



CANYONS
SCHOOL DISTRICT

HEAD LICE GUIDELINES and PROTOCOL FOR SCHOOLS



Nursing Services, Department of Responsive Services

Head Lice Guidelines and Protocol for Schools

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INTRODUCTION

Head lice are a fairly common problem for students. Lice are most prevalent among preschool and elementary school age children and their household members. Head lice can be acquired anywhere in the community. While lice are a nuisance, they pose no significant health hazard and occur in all settings regardless of cleanliness. In fact, an active head lice infestation has likely existed for a month or more by the time it is discovered.ⁱ

The most challenging aspects of head lice is not the condition itself, but other issues:

- Emotional reactions to lice by staff and parents, including fear and anger.
- Impaired self-esteem of student due to social isolation and teasing.
- Chronic infestations from inconsistent treatment and management of lice.
- Increased absenteeism due to ineffective “no nit” policies.

The presence of nits does not indicate active infestations nor do they lead to any disease process. In light of this, the American Academy of Pediatricsⁱⁱ, Centers for Disease Control, National Association of School Nurses and Utah Department of Healthⁱⁱⁱ recommend that schools:

- DO maintain strict confidentiality to prevent embarrassment and undo stress for the student and their parent.
- DO notify the child’s parent if lice are noted so that prompt, proper treatment can be started.
- DO emphasize a focus on educating the parent in identifying and managing head lice.
- DO allow the student to return to school after treatment is initiated.
- Discontinue “no nit” policies and practices involving classroom or school-wide lice screenings.
- Avoid exclusion from school for nits and lice so as not to disrupt the student’s educational participation.
- Discourage student’s with active lice infestation from having close direct head contact with others.

The information contained in this document has been developed based on current research and knowledge obtained from guidelines set forth by the Utah Department of Health, Primary Childrens Hospital^{iv}, American Academy of Pediatrics, the Centers for Disease Control^v, the National Institutes of Health^{vi}, and the National Association of School Nurses^{vii}.

Definitions

Active Infestation - The presence of live lice or nits found within ¼ inch of the scalp.

Lice – Plural for more than one louse.

Louse – A wingless insect that attaches itself to human hair.

Nit – The egg or young form of a louse, generally attached to the shaft of hair.

UNDERSTANDING HEAD LICE - FAQs

What are head lice?

Head **lice** are tiny, wingless, tan/brown insects that live and breed in human hair. They are about the size of a sesame seed. The eggs, called **nits**, are easier to see than the lice themselves. Nits are yellowish-white, tear drop shaped, and are firmly attached at an angle to the hair shaft close to the scalp behind the ears and on the back of the neck. They survive by piercing the skin to feed on blood.



Lice cannot survive away from the head for more than 24-48 hours. However, the nits can survive off the body for a week or more but in order to survive they must get back on the head soon after they hatch.

Dandruff, lint, and hair spray globules can easily be brushed from hair and can be mistaken for nits. Unlike dandruff, nits are difficult to remove and cannot be brushed away.

How do lice spread?

Lice crawl slowly and cannot crawl long distances. **They do not fly, hop, or jump.** Lice are primarily spread by direct hair-to-hair contact, and less frequently through shared items such as combs, brushes, scarves, hats, headphones, sleeping bags, and stuffed animals. Lice may also be transmitted through shared bedding such as pillows, pillowcases, sheets, and blankets.

Most lice are species-specific. For example, canine (dog) lice cannot live on humans and vice-versa. Pets in the classroom do not need to be treated and cannot carry or transmit human lice.

How are lice detected?

The first clue that a child has head lice is frequent scratching of the scalp. Skin irritation at the feeding site causes itching. Since head lice shy away from light, you may only see the eggs (nits), small whitish ovals of uniform size (teardrop shape) attached to the hair shaft.



If lice are suspected, contact the office to check the student. To check for infestation, carefully examine the hair around the back of the neck and behind the ears.

What's the best way to prevent head lice?

- Teach children not to share combs, brushes, hats, and coats.
- Teach children to hang coats separately – placing hats and scarves inside coat sleeves.
- Do not try on other people's hats (not even in stores).
- Check your child's hair if he/she itches or complains about itching.
- Treating lice as soon as they are found can prevent them from spreading in your home.

