

## Lindane

Lindane shampoo is available only by prescription. Over use or misuse of this product can be toxic to the brain and nervous system. In some cases, lice have become resistant to Lindane.

Lindane is contraindicated for persons with seizure disorders, infants and pregnant women.

Tips for using Lindane:

- Carefully follow the instruction sheet provided with this product.
- Avoid contact with eyes. Do not use in areas of open wounds, sores, or cuts.
- Avoid cream rinses, hair gels, or oil based hair dressing before and for two weeks after application of Lindane.
- Use one half of a 2 oz. bottle for short hair, 3/4 of a bottle for medium length hair and a full bottle for long hair.

## **Nits**

Nits are hard to remove from your hair. They feel like little grains of sand stuck to the hair, so you may feel them before you see them. Dandruff can be easily flicked away and nits must be scraped off the hair shaft. Nits are yellow-white on the scalp hair and pepper-like on the genital hair.

## **Nit Removal Process**

Nit removal from scalp hair requires the aid of another person. Equipment needed:

- one sheet or large towel
- hair dryer
- sink or shower to wash hair
- one regular comb
- hair clips
- one nit comb (LiceMeister® or LiceOut® comb)
- Paper towels or toilet paper
- Good lighting and magnifying lens

1. Wet hair. Place a sheet or large towel under a chair and place the infested person in the chair.
2. Dry the hair with a towel or hair dryer until it is completely dry. The heat will help to loosen the nits from the hair.
3. Wet the hair again and comb out tangles with a regular tooth comb
4. Part the hair into four sections and pin with clips.
5. Pick up one section starting at the tops of this section, lift a one inch wide strand of hair and place the teeth of the nit comb as close to scalp as possible. Make sure the teeth of the comb are deep into the strand of hair. Pull the nit comb through the strand of hair.
6. Nits that are difficult to remove may be scraped off by moving the nit comb up and down the hair shaft starting at the scalp. Wipe the comb off, with a tissue, after each stroke through the hair.
7. Pin back each section of hair after removing the nits.
8. Repeat steps 5-7 to the remaining 3 sections of hair. If the hair becomes dry, dampen with a little water.
9. After picking all the lice and nits you can see, rinse the hair with water to wash out any loose nits.
10. Dry the hair with a clean towel or hair dryer, then check the entire head for nits you may have missed.
11. Repeat this process twice a day for two weeks, even if you don't see nits!

## After Treatment Cleanup

1. Have the person who was treated change into clean clothing.
2. If you are treating more than one person –pour boiling water over the nit comb, hair clips, and regular comb and let soak for 30 seconds.
3. Wash the sheet, towels clothing the person was wearing.
4. Flush the toilet paper and seal paper towels in a bag and place in trash.

## **Household Treatment to Kill Lice & Nits**

Wash the following items in hot water: towels, washable rugs, sheets, blankets, pillow cases, coats, hats, scarves, clothing in clothes hamper, and back packs. Items may also be placed in a high heat dryer for 30 minutes.

Vacuum rugs, carpet, car seats, chairs, couches, pillows from couch or bed, bed mattresses, stuffed animals. Remove the vacuum bag and place sealed in the trash. An additional cleaning option is to seal the above items in a plastic bag for two weeks. The lice will die without food (blood)

Sanitize brushes, combs, and nit loosening combs, barrettes, other hair holders, and detachable foam pads inside bike and sport helmets. Soak them in 1/4 cup bleach to 1 quart of cold water for one hour.

Adapted from [A Head Lice Prevention and Treatment Booklet](#)  
Washington State Department of Health, 7/99  
SHC 8/00

# How To Say

# “NO”

# To Nits

The word lousy originally referred to someone or something that was infested with lice. Lice are spread by close physical contact or contact with infested articles.

### General Information About Lice

- An adult louse is about the size of a sesame seed.
- When a female louse finds its way to the scalp or genital area of a person, she begins laying eggs (nits), along with a glue that firmly attaches the nits to the hair close to the scalp or skin. An adult female louse can lay 6-8 nits in 2 days.
- In approximately 7 days, the nits hatch, and the newborn lice begin to feed by biting the scalp or skin to obtain blood.
- Lice inject a chemical under the skin when they bite that causes itching for some individuals.
- Lice mature to adults in about 10 days.
- It takes about 16 days for a nit to become an adult female louse capable of laying more nits.
- There are several kinds of lice that prefer humans for hosts. Some infest the scalp or facial hair, others the body and the genital area (often referred to as *crabs*). Head lice are most often found behind the ears, at the nape of the neck.
- Lice do not carry diseases in the U.S.

