Head Lice Fast Facts

• Adults are small (1/16–1/8-inch long), wingless and brown-colored. They have pincher-like claws which help them firmly grasp human hair. Lice feed on blood.

• Head lice develop in three stages: egg, nymph and adult. Female lice lay 8–10 eggs a day, eggs hatch in seven days and mature to an adult in another seven days. Lice live for about 30 days.

• Lice do not jump, fly or crawl long distances.

• Head lice are transmitted through head-to-head contact or immediate sharing of items like hats, combs or headphones.

• There are several products that help to control head lice but you may have to use multiple products multiple times to completely remedy the issue.

Head Lice and the Return to School

While we associate head lice with going back to school, the truth is lice are rarely transmitted in schools. Lice are most often transmitted among close friends, cousins, siblings and other relatives during events such as sleepovers, camps and extended visits. It is best to teach your child about situations in which head lice can be transmitted and how to prevent passing it among friends.

How are Head Lice Transmitted?

Transmission occurs through close, head-to-head contact, such as hugging, immediate hat or headphone sharing, sharing hair brushes or costume sharing, or sharing a bed or pillow. Lice do not live or breed on inanimate objects or other animals besides human heads. Even items in contact with head lice such as clothes, hats, headphones, blankets, rugs, etc. will have a low risk of transmitting head lice after 24–48 hours of non-use.

How Can I Tell if my Child has Head Lice?

An active infestation of head lice is defined as live, moving and feeding individuals. To inspect your child’s head, you will need: a bright light, a comb and a magnifying glass. Have your child sit in a chair and comb the hair, close to the scalp, to inspect for adult lice or their eggs.

What you are looking for:

Viable eggs — Eggs (aka nits) are less than 1/32-inch long, light brown/yellow/white, oval-shaped, and are glued to one side of the hair shaft. Lice eggs are located no more than 1/4 inch from the scalp and are common at the nape of the neck and close to ears. Hatched eggs are pearly white and remain attached to the hair. Due to hair growth over time, nits are considered non-viable if found 1/4–1/2-inch from the scalp.

Adults — Adult lice are 1/16–1/8-inch long, wingless, brown-colored insects. They have pincher-like claws allowing them to firmly grasp hair shaft. Other symptoms of an active case of head lice include tickling sensations, difficulty sleeping, rashes from scratching and an itchy scalp. Make sure the problem is, in fact, head lice and not dandruff, sand, dirt or hairspray.

How do I Treat for Head Lice?

Mechanical treatment includes combing hair with a fine-toothed, metal comb to remove viable nits and lice, repeated every few days for at least two weeks. In addition, there is a variety of FDA-approved pediculicides (lice killers) sold over-the-counter or as a prescription treatment (see table on next page). These products are safe and effective when used as directed.
Schools face many challenges when working to create a healthy environment for students and staff. Good information can be hard to locate, recommendations can change quickly, and keeping up with current best practices and guidelines can be time consuming. Yet the need to do such work is ever present, and schools have daily opportunities to take action to improve the wellness of their populations. These real needs motivated experts from many different organizations across the state to team up to write this handbook. We want to take the mystery and guesswork out of preventing and managing infectious diseases in schools and provide some easy-to-use tools and resources. Creating and maintaining a school environment to reduce the risk of disease transmission is possible. This handbook gives you the best and most up-to-date information, so school staff in Nebraska can spend less time searching for answers and more time doing the important work of educating and caring for students.

In Nebraska, we are highly aware of disparities between rural and urban areas. Persons living in rural areas have less access to healthcare, have lower rates of vaccination, and have a more difficult time to access many experts and resources to support school health than their urban counterparts may. The original funding for this book was provided through an American Academy of Pediatrics Managing Infectious Diseases in Schools Chapter Innovation Grant with collaboration of the Nebraska Chapter of the American Academy of Pediatrics. This grant provided funding for compilation, printing and distribution of this handbook to rural schools with the intent of reducing rural health disparities. To best address unique issues in rural schools, we specifically sought the input of rural school nurses from across Nebraska. Later, a CDC grant provided the ability to print and distribute this handbook to all of the remaining public and private schools in Nebraska. While rural schools were the original target audience for this publication, the hope is that this book benefits rural, suburban and urban districts alike.

Use this book as a reference when searching for regulations on school health in Nebraska, how best to manage certain communicable diseases, or how to be prepared for an outbreak. Because parent engagement is so important to having healthy students, we have included sample parent letters and many educational handouts that may be photocopied and distributed without restriction. Plus, all the parent information in this book has also been translated into Spanish. The tools and resources included (such as the exclusion guidance infographic) are intended to be easy to use if a school chooses to implement them; however, it is not a requirement to do so. The information in this handbook is not meant to supersede any district policies or initiatives, but simply be a vetted resource to make the work of keeping your school healthy a little easier to do.
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HAND WASHING is your super power!

Fight the Germs

*Germ Stopper* by Ashley from Wood River
One of the most important ways staff and children in schools can stay healthy is by keeping their hands clean throughout the day. In fact, schools promoting hand hygiene can result in students with fewer illnesses and missed days of school. This is why it is important to encourage cleaning hands at key times with soap and water for at least 20 seconds or using an alcohol-based hand sanitizer with at least 60% alcohol if soap and water are not readily available.

WAYS TO PROMOTE HAND HYGIENE IN YOUR SCHOOL:

- Teach and reinforce handwashing with soap and water for at least 20 seconds. Integrate hand hygiene lessons in your school to regularly remind children of the importance of keeping hands clean.

- Build time into daily routines for children and staff to wash hands, especially at key times like after bathroom breaks, before lunch, or after playing outside. Take into consideration any additional time children or staff may need to wash their hands.

- Supervise and assist children with handwashing as needed. Younger children and children with certain disabilities (such as disabilities that limit their ability to move, or disabilities that make it difficult to follow instructions) may need help with washing their hands.

- Consider making hand sanitizers with at least 60% alcohol available for teachers, staff, and children.

- Consider increasing access to hand hygiene infrastructure and supplies, such as sinks, soap dispensers, portable handwashing stations, and hand sanitizer dispensers.

- It is also important to provide a way for children and staff to dry hands by providing paper towels or hand dryers. Germs spread more easily when hands are wet, so making sure children and staff have a way to dry hands completely can help keep them safe. When hand hygiene facilities and supplies are available, children and staff are better able to make hand hygiene part of their routine.

- Place visual cues such as handwashing posters, stickers, and other materials in highly visible areas throughout the school—for example, bathrooms and locker rooms, classroom sinks, or cafeteria kitchens. We have included posters created by Nebraska students on the following pages.

- Learn how to make a hygiene plan to help keep students safe. CDC’s Clean Hands and Spaces online training provides information on how to reduce the spread of germs through good hygiene habits and safety practices in schools.
When should I use?

**SOAP & WATER**
- Before, during, and after preparing food
- Before eating food
- Before and after caring for someone who is sick with vomiting or diarrhea
- Before and after treating a cut or a wound
- After using the toilet
- After changing diapers or cleaning up a child who has used the bathroom
- After touching an animal, animal feed, or animal waste
- After handling pet food or pet treats
- After touching garbage
- If your hands are visibly dirty or greasy
- Before and after wearing gloves

**ALCOHOL-BASED HAND SANITIZER**
- Before and after visiting a friend or loved one in a hospital or nursing home, unless the person is sick with *Clostridioides difficile* (if so, use soap and water to wash hands)
- If soap and water are not readily available, use an alcohol-based hand sanitizer that contains at least 60% alcohol, and wash with soap and water as soon as you can.
- **DO NOT** use hand sanitizer if your hands are visibly dirty or greasy—for example, after gardening, playing outdoors, fishing, or camping. If a handwashing station is available, wash your hands with soap and water instead.
- Before and after wearing gloves

How should I use?

