

APPENDIX IV: COMMUNICABLE DISEASE & AIDS

Preparing students to step forward with confidence and a vision of lifetime success



SD School for the Blind
and Visually Impaired

Partners in educational success



South Dakota School for the Deaf

Dear State of South Dakota Employees,

Public service is essential to maintaining our democratic society, providing services to our citizens, and helping the state and country prosper. Thank you for your dedication to the State of South Dakota and its citizens.

Beyond day-to-day duties, each State employee, regardless of title or pay grade, is responsible to help maintain the public trust. Any misappropriation of resources, conflict of interest or other illegal activity, undermines the confidence citizens have in our State government. It overshadows the otherwise good work being done for society.

In addition to reading and abiding by the personal responsibility policies outlined here, you are asked to report acts that you believe violate these policies. If you see something, please say something. To create a comfortable atmosphere for recounting such concerns, an internal control officer has been appointed in each department. If you do not feel comfortable discussing your concerns with the internal control officer in your department, you may reach out to an internal control officer from another department or contact your human resources manager.

Thank you in advance for representing yourself and your fellow State employees with integrity.

Sincerely,

Governor Dennis Daugaard

Dear Board of Regents Employees,

Integrity. Ethics. Transparency. Protecting the public trust. You and I not only have the responsibility to maintain the very highest standards in these areas, but also to pass these values along to our students. Our society has long depended on higher education to enhance the ability of our democracy to function effectively and fairly for all of the people that call our nation and state home. We must assist students in their search for knowledge, in understanding themselves and their cultural and physical environments, and in developing the wisdom and skills necessary to function as responsible citizens in society.

As a Regental system employee, you play an integral role in carrying out that mission. Each and every employee has a responsibility to demonstrate to each other, our students, and the citizens of the State of South Dakota, a commitment to making stewardship and ethical behavior a part of our everyday activity. Thank you for representing the Board of Regents and your institution with honesty and integrity, and leading by example for the future leaders of South Dakota.

Sincerely,

A handwritten signature in black ink that reads "Mike Rush". The signature is written in a cursive, flowing style.

Mike Rush
Executive Director and CEO

TABLE OF CONTENTS

APPENDIX IV: COMMUNICABLE DISEASE AND AIDS

COMMUNICABLE DISEASE AND AIDS POLICIES	1
BASIC ENVIRONMENTAL HYGIENE PROCEDURES	6
BODY FLUID CLEANING UP	6
EDUCATIONAL PLAN, STUDENT	3
EMPLOYEE GUIDELINES.....	2
EMPLOYEE POLICY.....	1
SPECIAL PROCEDURES	7
DIAPERING GUIDELINES	7
EQUIPMENT AND SUPPLY STORAGE AND CLEANUP.....	8
HANDLING FOOD AND UTENSILS	9
SCHOOL, RESIDENTIAL, AND COMMON AREA CLEANING AND DISINFECTING GUIDELINES	8
SELECTING AN APPROPRIATE DISINFECTANT.....	9
STUDENT GUIDELINES.....	4
STUDENT POLICY	3
HEAD LICE GUIDELINES	9
ALTERNATE TREATMENT FOR HEADLICE	14
FACT SHEET: HEAD LICE INFESTATION.....	10
FACT SHEET: TREATING HEAD LICE.....	12
FACT SHEET: WHAT YOU SHOULD KNOW ABOUT HEAD LICE IN THE CHILD CARE SETTING	15
PREEMPTIVE MEASURES IN RESPONSE TO THE OUTBREAK OF CONTAGIOUS DISEASE POSING AN IMMINENT THREAT TO THE HEALTH OF INSTITUTIONAL STUDENTS, STAFF, OR VISITORS.....	1

PREEMPTIVE MEASURES IN RESPONSE TO THE OUTBREAK OF CONTAGIOUS DISEASE
POSING AN IMMINENT THREAT TO THE HEALTH OF INSTITUTIONAL STUDENTS, STAFF,
OR VISITORS

Please refer to Board of Regents Policy Manual section #1 (www.sdbor.edu) for information.

COMMUNICABLE DISEASE AND AIDS POLICIES

Please refer to Board of Regents Policy Manual section #4 (www.sdbor.edu) for additional information.

EMPLOYEE POLICY: The SDSBVI/SDSD is responsible for providing a clean and healthy environment for employees as well as safeguarding the rights of individuals.

As state in the Board of Regents Policy Manual, all rules and policies apply regarding diseases or conditions which may incapacitate employees for work or otherwise affect job performance.

