# Colorado **IPM Fact Sheet 1 Revised March 2014**

# seet 1 Tools for a Healthy Learning Environment Tol.

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 (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 ¼ 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.

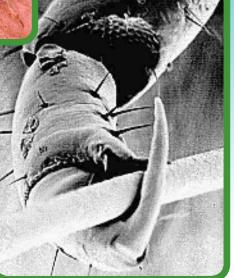
### What are the symptoms?

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.



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

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



### Did You Know?

- The head louse is an ectoparasite whose only host is humans.
- Without blood meals, the louse will die within 1 to 2 days and perhaps as soon as a few hours off the host.
- Lice actually prefer a clean, healthy scalp.
- Head lice were found on two Peruvian mummies dating to about 1025 CE.



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).



# Managing Head Lice with Integrated Pest Management

- Staff trained in diagnosis and identification should perform inspections. Inspect children's heads, particularly near the ears and above the neckline. Individual lice are more easily controlled than advanced infestations.
- Nits are most effectively removed by combing the hair with a specially designed nit comb.
- Consider the risk. The most common way to get head lice is by head-to-head contact with a person who already has head lice. Although not as common, head lice may be spread by using infested combs, brushes, towels or bedding.
- Students diagnosed with live head lice do not need to be sent home early from school; they can go home at the end of the day, be treated, and return to class after appropriate treatment has begun. Consider eliminating school exclusion policies for both nits and lice.
- Be aware of medical and privacy issues.

## Home Treatment for Lice

Nits are often misidentified, causing unnecessary absences from school.

### How do I remove nits?

ABC

- 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.
- Over-the-counter and prescription medications are available to help control head lice.

### For more info., check out:

**EPA IPM in Schools:** 

www.epa.gov/pesticides/ipm

**EPA Head Lice Presentation:** 

http://www2.epa.gov/sites/production/files/documents/Module10.pdf

IFAS at the University of Florida: http://schoolipm.ifas.ufl.edu/doc/headliceparents.pd

The National Pediculosis Association: headlice.org/

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