**SOAP & WATER**
- Wet your hands with clean running water (warm or cold), turn off the tap, and apply soap.
- Lather your hands by rubbing them together with soap. Lather the backs of your hands, between your fingers, and under your nails.
- Scrub your hands for at least 20 seconds. Need a timer? Hum the “Happy Birthday” song twice.
- Rinse your hands under clean running water.
- Dry your hands using a clean towel or air dry them.

**ALCOHOL-BASED HAND SANITIZER**
- Use and alcohol-based hand sanitizer that contains at least 60% alcohol. Supervise young children when they use hand sanitizer to prevent swallowing alcohol, especially in schools and childcare facilities.
- Put enough sanitizer on your hands to cover all surfaces.
- Rub your hands together until they feel dry (this should take around 20 seconds).
- **Do NOT** rinse or wipe off. off the hand sanitize before it’s dry; it may not work well against germs.

Source: [https://www.cdc.gov/handwashing/hand-sanitizer-use.html](https://www.cdc.gov/handwashing/hand-sanitizer-use.html)
HAND SANITIZER

KNOW WHEN AND HOW TO USE HAND SANITIZER:

CDC recommends washing hands with soap and water because handwashing effectively removes germs, dirt, and chemicals from hands. If soap and water are not readily available, using a hand sanitizer with at least 60% alcohol can help staff and children avoid getting sick and spreading germs to others.

FACTS:

- Hand sanitizers can quickly reduce the number of germs on hands in many situations. However, hand sanitizers do not eliminate all types of germs, including some germs that cause diarrhea. Always wash hands with soap and water after using the toilet, after handling trash, and when hands are visibly dirty.

- Hand sanitizers are not effective when hands are visibly dirty or greasy. Hands are often dirty or greasy after activities like eating or playing outside.

- Hand sanitizers will not remove harmful chemicals, like pesticides and heavy metals, from hands.

PREVENT ACCIDENTAL POISONING

CAUTION! Keep hand sanitizer out of reach of young children and supervise their use.

- Hand sanitizers should be stored up, away, and out of sight of children and should be used with adult supervision for children under 6 years of age or older children who have difficulty following instructions. Swallowing more than a couple of mouthfuls of an alcohol-based hand sanitizer can cause alcohol poisoning. In fact, calls to U.S. poison centers related to alcohol-based hand sanitizers increased by 36% from 2019 to 2020.

- If you think a child has been poisoned, and they are awake and alert, call Poison Control (1-800-222-1222). The center can be reached 24 hours a day, 7 days a week.

- Call 911 if a child has collapsed or is not breathing due to possible poisoning.

Source: Hand Hygiene in School and Early Care and Education | CDC

Resources: CDC’s Clean Hands and Spaces online training provides information on how to reduce the spread of germs through good hygiene habits and safety practices in K-12 schools and ECE settings.
Handwashing is a key part of preventing the spread of diseases in school. But how do we motivate students, especially younger ones, to wash their hands? The CDC recommends that schools “place visual cues such as handwashing posters, stickers, and other materials in highly visible areas throughout the school.”

Knowing this, we wanted a way to get students involved, as they can then influence and motivate each other. The authors of this book conducted a statewide contest in the fall of 2023 for students to create a handwashing poster for schools, the winners of which would be published in these pages. There were over 200 students (primarily 4th and 5th grade) that shared their talent and entered posters into the contest. A team of judges narrowed it down to 4 finalists, which are displayed in the next four pages. However, we had such a great turnout and so much wonderful artwork to choose from, that we incorporated a few more into the pages of this book. In addition, we are publishing a Handwashing Poster Pack featuring over 30 additional posters that schools can download on the Nebraska Department of Education School Health Services website: https://www.education.ne.gov/schoolhealth/

We would like to sincerely thank the students, teachers, school nurses, parents, and guardians that helped this poster contest be successful. Nebraska has many talented students and we are proud to support them by featuring their original designs in this book, and we hope schools will use these posters to help prevent the spread of germs in their classrooms.
Hello. I'm here to make you sick!

NO!

Stop right there germ

Ahhh!

bang
fight
Pow
fight
fight
fight

Remeberto always clean your hands

Bam. Clong

Help me to fight off those germs by washing your hands with soap and water for 20 seconds.

Germ Battle by Kye from York
Bad Germs are NOT your friends. Wash your hands!
Wash your hands or get sick!!!!!!!
Lávate las manos o te enfermas!!!!!!!
Wash Your Hands by Landry from York

1. Wash your hands.
2. Dry your hands.
3. Rub your hands together.
4. Use soap and water.
5. Wash your hands.
Germs spread easily among young children in group settings, so schools must be diligent. Cleaning and disinfection processes are designed to protect children and staff in schools by keeping illnesses from spreading. The terms cleaning, sanitizing, and disinfecting are frequently used interchangeably, but they do not mean the same thing. It is important to know the distinction between them.

1. KNOW THE DIFFERENCE BETWEEN CLEANING, SANITIZING, AND DISINFECTING.

**CLEANING** is the first step of any disinfection process. It involves using soap or detergents, then rinsing with water. This removes dirt, organic matter, and a substantial amount of microorganisms, but not all of them.

**SANITIZING** reduces the number of pathogens on surfaces to levels generally considered safe; it does not eliminate all pathogens. It can kill bacteria on surfaces using chemicals, but it is not intended to kill viruses. It is safe to sanitize food surfaces.

**DISINFECTING** kills viruses and bacteria on surfaces using chemicals. Disinfectants are used on high touch surfaces or surfaces contaminated with blood and body fluids. Organic material may deactivate the chemical, so always clean the surface before disinfecting. Always use personal protective equipment (PPE) when disinfecting.
2. ROUTINE CLEANING

WHEN TO CLEAN SURFACES:

- Clean high-touch surfaces regularly (for example, door handles, stair rails, elevator buttons, touchpads, restroom fixtures, and desks). Establish a facility routine.
- Clean other surfaces when they are visibly dirty.

CLEANING TIPS:

- Use warm/hot water with any household soap or detergent.
- Scrub vigorously to remove dirt and soil. Use a brush if item is not smooth or has hard to reach corners, such as toys and bottles.
- Change water when it looks or feels dirty, after cleaning bathrooms, after cleaning diaper changing areas, and after cleaning the kitchen.
- Always clean the least dirty items and surfaces first to avoid transferring contamination from dirtier surfaces to cleaner surfaces. For example, countertops before floors; sinks before toilets.
- Always clean high surfaces first, then low surfaces.
- Disposable towels or reusable cleaning cloths may be used for cleaning. If using reusable cloths/rags, launder between cleaning uses. See section on Cleaning Cloths. Do not use sponges since they are hard to clean.
- Clean completely on a regular schedule and spot clean as needed.

HOW TO SAFELY CLEAN

VARIOUS SURFACES:

Follow these tips to safely clean different surfaces in your school:

For hard surfaces, such as counters, light switches, desks, and floors:

- Clean surfaces with soap and water or with cleaning products appropriate for use on the surface.

