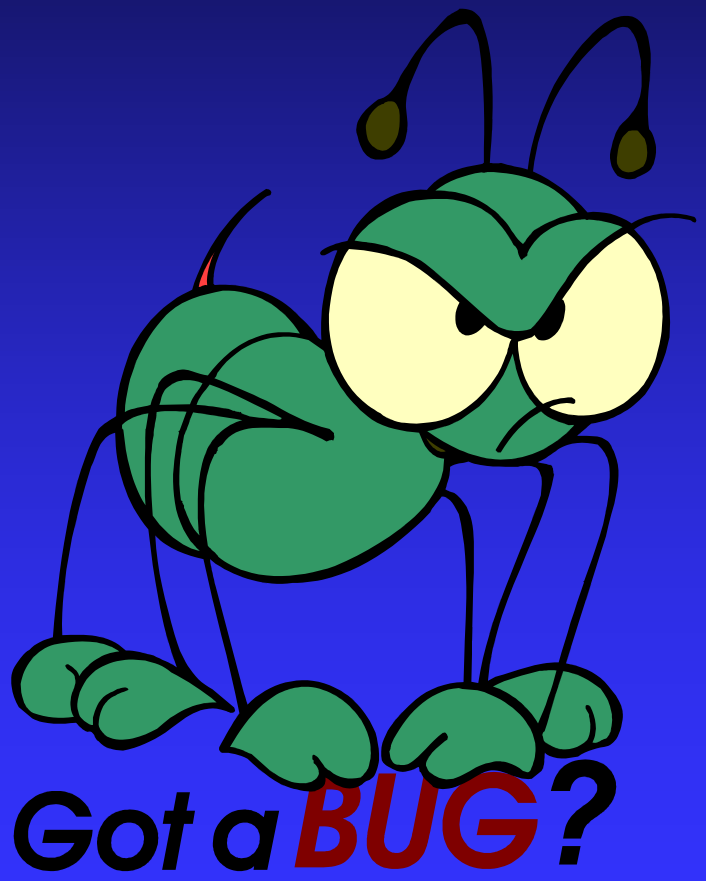
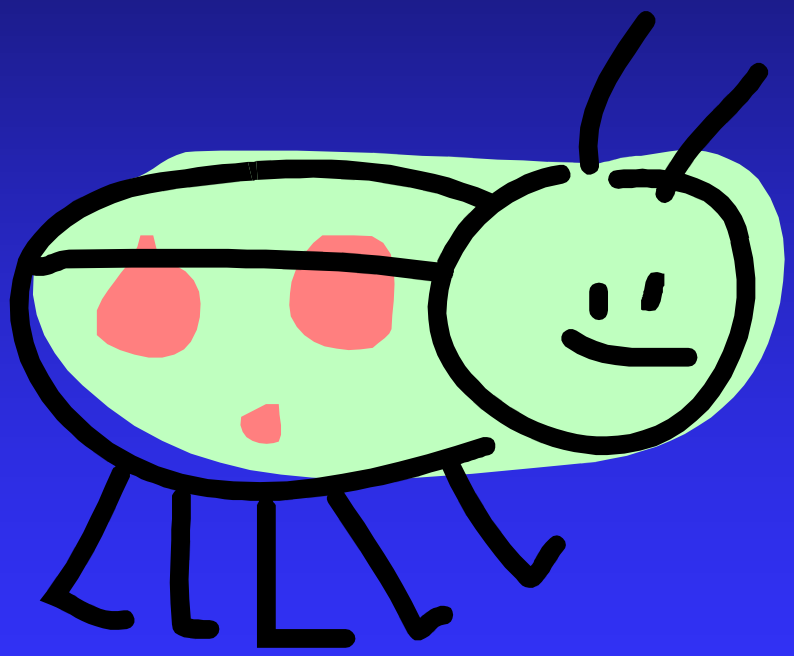
Managing Head Lice in the School Setting