Restrictions: It may be necessary to temporarily alter regular assignments to avoid/contain transmission of a communicable disease. The Superintendent will determine on a case-by-case basis. If additional knowledge and expertise are required to reach a decision, the superintendent/designee will refer the case to an Advisory Committee for assistance in determining a course of action and may officially request assistance from the State Health Department.

The Advisory Committee may be composed of:

1. representative from the State Health Department
2. employee's physician
3. employee or his/her designee
4. school nurse (where appropriate)
5. superintendent/designee
6. student services director (where appropriate)
7. other appropriate school personnel

In making the determination, the Advisory Committee shall consider:

1. physical condition of the school employee
2. expected types of interaction with others in the school setting
3. impact on both the infected employee and others in that setting
4. South Dakota Department of Health guidelines and policies
5. all existing BOR and Bureau of Personnel Policies

EMPLOYEE GUIDELINES - The following is a partial list of common diseases that may warrant an employee's exclusion from work:

<u>DISEASE</u>	<u>EXCLUSION RULES</u>
Acquired Immune Deficiency Syndrome (AIDS)	Determination will be made by the Advisory Committee as outlined in the Communicable Disease Policy.
Cytomegalovirus (CMV) Salivary Gland Viruses	The employee may attend work and must take precautions when coming in contact with individuals with immunosuppression as anticancer or organ transplants as well as anyone with suspected or known pregnancy. Good handwashing should eliminate risk of infection or transfer.
Giardiasis (Intestinal Protozoan Infection)	The employee may attend work. Good handwashing should eliminate risk of infection or transfer.
Herpes Simplex	The employee may attend work during an active case. Good handwashing should eliminate risk of infection of transfer.
Impetigo	The employee may attend work when treatment is verified and affected areas are covered or dry.
Infectious Hepatitis	The employee may attend work as directed by the physician. Appropriate personal hygiene precautions should eliminate risk of infection or transfer.
Mono (Infectious Mononucleosis, Glandular Fever)	The employee may attend work as directed by the physician.
Pediculosis (lice, "crabs")	The employee may attend work after treatment.
Pink Eye (Conjunctivitis)	The employee may attend work after the affected eye is no longer inflamed or under medical management.
Ring Worm (Scalp, body, athlete's foot)	The employee may attend work if the area is under treatment and covered.
Scabies (7 year itch or mites)	The employee may attend work after completing the course of treatment.
Staphylococcal	The employee may attend work upon presentation of a physician's written permission.
Streptococcal Infections (Scarlet Fever, Scarletina)	The employee may attend work 24 hours after initiating antibiotic therapy and is clinically well.
Tuberculosis	The employee may attend work upon presentation of a physician's written permission.
Enteric Infections (Salmonella, Shigella) Intestinal bacterial infection	The employee may attend work once diarrhea has subsided. Good handwashing should eliminate risk of infection or transfer.

STUDENT EDUCATIONAL PLAN: Please refer to Board of Regents Policy Manual section #3 (www.sdbor.edu) for additional information.

1. All students enrolled in elementary and secondary programs will receive AIDS education on an annual basis through health education classes unless the parent/guardian has opted to assume that responsibility.
2. Students who are not enrolled in those classes will receive instruction which is individually appropriate for them. Their objectives will be noted on their individual IEPs.
3. As required in 24:03:06:21.01 of the Education Rules, instruction, which is appropriate to the individual student's age and developmental level, will stress the importance of truthfulness, temperance, purity, sexual abstinence, public spirit, patriotism, citizenship, respect for honest labor, obedience to parents, respect for the contributions of minority and ethnic groups to the heritage of South Dakota and due deference to old age.

STUDENT POLICY - The SDSBVI recognizes the need and the right of all children to receive a free and appropriate education. The SDSBVI also recognizes its responsibility to provide a healthy environment for its students and school employees.

A student who is a carrier of or has a chronic communicable disease may attend school in the residential classroom setting when it is determined the placement is more appropriate than a less restrictive one. If the SDSBVI is determined not to be an appropriate placement, the student will be removed from school and a staffing with the Local Education Authority and the school will be held.

The determination of placement in a classroom in a residential setting will be based on the following prioritized factors:

1. risk of disease transmission to others
2. health risk to the particular student
3. reasonable adjustments in routine which can be made to reduce the health risk to the student and others
4. educational benefits or detriments of a less restrictive rather than a more restrictive environment

Pending determination of appropriate placement, a student with a chronic communicable disease may be temporarily excused from regular programming. The exclusion of an infected student from classroom, dormitory, or school activities shall be determined on a case-by-case basis by the superintendent/designee.