For soft surfaces, such as carpet, rugs, and drapes:

- Clean the surface using a product containing soap, detergent, or other type of cleaner appropriate for use on these surfaces.
- Launder items if possible, according to the label’s instructions. Use the warmest appropriate water setting and dry items completely.
- Vacuum surfaces such as carpets and rugs and dispose of the dirt safely.

For laundry items, such as clothing, towels, and linens:

- Use the warmest appropriate water setting and dry items completely.
- It is safe to wash dirty laundry from a person who is sick with other people’s items.
- Clean clothes hampers or laundry baskets according to guidance for surfaces.

For electronics, such as tablets, touch screens, and keyboards:

- Consider putting a wipeable cover on electronics, which makes cleaning and disinfecting easier.
- Follow the manufacturer’s instructions and recommendations for cleaning the electronic device.

For outdoor areas, such as patios and sidewalks:

- Spraying cleaning or disinfection products on low-touch surfaces in outdoor areas—such as on sidewalks, roads, or ground cover—is not necessary, effective, or recommended.
- Clean high-touch surfaces made of plastic or metal, such as grab bars, play structures, and railings when visibly dirty.
- Cleaning and disinfection of wooden surfaces (such as wood play structures, benches, and tables) are not recommended.
ROUTINE CLEANING

THE USE OF CLEANING CLOTHS

- Disposable or reusable cleaning cloths are both acceptable to use for cleaning. Sponges are not recommended.
- Thoroughly wet (soak) a fresh cleaning cloth in the environmental cleaning solution.
- Wipe surfaces, moving from clean to dirty, high to low, in a systematic manner. Make sure to use mechanical action (for cleaning steps) and making sure to that the surface is thoroughly wetted to allow required contact time (for disinfection steps).
- When the cloth is no longer saturated with solution, dispose of the cleaning cloth or store it for reprocessing.
- Use fresh cleaning cloths at the start of each cleaning session (e.g., per each area or room).
- Change cleaning cloths when they are no longer saturated with solution, for a new, wetted cloth. Soiled cloths should be stored for reprocessing.
- For higher-risk areas, change cleaning cloths between each zone (such as after a bathroom or diapering area).
- Ensure that there are enough cleaning cloths to complete the required cleaning session.
- Never double-dip cleaning cloths into portable containers (e.g., bottles, small buckets) used for storing environmental cleaning products (or solutions).
- Never shake mop heads and cleaning cloths—it disperses dust or droplets that could contain microorganisms.
- Never leave soiled mop heads and cleaning cloths soaking in buckets.
- If reprocessing cleaning clothes, follow the manufacturer’s directions for laundering. Often, specific temperatures and avoidance of laundry additives are directed.
- Wash hands after using cleaning cloths.
ROUTINE SCHEDULE

Follow your school’s standard procedures for routine cleaning and disinfecting. Typically, this means daily sanitizing surfaces and objects that are touched often, such as desks, countertops, doorknobs, computer keyboards, hands-on learning items, faucet handles, phones, and toys. Some schools may also require daily cleaning and disinfecting of these items. Standard procedures often call for cleaning and disinfecting specific areas of the school, like bathrooms or diaper changing areas.

Immediately clean surfaces and objects that are visibly soiled. If surfaces or objects are soiled with body fluids or blood, use gloves and other standard precautions to avoid coming into contact with the fluid. Remove the spill with cleaning, and then clean and disinfect the surface.

Schools should create and maintain a routine cleaning, sanitizing, and disinfecting schedule accessible for all staff (print or electronic).

- Utilize the National Health and Safety Performance Standards surface-specific guide
- Create a “person-responsible” list for cleaning, sanitizing, and disinfecting items (e.g., general cleaning of books, toys, spills, rugs/carpets, soiled clothing, electronics)

ENHANCED SCHEDULE

In addition to routine schedules for high touch surfaces, additional cleaning and disinfecting may be needed during time of increased illness, or when prevention is needed to slow and or stop infectious disease processes (e.g., community illnesses or outbreaks). See Part 2 “Outbreaks” for more information on Enhanced Cleaning.

Resources:

- Minnesota Infectious diseases in childcare settings and schools manual: [www.hennepin.us/childcaremanual](http://www.hennepin.us/childcaremanual)
- When and How to Clean and Disinfect a Facility [www.cdc.gov/hygiene/cleaning/facility.html](http://www.cdc.gov/hygiene/cleaning/facility.html)
[www.cdc.gov/hygiene](http://www.cdc.gov/hygiene)
Every school or district must choose disinfectants and other cleaning supplies, which can make a big impact on preventing the spread of illness and overall student health. Use these criteria to help make the safest choice for students and the best choice for your school.

- Safety and health considerations
- EPA Registered
- Cost
- Surface compatibility with instructions for use
- Contact Time
- Application Method (wipes, bucket immersion, pour bottles, and sprays)
- Common Types of Disinfectants

STUDENT SAFETY AND HEALTH CONSIDERATIONS:

Children are more vulnerable to chemical exposure because they are growing and developing. Their little bodies have a harder time breaking down toxins, and they breathe twice as much per body weight as adults. Children have softer, more absorbent skin and smaller airways. They also spend more time on the floor where chemical residues can collect. Therefore, schools must be intentional in choosing safe products and not to use them more than necessary.

Products that are healthier for people and the environment will have labels to indicate third party review and approvals. Only one of these programs is for disinfectants. The rest are for cleaning products. These include the following:

<table>
<thead>
<tr>
<th>EPA DESIGN FOR THE ENVIRONMENT (DFE)</th>
<th>DISINFECTANTS: This is a third-party certification program that identifies antimicrobial products that are better for the environment.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECOLOGO</td>
<td>CLEANING PRODUCTS: Certified products and services that are verified to reduce environmental and health impact.</td>
</tr>
<tr>
<td>GREEN SEAL</td>
<td>CLEANING PRODUCTS: Certified green products proven to meet rigorous human and environmental health criteria.</td>
</tr>
<tr>
<td>SAFER CHOICE</td>
<td>US EPA</td>
</tr>
</tbody>
</table>
HOW TO CHOOSE A DISINFECTANT CONTINUED

EPA REGISTERED:
Make sure that any product used in your school has approval from the Environment Protection Agency (EPA). The EPA registration number will be listed on the label. Use this registration number and check the EPA’s List N to see if the disinfectant kills COVID-19. Epa.gov/listntool

COST:
Premixed and disposable products are easier to use, but generally are more expensive. Concentrated chemicals that have to be mixed are more economical but require more training and education.

SURFACE COMPATIBILITY:
Some disinfectants can cause damage to surfaces.

CONTACT TIME:
Also called dwell time or wet time. This is the amount of time a disinfectant needs to sit on a surface or remain wet, without being wiped away or disturbed to effectively kill germs. Contact times vary depending on which organism is targeted. Viruses are generally easier to kill and may take 30 seconds to 1 minute versus bacteria that cause diarrhea, i.e. norovirus, which can take up to 10 minutes.

APPLICATION METHODS:
This includes premixed, which can include disposable wipes and sprays. The bucket emersion method is generally a concentrated product that may require mixing by trained staff.