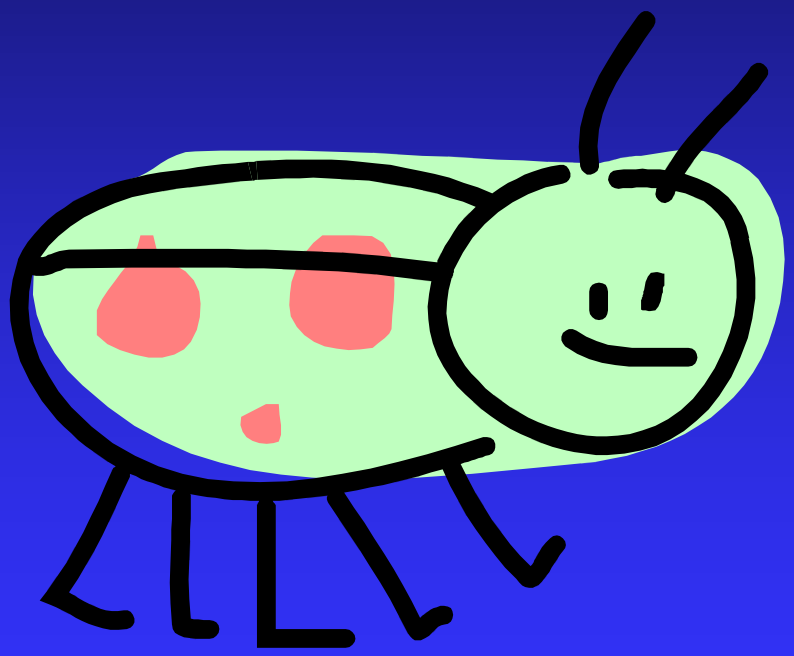
Marjorie Cole, RN, MSN

What Is Head Lice?



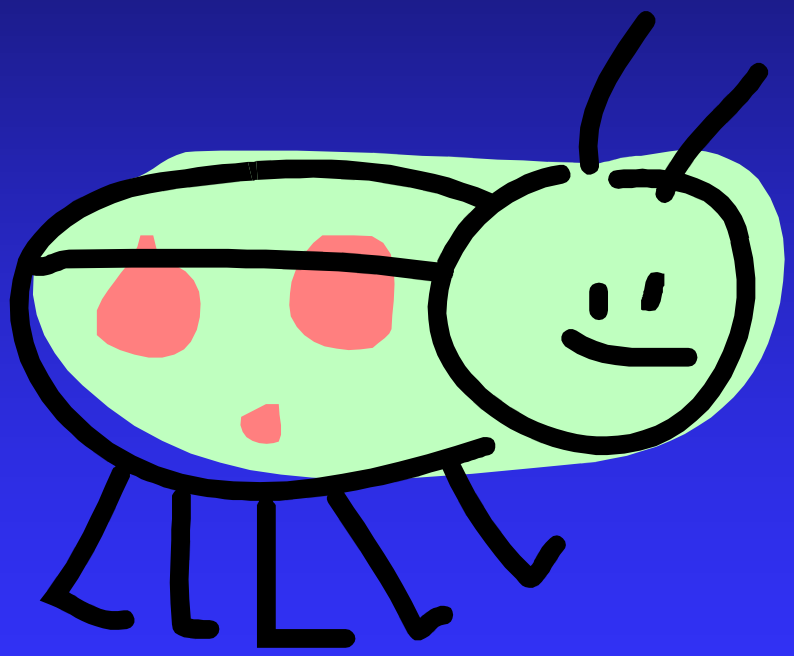
- A small parasitic insect that lives on the scalp and neck hairs of a human host.
- Six legs
- No wings
- Cannot hop
- Does not fly

What Is Head Lice?



- Requires human blood to grow, develop and lay eggs (nits).
- Cannot survive more than a day without a blood meal.
- Cannot survive more than a day or so at room temperature.

What Is Head Lice?



- Not known to transmit infectious agents;
- Does not discriminate among socioeconomic groups;
- More commonly found in children of preschool and early elementary age

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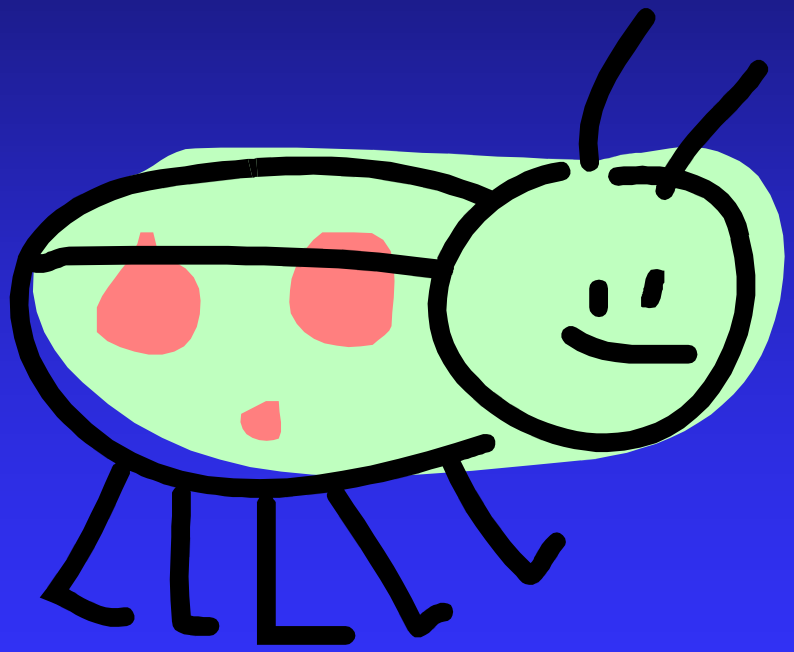


