Head Lice Recommendations 2010
Qs and As for Public

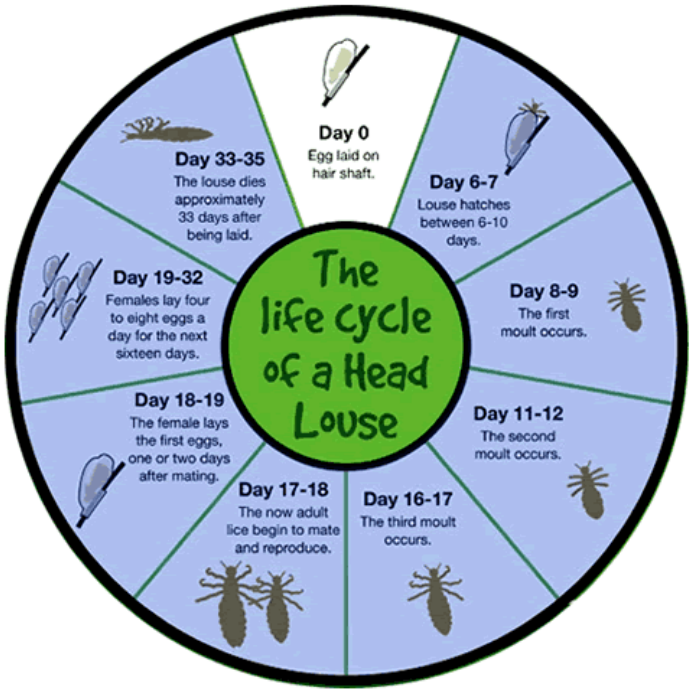
General Information

Q. What are head lice (pediculosis capitis)? What do head lice look like?

A. Head lice are small insects approximately 2 to 4 mm long (approximately the size of a sesame seed). They have six legs and are usually tan to grayish white in color. They do not have wings and cannot fly. Likewise, they cannot jump, but they move very quickly in the hair.

Q. What is the life cycle of a head louse?

A. - The head louse feeds every 3 to 6 hours by sucking blood and simultaneously injecting saliva.
- After mating, the adult female louse can produce five to six eggs per day for 30 days, each in a shell (a nit) that is 'glued' to the hair shaft near the scalp.
- The eggs hatch nine to 10 days later into nymphs that molt several times over the next nine to 15 days to become adult head lice.
- The hatched empty eggshells (nits) remain on the hair, but are not a source of re-infestation.
- Nymphs and adult head lice can survive for up to three days away from the human host.
- While eggs can survive away from the host for up to three days, they require the higher temperature found near the scalp to hatch.



Source of Image: Pharmacy Direct

Q. How serious are head lice?

A. Unlike body lice, head lice are not a health hazard, a sign of poor hygiene, nor do they spread disease. However, they are a nuisance and cause a high level of anxiety.

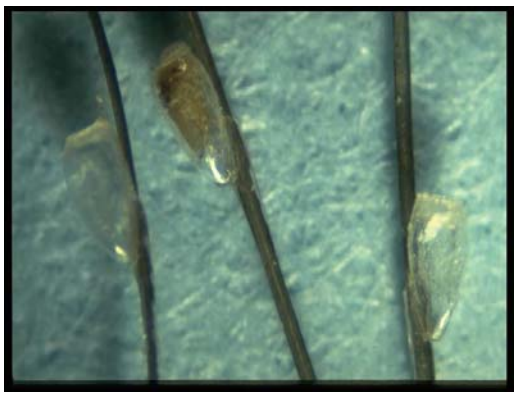
Q. What are the health implications of head lice?

A. Head lice are not responsible for the spread of any disease. People may experience itching because they are reacting to bites of the head louse. Rarely, scratching may cause skin infections that can be treated with antibiotics.

Because lice infestations are so benign, treatments must prove safe to ensure that the adverse effects of therapy are not worse than the infestation.

Q. What do nits (eggs) look like?

A. Nits are attached to the shaft of the hair close to the scalp with a glue-like substance. They are not easily removed and will not fall or shake out of the hair. Nits that have already hatched are often more visible than eggs that have not because they appear white in color against dark hair. Nits that have not hatched blend into the hair color of the infested person. Nits are found more easily at the back of the head along the hair line.



http://www.liceremovallosangeles.com/Pictures-of-lice-and-nits.html

http://www.headliceremediestlc.com/images/lice-size.jpg

Q. How do I know if my child has head lice?

A. Diagnosis of head lice requires finding live head lice. Detection of nits alone does not indicate active infestation.

Infested children usually carry fewer than 20 mature head lice (more commonly, less than 10 head lice).

