

TREATMENT

How can I treat a head lice infestation?

- **The single most effective treatment is thorough combing of all hair with a fine tooth comb.** (See Step 1 – Fine tooth combing for more information).
- For persistent or significant infestations, medicated shampoos may be helpful but are not necessarily required.

Treating the infested person, any other infested family members, and by cleaning clothing and bedding used within the 2 days prior to treatment is also helpful.

If I choose to use OTC (over the counter) medications, what is available to treat head lice?

Many head lice medications are available at your local drug store. Many of the OTC products contain one of the following active ingredients proven in research studies to get rid of lice. More information available under **Treatment Steps** below.

1. **Pyrethrins** (pie-WREATH-rins): often combined with **piperonyl butoxide** (pie-PER-a-nil beu-TOX-side):
Brand name products: A-200*, Pronto*, R&C*, Rid*, Triple X* Pyrethrins are natural extracts from the chrysanthemum flower. Though safe and effective, pyrethrins only kill crawling lice, not unhatched nits. A second treatment is recommended in 7- 10 days to kill any newly hatched lice. Sometimes the treatment does not work.
2. **Permethrin** (per-meth-rin):
Brand name product: Nix*
Permethrins are similar to natural pyrethrins. Permethrins are safe and effective and may continue to kill newly hatched eggs for several days after treatment. A second treatment may be necessary in 7-10 days to kill any newly hatched lice. Sometimes the treatment does not work.

Note: If OTC permethrin (1%) does not effectively kill crawling bugs, prescription- strength (5%) permethrin will not be any more effective. If lice are resistant to 1%, they will also be resistant to 5% permethrin.

What about alternative methods for treating head lice?

Although not proven in studies, fairly good success has been reported with tea tree oil, lavender and/or peppermint oils. More can be read about these at <http://www.healthline.com/health-slideshow/tea-tree-oil-treatment-lice#1>.

Alternative methods such as mayonnaise, oils, and hair dyes have not been proven to be effective treatments, although oils can be helpful with the fine combing process. Swimming is also not a treatment, as lice can survive several hours in a chlorinated pool by clinging to affected person's hair.

Which head lice medicine is best for me?

If you aren't sure, ask your pharmacist or health care provider. When using medicine, always follow the instructions.

When treating head lice:

1. Do not use extra amounts of the lice medication unless instructed. Drugs are insecticides and can be dangerous when misused or overused.
2. Do not treat the infested person more than 3 times with the same medication if it does not seem to work. See your health care provider for alternative medication.
3. Do not mix head lice medications.

Treatment steps

Step 1: Checking for live lice and nits

Fine tooth combing - how to do it

- Wash the hair well and then dry it with a towel. The hair should be damp, not dripping. Some people find applying a leave-in conditioner or small amount of oil helps keep the hair damp for a longer period of time and makes combing easier.
 - Make sure there is good light. Daylight is best.
 - Comb the hair with an ordinary fine-tooth comb or, if desired, a special nit comb.
 - Start with the teeth of the fine tooth comb touching the skin of the scalp at the top of the head. Draw the comb carefully towards the edge of the hair.
 - Look carefully at the teeth of the comb in good light to determine if there are live lice or the presence of nits. If there are head lice, you will find one or more lice on the teeth of the comb.
 - Wipe the comb clean with a tissue and place the used tissue in a container.
 - Do this over and over again from the top of the head to the edge of the hair in all directions, working round the head.
 - Do this for several minutes. It takes at least 10 to 15 minutes to do it properly for each head.
 - Head lice are little insects with moving legs. They are often not much bigger than a pin head, but may be as big as a sesame seed (the seeds on burger buns).
 - **Don't treat with a medicated shampoo/lotion unless you are sure that you have found a living, moving louse or nits within ¼ inch of the scalp.** (Nits located further than ¼ inch from the scalp are typically non-viable (not alive) – they usually are too old or have already hatched).
 - Discard tissues used to wipe comb in a toilet and wash container in hot, soapy water or in a dishwasher.
 - **Fine tooth combing is the single best treatment for lice. Additional treatments may be helpful for treating adult lice but are not required.**

Step 2: Medicated treatment (If indicated and if desired)

If live, moving lice or nits located within ¼ inch of the scalp are found, some people prefer to use a medicated treatment in conjunction with combing.

Follow these treatment steps:

1. Before applying treatment, remove all clothing from the waist up to prevent lice from re-entering the scalp. Draping an old towel over the shoulders for warmth may make the session more tolerable.
2. Apply lice medicine, also called pediculicide (peh-DICK-you-luh-side), according to label instructions. If your child has extra-long hair, you may need to use a second bottle but some instructions recommend applying product only on hair from scalp to where you would place a ponytail band, so read carefully.

WARNING: Hair conditioner or combination shampoo/conditioner can act as a barrier, preventing the medication from sticking to the hair. Wash hair of these products prior to treatment if used. Do not re-wash hair for 1-2 days after treatment.

3. Have the infested person put on clean clothing after treatment.
4. If some live lice are still found 8-12 hours after treatment, but are moving more slowly than before, do not retreat. Comb dead and remaining live lice out of the hair. The medicine sometimes takes longer to kill the lice.
5. If no dead lice are found 8-12 hours after treatment and lice seem as active as before, the medicine may not be working. See your health care provider for a different medication and follow the treatment instructions.
6. A nit comb should be used to remove nits and lice from the hair shaft. Many flea combs made for cats and dogs are also effective. Finer-toothed nit combs or electronic nit combs may also be helpful.
7. After treatment, check hair every 2-3 days for 2 weeks and use a nit comb to remove any nits or lice you see.
8. Retreatment is meant to kill any surviving hatched lice before they produce new eggs. For some drugs, retreatment is recommended routinely about a week after the first treatment (7-10 days, depending on the drug) and for others only if crawling lice is seen during this period. Retreatment with lindane shampoo is not recommended. Check all treated persons for 2 weeks after you think that all lice and nits are gone.

Step 3: Treat the household

Head lice do not survive long if they fall off a person and cannot feed. You don't need to spend a lot of time or money on housecleaning activities. Follow these steps to help avoid re-infestation by lice that have recently fallen off the hair or crawled onto clothing or furniture.

1. Machine wash and dry clothing, bed linens, and other items that the infested person wore or used **during the 2 days before treatment** using the hot water (130°F) laundry cycle and the high heat drying cycle. Clothing and items that are not washable can be dry-cleaned **OR** sealed in a plastic bag and stored for 10 days - 2 weeks.
2. Soak combs and brushes in hot water (at least 130°F) for 5-10 minutes. Keep in mind most hot water heaters are set to 120°F to avoid accidental scalding. Additional heating of

water, such as in a microwave or on the stove, may be necessary for soaking combs and brushes. Dishwashers are also effective.

3. Vacuum the floor and furniture, particularly where the infested person sat or lay. However, the risk of getting infested by a louse that has fallen onto a rug or carpet or furniture is very small. Head lice survive less than 1–2 days if they fall off a person and cannot feed; nits cannot hatch and usually die within a week if they are not kept at the same temperature as that found close to the human scalp. Spending much time and money on housecleaning activities is not necessary to avoid reinfestation by lice or nits that may have fallen off the head or crawled onto furniture or clothing.
4. Do not use fumigant sprays; they can be toxic if inhaled or absorbed through the skin.