- Girls are infested more often than boys
- Parents and siblings sometimes acquire
- Caucasians more frequently than other ethnic groups

Signs and Symptoms

- Students with head lice are usually asymptomatic
- Some experience itching from an allergic reaction from the bites or irritation from sores caused by bites

The Facts on Head Lice

- Three Stages:
- 1. Nit
- 2. Nymph
- 3. Adult

Nit (louse egg)

- Oval in shape
- Nits are laid onto the hair shaft, close to the scalp
- 8-12 days to develop and hatch
- Eggs that have died or hatched, remain firmly attached to the hair; but will never again produce another louse

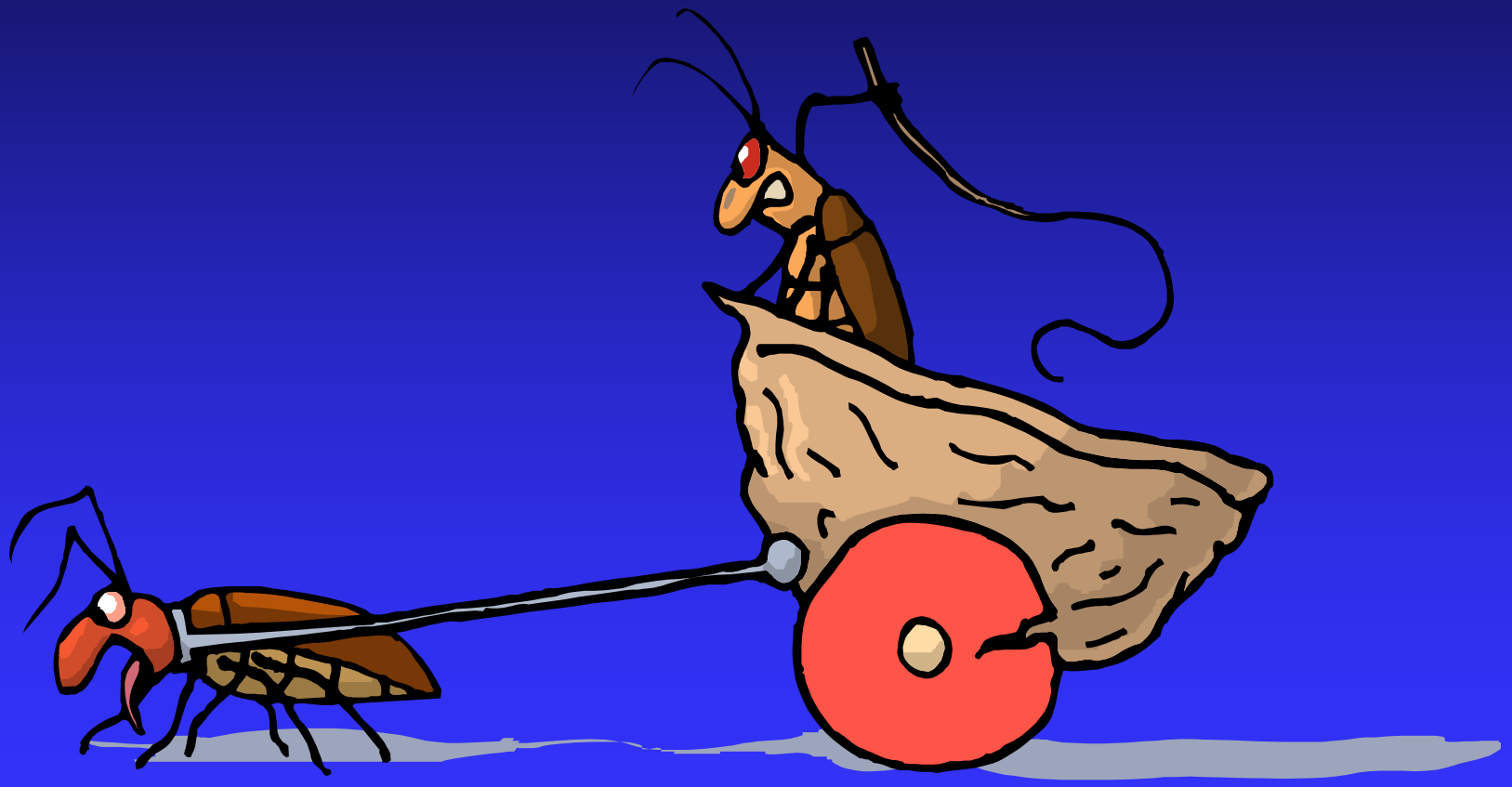
Nymph

- Immature stage of a louse
- Look like an adult, only smaller and are unable to reproduce
- Mature into adults about 9-12 days after hatching
- Must feed on human blood to survive and grow

Adult Louse

- Difficult to see-move quickly
- Fewer than a dozen active lice on the head at any time
- Size of a sesame seed
- Tan to grayish
- Adult females live up to 30 days
- Feed once or more a day.
- Will die within a day when off the head
- Lay about 6 eggs a day

How is Lice Transmitted from One Person to Another??



Transmission

- Head to head contact with an infested person
- The transmission from hats, combs, pillows, etc is possible – but much less likely
- According to CDC, most transmissions occurs in the home environment. (friends, sleep-overs, camps, etc)

Diagnosis of Head Lice

- Head lice can be found anywhere in the hair
- Easiest to locate on the scalp and behind the ears and near the neckline at the back of the neck

Diagnosis of Head Lice

- Nits are deposited on the hair shaft about 1mm from the scalp
- Eggs more than ½ of an inch away from the scalp are nearly always hatched and do not, by themselves indicate an active infestation

Transmission of Head Lice

- Only LIVING LICE can transfer from one person to another
- Nits cannot be passed onto someone else

Treatment of Head Lice

- Treatment is recommended only for individuals found with live lice or viable eggs
- Nits further than ¼ inch from head, are probably hatched and no longer viable

Treatment of Head Lice

- Over the counter lice shampoo
  - Pyrethroid insecticides
- Directions must be followed exactly
- Susceptible lice do not die or fall from the hair immediately upon treatment
