



HEAD LICE

What are the aims of this leaflet?

This leaflet has been written to help you understand more about head lice. It tells you what head lice are, what can be done about them, and where you can find out more about them.

What are head lice?

Head lice are very common. They are small (adult lice are the size of a sesame seed) grey-brown insects that live only on human scalps. They cannot fly or jump; neither can they burrow into the scalp. They can affect anyone, with long or short hair, no matter how clean the hair is.

How are head lice acquired?

Head lice are usually picked up by head-to-head contact; it takes about 30 seconds for a single louse to transfer from one scalp to another. Less often, sharing hats, combs or pillows can spread them. Head lice live only on humans and die in a day or two away from the human scalp. They cannot be caught from animals.

Head lice can affect anyone, but are:

- Most common in children between the ages of 4 and 11
- More common in girls than boys
- Most often found at the start of the school year

Are head lice infestations hereditary?

No, though several members of a family may have them at the same time.

What are the symptoms of head lice infestation?

Head lice have to feed on human blood several times a day to survive, and their bites, saliva and faeces often make the scalp itchy. Some people may be unaware they have head lice as they do not experience the itch and other symptoms. This lack of itching does not mean that lice are not present, and the only way to be sure is by taking a careful look at the scalp. If the skin becomes infected with the bacteria that cause impetigo, the scalp may become sore and children may have a raised temperature and feel unwell.

What does a louse-infested scalp look like?

Female lice live for up to 40 days, during which time they can lay more than 100 eggs. They attach their eggs (known as nits) to hairs close to the scalp surface. The eggs are yellow or white, and the size of a pin head. They take 7 to 10 days to hatch, and the new lice can then lay more eggs after about 7 days. The eggs that still contain unborn lice usually lie within half a centimetre of the scalp surface. Empty egg cases remain firmly stuck to the hairs and become further away from the scalp as the hair grows.

An affected scalp carries a mixture of the following:

- Eggs containing developing lice – firmly stuck to the hair shafts near to the scalp
- Empty egg cases – also firmly stuck to the hairs, but further from the scalp surface
- Immature lice
- An average of 10 adult lice, though some scalps carry many more
- Louse droppings – most easily seen as dark specks on pillows or clothing

Some of the above are difficult to see. Immature lice are small and seldom found, and adult lice can also be hard to spot unless the infestation is a heavy one. Empty egg cases are white, and so show up more easily than eggs that have not yet hatched; all are most obvious on the sides and back of the scalp.

Other features of a head lice infestation can include:

- Scratch marks, and a sticky weeping scalp

- Small itchy pink bumps around the edge of the scalp, particularly on the back of the neck
- Enlarged glands in the neck, and impetigo (bacterial infection)

How are head lice diagnosed?

Head lice should be considered in anyone who has an itchy scalp, or who has repeated infections on or around their scalp. There are many other causes of scalp itching that can be mistaken for head lice including folliculitis, psoriasis, eczema and dandruff, but they do not have the features mentioned above. Sometimes excess application of styling product dried onto the hairs can look rather like nits, but this will wash off and slide easily along the hair, whereas eggs are fixed firmly to hair.

The diagnosis is made by a careful examination of the scalp. Your healthcare adviser will use a magnifying glass and a bright light to look for moving lice and un-hatched eggs fixed to the hairs. No special tests are needed, although a special fine toothed comb (a nit comb) is often the best way to identify the lice and their eggs. This can be done at home.

Can a head lice infestation be cured?

Yes, but this is not always easy as some lice are now resistant to the insecticides used to treat them, and repeated infestations are common

How can a head lice infestation be treated?

Treatment is needed only when an active louse infestation is present; as shown by the presence of living and moving lice, or of eggs that have not hatched and are attached to the hairs close to the scalp. Neither itching by itself, nor evidence of an old infestation (only empty egg cases), is a reason for starting treatment.

Once a decision to treat has been made, there are three main choices:

A) A *physical insecticide* such as dimeticone 4% gel, lotion, or spray (Hedrin® Once or Lotion; Chemists' Own® Head Lice Spray), dimeticone 92% spray (NYDA®), dimeticone > 95% lotion (Linicin® Lotion); isopropyl myristate and cyclomethicone solution (Full Marks Solution®), isopropyl myristate or isopropyl alcohol aerosol (Vamousse® Head Lice Treatment). All these treatments are available on the NHS.

A physical insecticide works by physically coating the surfaces of head lice and suffocating them, so resistance is unlikely to develop.

B) **A chemical insecticide** such as Malathion 0.5% aqueous liquid (Derbac-M®).

A chemical insecticide poisons the head lice by chemical means. Resistance has been reported.

C) **Wet combing** with the Bug Buster® kit, or other nit combs.

Lubricating the hair with a conditioner or a product containing dimeticone makes the procedure easier, particularly for curly hair. The comb has to be immediately cleaned after each pass to remove lice and eggs. This is best done by wiping on clean white paper or cloth. There is information on wet combing on the [Community Hygiene Concern](#) website.

In general, when using the above treatments, the following points should be kept in mind:

- Follow the product information leaflet strictly when applying the treatment
- Treatment should be applied to dry hair, to all areas of scalp, and to all hairs from their roots to their tips
- Usually, two applications, 7 days apart are needed to kill the lice that have hatched after the first application
- Head lice shampoos are less effective than lotions, as they are diluted too much and have an insufficient contact time to kill eggs
- Wet combing or dimeticone 4% lotion is generally recommended as the first line treatment for those who are pregnant or breastfeeding, young children aged 6 months to 2 years, and people with asthma or eczema

When lice do not clear

There are several reasons why things may not get better after treatment:

- The diagnosis of head lice infestation may have been incorrect
- You may not have followed the treatment instructions correctly
- The lice may have been resistant to the chosen treatment

- You may have picked up a new infestation immediately after the treatment finished

Self-care (What can I do?)

- After the treatment is complete you should check every week, for a month, to make sure the lice are clear.
- Make sure that everyone who has been in contact with an affected person is examined to ensure that they have not got head lice too; this especially applies to members of the same household and to close school friends.
- All affected members of the household should be treated at the same time.
- The combs and brushes of an infested person should be washed in hot water daily.

There is no need to keep children with head lice away from school as long as the advice given above is being followed.

Can head lice infestation be prevented?

Children of primary school age should be examined regularly at home using a nit comb to identify infestation early as prompt treatment helps prevent further spread.

Do not use chemicals regularly in an attempt to prevent an infestation occurring; this simply encourages the emergence of resistant strains of lice.

Where can I get more information about head louse infestations?

Web links to detailed leaflets:

www.medinfo.co.uk/conditions/headline.html

www.cdc.gov/parasites/lice/head/index.html

www.nhs.uk/conditions/Head-lice/Pages/Introduction.aspx

www.patient.co.uk/health/checking-for-head-lice

www.chc.org/index.cfm

<https://cks.nice.org.uk/head-lice#!scenario>

<http://www.nhs.uk/Conditions/Head-lice/Pages/Treatment.aspx>

The British Skin Foundation fund vital research into all skin diseases. To find out how you can help, please visit the British Skin Foundation website.

For details of source materials used please contact the Clinical Standards Unit (clinicalstandards@bad.org.uk).

This leaflet aims to provide accurate information about the subject and is a consensus of the views held by representatives of the British Association of Dermatologists: individual patient circumstances may differ, which might alter both the advice and course of therapy given to you by your doctor.

This leaflet has been assessed for readability by the British Association of Dermatologists' Patient Information Lay Review Panel

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