

## Facts

## Head lice

- ★ Head lice are small, six-legged wingless insects, pin-head size when they hatch, less than match-head size when fully grown and grey/brown in colour. They are difficult to detect in dry hair even when the head is closely inspected. They very often cause itching, but this is not always the case, particularly when recently arrived on the head.

- ★ Head lice cannot fly, jump or swim, but spread by clambering from head to head. Anyone with hair can catch them, but children who have head to head contact, either at school or during play, are most commonly affected.

- ★ Head lice feed by biting and sucking blood through the scalp of their host. The female louse lays eggs in sacs (nits) which are very small, dull in colour, and well camouflaged. These are securely glued to hairs where the warmth of the scalp will hatch them out in 7-10 days. Empty egg sacs are white and shiny and may be found further along the hair shaft as the hair grows out. Lice take 6-14 days to become fully grown, after which they are capable of reproduction.

- ★ Head lice are not fussy about hair length or condition. Clean hair is therefore no protection, although regular (eg weekly) hair washing and combing sessions offer a good opportunity to detect head lice, and arrange treatment if discovered.

Lice hang on tight to the hair, usually close to the scalp where there is warmth, food and shelter from detection. Full grown lice take the opportunity to move from head to head during close contact. Younger lice tend to remain for about 6 days on the head where they have hatched.

Head lice need to maintain contact with a host in order to survive. Those lice that leave the host voluntarily, or fall off, are likely to be damaged or approaching death (their life span is about 3 weeks) and so unable to start a new colony. There is no need to wash or fumigate clothing or bedding that comes into contact with head lice.



Magnified photo of the human head louse and louse egg (nit).

If you are at all worried about head lice or feel you need more advice on how to cope, then you should consult your school nurse, health visitor, pharmacist or family doctor.

Further copies of this leaflet may be obtained from:  
 Department of Health, PO Box 777, London SE1 6XH  
 Fax: 01623 724 524 (Email: [dh@prolog.uk.com](mailto:dh@prolog.uk.com))

This document is also available in other languages on request. Picture reproduced courtesy of the Electron Microscopy and Histopathology Service at the London School of Hygiene & Tropical Medicine.

# Head Lice



## Detection

Head lice are well camouflaged and hide when disturbed by combing. They do not always cause itching, particularly when recently arrived on the head. They may also be few in number and a quick inspection is unlikely to detect them. The following method of detection is effective:

- \* Wash the hair using ordinary shampoo, then use a wide toothed comb to straighten and untangle the hair. It is easier to do this with wet hair, and using hair conditioner.
- \* Once the comb moves freely through the hair, without dragging, switch to a fine tooth comb. Make sure the teeth of the comb slot into the hair at the roots and draw down to the ends of the hair with every stroke. The comb must be fine enough to catch the lice – size indicated below – do not confuse lice or their eggs with clumps of dandruff or other debris.



*Actual size in stages of growth of the head louse.*

- \* Check the comb for lice after each stroke as you work through the hair section by section, so that the whole head of hair is combed through, then rinse out the conditioner and repeat the combing procedure in the wet hair.
- \* This can be undertaken on a regular basis – eg at routine hair washing sessions – to detect the presence of lice before they can spread. Check all family members at the same time and arrange treatment when lice are found.

## Treatments

If you find lice, then there are two options. Whichever option you choose it is important to recognise that neither will protect against re-infection if head to head contact is made with someone with head lice at a later date. You may therefore wish to undertake occasional checks during hair washing sessions.

### Option 1: Lotions

- \* Do not use lotions unless you find a living moving louse. Check all close family/friends by the "wet combing" method, as described, and treat anyone who is found to have lice at the same time, to prevent re-infection.
- \* Ensure you have enough lotion to treat all those affected and follow the instructions on the packet carefully, eg as to how long the treatment must remain on the hair to be effective, how often you may apply the product etc.
- \* The product may be capable of killing eggs, as well as lice, but there is no certainty of this. Check for baby lice hatching out from eggs 3-5 days after you use it, and again at 10-12 days.
- \* If the lice appear to be unaffected by the product (some lice may have developed resistance to a particular insecticide) or if the problem persists – then you should take advice from your local school nurse, health visitor, pharmacist or GP, who will be able to advise you on alternative treatments and explain how to use these to best effect. You should seek advice where whoever is being treated is either under 1 year of age, suffers from asthma or allergies, or is pregnant or breast feeding.