How are lice infestations successfully treated?

Successful treatment needs to concentrate on removing/killing lice and nits on the child. Several products are available to treat head lice. These are either shampoos or cream rinses. Some can be purchased over-the-counter while others need a prescription.



Only those family members with lice or nits should be treated. These shampoos and rinses should **not** be used on infants because the medicine is absorbed through the skin and can affect the brain.

It is important to follow the instructions on the label exactly as they are written.

- Many of the treatments must be applied to dry hair to be effective.
- Do not use a cream rinse, combination shampoo/conditioner, or conditioner before using lice medicine.
- After the initial treatment, comb or pick out all the nits with a fine-tooth nit comb. Combing should be repeated daily until no lice or nits are seen.
- Do not re-wash the hair for 1-2 days after the lice medicine is removed.
- A second treatment is recommended 7-10 days after the initial treatment.



What is the most effective way to treat the environment?

In addition to treating those with lice, the home also needs to be addressed by:

- ✓ Checking everyone in the household at the same time, prior to cleaning the environment.
- ✓ Washing clothing and bed linens in hot water. Items should be washed for at least 10 minutes at a water temperature of 130 - 140°F. Dry items on high heat for at least 30 minutes.
- ✓ Vacuuming your upholstered furniture, carpet, floors, stuffed animals, coat collars, hats, bare mattresses, car upholstery and child car seats. Soaking your combs, brushes, and hair accessories in boiling water for 10 minutes. If items cannot be exposed to heat, soak them in Lysol, rubbing alcohol or a pediculicide for one hour.
- ✓ Items that cannot be washed or vacuumed, such as stuffed animals, can be placed in a tightly closed plastic bag for 14 days at room temperature or 24 hours in below freezing temperatures.
- ✓ All of the above tasks should be completed on the same day for increased success in eliminating head lice.



Spraying or fogging a home with insecticides or pediculicides is NOT RECOMMENDED, and may be harmful if used in a poorly ventilated area.

ROLES and RESPONSIBILITIES

Parent Responsibility

- Retain ultimate responsibility in prevention and treatment of child's lice.
- Regularly checking their children's hair and immediately treating when head lice is detected.

School Responsibility

- Educate students on how to prevent transmission of head lice.
- Maintain the confidentiality of each student and treat each family with respect.
- Designate individuals who will be responsible to check students who are suspected of having head lice.
- Verbally notify parent if a student has head lice.
- Send letter (*See **Appendix A - Head Lice Found on Child***) home with student along with educational materials on lice treatment and environmental cleaning recommendations.
- Clean the school environment (*See **Appendix B - Parent/Guardian Lice Education***).
- Perform rescreen of student to verify removal of live lice and nits before student reenters school.

School Nurse Responsibility

- Develop head lice guidelines and screening protocol.
- Provide training to school administration on *CSD Head Lice Guidelines and Protocol for Schools*.
- Train designated school personnel on proper lice screening procedures.
- Develop head lice resource packet for school personnel.
- Confer with parents at the request of the principal on recurrent, exceptional or challenging cases of head lice.
- Be available as a resource for questions or concerns.
- **School Nurses may not be available for individual head lice screenings.**

PROTOCOL AND SCREENING PROCEDURE

Canyons School District Nursing Services recommend an approach that focuses on the identification and treatment of cases involving active infestations only. Nits that are found more than ¼ inch from the base of the hair shaft are almost always non-viable (hatched or dead).

Immediate treatment at home is advised. The student will be readmitted to school after initial treatment and examination. If, upon examination, the school-designated personnel find no live lice on the child, the child may return to school. The child should not be out of school for longer than 24 hours.

Any student with nits more than a ¼ inch from the scalp or that have been treated within the last two weeks should be allowed to stay in school.

Screening Procedure

Head lice screening requires the direct inspection of the hair and scalp for the presence of live lice and/or nits. It is not uncommon when screening for head lice to only see nits and not the actual live lice.

