

## AN IMPORTANT NOTE FROM THE HEALTH OFFICE

Dear Parent/Guardian: *Your child may have been exposed to Head Lice.*

### HEAD LICE

Head lice infestations are a common problem for children in childcare settings and schools. Anyone can get head lice. There are two other kinds of lice that infest people, but they do not live on the head. Parents should check their child(ren) for head lice regularly. If they find lice or eggs, use the information provided below.



**CAUSE** *Pediculus humanus capitis*, a louse.

Head lice are very small (less than 1/8" long, about this size [--]), brownish-colored insects that live on human heads and lay their eggs (nits) close to the scalp. The eggs are tiny (about the size of the eye of a small needle) and gray or white in color. Adult lice move fast and do not like light.

**SYMPTOMS** Itching of the head and neck. Look for: 1) crawling lice in the hair, usually few in number; 2) eggs (nits) glued to the hair, often found behind the ears and at the back of the neck; and 3) scratch marks on the head or back of the neck at the hairline.

**SPREAD** Lice are spread by head-to-head contact and by sharing personal items such as combs (especially on picture day), sports head gear, brushes, barrettes, hats, scarves, jackets, blankets, sheets, pillowcases, stuffed animals, play activity clothes, and hats. Head lice may be spread during sleepovers. Lice do not jump or fly; they crawl and can fall off the head. Head lice do not live longer than 48 hours off the head. They only lay their eggs while on the head. Nits which are more than 1/2" from the scalp are dead or empty and will not hatch. The eggs do not hatch if they fall off the head. Lice do not spread to or from pets.

**INCUBATION** It takes 7 to 10 days from when the eggs are laid until they hatch.

**CONTAGIOUS PERIOD** Until treated with a lice treatment product. **Paranit, Nix, Nittifor** products may be purchased at the local pharmacist.

**EXCLUSION** Childcare and School: Until first treatment is completed and no live lice are seen. Nits are NOT considered live lice. Children do not need to be sent home immediately if lice are detected; however they should not return until effective treatment is given.

**TREATMENT**

- Call a healthcare provider or pharmacist for advice. Recommended treatment includes using either an over-the-counter (OTC) or prescription medicated (lice killing) product. Use products that contain permethrin or a pyrethrin-based shampoo. Refer to the Centers for Disease Control and Prevention (<http://www.cdc.gov/lice/head/>) for the most current head lice treatment guidelines.
- Follow the product directions carefully (especially the **amount of product to use, length of time on the hair, and whether to use on dry or damp hair**). Directions will vary, depending on the product used.
- With certain products a second treatment is recommended 7 to 10 days later to kill any lice that may have hatched after the first treatment.
- It may take 24 hours for products to kill lice.

## TREATMENT (CONTINUED)

- Lice treatment products are not 100% effective in killing lice, especially nits. Removing the nits (nitpicking) is an essential part of the treatment for controlling the spread of head lice. The nits are glued onto the hair shaft as they are laid and require effort to remove. To remove the nits, use a metal nit comb, cat flea comb, or your fingernails to slide eggs off the hair shafts, or use scissors to cut the hair shafts that have nits glued to them. Continue checking the head and combing hair daily for 2 weeks. If all nits within ½" of the scalp are not removed, some may hatch and the child will be infested again.  
**Remember: it takes at least 2 weeks to get rid of lice.**
- Check all household members for head lice. Treat only household members with head lice, and treat all at the same time.
- Many alternatives to OTC or prescription head lice control products have been suggested. CDC does not have clear scientific evidence to determine if suffocation of head lice with mayonnaise, olive oil, margarine, butter, or similar substances is an effective form of treatment.

## PREVENTION/CONTROL

- DO NOT share combs, brushes, other hair grooming items and other hair accessories (barrettes, etc.), towels, bedding, clothing, hats, and headgear, such as personal headphones and sports helmets.
- Hang coats, jackets, and caps in individual lockers or on assigned coat hooks. If this is not possible, put the clothing in separate plastic bags. Bedding, when not in use for naptime, can be stored in individual plastic bags or storage boxes.
- Parents should check their child's head frequently throughout the year. If one person in a household, childcare, school, etc., has head lice, others should be checked too. Sleepovers are a common setting in which head lice are spread. When a child returns from a sleepover, check the child's head and launder any bedding that they brought home.
- Clean all combs, brushes, other hair grooming items and accessories (barrettes, etc.) by doing one of the following:
  - soaking in the lice treatment product for 10 minutes.
  - cleaning with hot soapy water.
  - boiling for 5 minutes.
- Vacuum carpets, upholstered furniture, mattresses, and seats in the car(s) thoroughly. **Insecticide sprays are NOT recommended** because this will expose household members to unnecessary pesticides and most viable lice are found on the head, not in the environment.
- Wash clothing worn in the last 3 days (e.g., jackets, hats, scarves, pajamas), bedding, and towels in hot (130°F or higher) water and dry in a hot dryer for at least 20 minutes before using again. Clothing or backpacks that cannot be washed or dried, linens, and stuffed toys can be dry cleaned or sealed in plastic bags for 2 weeks.

