Head Lice in Schools and Child Care Centers
Nebraska Extension
Lice have become resistant to many over-the-counter products.

- Some lice and nits will probably survive treatment even when used as directed.
- Nix®, Rid®, and many store brand products don’t work as well as they once did.
- Resistant product active ingredients:
  - Pyrethrins, pyrethrum, permethrin, resmethrin, and other synthetic pyrethroids
Frustrated Parents May Blame School or Child Care Center for Head Lice.

- Facilities can help identify early cases of head lice by checking children periodically.
What do head lice look like?

Female louse (size of a small grain of rice). Egg is glued to the hair shaft about \( \frac{1}{4} \)" from scalp.

- Egg is hard to remove.
- Glue will not be dissolved by enzymatic products claiming to dissolve it.

Male (smaller than female)

Photo: UNL Extension - Lancaster County
Eggs hatch after 7-10 days.

- Viable egg (one that will hatch) is brown.
- After hatching, the eggshell remains glued to the hair shaft and looks white.
The smallest stage louse is just a little larger than the egg.

- These tiniest lice are hard to see!
- Recurrent infestations:
  - Parents may miss a few tiny lice, stop treatments and combing.
  - Parents may not know the over-the-counter products don’t kill ALL the lice.
Head Lice Facts:

- Feed only on humans, not other animals.
- Usually infest children, but will also infest adults.
- Head lice spend all their lives on their host. They cannot live very long away from their human host.
Head lice cannot fly or jump.

- Researchers believe head-to-head contact is primary mode of transmission.
- May be some transfer from combs, brushes, coats, sports helmets and other items.

Photo: Hemera Technologies Inc.
Research in schools looked at transmission of lice.

- Used a school with a head lice outbreak.
- Lice collected from kids.
- Search for head lice in school classrooms.
  - Carpeted floors were vacuumed with filter.

Photo: Nebraska Extension in Lancaster County
In this study....

- 91.5% classrooms were infested.
- 21% of children were infested.
- Average number of lice: 30.1 per infested child.
- But, no lice were recovered from classroom floors.

Conclusion: Most transmission probably by head-to-head contact.
What about transmission via inanimate objects?

- **Personal combs and brushes**
  - No head lice found in brushes after brushing hair of infested children.
  - Head lice will slip between the tines of ordinary combs.

- **Examination of 1000 hats:**
  - No lice found on hats, but 5500 lice were found on children who wore the hats
What can school personnel do?

- Vacuum rugs and upholstered furniture regularly.
- Be responsive to extra vacuuming, if asked.
  - Sometimes, the appearance of extra effort is important.
- It is a good idea to have cubbies so each child can store his/her outerwear.
Never, ever, spray classrooms for lice.

- It is a waste of time and money.
- Unnecessary exposure to kids and staff who work in the facility.
Head Lice Control is Up to Parents!

This non-toxic method is inexpensive, too:

- Saturate hair with cooking oil or conditioner to make it easier to comb.
- Use a metal nit comb to remove eggs and lice.
  - Get close to the scalp where lice and eggs are found.
- Check daily. Repeat this protocol until no live lice or nits are seen. Continue to check for a couple weeks.

Website: http://lancaster.unl.edu/pest/lice/

A videotape that demonstrates combing is available from UNL Extension.
Combing really works, but it takes persistence and determination.

Head louse caught in the tines of a metal nit comb.
What about laundering and vacuuming?

- Because lice tend to stay on the child’s head, the chances of killing a stray louse by laundering and vacuuming is not very great.

- It is better to focus time and energy removing head lice from your child’s head than to spend a lot of time on cleaning.
There are also effective prescription products, but these require a trip to the doctor’s office and some may be expensive.
In Conclusion:

- Head lice are resistant to OTC treatments, but diligent combing with a nit comb is an inexpensive, safe and effective way to combat this pest.
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