

# Headlice Policy



## HEAD LICE POLICY - SUMMARY

Head lice control involves the whole community, both adults and children, not just schools.

No treatment should be prescribed or used, unless a living, moving louse has been found by detection combing.

Thorough but appropriate contact tracing is essential.

Treat all confirmed infections at the same time with an insecticidal lotion or liquid. Do not use head louse shampoos. A course of treatment is two applications, seven days apart.

When prescribing, please specify the formulation and order enough lotion or liquid for two applications.

Insecticides must not be used for prophylaxis.

A “structured mosaic” of treatments should be followed. The practice of rotating insecticides is outmoded.

“Resistance” is more likely to be due to faulty treatment technique and failure to trace and treat infected carriers.

Wet combing is the standard method for detecting head lice. It may also be a treatment method for some individuals although its effectiveness has not been demonstrated scientifically. It is not recommended as general treatment of head lice in the wider population.

Alternative remedies, such as cosmetic shampoos with herbs or aromatic oils, do not have product licences and there is little or no safety data to support their use! Concentrated oils such as tea tree or lavender oil can cause skin reactions and should therefore not be used.

### Prevalence

Because systematic validated surveys have not been done, the true prevalence of head lice is unknown but is probably much lower than the public and professional perception.

### Health Implications

Head lice are not a serious health problem in this country. They rarely, if ever, cause physical health problems other than itching of the scalp. Adverse health effects mainly derive not from the 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.

## A problem of society

Head louse infection is more a societal than an infectious disease problem.

# ***Responsibility for control of head lice***

## Parents

The primary responsibility for the identification, treatment and prevention of head lice in the family lies with the parent. Parents, however, needs support from health professionals to recognise headlice and distinguish their findings from other conditions.

## Primary Care Team

For all patients the primary professional responsibility for the diagnosis, management, treatment and prevention of disease lies with the general practitioner with whom they are registered. General practitioners or other delegated members of the primary health care team need to be knowledgeable and competent in the diagnosis and control of head lice, be prepared to advise appropriate treatments and able to teach parents the technique of detection combing. Treatment should never be initiated unless the health care worker is convinced that living lice are present on the head of at least one of the family.

## Pharmacists

Local pharmacists should inform themselves of the Buckinghamshire policy and protocol and should adhere to them. Every opportunity should be taken to give accurate information to the public. Customers should be dissuaded from the inappropriate, repeated, or unnecessary use of insecticidal preparations. Pharmacists and their staff should therefore be knowledgeable and competent in the control of head lice, be able to teach parents the technique of detection combing, and be prepared to advise appropriate treatment. Treatment should never be advised unless the pharmacist/worker is convinced that living lice are present on at least one of the scalps of the family.

## School Health Service

School nurses and carers have responsibility for professional advice to staff, parents and children and for endorsing Buckinghamshire's policy. They should provide clear, accurate, up to date information about head lice. This should be done on a regular basis not only when parent's or teacher's concern is already raised or when there is an "outbreak" in the school. It should generally be integrated with the management of other school health problems rather than as a special separate topic. School nurses should be prepared to teach detection coming and give advice on treatment and prevention to individuals and families at their homes if necessary, and to groups of parents, children and staff as required.

**They should not undertake routine head inspections.**

## Headteachers

The Headteacher should work with the School Nurses and Doctors and the Health Authority's Communicable Disease Control Team (CDC) guided by Buckinghamshire head lice policy and adhere to it. **The "alert letters" system should be discontinued.**

Advice should always be sought on detection, treatment and prevention before school staff take action.

## The Communicable Disease Control Team

The Consultant in Communicable Disease Control (CCDC) is responsibility for advising other professionals of the local policy and measures for control of head lice in the population as a whole. The county policy and protocols are produced to guide all involved professionals including school nurses, school doctors, nursery nurses, general practitioners, health visitors, practice nurses, community paediatricians, infection control teams, pharmacists and headteachers. The Communicable Disease Control Team (CDC) will support school and other community nurses, practice nurses and educational staff through regular training sessions, respond to queries and "trouble shoot".

## The Head Louse – *Pediculus Humanus Capitis*

The head louse is a well-camouflaged insect, which feeds on human blood. The adult louse is about the size of a sesame seed and lives for about one month. The female louse lays seven or eight eggs and glues them to the base of the hair shaft next to the scalp. The eggs hatch seven days later. The new louse emerges from the egg leaving the empty case (“nit”) visibly attached to the hair shaft. It is important to differentiate between lice, eggs and nits. Many people think they are the same thing.