COMMON DISINFECTANTS:

<table>
<thead>
<tr>
<th>DISINFECTANT</th>
<th>ADVANTAGES</th>
<th>DISADVANTAGES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorine (a.k.a. bleach solutions)</td>
<td>EPA registered; low incidence of toxicity; reduces biofilms of surfaces; sporicidal at specific concentrations</td>
<td>Discoloration of fabrics; inactivated by organic matter; toxic when mixed with ammonia</td>
</tr>
<tr>
<td>Quaternary ammonium compounds</td>
<td>EPA registered; surface compatible; active against many bacteria, enveloped viruses, and fungi</td>
<td>Not sporicidal*; not effective against non-enveloped viruses; water hardness and cotton can make it less microbiocidal</td>
</tr>
<tr>
<td>Improved hydrogen peroxide</td>
<td>EPA registered; non staining; surface compatible; excellent coverage of organisms; benign for environment; often sporicidal</td>
<td>Expensive</td>
</tr>
<tr>
<td>Phenolics</td>
<td>EPA registered; active against many bacteria, enveloped viruses, and fungi; inexpensive</td>
<td>Not sporicidal*; tissue irritant</td>
</tr>
<tr>
<td>Alcohol</td>
<td>Good organism coverage; easy to use; works on small surfaces (e.g., rubber stoppers on medication vials)</td>
<td>Not EPA registered; not sporicidal; no detergent or cleaning properties</td>
</tr>
</tbody>
</table>

*Sporicidal agents are effective against bacterial and fungal spores, such as those produced by C. difficile and mold.

4. HOW TO SAFELY WORK WITH BLEACH

Common household bleach is an effective and economical product; however, it must be used correctly. Follow the instructions below to safely use bleach to disinfect your school.

1. CHECK THE BLEACH CONCENTRATION BEFORE MIXING WITH WATER:
   - Concentrations sold are 5.25% to 8.25% sodium hypochlorite.
   - Verify that the mixing instructions for bleach to water ratio are corrected to reflect the concentration.
   - Follow the instructions on the label or use the ratio calculator to determine the correct ratio of bleach to water. Ratio Calculator (omnicalculator.com)

2. MIX BLEACH IN THE APPROPRIATE CONCENTRATION FOR THE TASK:
   - Using the omnicalculator above and the concentration from the bleach label, you can learn how to mix appropriately the volume of final bleach solution to the concentration appropriate for the task. Instructions may also be on the bleach label.
   - To sanitize, use bleach concentrations of 50-100 parts per million (ppm)
   - To disinfect, use 500-615 ppm
   - For blood spills, use 5,000-6,150 ppm

3. KNOW HOW BLEACH CAN LOSE ITS EFFECTIVENESS:
   - Bleach can become deactivated by heat, light and organic material. Therefore, it is important to:
     - Store bleach between 50 - 70 degrees F
     - Keep the product out of sunlight.
     - Use opaque containers after mixing.

4. USE THE FOLLOWING SAFETY PRECAUTIONS:
   - Use cool water when mixing (hot water can deactivate it)
   - Clean the surface of organic material prior to disinfecting with bleach.
   - Bleach has a short shelf life of 1 year – stock accordingly.
   - The bleach product starts degrading as soon as it is mixed.
     - Discard 24 hours after mixing and make fresh daily.
     - Include date and time when mixed.

Disinfectants used for environmental disinfection
https://www.ajicjournal.org
Cómo leer la etiqueta de un desinfectante

**Ingredientes activos:**
¿Cuáles son las principales sustancias químicas desinfectantes?

**Número de registro de la EPA:**
La legislación de los EE. UU. exige que todos los desinfectantes estén registrados en la EPA.

**Instrucciones de uso:**
¿Dónde se usa el desinfectante?
¿Qué microbios mata el desinfectante?
¿En qué tipos de superficies se puede usar el desinfectante?
¿Cómo uso adecuadamente el desinfectante?

**Tiempo de contacto:**
¿Durante cuánto tiempo debe permanecer húmeda la superficie con el desinfectante para matar los microbios?

**Palabras de advertencia (Precaución, Advertencia, Peligro):**
¿Qué tan peligroso es este desinfectante si se ingiere, inhala o absorbe a través de la piel?

**Avisos de precaución:**
¿Cómo uso este desinfectante de manera segura?
¿Debo usar un equipo de protección personal (EPP)?

**Primeros auxilios:**
¿Qué debo hacer si mis ojos, boca o piel entran en contacto con el desinfectante o si lo inhalo?

**Almacenamiento y eliminación:**
¿Cómo se debe guardar el desinfectante? ¿Cómo se deben eliminar los desinfectantes vencidos? ¿Qué debería hacer con el envase?

**Cómo leer la etiqueta de un desinfectante**

*Lea toda la etiqueta. ¡La etiqueta es lo que vale!*

Nota: A continuación, se muestra un ejemplo de la información que puede encontrarse en la etiqueta de un desinfectante.
SAFETY MEASURES

WHEN USING THESE PRODUCTS, IT IS BEST PRACTICE TO TAKE THE FOLLOWING STEPS:

- Open doors and windows in the affected area to let in fresh air or use exhaust fans to pull disinfectant vapors away.
- Use fans or HVAC (heating, ventilation, and air conditioning) settings to increase air circulation.
- Wear recommended PPE while mixing and using products including:
  - Gloves: Wear gloves when using disinfectants and wash hands after removing gloves.
  - Eye protection: Wear goggles (best) or a face shield to protect eyes and mucous membranes from possible splashes.
  - Gown: Gowns can be worn to protect the skin.
- Follow the product instructions on how to dilute the product with water, and use room temperature water unless otherwise specified.
- Clearly label all cleaning or disinfection solutions if mixing and placing them into a container other than the manufacturers. Include:
  - Date and time solution mixed
  - Name of product and/or chemical
  - Health hazard warnings
  - Physical hazards (e.g., flammable)
  - Name and address of chemical manufacturer
- Store and use chemicals out of reach of children and animals. Keep products locked away and lids tightly closed.
- Do not mix products or chemicals! These products can cause serious harm. (e.g., toxic fumes)
- Remove gloves and wash hands with soap and water for 20 seconds immediately after disinfecting.
- Disinfectants such as bleach or products with fragrances can trigger asthma attacks. People with asthma who are disinfecting should limit exposure to bleach or choose another disinfectant such as hydrogen peroxide.
- Determine your school schedule for cleaning and disinfecting to avoid overuse of products.

RESOURCES

Follow the QR code to access the links for the additional resources.

- Protect Yourself: Cleaning Chemicals and Your Health (osha.gov)
- Safer Choice Fact Sheet - Schools (epa.gov)
- US EPA - Cleaning and Disinfecting Best Practices During the COVID-19 Pandemic
- Six Steps for Safe & Effective Disinfectant Use (epa.gov)
- Common Asthma Triggers - Cleaning and Disinfection | CDC
- National Resource Center for Care and Safety in Child Care and Early Education Caring for our Children, National Health and Safety Performance Standards
  - Chapter 3: Cleaning, Sanitizing, and Disinfecting: https://nrckids.org/CFOC/Database/3.3.0.1
Making sure school buildings have adequate ventilation and air filtration is of paramount importance for the health and well-being of students, educators and their families. Reducing indoor air pollution and reducing the amount of viral and bacterial pathogens spread through the air is critical to ensure a healthy and safe environment. Indoor air pollutants are a significant health hazard, and infectious outbreaks are more likely to spread in school areas with poor ventilation and filtration. Adequate ventilation and filtration can be achieved through a variety of engineering practices combined with air filters, purifiers and HEPA machines. It can be efficiently assessed and monitored through techniques described below.