- A second treatment may be required in 10 to 14 days

Prescription Lice Shampoo

- If live lice persist following treatment with over the counter products, parents should discuss with HCP…

Alternative Treatments

- Examples: Petroleum jelly, margarine, mayonnaise, herbal oils, olive oil, and enzyme-based products- no conclusive evidence that are effective (or necessarily safe)

Treatment of Head Lice

- Combing with a nit comb can sometimes be effective in removing viable nits and lice
- Comb daily until no live lice are discovered (2 weeks)
- Recheck in 2-3 weeks after you think they are gone

The Facts on Head Lice

- The Center for Disease Control published a study in May of 2001 which showed that only 9 of 50 children with nits alone (18%) converted to a live lice

National Recommendations for School Policy

The American Academy of Pediatrics recommends that no healthy child be excluded from or allowed to miss school because of head lice, and that “no nit policies” for return to school be discouraged

National Recommendations for School Policy

- The National Association of School Nurses state that nit free policies disrupt the education process and should not be viewed as an essential strategy in the management of head lice

National Recommendations for School Policy

- Health and Health Care in Schools:

“ Children with nits do not pose an immediate risk to the health of others, therefore, excluding these children from school and requiring them to be treated with pesticidal product is probably excessive”.

Managing Head Lice in the Schools

- When parents of elementary school aged children are surveyed as to what childhood health issues concern them most, head lice usually ranks higher than much more serious conditions.

Managing Head Lice in the Schools

- School district policies on head lice vary throughout Missouri
- 97% have “no nit policies”

Missouri Survey

- 91% screen regularly
- 60% screen at beginning of school year
- 23% screen monthly
- 81% screen according to a “situation”

Managing Head Lice in the Schools

WHY??!!!

- One school district in Missouri with 2,000 students:
- 02/03- 199 cases with 202.5 days missed
- 03/04- 92 cases with 88 missed days
- 04/05- 117 cases with 244 days missed

Kentucky: One School District

- FY04
  - 344 days were missed by 19 students.

