

Head lice

Introduction

Head lice are tiny insects that live in human hair. They're particularly common in children.

Head lice are whitish to grey-brown in colour, and smaller than the size of a pinhead when first hatched. When fully grown they're about the size of a sesame seed.

They can't fly, jump or swim and are spread by head-to-head contact, climbing from the hair of an infected person to the hair of someone else.

A head lice infestation isn't the result of dirty hair or poor hygiene. All types of hair can be affected, regardless of its length and condition.

Head lice only affect humans and can't be passed on to animals or be caught from them.

Itching

Head lice often cause a person's scalp to itch. Itching isn't caused by lice biting the scalp, but by an allergy to the lice.

However, not everyone is allergic to head lice, so you or your child may not notice a head lice infestation.

Even if someone with head lice is allergic to them, itching can take up to three months to develop.

In some cases, a rash may appear on the back of the neck. This is caused by a reaction to lice droppings.

Life cycle of head lice

A female head louse lays eggs by cementing them to hairs (often close to the root), where they're kept warm by the scalp. The eggs are pinhead-size and difficult to see.

After seven to 10 days, the baby lice hatch and the empty eggshells remain glued in place. These remains are

NHS Choices puts you in control of your healthcare

NHS Choices has been developed to help you make choices about your health, from lifestyle decisions about things like smoking, drinking and exercise, through to the practical aspects of finding and using NHS services when you need them.

known as nits. Nits are white and become more noticeable as the hair grows and carries them away from the scalp.

Head lice feed by biting the scalp and feeding on blood. They take nine to 10 days to become fully grown. Head lice normally only crawl from head to head when they're adults or nearly mature juveniles.

A female head louse may start to lay eggs from nine days after she's hatched. Therefore, to break the cycle and stop them spreading, they need to be removed within nine days of hatching.

How to spot head lice

Head lice can be difficult to see, even when the head is closely inspected.

Unhatched eggs or nits (empty eggshells) alone aren't enough to diagnose an active head lice infestation. This is because it can be difficult to distinguish between eggs and nits that are dead or alive. Nits also usually remain glued to hairs long after successful treatment.

To confirm an active head lice infestation, a louse must be found through a reliable, accurate method, such as detection combing.

Detection combing is the best way of finding head lice. It involves using a special fine-toothed head lice comb with a tooth spacing of 0.2-0.3mm to comb through the hair.

The comb can trap even the smallest lice. It works better on wet hair but can also be used on dry hair.

Read more about detection combing.

Treating head lice

Head lice can usually be effectively treated with lotions or sprays designed to kill head lice, or by wet combing, using a specially designed head lice comb (see above).

Wet combing can be used without lotions or sprays, but it needs to be done regularly and can take a long time to do thoroughly.

Lotions or sprays can be used as an alternative. However, to be totally effective they need to be applied correctly and thoroughly. Your pharmacist will be able to recommend an over-the-counter lotion or spray and give you advice about how to use it correctly.

NHS Choices puts you in control of your healthcare

NHS Choices has been developed to help you make choices about your health, from lifestyle decisions about things like smoking, drinking and exercise, through to the practical aspects of finding and using NHS services when you need them.

Read more about treating head lice.

Preventing head lice

It's difficult to prevent a head lice infestation because head lice are spread by head-to-head contact.

Regular detection combing – for example, on a weekly basis – is the best way to find new lice quickly.

Lotions and sprays don't prevent head lice infestations and should only be used if a live louse has been found on your, or your child's, head.

Head lice can be effectively treated with medicated lotions or by wet combing using a specially designed head lice comb



How common are head lice?

Head lice are a common problem, particularly in school children aged 4-11 years.

It's difficult to know exactly how common head lice are because the problem is often treated at home, with people only visiting their GP if treatment is unsuccessful.

However, it's thought that up to one in three children in the UK may get head lice at some point during the year.

NHS Choices puts you in control of your healthcare

NHS Choices has been developed to help you make choices about your health, from lifestyle decisions about things like smoking, drinking and exercise, through to the practical aspects of finding and using NHS services when you need them.

Detecting head lice

It's difficult to identify head lice simply by inspecting your child's head. Detection combing is a more reliable method.