**INDOOR AIR QUALITY BEST PRACTICES FOR SCHOOLS**

- **Verify routine maintenance of HVAC System with maintenance staff.**
  - Filters changed as instructed by the manufacturer.
  - HVAC Systems are routinely serviced.
  - **Air Exchanges** are maximized to allow the system to bring in as many air exchanges as possible. EPA recommendations are to aim for a minimum of 5 air exchanges per hour.
  - Verify **HEPA filter with MERV rating of 13 (minimum)** is being utilized. Some systems may not handle higher MERV filters.

- **Use CO2 monitors to evaluate room air quality.**
  *Readings below 800 ppm indicate adequate air quality.*

- **Utilize Air Purifiers, Air Sanitizers, HEPA Machines to filter and clean the air in the room as a supplement to your schools HVAC system as needed.**
  - Change filters according to instructions from manufacturers.

- **Bring in as much outdoor air as possible:**
  - If it is safe to do so, open windows and doors. Even just cracking a window or door helps increase outdoor airflow!
  - Use child-safe fans to increase effectiveness of open windows.
<table>
<thead>
<tr>
<th>WORD</th>
<th>DEFINITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACTIVATED CARBON FILTER</td>
<td>Filter utilized to filter gas particles.</td>
</tr>
<tr>
<td>AIR EXCHANGES</td>
<td>Refers to the number of times per hour that fresh air is delivered through the HVAC system. Aim for a minimum of five air changes per hour.</td>
</tr>
<tr>
<td>BIPOLAR IONIZATION</td>
<td>A technology that can be used in HVAC systems or portable air cleaners to generate positively and negatively charged particles to remove viruses. Produces ozone, which is an irritant to the airways. Not recommended by the EPA.</td>
</tr>
<tr>
<td>CADR</td>
<td>Clean Air Delivery Rate. Rating for the size of room or area that particles are filtered. The higher the rating, the higher the size of room it can filter. Measured in cubic meters per hour.</td>
</tr>
<tr>
<td>CO₂ MONITORS</td>
<td>Humans take in oxygen and release carbon dioxide (CO₂). The room’s CO₂ reading can be an indicator of how well-ventilated space is and if more fresh air needs to be brought in. Outside air reads around 400 parts per million (ppm), exhaled air reads around 40,000 ppm. Note that CO₂ is not an indicator of overall air quality.</td>
</tr>
<tr>
<td>FILTRATION</td>
<td>The action or process of removal of particles in the air. Air purifiers, air sanitizers, and HEPA machines are designed to filter the air in a single room. They work best with windows and doors shut.</td>
</tr>
<tr>
<td>HEPA FILTER</td>
<td>High Efficiency Particulate Air Filter. A filter that removes particles (including viruses) from the air. <a href="https://www.epa.gov/indoor-air-quality-iaq/what-hepa-filter">https://www.epa.gov/indoor-air-quality-iaq/what-hepa-filter</a></td>
</tr>
<tr>
<td>MERV RATING</td>
<td>Minimum Efficiency Reporting Value. The measurement used to report effectiveness of a filter. The higher the rating the smaller the particles are that can be removed from the air.</td>
</tr>
<tr>
<td>UVGI</td>
<td>Ultraviolet Germicidal Irradiation. UV kills or inactivates viral particles. Utilized in the return air ducts or upper room near the ceiling. UV light can be harmful to the eyes and skin.</td>
</tr>
<tr>
<td>VENTILATION</td>
<td>Systems that supply warm or cooler air to the building. Ventilation systems need to be cleaned and services to meet code requirements.</td>
</tr>
</tbody>
</table>

**RESOURCES**

- [EPA Ventilation Checklist](#)
- [Ventilation in Schools and Child Care Programs](#)
- [CDC.gov](#)
- [Guidance to control airborne infection risks](#)
Indoor air pollution is ranked among the top five environmental risks to public health. Good indoor air quality (IAQ) contributes to a favorable environment for students, improved teacher and staff performance and a sense of comfort, health and well-being. In combination, these elements empower schools in meeting their core mission — educating children.

Scan the QR Codes below to access each resource, or scan the code to the right to explore EPA’s Creating Healthy Indoor Air Quality in Schools website.

**Framework for Effective School IAQ Management**

This framework provides detailed guidance on the proven strategies, organizational approaches and leadership styles that are fundamental to school IAQ management effectiveness.

**IAQ Tools for Schools Action Kit**

This Action Kit shows schools how to carry out a practical plan to improve indoor air problems at little- or no-cost using straightforward activities and in-house staff. It provides best practices, industry guidelines, sample policies and a sample IAQ management plan.

**IAQ Tools for Schools Preventive Maintenance Guidance Document**

This guide walks readers through straightforward steps to develop and implement a sustainable indoor air quality preventive maintenance plan for their school districts.

**On-Demand Training Webinars**

The IAQ Tools for Schools Program hosts web-based trainings that provide school district staff across the country with the knowledge needed to start, improve or sustain an IAQ school management program. Pre-recorded webinars are available in the following topic series:

- IAQ Master Class Professional Training
- IAQ Knowledge-to-Action Professional Training
- Healthy Indoor Environments in Schools
- Energy Savings Plus Health
Proven Strategies to Improve Indoor Air Quality in Schools

Putting strategies in place to ensure adequate ventilation and filtration in school buildings is critical for providing healthy indoor air to students and staff. To reduce pollutants in the air and limit the spread of viruses and bacteria, schools should maximize ventilation rates to the extent possible by bringing in as much outdoor air as weather and outdoor air quality permit. When sufficient HVAC adjustments are not possible, consider other means of bringing in outdoor air, and also consider increasing HVAC filter efficiency and using portable air cleaners as a supplemental filtration strategy.

Increase Ventilation Rate

- Conduct an HVAC assessment to evaluate the condition of the existing HVAC system components and unit ventilation equipment.
- Ensure a scheduled inspection and maintenance program for HVAC systems is in place to allow for repair, modification or replacement of equipment.¹
- Assess and service your ventilation system to ensure it continues to perform as designed.
- Adjust the HVAC system to bring in more outdoor air.
- When HVAC adjustments are not possible, consider other means of bringing in outdoor air, such as opening windows and using window fans, if weather and outdoor air quality permit.
- Keep unit ventilators clear of books, papers and other items that could reduce airflow.

Increase HVAC Filter Efficiency

- Increase filter efficiency in existing HVAC systems by using filters with the highest Minimum Efficiency Reporting Value (MERV) rating possible (per equipment specifications). If possible, increase the level of the air filter to MERV 13 or higher.
- Make sure the filters are sized, installed and replaced according to the manufacturer’s instructions.

Supplement with Portable Air Cleaners

- Consider using portable air cleaners as a supplemental filtration strategy. Choose portable air cleaners that use proven technology and are appropriately sized for the spaces they will service. Replace filters according to the manufacturer’s instructions.
- Do not use air cleaners that intentionally generate ozone in occupied spaces or that do not meet state regulations or industry standards for ozone generation.
- If air cleaners are used, they should be placed so that air is not blown directly from one person to another, as this could potentially facilitate the spread of viruses and bacteria to others. Air flow to and from air cleaners should not be obstructed.

¹ Ensure HVAC assessments and maintenance are in accordance with minimum inspection standards of the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)/Air Conditioning Contractors of America (ACCA) Standard 180, ASHRAE handbooks, or other equivalent standards and guidelines.

epa.gov/iaq-schools
Even Animals Wash Their Hands by Colton from Bellevue
INFECTION PREVENTION CONSIDERATIONS FOR PETS/ANIMALS

Consulting a veterinarian, pediatric health professional, or other health professionals should be considered prior to approval of any classroom pets for appropriateness of animal selection and care.

