

# Lice and how to treat lice infestations

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Head lice are tiny, wingless, parasitic insects that live on people's heads. An adult louse is approximately the size of a sesame seed and the nits (eggs) are even smaller. Three types of lice can live on humans: head lice, body lice and pubic lice. 1.2.3 This article will discuss head lice.

# **Symptoms**

Symptoms of head lice include<sup>1,2,3</sup>:

- · Intense itching of the scalp
- · Tickling feeling in the hair
- · Lice eggs (nits) on the hair
- · Small red bumps on the scalp, neck and shoulders

The most reliable diagnosis of head lice is to see a visible louse on the hair. The presence of nits also indicates that there is or was an active infestation.<sup>1</sup>

### Causes

Lice cannot hop or fly. They move by crawling and are spread by close person-to-person contact. Children tend to huddle together, with their heads touching, and so the lice are able to move hosts. Shared hats, brushes, blankets and clothing may also increase transmission. The eggs or nits are attached to the hair shaft and will not easily fall out of the hair. Personal hygiene does not affect whether you will get lice. 1.2.3

## **Treatment**

Treatment for head lice involves treatment of the infected person and other family members.

- Eggs (nits) can be removed by shaving off the affected hair or by combing the hair with a fine-toothed comb.
- Home remedies may include treating the hair with vinegar (5% acetic acid) or olive oil before fine-combing the hair.
  Note: Home remedies such as paraffin and kerosene are not recommended as they are potentially dangerous.<sup>2</sup>
- Various lice treatment shampoos, lotions and sprays are available (e.g. Controlice®, ParaNix®, Treet-It®). These products contain dimethicone, sodium lauryl sulphate, petrolatum, tea-tree oil, Neem oil, mineral oil and various other essential oils.<sup>4</sup>
- Over-the-counter (OTC) medicated treatments include sprays that contain pyrethrin combinations (e.g. Para® Plus Lice Spray and Para® Special Lice Spray).<sup>5</sup> Resistance to these insecticides has been reported.<sup>4</sup>

It is important to follow the directions on the product carefully, and to follow through with all other self-care procedures.

### Self-care procedures:

- Use the product according to instructions, paying attention to how long the product should be left on the hair before rinsing.<sup>1,2,3</sup>
- Do not use hair conditioner before using lice medicine.<sup>1</sup>
- Use only one product at a time unless instructed otherwise.2
- Comb wet hair with a fine-toothed comb or nit comb to physically remove the lice from the hair.<sup>1,2,3</sup>
- After treatment, check the hair for the presence of lice and nits. Hair should be combed with a nit comb every 2–3 days to ensure all nits are removed.<sup>1,2,3</sup>
- Treatment should be repeated after 7–10 days to allow for any lice that may have hatched since the last treatment.<sup>1,3</sup>
- If live lice are seen 12 hours after treatment, they may not be susceptible to that product and a different product should be used.<sup>1</sup>
- Children under two years should have the lice and nits removed with a comb and be seen by a doctor if this is not effective.<sup>1</sup>

Although lice live only for 1–2 days off the body, it is possible to become infected when sharing items such as hairbrushes, hats or resting one's head on contaminated furniture or bedding. It is therefore important to check everyone in a household if one member has been infected with lice.<sup>1,2,3</sup>

Contaminated items such as bedding, clothing, hats and stuffed animals must be washed with hot, soapy water and dried at high heat for at least 20 minutes.<sup>1,2,3</sup>

Hairbrushes and combs should be soaked in hot, soapy water (54  $^{\circ}\text{C}).^{1,2,3}$ 

The floors and all soft furnishings should be thoroughly vacuumed. Unwashable items should be sealed in an airtight plastic bag for two weeks. 1,2,3

### **Prevention**

It can be difficult to prevent the spread of head lice among children. Children should be encouraged not to get too close to their friends and taught not to share hats and brushes. Children should not go to school if they have lice. 1.2,3

### Conclusion

Head lice are not a reflection on general hygiene. They can be contracted from contact with someone who is infected. Once diagnosed, the lice can be treated and eradicated. Retreatment may be necessary.<sup>1</sup>

## References

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