How to Prevent, Find, and Treat Head Lice

What Are Head Lice?
Head lice are tiny insects that live on the head. They lay eggs (called nits) close to the scalp. Head lice do not spread disease, and having head lice does not mean that you are not clean. Head lice are very common among children. Scratching the head can be a sign of head lice, but you can have head lice without any itching.

How Is Head Lice Spread?
Head lice spread through direct contact among children (head-to-head), or indirectly on items such as hats, combs, hairbrushes, headbands, helmets, and toques.

Head lice
- do not jump, fly, or hop, but they crawl very quickly
- cannot live on pets or other animals
- can live off the head for up to 3 days, but their eggs, the nits, need a warm environment to develop—nits are not likely to hatch at room temperature

How to Prevent the Spread of Head Lice
- Check your child’s head regularly:
  - once a week as part of your routine
  - after every sleepover
  - every day during lice outbreaks at school
- Keep long hair tied back or braided.
- Teach your child not to share personal items that are used on their head. This means things like brushes, combs, barrettes, headbands, elastics, towels, hats, helmets, toques, and scarves.
- Teach your child to put their hats and scarves in their coat sleeves or backpacks when they take them off at school.

If your child has been in contact with someone who has lice, you need to check your child’s head carefully to see if they have caught lice. Head lice spread easily, so if one person in the household has lice, others may have it too. Check everyone in the household on the same day.
How to Check for Head Lice

What you need
- bright light
- hair conditioner—white is best
- regular comb
- paper tissues—white is best
- lice comb, a special fine-tooth comb available at any drug store
- plastic bag for garbage

What to look for
You are looking for both live head lice, called climbers, and the lice eggs, called nits.
- Adult lice are 2 to 4 mm long, or about the size of a sesame seed. Lice move quickly and can be difficult to see, so it's more likely that you'll see nits.
- Nits are shaped like tiny teardrops and have a brownish white colour. They are about the size of a poppy seed. They are stuck firmly to individual hairs and will not move unless you pull them from the hair with your fingernails or a nit comb.

What to do when checking for head lice
Start behind the ears and check the entire head, hair by hair. Check all hair from roots to tips.
An easy way to find live lice is to use conditioner and a lice comb. White conditioner makes it easier to see lice.
- Apply conditioner to dry hair, soaking the hair from the scalp to ends of the hair.
- Remove tangles from the hair using a regular comb.
- Immediately comb with a lice comb. Pick a place to start. Be sure you comb through all hair over the whole head.
- Place the lice comb against the scalp and pull it to the end of the hair.
- After each pull through the hair, check the teeth of the comb for lice. Wipe the conditioner off the comb onto a paper tissue and look for lice again. Place used tissues in a plastic bag.
- Repeat the combing for every part of the head at least 5 times.

If you find head lice
- If you find live lice, you have a confirmed case that should be treated.
- If you find only nits and they are close to the scalp, you have a probable case of head lice. If your child has not been treated within the last month, you should treat for headlice now.
- Check everyone else in the household for lice, even if they do not feel itchy.
- Treat everyone in the household who has lice on the same day.

How to Treat Head Lice

What you need
- head lice treatment
  Public Health recommends using treatments with the following ingredients:
  - permethrin, found in products such as Nix or Kwellada-P OR
  - pyrethrins with piperonyl butoxide, found in products such as R&C, Pronto, Equate, or Licetrol
  Other products may be available, but some do not have the ingredients that Public Health recommends to kill head lice. Please check for the above ingredients.
- lice comb, a special fine-tooth comb available at any drug store
- regular comb
- clean towel

“Conditioner stuns lice for 20 minutes. So once the hair is properly covered with a layer of conditioner, do not delay in combing those little suckers out!” Rick Speare, Tropical Health Solutions.
What to do—10 steps

1 Comb hair with a regular comb to remove tangles.

2 **Apply the treatment as follows:**
   - Shake the bottle.
   - Apply the treatment to dry hair, even if the product directions say, “towel dried hair.” This will make sure the product is not watered down.
   - Put the lice treatment all over the scalp and rub in well.
   - Be sure that the treatment covers all of the hair, from the scalp to the ends.
   - Leave the treatment on the hair for as long as the package recommends.

3 **Rinse out the treatment over the sink.** Don’t rinse in a bathtub where the product could get onto other parts of the body. Dry the hair with a clean towel.

4 Comb the hair with a regular comb to remove tangles.

5 Comb for lice with a lice comb.

6 **Continue daily lice combing** every day between the first and second treatment. It is described in the next section. Do not skip this step!