More information about head lice can be found on the Centers for Disease Control and Prevention website at: <http://www.cdc.gov/lice/head>. Your co-operation is an important part of the efforts being made to completely control the spread of head lice in the school. Thank you.

# A GUIDE TO HEAD LICE TREATMENT AND PREVENTION

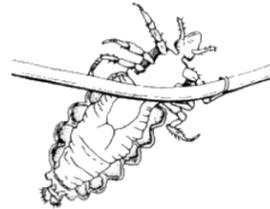
Head lice are very small, tan-colored insects about the size of a sesame seed which live only on human heads. They live and lay eggs (nits) close to the scalp. The nits are about the size of the eye of a needle, oval shaped, and grey, white, brown, or tan in color. Head lice depend on human blood for their survival.



Nits hatch into nymphs  
(immature adults) in  
7 - 10 days.



Nymphs reach adulthood  
and produce nits in  
8 - 10 days.



Adults live for 30 days.  
They lay 3 - 4 nits  
per day.

## How are head lice spread?

Lice are passed by direct contact with an infested person, or shared personal or household items. Lice do not spread to or from pets. Lice do not jump or fly. They crawl and can fall off the head. Lice do not live longer than 48 hours off the head. They only lay nits on hair shafts attached to the head. Nits that hatch after they have fallen off the head will die quickly without a blood meal.

## Prevention of head lice

Children should not share hair care items, towels, clothing, hats, sports headgear or head phones. Avoid sharing lockers. If jackets and hats must be hung next to each other, control the spread of lice by hanging the clothing inside a plastic bag. Check children's heads often so that new cases can be treated promptly.

## What are the symptoms of head lice?

Tiny red blood spots (louse bite marks) on the scalp are a sign of lice. These bites cause itching of the scalp and neck. A magnifying glass and a bright light will help you spot lice or nits.

## What to do if a family member gets head lice?

There are several ways to get rid of lice, but all of them follow the same basic steps:

1. Kill the lice
2. Remove all nits
3. Remove lice from the environment
4. Follow-up and repeat as needed

# HEAD LICE TREATMENT SEVEN OPTIONS TO KILL LICE

Use a lice treatment of your choice. There are a variety of treatment products which are available at the drugstore or grocery store. Check every member of the family when one member has head lice. All family members with lice or nits must be treated, preferably on the same day.



### Suffocating Agents

Mayonnaise  
Vegetable Oil  
Petrolatum Gel

### Chemical Agents

Over-the-Counter Creme Rinse  
Prescription Lotion  
Over-the-Counter Shampoo  
Prescription Shampoo (Warning!)

## DO NOT USE

The following are not recommended for treatment of lice:

- × Antibiotics (may increase antibiotic resistance)
- × Elimite (not a recommended use)
- × Kerosene or any other flammable liquid (may cause severe burns)
- × Insect killing products [e.g. Raid®] (toxic to children)

## HELPFUL HINTS:

- ✓ Use a different towel for each step of treatment and for each person treated.
- ✓ Wash and dry all towels after use.
- ✓ Haircuts help get rid of nits.

# SUFFOCATING AGENTS

Mayonnaise Treatment  
(100% *real* mayonnaise)

Oil Treatment  
(Vegetable, olive, mineral)

Petrolatum Gel Treatment  
(Vaseline®)\*

1. Choose one of the above treatment options.
2. Apply product directly to the head, coating the hair and scalp thickly.
3. Pile hair on the head.
4. Cover with a close fitting shower cap or plastic wrap. Leave on for at least three hours.
5. Remove the shower cap and wash hair to remove most of the product.
  - ✓ *Baby Oil* may be used to help remove the *petrolatum gel*.
  - ✓ The *Oil treatment* may be left in throughout the nit removal process
6. **Remove all nits as discussed under the Nit Removal Section.**
7. Wash hair thoroughly with shampoo to remove any remaining product.
8. Check for and pick out any remaining nits.
9. Because there are NO HARMFUL CHEMICALS, treatment can be repeated as often as needed.