### How Lice Are Spread

- Lice can infest **anyone**, young, old, rich, poor, clean, or dirty.
- Lice do not fly or jump; they crawl.
- Lice can be acquired by intimate physical or with contact infested personal articles, bedding, clothing, or towels.

### The Delousing Process

The treatment of lice is a process that can take up to 21 days. Eradication of lice requires a two step approach; killing the live lice and removing the nits from the hair. If lice are found after you treat, either nits or newly hatched lice were not removed.

#### Pesticide Free Treatment Products

##### LiceOut®

LiceOut® is a non-toxic gel that washes out easily and is safe and easy to use. LiceOut® traps lice so that nit combs, such as LiceOut® or the LiceMeister® comb can remove lice and nits. Always follow the instructions on any lice treatment product.

##### Oil based products

Oil based products such as olive oil or mayonnaise (not homemade, low/no fat or salad dressing) make it difficult for lice to breathe.

Directions:

- Cover the infested head completely with olive oil or mayonnaise.
- Place a shower cap over the hair or wrap the hair with plastic wrap.
- With the cap on, briefly blow dry the hair. The heat will help kill the lice.
- Leave the cap on at least 30 minutes, up to 2 hours.
- Using a nit removing comb (e.g. LiceMeister® or LiceOut®) remove the lice and nits.
- Shampoo the hair until oil is removed.
- Use the special nit removing comb to remove any remaining nits. Continue to remove nits twice a day for two weeks.

##### HairClean 1-2-3®

This is a natural head and hair hygiene treatment that is pesticide-free. It contains coconut oil, anise oil, and ylang ylang oil. It has been used effectively in Israel to kill lice. A study at the University of Miami found HairClean 1-2-3® to be an effective non-toxic product for the treatment of head lice. Always follow the instructions on any lice treatment product.

#### Pesticide Treatment Products

Currently there are three types of lice pesticides: pyrethrum, permethrins and Lindane. These products may kill lice on contact. Pesticides are toxic products, which if used improperly, may cause side effects. Always carefully follow product instructions. Case reports suggest that head lice are becoming increasingly resistant to pesticide products. Using several different products does not increase effectiveness but may only increase side effects. Even if you choose to use a pesticide product, you must continue to pick the nits twice a day for two weeks. **Pregnant women, children, and persons with allergies** must consult their health care provider before using any pesticide treatment product.

##### Pyrethrums

These pesticides kill lice on contact but have no long-lasting effect on lice that may hatch later.

##### Pyrethrum Shampoos

Rid®

A-200®

Clear®

R&C®

##### Pyrethrum Cream Rinses

Pronto®

End Lice®

Tips for using these products:

- It may take up to 20 minutes for lice to die after treatment.
- One treatment will not kill all of the lice. You must continue to check the hair and remove the nits. Do not reapply any pesticide for at least seven days.

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- Many of these products can be bought as a package with a lice spray. Evidence shows that lice sprays are not effective in killing lice or nits. They do put poison into the air.

### Permethrins

These pesticides usually kill lice on contact and may continue to kill lice and newborn lice for 7-10 days.

#### Permethrin cream rinses

Nix® - 1% permethrin

Elimite® (prescription only) - 5% permethrin

Tips for using permethrin:

- Permethrins are the treatment of choice by the Centers for Disease Control (CDC), although they report that treatment failure is common.
- Do not reapply any pesticide product for at least seven days after the first pesticide treatment. Using treatment for frequently than recommended can cause serious side effects.
- Do not shampoo the head for at least 24 hours after treatment.
- Use only a baby shampoo or a regular shampoo without conditioner for two weeks after the lice treatment. Do not use hair coloring, mousse, gel or hair spray for at least 2 weeks after lice treatment.
- When using Nix® use the entire 2 ounce bottle for head lice. In the pubic area, or for a person with short hair use only half the bottle. If the person has long hair, use one and a half to two bottles of Nix®