Supplies Needed:

- Disposable applicator sticks (long wooden Q-tips) or tongue depressors
- Trash can with garbage bags
- Transparent tape
- Gloves (optional)
- Chair
- Well-lit private area
- Knowledge of *Canyons School District Head Lice Protocol & Procedures*

Screening Procedure:

1. A trained designee from the school will check the student for head lice.
2. Have student sit in a chair in a well-lit area.
3. Begin by separating the hair into small sections using tongue blade or applicator stick. Although there is little chance of contracting pediculosis by screening, non-latex surgical gloves may be used if desired.
4. Examine the head, paying special attention to the areas behind the ears, back of neck, and scalp, for lice or nits.
5. If a louse is found, use transparent tape to remove louse. This can then be shown to parent to confirm that a live louse was found.
6. If nits are suspected be sure to make sure it is not dandruff, lint, or hair spray globules. Dandruff, lint, or hair spray globules can be easily removed from the hair by blowing, rubbing or brushing; nits won't budge unless "picked" or removed with a fine-tooth-comb.

What to Look For:

- Live lice are the size of a sesame seed and are usually tan/brown in color. They move quickly away from the light. Lice do not fly, hop, or jump.
- Nits are easier to see than the lice themselves. The nits are yellowish-white, tear drop shaped, and are firmly attached at an angle to the hair shaft close to the scalp behind the ears and on the back of the neck.
- Dandruff, lint, and hair spray globules can easily be mistaken for nits. Unlike nits, which are firmly attached to the hair shaft, dandruff, lint, and hair spray globules can easily be brushed away.

If a case of lice is identified

1. A student with live lice or nits within ¼ inch of the scalp **may remain in school until the end of the day** (see *CSD Exclusion Guidelines*) and should be allowed to ride the bus home (as applicable). Transmission via school bus seats is not likely because of the biology of head lice.
2. The school should call the parent and notify them of the head lice.
3. The student with suspected head lice should be restricted from activities involving close contact (i.e. hugging) or sharing personal items (i.e. hats, clothing, brushes) with other children.
4. Send the letter, “*Lice Found on Child*”, home with the student (See *Appendix A*).
5. Provide parent with instructional material on treatment procedures (See *Appendix B*).
6. If several cases of head lice occur in the same classroom the principal may choose to send a letter home notifying classmates’ parents that a case of head lice is suspected and asking them to check all of their children for head lice. (See *Appendix C*)
7. **Do not** conduct mass classroom/grade screening unless unusual circumstances warrant it. The School Nurse should be consulted prior to any classroom/grade screening.