- Living eggs are translucent and difficult to see
- Nits are white in colour and attached to the hair
- By the time nits are seen, the person may have been infected for several months.
- Lice become coloured when they feed and then blend in with hair colour.
- A louse will only transfer from one head to another when two heads are in prolonged head to head contact.
- Head lice do not jump or fly.
- Head lice do not discriminate between clear and dirty heads.

Initially, there may not be any symptoms and affected people are often unaware of their infection. However, if left untreated, the head becomes itchy due to sensitisation, excessive scratching may lead to secondary infection of the scalp.

Rarely, and only with heavy infection, sleep patterns and concentration may be disturbed and children may complain of illness and fatigue.

### Diagnosis/Detection

#### Only one way

**Unless a living, moving louse is found a diagnosis of head louse infection cannot be made with certainty no matter how many nits are present, how many reported cases there are in school, how bad the itch is, or however dirty the pillows are.**

#### Detection combing

The only reliable method of diagnosing current, active infection with head lice is detection combing, though there may be other clues to their presence such as dirty pillow.

Misdiagnosis may occur if detection combing is not used. This is commonly due to the factors listed under “Imaginary lice”.

#### Prevalence

Prevalence is measured by surveys. There is no reliable reporting or diagnostic tests to aid estimates. From surveys undertaken in Southern England and over the past ten years, prevalence in children has been up to 10%.

#### Self Diagnosis

Detection combing should be done by parents/family members following the advice in the head lice fact sheet. General practitioners, school nurses and other professionals should not necessarily rely on patients’ diagnosis without asking to see the evidence, e.g. a louse stuck onto paper with clear adhesive tape.

#### Imaginary Lice

Many “cases” of head louse infection are not current infections, but are:

- Psychogenic itch and revulsion on hearing of other cases in the school, usually by the headteacher’s “alert letter”.

- Resultant “louse phobia”.
- Itching scalp due to other causes such as eczema (which in itself may be caused by repeated treatment with insecticides).
- Other conditions such as seborrhoea, “dandruff”.
- Persistent nits after adequate treatment.
- Itch persisting after adequate treatment.
- The result of parents grievances which are not primarily to do with head lice.

## ***Prevention and Treatment***

### “Being seen to do something”

A clear distinction should be made between treating head louse infections and “treating” the public reaction, which can be excessive. Actions sometimes seem effective in reducing the prevalence of head lice when in fact there has been a reduction in public agitation and concern simply because “something has been seen to be done”.

It is bad clinical practice and ethically dubious to recommend action/treatment which is not based on scientific/clinical evidence or at least on widespread professional consensus. Professionals may want “to be seen to be doing something”, but may in fact make the problem worse by diverting efforts in the wrong direction.

### Grooming

Good hair care is sensible in terms of personal and social education and hygiene, and should be encouraged. Thorough regular grooming using a fine toothed pocket comb or bristle brush has often been recommended as a means of prevention, detection, and even treatment of head lice.

Whilst there is no convincing evidence for such claims, good grooming should be recommended “sensible” action and good practice.

### Mechanical removal of Lice i.e. “Bug Busting”

In recent years, mechanical removal of lice by wet combing with the use of conditioner has been put forward as a way of treatment and control. Its effectiveness has to date not been substantiated by authoritative scientific studies. There are anecdotal reports of both its success and failure. If it were demonstrated to work for individuals and their contacts, it is unlikely that it would be practicable as a method of community control. Wet combing is, of course, an important way of diagnosing current infection. Its effectiveness in diagnosis should be clearly distinguished from claims that it also works as a treatment. It may be suggested as an alternative method to conventional treatments with insecticides when this is refused because of concerns about their safety or for other reasons.

A metal nit comb should be used to remove nits. Although harmless, nits are unsightly and could be mistaken for continued or re-infection.

### Repellents

Proprietary products, which are claimed to repel lice, are not recommended because there is no adequate evidence of their effectiveness. As they do not treat existing infections, they are not useful for control of prevalent infections.

### Chemical Treatment

This is the only method supported by evidence of effectiveness. Therefore chemical treatments should be recommended as first line treatment when active lice are seen.

The three main groups of chemicals (pyrethroids, malathion and carbaryl) are still effective, even though some degree of resistance to each group has been reported around the country.

