

THE TRUTH ABOUT HEAD LICE: HOW TO TREAT AND PREVENT HEAD LICE SAFELY AND EFFECTIVELY

A FACTSHEET FROM MIDWEST PESTICIDE ACTION CENTER



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The saying that there are some cures worse than the disease certainly applies to human head lice. According to the U.S. Centers for Disease Control and Prevention, human head lice are not currently a concern for the spread of disease, and pose NO serious health risks. They are an annoyance causing itching and irritation. In extreme cases, excessive scratching may lead to skin infection.

The commonly used “cures” for head lice, such as shampoos and treatments often contain pesticides that are neurotoxins and can cause seizures, memory impairment, irritability and aggression even when used in accordance with the directions.^{1,2} They have also been linked to cancer, asthma, and hormone disruption.^{3,4,5}

THERE ARE SAFE AND EFFECTIVE TREATMENTS FOR HEAD LICE⁶

The following steps will help reduce your risk of lice.

Early Detection

- > Observe for signs and symptoms: scratching behind the ear and nape of neck, or red bite marks behind the ears.
- > Check the scalp and hair of children regularly for live lice and nits by separating the hair into sections and looking carefully under a bright light (Nits are small white eggs tightly bound to the hair shaft about 1 inch from the scalp - don't mistake dandruff or hair product residue for nits).

Quick Response

- > For 3 to 4 days following exposure to head lice, check your child and other family members daily as described above.

- > Launder and heat dry all washable items such as hats, coats, pillowcase, and bed sheets at 130°F or above. A typical washing machine hot water cycle with drying is usually enough to kill lice.

- > Head lice infestation **can't be prevented** by any type of pretreatment.
- > Head lice currently **carry no known diseases**.
- > Head lice **prefer clean, straight hair**; are more likely to infest girls than boys, and are most common in children 3-10 years old and their families.
- > Head lice infestation can be treated effectively **without chemicals** that can harm children's health. Spraying pesticides in a building is unnecessary and ineffective since head lice die within 3-4 days without a human host.

- > Unwashable items that are of concern can be placed in a sealed plastic bag for 4 days to kill the lice and then shaken outside.

- > DO NOT use any spray pesticides to treat buildings or furniture for lice. This is ineffective since head lice cannot survive long off a human host.

Careful Combing

- > Once you identify a lice infestation, use the following method to manually remove lice and their eggs from the hair. Before you begin, assemble the following items: a regular comb, a fine-toothed comb – preferably a special metal

nit comb (available at your pharmacy), white facial tissue or toilet paper, towel, plenty of regular hair conditioner/cream rinse, good lighting, a garbage can, and an activity for the child to do while the combing takes place (e.g. book, video or puzzle).

Wash your child's hair with your regular shampoo; apply a generous amount of hair conditioner/cream rinse. DO NOT rinse conditioner out of the child's hair. Comb through the hair using the regular comb to remove tangles. Sit the child and yourself in comfortable chairs and cover the child's shoulders with a towel. Begin careful combing of the hair with the fine-toothed comb by using the following steps:

- 1 Carefully separate the hair into small sections.
- 2 Comb each section separately and slowly from the scalp to the ends of the hair several times.

3 After each section is combed, wipe the conditioner from the comb onto the facial tissue looking for live lice. Discard tissue. If lice are present flush all tissues down the toilet.

4 Continue until the entire head has been carefully combed.

5 Treatment should take 45 minutes to 2 hours depending on the length and thickness of the hair.

6 Re-shampoo and rinse the hair after combing is complete to remove the conditioner.

7 After the hair is dry re-check under a bright light for nits.

8 If nits are found, remove the nit by cutting the hair out using a small scissors.

9 Repeat this process every 3 to 4 days until no more live lice are found.

10 Continue being vigilant and respond quickly to avoid and control future infestations.

THE HEALTH RISKS OF COMMON PESTICIDE TREATMENTS FOR HEAD LICE

Most chemical treatments for head lice contain the pesticides lindane (Kwell), malathion (Ovide Lotion, 0.5%), or permethrin (Nix Lice, Acticin and Elimite). Lindane is considered the most hazardous of the pesticides used to treat lice, and has been banned in California and 15 European countries. Permethrin is the least toxic of these three chemicals. These pesticides have neurological impacts (such as seizures, memory impairment, irritability and aggression), can cause hormone disruption, and have been linked to cancer.

WARNING: If all other options have been explored and you must use a pesticide treatment,

- > Always follow the directions exactly as listed on the label.
- > Never use on children under 2 years old. Pregnant women should never use these products, nor should they apply them to treat others.
- > Use gloves when using these products. Never use where there are skin lacerations or open wounds.
- > Never in the shower or bath - use over the sink or wash basin to limit pesticide contact with skin.
- > Always store out of the reach of children.

HOW TO PREVENT THE SPREAD OF HEAD LICE

Let's face it, head lice have been around for millions of years – they are not going to disappear. However, the following steps can help us control their numbers by slowing or eliminating their spread in our communities.

In the home or classroom:

- > Keep personal items such as coats and hats stored separately.
- > Discourage the sharing of combs, brushes and hair clips.
- > Vacuum frequently.
- > Wash and heat dry shared items such as dress-up clothes as often as possible at 130oF or above.
- > Check your child frequently for any signs of lice: comb through hair one section at a time looking for live lice or nits.
- > Suspend contact sports and activities such as wrestling during an outbreak.
- > DO NOT use any spray pesticides to treat a school or home for lice (see above).



Nit

Louse

¹ Burkhart, CG. Relationship of Treatment-Resistant Head Lice to the Safety and efficacy of Pediculicides. Mayo Clinic Proc., Volume 79, pages 661-666. May 2004.

² Evangelista de Duffard AM, Duffard R. Behavioral toxicology, risk assessment, and chlorinated hydrocarbons. Environmental Health Perspectives 104(suppl 2): 353-360, 1996.

³ Danzo BJ. Environmental xenobiotics may disrupt normal endocrine function by interfering with the binding of physiological ligands to steroid receptors and binding proteins. Environmental Health Perspectives 105(3): 294-301, 1997.

⁴ Davis JR, Brownson RC, Garcia R, Beniz BJ and Turner A. Family pesticide use and childhood brain cancer. Arch Environ Contam Toxicol 24: 87-92, 1993.

⁵ Cantor KP, Blair A, Everett G, Gibson R, Burmeister LF, Brown LM, Schuman L and Dick FR. Pesticides and other agricultural risk factors for non-Hodgkin's lymphoma among men in Iowa and Minnesota, Cancer Res. 52: 2447-2455, 1992.

⁶ Frankowski, BL, Bocchini, JA, and The Council on School Health and Committee on Infectious Diseases. Clinical Report Head Lice. Pediatrics, Official Journal of the American Academy of Pediatrics. Volume 126, Number 2, Pages 392-403. August 2010.

Midwest Pesticide Action Center is dedicated to reducing the health risks and environmental impacts of pesticides and promoting safer alternatives.