CLEANING THE SCHOOL ENVIRONMENT

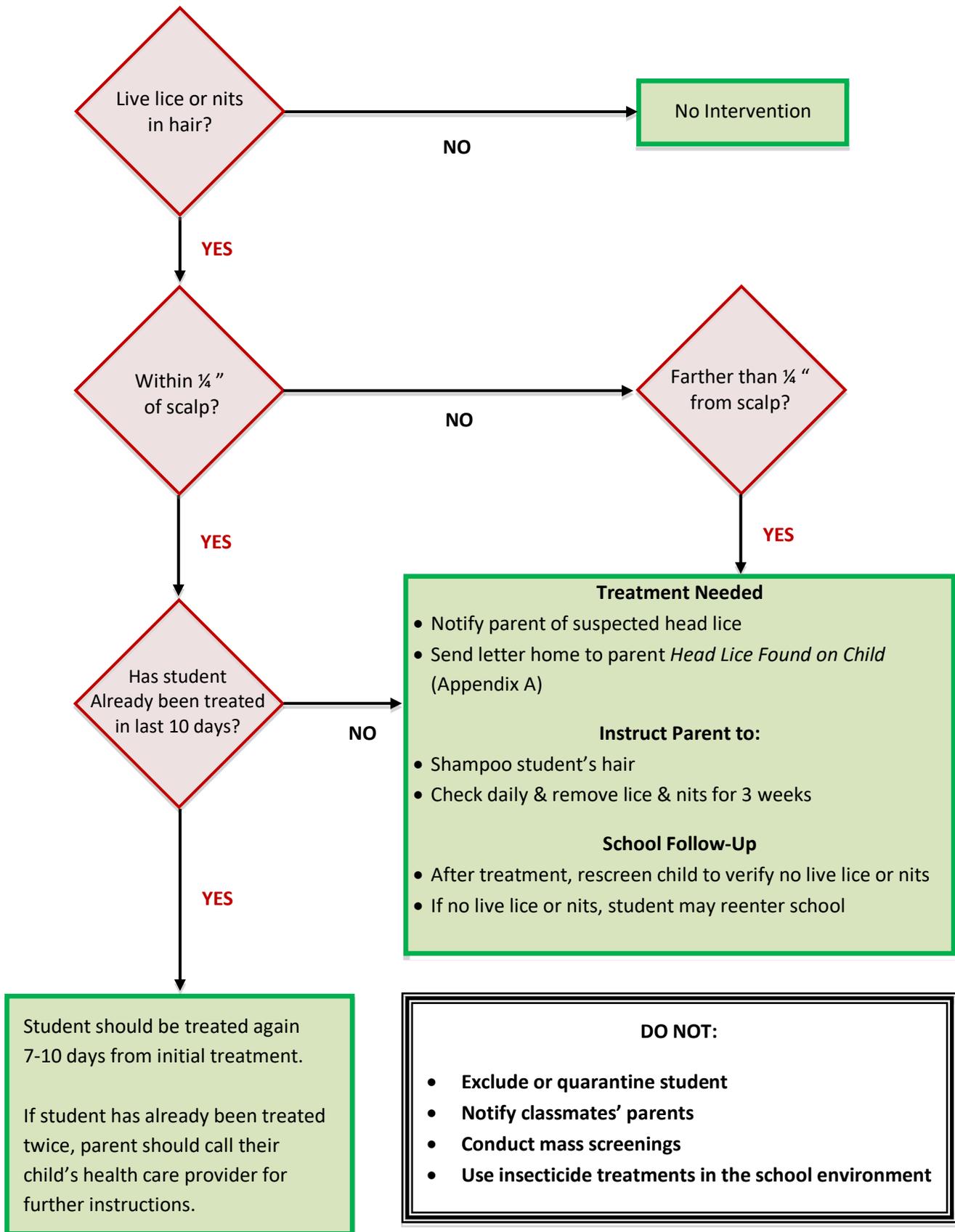
DO:

- Vacuum all floors, rugs, pillows, carpet squares, and upholstered furniture.
- Wash play clothing, linens, smocks and cloth toys/stuffed animals worn or handled by an infested individual within 2 days before diagnosis in water hotter than 130°F, or machine dried at the highest heat setting for at least 30 minutes.
- Clean and disinfect shared headgear, helmets, and/or headphones with Lysol or rubbing alcohol before being issued to other students.
- Place other items in a sealed plastic bag for 14 days at room temperature or 24 hours in below freezing temperatures

DO NOT:

- Use an exterminator!
- Spray or fog schools with insecticides or pediculicides! These are harmful if used in a poorly ventilated area or around students who may have a compromised respiratory system.

Flow Chart for Managing Head Lice



APPENDIX A – HEAD LICE FOUND ON CHILD

(SAMPLE LETTER)

Dear Parent or Guardian of _____

Head lice or recently laid nits (eggs) have been found on your child's head. Head lice have nothing to do with the cleanliness of a house or parenting skill. Head lice are spread by hair-to-hair contact, although sharing hats, combs, and other hair accessories may also spread head lice. Head lice cannot jump or fly. Head lice crawl and are not a risk to pets.

It is important to treat your child before he/she returns to school. Please begin treatment as soon as possible. Your child may return back to school the following day so that they do not miss learning opportunities in the classroom. Also, remember to check everyone in the household and treat anyone that has live head lice and/or nits. Continuous checking maybe required up to 3 weeks to avoid re-infestation.

How to Treat Head Lice

Head lice may be treated with specialized shampoos intended for the treatment of lice. Many of these shampoos are insecticides and should be used with caution, especially on children and by pregnant or nursing women. If your child has asthma please consult with his/her health care provider.

It is important that you use the shampoo exactly as directed on the label as some require application on wet hair and some require application on dry hair. In addition, some lice shampoos require a second shampooing 10 days later to kill lice that may have hatched after the initial treatment.

Do not over treat. In some cases, the over-the-counter products fail to kill the live lice. If this occurs please contact your health care provider, as they may be able to order a prescription medication for treatment of head lice.

Removal of Head Lice and Nits

Effective treatment of head lice requires the removal of both lice and eggs from the hair. Lice shampoos do not remove eggs from the hair. The eggs must be combed out or manually removed from the hair.

