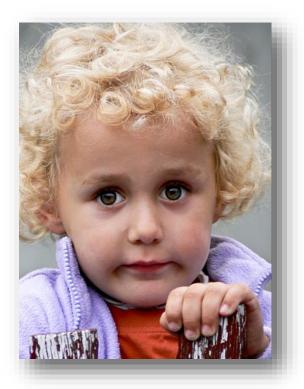
Managing Head Lice at Home







Introduction	3
Head Lice Life Cycle	4
The Facts about Head Lice	6
Preventing the Spread of Head Lice	7
How to Find Head Lice	8
When to treat for Head Lice	11
Use of Treatment Products	12
Has the Product Worked	14
Removing Nits by Hand	16
When Treatment Does Not Seem to Work	18
House and Personal Belongings	19

Third Edition October 2014

Introduction

Eastern Health values the physical and emotional health of everyone in our community.

When we deal with a particular issue (such as head lice), we consider:

- the need for accurate information and support to decrease any myths or blame;
- the importance of feeling good about ourselves and others;
- the need for everyone to work together.



Head Lice Life Cycle

The life cycle of the head louse has three stages: egg, nymph, and adult.

Egg

Nits are head lice eggs. They are hard to see and are often confused for dandruff or hair spray droplets. Nits are laid by the adult female and are glued at the base of the hair shaft nearest the scalp. They are 0.8 mm by 0.3 mm, (very small, about the size of 1 grain of salt) oval and usually yellow to white, but can be gray, dark brown, or see-through. Nits take about 1 week to hatch (range 7 to 10 days). Live eggs are usually located within 6 mm of the scalp. If nits are found more than 6mm (about the width of the top of your pinky finger!) away from the scalp, they are more than likely already dead or hatched. Nits need the warmth of the scalp to hatch.

Nymph

The egg hatches to release a nymph. The nit shell then becomes a more visible dull yellow and remains attached to the hair shaft. The nymph looks like an adult louse, but is about the size of a pinhead. Nymphs become adults anywhere from 9-15 days after hatching.



Adult

The adult louse is about the size of a sesame seed, has 6 legs (each with claws), and is usually tan to grayish-white, but can be dark brownish. In persons with dark hair, the adult louse will appear darker. Females are usually larger than males and can lay up to 8 nits per day. Adult lice can live up to 30 days on a person's head. To live, adult lice need to feed on blood several times daily. Without blood meals, the louse will die within 1 to 2 days off the host. (Centers for Disease Control and Prevention).



Eran Finkle, <u>CC-BY-SA</u>

The Facts About Head Lice

Head lice live on the scalp and cannot jump or fly. People get head lice from others by head to head contact. The lice crawl from the head to another head anytime people are close together e.g. children playing and sleepovers. Sharing of combs, brushes, headbands, hats, etc. can also spread lice.

Anyone can get head lice. It doesn't mean that the person is unclean, has little money, or that a child has bad parents. **Lice do not discriminate.**

Itching and scratching does not mean that a person has head lice. A person could have head lice and not have any itching. Checking the head weekly is the only way to find head lice.

Head lice do not carry disease, but dealing with head lice can be frustrating. Some parents/ caregivers are embarrassed, so it helps to talk to the local public health nurse for information.

Preventing the Spread of Head Lice

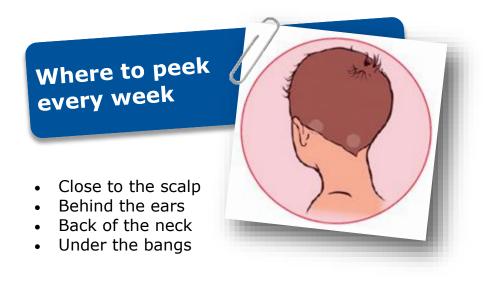
- Check your child's head weekly, after every sleepover, and every day during lice outbreaks at school or in the community.
- Treat immediately and properly if head lice are found.
- Notify the school or community group that you have found head lice and that your child has been treated.
- Keep long hair tied back or braided.
- Teach the whole family not to share personal items that are used on the head e.g. hats, helmets, hair accessories, headphones, etc.
- Teach the whole family to put their hats and scarves in their coat sleeves or backpacks.

How to Find Head Lice

It is best to check your child's head carefully every week. If they have been on a sleepover, it will be best to check every day for a week.

Finding head lice is not an easy thing, they are very small and can move very quickly.

Head lice spread easily. If one person in the household has lice, others may have it too. Check everyone in the household on the same day.





