

Take our Advice, and Avoid Pesky Head Lice

Head lice (*Pediculus humanus capitis*) are small insects that live on the human scalp. They do not have wings or powerful jumping legs, so they move about by clinging to hairs with claw-like legs. Although head lice cause intense itching, they do not have serious consequence and can not carry or transmit disease.

What do they look like?

Head lice are about the size of a sesame seed, while their eggs (nits) resemble dandruff flakes both in appearance and size. Nits are oval-shaped, white cylinders ($\frac{1}{16}$ inch long) that are firmly attached to the hair shaft. They are often mistaken for dandruff or hairspray flakes. Nits are very hard to remove without a fine-toothed metal comb designed for nit removal.

Life Cycle on the Human Scalp

Female lice lay a total of 50 to 100 eggs during their lifetime, which may last up to 40 days.

Nits usually hatch in 7 to 10 days, which is long enough for hair to grow away from the scalp. If nits are more than $\frac{1}{4}$ inch from the scalp, they are probably no longer viable or hatched out already. Once nits hatch, the young lice must feed on a human host within 24 hours, or they will die.

What are the symptoms?

Symptoms include an itchy scalp and small, red bumps on the neck, scalp, and shoulders. Tiny white nits may be visible on hair near the scalp.

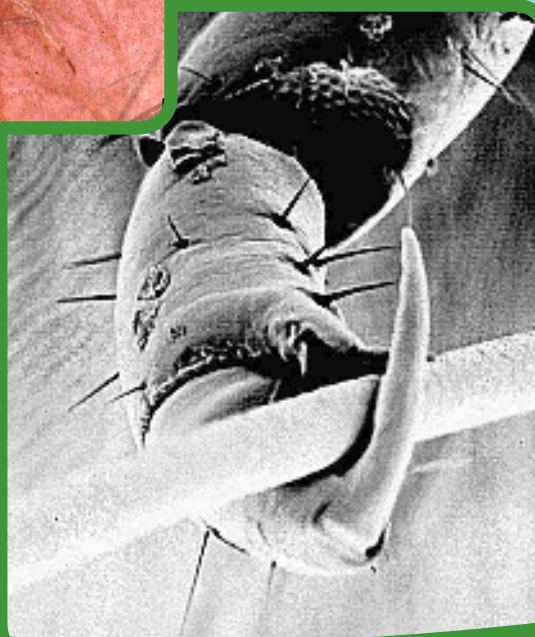
Did You Know?

- Lice have been evolving for the past 1 million years.
- Lice can only survive 48 hours without a human host.
- Lice actually prefer a clean, healthy scalp.
- Pediculosis is another word for lice infestation.
- Five percent of the United State's population suffers from head lice infestations every year; this is about 12 million people!



Above:
Adult louse (James
Castner, University of
Florida)

Right:
Head lice use their
claws to cling to hairs
(Alabama School IPM)





Left:
Carefully inspect children's hair for head lice and nits (UNL Extension in Lancaster County).



Right:
Divide the hair into sections, and comb lice out using a nit comb (UNL Extension in Lancaster County).



Home Treatment for Lice

"No-nit" policies have been discontinued in many schools. Nits are often misidentified, causing unnecessary absences from school.

How do I remove nits?

- Shampoo the hair and remove tangles.
- Apply olive oil to hair (this makes nit removal easier), and divide hair into sections.
- Comb lice out using a metal nit comb (available at any pharmacy). Rinse comb in soapy water.
- Use good lighting and a magnifying glass for examinations.
- Comb the hair, using a nit comb, every day for two weeks.
- Wash clothing and linen in hot water with detergent to prevent head lice from spreading during the short period of time they can survive without a human host.
- Insecticidal shampoos are available, but be aware that some head lice are immune to the insecticides in shampoos (however, your children are not).

Managing Head Lice with Integrated Pest Management

- Perform inspections often, especially when other children are known to have lice, for early detection. Individual lice are more easily controlled than advanced infestations.
- Infestations are normally found on children, but can be spread to adults. Inspect children's heads, particularly near the ears and above the neckline.
- Encourage children NOT to share brushes, combs, hats, barrettes, towels, and bedding.
- Clean carpets and furniture in classrooms frequently. Cleaning may prevent the spread of lice because sometimes lice and/or nits may get into these areas.
- Be aware of medical and privacy issues. Consult your school nurse.



For more info, check out:

Colorado School IPM: <http://coloradoipmcenter.agsci.colostate.edu/>

EPA IPM in Schools:
www.epa.gov/pesticides/ipm

IFAS at the University of Florida:
schoolipm.ifas.ufl.edu/

The National Pediculosis Association:
headlice.org/

Thanks to Dr. Dawn Gouge, University of Arizona, for compiling this information.



Colorado State University

Extension

Any products, services or organizations that are mentioned, shown or indirectly implied in this publication do not imply endorsement by Colorado State University.