- Sit behind your child in a room with good lighting to comb through the hair, one section at a time.
- Use a fine-toothed nit comb. These combs are sold at most stores or may be included in packages of the lice shampoo. Combs with metal teeth spaced close together work best.
- Your child's hair should be clean, wet, well combed or brushed to remove tangles before using the nit comb. A conditioner may be used to lubricate the hair.
- Divide hair into small sections. Comb through each section until no more lice or eggs are found. Clean the comb with a paper towel to remove any eggs or lice.
- You should continue checking and removing any lice or eggs for a period of 3 weeks.

Treating the Environment

In addition to treating those with lice, the home also needs to be addressed.

- All items your child has been in contact with in the past two days such as towels, pillowcases, sheets, pajamas, clothes, coats, hats, and similar items should be washed in water temperature of 130° - 140°F and dried on high heat for at least 30 minutes.
- Items that cannot be washed or vacuumed, such as stuffed animals, can be placed in a tightly closed plastic bag for 14 days at room temperature or 24 hours in below freezing temperatures. Lice in the environment (not on the head) usually die within a day and the eggs generally cannot live much longer.
- Vacuum the house, mattresses, furniture, car upholstery, and child car seats.
- Using household insecticides to treat the home, vehicles, carpets or furniture **is not recommended** and may unnecessarily expose your household to harmful chemicals.

Please feel free to contact your school with any questions you may have in addressing this matter.

Sincerely,

APPENDIX B – PARENT/GUARDIAN LICE EDUCATION

(SAMPLE LETTER)

Dear Parents/Guardians

We are sending this letter to all parents to increase head lice awareness so that you may take steps at home to help prevent your child from becoming infested with head lice. Any time children come together, particularly at the start of the school year, or any social grouping, head lice cases commonly increase. Please encourage your child not to share or trade personal items such as hats, combs, brushes, headbands, clips, as well as helmets or headphones with foam protectors.

Direct, physical, hair-to-hair contact is the usual method of transmission. Lice do not jump, fly or swim. They are, however, good crawlers.

Check your child's head weekly for lice and/or nits (eggs). Mature lice, which are the size of a sesame seed, avoid light and are hard to see. Lice eggs or "nits" are usually found close to the scalp-usually within ¼ inch. The nits are yellowish-white, tear drop shaped, and are firmly attached at an angle to the hair shaft close to the scalp behind the ears and on the back of the neck. They cannot be easily flicked away as dandruff can.

Head lice are a nuisance but they do **not** transmit disease or pose any serious medical condition. They also cannot survive on pets. If you find head lice on your child keep him/her home until properly treated. This should be no longer than 24 hours. Continue to examine all family members for 3 weeks and treat if live lice or nits close to the scalp are found.

KEEP HEAD LICE OFF YOUR CHILD

Check Regularly – Treat Quickly

For more information regarding head lice please feel free to contact the school office or your local Health Department. Information on Head Lice, including the detecting and treating head lice can also be found on the Canyons School District Website at www.canyonsdistrict.org click departments, then click on Nursing Services. Thank you for your help and support.

Sincerely,

APPENDIX C – SEVERAL CASES OF LICE FOUND AT SCHOOL

(SAMPLE LETTER)

Dear Parent/Guardian:

A case of head lice has been found in your child's class. The parents of all students in the class are being notified via this letter.

This is not cause for panic.

It is cause for action to be taken to prevent head lice.

Treat/remove any head lice or nits found on your child's head.

It is extremely important for you to check your child's head TODAY. Keep checking every 2 days for 10 days to make sure no head lice are found.

The best way to prevent transmission:

- ⇒ Teach children not to share combs, brushes, hair ornaments, hats, scarves, headsets, or any other personal headgear.
- ⇒ Do not try on other people's hats (even at department stores).
- ⇒ Teach children to hang coats separately- placing hats and scarves inside coat/jacket sleeves.
- ⇒ Conduct regular checks of your child.

