

# HEADLICE AND NITS: A Guide for School Communities.

## Introduction

Headlice are not new. Headlice and the eggs (nits) have been with us for centuries. Egyptian mummies over 3000 years old have been found with the remains of headlice. It is only recently that the western world has been relatively free of headlice. No one to date has found a sure-fire way of totally eradicating headlice in a community. There may be 'miracle cures' offered but few live up to the claims.

Headlice are a common problem throughout the world. Schools do not give people headlice; people bring headlice to schools. Headlice are also brought to churches, supermarkets, sports fields and homes by people. A population is likely to host headlice most of the time. Infestation levels fluctuate for no apparent reason and sometimes headlice appear to be epidemic while at other times they appear to be absent.

*Controlling headlice requires people in a community as a whole to act.*

## Myths

Headlice can jump or swim from person to person.

NO!

*Headlice have legs designed for climbing so need to be able to crawl from person to person in close proximity. Headlice cannot swim.*

Only dirty people have headlice.

NO!

*Headlice feed on blood, not dirt. Anyone can host headlice.*

People with dark-coloured hair get headlice more than other people.

NO!

*It is easier to see the yellow-white nits in dark hair so darkhaired people are possibly able to manage the problem more easily. People with light-coloured hair may find it is easier to manage the brown headlice. Headlice like hosts with hair of any colour.*

Headlice prefer certain blood types.

NO!

*Headlice like to feed on any blood.*

Children get headlice from classroom carpets or animals.

NO!

*Headlice only live on human heads.*

Schools with policies on headlice don't have children with headlice.

NO!

*A policy is not a magic protection but a well-thought-out policy does help a school manage the problem. However, a policy no one follows is no help at all.*

## **Some facts**

### *What to look for*

Headlice are small insects approximately 2 to 4 mm long and about 1mm wide. They have six legs with claws and are usually a light or dark brown colour.

Eggs (nits) are small and hard like a grain of salt and are yellow-white in colour. Eggs are usually found on the hair very close to the scalp. Those found further from the scalp than one to one and half centimetres from the scalp are probably dead or hatched.

Sometimes a person with headlice or eggs might feel itchy, but not always.

### *Checking for headlice or eggs*

Check weekly using bright light and by parting the hair. Check the scalp, especially at the front, nape of the neck, behind the ears and at the base of a pony tail or plaits.

Small red dots behind the ears and on the nape of the neck may be headlice bites. Eggs are usually easier to see than headlice. Don't be confused by dandruff that is flaky and easily removed. Eggs will feel sandy or gritty when fingers are run through the hair.

### *Transmission*

Headlice crawl from head to head. Because young children are often in close proximity to one another in play or classwork, or in close proximity to family adults at home, headlice have opportunities to move from one head to another. It is impossible to know the origin of an outbreak.

A less likely method of transmission is through the sharing of things like combs, hairbrushes, hats, and other things that touch the head and hair.

Because headlice need food, humidity and warmth to survive it is unlikely they will be found alive on car seats, curtains or carpets.

Adolescents and adults tend to spend little time in close proximity to others so transmission of headlice amongst older people is less likely than amongst the young.

### *Temperature and Humidity*

Headlice and the eggs (nits) enjoy warmth. Between 28 and 32 degrees centigrade makes the human head an ideal place for headlice to live. Humidity needs to be about 75% in order for eggs (nits) to hatch.

### *Food*

Blood is the food of headlice. Headlice need something to cling to and to lay their eggs on. Headlice find a head of hair a most suitable place to live.

### *Hosting headlice*

Headlice do not cause disease. They may cause an uncomfortable itching. At worst, a child with headlice may scratch excessively and break the scalp possibly allowing infection in. An infestation of headlice should be detected and dealt with long before it becomes either highly visible or irritating.

## **Preventing headlice**

- Avoid head to head contact.
- Don't share brushes, combs, hats and other items that come into contact with hair.
- Discourage children from playing with each others' hair.
- Tie long hair back or plait it.
- Brush hair regularly.
- Check the hair of everyone in the family at least once a week.
- Take action if a child is scratching unusually – check their head carefully.