Detection combing

Detection combing can be carried out on dry or wet hair. Less preparation is needed to comb dry hair, but wet combing is more accurate because lice remain motionless when wet.

You'll need to use a special fine-toothed detection comb that you can buy from your local pharmacy. The comb has a tooth spacing of 0.2-0.3mm to trap the smallest lice.

Nit combs aren't suitable for louse detection because the teeth are too close together. Lice can get trapped between the teeth and remain unseen.

Wet detection combing

Follow the steps below for wet detection combing.

- Wash hair using ordinary shampoo and apply plenty of conditioner. Use a wide-toothed comb to straighten and untangle the hair.
- Once the comb moves freely through the hair without dragging, switch to the louse detection comb. Make sure the teeth of the comb slot into the hair at the roots with the bevel-edge of the teeth lightly touching the scalp.
- Draw the comb down to the ends of the hair with every stroke, and check the comb for lice.
- Remove lice by wiping or rinsing the comb.
- Work methodically through the hair, section by section, so that the whole head of hair is combed through.
- Rinse out the conditioner and repeat the combing procedure in the wet hair.

Dry detection combing

Follow the steps below for dry detection combing:

- Use an ordinary comb to straighten and untangle the hair.
- Once the comb moves freely through the hair without dragging, switch to the louse detection comb. Comb

NHS Choices puts you in control of your healthcare

NHS Choices has been developed to help you make choices about your health, from lifestyle decisions about things like smoking, drinking and exercise, through to the practical aspects of finding and using NHS services when you need them.

the hair from the scalp to the ends, combing each section of hair three or four times before moving on to the next section.

- Look for lice as the comb is drawn through the hair. If you see a louse, trap it against the face of the comb with your thumb. This will stop the louse being repelled by static electricity as the comb is removed from the hair.
- Continue combing the hair section by section until the whole head has been combed through.

You can be confident of an active infestation if you find a live louse in the hair. If you're still unsure, you can attach any lice you find to sticky tape and take it to your pharmacist, GP or practice nurse for confirmation.

Checking the rest of the family

If you discover head lice in your child's hair you should check the rest of the family and alert close friends.

You should only treat hair after live head lice have been found. Don't treat "just in case". However, once confirmed, take immediate steps to treat head lice.

Read more about treating head lice.

Head lice and school

There's no need for children with head lice to be kept off school.

They'll probably have had head lice for several weeks, so keeping them off school is unlikely to affect transmission.

Itching

Just hearing that other people have head lice can make you start itching.

Simply having an itchy head doesn't mean you have head lice. A diagnosis can only be made if a live head louse is found.

Itching may continue for days or weeks, even after all head lice have been removed. In some cases, itching starts months after a person has an infestation.

NHS Choices puts you in control of your healthcare

NHS Choices has been developed to help you make choices about your health, from lifestyle decisions about things like smoking, drinking and exercise, through to the practical aspects of finding and using NHS services when you need them.

Treating head lice

Head lice can be difficult to treat due to the time-consuming and precise nature of treatment and high re-infestation rate.

In the past, traditional insecticides were used to treat head lice infestations but head lice would often develop resistance to them.

Therefore, these types of treatments have virtually been replaced with silicone and oil-based preparations which have a physical rather than a chemical action on lice.

After a head lice infestation has been confirmed you can treat the lice at home by wet combing the hair with a head lice comb or by using a lotion or spray that's designed to kill head lice (see below).

However, neither will protect against re-infestation if head-to-head contact is made with someone with head lice during the treatment period.

Wet combing

The wet combing method involves removing the head lice by systematically combing the hair using a special fine-toothed comb.

The comb's teeth should be spaced 0.2-0.3mm apart. Lice can be crushed or trapped between the teeth of nit combs with a tooth spacing of less than 0.19mm and remain unseen.

You can buy a fine-toothed comb from your local pharmacy or you can order one online.

Lotions or sprays don't need to be used for wet combing. However, to be effective, wet combing needs to be carried out regularly and thoroughly. The method you should use is described below.

- Wash the hair using ordinary shampoo and apply plenty of conditioner, before using a wide-toothed comb to straighten and untangle the hair.
- Once the comb moves freely through the hair without dragging, switch to the louse detection comb. Make sure the teeth of the comb slot into the hair at the roots, with the bevel-edge of the teeth lightly touching the scalp.
- Draw the comb down to the ends of the hair with every stroke, and check the comb for lice.
- Remove lice by wiping or rinsing the comb.