### Option 2: The "Bug Busting" treatment method

This aims at systematic removal of live lice by combing through the hair and physically removing any lice found. Success depends largely upon adopting a painstaking approach – as described in the "Bug Buster" kit. The kit, which includes an illustrated guide and combs, is available from some pharmacies, and by mail order from:

Community Hygiene Concern  
Manor Gardens Centre, 6-9 Manor Gardens  
London N7 6LA  
Bug Buster: Help Line: 020 7686 4321  
Fax: 020 7686 4322  
Internet: [www.chc.org/bugbusting](http://www.chc.org/bugbusting) Charity reg no: 801371

- \* Only one kit is required for a family and it is reusable. Four sessions spaced over 2 weeks are required to clear the lice, as long as the person does not catch more lice, in which case half-weekly sessions must continue.
- \* Some schools find it helpful to adopt a whole-school approach (where all parents check their children and family members on the same evening and treat as needed). A "Bug Buster" Teaching Pack is available to assist this process. For further information contact Community Hygiene Concern, details as above.
- \* Taking part on "Bug Busting" days can help to prevent lice circulating, ie if all cases are identified and treated successfully at the same time there will be fewer opportunities for lice to circulate amongst children and their families.

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## HEAD LICE – A GUIDE FOR PARENTS

Checking the hair of everyone in the family at least once a week ensures early detection.



### WET COMBING – HOW TO DO IT!

You will need:



A Nit Comb  
Good lighting  
An ordinary Comb or Brush  
Conditioner

- 1) Wash the hair well, then dry it with a towel. The hair should be damp, not dripping. Apply ordinary conditioner and leave in the hair.
- 2) Make sure there is good light. Day light is best.
- 3) Brush or Comb the hair first. You may find dividing the hair into sections with clips etc. useful.
- 4) Start with the teeth of the detection comb touching the skin of the scalp at the top of the head.
- 5) Comb through each section from the scalp to the ends of the hair.
- 6) Look carefully at the teeth of the comb in good light and wipe with a tissue.
- 7) Do this for as long as it takes to comb each section of the hair.
- 8) If there are head lice, you will find one or more lice on the teeth of the detection comb.
- 9) Continue to comb through each section to remove any live lice until no more are detected.

This will not remove 'live' eggs so you will need to repeat every day in order to remove any newly hatched lice.

- 10) If you are going to use lotions DO NOT TREAT unless you are sure you have found a living moving louse

## **Head Lice Fact Sheet**

**FACT ONE.** Head lice are common year round and right round the world. They are not dangerous, do not carry diseases and are not a sign of poor hygiene. In fact, head lice don't much care whether the hair is clean or dirty.

**FACT TWO.** The head lice family consists of nits and lice: the nit (head lice egg), the nymph (adolescent louse) and the adult louse. There are female and male lice and head lice do reproduce sexually.

**FACT THREE.** Head lice cannot fly or jump but they do crawl at exceptional speeds. The lifespan of an individual louse is just thirty five days. However, within this time the louse can reproduce and create a large family of lice that continue the head lice life cycle.

**FACT FOUR.** The female louse can lay between fifty and one hundred and fifty eggs in her lifetime, we refer to these as nits. The nits are an oval shape and are between 0.5 millimetres and 2 millimetres in length. When laid they are a yellow / white colour but can turn to a tan or coffee like colour as the embryo grows, once hatched the shell appears white.

**FACT FIVE.** An adolescent louse, the nymph is between 1 and 2 millimetres in length and grows to around 2 to 3 millimetres as it develops into an adult louse.

**FACT SIX.** Head lice can only survive on human blood, the lice feed from the scalp 3 to 4 times a day. The lice bite into the scalp and extract the blood directly from the bite. The bite is what can cause irritation to the infested person but not everyone will have "the itch" as irritation levels differ between individuals. Once off the scalp lice can only survive for approximately 24 hours.

**FACT SEVEN.** A treatment product on its own won't eradicate the infestation of head lice. It is essential to comb out all nits and head lice after the treatment has been applied. Currently there isn't a product on the market that can penetrate the nit shell and kill the embryo inside. If nits are left in the hair they will hatch and start the head lice life cycle again.

**FACT EIGHT.** It's not just fancy marketing when it is recommended to repeat the treatment process. As combing requires time and the nits are very small it is very possible some may be missed during the initial treatment. These nits will hatch in 7-10 days and be vulnerable to a treatment – stopping the life cycle.

