Southern Health Board
Bord Sláinte An Deiscirt

introduction

The principal message of this Policy is that health education rather than routine head inspection by nurses in schools is the most effective way of reducing and ultimately eradicating headlice from our community.

The purpose of this Policy is to provide a common approach to headlice prevention in the Southern Health Board area so that:

(a) The roles and responsibilities of parents, children, schools and health care professionals are clearly defined and can be understood.

(b) A common message is delivered, which will allay concern and confusion about headlice and their prevention within the community and among professionals (medical, nursing, teaching etc.).

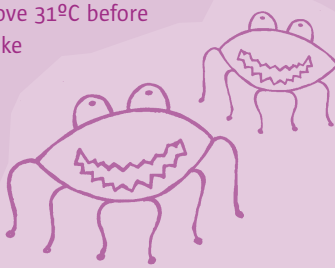
The Policy and Procedures are in line with:

(a) Current research and thinking on headlice.

(b) The general philosophy of the healthcare team which is to provide advice and information and to encourage and support families in taking responsibility for their own health.

what are headlice?

Headlice are flat-backed, grayish insects, which live on human scalps. A head louse is about the size of a pinhead and it feeds by biting the scalp and sucking blood. When two heads touch, the hair caught between them must first warm up above 31ºC before lice can pass from one head to the other. For this transmission to take place heads must come into prolonged contact. Close head contact must usually occur for a minimum of about one minute for transmission to occur. Headlice are invariably acquired from members of the family, extended family or close friends.



The source of headlice can be of any age. **Some 30 to 40% of headlice infections occur on adults.** Adults with lice have an epidemiological importance out of proportion to their numbers because they may remain infectious and undiscovered for long periods, sometimes indefinitely.

- 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 which move around the head. Nits are egg cases laid by lice, stuck on to 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 including adults. Head louse infection is a problem of the whole community, not just 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 picked up there.

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

HOW DO you GET them?

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

DETECTion COMBing – how to do it

Need: Plastic detection comb, good lighting and an ordinary comb.

- Wash the hair well, then dry it with a towel. The hair should be damp, not dripping.
- 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. Draw the comb carefully towards the edge of the hair.
- Look carefully at the teeth of the comb in good light.
- Do this over and over again from the top of the head to the edge of the hair 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 headlice, you will find one or more lice on the teeth of the comb. A magnifying glass may be useful identifying lice.

- 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 louse lotion (not shampoo).
- Ask your local chemist, public health nurse or family doctor which lotion to use, and how long to leave it on.
- 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.
- You don't need to put lotion down long hair any further than where your would put a pony-tail band.
- Keep the lotion out of the eyes and off the face.
- Let the lotion dry on the hair. Some lotions catch fire, so keep well away from flames, cigarettes, stoves, and other sources of heat. Don't use a hair dryer.
- **Treat all of them again seven days later in the same way with the same lotion.**
- **Check all the heads a day or two after the second treatment. If you still find living, moving lice, ask your public health nurse or family doctor for advice.**

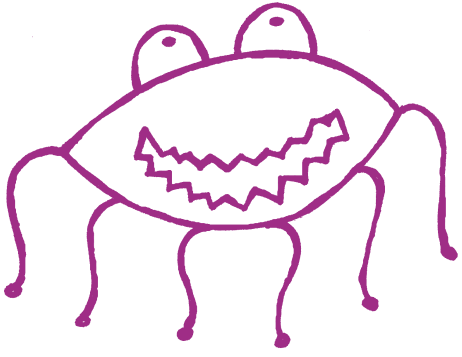
Southern Health Board
18/20 Denny Street
Tralee
Co. Kerry
Tel: 066 7121566

Southern Health Board
Gouldshill House
Mallow
Co. Cork
Tel: 022 21484

Southern Health Board
Hospital Grounds
Skibbereen
Co. Cork
Tel: 028 21722

Southern Health Board
Abbey Court House
George's Quay
Cork
Tel: 021 4965511

HEADlice notes for families



what ARE they?

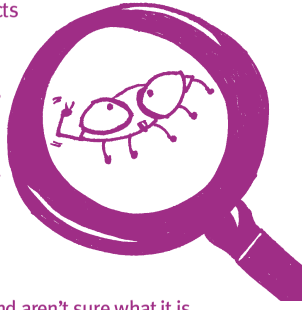
- Headlice are small insects with six legs. They are often said to be "as large as a match head"; in fact, they are often not much bigger than a pin head, and rarely bigger than a sesame seed (the seeds on burger buns).
- They live on, or very close to the scalp, and don't wander far down the hair shafts for very long.

prevention – can you stop 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 being passed round the family.

The way to check heads is called **"detection combing"**. It should be done regularly and in the case of a confirmed infection in one family member, the other members of the household should carry out **"detection combing"** twice weekly for one week.

