

Head lice

Introduction

Head lice are tiny wingless insects that live in human hair. They are common, particularly in children.

Head lice are grey-brown in colour, the size of a pinhead when hatched and of a sesame seed when fully grown.

They cannot 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 is not the result of dirty hair or poor hygiene. Head lice can affect all types of hair, irrespective of its condition and length.

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

Life cycle of head lice

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

After 7-10 days, the baby lice hatch and the empty eggshells remain glued in place. These remains are known as nits. Nits glisten 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 6-10 days to become fully grown. Once mature, a head louse can crawl from head to head.

A female head louse may start to lay eggs as early as seven days after she has hatched. To break the cycle and stop them spreading, they need to be removed within seven days of hatching.

How to spot head lice

In most cases, itching is the main symptom of head lice. It is not caused by the lice biting the scalp but by an allergy to the lice. However, not everyone experiences itching.

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It's not always easy to see head lice, so detection combing is the best way of finding head lice. This involves using a special fine-toothed head lice comb (with tooth spacing of less than 0.3mm to trap the smallest lice) to comb through the hair. It works better on wet hair, but can be used on dry hair.

Detection combs are available from pharmacies.

Read more about detection combing.

Treating head lice

Usually, head lice can be treated effectively using medicated lotions or by wet combing, using a specially designed head lice comb.

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

Medicated lotion or spray can be used as an alternative. However, no medicated treatment is 100% effective. Your pharmacist will be able to recommend an over-the-counter lotion or spray.

Read more about treating head lice.

Preventing head lice

It's difficult to prevent a head lice infestation. Regular detection combing – such as on a weekly basis – is the best way to find new lice quickly.

Medicated lotions and sprays do not prevent head lice infestations and should only be used if a live louse has been found on yours or your child's head.

Read more about preventing head lice.

How common are head lice?

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

It is not easy to tell exactly how common head lice are because the problem is often treated at home, with people only visiting their GP if treatment proves unsuccessful.

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However, it is thought that more than 1 in 3 children in the UK will get head lice at some point during the year.

Symptoms of head lice

In many cases, head lice cause the scalp to itch. Itching is not due to 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.

Looking for head lice

It is difficult to see head lice, even when the head is closely inspected. Unhatched eggs or nits (empty eggshells) alone are not 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 often remain glued to hairs after successful treatment.

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

Read more about detecting head lice.

Detecting head lice

It is 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 will need a special fine-toothed detection comb available from pharmacies. The comb has a tooth spacing of

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less than 0.3mm to trap the smallest lice.

Nit combs are not suitable for louse detection as 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 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 helps to avoid 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 a live louse is found in the hair. If you are still unsure, you can attach any lice you find to sticky tape and take it to your 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, alert close friends and inform

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your child's school.

Treatment should only be carried out after live head lice have been found. Do not treat hair "just in case". However, once confirmed, take immediate steps to treat head lice.

Read more about treating head lice.

Head lice and school

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

They will probably have had the infestation for several weeks, so keeping them away from 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 does not 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.

Treating head lice

Head lice can be difficult to treat due to a high re-infestation rate and their ability to develop resistance to traditional insecticides contained in some medications.

It is thought head lice will not develop immunity to the newer silicone and oil-based preparations, because they 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 using a head lice comb, or by using medicated lotion (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.

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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 trapped between the teeth of nit combs with a tooth spacing of less than 0.19mm and remain unseen.

Combs are available from pharmacies, or you can order them online from the Community Hygiene Concern.

Medicated products do not need to be used for wet combing. This is good because head lice are becoming more resistant to the insecticides commonly used to remove them.

However, for wet combing to be effective, it needs to be regular and thorough. This is the method you should use:

- 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.
- 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 5, 9 and 13, so that you clear young lice as they hatch, before they have time to reach maturity.

The length of time it will take to comb your child's hair will depend on the type of hair your child has and how long it is. For example, short, straight hair can be quickly prepared and can be fine-toothed combed in a few minutes, whereas longer, curlier hair will take longer to comb.

Medicated lotion or spray

Using medicated lotion or spray is an alternative method of treating head lice. However, no medicated treatment is 100% effective. Your pharmacist will be able to recommend an over-the-counter lotion or spray.

Medicated treatments should only be used if a living (moving) head louse is found. Crème rinses and shampoos are not thought effective and are therefore not recommended.

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

Follow instructions that come with the medicated lotion or spray when applying it. Depending on the product you are using, the length of time it will need to be left on the head may vary, from 10 minutes to 8 hours.

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

Traditional insecticides must not be used more than once a week for three weeks in a row. Some products also carry a fire warning.

Some medicated products may be capable of killing eggs as well as lice, although there is no certainty of this. Check for baby lice hatching from eggs 3-5 five days after you use 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 do not always kill louse eggs.

If the lice appear unaffected by the product (some lice may develop resistance to particular insecticides), or if the problem persists, seek advice from your school nurse, health visitor, pharmacist or GP.

Cautions

Always seek the advice of a healthcare professional before using medicated head lice lotions on the following groups:

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

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

You should always carefully read instructions before using medicated head lice lotions.

Afro hair

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Afro hair or tightly curled hair can make treating a head lice infestation particularly difficult.

If your child has afro hair and they develop head lice, keeping their hair short will make treating it easier. Alternatively, you could try plaiting or braiding their hair, as this can make it difficult for head lice to attach themselves to the bottom of the hair strand.

Using a medicated lotion, such as dimeticone, and methodically combing small sections of hair at a time with a lice comb, will usually prove effective.

Head lice and clothing

Healthy head lice do not deliberately transfer onto clothing, bedding or soft toys.

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

Hot washing or fumigation is not necessary to control head lice.

Lice that fall from the head during chemical treatment should be promptly disposed of. They may recover if they are resistant to the insecticide or have not been fully coated in the product.

Head lice on combs

Healthy lice that get caught on brushes or combs can get back onto a person's head. Inspect brushes and combs that are used during treatment, and remove any lice before the next stroke.

While wet, head lice appear lifeless, but start to move as they become dry. However, these lice will die after a day or two if they do not feed on human blood.

You should also be aware that head lice can be flicked from dry hair during vigorous combing. If they land on someone, they will try to climb up to the head.

Preventing head lice

It's not always easy to prevent an infestation occurring because head lice are spread by head-to-head contact.

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

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Medicated lotions and sprays are not effective in preventing head lice infestations and should only be used if a live louse is found on your child's head.

Washing clothing and bed linen on a high temperature setting of at least 50°C (122°F) will kill any living head lice. However, lice that fall off the head are unlikely to survive for more than 24 hours.

National bug busting days

National bug busting days are educational days that many schools across the country take part in.

The aim of these sessions is to inform parents and their children about the behaviour of head lice and how to detect and remove them.

Co-ordinating bug busting days across the country can help prevent head lice circulating.

There are three designated bug busting days each year. The dates are:

- 31st January
- 15th June
- 31st October

Visit the Community Hygiene Concern website to find out more about bug busting for schools.

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>

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