In situations where the decision requires additional knowledge and expertise, the superintendent/designee will refer the case to an Advisory Committee for assistance in determining a course of action.

The Health Advisory Committee may be composed of:

1. representative from the State Health Department
2. student's physician
3. student's parents or guardians
4. school principal
5. student services director
6. school nurse
7. superintendent/designee
8. student's teacher and other appropriate personnel

For students with AIDS, the State Department of Health Advisory Committee will determine a course of action.

In making the determination, the Advisory Committee shall consider:

1. type of contagious disease
2. behavior of the student
3. developmental level of the student
4. medical condition of the student
5. expected types of interaction with others in the school or dormitory setting

Factors or conditions for exclusion from school attendance include, but are not limited to:

1. physical aggression with a documented history of biting or harming others
2. child is not toilet trained or is incontinent
3. child drools
4. presence of open draining sores in which the drainage cannot be contained properly
5. possibility of inoculation of potentially infected body fluids into the blood stream: through sexual activity which involves the exchange of bodily fluids, intravenous drug use, or other circumstances

If there is reasonable cause to think a student is infected, an appropriate medical evaluation of the student may be required.

If an infected student is not permitted to attend classes or participate in school activities, the LEA will be responsible to provide arrange an appropriate educational program.

Information regarding a student who may be infected will not be revealed. If the student is permitted to remain in the school or dormitory setting, appropriate information will be provided only to staff with a need to know.

STUDENT GUIDELINES

DISEASE

Acquired Immune Deficiency Syndrome (AIDS)

Chicken Pox

Cytomegalovirus (CMV)
Salivary Gland Viruses

Fifth Disease
(Erythema Infectiosum)

Giardiasis
(Intestinal Protozoan Infection)

Herpes Simplex

EXCLUSION RULES

Determination will be made by the Advisory Committee as outlined in the Communicable Disease Policy.

The student may attend school after all pox are dry and scabbed.

The student may attend school and must take precautions when coming in contact with individuals with immunosuppression as anticancer or organ transplants as well as anyone with suspected or known pregnancy. Good handwashing should eliminate risk of infection or transfer.

The student may attend school with physician's written permission.

The student may attend school. Good handwashing should eliminate risk of infection or transfer.

The student may attend school during an active case. Good handwashing should eliminate risk of infection of transfer.

DISEASE

EXCLUSION RULES

Impetigo

The student may attend school if treatment is verified and covered or dry.

Infectious Hepatitis

The student may attend school with physician's written permission and if the student has the ability to take appropriate personal hygiene precautions.

Mono
(Infectious Mononucleosis,
Glandular Fever)

The student may attend school with physician's permission. The student may need adjusted school days and activities.

Pediculosis
(lice, "crabs")

The student may attend school after treatment. After repeated infestation of the same student, the student may be excluded until all nits are removed.

Pink Eye
(Conjunctivitis)

The student may attend school after the affected eye is no longer inflamed or under medical management.

Ring Worm
(Scalp, body, athlete's foot)

The student may attend school if the area is under treatment and covered. Restrict known cases of athlete's foot from pools and showers until under treatment.

Vaccine Preventable Diseases
(Measles, Mumps, Rubella and
Pertussis)

The student will be excluded until presenting certification from a licensed physician that the student has been immunized or is in the process of receiving adequate immunization.

Scabies
(7 year itch or mites)

The student may attend school after completing the course of treatment

Staphylococcal

The student may attend school upon presentation of a physician's written statement that s/he is not communicable.

Streptococcal Infections
(Scarlet Fever, Scarletina,
Strep Throat)

The student may attend school 24 hours after initiating oral antibiotic therapy, and is clinically well.

Tuberculosis

The student may attend school upon presentation of a physician's written statement that s/he is not communicable.

Enteric Infections
(Salmonella, Shigella)
Intestinal bacterial infection

The student may attend school once diarrhea has subsided. Good handwashing should eliminate risk of infection or transfer.

All communicable and chronic diseases should be reported to the nurse on duty.

BASIC ENVIRONMENTAL HYGIENE PROCEDURES - These procedures must be employed at all times.