ALLOWABLE ANIMALS:
- Older than one year
- Not aggressive
- Adapted to be with young children
- Show no evidence of disease, fleas, ticks, or poor health
- Fully immunized and on intestinal parasite control plans
- Can show proof of vaccines
- Have maintained treatment

CLEANING ANIMAL HABITATS:
- Ensure living areas are enclosed
- Do not wash or fill animal feeding dishes in any sink used for human food preparation.
- Clean out waste by an adult (not when handling food).
- Remove animal waste immediately in a sealed plastic bag/container or flush it in a toilet.
- Do not allow pregnant women to handle cat waste or litter.
- Aquariums should be cleaned by adults only.
- Salmonella and E. coli
  - Can be spread by not only touching the animals, but also from their habitat or any areas that they are allowed to roam.
  - Wash hands with soap and water after contact with the animal and/or environment - supervise younger children.
  - Supervise all contact between children and animals to prevent close contact between the animal and children's faces.
  - Clean and disinfect all areas where the animal has been.

IF THE ANIMAL BITES SOMEONE:
- Wash wounds with warm soapy water immediately.
- Seek medical attention if:
  - The animal appears sick.
  - You don’t know if the animal has been vaccinated against rabies.
  - The wound is serious.
  - The wound becomes red, painful, warm or swollen.
  - It has been more than five years since your last tetanus shot.
- Contact animal control. The animal may need to be quarantined or observed by a veterinarian. It should be moved to a safe place away from students and staff. See link (QR code) below for more information.

NOTE
THERE ARE RULES ON MANDATORY REPORTING YOU NEED TO KNOW.

Resources:
- Animals in Schools and Daycares
  www.cdc.gov/healthypets
- Infectious diseases in childcare settings and schools manual, Section 2: Pets in Childcare Settings and Schools. Link to manual on page 33.
Did you play with the class pet today?

Animals sometimes carry germs that can make you sick, even if they look clean and healthy. Follow these steps to stay healthy around your class pet, whether it’s covered in fur, feathers, or scales!

1. Wash your hands with soap and water for 20 seconds after touching your pet. Need a timer? Hum the “Happy Birthday” song twice.

2. Don’t kiss or hold pets close to your face. This is one of the most common ways for germs to get into your body.

3. Don’t eat or drink near pets.
It is important for staff to understand good hygiene practices when it comes to diapering students. The poster on the right from CDC shows the basics for diapering in child care settings. For information on best practices in the school setting, see Diapering from the Minnesota (Hennepin County) Infectious diseases in childcare settings and schools manual Section 2 Guidelines: Environment. The text below contains guidelines from this manual. https://www.hennepin.us/childcaremanual

BASIC PRINCIPLES

- Change diapers in a designated diapering area.
- Follow safety procedures and do not leave children unattended.
- Use surfaces that can be easily cleaned and disinfected.
- Use a separate area for diapering that is away from medication, food storage, food preparation, and eating areas.
- Dispose of soiled diapers in a “hands-free” covered waste container.
- Wash hands of both staff and children after diapering.
- Do not allow objects such as toys, blankets, pacifiers, or food in the diapering areas.
- Consult with your school nurse for any special diapering issues
SAFE AND HEALTHY DIAPER CHANGING STEPS IN CHILDCARE SETTINGS

Keep a hand on the child for safety at all times!

1. PREPARE
   - Cover the diaper changing surface with disposable liner.
   - If you will use diaper cream, dispense it onto a tissue now.
   - Bring your supplies (for example, clean diaper, wipes, diaper cream, gloves, plastic or waterproof bag for soiled clothing, extra clothes) to the diapering area.

2. CLEAN CHILD
   - Place the child on diapering surface and unfasten diaper.
   - Clean the child’s diaper area with disposable wipes. Always wipe front to back!
   - Keep soiled diaper/clothing away from any surfaces that cannot be easily cleaned. Securely bag soiled clothing.

3. REMOVE TRASH
   - Place used wipes in the soiled diaper.
   - Discard the soiled diaper and wipes in the trash can.
   - Remove and discard gloves.

4. REPLACE DIAPER
   - Slide a fresh diaper under the child.
   - Apply diaper cream, if needed, with a freshly gloved finger.
   - Fasten the diaper and dress the child.

5. WASH CHILD’S HANDS
   - Use soap and water to wash the child’s hands thoroughly.
   - Return the child to a supervised area.

6. CLEAN UP
   - Remove liner from the changing surface and discard in the trash can.
   - Wipe up any visible soil with damp paper towels or a baby wipe.
   - Wet the entire surface with disinfectant; make sure you read and follow the directions on the disinfecting spray, fluid, or wipe. Choose disinfectant appropriate for the surface material.

7. WASH YOUR HANDS
   - Wash your hands thoroughly with soap and water.

Centers for Disease Control and Prevention
National Center for Emerging and Zoonotic Infectious Diseases
**ORAL HEALTH**

Schools can offer interventions to provide a healthy environment and reduce the risk of infectious diseases in students, such as the measures mentioned previously in this chapter (e.g., encouraging handwashing, regular cleaning and disinfecting). One area many people do not think about is schools being able to help students prevent infections by promoting oral health. Although cavities are largely preventable, they are one of the most common chronic diseases throughout the lifespan. Untreated tooth decay can lead to acute pain and localized infections (abscesses near the gumline) that can spread into facial spaces creating a regional cellulitis that can have serious life-threatening consequences.

Tooth decay causes more missed days of school than any other chronic health problem. In fact, the CDC states on average, 34 million school hours are lost each year because of emergency dental care. School staff should be aware of the importance of good oral health for students to prevent problems that could result in pain, absences, and poor overall health.

**HERE ARE SOME FACTS SCHOOLS SHOULD KNOW:**

- Oral health is essential to general health and well-being.
- Nearly half of Nebraska children will experience tooth decay before entering kindergarten.
- Untreated cavities can cause pain and infections that may lead to problems with eating, speaking, sleeping, socializing, and learning.
- Children in low-income households have much higher rates of untreated cavities as higher-income children.
- Decay rates are higher for Nebraska children living in rural areas compared to urban children; however, this disparity has declined in recent years due to an increase in access to rural dental disease prevention services through local health departments. See the figure below from the Nebraska Oral Health Survey of Young Children - 2021-2022.

**NEBRASKA ORAL HEALTH SURVEY OF YOUNG CHILDREN 2021-2022**

*Figure 7: Prevalence of decay experience and untreated decay among Nebraska’s Third Grade Children by survey year and county population density, 2015-2016 vs. 2022-2023*

**DECAY EXPERIENCE GEOGRAPHIC DISPARITY REDUCED**

- Decay Experience 2015-2016: 81% Rural, 55% Urban
- Decay Experience 2022-2023: 66% Rural, 54% Urban

**UNTREATED DECAY GEOGRAPHIC DISPARITY ELIMINATED**

- Decay Experience 2015-2016: 53% Rural, 21% Urban
- Decay Experience 2022-2023: 25% Rural, 24% Urban
WHAT SCHOOLS CAN DO TO IMPROVE ORAL HEALTH:

DENTAL SCREENING

› School nurses can annually screen students for dental problems that may be painful and interfere with learning. Use this chart to reference when doing dental screening at your school.
  • Dental Screening Reference Chart (ne.gov)

REFERRALS

› Schools can connect families with dental homes, or low-cost dental clinics. Below are brochures that schools may provide parents to help them find affordable access to dental care.
  • A Medical/Dental Home for Your Child (ne.gov)
  • Un hogar médico y dental para su hijo (ne.gov)
  • Nebraska Dental Public Health Clinics Brochure.pdf

EDUCATION

› Schools can educate students on the importance of good nutrition and proper daily oral hygiene to prevent dental problems which can be painful, expensive, and lead to missed days of school.