Unless resistance is demonstrated scientifically, treatment failure is more likely to be due to ovidical failure, misdiagnosis, faulty treatment technique or the problem of imaginary lice. The often arduous investigation to determine whether there was a true active infection and true “treatment failure” may be necessary.

Malathion, carbaryl and the pyrethroids have good safety records when used correctly, the dose levels contained in a course of treatment, i.e. two application seven days apart, are well within the safety limits. Reports side effects are given due to the carrying vehicle, not the insecticide.

Lotion formulations have an alcoholic base. They are not suitable for asthma and eczema sufferers, or young children.

Liquid formulations have an aqueous base and are suitable for everyone. (See NF 13.10.4).

Care must be taken that the chemical treatments are used in well-ventilated spaces, away from sources of flame and heat such as fires, stoves, cigarettes and hair dryers. Care should also be taken to prevent lotions/liquids from running over the face and eyes.

### **Treatment Failure and Reinfection**

Treatment failures are perceived when there are:

“imaginary lice” – see under “Diagnosis”.

Inadequate or inappropriate treatment.

Misdiagnosis, e.g. itch or nits still present after successful eradication of living lice.

The finding of young lice which have not been killed whilst in the egg after the first and before the second application of lotion.

Treatment failure is often interpreted as reinfection.

True reinfection is rare and as likely from a contact in the community as from school contacts. Carriers of lice may not be aware that they are infected.

### **Family and Close Contacts**

All family members and close contacts, both adults and children, of an infected person should examine their hair using detection combing. Anyone who is infected, i.e. active lice seen, should be treated at the same time. Contact tracing and any necessary treatment is essential to prevent re-infection. Families may find the contact checklist on the patient information leaflet helpful.

#### Management of true re-infections

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 chemical preparation. Carbaryl is prescribed after medication consultation.

Supervision and assistance may be appropriate, such as domiciliary visit to the family by the school nurse or practice nurse.

Further thorough attempts to define if there may be a source of recurring infection e.g. a “best friend” and attempts to reduce the process of continued physical removal of lice.

If the problem remains, consider teaching the process of continued physical removal of lice (wet combing/bug busting).

## **Wet Combing/Bug Busting Treatment**

Wet combing, is a physical method of removing lice from the hair. This method may work for certain individuals although its effectiveness has not been demonstrated scientifically. The technique includes applying a handful of conditioner to wet hair and then using a plastic detector comb to comb the hair in a similar manner to detection combing. A treatment session takes 30 minutes and has to be repeated every three to four days for a minimum of two weeks. It should only be used as the first treatment method if the patient refuses chemical treatment.

### Combs

- Using the correct comb for a procedure is very important.
- Detection combing – plastic detector comb.
- Wet combing as a treatment – plastic detector comb.
- Removal of nits – metal nit comb.
- Detector and nit combs can be purchased from the community pharmacy.
- Electric combs which will kill lice but not eggs, are available over the counter. In order to operate effectively the hair must be very clean and dry. They are expensive and general use is not recommended.

### **Mosaic Strategy for Treatments**

A “structured mosaic” strategy is now recommended. Although Buckinghamshire and other Health Authorities in the region operated a policy of rotating insecticides for several years, this strategy has now been discontinued. This means that a treatment is chosen and used for one completed course i.e. two applications seven days apart. If this treatment fails another insecticide is chosen. If the second also fails, a third choice of insecticide is tried.

This strategy prevents the repeated use of a single product, limiting the development of resistance or sensitisation to the insecticide.