Handwashing:

- before eating
- before handling clean utensils or equipment
- before and after handling food
- before and after assisting or training students in toileting or eating
- after bathroom use
- after contact with body secretions such as blood, menstrual flow, urine, feces, mucus, saliva, semen, tears, drainage from wounds
- after handling soiled menstrual pads, garments, or equipment
- after caring for any student, especially those with mouth, nose, eye, or ear discharge
- after removing rubber gloves

Basic Hygiene:

- Caregiver with a cut or open lesion on hands must wear disposable gloves when providing direct student care.
- Personal items such as combs, fingernail files, nail clippers, lipsticks, toothbrushes, razors, pierced earrings, etc. cannot be shared.
- Fingernails clean and trimmed short.
- Athletes with open sores or wounds must wear a protective cover.
- Drinking containers cannot be shared.

BODY FLUID CLEANING UP - (blood, feces, urine, semen, vaginal secretions, vomit)

- Wear disposable gloves. Before putting on gloves examine them for defects and remove sharp rings. When gloves are not available or unanticipated contact occurs, hands and other affected areas should be thoroughly washed.
- Clean and disinfect all impacted areas immediately.
- Remove disposable gloves and discard in plastic-lined waste receptacle.
- Thoroughly wash hands.
- Plastic bags of contaminated waste should be secured and disposed of daily.
- Large containers for contaminated waste are located in safe areas away from students (marked can in garage or outdoor dumpster).

➤ HARD SURFACES AND FLOORS

- Remove soil before applying a disinfectant.
- Use paper towel or tissues to wipe up small soiled areas.
- Use clean paper towels, soap, and water to clean area after soil is removed.
- Let the surface air dry and follow with a disinfectant.
- Apply a sanitary absorbent agent for larger soiled areas.
- After soil is absorbed, vacuum or sweep up material.
- Disinfect area with a dilution of 1:10 household bleach solution or another EPA approved disinfectant
- Put mop head into a plastic bag, seal it, and send it to the laundry.
- Rinse broom and dust pan in disinfectant solution.
- Disinfectant solution should be promptly disposed of down a drain.

➤ RUGS AND CARPET

- Clean and disinfect soiled rugs and carpets immediately by applying a sanitary absorbent agent, let dry, and vacuum
- Clean equipment and dispose of all disposable materials.
- Soiled tissue and flushable waste can be flushed down a toilet.
- Discard paper towels, vacuum bag, and sweepings into a covered waste receptacle lined with a plastic bag.

➤ CLOTHING OR OTHER NON-DISPOSABLE ITEMS

Rinse and place all items in plastic bags to be laundered within 24 hours.

SPECIAL PROCEDURES

A. DIAPERING GUIDELINES

Purpose: To avoid cross contamination when diapering

Equipment:

- Changing table, student's own bed or mat, or safe nonporous surface
- Readily accessible handwashing facilities, including soap and paper towels
- Supplies for cleaning student's skin: disposable baby wipes or washcloths, soap and water
- Plastic bags for student's contaminated clothing
- Covered waste receptacle, inaccessible to students, lined with disposable plastic bag
- Use of disposable diapers; use of cloth diapers is discouraged
- Disposable non-sterile plastic gloves
- Disinfectant for cleaning changing surface

Procedure:

- Wash hands.
- Place student on clean surface.
- Use disposable gloves.
- Remove soiled diaper and place in appropriate receptacle.
- Remove, rinse, and place soiled clothing directly in a plastic bag for laundering.
- Clean the perineum and buttock areas thoroughly with baby wipes or washcloths, soap and water.
- Rinse well and dry skin.
- Remove gloves and dispose of in proper receptacle.
- Wash student's hands; then wash own hands.
- Return student to class activity.
- Use disinfectant to clean impacted surfaces.
- Report abnormal conditions to appropriate personnel (school nurse or administrator).

B. EQUIPMENT AND SUPPLY STORAGE AND CLEANUP

- Discard any soiled disposable items immediately after use; place them in a plastic bag in a covered waste receptacle.
- Store student's personal grooming items separately.
- Seal and discard the disposable plastic bag used to line the covered receptacle at least once a day.
- Launder soiled sheets and other soiled items daily.
- Presoak heavily soiled items.
- Use 1/2 cup household bleach for is bleachable items.
- Use 1/2 cup colorfast bleach for non-bleachable items.
- Wash and dry items on the “hot” cycle.

C. SCHOOL, RESIDENTIAL, AND COMMON AREA CLEANING AND DISINFECTING

Clean Daily:

- protective floor pads, bolsters, wedges, etc. after each use by non-ambulatory students and at the end of the day
- changing surface, bathtubs, sinks, portable toilets and toilet seats daily
- bathrooms
- kitchen
- sinks and faucet handles
- waste receptacles
- gym mats

Clean Regularly:

- all toys with a non-alkaline disinfectant as needed
- classrooms
- floors
- vacuum carpets, disinfecting soiled rugs as previously described
- steam clean carpets (as needed)
- scrub infirmary (once a week or as needed)
- ball bath (at vacation time or as needed by staff)

If something needs to be shampooed or cleaned, let maintenance know immediately.