What you need:

- bright light ٠
- hair clips ٠
- regular comb white tissues
- lice comb, available at any drug ٠ store
- plastic/paper bag for garbage
- magnifying glass (optional)

Steps:

•

- 1. Untangle dry hair with an ordinary comb.
- 2. Section the hair with the hair clips. Start with a section at the back of the head.
- 3. Using a head lice comb, place the teeth of the comb flat against the scalp.
- 4. Comb the hair from the roots through to the tips.
- 5. Wipe the comb on the tissue after each stroke. In good light, check the tissue for head lice. A magnifying glass may help. You may see some eggs.
- 6. Comb each section twice until you have combed the whole head.
- 7. Throw away all tissues using the plastic/paper bag. Tie it tightly and throw out with regular household garbage.
- 8. Soak combs and hair clips in soapy hot water (just after boiling) for at least 30 seconds to ensure head lice are killed (this should be one by an adult). When the water has cooled, remove all debris from the combs and clips

Option 2- Wet Combing

What you need:

- bright light
- hair clips
- regular combwhite tissues

old toothbrush

- white conditioner
- lice comb, available at any drug store
- plastic/paper bag for garbage
- magnifying glass (optional)

Steps:

- 1. Apply hair conditioner to **dry hair**. Cover the whole scalp and all hair from the roots to tips.
- 2. Divide the hair into four or more sections using the hair clips.
- 3. Using a head lice comb, place the teeth of the comb flat against the scalp at the back of the head.
- 4. Comb the hair from the roots through to the tips.
- 5. Wipe the comb on the tissue after each stroke. In good light, check for lice. You may see eggs.
- 6. Comb each section twice until you have combed the whole head. If the comb becomes clogged, use an old toothbrush to remove the head lice or eggs.
- Throw out all used tissues and old toothbrush in the plastic/paper bag. Tie it tightly and throw out with the regular household garbage.
- Soak combs and hair clips in soapy hot water (just after boiling) for at least 30 seconds to ensure head lice are killed (this should be done by an adult). When the water has cooled, remove all debris from the combs and clips.

When to Treat for Head Lice

If you find lice during your check, don't worry. Head lice are a normal part of life and nothing to be embarrassed or panicked over. You will need to use a treatment product.

You may only find eggs (nits). These are stuck to the hair within 6 mm of the scalp. Nits found more than 6mm away from the scalp are not live and unlikely to hatch. You will need to use a treatment product.

Apply a treatment method to members of the household who have lice/nits, on the same day

Treatment products:

Consider the person's age when choosing a product to use. Not all products are suitable for young children or pregnant women, **read the product label.**

- Permethrin e.g. Nix
- Pyrethrin e.g. R&C Shampoo/Conditioner
- Resultz
- NYDA

Each product is used differently, so carefully follow the instructions included with the product you are using.

Use of Treatment Products (Repeat after 7-10 days)

Using permethrin, pyrethrin (Nix, R&C Shampoo), generally the directions include:

- 1. Comb hair with a regular comb to remove tangles.
- Conditioners can reduce the effectiveness. So if you have used the wet combing method to check for lice, ensure the conditioner has been thoroughly washed out before applying this product
- 3. Shampoo with a **conditioner-free** product.
- 4. Rinse with water.
- 5. Towel dry hair so it is damp but not wet.
- 6. Shake the bottle of product.
- 7. Be sure that the product covers all of the hair, from the scalp to the ends. Protect the eyes with a wash cloth or towel.
- 8. Leave the product on the hair for as long as the package recommends and no longer.
- Over a sink, rinse out the product with warm water.
 Don't rinse in a bathtub or shower where the product could get onto other parts of the body.
- 10. Towel dry the hair with a clean towel.
- 11. Do not blow dry hair. The heat will reduce the effectiveness of the product.

After you have applied the product, use a **conditioner-free** shampoo for the next 7-10 days.

No product currently available will kill all nits.

The first application kills the live lice and the second kills lice that have hatched since the first application.

Use of Treatment Products (Repeat after 7-10 days)

Using myristate/cyclomethicone (Resultz), generally the directions include:

- 1. Protect the eyes
- 2. Apply adequate amount of the product to dry hair
- 3. Leave the product on the hair for as long as the package
- 4. recommends
- 5. Rinse the product off the hair using warm water

No product currently available will kill all of the nits.

Using dimeticone (NYDA), generally the directions include:

- 1. Apply to dry hair.
- 2. The solution should be massaged in well until the hair is completely wetted with the solution.
- 3. Leave product on the hair for 30 minutes.
- 4. Comb the hair carefully with the lice comb to remove the suffocated lice and nymphs .
- 5. The hair should be left to dry for at least 8 hours (e.g. overnight).
- 6. The hair can then be washed with normal commercial shampoo.