**Example of mosaic strategies:**

1<sup>st</sup> or 2<sup>nd</sup> Choice

Malathion

2<sup>nd</sup> or 1<sup>st</sup> Choice

Malathion

3<sup>rd</sup> Choice

Carbaryl or wet combing

or

1<sup>st</sup> or 2<sup>nd</sup> Choice

Permethrin

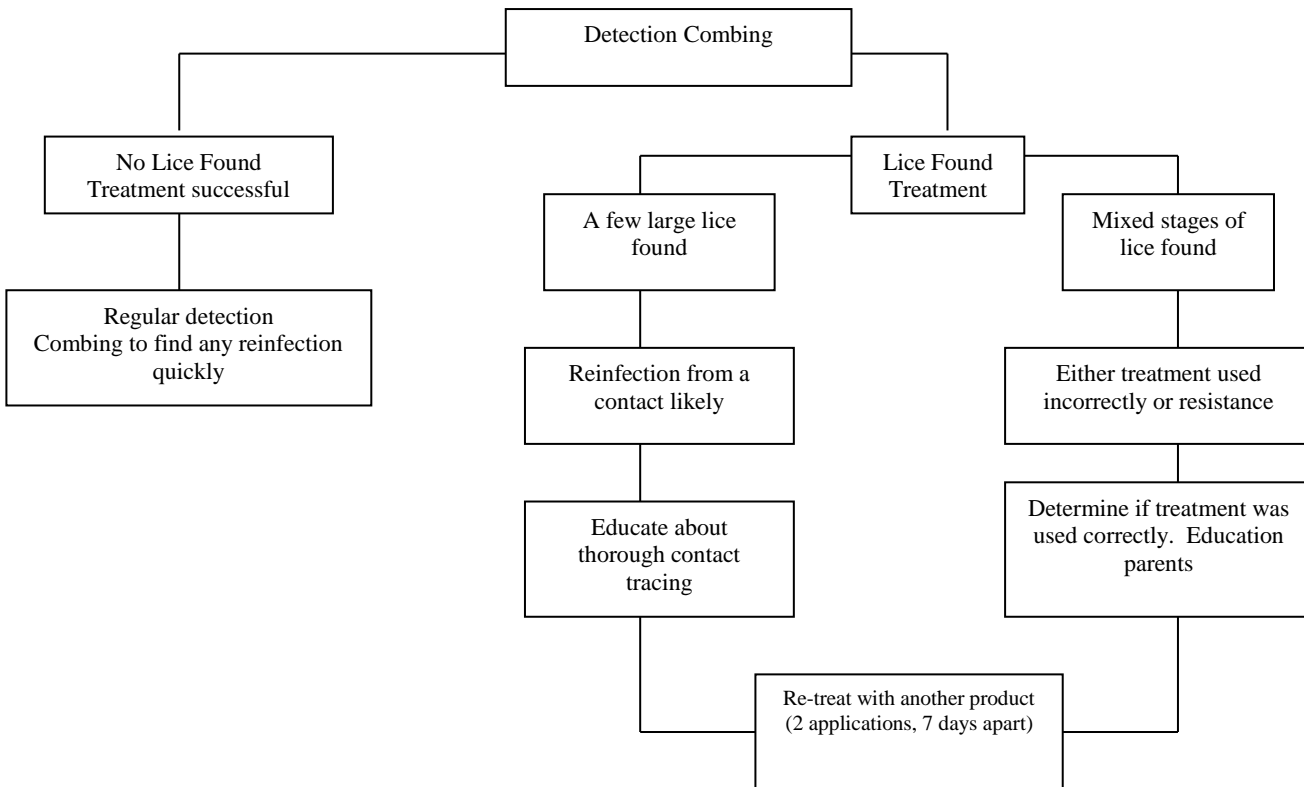
2<sup>nd</sup> or 1<sup>st</sup> Choice

Malathion

3<sup>rd</sup> Choice

Carbaryl or wet combing

**Evaluation after two treatment applications, seven days apart**



Treatments Available

Insecticide

Preparation of Product

Malathion 0.5% Suleo M Lotion (alcoholic) – 50ml, 200ml  
Derbac M Liquid (aqueous) – 50ml, 200ml  
Quellada M Liquid (aqueous) – 50ml, 200ml

Phenothrim 0.2% Full Marks Liquid (aqueous) – 50ml, 200ml  
Full Marks Lotion (alcoholic) – 50ml, 200ml  
Full Marks Mousse – 50ml, 200ml

Permethrin 1% Lyclear Crème Rinse – 59ml

Carbaryl 1% Carylderm Liquid (aqueous) - 50ml  
(prescription only) Carylderm Lotion (alcoholic) – 50ml

Detector comb – approx. 1.89 } (1999  
Nit comb approx. 2.99 } prices)



## **APPENDIX 1 - HEAD LICE ADVICE TO PARENTS/GUARDIANS**

*These notes are intended for families. Please photocopy as appropriate for parents/guardians.*

### **THE FACTS ABOUT HEAD LICE**

- Head lice are small insects (about the size of a sesame seed when fully grown) that live very close to the scalp.
- Nits are not the same as lice. Nits are the empty egg cases which stick to the hair.
- You only have head lice if you find a living, moving louse (not a nit).
- Anybody can get head lice – adults and children, even grandparents.
- Head lice don't care if the hair is dirty or clean, long or short.
- A lot of infections are caught from close family and friends in the home and community, not school.
- Head lice can walk from one head to another, if the heads are pressed together for some time. They do not fly, jump or swim.
- Regular hair care may help to spot lice early.
- The best way to stop infection is for families to check their heads regularly using detection combing.