If head lice/nits are found on your child:

- ⇒ Check others in the household for signs of head lice or nits. If found, complete remaining steps on all infested individuals.
- ⇒ Use an effective head lice treatment.
- ⇒ Remove nits from the head by combing. This is the most important lice control measure. Complete nit removal is time consuming but is critical for successful treatment.
- ⇒ Remove all of the lice and nits from the environment by washing or vacuuming. There is no need to spray pesticides at home as they may unnecessarily expose your household to harmful chemicals.
- ⇒ Perform daily head checks and remove nits for 3 weeks until head lice are gone. Continue to check your child weekly to detect re-infestation.

For more information on head lice, please visit Canyons District Nursing Services website at [www.canyonsdistrict.org/Departments/Nursing Services](http://www.canyonsdistrict.org/Departments/Nursing%20Services). If you have difficulty getting rid of the head lice on your child, please contact your child's health care provider.

Sincerely,

APPENDIX D - SAMPLE NEWSLETTER ARTICLE

Parents, your participation in the control of head lice is crucial when preventing outbreaks in the school setting. Head lice are easily acquired in the community and are usually not identifiable for weeks to months after exposure. Having head lice will not lead to any other disease, nor does it mean your child is dirty. This condition, though troublesome, should not be the basis of irrational or unkind reactions.

You can help by understanding what head lice are, how you get it, how to prevent it, how to detect it, and how to treat it.

- **What are head lice?**

Head lice are tiny, wingless, tan/brown insects that live and breed in human hair. They are about the size of a sesame seed. The eggs, called nits, are easier to see than the lice themselves. The nits are yellowish-white, tear drop shaped, and are firmly attached, at an angle to the hair shaft close to the scalp behind the ears and on the back of the neck. Dandruff, lint, and hair spray globules can easily be brushed from hair and can be mistaken for nits. Unlike dandruff, nits are difficult to remove and cannot be brushed away. Lice crawl slowly and cannot crawl long distances. **They do not fly, hop, or jump.** They survive by piercing the skin to feed on blood. Skin irritation at the feeding site causes itching. While head lice are a nuisance it does not pose a significant health hazard and they are not known to spread disease.



- **How do lice spread?**

Lice are primarily spread by direct hair-to-hair contact, and less frequently through shared items such as combs, brushes, scarves, hats, headphones, sleeping bags, and stuffed animals. Lice may also be transmitted through shared bedding such as pillows, pillowcases, sheets, and blankets. Lice cannot survive away from the head for more than 24-48 hours. However, the nits can survive off the body for a week or more but in order to survive they must get back on the head soon after they hatch. You cannot catch head lice from or give them to pets.

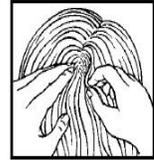
- **How do you prevent head lice?**

- Teach children not to share combs, brushes, hats, and coats.
- Do not try on other people's hats (not even in department stores).
- Teach children to hang coats separately – placing hats and scarves inside of coat. Check your child's hair if he/she frequently scratches their head or complains about itching.
- Getting rid of lice as soon as they are found can prevent them from spreading in your home.



- **How are lice detected?**

The first clue that a child has head lice is frequent scratching of the scalp. To check for infestation, carefully examine the hair around the back of the neck and behind the ears. Since head lice shy away from light, you may only see the eggs (nits), small whitish ovals of uniform size (teardrop shape) attached to the hair shaft.



- **How are lice treated?**

Successful treatment needs to concentrate on removing/killing lice on the child and on the removal of the nits.

Several products are available to treat head lice. These are either shampoos or cream rinses. Some can be purchased over-the-counter while others need a prescription. These medicated shampoos and rinses should not be used on infants because the medicine is absorbed through the skin and can affect the brain.



It is important to follow the instructions on the medicine exactly. Many of the treatments must be applied to dry hair to be effective. After the initial treatment, comb or pick out all the nits with a fine-tooth nit comb. Combing should be repeated daily until no lice or nits are seen. A second treatment is recommended 7-10 days after the initial treatment. Only those family members with lice or nits should be treated.



Do not use a cream rinse, combination shampoo/conditioner, or conditioner before using lice medicine. Do not re-wash the hair for 1-2 days after the lice medicine is removed.