## **Treatment**

Ideally, once headlice are detected in a school, the whole school community should take action at the same time and over a period of weeks. One untreated head in a community can ensure an outbreak continues for months.

Treatment must be thorough, regular and carried out over a period of weeks by everyone. Even so, such treatment will not prevent a reinfestation originating from another community. Keeping headlice under control requires constant vigilance.

Effective treatment can be cheap. A combination of methods is likely to be most successful.

### *Dry combing*

This method is for removal of headlice and eggs.

- Use a metal fine-toothed comb. The National Pediculosis Association in the United States recommends combs that have individually tooled rounded teeth that are evenly spaced and set in a plastic handle.
- Fingernails can effectively remove eggs.
- Individual strands of hair can be cut to remove difficult eggs.
- Some combs will extract adult headlice only and leave the eggs; the closer together the teeth of the comb are, the more successful combing will be.

### *Wet combing*

This method, using any kind of hair conditioner, is for detection and removal of headlice and eggs. It is recommended that this treatment be repeated on alternate days for three weeks. The idea is to smother the headlice with conditioner, preventing them moving away, and to allow manual removal. Do not use conditioner within a day of using a chemical treatment; it will make the chemical treatment ineffective.

- Apply enough conditioner (much more than usual) on dry hair to thoroughly cover the whole scalp and all the hair from the roots to the tips.
- Keep the conditioner in the hair. Conditioner stuns the insects for about 20 minutes.
- Comb the hair straight and get knots out with an ordinary comb.
- Use a fine-toothed comb to systematically comb the hair. Comb the full length of each hair.
- Wipe the comb with a clean tissue after each stroke of the comb.
- After thorough combing and inspection, wash the conditioner out.

### Electric combs

Electric battery operated combs are available to be used on dry hair. These are claimed to stun or kill the headlice so they let go of the hair and can be combed out. Clean the teeth after each stroke of the comb. Electric combs should be used on alternate days for two or three weeks to break the breeding cycle. People with epilepsy, heart disease or pacemakers should not use them.

### Haircuts

Short hair is easier to comb, requires less time to treat and makes detection easier. It should not be necessary to shave heads. Hairdressers may refuse to cut infested hair.

### Chemicals

The use of any chemical in or on the body carries risk. Some older treatments for headlice are no longer available because of the risk they posed. The chemicals used are insecticides and should be used with care and strictly as directed by the manufacturer. Chemicals are expensive.

There are three chemicals that are most commonly used:

Pyrethrins – derived from chrysanthemum flowers, these attack the insects' nervous system but break down in sunlight. These are usually combined with piperonyl butoxide for more effectiveness.

Pyrethroids – synthetic pyrethrins that are more stable in sunlight.

Maldeson – an organophosphate insecticide that attacks the insects' nervous system.

- Apply the treatment strictly in accordance with the manufacturer's instructions.
- Treat those members of the household who appear to be hosting headlice. *Do not* treat babies with chemicals.
- *Do not* wash the hair or use conditioners for at least 24 hours after treating. Treatments are designed to coat the hair shaft and should be allowed to remain. *Do not* wash chemicals off.
- *Do not* use hairdryers on treated hair. The heat may break down the active chemical.
- Comb the hair carefully to remove as many dead or live headlice and eggs as possible.
- Repeat the treatment after seven to ten days.
- Check *all* members of the household daily for a period of three weeks.

### Herbal remedies

Several herbal preparations are available, however the effectiveness of these is not clearly established. Most herbal remedies might be regarded as expensive conditioners that are no more effective than other conditioners. Some, such as tea tree oil, may be, volume for volume, more toxic to humans than chemical preparations. Olive oil, hair gel and mayonnaise may make combing easier.

### What else can help?

Extra precautions may include washing all bedlinen and certainly pillowcases and towels in hot water (at least 60 degrees centigrade) and tumble drying for 20 minutes on high. Other items that have come in contact with heads should also be thoroughly cleaned. Soak hairbrushes and combs in hot water for at least ten minutes. Vacuuming carpets and rugs may also be helpful, if only to ensure that dead nits and lice are collected and not left to reappear on the heads or clothing of people in the household.