### **Detection Combing**

You need:        Plastic detection comb (from the chemist)  
                      Good lighting  
                      Ordinary comb  
                      Conditioner (optional)

1. Wash the hair well, towel dry until damp but not dripping.
2. First comb the hair with an ordinary comb (you may put some conditioner on hair first to make combing easier).
3. Then, using the detection comb, touching the skin of the scalp at the top of the head, slowly draw the comb towards the end of the hair.
4. Carefully check the teeth of the comb in good light.
5. Repeat steps 3 and 4 working your way around the head from the top of the scalp to the ends of the hair. This will probably take 10-15 minutes.
6. If there are head lice you will find one or more on the teeth of the comb. Clean the comb under running water – a nailbrush helps to do this.
7. If you find lice, or something which you are unsure about, stick it onto a piece of paper with clear sticky tape and show it to your school nurse, GP or local chemist.

**The best way to stop infection is to do combing regularly (weekly including in school holidays). Never use insecticidal liquids, lotions or shampoos to PREVENT infection or just in case.**

## HOW TO TREAT HEAD LICE

**DO NOT TREAT UNLESS YOU ARE SURE YOU HAVE FOUND A LIVING, MOVING LOUSE.**

Ask your GP, Practice Nurse, Health Visitor, School Nurse or Pharmacist which head louse lotion or liquid to use and how long to leave it on.

Do **NOT** use head louse shampoo.

Do **NOT** use head louse treatments on your family “just in case”.

*In a well ventilated room...*

If you are sure you have a living louse:

1. Apply the lotion or liquid to **dry** hair (checking pack instructions carefully on length of time treatment should be left on).
2. Part the hair near the top of the head, put a few drips of the lotion or liquid on to the scalp and rub in some more of the lotion or liquid. Do this again and again until the whole scalp is wet. You don't need to take the lotion or liquid any further than where you would put a pony tail band. Take care not to get the lotion or liquid in the eyes or on the face.

**You should use at least one small bottle of lotion or liquid per head, more if the hair is thick.**

3. Let the lotion or liquid dry on the hair naturally. Keep well away from naked flames, cigarettes or other sources of heat. Do **NOT** use a hair dryer. The period of time that the treatment is on the hair (contact time) is important if the treatment is to be successful and therefore must be adhered to. Always check the manufacturer's instruction for the correct contact time.
4. Then, wash and rinse as normal. Repeat the entire treatment seven days later, using a second bottle of the same lotion or liquid.
5. Check the head two days after the second treatment. If you still find living, moving lice, ask your pharmacist, school nurse, health visitor, practice nurse or GP for advice.
6. Remove the nits (egg cases) by combing the hair, while wet, with a metal nit comb.

## CONTACT TRACING

You need to find where the lice came from or you may be reinfected. The source is probably a family member or close friend, who probably doesn't know they have lice.

Use the checklist to make sure you get in touch with everyone who have been in close (head to head) contact with the infected person. All the people on your list should check themselves and their families for head lice using detection combing. Anyone who is infected with living, moving lice should be treated straight away.

## REMEMBER

**It doesn't matter how many nits you have, or how itchy your scalp is – if you can't find a living, moving louse, you don't have head lice.**

**The problem won't go away?**

DID YOU...

- ... use enough lotion or liquid?
- ... apply it correctly?
- ... let it dry naturally?
- ... leave it on for the correct contact time?
- ... use a second bottle, 7 days after the first?
- ... check all your close family and friends?
- ... check adults as well as children?
- ... treat all infected contacts at the same time?

**Contact check list:**

	<b>Contacted</b>
Parents	
Grandparents	
Brothers/Sisters	
Sons/Daughters	
Aunts/Uncles	
Cousins	
Nieces/Nephews	
Friends	
Lodgers	
School/Nursery	
Babysitter	
Clubs/Brownies/Guides/Cubs/Scouts	
<b>Other</b>	