- Headlice 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 public health nurse or family doctor.

note!

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

HOW to treat HEAD LICE

- The best treatment is to use lotion (NOT shampoo) as recommended by a public health nurse, pharmacist or G.P.

IF you are SURE you have FOUND a living louse

Extensive research has revealed that:

(a) The main source or reservoir for headlice infection is not the school but carriers in the general community, often adults, who have been host to the lice for so long that they display few symptoms and are often unaware of their infection.

(b) Head inspection of all children by nurses or others is ineffective. A quick inspection may identify very lousy children but does not reveal those with just one or two lice. Children who have been "checked" in this way are assumed to be louse-free and then they and their parents or carers may not bother to carry out the more effective preventative measures, i.e. detection combing weekly. Lice are then left to breed and infect others.

(c) The true prevalence of infection is unknown but is probably much lower than public and professional perception.

a new approach to headlice

The emphasis is on the provision of information and health education in order that adults and children have an understanding of headlice and their prevention.

Adults and children need to be aware of the following in order to assist in the control of headlice:-

a) Regular grooming of children and adult's hair is good practice.

b) The use of a detection comb to check for lice on a regular basis is recommended for all children and adults.

c) A diagnosis of head louse infection can only be made when a living moving louse is found. Only those affected should be treated. Treatment should be with headlice lotion.

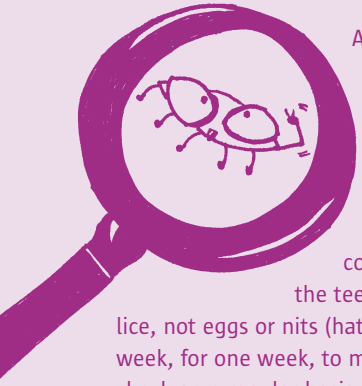
d) If possible, infection should be treated on the day it is discovered and everyone who needs treatment should be treated at the same time to avoid re-infection.

e) Contact tracing, when infection is found (i.e. identifying and informing people who have been in head-to-head contact with an infected person) is an essential part of the process. Contact tracing is the responsibility of the parents, carers or adults concerned.

f) The new treatment consists of two applications of the same lotion one week apart. Advice about which lotion to use can be obtained from the local pharmacist, GP or Public Health Nurse. All family members need to be checked for living lice so that they can be treated, if necessary.

g) The use of shampoos, repellents and electronic combs is not recommended.

detection of headlice



A regular family check is advised, as a routine to check for headlice. The only reliable method of diagnosing current, active infection with head lice is by detection combing. Hair should be damp and combed through from the roots, using an approved detection comb over a pale sheet of paper or other surface so that any lice can be combed out and seen. Lice will also be seen, by inspecting the teeth of the detection comb. The emphasis is on checking for lice, not eggs or nits (hatched eggs). If nits or eggs are found, keep combing twice per week, for one week, to make sure there are no live lice. If no lice are found, continue to check on a regular basis.

Details of how to undertake headlice detection is provided in "Notes for Families".

confirmed infection

Prompt treatment with headlice lotion is needed when infection with headlice is found. If a person is unsure whether they have found a louse they should be advised to put it on sellotape backed with white paper and seek the advice of the local Public Health Nurse or their GP. Only treatment with insecticidal lotion should be used, since this is the only method that has been demonstrated scientifically to be effective. The following procedure is recommended:

(a) All members of the infected person's household should check themselves (or be checked) by combing with a detection comb twice weekly for one week.

(b) Everyone in the household who is found to have living, moving lice should then be treated, preferably at the same time, to avoid re-infection.

(c) Lotions, rather than shampoos, should be used.

(d) A local pharmacist, Public Health Nurse or GP will recommend the correct lotion for the person infected. Some lotions may not be suitable for babies, or anyone with skin conditions or asthma.

(e) It is recommended to follow instructions exactly and use the right amount of lotion for the person being treated. Most people need 50ml. of lotion for each treatment.

(f) Most people can be treated with either water-based or alcohol-based lotions, but water-based lotions should always be used when the infected person:

- Is a child under 6 months old (in which case treatment should be given under medical supervision).
- Has asthma.
- Has a skin complaint (e.g. eczema, psoriasis, impetigo).
- Has communication problems or comes from a family where there are communication problems which would make the use of alcohol based lotions difficult or dangerous.
- If lice are found on eyebrows or eyelashes.

(g) There is no need to remove dead nits or lice from the hair after treatment other than for cosmetic reasons, but the wet hair may be combed if wished.

(h) Every effort should be made to notify anyone outside the household who has been in head-to-head contact with the infected person.

(i) Checking, treating and contact tracing are the responsibility of the adults, parents or carers concerned.

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

effectiveness of chemical treatment

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, this may require a change in therapy after an initial confirmed failure. The effectiveness probably compares favourably with that of most commonly used broad-spectrum antibiotics used for other infections.