D. HANDLING FOOD AND UTENSILS

- maintain a clean area for serving food
- maintain a separate area for cleanup
- treat all leftover food on dishes and utensils as contaminated
- scrape food from dishes into plastic bag
- pour liquids down sink drain
- rinse dishes with warm water before placing in dishwasher
- throw away any food contaminated with blood
- cooks or food servers with an open sore on their hands must wear disposable gloves or use proper tools
- clean any equipment contaminated with human blood or other body fluids
- clean all food contact areas (sinks, counter tops, tables, chairs, trays) with approved disinfectant
- wash hands before removing dishes/utensils from dishwasher
- store clean items in the designated "clean" area of the kitchen

E. SELECTING AN APPROPRIATE DISINFECTANT

- Any liquid or bar soap is acceptable for routine washing and there is antibacterial soap in each dorm bathroom, kitchen, and infirmary.
- Select and stock a sanitary, absorbent agent for cleaning body fluid spills.
- Select an intermediate-level disinfectant which will kill vegetative bacteria, fungi, tubercle bacillus, and virus.
- Select an agent that is registered by the US Protection agency.
- Select an agent that belongs to one of the following classes of disinfectants:
 - ethyl or isopropyl alcohol
 - quaternary ammonium germicidal detergent solution (2% aqueous)
 - iodophor germicidal detergent (500 ppm available iodine)
 - phenolic germicidal detergent solution (1% aqueous)
 - sodium hypochlorite (1:10 dilution of household bleach). This solution must be made fresh daily.

*Store all disinfectants in a safe area inaccessible to students.

HEAD LICE GUIDELINES

The attached Fact Sheets from the Centers for Disease Control and Prevention are the guidelines that SDSBVI will follow if a medically diagnosed case of head lice is found.

The only exception is that, due to the fact that we are a residential school, we will not “temporarily exclude the infested child from the child care setting until 24 hours after treatment”, as recommended. Since this is not possible, we need to use a “minimal personal contact” philosophy.

If you think a child may have head lice, make a referral to the nurse on duty. The referral should also be documented on the weekly “Infirmary Referral” form and given to Student Services Director.

The child will be taken to the Infirmary and examined. If it is at night, the nurse on-call should be notified and the child will be checked when the nurse returns to the school. Until that time, try to follow these guidelines “just in case”.

Remember – this condition is transmitted only by (1) person-to-person contact, (2) or by “fomites”, including sharing infested items and by lying on infested areas.

- Above all, we need to respect the child’s right to privacy and feelings. If there is a situation with a child that you work with, you will be notified by the Nurse on duty. The people to be told include: Principal, Student Services Director, classroom teacher and instructional aide, related service providers, and Dorm Supervisor (who will notify the dorm staff).
- This information is confidential, so students and other staff members should not be directly told, and there should be no discussions in the presence of students.
- In order to leave a sense of dignity for the child, s/he will not go to school during a treatment but will stay in the Infirmary. Since these types of things are usually addressed at home, it would be best if the treatments can be given in the dorm where there is more privacy.
- After the treatment has been done, the child will return to school.
- For the next 24 hours,
 - The child should not be held or hugged.
 - The kids should not wrestle or play closely with each other.
 - Activities should be provided for the student to do in his/her bedroom and time alone should be encouraged.
 - The child should not sit on stuffed furniture, unless it has a plastic/leather cover.
 - Hair washing should be done only as instructed by the Nurse.
 - If the child’s classroom has carpeting, it should be vacuumed along with the dorm area. (Refer to the “Treat the Household Section).
 - The child’s mattress and pillow should have a plastic cover.
 - Above all else, remember this situation is not the child’s fault and it is not a crisis situation! When it seems children are the least deserving of affection is when they need it the most!

Fact Sheet

Head Lice Infestation (Pediculosis)

What are head lice?

Also called *Pediculus humanus capitis* (peh-DICK-you-lus HUE-man-us CAP-ih-TUS), head lice are parasitic insects found on the heads of people. Having head lice is very common; as many as 6-12 million people worldwide get head lice each year.

Who is at risk for getting head lice?