Misdiagnosis and over-diagnosis are common. It is common to mistake dandruff, hairspray drops, scabs, or dirt for lice and nits.

Q. What if nits are found but we cannot find live lice?

A. Finding nits indicates a past infestation that may not be active at this time.

Over 75% of children with nits and no live lice do not develop active infestations. Even with optimal scalp conditions, 10-30% of nits do not hatch.

Without the ability to tell the difference between nits that have hatched and those that have not, one cannot be sure that a person has an active infestation by nit detection alone.

Treatment should never be initiated unless there is a clear diagnosis of head lice (i.e., a live louse is found).

Q. Is there a way to determine if nits are viable or not?

A. Although nits are attached to the hair shaft close to the scalp when they are laid, the distance from the scalp when the nit is found is not a good indicator of an active infestation.

Q. What are the symptoms of head lice?

A. A person may experience a tickling feeling on their head. When lice bite the scalp, they may cause itching. The first time a person has head lice, it can take up to 4-6 weeks for a person to become sensitized to the louse saliva and experience itching. Itchiness can develop within 24-48 hours of future infestations.

Itchiness alone is not a reason to believe a person has head lice or that a treatment did not work because some of the treatments can cause itching. Finding live lice is the only way to determine if a re-infestation has occurred.

Screening

Q. How often should I check my child's hair?

A. Check for live lice once a week throughout the school year, before and after a sleepover experience, and daily during an outbreak.

Q. What is the best way to find lice?

A. Combing with a fine tooth lice comb has been shown to be 4 times more effective than and twice as fast as direct visual examination for the detection of live head lice.

Nova Scotia Public Health Services (2008) identifies the following as steps to detect head lice:

1. Apply ample conditioner to dry hair, enough to soak from the scalp to the end of the strands.
2. Remove tangles with a regular comb.
3. Start behind the ears and comb the hair section by section. Separating the hair with hair clips is helpful.
4. Place the lice comb against the scalp and pull to the end of the hair.
5. Check the comb for lice after each pull.
6. Wipe the comb with a tissue each time and look for lice.
7. Place the tissue in a bag.

8. Check all the hair over the entire head.
9. Repeat combing for every part of the head at least 5 times.
10. Once finished, tie the bag with the soiled tissues and throw it in the garbage.
11. If lice are detected and treatment is required, make sure that all conditioner is washed from the hair prior to treatment.

Prevention:

Q. What is the best way to prevent head lice?

A. The main way to prevent the spread is to reduce the number of lice on the head of a person who has lice and to reduce the frequency of head-to-head contact with others.

Q. How do head lice spread?

A. Head lice are spread, in most cases, by direct contact with the head of an infested person. Spread through contact with personal belongings of an infested person (combs, brushes, hats, etc.) is much less likely but may occur rarely. A louse found on a comb is likely to be injured or dead and a healthy louse is not likely to leave a healthy head unless there is a heavy infestation.

Treatment

Q. Who should receive treatment?

A. Anyone who has an active infestation of head lice (live lice) should be treated with a treatment that is appropriate for them. This means that siblings, parents or bed mates should be treated only if live lice are found when they are checked. Checking of household members more often may be helpful to identify people with live lice early.

Q. What is the approved treatment?

A. Health Canada recommends treatment with a topical insecticide (pyrethrins, permethrin 1% or lindane) or a recently approved non-insecticidal product called Resultz®. The treatment course for each of these products involves a first application followed by a second application in 7 days. You should consult with your physician or a pharmacist to find out what the best treatment choice is for you or your child.

Q. For those who have been diagnosed with head lice, why is a second treatment required in 7 days?

A. Most approved treatments will kill the lice, but are not effective against the nits. A second treatment in 7 days will kill the lice that have hatched since the first treatment before they are mature enough to lay new eggs.

Q. There are head lice in my child's classroom. Shouldn't I just treat my child now?

A. Misdiagnosis and over treatment are common. When a case of head lice is detected in a classroom, parents of other children should respond by checking their children's heads on a regular basis and treat only when live lice are detected.

Treatments involve chemicals that will kill the lice. It is not recommended to expose individuals to these chemicals unless they have live lice because of the potential for side effects. Additionally, there is a concern that over use of medications could increase the potential for the head lice to develop resistance to the products making treatment choices more limited.