KSBA data collection

- Districts asked to report for the period Aug. 1 through Nov. 15, 2004.

34% of districts responded.

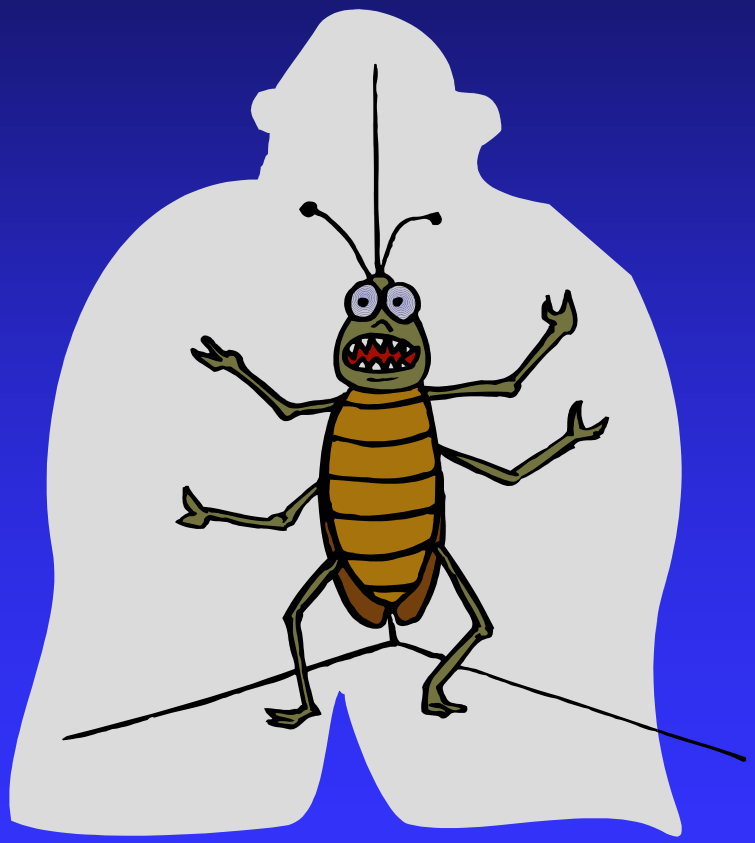
of students missing school due to identification of lice or nits

Less than one day	449
Only one day	1037
More than one day	1191
Incidents involving missing any school	2677 in 75 days of school

Majority of Students Involved

- 85 % of districts removed students from class for the presence of nits.

We Went to the Literature



- These are insects that CANNOT jump or fly.
- Their method of movement relies on 6 legs, each of which ends in a claw which can grasp human hair.

The Facts on Head Lice

- Lice eggs are called **nits**. They are oval shaped and usually yellow to white. The eggs are attached to the hair with a quick hardening glue that the female louse extracts from her body.

Please Remember

- Lice don’t mount expeditions, striking off to find new heads. They are obligate human parasites, their goal is to stay on the head where they presently live!!!!!

Eggs by themselves without the presence of live lice do not indicate an active infestation. Treatment should ONLY be carried out if live lice are present.

Why NOT a No-Nit Policy??

- Such a policy has ***not*** been supported by research and is not recommended by experts.
- Misdiagnosis of nits is common.

Why NOT a No-Nit Policy?

- Encourages use of potentially dangerous pesticides for no reason.
- Causes children to miss school needlessly.

No Scientific Support

- Harvard's School of Public Health obtained samples from health care professionals and the public of "lice and nits".
- Most samples came from schools.
- Lice or eggs were present in **less than two thirds.**
- **Less than half** had either a louse or potentially viable egg.

- The researchers found that over-the-counter medications were used as much in those with active infestations as those without viable lice or eggs.
- Misdiagnosis leads to the possibility of ***overuse of pediculocides*** and **inappropriate exclusion from school.**
- The same researchers have found that the kids sitting next to kids with live lice are NOT more likely to get it than anyone else.

- It is transmitted when there is direct head-to-head contact where LIVE lice are concerned.
- Nits cannot be passed to another person.
- According to the Center For Disease Control most transmission occurs in the home environment. (friends, sleep overs, camps, etc..)

The greatest harm associated with head lice is from well-intentioned but misguided use of caustic or toxic substances to eliminate the lice

- Remember: we need to base practices on scientific evidence, not fear and hysteria.

Contact Information

Marjorie Cole, RN, MSN

Department of Health and Senior Services

School Health Program

Marjorie.Cole@DHSS.MO.GOV

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