Unless demonstrated scientifically, "resistance" is more likely to be due to ovicidal failure (i.e. failure to kill the eggs) misdiagnosis, faulty treatment technique, and (perhaps most common) the 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.

reinfection and treatment failure

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

- Imaginary lice.
- Inadequate or inappropriate treatment.
- Misdiagnosis, e.g. itch or nits still present after successful eradication of living lice.
- The findings of young lice which have not been killed whilst in the egg after the first, and before the second application of lotion.

True reinfection is usually from close contact in the community rather than specifically from school contact. Carriers of lice are likely not to be aware that they are infected.

cardinal rule after chemical treatment

Insecticide preparations should not be used for more than one complete treatment of 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 which have hatched after a first application.
- 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 re-infection has occurred?

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:

- Re-treatment with the same preparation, but ensuring that it is undertaken adequately and for all contacts simultaneously.
- Re-treatment using a different chemical preparation (two applications).
- Supervision and assistance may be appropriate.
- Further thorough attempts to define if there may be a source of recurring infection eg. a "best friend" and attempts to reduce the likelihood of re-infection of the case family.
- If the problem remains, consider teaching the process of continued physical removal of lice.

rotation of insecticides

The rotation of insecticides has no value and should be discontinued. There are now doubts about the scientific grounds underlying the concept of limiting treatment to one chemical agent for three years. If the chemicals are inappropriately and grossly overused then it could be argued that the limitation of therapy to one agent is more likely to encourage the proliferation of resistant lice then would a mosaic system.

roles and responsibilities

All medical and nursing personnel should ensure they have up to date information about headlice, their prevention and transmission, detection-combing and treatment so that they are able to offer appropriate education, advice and support to clients.

Health centres should have a supply of detection combs, and up to date literature on headlice. Clinic bases should ensure that they hold supplies of insecticide (water and alcohol based lotions) for distribution in certain circumstances. Only professional health staff should distribute insecticide on the basis of an accurate diagnosis e.g. lice on sellotape.

Group education of parents, carers, children, professional staff and others should be offered whenever possible through informal talks and demonstrations. Information on headlice should be included as part of health education work in the classroom, and as requested at school meetings for example, at commencement of school year.

Parents and carers

When appropriate it is the responsibility of all adults and carers to use detection combing to check for lice.

Schools

Headlice are not primarily a problem of schools, but of the community. Stigma and tradition however, combined with inadequate public and professional knowledge continue to hold schools responsible. Children discovered to have headlice should **NOT** be sent home, isolated, or kept from school, play group, or nursery, but should be treated on the day of the discovery.

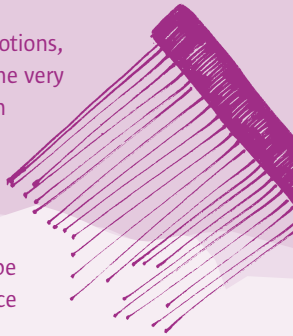
All schools should have a copy of current guidelines and up to date headlice literature available ("Notes for Families"). The use of alert letters by the school should be discouraged. However, if teachers do wish to issue letters, it should emphasise factual information and avoid raising undue alarm. Parent information about headlice may be included in the parent's letters circulated at the beginning of the school year.

Routine head inspections, usually by the School Nurse, as a screening measure are without value and should not be done, though examination of parents of an individual (not necessarily in the school) may be indicated to establish the presence of infection in a specific population group.

Community Care Services

The role of the community healthcare team and other professionals is to advise and offer support as part of their respective duties. To this end they should ensure that they are aware of these guidelines and are informed about headlice, their prevention, transmission, detection and treatment.

Before the effective control of headlice became possible with insecticidal lotions, severe cases of infection occurred and head inspections served to detect the very worst and therefore most obvious of them. Nowadays, such gross infection rarely occurs. Most active infections are of only a few lice, and routine head inspections are ineffectual at identifying these.



The role of the Public Health Nurse is primarily in education. It is not to undertake routine classroom head inspection. Detection combing is to be done by the parents, but they should have proper information and advice given to them.

other approaches to headlice

Repellents

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.

Mechanical removal of lice

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 any authoritative scientific work. There are anecdotal reports of both its success and failure. If it were demonstrated to work for individuals or individual families, it is unlikely that it would be practicable as a method of community control. 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 insecticides because of concern about their safety.

Other "Cures"

Many and varied cures have over the ages been claimed to be effective in preventing or treating headlice, such as tea tree oil. Some of these are usually harmless eg. dilute vinegar, some may be dangerous. Essential oils such as tea tree and lavender oil can be quite toxic especially as concentrates.

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18/20 Denny Street
Tralee
Co. Kerry
Tel: 066 7121566

Gouldshill House
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