- **How to Treat the Environment**

In addition to treating those with lice, the home also needs to be addressed by:

- Checking everyone in the household for head lice at the same time, prior to cleaning the environment.
- Washing clothing and bed linens in hot water for at least 10 minutes at a water temperature of 130-140°F. Dry items on high heat for at least 30 minutes.
- Vacuuming your upholstered furniture, carpet, floors, stuffed animals, coat collars, hats, bare mattresses, car upholstery and child car seats. Soaking your combs, brushes, and hair accessories in boiling water for 10 minutes. If items cannot be exposed to heat, soak them in Lysol, rubbing alcohol or a pediculicide for one hour.
- Items that cannot be washed or vacuumed, such as stuffed animals, can be placed in a tightly closed plastic bag for 14 days at room temperature or 24 hours in below freezing temperatures.
- All of the above tasks should be completed on the same day for increased success in eliminating head lice.



Spraying or fogging a home with insecticides or pediculicides is NOT RECOMMENDED, and may be harmful if used in a poorly ventilated area.

Removal of Head Lice and Nits

Effective treatment of head lice requires the removal of both lice and eggs from the hair. Lice shampoos do not remove eggs from the hair. The eggs must be combed out or manually removed from the hair. Sit behind your child in a room with good lighting to comb through the hair, one section at a time. Use a fine-toothed nit comb. These combs are sold at most stores or may be included in packages of the lice shampoo. Combs with metal teeth spaced close together work best. Your child's hair should be clean, wet, well combed or brushed to remove tangles before using the louse comb. A conditioner may be used to lubricate the hair. Divide hair into small sections. Comb through each section until no more lice or eggs are found. Clean the comb with a paper towel to remove any eggs or lice. You should continue checking and removing any lice or eggs for a period of 3 weeks.

Supplemental Measures

Head lice do not survive long if they fall off a person and cannot feed. You don't need to spend a lot of time or money on housecleaning activities. Follow these steps to help avoid re-infestation by lice that have recently fallen off the hair or crawled onto clothing or furniture.

1. Machine wash and dry clothing, bed linens, and other items that the infested person wore or used during the 2 days before treatment using the hot water (130°F) laundry cycle and the high heat drying cycle. Clothing and items that are not washable can be dry-cleaned OR sealed in a plastic bag and stored for 2 weeks.
2. Soak combs and brushes in hot water (at least 130°F) for 5-10 minutes.
3. Vacuum the floor and furniture, particularly where the infested person sat or lay. However, the risk of getting infested by a louse that has fallen onto a rug or carpet or furniture is very small. Head lice survive less than 1-2 days if they fall off a person and cannot feed; nits cannot hatch and usually die within a week if they are not kept at the same temperature as that found close to the human scalp. Spending much time and money on housecleaning activities is not necessary to avoid re-infestation by lice or nits that may have fallen off the head or crawled onto furniture or clothing.
4. Do not use fumigant sprays; they can be toxic if inhaled or absorbed through the skin.

ACKNOWLEDGEMENTS

We would like to extend a special thanks to Insight Pharmaceuticals for granting permission to reprint the illustrations from the Nix product brochure.

Parts of this manual are derived from the Michigan Head Lice Manual:

[www.michigan.gov/documents/Final Michigan Head Lice Manual 106828 7.pdf](http://www.michigan.gov/documents/Final_Michigan_Head_Lice_Manual_106828_7.pdf)

ⁱ Price, J., Burkart, H., Burkart, C., Burkhart, N., & Islam, C. (1999). Schools nurses' perceptions and experiences with head lice. *Journal of School Health*. 69. 163-168

ⁱⁱ American Academy of Pediatrics Clinic Report – Head Lice <https://pediatrics.aappublications.org/content/135/5/e1355>

ⁱⁱⁱ Utah Department of Health – Head Lice. http://health.utah.gov/epi/diseases/head_lice/

^{iv} Primary Children's Medical Center: Let's Talk About Head Lice, <https://intermountainhealthcare.org/ckr-ext/Dcmnt?ncid=520408215>

^v Centers for Disease Control and Prevention - Head Lice Information for Schools, <https://www.cdc.gov/parasites/lice/head/schools.html>

^{vi} National Institutes of Health – Head Lice Infestations: A Clinical Update. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2724133/>

^{vii} National Association of School Nurses – Head Lice Management in the School Setting. <https://www.nasn.org/advocacy/professional-practice-documents/position-statements/ps-head-lice>