Anyone who comes in close contact with someone who already has head lice, contaminated clothing, and other belongings. Preschool and elementary-age children, 3-10, and their families are infested most often. Girls get head lice more often than boys, women more than men. In the United States, African-Americans rarely get head lice.

What do head lice look like?

There are three forms of lice: the nit, the nymph, and the adult.

Nit:

Nits are head lice eggs. They are hard to see and are often confused for dandruff or hair spray droplets. Nits are found firmly attached to the hair shaft. They are oval and usually yellow to white. Nits take about 1 week to hatch.

Nymph:

The nit hatches into a baby louse called a nymph. It looks like an adult head louse, but is smaller. Nymphs mature into adults about 7 days after hatching. To live, the nymph must feed on blood.

Adult:

The adult louse is about the size of a sesame seed, has 6 legs, and is tan to grayish-white. In persons with dark hair, the adult louse will look darker. Females lay nits; they are usually larger than males. Adult lice can live up to 30 days on a person's head. To live, adult lice need to feed on blood. If the louse falls off a person, it dies within 2 days.

Where are head lice most commonly found?

On the scalp behind the ears and near the neckline at the back of the neck. Head lice hold on to hair with hook-like claws found at the end of each of their six legs. Head lice are rarely found on the body, eyelashes, or eyebrows.

What are the signs and symptoms of head lice infestation?

- Tickling feeling of something moving in the hair.
- Itching, caused by an allergic reaction to the bites. Irritability.
- Sores on the head caused by scratching. These sores can sometimes become infected.

How did my child get head lice?

- By contact with an already infested person. Contact is common during play at school and at home (slumber parties, sports activities, at camp, on a playground).
- By wearing infested clothing, such as hats, scarves, coats, sports uniforms, or hair ribbons.
- By using infested combs, brushes, or towels.
- By lying on a bed, couch, pillow, carpet, or stuffed animal that has recently been in contact with an infested person.

How is head lice infestation diagnosed?

By looking closely through the hair and scalp for nits, nymphs, or adults. Finding a nymph or adult may be difficult; there are usually few of them and they can move quickly from searching fingers. If crawling lice are not seen, finding nits within a 1/4 inch of the scalp confirms that a person is infested and should be treated. If you only find nits more than 1/4 inch from the scalp, the infestation is probably an old one and does not need to be treated. If you are not sure if a person has head lice, the diagnosis should be made by a health care provider, school nurse, or a professional from the local health department or agricultural extension service.

This fact sheet is for information only and is not meant to be used for self-diagnosis or as a substitute for consultation with a health care provider. If you have any questions about the disease described above or think that you may have a parasitic infection, consult a health care provider.

Treating Head Lice

I have heard that head lice medications do not work, or that head lice are resistant to medication. Is this true?

A recent study done by Harvard University did show that SOME, but NOT ALL (or even most) head lice are resistant to common prescription and over-the-counter medications (OTC). There is no information on how widespread resistance may be in the United States. Resistance (medication not working) is more likely in people who have been treated many times for head lice. There are many reasons why medications may seem not to work. Below are some of those reasons:

1. **Misdiagnosis of a head lice infestation.** A person has head lice if they have crawling bugs on their head or many lice eggs (also called nits) within a quarter inch (approximately the width of your pinky finger) of the scalp. Nits found on the hair shaft further than 1/4 inch from the scalp have already hatched out. Treatment is not recommended for people who only have nits further than one-quarter inch away from the scalp.
2. **Not following treatment instructions fully.** See instructions below for how to treat a head lice infestation. Using medication alone is not likely to cure a head lice infestation.
3. **Medication not working at all (resistance).** If head lice medication does not kill any crawling bugs, then resistance is likely. If the medication kills some of the bugs, then resistance to medication is probably not the reason for treatment failure (see item #2 and #4).
4. **Medication kills crawling bugs, but is not able to penetrate the nits.** It is very difficult for head lice medication to penetrate the nit shell. Medication may effectively kill crawling bugs, but may not treat the nits. This is why follow-up treatment is recommended. See instructions below for a detailed summary.
5. **New infection.** You can get infested more than once with head lice. Teach family members how to prevent re-infection.

How can I treat a head lice infestation?

By treating the infested person, any other infested family members, and by cleaning clothing and bedding.

