



The Doctor Is In

BY DR. DAVID HILL

Lice to Meet You

Halloween heralds myriad horrors, from bubble-gum eyeballs to the price they can charge for a Cinderella costume. But no one, from Edgar Allen Poe to Walt Disney, has come up with anything as shocking as finding a nit in your child's hair. It's...it's...ALIVE!

How ugly are lice?

They are really ugly! The adult louse is a grey to white-colored insect about three to four millimeters long with legs for grasping hairs and mouth parts for sucking blood. The female louse lives a month and lays seven to ten eggs a day. These eggs or "nits" are little oval capsules she cements to the base of the hair shaft using her saliva. They hatch after about eight days, and the nymphs need another eight days to mature into adults.

Are all lice the same?

Pediculus humanis capitis is the subtype of louse that lives on people's heads. While the body louse (*Pediculus humanis corporis*) is technically a member of the same species, body lice don't like scalps and vice-versa. The pubic louse is a different species altogether.

How common are head lice?

Among elementary school students, head lice are the second most common transmissible condition, after the common cold. A 1997 study found one in four elementary-aged students to be infested at some point.

How do you get lice?

Lice don't have powerful hind legs or wings, so they can't jump or fly. They starve if they don't feast on human blood for 48 hours. Human lice cannot survive on dogs, cats, or other animals. So lice must be transferred by direct contact with human hair or on articles (hats, combs, brushes, towels, pillows, headphones) that have recently touched human hair. It is possible for your child's hood to pick up lice from another child's coat, but contact is required.

Aren't lice a sign of poor hygiene?

Lice are largely equal-opportunity parasites. They discriminate little by socioeconomic status, although they do strongly prefer straight European or Asian hair over the African variety. They like girls a little more than boys, but they

don't seem to care how short or long a host's hair is. Lice don't mind soap or water at all, so regular shampooing doesn't faze them.

How do you know when your child has lice?

Visible nits are often the first sign of infestation. Lice sometimes cause itching of the scalp, neck, and ears due to an allergy to louse saliva. But children can carry around lots of lice without any symptoms. Louse bites may become infected, leading to pustules, sores, or enlarged lymph nodes.

Nits are easier to see than adult lice, which can be elusive. Even after hatching, the egg sacs remain glued firmly to the hair shaft. Anyone who has treated lice knows that a fine-toothed comb is no metaphor. It's the most efficient tool for finding and removing nits. Ideally you'd go through the entire scalp at least twice. An ultraviolet (Wood's) light can help locate nits: they fluoresce a pale blue.

I found nits! Does that mean my child has an active infestation?

Not necessarily. Nits remain glued to the hair long after the last louse leaves. Because hair grows at a predictable rate, the distance between the scalp and the nits can serve as a clock to gauge whether there are still active lice: nits within a quarter-inch of the scalp suggest an ongoing infection.

How can I get rid of the little pests (the lice, not my children)?

Pesticides remain the most effective treatment. They include permethrin, pyrethrin, piperonyl butoxide, and malathion. Most of these agents are used in the same way. First shampoo and towel dry the hair. Then saturate the hair with lice treatment and leave it on for about ten minutes before rinsing. Repeat in seven to ten days to catch any newly-hatched lice. You'll also want to launder clothing and bedding that the child has used in the last 48 hours and vacuum the carpet.

Is it true lice are growing resistant to the usual therapies?

Resistance is a growing problem, but routine therapies still kill all the lice in about 95% of cases. The only therapy

that remains 100% effective is malathion (Ovide), but malathion is only available by prescription, and it must be left on for eight to twelve hours.

I'm a little anxious about putting insecticide on my child. Is this stuff safe?

Lice medicines work by poisoning the louse's nervous system in a way that doesn't affect humans. In children over age two, they are considered quite safe. Permethrin 1% cream (Nix) is available over the counter, and is considered the least toxic of all the current therapies. Lindane is the most toxic and least effective.

But my one-year old has lice. What can I do?

Wet combing is a chemical-free alternative that can be effective but labor-intensive. Wet the hair and add a lubricant such as hair conditioner, olive oil, or vinegar (the textbooks say nothing about vinaigrette). Comb with a fine-toothed comb twice over. Repeat this every three to four days for at least two weeks after you find the last adult louse.

Physical agents, including Cetaphil cleanser and dimeticone (a form of silicone), may be used to coat the lice. The literature on these agents is sparse, but they are at least unlikely to harm the host. One company even sells an electrified comb, but no studies confirm it works.

When can my child return to school?

Experts recommend allowing children back in school as soon as they have completed their first application of lice treatment or undergone a thorough wet combing. Your school nurse will want to confirm that your child has been treated before he or she returns to class. With proper attention you can ensure the only little monsters at school this year will be your own children.

Dr. David Hill is a board certified pediatrician with Cape Fear Pediatrics. He and his wife have three children.