DENTAL FLUORIDE AND SEALANTS

› Staff may educate children and parents about how topical fluoride applications and dental sealants can work together to reduce tooth decay by 60-80%.
› Schools may also host dental fluoride and sealant clinics, a great way to prevent cavities and keep children in school, especially in areas of the state that lack access to dental care. For assistance, contact your Local Health Department.
  • Dental Sealants Brochure.pdf (ne.gov)
  • Dental Sealants Brochure - Spanish Version.pdf (ne.gov)
  • Fluoride Varnish brochure
    (link to Fluoride Varnish Brochure.pdf (ne.gov)
  • Fluoride Varnish brochure – Spanish version Flouride Varnish Brochure Spanish Version.pdf (ne.gov)

Brochures above are available under “Resources” on the DHHS Oral and Dental Health website or follow the QR code to access the links.
**Part 1 /// PREVENTION**

**FAMILY & COMMUNITY ENGAGEMENT**

Research shows that school health activities are more successful when parents are involved. The authors of this manual believe that engaging students, parents and the community are crucial for schools’ infection prevention efforts to be successful. For more information about how schools can engage families and community, see Parents for Healthy Schools | Healthy Schools | CDC and Whole School, Whole Community, Whole Child (WSCC) | Healthy Schools | CDC.

To learn more about Family & Community Engagement in Nebraska, see https://www.education.ne.gov/FAMILY/.

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**STAFF HEALTH AND SAFETY**

**KEEPING STAFF WELL:** School staff need a healthy and safe environment to work, which can be challenging in crowded spaces. This book provides multiple strategies for reducing the risk of disease transmission within the school building and preventing staff illness, such as the “PPE and Staff Safety Considerations” in Part 4, and the OSHA Bloodborne Pathogen standard in Part 5. Below are additional strategies school staff and administrators may consider.

**SICK LEAVE:** Staff and students alike need to stay home when sick to prevent the spread of diseases. To encourage this, schools should allow flexible and supportive paid sick leave for staff. District policies for sick leave should support workers caring for a sick family member. Policies should also encourage sick workers to stay home without fear of retaliation, loss of pay, loss of employment, or other potentially negative impacts.

**FALL AND WINTER VIRUS SEASON PREPARATIONS:** Illnesses like RSV, COVID-19, and influenza infect hundreds of thousands of people during the fall and winter virus season. There are ways to keep staff well, including:

- **SAFE, UPDATED IMMUNIZATIONS** – For the first time ever, immunizations are available for all three major fall and winter respiratory diseases – flu, COVID-19, and RSV. Having staff up to date on these vaccines can prevent illness and keep teachers and students in school.
  - Go to vaccines.gov to locate flu or COVID-19 vaccines

- **WIDELY AVAILABLE, EFFECTIVE TREATMENTS** – Treatments are available for flu and COVID-19 that can reduce severe illness, hospitalization, and death. School staff should contact their healthcare providers when ill to see if treatments may be right for them.

- **TESTING** – Tests, some of which can be used at home, can quickly detect these respiratory viruses so staff do not delay treatment and other actions that can protect their family, students, friends, and coworkers.
  - Every U.S. household can order 4 more free COVID-19 self-tests by going to covidtests.gov Check for current availability of tests.
  - Expiration dates on many home COVID tests have been extended

- **COMMON-SENSE MEASURES** – Other tools like masking, physical distancing, washing hands, and improving airflow in classrooms can provide an additional layer of protection.

Source: Resources to Prepare for Flu, COVID-19, and RSV | CDC
SCHOOL NURSE STAFFING

One aspect of prevention that should be considered by administrators is whether they have adequate staffing in the health office. Because most infection prevention activities are carried out by the school nurse, it would benefit the health of the students and staff to have nurses and health office staff who can take on these responsibilities. However, recent data from the Nebraska Centers for Nursing show that many school nurses are taking care of more students than is recommended by the CDC. Their report, “Bridging the Gap: Advancing Health Equity through Nursing Practice” advocates for lower nurse to student ratios to meet the health needs of students. (Francis & Ramírez, 2023)

<table>
<thead>
<tr>
<th>Geographic location (a)</th>
<th># Students (b)</th>
<th># School Nurses (FTE) (c)</th>
<th>Ratio school nurse per student</th>
<th>Ratio school nurse/student recommended by CDC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>66,467</td>
<td>65.8</td>
<td>1,011</td>
<td>750</td>
</tr>
<tr>
<td>Urban Large</td>
<td>217,018</td>
<td>206.5</td>
<td>1,051</td>
<td>750</td>
</tr>
<tr>
<td>Urban Small</td>
<td>79,988</td>
<td>67.1</td>
<td>1,192</td>
<td>750</td>
</tr>
<tr>
<td>TOTAL</td>
<td>363,473</td>
<td>Rural</td>
<td>1,071</td>
<td>750</td>
</tr>
</tbody>
</table>

*These are not official numbers (own elaboration)

- a Geographic location based on NE DHHS (2016).
- b Nebraska Department of Education. 2022/23 County Membership by Grade.
- c FTEs calculated on 40 hours worked per week based on the 2021 LPN Renewal Survey and 2022 Nebraska RN Renewal Survey (Nebraska Center for Nursing).

Another recent data report, “Nebraska School Nurse Pandemic Response,” analyzed the amount of new responsibilities school nurses took on in addition to their regular duties to keep their school communities safe during the pandemic. The following page shows a snapshot of the types of activities school nurses performed as the health leaders for their schools. Together these data demonstrate the need for proper health office staffing to meet the acute needs of schools during the pandemic and the ongoing need to address social determinants of health.

References:
See also: School Nurse Workload: Staffing for Safe Care - National Association of School Nurses (nasn.org)
What did Nebraska School Nurses Do During the Pandemic?

**Performed Infection Prevention Activities**
- Excluded students with signs and symptoms of COVID-19 (90%)
- Performed infection prevention activities (78%)
- Did contact tracing (71%)
- Conducted daily temperature checks (50%)

**Advised and Trained Staff**
- Advised school administrators (82%)
- Trained staff on COVID-19-related tasks (64%)
- Contributed to school’s reopening plan (49%)
- Created school policies related to COVID-19 (40%)

**Communicated with and Educated School Community**
- Provided education to school community on COVID-19 guidelines or infection control practices (70%)
- Informed school community of positive cases (63%)
- Provided education to school community on COVID-19 vaccines (54%)
- Communicated facts about COVID-19 or vaccination on schools social media (27%)
- Communicated facts about COVID-19 or vaccination in school newsletter (24%)

**Collaborated with Public Health**
- Collaborated with Local Health Departments (77%)
- Reported COVID-19 cases to Local Health Departments (67%)
- Hosted or helped arrange a school vaccine clinic (42%)

**Provided Direct Care for Students**
- Administered COVID-19 tests at school (21%)
- Gave vaccinations at school vaccine clinics (15%)
- Provided compassionate care to all sick children in their Health Offices