Step 1: Treat the infested person/any infested family members

Requires using an OTC or prescription medication. Follow these treatment steps:

1. Before applying treatment, remove all clothing from the waist up.
2. Apply lice medicine, also called pediculicide (peh-DICK-you-luh-side), according to label instructions. If your child has extra long hair, you may need to use a second bottle.
WARNING: Do not use a creme rinse or combination shampoo/conditioner before using lice medicine. Do not re-wash hair for 1-2 days after treatment.
3. Have the infested person put on clean clothing after treatment.
4. If some live lice are still found 8-12 hours after treatment, but are moving more slowly than before, do not retreat. Comb dead and remaining live lice out of the hair. The medicine sometimes takes longer to kill the lice.
5. If no dead lice are found 8-12 hours after treatment and lice seem as active as before, the medicine may not be working. See your health care provider for a different medication and follow their treatment instructions.
6. A nit comb should be used to remove nits and lice from the hair shaft. Many flea combs made for cats and dogs are also effective. Finer-toothed nit combs, available through Wal-Med* and the National Pediculosis Association*, may also be helpful.
7. After treatment, check hair every 2-3 days and use a nit comb to remove any nits or lice you see.
8. Retreat in 7-10 days.
9. Check all treated persons for 2-3 weeks after you think that all lice and nits are gone.

Step 2: Treat the household

1. To kill lice and nits, machine wash all washable clothing and bed linens that the infested person touched during the 2 days before treatment. Use the hot water cycle (130o F) to wash clothes. Dry laundry using the hot cycle for at least 20 minutes
2. Dry clean clothing that is not washable, (coats, hats, scarves, etc.) OR
3. Store all clothing, stuffed animals, comforters, etc., that cannot be washed or dry cleaned into a plastic bag and seal for 2 weeks.
4. Soak combs and brushes for 1 hour in rubbing alcohol, Lysol*, or wash with soap and hot (130o F) water.
5. Vacuum the floor and furniture. Do not use fumigant sprays; they can be toxic if inhaled.

My child has head lice. I don't. Should I treat myself to prevent being infested?

No, although anyone living with an infested person can get head lice. Have another person check the back and sides of your head for lice and nits. Check family members for lice and nits every 2-3 days. Treat only if crawling lice or nits are found within a 1/4 inch of the scalp.

Is there a product I can use to prevent getting head lice?

No.

Should my pets be treated for head lice?

No. Head lice do not live on pets.

My child is under 2 years old and has been diagnosed with head lice. Can I treat him or her with prescription or OTC drugs?

No. For children under 2 years old, remove crawling bugs and nits by hand. If the problem persists, consult your pediatrician.

What OTC medications are available to treat head lice?

Many head lice medications are available at your local drug store. Each OTC product contains one of the following active ingredients.

1. **Pyrethrins** (pie-WREATH-rins): often combined with **piperonyl butoxide** (pie-PER-a-nil beu-TOX-side):
Brand name products: A-200*, Pronto*, R&C*, Rid*, Triple X* Pyrethrins are natural extracts from the chrysanthemum flower. Though safe and effective, pyrethrins only kill crawling lice, not unhatched nits. A second treatment is recommended in 7- 10 days to kill any newly hatched lice. Sometimes the treatment does not work.
2. **Permethrin** (per-meth-rin):
Brand name product: Nix*
Permethrins are similar to natural pyrethrins. Permethrins are safe and effective and may continue to kill newly hatched eggs for several days after treatment. A second treatment may be necessary in 7-10 days to kill any newly hatched lice. Sometimes the treatment does not work.

Note: If OTC permethrin (1%) does not effectively kill crawling bugs, prescription- strength (5%) permethrin will not be any more effective. If lice are resistant to 1%, they will also be resistant to 5% permethrin.

What are the prescription drugs used to treat head lice?

Malathion (Ovide *): Malathion has just been reapproved for the treatment of head lice infestations. When used as directed, malathion is very effective in treating lice and nits. Few side-effects have been reported. Malathion may sting if applied to open sores on the scalp caused by scratching. Therefore, do not use if excessive scratching has caused a large number of open sores on the head.

Lindane (Kwell*): Lindane is one of the most common treatments used to treat head lice. When used as directed, the drug is usually safe. Overuse, misuse, or accidentally swallowing of Lindane can be toxic to the brain and nervous system. Lindane should not be used if excessive scratching has caused open sores on the head.

Which head lice medicine is best for me?

If you aren't sure, ask your pharmacist or health care provider. When using medicine, always follow the instructions.

When treating head lice

1. Do not use extra amounts of the lice medication unless instructed. Drugs are insecticides and can be dangerous when misused or overused.
2. Do not treat the infested person more than 3 times with the same medication if it does not seem to work. See your health care provider for alternative medication.
3. Do not mix head lice medications.

