French soldiers, during World War I, dubbed body lice “cooties”. The name stuck and has been used in nursery rhymes, poems and even the name for a popular children’s game ever since. It is, however, the head louse (Fig. 1, plural lice) that causes so much concern among teachers, parents and kids today.

There are three different lice that affect people - head lice, body lice and crab or pubic lice. All are blood-feeders. Bites cause intense itching, and in some, allergic reactions of the skin.Scratching can lead to secondary infections when bacteria are scratched into the skin. Body lice can also transmit some pretty nasty diseases, like typhus, but this is rare today in industrialized countries. By far the most common of the three lice is the head louse.

The head louse is most commonly found in hair above ears and on the back of the scalp. It measures about 1/8 inch (3 mm) long when fully grown.

Anyone can get head lice. Family income level is not important in determining the incidence of head lice. In general, children are more susceptible than adults. The chance of a head lice infestation goes up in schools where lockers and coat hooks are shared, not assigned. Head lice are spread by people to people contact and sharing of personal items like combs, hair brushes and hats. The most important signs of a lice infestation are live lice and “nits” (eggs) attached to hairs (Fig. 2).

Unlike the head louse, body lice spend much of their time on clothing, usually in areas where the cloth is in contact with the body. Eggs are laid on
clothing as well. They generally occur in crowded, unsanitary conditions. Body lice are slightly smaller than head lice but otherwise almost identical in appearance. If fact, there is some evidence that they are the same species. Body lice are uncommon in most of the U.S. population.

As their name suggests crab lice (Fig. 3) look superficially like tiny crabs with their enlarged second and third pairs of legs. Crab lice, also called pubic lice, infest the pubic area - but can spread to the chest, armpits, and even eyebrows. As with other lice, people to people contact is the most common means of transmission. There is no evidence that lice transmit venereal diseases.

Figure 3. Crab louse (magnified). Original photo by Ken Gray.

Control of lice. Lice cannot survive off their hosts. Treatment efforts should be directed where lice live. There is no benefit to treating the general environment with insecticide. Safe and effective treatment of head lice is a 3 step process. Before any treatment be certain that there is an active infestation with live lice and nits. Many head lice infestations turn out to be false alarms on closer inspection. With an active infestation you should be able to find live lice and nits. Lice should be active. Telling live nits from dead nits can be more difficult. However, if they appear shrivelled or broken open they are non-viable. Active infestations should be treated with an over-the-counter (OTC) lice shampoo according to label directions. Finally, comb for nits with a good quality, metal comb (Fig. 4). Repeat nit combing daily until no lice or nits are found.

Lindane was once the insecticide of choice and was only available by prescription. Today, lindane has been largely replaced by much safer materials that can be purchased without prescription. The only medication currently available by prescription for head lice contains malathion as the active ingredient. Bedding and clothing from infested individuals should be machine washed in hot water and dried under heat.

Body lice are generally only a problem among those who wear the same clothing more or less constantly, without washing them. Body lice are more common during winter months and among the poor and homeless. Body lice infestations can generally be stopped by bathing and cleaning of clothes.

Crab or pubic lice are generally treated with prescription or OTC lotions. Medical attention is
recommended for this condition - see a physician.

Detection of head lice often causes a near panic among grade school teachers, school nurses and parents. The panic may lead to extraordinary and possibly harmful measures. Sometimes the infestation is real but sometimes it is not. In either case simple, prudent measures will alleviate the problem without resorting to extremes. There is no need to screen students before they are allowed to enter the school building. If a child is found to have head lice they should be treated at home and sent back to school. No-nit policies are unwarranted. Suspected cases of infestation should be confirmed by a dermatologist or entomologist.


Head Lice Control Summary

- Confirm active infestation. If live lice and nits are not found do not treat.
- Treat with OTC lice shampoo/lotion unless resistance is confirmed.
- Insecticide resistance is less common than most believe.
- Comb hair to remove lice and nits. Use a fine-tined lice comb.
- “No-nit” policies are unwarranted and may even be harmful.