



*The Pennsylvania*  
**INTEGRATED PEST  
MANAGEMENT PROGRAM**



Pennsylvania Department of  
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## News Release

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### **Head Lice in School and at Home**

UNIVERSITY PARK, PA – What do you do if your child is sent home from school with head lice? It happens more often than you think. According to the Bio-Integral Resource Center, head lice affect over six million children (more than 10 percent of the elementary school population) every year. Your solution should include IPM strategies to safely and effectively eliminate these pesky infestations.

While head lice are irritating, they pose no known health risks, says Steve Jacobs, extension entomologist at Penn State. “Head lice are tiny insects (the adult is about the size of a sesame seed) that thrive on the warmth, food and moisture a scalp provides. They spend their entire life on the human head. A single female may lay more than 100 eggs. They glue their eggs (called ‘nits’) to the base of hairs (one egg per hair), especially near the ears and back of the head, and will hatch in five to ten days, depending on the temperature,” says Jacobs. There are three nymphal stages (6-12 days), the third followed by the adult stage, which lasts about 30 days. According to Jacobs, all stages must have blood meals if they are to survive and continue their development. “Away from people, lice usually die within one to three days,” Jacobs explains.

Since head lice are easily transmitted in schools and daycare centers where children have close contact, children in these situations should be inspected regularly for active lice. According to Jacobs, head lice are not caused by poor hygiene and do not “jump” from one person to another. “They can be transferred between people who share items such as hats, hairbrushes and combs,” he says. They can also walk from one child’s head to another if their heads come into contact.

Family members of any child found with head lice should also be checked for head lice. Unless the problem is addressed at home, an infestation may reoccur. Some school districts have adopted a “no nit” policy and do not allow students back into the classroom with any nits remaining on the hair. However, recent research has shown that most nits, especially those more than one inch from the scalp, will not develop into lice, so ‘no-nit’ policies are being reviewed to make sure that children are not being kept out of school unnecessarily. Because of increased resistance to prescription and nonprescription treatments, head lice may become more difficult to manage than in the past. In addition, because head lice spend their entire life on the human head, schools should never be sprayed with an insecticide to control for infestations on students.

To prevent the spread of head lice, Jacobs says parents should instruct their children to avoid wearing anyone else's hat, avoid sharing combs or hairbrushes, and, if in close contact with a large group of children, tie back long hair. Reinfestation by lice can take place at any time, so children should continue to be inspected even after treatment. For more information on head lice see the Pennsylvania IPM Program's Pest Problem Solver at <http://paipm.cas.psu.edu/ProblemSolvers/PHealthProblSolv.htm#lice>.

### **Treating Head Lice Safely**

Combing is a safe, non-toxic and effective method of lice control. Use a metal lice comb specially designed for lice and nit removal (such as "Lice Meister" which is available online or at a drug store) to help remove nits. **DO NOT USE A PLASTIC COMB.**

1. Find a well-lit area and seat the child just below eye level. Also find something fun to entertain the child with such as books, modeling clay, coloring books or videos.
2. Cover the hair with any type of salad oil. Remove tangles with a regular hair comb. You can also use hair conditioner to help pull the comb through the hair.
3. Separate a mass of hair about the width of the metal lice comb. It is important to separate the hair into small sections so you can more easily see lice and nits.
4. Hold the mass of hair with one hand. Insert the lice comb as close to the scalp as possible and gently pull the comb slowly through the hair several times. Check the hair carefully.
5. After combing each section, dip the comb in a bowl with a solution of soapy water and use a tissue to remove lice and debris. Make sure the comb is clean before you use it on the hair again. Continue combing.
6. Comb one section at a time and check each section again. If hair is long, pin it up in a curl flat against the head.
7. After combing, flush the contents of the bowl down the toilet. Shampoo the hair at least twice to remove the oil. When the hair is dry, check for stray nits and remove those hairs individually with a pair of small, pointed scissors. It is VERY important to remove all of the nits.
8. Boil the metal comb for 15 minutes in water only. Use an old toothbrush to clean the comb. The comb can now be used on another family member.

### **Removing Head Lice Safely from the Home**

Wash bedding, towels and recently worn clothing when you are treating your child – it doesn't have to be done daily.

1. Wash bed linens and recently worn clothes in hot, soapy water in a washing machine. Dry in a 140 degree Fahrenheit dryer to kill both lice and nits. Items like stuffed animals, pillows, headphones and hats that are not washable can be dry-cleaned or stored in tightly sealed plastic bags for two weeks.
2. Family combs and brushes should soak for at least 10 minutes in hot water (130 degrees Fahrenheit). If they don't already have them, it might be a good time to get every member of the home their own comb and brush. Tell your child not to share these items with others.
3. Vacuum carpets, pillows, mattresses, car seats and overstuffed furniture. It is recommended that you vacuum these items instead of using insecticidal sprays. (Courtesy of University of Nebraska Cooperative Extension)

If you decide to use a lice treatment pesticide shampoo, keep in mind there are several products available with or without a prescription. Talk to your doctor to find out what he/she recommends. It is very important that you follow the label directions on the product EXACTLY. Remember, these products may only reduce the number of live lice. In addition, lice treatment pesticide shampoos and lotions are NOT to be used repeatedly, in conjunction with or as a follow-up to other chemical formulations.

New industry developed guidelines direct parents and health professionals to over-the-counter pesticide products already documented to be less than 100 percent effective or lice resistant. If these treatments fail, a prescription remedy may be called for. Keep in mind, however, there are known health risks inherent with the use of pesticides on children and these risks increase dramatically when you follow one chemical treatment with another. The National Pharmacy Association advises parents to discontinue the use of any treatment at the earliest sign of failure and to avoid using other chemicals. Manual removal is the best option whenever possible, especially when treatment products have failed. For more information, visit HeadLice.org's Web site at <http://www.headlice.org/>.

The Pennsylvania IPM program is a collaboration between the Pennsylvania State University and the Pennsylvania Department of Agriculture aimed at promoting integrated pest management in both agricultural and urban settings. For more information, contact the program at (814) 865-2839, or Web site <http://www.paipm.org>. To view our archived news releases, see Web site <http://paipm.cas.psu.edu/newsrelease.html>.