# CHEMICAL AGENTS

## Important Cautions:

Please remember, all chemical agents are pesticides and may be harmful or toxic if misused.

- ✓ Chemical treatments should not be used on children under two years of age.
- ✓ Consult your physician before using chemical treatments with people who are pregnant, breast-feeding, or have a pre-existing medical condition.
- ✓ Do not use chemical treatments if there are sores or open lesions on the scalp.
- ✓ Never use chemical treatments near the eyes, even if there are lice or nits in the eyebrows or eyelashes.
- ✓ After chemical treatment, it may take up to 24 hours for lice to die. If live lice are still present two days after treating, switch to a suffocating agent to kill the lice.
- ✓ Do not use household lice sprays or any other insecticidal sprays! They are costly, unnecessarily increase exposure to pesticides, and are ineffective.

## Over-the-Counter Lice Treatment Creme Rinse (e.g. Nix®)

1. Pre-treat hair with a white vinegar and water solution prior to shampooing. See "[Using Nit Loosening Products](#)"
2. Wash the hair using any shampoo that does not contain conditioners.
3. Towel dry the hair. This product can be applied to damp hair.
4. Apply single dose bottle directly to the hair. Work thoroughly into the hair from roots to ends until all the hair is treated. Leave it on for ten minutes.
5. Rinse well over sink or tub and towel dry hair. (Do NOT shower.)
6. **Remove all nits as discussed under the Nit Removal Section.**
7. A second treatment may be needed in seven days to kill any new lice. *Do not retreat more than once with this product or other chemical products.*
8. Do not use hair conditioners, detanglers, hair spray or gel for at least a week after treatment. If you wash the hair during this time use a shampoo that does not contain conditioners.

## Prescription Lotion (malathion, Ovide™)\*

If you and your doctor decide to use this product, be aware that there is controversy about the instructions to leave the product on the head for 8-12 hours. Research has shown that malathion kills lice within 20 minutes. Longer exposures increase the risk of harm. The drug is not recommended for use with infants. This is an alcohol based lotion that is flammable, may cause stinging, and should be kept out of the eyes and away from heat sources.

1. Sprinkle Ovide™ Lotion on DRY hair and rub gently until the scalp is thoroughly moistened. Pay special attention to the back of the head and neck.
2. Allow to air dry. Leave uncovered.
3. After 20 minutes, rinse product out and wash hair with ordinary shampoo.
4. Rinse hair.
5. **Remove all nits as discussed under the Nit Removal Section.**
6. If required, repeat with a second treatment in 7 to 9 days.

## Over-the-Counter Lice Treatment Shampoo

(e.g. Rid®, A-200®, Pronto®, other pyrethrins)\*

1. Wash hair with any shampoo that does not contain conditioners.
2. Completely dry hair. **This product must be applied to dry hair.**
3. Apply single dose bottle directly to the hair, without adding water. Work thoroughly into the hair from roots to ends until all the hair is treated. Leave it on the hair for ten minutes.
4. Add enough warm water to form a lather and shampoo as usual.
5. Rinse well over sink or tub and towel dry hair. (Do NOT shower.)
6. Use a Nit Loosening Agent prior to removing nits.
7. **Remove all nits as discussed under the Nit Removal Section.**
8. A second treatment must be done in seven days to kill any new lice. *Do not retreat more than once with this product or other chemical products.*
9. Do not use hair conditioners, detanglers, hair spray or gel for at least a week after treatment. If you wash the hair during this time use a shampoo that does not contain conditioners.

**Prescription Shampoo** (e.g. Kwell®, Lindane Shampoo, USP 1%)\*

**WARNING:** This chemical agent is the least effective at killing lice and nits, and is dangerous to humans. It penetrates human skin and can be toxic to the brain and nervous system. Incorrect use has caused seizures and death. Pregnant women, breast feeding mothers, and infants under age two should NOT use it. If you and your doctor choose to use this product, follow directions on the label carefully. Nits must be removed after treatment. Do not use an oil based nit removal method.