NHS Choices puts you in control of your healthcare

NHS Choices has been developed to help you make choices about your health, from lifestyle decisions about things like smoking, drinking and exercise, through to the practical aspects of finding and using NHS services when you need them.

- Work methodically through the hair, section by section, so that the whole head is combed through.
- Rinse out conditioner and repeat the combing procedure.
- Repeat the procedure on days three, six, nine, 12 and 15, so that you clear young lice as they hatch, before they have time to reach maturity.

How long it will take to comb your child's hair will depend on the type of hair they have and its length. For example, short, straight hair can be quickly prepared and can be fine-toothed combed in a few minutes. Longer, curlier hair will take longer to comb.

Lotion or sprays

Using a lotion or spray is an alternative method of treating head lice. However, to be effective they need to be used correctly. Your pharmacist will be able to recommend an over-the-counter lotion or spray and advise you about how to use it correctly.

A lotion or spray should only be used if a living (moving) head louse is found. Crème rinses and shampoos aren't thought to be effective and therefore aren't recommended.

Ensure you have enough lotion or spray to treat everyone in your family who's affected. Use enough to coat the scalp and the length of the hair during each application.

Follow the instructions that come with the lotion or spray when applying it. Depending on the product you're using, the length of time it will need to be left on the head may vary from 10 minutes to eight hours.

The normal advice is to treat the hair and repeat the treatment after seven days. Some products also supply a comb for removing dead lice and eggs.

Some products may be capable of killing eggs as well as lice, although there's no certainty of this. Check for baby lice hatching from eggs three to five days after using a product and again 10-12 days afterwards.

At least two applications of lotion are needed to kill lice over the hatching period because the lotions don't always kill louse eggs.

If the lice appear unaffected by the product, or if the problem persists, seek advice from your school nurse, health visitor, pharmacist or GP.

Cautions

NHS Choices puts you in control of your healthcare

NHS Choices has been developed to help you make choices about your health, from lifestyle decisions about things like smoking, drinking and exercise, through to the practical aspects of finding and using NHS services when you need them.

Always read the instructions on the pack or leaflet that comes with a head lice treatment, particularly in relation to the following groups:

- young babies (under six months old)
- pregnant women
- people with asthma or allergies

If you're still unsure, seek advice from a healthcare professional before using the product.

It's recommended that pregnant women use either wet combing or 4% dimeticone lotion, which is licensed for use during pregnancy and breastfeeding.

Afro hair

Afro (frizzy) hair or hair that's tightly curled can make treating a head lice infestation particularly difficult.

There's no evidence that keeping your child's hair short, or plaiting or braiding it, will make it easier to treat.

Afro hair should be treated in a similar way to straight hair. Methodically combing small sections of hair at a time with a lice comb, and/or using a lotion or spray, will usually prove effective.

Head lice and clothing

Healthy head lice don't deliberately transfer onto clothing, bedding or soft toys.

Their life span is about three weeks and when they fall from the head they're dying and unable to breed.

Hot washing or fumigation isn't necessary to control head lice.

Promptly dispose of any lice that fall from the head on to clothing or bedding.

Head lice on combs

Inspect brushes and combs that are used during treatment and remove any lice before the next stroke.

Head lice will die after a day or two if they're unable to feed on human blood.

NHS Choices puts you in control of your healthcare

NHS Choices has been developed to help you make choices about your health, from lifestyle decisions about things like smoking, drinking and exercise, through to the practical aspects of finding and using NHS services when you need them.

Be aware that head lice can be flicked from dry hair during vigorous combing. If they land on someone they'll try to climb up to their head.

Additional information

Useful organisations

Parentline Plus

520 Highgate Studios, 53-79 Highgate Road, Kentish Town, London, NW5 1TL
Tel : 0808 800 2222

<http://www.parentlineplus.org.uk/default.aspx>

NHS Choices puts you in control of your healthcare

NHS Choices has been developed to help you make choices about your health, from lifestyle decisions about things like smoking, drinking and exercise, through to the practical aspects of finding and using NHS services when you need them.