Q. If a child in school has head lice, why aren't they sent home?

A. Head lice in classrooms do not spread as much as previously thought. Studies have shown that children without active infestations of head lice were excluded from school because of presumed lice infestation more frequently than were children who were infested.

A child with an active head lice infestation likely has had the infestation for a month or more by the time it is discovered and poses little risk to others from the infestation. They should remain in school, but be discouraged from close direct head contact with others.

Q. Do the lice "zapper" combs work, such as LiceGuard or Robi Comb™?

A. The American Academy of Pediatrics (2010) indicates that there have been no randomized controlled studies performed with the electronic or bug zapping combs. Their use is not recommended. These "bug zapper" combs seem to offer little advantage over a well-designed traditional louse comb. Their instructions warn not to use on individuals with seizure disorders or a pacemaker.

Q. How do I know if I need to treat again?

A. All approved products recommend treating again in 7 days with the same product.

Treating with a different product is recommended if live lice are found within 24-48 hours of the first treatment. This product should be used again in 7 days for the second treatment.

Q. How do I know if the treatment is working?

A. Effective treatment will kill live lice. Most products have lingering effects. This means that live lice may be found shortly after the first application. If live lice are found 24-48 hours after the first treatment, the first treatment didn't work and a second product should be used.

Most products are not effective against nits (eggs) and they will continue to hatch. This means that live lice may be found close to a week following the first treatment. This does not mean the first treatment was ineffective; instead the lice that are being found are newly hatched and will be at risk to the second application of the treatment that is required 7 days after the first. This second treatment will kill the immature lice before they are able to lay eggs.

Q. Why would a treatment fail?

A. Head lice treatment products have specific directions to make sure that they are working properly. Depending on the product, this may mean it should be applied to wet hair or dry hair. It may mean that regular shampoo should not be used for a defined period of time after treatment or there may be restrictions on the use of conditioners. Some products must be left on the hair for a defined period of time. It is very important to read and follow the instructions carefully to ensure the product will be most effective.

Q. I've heard about using mayonnaise or tea tree oils. Are these not safer for my child?

A. A number of household products, such as mayonnaise, petroleum jelly, olive oil, tub margarine and thick hair gel, have been suggested as treatment for head lice. Application of a thick coating of such agents to the hair and scalp left on overnight are thought to block the breathing holes in lice and suffocate them. However, these products show little killing of lice and are less effective than chemical treatments (topical insecticides). There are no published trials on the safety or usefulness of these home remedies.

Other products such as gasoline or kerosene are flammable, poisonous and dangerous. While a number of 'natural' agents, such as tea tree oil and aromatherapy, have been used for the treatment of head lice, effectiveness and information on harmful effects are not available for these agents.

These treatments may get in the way with the approved head lice treatment so they are not recommended.

Q. What kind of cleaning do I need to do around my house?

A. Cleaning of items in prolonged or intimate contact with the head (e.g., hats, pillowcases, brushes and combs) may be warranted. Washing the item in hot water, drying in a hot drier for 15 minutes or storing it in an air tight plastic bag for two weeks or in a deep freeze for 24 hours will kill lice and nits.

Excessive cleaning of classrooms and households is not needed. Studies results showed:

1. When carpets were examined from 118 classrooms, no lice were found despite more than 14,000 live lice found on the heads of 466 children using the classrooms.
2. Live lice were found on only 4% of pillowcases used by infested volunteers.

Q. Should all the nits (eggs) be picked out?

A. "No nit" policies in schools are not recommended. Individuals may choose to remove nits because this can help decrease diagnosis confusion; can decrease the possibility of unnecessary re-treatment; and can decrease the risk of self re-infestation.

Q. Should I shave my child's hair off?

A. Shaving the head may be effective in removing head lice and nits, but is not recommended because of the emotional impact that this may have on the child.

Q. What are the side effects of the treatments?

A. Each product has different risks and side effects. It is important to ask your health care provider for assistance in choosing the right product for you.

Reactions range from scalp irritation including an itching or burning sensation, to allergic reactions to the products, to possibility of effects on the nervous system including seizures.

Q. What if a child cannot receive a treatment because of age or medical condition? What should a parent use on their young child?

A. Your health care provider can help you to choose the right treatment for your child.

Q. What is a pregnant woman to use?

A. Treatment options are available. Pregnant women should consult their physician or a pharmacist when choosing the right treatment procedure.

References

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