7 **Use the lice treatment a second time, 9 to 10 days after the first treatment.** Use the same product, and follow the same steps you used for the first treatment. The first treatment kills the live lice and the second treatment kills any lice that have hatched since the first treatment was done. No product currently available will kill all of the nits.

8 **Continue checking household members at least once a week for 3 weeks** after the second treatment is done to make sure everyone is free of live lice. See How to Check for Head Lice section of this pamphlet.

9 **If you find live lice after the second treatment has been done,** then repeat steps 1 to 8 using a different product (with a different ingredient) to kill the lice. For example, if you used a product with permethrin, then choose a different product that has pyrethrins with pipernyl butoxide. Make sure to do 2 treatments with the new product.

10 If you continue to find live head lice after following these steps, contact Public Health.

**Keys to controlling head lice**

- Two treatments, 9 to 10 days apart, for every household member who has live lice
- **Daily lice combing** between treatments
- Careful checking of everyone who has been in close contact with someone who has head lice
- Cleaning personal and household items that the people with lice may have used

**Daily Lice Combing**

**Comb for lice every day between the first and second treatments.** The first treatment will not kill all of the nits. Daily combing is needed to remove any lice that will hatch. If the new lice aren’t removed, they’ll lay more nits in 9 to 15 days and start the cycle over again. **This step is key to your success in getting rid of head lice!**

1 Wet your child’s hair. It should be damp, not dripping wet.

2 Comb hair with a regular comb to remove tangles.

3 Part the hair into thin, narrow sections. Comb with a lice comb (fine tooth comb) one section at a time.

4 Place the lice comb against the scalp and pull it to the end of the hair.

5 Check the teeth of the lice comb after each pull through the hair. Rinse off any lice or nits under running water or wipe them away with a tissue. Drop each tissue into a bag.

6 Repeat the combing for every section of hair at least 5 times.

7 **When you finish lice combing,** wash the comb under the tap. Use a nailbrush or old toothbrush to get between the teeth of the comb. If you’ve been using tissues to wipe the comb, tie the bag closed and throw it away. Soak the comb in very hot water for 10 minutes or store in the freezer for 24 hours before using again.

**There are no short cuts to getting rid of Head Lice!**

Daily lice combing is very important.
Household Clean Up

- **Wash combs, brushes, and hair accessories**—such as scrunchies, barrettes, and headbands—with hot, soapy water until all lice or nits are removed. Then soak them in very hot water for 10 minutes. Or you can put them in the freezer for 24 hours.

- **Use very hot, soapy water to wash clothing, sheets, towels, pillowcases, and so forth.** used by any household members with head lice in the last 3 days.

- Treat items that you can’t wash, such as blankets, coats, and stuffed toys, in one of the following ways:
  - Put it in a closed plastic bag for 10 days.
  - Put it in a hot dryer for 20 minutes.
  - Put it in the freezer for 24 hours.
  - Iron it.

- **Vacuum mattresses, carpets, and furniture.** Head lice can live off the human head for up to 3 days.

- **Do not use lice spray** around your home. There is no proof that spraying will help control lice, and it may harm family members or pets.

Other Treatments

You may have heard of using household products such as vaseline, mayonnaise, hair gel, or olive oil to treat head lice. Please remember that such methods have not been proven to work. Applying these products is thought to plug the holes through which the lice breathe. But head lice can live without air for up to 6 hours.

If you use one of these products, apply a thick coating to the hair and leave it on for at least 8 hours at a time. You may wish to apply before bedtime, cover hair with a shower cap overnight, and wash hair with regular shampoo in the morning. This may suffocate the live lice, but the nits will not be affected and will continue to hatch. You will need to repeat these treatments several times over 2 to 3 weeks. Remember to also use **daily lice combing**.

Some people have used natural products such as tea tree oil, other essential oils, and aromatherapy products to treat head lice. Public Health does not recommend the use of such products, because their safety and effectiveness is not yet known.

Other products such as gasoline or kerosene are flammable (easily set on fire) and toxic (poison). They are not recommended by Public Health because they are dangerous.

**For More Information**

**Phone:** 811

**Websites:**
- Speare, Rick. Tropical Health Solutions. tropicalhealthsolutions.com/headlice
- Canadian Paediatric Society: caringforkids.cps.ca/handouts/head_lice
- Centers for Disease Control and Prevention: cdc.gov/parasites/lice/index.html
- 811 head lice: 811.novascotia.ca
  Click on “Search Health Topics”, type “lice” in the Search bar, then click “Search”.

*This pamphlet was written and reviewed by Public Health, Nova Scotia Health Authority.*