## Selsun Blue® Treatment\*

1. Apply original Selsun Blue® to dry hair and rub into the hair and scalp. Apply until head is heavily coated.
2. Place a plastic cap over the head.
3. Adults can leave the shampoo and cap on for one hour.
4. Elementary school age children can leave the shampoo and cap on for one hour.
5. Toddlers can leave the shampoo on for 30 minutes.
6. Rinse hair completely and remove visible nits.

\*There are several types of Selsun Blue®. The recommendation is to use the original Selsun Blue.

# NIT REMOVAL

Some lice eggs (nits) survive head lice treatments. The only way to be sure that lice won't come back is to **pick out all nits**. Nits left on the hair can hatch and cause a new case of head lice. Since nits are very small and hard to see, **continue to check for nits every day for several weeks**. It is easy to miss a few nits!

## Getting Started

- ✓ Find a good metal nit comb (e.g. Lice Meister™)\*. Some people prefer to slide nits off the hair shafts using their fingernails, or to cut nits out using safety scissors.
- ✓ Gather a large supply of hair clips to use for pinning up hair.
- ✓ Choose a comfortable area with strong overhead lighting or bright sunlight. You may also want to have a magnifying glass handy.
- ✓ Have your child choose a TV program or a videotape to help make the time more relaxing and enjoyable.



## Finding The Nits

- ✓ Nits are oval-shaped and grey, white, brown or tan in color. They are as small as the eye of a needle and glued at an angle to the side of the hair shaft.
- ✓ Nits can be cemented anywhere on the hair shaft, but are usually close to the scalp.
- ✓ Expect to see larger numbers of nits the nape of the neck, and around the ears and crown.

## Using Nit Loosening Products

- ✓ Suffocating treatments loosen nits naturally.
- ✓ Chemical treatment methods do not loosen nits, and using a nit loosening agent may speed nit removal.
- ✓ A mixture of white vinegar and water or a commercial nit removal product can be used for this purpose.

## Vinegar/Water Treatment Instructions

1. Mix three (3) cups of white vinegar and three (3) cups of water (1:1 mixture).
2. Soak the hair with mixture, and then wrap the hair in a damp towel soaked in the same mixture for 30 to 60 minutes.
3. Remove all nits.
4. Rinse hair.

## Combing Out The Nits

- ✓ Divide and fasten the hair into small (one inch) sections, pinning each section together using hair pins.
- ✓ Using a nit comb, go through each hair section, passing the comb from the scalp to the ends of the hair.
- ✓ Look closely for nits and live lice on the comb. Remove any lice or nits from the comb as you go.
- ✓ Dip the comb into a cup of water, or use a paper towel, an old toothbrush, an index card, or unwaxed dental floss to clean the comb.
- ✓ Comb each section until completely free of nits, checking thin sections of hair for any you may have missed.
- ✓ Pin back clean sections of hair as you go. Move on, section by section, until all nits are removed.



## Clean Up

- ✓ Soak nit comb, hair combs, brushes, hair pins in very hot water (130° F) for 15 minutes.
- ✓ Wash hands and clean under nails thoroughly.

## Follow Up

- ✓ A few lice or nits will probably be missed. Check every day until all are removed, in order to prevent a new lice infestation.
- ✓ If 6 or more nits are found during daily head checks, lice may still be active on the head. Kill the lice using one of the suffocating treatment methods, and repeat the combing-out process.

# REMOVE LICE FROM THE ENVIRONMENT

**Lice do not survive off the human head for more than 48 hours.** Cleaning activities are best done on the same day of treatment.

For upholstered furniture and car seats used by person with lice:

- ✓ vacuum thoroughly

For recently used items, including bedding, caps, coats, backpacks, headphones, and all hair care items:

- ✓ place in a plastic bag for at least 48 hours OR
- ✓ wash in hot (130 F) water OR
- ✓ dry in hot dryer for 20 minutes OR
- ✓ place in freezing temperatures for 24 hours



## DO NOT USE

- ✓ household lice killing sprays
- ✓ any insect killing sprays

# FOLLOW UP AND REPEAT AS NEEDED

Success in lice treatment depends on daily checking to be sure that all lice and nits are gone. Suffocating treatments and nit removal are harmless and can be repeated as often as desired. If no new lice or nits are seen for three weeks, most likely the lice are gone for good!

\* Brand names are examples only. We do not endorse any product.

If you have any further questions, call your school nurse, family physician, or Washington County Department of Public Health and Environment at 651-430-6655 (TTY 651-430-6246).