

Fact Sheets for Families

Head Lice: Treatment Recommendations

Head lice are very common among children 3 to 12 years of age. Children in group settings like child care and schools are at increased risk, because of their habits of frequent head-to-head contact and sharing personal items. Although head lice are a nuisance, they do not transmit infections.

Exercise caution

In the past two decades, head lice have become resistant to some of the over-the-counter treatments. As a result, these treatments will not always kill or resolve the lice infestation, and can expose children to unnecessary side effects and toxicity if repeatedly used. However, over-the-counter treatment should be considered for a child who has never been treated for lice infestation.

Know the biology of head lice

Understanding the life cycle is an important factor in the management of head lice. Head lice live and breed on the child's hair and scalp and feed on blood. They cannot survive for more than one to two days off of a live host.

- The female lives up to three to four weeks and lays approximately six eggs (nits) a day. These tiny eggs (appearing as tiny white or dark ovals) are firmly attached to the hair, with a glue-like material, close to the scalp.
- Young nymphs hatch in about seven days, resembling a small adult.
- Nymphs molt or shed skin three times to reach the adult stage in about 10 days.

What are the signs and symptoms?

The major symptoms are itching and scratching caused by the bugs and their bites. Continued scratching may lead to open sores and secondary infection.

What methods can be used to treat the infestation?

There are several treatment options available, but before treating, make sure the child has an active case. In fact, the greatest harm associated with head lice is not from the lice, but from

well-intentioned yet misguided use of toxic chemicals to eliminate the lice.

Non-chemical methods

- **Mechanical removal** of lice and nits can be an effective method. This is time-consuming, but safest for young children. Use a nit comb, a good light and magnification, since nits are small and hard to see.
- **Haircuts** make the search for lice and eggs easier.
- **Heat** from the ordinary hand-held air dryers may be sufficient to kill the lice and their eggs.
- **Alternative treatments** involving the use of herbal shampoos, mayonnaise, food grade oils, kerosene and hair gels are not proven to be effective.

Chemical methods

- **Shampoos** containing permethrin or pyrethrins are popular over the counter treatments, but because of resistance may not always be effective. They do not kill the eggs and a second treatment is often needed about 10 days later to kill the newly-hatched lice.
- **Lindan** is approved by the Food and Drugs Administration, but not recommended because of widespread resistance and side effects including neurotoxicity.
- **Malathion** is currently recommended as a chemical choice for the treatment of head lice in children. It is not approved for use by children younger than 6 years old, and is available only by prescription.

Selection and use of treatment products are very important. The remedy for head lice should be based on life cycle, resistance and safety considerations.