General Guidelines for Head Lice from the CDC

Treatment for head lice is recommended for persons diagnosed with an active infestation. All household members and other close contacts should be checked; those persons with evidence of an active infestation should be treated. Some experts believe prophylactic treatment is prudent for persons who share the same bed with actively-infested individuals. All infested persons (household members and close contacts) and their bedmates should be treated at the same time.

Some pediculicides (medicines that kill lice) have an ovicidal effect (kill eggs). For pediculicides that are only weakly ovicidal or not ovicidal, routine retreatment is recommended. For those that are more strongly ovicidal, retreatment is recommended only if live (crawling) lice are still present several days after treatment (see recommendation for each medication). To be most effective, retreatment should occur after all eggs have hatched but before new eggs are produced.

When treating head lice, supplemental measures can be combined with recommended medicine (pharmacologic treatment); however, such additional (non-pharmacologic) measures generally are not required to eliminate a head lice infestation. For example, hats, scarves, pillow cases, bedding, clothing, and towels worn or used by the infested person in the 2-day period just before treatment is started can be machine washed and dried using the hot water and hot air cycles because lice and eggs are killed by exposure for 5 minutes to temperatures greater than 53.5°C (128.3°F). Items that cannot be laundered may be dry-cleaned or sealed in a plastic bag for two weeks. Items such as hats, grooming aids, and towels that come in contact with the hair of an infested person should not be shared. Vacuuming furniture and floors can remove an infested person’s hairs that might have viable nits attached.

***Treat the infested person(s):*** Requires using an Over-the-counter (OTC) or prescription medication. Follow these treatment steps:

1. Before applying treatment, it may be helpful to remove clothing that can become wet or stained during treatment.
2. Apply lice medicine, also called pediculicide, according to the instructions contained in the box or printed on the label. If the infested person has very long hair (longer than shoulder length), it may be necessary to use a second bottle. Pay special attention to instructions on the label or in the box regarding how long the medication should be left on the hair and how it should be washed out.

WARNING:

Do not use a combination shampoo/conditioner, or conditioner before using lice medicine. Do not re–wash the hair for 1–2 days after the lice medicine is removed.

* Have the infested person put on clean clothing after treatment.
* If a few live lice are still found 8–12 hours after treatment, but are moving more slowly than before, do not retreat. The medicine may take longer to kill all the lice. Comb dead and any remaining live lice out of the hair using a fine–toothed nit comb.
* If, after 8–12 hours of treatment, no dead lice are found and lice seem as active as before, the medicine may not be working. Do not retreat until speaking with your health care provider; a different pediculicide may be necessary. If your health care provider recommends a different pediculicide, carefully follow the treatment instructions contained in the box or printed on the label.
* Nit (head lice egg) combs, often found in lice medicine packages, should be used to comb nits and lice from the hair shaft. Many flea combs made for cats and dogs are also effective.
* After each treatment, checking the hair and combing with a nit comb to remove nits and lice every 2–3 days may decrease the chance of self–reinfestation. Continue to check for 2–3 weeks to be sure all lice and nits are gone. Nit removal is not needed when treating with spinosad topical suspension.
* 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 (7–9 days, depending on the drug) and for others only if crawling lice are seen during this period. Retreatment with lindane shampoo is not recommended.
* ***Supplemental Measures:*** 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 2 weeks.
		2. Soak combs and brushes in hot water (at least 130°F) for 5–10 minutes.
		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.

Many head lice medications are available “Over-the-counter” without a prescription at a local drug store or pharmacy. Each Over-the-counter product approved by the FDA for the treatment of head lice contains one of the following active ingredients. Always follow the label instructions when administering these medications. If crawling lice are still seen after a full course of treatment contact your health care provider.

* 1. **Pyrethrins** combined with piperonyl butoxide;
	Brand name products:
	A–200\*, Pronto\*, R&C\*, Rid\*, Triple X\*. Pyrethrins are naturally occurring pyrethroid extracts from the chrysanthemum flower. Pyrethrins are safe and effective when used as directed. Pyrethrins can only kill live lice, not unhatched eggs (nits). A second treatment is recommended 9 to 10 days after the first treatment to kill any newly hatched lice before they can produce new eggs. Pyrethrins generally should not be used by persons who are allergic to chrysanthemums or ragweed. Pyrethrin is approved for use on children 2 years of age and older. The [efficacy of pyrethrinsexternal icon](https://pediatrics.aappublications.org/content/135/5/e1355) may be reduced because of development of resistance, but the prevalence of resistance has not been well studied and is unknown. If crawling lice are still seen after a full course of treatment contact your health care provider.
	2. **Permethrin lotion, 1%**;
	Brand name product:
	Nix\*. Permethrin is a synthetic pyrethroid similar to naturally occurring pyrethrins. Permethrin lotion 1% is approved by the FDA for the treatment of head lice. Permethrin is safe and effective when used as directed. Permethrin kills live lice but not unhatched eggs. Permethrin may continue to kill newly hatched lice for several days after treatment. A second treatment often is necessary on day 9 to kill any newly hatched lice before they can produce new eggs. Permethrin is approved for use on children 2 months of age and older.Resistance to 1% permethrin  has been reported, but its prevalence is unknown. If crawling lice are still seen after a full course of treatment contact your health care provider

Prevention & Control

Head lice are spread most commonly by direct head-to-head (hair-to-hair) contact. However, much less frequently they are spread by sharing clothing or belongings onto which lice have crawled or nits attached to shed hairs may have fallen. The risk of getting infested by a louse that has fallen onto a 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 scalp.

The following are steps that can be taken to help prevent and control the spread of head lice:

* Avoid head-to-head (hair-to-hair) contact during play and other activities at home, school, and elsewhere (sports activities, playground, slumber parties, camp).
* Do not share clothing such as hats, scarves, coats, sports uniforms, hair ribbons, or barrettes.
* Do not share combs, brushes, or towels. Disinfest combs and brushes used by an infested person by soaking them in hot water (at least 130°F) for 5–10 minutes.
* Do not lie on beds, couches, pillows, carpets, or stuffed animals that have recently been in contact with an infested person.
* Machine wash and dry clothing, bed linens, and other items that an 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 2 weeks.
* Vacuum the floor and furniture, particularly where the infested person sat or lay. However, 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.
* Do not use fumigant sprays or fogs; they are not necessary to control head lice and can be toxic if inhaled or absorbed through the skin.

To help control a head lice outbreak in a community, school, or camp, children can be taught to avoid activities that may spread head lice.