Source: *Nebraska School Nurse Pandemic Report, Spring 2023*
# WSCC FRAMEWORK

Strategies for Using the Whole School, Whole Community, Whole Child (WSCC) Framework to Prevent Infectious Diseases in School

<table>
<thead>
<tr>
<th>WSCC COMPONENT</th>
<th>SCHOOL HEALTH SERVICES STRATEGIES</th>
</tr>
</thead>
</table>
| Health Services                | • Deliver clinical services to students with infectious diseases.  
• Educate students and their caregivers about infectious diseases and how to prevent them. Coordinate with external health care providers or Local Health Departments.  
• Train appropriate school staff on how to identify students with infectious diseases and how to prevent spread of disease in school.  |
| Nutrition Environment and Services | • Provide healthy food options for children. Healthy eating can boost immunity and reduce risk of dental cavities. Emphasize the role of good nutrition in oral health and disease prevention. |
| Physical Education and Physical Activity | • Encourage all students to participate in physical activity, as it may help reduce the risk of serious outcomes from infectious diseases, including COVID-19, the flu, and pneumonia. Benefits of Physical Activity | CDC |
| Health Education               | • Make sure that students get information on preventing infectious disease (such as handwashing, covering your cough, etc).  |
| Community Involvement           | • Involve local hospitals, health departments, and community health centers in school health initiatives.  
• Connect with out-of-school programs about access to health services and identifying and preventing the spread of infectious diseases. |
| Family Engagement               | • Give parents opportunities to learn about identifying, managing, and preventing infectious diseases and school health services.  
• Communicate with families when there are disease outbreaks in school.  
• Make sure parents know when to keep their children home from school. |
| Employee Wellness               | • Create a healthy work environment for staff.  
• Encourage school staff to model healthy behaviors and to stay home when sick.  
• Provide paid sick leave for staff to prevent spread of infectious diseases in schools. |
| Physical Environment            | • Provide a safe physical environment, both outside and inside school buildings, by ensuring proper cleaning and disinfecting, ventilation, and limiting exposure to chemicals and pollutants. |
| Social and Emotional Climate    | • Promote a positive school climate where respect is encouraged and students can seek help from trusted adults.  |
| Counseling, Psychological, and Social Services | • Identify and provide care to students with emotional, behavioral, mental health, or social needs.  
• Help students cope with the stress of personal or family illnesses, disease outbreaks, or the pandemic.  
• Provide or refer students and families to school- and community-based counseling services when needed. |

To learn about the WSCC framework, see: Whole School, Whole Community, Whole Child (WSCC) | Healthy Schools | CDC  
To learn about WSCC in Nebraska, see: Whole School, Whole Community, Whole Child – Nebraska Department of Education  
Adapted by Andrea Riley, BSN, RN Nebraska State School Nurse Consultant from “Strategies for Using the WSCC Framework, School Health Services” by CDC Healthy Schools.
The purpose of this document is to provide general recommendations to schools to provide a safe and healthy environment for students and staff.

What Schools Can Do:

Be Prepared:
Consider stocking up on infection prevention and control supplies such as:
- Facial tissue
- Adult and child-size masks
- Hand sanitizer
- Disinfectant wipes
- Tests for illness

Implement plan to monitor illnesses:
- Consider creating tracking sheet to monitor whether students are sick from gastrointestinal illness, respiratory illness, or other ailments
- If your school has never been part of the school absenteeism surveillance system before, enroll HERE

Implement plan regarding blood and body fluid spills:
- Instruct staff about bloodborne pathogens
- Stock personal protective equipment
- Instruct staff on proper cleaning and disinfection of blood and body fluid spills

Improve ventilation and indoor air quality:
Ensure HVAC units have preventative maintenance and settings on ventilation.
Consider an update that includes use for smoke/air quality concerns.
Consider posting traffic flow guidance for periods of increased illness.

For schools that have portable HEPA machines:
- Ensure air filtration units are functional
- Air filtration filters of the appropriate size available and changed according to manufacturer’s directions
- Placement guidance available (such as when to use, and where to place in classroom)

Implement Advanced Control Measures During Periods of Increased Infections:
Consider the following measures if an outbreak occurs or if 10% or more of students are absent:
- Contact local health department for assistance
- Increase frequency of cleaning and disinfection
- Limit traffic flow
- Use portable HEPA filter machines in classrooms or other areas
- Screen for symptoms of illness & decide on exclusion directives related to infection and/or symptoms
- Test for specific illness (for example, sending a test home with a symptomatic student)
- Support use of masks by staff members and/or students
  - Prioritize for people with symptoms or who may be immunodeficient
Tips for a Healthy School Year

What Staff and Students Can Do:

Wash your hands! One of the most important ways staff and children can stay healthy is keeping their hands clean throughout the day. School programs promoting hand hygiene result in fewer missed days of school due to illness.

Hand Hygiene:
- Decide on when and where to post signage.
- Stock up on soap, supplies, paper towels.
- Share student activity ideas with teachers.

Keep Up-To-Date on Vaccines:
Protect yourself and others by getting your flu and COVID-19 vaccines (find them at www.vaccines.gov).
For students, see vaccine schedule for children.
- Refer students in need of immunizations to their local health department or vaccines for children provider if they are uninsured or under-insured.
For staff, see current recommendations for adult immunizations, including pneumococcal and the RSV vaccine for adults 60 years of age and older.

Test & Isolate:
Symptomatic staff and students should get tested for COVID-19.
- If found to be positive, they should begin isolation immediately and isolate for at least 5 days, then wear a mask for an additional 5 days.
- Consider asking those exposed to COVID-19 to wear a mask for at least 5 days after exposure.

Further Information & Resources:
- ASHRAE: School Technical Resources
- CDC: COVID-19 Exposure Calculator
- CDC: Isolation & Precautions for People with COVID-19
- CDC: Seasonal Flu Information for Schools & Childcare Providers
- CDC: Ventilation in Schools and Childcare Programs
- DHHS: Immunizations
- DHHS: Seasonal Respiratory Diseases
- ICAP: Kids Health Zone: Hand Hygiene
- ICAP: Kids Health Zone: Ventilation
- NDE: School Health Services - Nebraska Department of Education
- US EPA: Creating Healthy Indoor Air Quality in Schools

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PART 02
Included in this section:

45 Enhanced Cleaning for Schools
4 Respiratory Disease Outbreaks
64 Gastrointestinal Disease Outbreaks
Germs in Jail by Quinn from Ansley
ENHANCED CLEANING FOR SCHOOLS

Follow standard policy and procedures for standard routine cleaning and disinfection processes (see Chapter 1). Enhanced cleaning occurs during periods of outbreak in the school or when community levels of an illness are higher than normal (i.e., respiratory illness season) or facility experiences cases of infectious diseases. Consider using enhanced cleaning measures in classrooms or areas where the identified outbreak has occurred as opposed to the entire building. For example, a child or children identified with a diarrheal outbreak are from the same classroom. Enhanced cleaning/disinfection of high touch surfaces in that classroom and designated bathroom is completed more frequently. Disinfection does not replace good hand hygiene practices but reduces the spread of viral particles on surfaces.

WHAT NEEDS TO BE IN ENHANCED CLEANING POLICY?

*Prohibit teachers and school staff from bringing in their own cleaning products*

A List of cleaning and disinfection products should be pre-approved by the facility. A list of FDA-approved products should be available for use prior to an outbreak occurring. Include:

- Name of the product and organism and/or type of outbreak it is approved for use.
- