

# How to get rid of head lice



**By Christine Brown**  
*Nurse Advisor (RN1,RSN)*



**The Medical Entomology Centre**  
*Incorporating: Insect Research & Development*

# About head lice

## Are head lice a common problem?

Yes they are. We don't know exactly how many people in Britain have head lice, but a recent national survey in Wales suggested the figure could be as high as 10%.

## Who's most likely to have them?

Anyone can catch them, but lice are most common amongst children between the ages of 7-11, and especially amongst girls.

## Does head lice infection come from dirty hair or a dirty home?

Absolutely not. Head lice don't mind if hair is clean or dirty; and as they cannot live away from the human head, home hygiene has nothing to do with infection.

## Do pets spread head lice?

No. Head lice are a purely human parasite and cannot infect cats, dogs or other animals.

## So how are they spread?

By close head-to-head contact ONLY; not through clothing, hats, headphones, hairbrushes, furniture or any other means.



Head louse eggs on hair

## Don't they jump from head to head?

No. Lice don't have the right sort of legs for jumping or wings, so they cannot jump, fly or crawl across clothing; they only move directly from one person's hair to hair on another head.

## Someone did see one jump. How?

If they were combing or brushing the hair, the electrostatic charge can make lice appear to leap away from the head; but it's nothing to do with the lice themselves.

## Will very short hair discourage lice?

No. Lice will happily live in 1cm of hair; short hair's only advantage is that detection and treatment can be easier.

## Does hair type make a difference?

Again, no. All hair types and lengths are just as likely to be infected.



# How to spot them

Close-up of head lice, *Pediculus capitis*

## How do I know whether anyone has head lice?

By finding a living adult louse - a fine tooth plastic detection comb is best for finding them.

## How often should I check?

It's advisable to use a detector comb on all members of your family at least once a week, especially if you have school-age children.

## What about nits?

Nits are empty or dead egg cases - they are a good indicator that lice are about, but not proof that someone is infected.



Electron microscope magnification of a head louse egg

## What do lice look like?

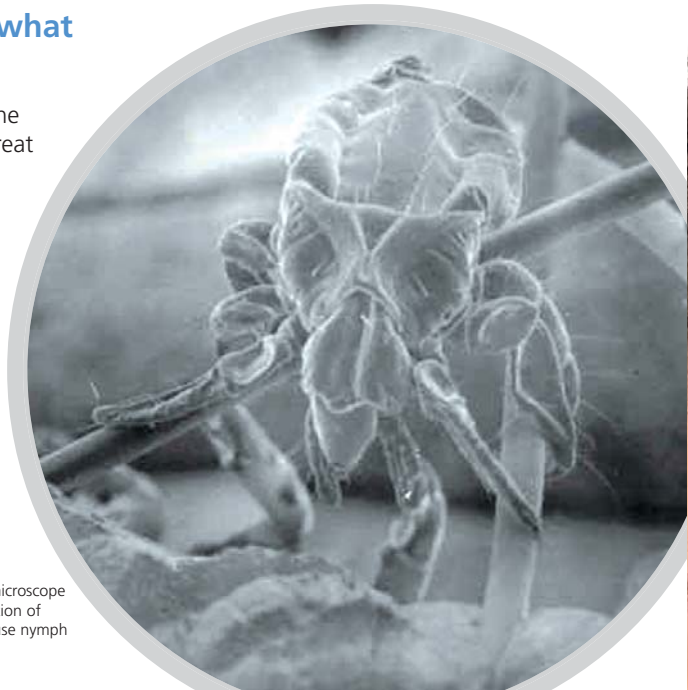
Young lice are the size of a full stop. Adult lice are the size of a sesame seed and the females live for about a month, laying 4-6 eggs a day. That's a lot of eggs!

## I've found a live louse, what do I do?

Don't panic! Check everybody in the family with a detector comb and treat **ONLY** the people who have living lice in their hair. (See over for how to choose your treatment).

Recheck a week after treatment to see if any uninfected family members have become infected, and treat them.

Electron microscope magnification of a head louse nymph



# How to kill head lice

There are FOUR types of head lice treatment...

- > **Pesticide lotions and shampoos**
- > **Non-pesticide lotions**
- > **Wet combing with conditioner**  
(bug-busting)
- > **Alternative treatments**  
(herbal remedies, etc.)



Various clinical trials have shown pesticide and non-pesticide lotions are the most effective of these treatments for killing lice.



But when you make a choice, you also have to consider how easy a treatment is to use, how long it takes, and how easily children will accept it.

An effective medicine is no good if you can't use it properly.

So, to help you choose a treatment, we have provided a summary of the four treatment types.

## **Christine Brown** (RNI, RSN)

**Christine Brown is a study co-ordinator and clinical nurse at The Medical Entomology Centre where she is part of a team that develop and conduct clinical trials for head lice products.**

*Christine previously worked as a school nurse where she inspected children's hair on a regular basis yet became frustrated that her position would not allow her to improve the incidence and prevalence of head lice. She became so fascinated that such a small insect could cause so much social havoc that she now also lectures on the subject to healthcare professionals.*



# Your guide to treatments

## Getting the right advice

You can get more advice from your pharmacist who will have most of the treatments readily available.

Your GP's surgery will also have information and may well have a community, health protection or school nurse who can help further.

If you have problems with treatment such as skin irritation or asthma, ask a health professional before continuing.

Your school will often be responsible for issuing head lice warnings and may also give out information on treatment.

## Pesticide lotions and shampoos

Lotions are very good at killing lice, but some have acceptance problems. Shampoos are nicer to use but are less effective.

Lice can become resistant to the effects of both lotions and shampoos.

### Lotions:

#### Pros:

- ✓ Effective at killing lice
- ✓ Easy to apply

#### Cons:

- ✗ Resistance can reduce effectiveness
- ✗ Some are unsuitable for people with allergies
- ✗ Some have a strong odour

### Shampoos:

#### Pros:

- ✓ Pleasant for children and parents
- ✓ Easy to apply
- ✓ some have 10-minute treatment time

#### Cons:

- ✗ Not as effective as lotions
- ✗ Resistance still a problem
- ✗ Not available on prescription

In Britain, four pesticides are used against head lice; malathion, carbaryl, permethrin and phenothrin.

The reason that four are needed is to combat potential resistance to any one pesticide.

Head lice can become resistant to a particular pesticide, reducing its ability to kill them; this is caused either by lice surviving weak concentrations of pesticide and passing resistance on to their offspring or by over-use of a particular pesticide in an area making the lice in that area become resistant.

Resistance is not a problem with any other type of treatment.

### How to use:

*Pesticide lotions, shampoos and rinses should be applied according to the pack instructions and repeated as the instructions tell you - usually after one week. This will catch lice that have hatched between treatments and before they can lay eggs of their own.*

*If lice are not affected by the first application, there's no point in re-applying that particular pesticide; you'll need to get a different pesticide and start all over again. To check, use a detector comb 24 hours after the first treatment; if you find live lice in all stages of growth, then get another pesticide - ask your pharmacist for advice.*

*Don't treat your family with pesticides "just in case". Insurance treatment can cause resistance to build and may also trigger scalp irritation.*

## Non-pesticide lotions

Very good at killing lice and has no resistance problems. However, it has to be left in the hair for 8 hours or overnight.

### Pros:

- ✓ Effective at killing lice
- ✓ Easy to apply
- ✓ No resistance problems
- ✓ No odour
- ✓ Allergy problems are unlikely

### Cons:

- ✗ 8-hour or overnight treatment time

Non-pesticide lotions use an odourless dimeticone compound that coats head lice and smothers them and are as effective as pesticide lotions at killing lice.

Because it uses a purely mechanical non-toxic method, resistance cannot develop and it can be used as often as necessary without irritating the scalp.

### How to use:

*Non-pesticide lotions should be applied according to the pack instructions and repeated as the instructions tell you - usually after one week.*

*This will catch lice that have hatched between treatments and before they can lay eggs of their own.*

*To check effectiveness, use a detector comb 24 hours after the second treatment; if you find live lice, then repeat the entire treatment until no lice are present.*

## Wet combing (bug busting)

Can be effective if the correct technique is used as often as required. Can be rather time-consuming for parent and child.

### Pros:

- ✓ Effective with the right procedure and where there are only a few lice
- ✓ Allergy problems are unlikely
- ✓ No need to buy treatments

### Cons:

- ✗ Time-consuming
- ✗ Children can be uncooperative
- ✗ May only control the lice on the head at any one time
- ✗ If lice are missed, the infection will continue and spread

Comb all infected people every 3 days for at least 2 weeks or until live lice cannot be found.

### How to use:

*Wet the hair with water or conditioner and using a fine toothed plastic nit comb, comb all the hair from the scalp to the tip.*

*Hair grips or slides may be helpful to separate the combed hair from the rest and the correct combing technique is essential for effective treatment.*

*Proper combing will take at least half an hour per person (longer if hair is longer) and should be repeated every three days for a fortnight or until live lice cannot be found.*

*It is important to check for lice nymphs and eggs as well as live adults; if any of these are missed, the infection will continue.*

## Alternative treatments

A wide range available but with no proof of effectiveness.

### Pros:

- ✓ Wide range available

### Cons:

- ✗ No clear proof of effectiveness
- ✗ Some ingredients may cause irritation

There are a large number of herbal and other treatments available, but many have been tested and found not to work very well, or in some cases, not at all.

If you do want to try one of these, favour the CE-marked treatments.

### How to use:

*Follow the instructions for the product chosen; if your child has any allergies or skin problems, consult your doctor before use.*

The Medical Entomology Centre  
Cambridge House  
Barrington Road  
Shepreth, Royston  
Hertfordshire SG8 6QZ  
Telephone: 01763 263011  
Facsimile: 01763 263022

[www.insectresearch.com](http://www.insectresearch.com)



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# Hate treating Headlice? You'll love Hedrin.



## New Hedrin, it's what you've been waiting for...

### ...no pesticides

Hedrin doesn't use a pesticide to poison the lice, instead it kills lice by smothering them and it's clinically-proven to be really effective.

### ...no worries about eggs

Lice eggs can be tricky to get rid of – but Hedrin's 2-step treatment first kills head lice, then goes on to treat newly hatched eggs when used again seven days later. Brilliant.

### ...no resistance problems

Lice can become resistant to pesticide treatments – but they can't escape Hedrin.

### ...suitable for sensitive skin

Hedrin is suitable for babies as young as six months and it doesn't have any solvents which can be problematic in asthma.

### ... and no nasty odours

Hedrin's a colourless, odourless silky-smooth lotion and it's easy to use. It even leaves hair feeling glossy and conditioned.

Ask your Pharmacist for NEW Hedrin.

**DON'T LOSE YOUR HEAD  
USE YOUR HEAD  
USE YOUR HEDRIN**

Contains dimeticone. Always read the label

[www.hedrin.co.uk](http://www.hedrin.co.uk)