

# Head Lice: What You Need to Know

Head lice are a common problem that usually affects school-aged children and their families. The lice can attach to the hair of anyone's head. It doesn't matter if the hair is clean or dirty. Head lice are also found worldwide in all different places, like homes or schools or the country or city. It doesn't matter how clean, dirty, rich, or poor the place or person is.

Although head lice may be a nuisance, they don't cause serious illness or carry any diseases. Head lice can be treated at home, but it's important to check with the doctor first.

Here is information from the American Academy of Pediatrics to help parents and caregivers check for, treat, and prevent the spread of head lice.

## What are head lice?

Head lice are tiny bugs about the size of a sesame seed (2–3 mm [millimeters] long). Their bodies are usually pale and gray, but their color may vary. One of these tiny bugs is called a *louse*.

Head lice feed on small amounts of blood from the scalp. They can't survive for more than 1 day without a blood meal.

Head lice lay and attach their eggs to hair close to the scalp. The eggs and their shell casings are called *nits*. The eggs are oval and small (about the size of a knot in thread [0.8 mm long and 0.3 mm wide]) and are usually yellow to white. Some nits may blend in with some people's hair color, making them hard to see. These nits are often confused for dandruff or hair spray droplets. Nits attach to the hair with a sticky substance that holds them firmly in place. After the eggs hatch, the empty nits stay on the hair shaft.

## What is the life cycle of head lice?

Head lice live about 28 days. They develop in 3 phases: egg (also called a *nit*), nymph, and adult louse.

- 1. Egg, or nit. Eggs, or nits, hatch in 7 to 12 days (depending on the surrounding temperature). Eggs are usually found within 4 to 6 mm of the scalp and do not survive if they are farther away.
- 2. Nymph. The nymph looks like an adult head louse but is much smaller (about the size of a pinhead [1.5 mm]). Nymphs become adults about 9 to 12 days after hatching.
- 3. Adult louse. An adult louse can multiply fast and lay up to 10 eggs a day. It takes about only 12 to 14 days for newly hatched eggs to reach adulthood.

This cycle can repeat every 3 weeks if head lice are left untreated.

# Louse egg (nit) enlarged to show detail Louse egg (nit) and adult louse compared to a penny

#### How common are head lice?

Head lice are most common in preschool- and elementary school–aged children. Each year, millions of school-aged children in the United States get head lice. However, anyone can get head lice. Head lice are found worldwide.

# How do head lice spread?

Head lice are crawling insects. They cannot jump, hop, or fly. Head lice spread mainly from close, prolonged head-to-head contact. There is a very small chance that head lice will spread when people share items like combs, brushes, hats, and sports helmets.

# What are symptoms of head lice?

Itching on the areas where head lice are present is the most common symptom. However, it may take up to 4 to 6 weeks after lice come into contact with the scalp before the scalp becomes sensitive to the lice saliva and begins to itch. Most of

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the itching happens behind the ears or at the back of the neck. Also, itching caused by head lice can last for weeks, even after the lice are gone.

# How do you check for head lice?

Regular checks for head lice are a good way to spot them before they have time to multiply and infest (become present in a large number on) your child's head.

- Seat your child into a brightly lit room.
- Part their hair.
- Look for crawling lice and for nits on your child's scalp within a section at a time.
  - O Live lice are hard to find. They avoid light and move quickly.
  - O Nits will look like small white or yellow-brown specks and be firmly attached to the hair near the scalp. The easiest place to find them is at the hairline at the back of the neck or behind the ears. Nits can be confused with many other things, like dandruff, dirt, or hair spray droplets. Here's how to tell the difference: nits are firmly attached to hair, whereas dandruff, dirt, or other particles are not.
- Use a fine-tooth comb, like a louse or nit comb, to help search the scalp section by section. (See What is the comb-out method?)

## What is the comb-out method?

The comb-out method can be used to help check for nits and head lice or to help remove nits and head lice after head lice treatment. However, the comb-out method doesn't usually work on its own to get rid of head lice.

## Here is how you use the comb-out method

Step 1: Wet your child's hair.

Step 2: With a fine-tooth comb (louse or nit comb), comb through your child's hair in small sections.

Step 3: After each comb-through, wipe the comb on a wet paper towel. Examine the scalp, comb, and paper towel carefully.

Step 4: Repeat steps 2 and 3 until you've combed through all your child's hair.

# How do you treat head lice?

Check with your child's doctor before beginning any head lice treatment. The most effective way to treat head lice is with head lice medicine. After each treatment, using the comb-out method every 2 to 3 days for 2 to 3 weeks may help remove the nits and eggs.

Head lice medicine should be used only when it is certain that your child has live head lice. Remember, check with your child's doctor before starting any head lice treatment. Also, when head lice medicine is used, it must be used safely. Here are some safety guidelines.

