Head lice are small parasitic insects that only live on the human head. They do not live on any other part of the body or on any other animal. Head lice crawl very fast over the human head, grasping hair shafts to move quickly. Their grasp is very strong which makes them hard to dislodge from the scalp and hair.

Head lice do not burrow into the skin. They feed only on human blood and they need to feed several times a day.

Eggs (nits) are laid by adult females close to the scalp on the hair shaft, usually no more than 1.5 centimetres from the scalp. These eggs are attached to the hair with incredibly strong glue.

**Do head lice cause illness or disease?**

Head lice do not carry any disease. Constant scratching may lead to sores on the scalp, however this is very rare. Parents should keep cases of head lice in their children in perspective. There are far worse health issues to concern a parent than head lice.

Adults, more than children, suffer from considerable outrage at the presence of these parasites. This outrage usually outweighs any public health significance that head lice may present.

The most likely harm caused by head lice is from the inappropriate use of chemicals in an attempt to treat them. The continued application of chemicals to the scalp can cause severe reactions on some heads.

Parents, in their frustration, can resort to applying products not tested for human use and not shown to have any effect on reducing head lice.

**How are head lice spread?**

Head lice are spread by contact occurring between one human head and another human head. The head lice move along the hair shaft from the head of an infested person to the hair of another person. Head lice cannot fly or jump and they do not crawl along furniture or hop between car seats. Head lice cannot survive off the human head for more than a few hours.

Thorough cleaning of your home, washing bedding and toys and rigorous vacuum cleaning do not affect the head lice population on a human head.

It is thought that increased human contact, especially among young children, may have contributed to an increase in head lice because of increased opportunities for transmission.
Treatment options

Chemical treatments

Before you choose a chemical treatment for head lice, consider the following:

- Make sure that the heads you treat actually do have head lice and do not treat unless they do. There is no preventative treatment available so treating members of the family who do not have lice has no effect but can contribute to the problem of lice building up resistance to the chemical treatments.
- Babies under twelve months of age, pregnant or breast feeding women or people with irritated or inflamed scalps should not be treated. Consult a health professional for advice.
- Do not let the product get into eyes.
- Many products have a very strong smell. A strong smelling substance left on the hair for any length of time may irritate your child.
- When trying a commercial head lice preparation, make sure you read the label first and apply strictly as directed. In desperation it can be tempting to use more of the product than is recommended in an effort to kill the lice. However, increasing the dose does not have any effect on how well the treatment works.
- Do not use insecticides, methylated spirits or kerosene on your child’s head.
- Do not blow dry the hair after treatment as the heat may inactivate the product.
- Do not rewash hair for 1-2 days after treatment.
- Apply product to every strand of hair and work through, leave for 20 minutes, and comb out with a good quality lice comb, wiping the product onto paper towel.
- If dead lice are found, the product has worked. However it is important to remember that since no product has been shown to kill eggs, any chemical treatment must be reapplied after seven days to kill any lice that may have hatched since the initial treatment.
- If you find live lice, the treatment probably hasn’t worked. Either use another product with a different active ingredient (read the label) or try the comb and conditioner method.

Comb and conditioner method

Head lice breathe through small openings along their abdomens. By coating the hair and therefore the louse in something thick and slimy, these openings close over, shutting down the breathing of lice for about 20 minutes. While unfortunately the lice don’t die using this method, it does slow them down so that you can catch them.

Nitbusting is a method of using a comb and conditioner (or another slimy product) to manage head lice. Using this method will not kill the lice or eggs but some good quality lice combs will remove them.

If Nitbusting at home with your child, do the following:

1. Try sitting the child between your legs on a low stool and putting on a video for an hour while you work.
2. Wrap a towel or kitchen paper around the child’s shoulders to catch conditioner spill.
3. Remove all items from the hair and comb out plaits and braids.
4. Apply liberal amounts of conditioner to the scalp and massage it through all the hair shafts. You will use a lot of conditioner. Every hair has to be coated to ensure it reaches the lice.

5. Lice live close to the scalp, so make sure that you cover the hair shaft close to the scalp. You don't have to work the conditioner onto the whole length of the hair. Combing will spread it well enough. The idea of the application is to restrict the movement of the head lice long enough for you to catch them with a comb.

6. After you've applied the conditioner, use a large comb to part small sections of the hair starting from the nape of the neck and working upwards toward the crown. Eggs are often found behind the ears and toward the back of the head. By using this method, you are more likely to find the head lice on top of and toward the front of the head.

7. When the hair is detangled and manageable, use a fine lice comb to comb out each section several times.

8. After each comb out, wipe the conditioner on the paper towel. If the child has head lice, you will see them on the towel.

9. Keep combing each section of hair until no further lice, nymphs (recently hatched lice) or eggs appear on the paper towel. Often you will see lots of old egg casings that may take some time to remove.

10. Once you have combed and re-combed each section of hair, either re-plait or tie it back. If it is very short, suggest to the child some interesting styling! Young boys often like their hair spiked up.

Other things you should know about the comb and conditioner method

Depending on the hair length and type, it is often easier to neatly section long and thick hair before applying conditioner to avoid getting the hair into a terrible tangle.

Head lice often congregate on the crown of the head, so that it may not be until you reach these last sections of hair that you find adult lice. However, heads that are severely infested will have adult lice everywhere.

A good head lice comb should also remove nymphs. These can be difficult to identify with the naked eye, but appear as small insects on the paper towel.

General advice

- Regularly check your children’s hair. Young girls growing up often become very independent about their hair care and it can become difficult to convince them that it’s important for you to continue checking their hair. Try to persist or show them how they can check their own hair when they wash it.

- Tying long hair back or braiding it, may help to reduce the transmission of lice.

- Keep a good quality lice comb in the shower so that every time anyone washes their hair they use the comb. The more people know about simple management methods the easier it will be to reduce the problem.

- Head lice and detangle combs should be cleaned between treatments in hot soapy water and rinsed in running hot water.

- For more information in English on head lice or the Nitbusters Program go to www.health.nsw.gov.au/headlice