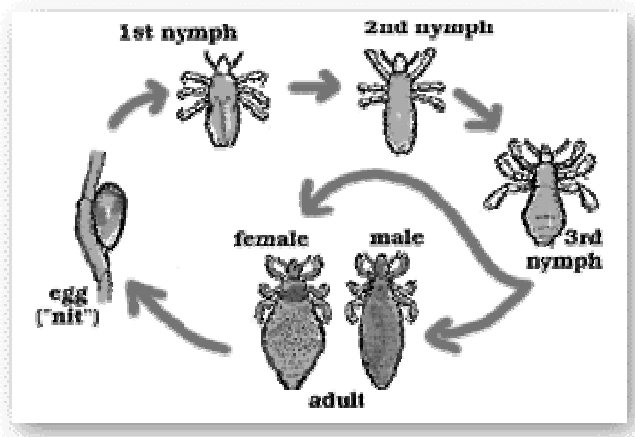


# Lousology 101

## Biology of Head Lice

### Which Came First... the Itchin' or the Egg?



(The Life-Cycle of the Head Louse)

- Nits (the eggs of the head louse) are small yellowish-white, oval-shaped eggs that are "to the side of a hair shaft glued" at an angle.
  - Nits must be laid by live lice. You cannot "catch nits."
  - Once laid, it takes 7-10 days for a nit to hatch, and another 7-10 days for the female to mature and begin laying her own eggs.
  - Head lice are clear in color when hatched, then quickly develop a reddish-brown color after feeding.
  - Head lice are about the size of sesame seeds.
  - Head lice have six legs equipped with claws to grasp the hair.
  - Head lice are crawling insects. They cannot hop, jump, or fly.
- Head lice do not thrive on pets.
  - Head lice are small, wingless insects which feed on human blood. They need human blood in order to survive.
  - Head lice live for approximately 30 days on a host and a female louse may lay up to 100 nits (eggs).

Head lice off of their human hosts will starve. The NPA suggests that, in most cases, a head louse will not survive for more than 24 hours off of its human host.

## How can you tell if you have head lice?

Head lice are difficult to find just by looking in the hair. If you suspect head lice, it is best to do 'detection combing' (described below). Some people advise that you do this to children's hair regularly, about once a week.

- Wash the hair in the normal way with ordinary shampoo.
- Rinse out the shampoo and put on lots of ordinary conditioner.
- Comb the hair with a normal comb to get rid of tangles.
- When the hair is untangled switch to a detection comb. This is a special fine toothed comb that you can buy at pharmacies. (The teeth of normal combs are too far apart.)

- Slot the teeth of the detection comb into the hair at the roots so it is touching the scalp gently.
- Draw the detection comb through to the tips of the hair.
- Repeat this in all directions until you have combed all the hair.
- Check the comb for lice after each stroke. A magnifying glass may help.
- If you see any lice, clean the comb by wiping it on a tissue or rinse it before the next stroke.
- Comb over a white surface such as white paper. This is so that any head lice that are flicked out by the comb are easy to see.
- After the whole head has been combed, rinse out the conditioner.
- While the hair is still wet, use an ordinary comb to get rid of tangles.
- Repeat the detection combing in the rinsed hair to check for any lice that you might have missed the first time.
- It takes about 10-15 minutes to do detection combing properly, depending on how thick the hair is.

## What are the treatment options for head lice?

**Treatment is only needed if you see one or more live moving lice.** Nits (empty eggshells) do not always mean infection. Nits stick to hair even when lice are gone (after treatment).