Should household sprays be used to kill adult lice?

No. Spraying the house is NOT recommended. Fumigants and room sprays can be toxic if inhaled.

Should I have a pest control company spray my house?

No. Vacuuming floors and furniture is enough to treat the household.

**Use of trade names is for identification purposes only and does not imply endorsement by the Public Health Service or by the U.S. Department of Health and Human Services.*

This fact sheet is for information only and is not meant to be used for self-diagnosis or as a substitute for consultation with a health care provider. If you have any questions about the disease described above or think that you may have a parasitic infection, consult a health care provider.

ALTERNATE TREATMENT FOR HEADLICE

1. Completely saturate the hair and scalp with Olive oil, Mineral oil, vegetable oil, or Mayonnaise (regular, not light).
2. Cover the hair with close-fitting shower cap. Leave on for 3 to 4 hours. Avoid treatment while the person is sleeping as the cap may become a suffocation hazard and if the shower cap comes off it will dirty the bed. (All bedding should be washed anyway.)
3. Remove the shower cap and wash the hair with shampoo to remove most of the suffocant agent (the best method of removing oily products is a degreasing dishwashing soap, such as DAWN).
4. Remove ALL nits and live lice. A metal comb works best for this and is reusable by washing in hot soapy water. Nits do not fall off the hair after treatment and can be difficult to remove as they are cemented on the hair shaft. The infested person's head should be checked regularly for 2 weeks after treatment to ensure that active lice and potentially viable nits are removed. One method to ease nit removal is to use vinegar and water (one to one mixture) to hair prior to treating it for lice. The hair is soaked with the mixture 30-60 minutes (a damp towel soaked in the same mixture may be used to contain the solution).
5. Wash bedding, combs, and any worn clothing in hot water and dry in a hot dryer. Items that cannot be washed may be placed in a plastic bag and sealed for 2 weeks. Stuffed toys and other objects and furniture may also be vacuumed to remove lice.

What You Should Know About...

Head Lice in the Child Care Setting

Head lice are tiny insects that live primarily on the head and scalp. They should not be confused with body lice, which may be found in clothing and bedding as well as on the body, or crab lice that infest the pubic area. They are found only on humans and should not be confused with fleas, which may be found on dogs, cats, and other pets.

Although small, adult head lice may be seen with the naked eye. Because lice move rapidly and only a few may be present, using a hand lens or magnifying glass may allow them to be seen more easily. Head lice suck blood, and the rash caused by their feeding activities may be more noticeable than the insects themselves. Head lice attach their eggs at the base of a hair shaft. These eggs, or nits, appear as tiny white or dark ovals and are especially noticeable on the back of the neck and around the ears. Adult head lice cannot survive for more than 48 hours apart from the human host.

Head lice are primarily spread through direct head to head contact, although sharing personal items such as hats, brushes, combs, and linens may play a role in their spread between children. Children with head lice should be treated with a medicated shampoo, rinse, or lotion developed specifically for head lice. *These treatments are very powerful insecticides and may be toxic if not used only as recommended.* The need to remove nits or egg capsules is controversial. Those found more than 1/4 inch from the scalp probably have already hatched or are not going to hatch. Treatments containing permethrin (an insecticide) have a high residual activity and are usually effective in killing nits as well as adult lice.

To prevent the spread of head lice when a case occurs in the child care setting:

Temporarily exclude the infested child from the child care setting until 24 hours after treatment. Many state and local health departments require that children be free of nits before readmission. To assure effective treatment, check previously treated children for any evidence of new infection daily for 10 days after treatment. Repeat treatment in 7 to 10 days may be necessary.

Nits can be removed using a fine-toothed comb. (A pet flea comb may work best.) Some commercial products may make removing nits easier. Commercial preparations to remove nits should be used according to the manufacturer's recommendations to assure that the residual activity of the insecticide is not affected.

On the same day, screen all children in the classroom or group and any siblings in other classrooms for adult lice or nits. Children found to be infested should also be excluded and treated. Simultaneous treatment of all infested children is necessary to prevent spread back to previously treated children.

Educate parents regarding the importance of following through with the same recommendations at home and notifying the facility if head lice have been found on any member of the household.

Although head lice are not able to survive off of humans for more than a few days, many persons recommend washing clothes (including hats and scarves) and bedding in very hot water, and vacuuming carpets and upholstered furniture in rooms used by person infested with these insects. Combs and hair brushes may be soaked in hot (65°C) water for at least one hour. Flea bombs and other environmental insecticides are not effective against head lice.