

# Pediculosis (Head Lice)

## Epidemiology

**Source:** Human hair

### Transmission

- Direct contact with hair of infested individuals
- Contact with personal belongings (hats, combs)

### Incubation

Eggs (nits) → nymphs → mature adults  
7 days                  6-10 days                  30 days

### Clinical case definition

Itching  
Physical presence of lice

**Contagious** as long as lice are present

6-12 million cases per year.

Especially common in school age children.

Exclusion not necessary

### Outbreaks

- Common in daycares and schools

## Diagnosis

*Pediculus humanus capitis* is a small, elongated, grayish-white insect with dark margins.

### Diagnosis

- Identification of eggs (nits), nymphs and lice is possible with the naked eye
- Can be confirmed using a microscope or hand lens
- Make sure that dandruff, hair spray, or other external hair debris are not mistaken for lice

## Treatment

- Treatment with a **pediculicide**. Follow directions carefully.
  - **Permethrin** – OTC. Second treatment after 7-10 days may be necessary to kill newly hatched lice. Resistance is possible.
  - **Pyrethrin** – OTC. Natural extracts from chrysanthemum flower. Second treatment in 7-10 days is necessary
  - **Malathion** – Prescription only. Can be used for children 6 or older. Retreatment only needed if crawling bugs are found after 7-10 days.
- Resistance to pediculicides is possible. If crawling bugs are present 24 hours after treatment, retreat with a different medication.
- Comb hair with special comb (metal teeth, permanently sealed handle) to remove lice and eggs
- Wash clothing/bedding that has come in contact with the infected person

**Examine contacts and treat if necessary**

## Contact precautions

## Control

### Treat the household

- Machine-wash all clothing and bed linens used by the infested person using hot water, and dry on high heat.
- Any non-washable items should be dry cleaned or placed in a sealed plastic bag for 2 weeks.
- Soak combs and brushes for 1 hour in rubbing alcohol or washed in pediculicide shampoo and soaked in hot water (>54°C) for 5 minutes
- Vacuum floor and furniture (do **not** use fumigant sprays)

### No Exclusion but...

Children should not be excluded nor sent home early from school because of head lice provided that the child will have NO head to head contact with classmates. If compliance is in doubt, exclude the child until a day after treatment.

Inform school and other contacts of lice infestation