- Follow the directions on the package exactly as written.
- Never let children apply the medicine. Medicine should be applied by an adult.
- Always rinse the medicine off over a sink and not during a shower or bath, so the medicine doesn't run off the head onto other areas of skin. Place your child's head over a sink and rinse the medicine off with warm water, not hot water
- Never place a plastic bag onto a child's head.
- Do not leave a child alone with medicine in their hair.
- Store medicine in a locked cabinet, out of sight and reach of children.
- Check with your child's doctor before beginning a second or third treatment. The same medicine may need to be applied again, depending on its instructions.
- Ask your child's doctor if you have any questions or if treatments you have tried have not gotten rid of lice.

Warning: Never use products posing danger, like gasoline or kerosene, or medicines made for use on animals! Also, do not use home remedies, like petroleum jelly, mayonnaise, tub margarine, essential oils, or olive oil, because no studies prove they work.

# What head lice medicines are available?

Check with your child's doctor before beginning any treatment. (See the "Head Lice Medicines" chart for a list of head lice medicines approved by the US Food and Drug Administration.)

## **Head Lice Medicines**

Treatment	Description
Permethrin lotion, 1% (multiple products)	<ul> <li>No prescription needed.</li> <li>Apply to shampooed and towel-dried hair, then rinse off after 10 minutes. Do not shampoo for 24–48 hours afterward.</li> <li>Kills lice; does not kill lice eggs.</li> <li>A second treatment is recommended between days 9 and 10 if live lice are seen.</li> <li>Approved for use in infants and children 2 months and older.</li> </ul>
Pyrethrin-based shampoo or hair mousse (brand name products: RID, A- 200, Pronto, R&C, Triple X, Licide)	<ul> <li>No prescription needed.</li> <li>Apply to dry hair, then rinse off after 10 minutes. Do not shampoo for 24–48 hours afterward.</li> <li>Kills lice; does not kill lice eggs.</li> <li>A second treatment is recommended between days 9 and 10.</li> <li>Approved for use in children 2 years and older.</li> </ul>
Ivermectin lotion, 0.5% (brand name product: Sklice)	<ul> <li>No prescription needed.</li> <li>Apply to dry hair, then rinse off after 10 minutes. Do not shampoo for 24–48 hours afterward.</li> <li>Kills lice; does not kill lice eggs. However, prevents newly hatched lice from surviving.</li> <li>Only 1 application needed.</li> <li>Approved for use in infants and children 6 months and older.</li> </ul>
Malathion lotion, 0.5% (brand name product: Ovide)	<ul> <li>Prescription needed.</li> <li>Apply to dry hair, then rinse off after 8–12 hours. Do not shampoo for 24–48 hours afterward.</li> <li>Kills lice and lice eggs.</li> <li>A second treatment is recommended within 7–9 days if live lice are seen.</li> <li>Approved for use in children 6 years and older.</li> <li>Strong odor.</li> <li>Flammable.</li> </ul>
Spinosad topical suspension, 0.9% (brand name product: Natroba)	<ul> <li>Prescription needed.</li> <li>Apply to dry hair, then rinse off after 10 minutes. Do not shampoo for 24–48 hours afterward.</li> <li>Kills lice and lice eggs.</li> <li>A second treatment is recommended within 7 days if live lice are seen.</li> <li>Approved for use in infants and children 6 months and older.</li> </ul>
Ivermectin tablet, 3-mg (milligrams)	<ul> <li>Prescription needed.</li> <li>Use only when other medicines have failed.</li> <li>A second treatment is recommended within 9–10 days if live lice are seen.</li> <li>Can be used at any age, as long as the person's weight is 15 kg (kilograms) or more.</li> <li>Do not use veterinary formulations of ivermectin.</li> <li>Approved for use in adults for head lice infestation and used in children for other infections.</li> </ul>

# What else do I need to know about treating head lice?

- You may want to wash your child's clothes, towels, hats, and bed linens in hot water and dry them on high heat if they were used within 2 days before head lice were found and treated. You do not need to throw these items away. Items that cannot be washed may be sealed in a plastic bag for 2 weeks or dry-cleaned.
- Do not spray pesticides in your home. They can expose your family to dangerous chemicals and are not needed when you treat your child's scalp and hair properly.
- All household members and close contacts should be checked for head lice and treated if needed.

### **About No-Nit Policies**

Some schools have "no-nit" policies, stating that students who still have nits in their hair cannot return to school. The American Academy of Pediatrics and the National Association of School Nurses discourage such policies. They believe that a child should not miss or be excluded from school because of head lice.

## For More Information

American Academy of Pediatrics www.aap.org and www.HealthyChildren.org

National Association of School Nurses www.nasn.org

### Remember

Head lice aren't a risk factor for any serious health problems in children. Products should be used only if they are safe. If your child has head lice, work quickly but safely to treat your child to prevent the head lice from spreading.

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