### TREATMENT WITH LOTIONS OR CREAM RINSE

You can buy lotions or a cream rinse which kills lice from pharmacies. You can also get them on prescription. Head lice shampoo is not very effective and is not advised. Lotions come in water or alcohol bases. Alcohol based lotions work slightly better than water based lotions. But, do not use alcohol based lotions if you have asthma, eczema, or broken skin. **Alcohol based lotions are flammable so do not use near naked lights, cigarettes, fires, or flames. Be careful with children near fires who have alcohol lotion in their hair.** Some tips include:

- Follow the instructions on the packet carefully. This may include the following.
  - **For lotions:** apply to dry hair. Part the hair near the top and pour a few drops onto the scalp. Rub well into the hair. Part the hair again a little further down and repeat. Repeat this until the scalp and roots of the hair are saturated. Apply down to where a pony tail band would be. Leave on for 12 hours (overnight) and then wash off. About 50ml of lotion is needed per person. Up to 150ml is needed for thick hair.
  - **For cream rinse:** apply to damp hair so that the scalp and roots of the hair are saturated. One tube is usually enough. Leave on for 10 minutes and then rinse off.
- Do not go swimming before applying a lotion. The chlorine from the swimming pool may stop it working.
- Do not use a hairdryer to dry hair after applying treatment.

- Re-apply the same treatment after 7 days. (Although lice are usually killed by one application, not all eggs may be. The second application makes sure that any lice that hatch from eggs that survived will be killed before they are old enough to lay further eggs.)
- Inspect the hair by detection combing 2-3 days after the second application. If you find any live moving head lice, despite treatment, then see a doctor or nurse for advice.

## **WET COMBING TREATMENT USING THE BUG BUSTING METHOD**

'Bug busting' is a way of removing head lice without having to use a lotion or cream rinse to kill them. Use the Bug Busting method as described in the section above 'How can you tell if you have head lice'. Do this on every member of the household that has been found to have head lice. (The detector comb removes the lice which cannot grip hair that is slippery with conditioner). You need to do the wet combing routine every 4 days for at least 4 sessions (2 weeks).

- The first combing session should remove all hatched head lice, but does not remove eggs.
- Any young lice that hatch from eggs after the first session are removed at the second, third and fourth sessions. This is why it is important to do the full 4 sessions.
- If you see full-grown lice at the second, third, or fourth session, this means that some had been missed on the first session, or re-infection from someone else has occurred. If this occurs, you should increase the number of sessions. In effect, following any session where you find adult head lice, you should do 3 further sessions at 4 day intervals where you do not see adult lice.

Fuller details of wet combing treatment ('Bug Busting') can be obtained from:  
Community Hygiene Concern: [www.nits.net](http://www.nits.net)

## **Do family and friends need treatment?**

All people in the same home, and other close 'head to head' contacts of the previous 4-6 weeks should be contacted. Tell them to look for lice. Only people with head lice should be treated. (It used to be advised to treat all close contacts even if they had no symptoms. This has changed to just treating people with definite head lice infection.) All people with head lice in the same home should be treated at the same time. This stops lice being passed around again.

## **What about school?**

Children with head lice should carry on going to school. Contrary to popular belief, head lice do not spread quickly through schools. Alarming 'head lice letters' from schools are unhelpful. Close head-to-head contact is needed to pass lice on to others. Young

children who are 'best friends' and play closely together may pass lice on. A common sense approach is to tell the parents of the close friends of an affected child to look out for lice in their children.

## **Can head lice be prevented?**

There is no good way of preventing head lice. Lice repellent sprays are not very effective. Regular detection combing of children's hair will detect lice infection early. This means treatment can be started early, which means less chance of passing them on to others.

## **Some other points about head lice**

- Use an anti-lice lotion or cream rinse only when you are sure that you or your child have head lice. Do not use them to prevent head lice, or 'just in case'. Frequent use may cause a build up of small amounts of the active medication in the body. The risk of harm from this is very small, but it is best to use these treatments only when infected.
- A common reason for head lice to recur in one person is because close contacts (family and close friends) are not checked and treated if they also have head lice. The treated person is then likely to get head lice back again from untreated family or friends.
- After treatment and the lice have gone, it may take 2-3 weeks for the itch to go fully.
- Nits may remain after lice have gone. They are empty egg shells and stick strongly to hair. They will eventually fall out. A fine toothed 'nit comb' can remove them if you prefer.

**A final reminder** - alcohol based lotions are flammable. Some children have been badly burnt as their hair caught fire whilst being treated. Keep children away from fires, cigarettes, flames, etc, whilst lotion is in their hair.