

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 unhatched 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 two main choices:

Chemicals such as malathion, phenothrin and permethrin that kill lice

Follow the instructions that come with the treatment you will be using, but the following points should be kept in mind:

- Apply the treatment to all areas of the scalp, and to all of the hairs, from their roots to their tips.
- The product should usually be left on for 12 hours then washed off.
- Two applications will be needed, 7 days apart. The second application is intended to kill the lice that have hatched after the first application.
- If live lice are found after the second application, the process should be repeated with a different treatment; occasionally a further treatment is necessary.
- Alcohol-based treatments can sting; shampoos, which are on the hair for a short time and are diluted with water, are less effective than lotions.
- Always ask medical advice before treating young children (under the age of 2) and pregnant women.

Physical methods that remove lice and their eggs by repeated combing

Regular daily combing with a louse or nit comb can clear lice infestations. A bright light and a magnifying glass are needed and the combing has to go on until no living lice have been found for two weeks. Lubricating the hair with a conditioner or a product containing dimeticone (wet combing) 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.

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

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

cks.nice.org.uk/head-lice#!scenariorecommendation

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

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

www.chc.org/index.cfm