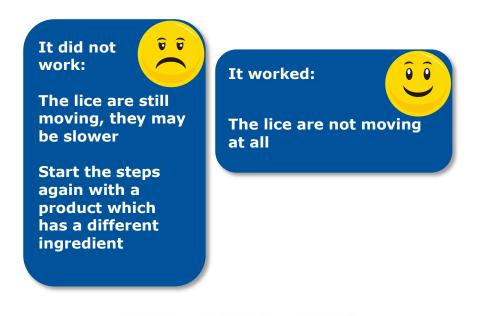
No product currently available will kill all nits.

The first application kills the live lice and the second kills lice that have hatched since the first application .

Has the Product Worked?

Check to see if the product has killed the lice

- After using a product and following all the directions and time lines, use a fine tooth head lice comb to comb all of the hairs from roots to tips.
- After each stroke, wipe the combings onto a tissue. Repeat until all hair has been combed at least twice.
- You may not find any lice
- If lice are found, observe for movement and decide if the treatment is effective or not





Continue checking household members at least once a week for 2 weeks after the second treatment is done. Make sure everyone is free of live lice and nits.

After application of any product, eggs/nits will still be present, remove these by hand.

If you find live lice after the second treatment, then repeat treatment using different product (with a different ingredient) to kill the lice. NOTE: Do not mix head lice products for use at the same time.

If you continue to find live head lice after following these steps, contact your family physician, pharmacist, or Public Health Nurse.



Removing Nits by Hand

What you need:

- bright light
- hair clips
- lice comb, available at any drug store
- regular comb · plastic/paper bag for garbage
- white tissues magnifying glass (optional)

Note: Do not use vinegar to help remove nits as it can reduce the effectiveness of some products.

Steps:

٠

- 1. Untangle dry hair with an ordinary comb.
- 2. Section the hair with the hair clips.
- 3. Start with a section at the back of the head. Place the teeth of the head lice comb flat against the scalp.
- 3. In a well lit area, inspect each hair for nits.
- 4. Nits are removed by pulling each one off the hair to which it is attached. This is very time consuming. You may have to use your fingers. Please remember that this is a difficult process for a child. They may need to have several sittings versus one long session.
- 5. Focus on removing those nits within 6 mm from the scalp. Nits found more than 6mm from the scalp are unlikely to hatch.
- 6. Wipe the lice comb on the tissue after each stroke.
- 7. Throw all used tissues into the plastic/paper bag. Tie tightly and throw out with regular household garbage.
- Soak combs and hair clips in soapy hot (just after boiling) water for at least 30 seconds (this should be done by an adult). When the water has cooled, remove all debris from the combs and clips.

A Note About Itching

Not everyone experiences itching, but if you do, it will most likely occur in the area around the ears and the nape of the neck



When Treatment Does Not Seem to Work

It is very frustrating when you are doing everything that is recommended and nothing seems to work. Some possible reasons for this may include:

Poor application of the product

Head lice products are expensive. Apply the product properly or it will cost more money in the long run. The product must be applied to all hairs, from the roots to the tips. The product must be in contact with the head lice for the right amount of time. Leave the product on the hair for the time stated in the directions.

Applying the product only once

Applying any product only once will fail. Even if the lice are killed or removed, the eggs will continue to hatch. Reapply the product one week later, paying careful attention to the instructions on the package.

Resistance to products

Resistance is when the product used for treatment does not kill the head lice. You will not know if the head lice are resistant to the product you are using before you try it. The only way to know is to check for effectiveness after you have used it (see *Has the Product Worked* on page 14).

House and Personal Belongings

Even though cleaning the house is important, excessive cleaning, such as scrubbing the walls, is not necessary. Concentrate on heads, where the lice live and feed. *Daily head checks and nit removal are more effective for the management of head lice.*

Toys and other items that can't be washed - place in a tightly sealed plastic bag for 2 weeks or in the freezer for at least 24 hours.

Hats, pillow cases and pajamas - may be washed in hot, soapy water and dried in a hot dryer each day. Dry clean anything that is not washable. Iron items that are safe to iron.

Combs and brushes and hair accessories - soak in very hot, just boiled water for at least 30 seconds each day.

Pets - neither carry nor spread head lice. No treatment is needed.

Regular household cleaning is appropriate. Vacuum mattresses, furniture and car seats. Household sprays are not recommended and can be toxic if inhaled or absorbed through the skin.



- * Centers for Disease Control and Prevention, Head Lice, Atlanta, November 2010
- * Heymann, D., Control of Communicable Diseases 19th Edition, 2008.
- * Pollack, R.J., Journal of Pediatric Infectious Disease, 2007.
- Queensland Government a Health Promoting Schools Approach to Managing Head Lice (2007).

First Edition February 2011 Second Edition revised October 2013

