

- Don't assume that "reinfections" or "treatment failures" are truly infections. Make sure that a louse is found or produced

- Don't recommend retreatment without first of all establishing that living, moving lice are still present after two applications of lotion seven days apart and after a full professional assessment as to the ways in which the family may not have complied carefully with the first attempt

- Don't support the use of electronic combs, repellent sprays or chemical agents not specifically licensed for the treatment of head louse infections

Appendix F

HEAD LICE: NOTES AND GUIDANCE FOR SCHOOL NURSES (OR OTHER RESPONSIBLE SCHOOL HEALTH OFFICERS)

General

Please read the attached Report carefully. It is your professional duty to ensure that you are fully informed and up-to-date with current scientific knowledge and practice.

Health professionals should make sure that they are able to identify a louse at all stages of its development. It helps to have a magnifying glass to hand.

Parents and staff should be made aware that head lice are only transmitted by direct, prolonged, head-to-head contact.

Specific

DO…

- Do adhere to the following principles of control (see NOTES FOR FAMILIES – HAVE YOU GOT HEAD LICE?; HOW TO TREAT HEAD LICE; and HEAD LICE: THE TRUTH AND THE MYTHS):
  - Definite diagnosis, i.e. a living, moving louse found by detection combing
  - Listing and examination of contacts by the family
  - Simultaneous thorough and adequate treatment of all confirmed cases with one of the standard chemical lotions
  - Repeat the treatment after seven days
- Do make a professional assessment of reported cases of head louse infection of any child in the school. If the report is from the child's parent, make sure that the parents are provided with information, advice and support. If the report is from a teacher, for example, that the child is scratching continuously or that a moving louse has been seen on the head, it may be necessary to examine the child to establish a diagnosis. If your knowledge of the parents is good, it may be sufficient to make contact with them to ensure that they know how to undertake detection combing and what to do if there are head lice present
- Do understand yourself and teach your families and school staff that the correct use of chemical lotions is the scientifically confirmed way to treat head louse infections
- Do make every effort to discourage unnecessary or inappropriate treatment with chemical treatments
- Do resist the temptation to agree with parents' suggestions that a first course of treatment has failed, that "it must be a resistant strain" and that a further course of treatment should be given. This may be an easier approach in a busy schedule, but is not in the best interests of the family. There is no substitute for a proper professional assessment

- Do be prepared to do a domiciliary visit if that is the most tactful and effective way of dealing with a case of head louse infection, especially for a "problem family". You have the professional skills and training to educate, persuade, inform, guide and support them

- Do play an active part in providing regular, accurate information about head lice to parents and staff. This should be done in conjunction with your local consultant in communicable disease control and the head teacher, and should preferably be integrated into a package along with information on other health issues

DON'T…

- Don't undertake routine head inspections as a screening procedure. Detection combing should be done by parents, but it is important that they are given proper information, advice and support by you. This should be in accordance with the attached Report

- Don't diagnose head louse infection unless you yourself have found a living, moving louse, or you have physical evidence from the parents; ask them to stick one of the lice on a piece of paper with clear sticky tape and bring it in to you or one of their other health advisers

- Don't recommend the head teacher to send out "alert letters" to other parents. In fact, encouragement should be given not to do so

- Don't recommend treatment unless a louse has been clearly identified (as described above). If you do recommend treatment, ensure that it is performed adequately both in the patient and in infected contacts

- Don't assume that "reinfections" or "treatment failures" are truly infections. Make sure that a louse is found or produced

- Don't recommend retreatment without first of all establishing that living, moving lice are still present after two applications of lotion seven days apart and after a full professional assessment as to the ways in which the family may not have complied carefully with the first attempt.

- Don't recommend or support any mass action

- Don't support the use of electronic combs, repellent sprays or chemical agents not specifically licensed for the treatment of head louse infections

- Don't wait until there is a perceived major outbreak and corresponding agitation in the school. A regular educational programme rather than a reactive "campaign" is more sensible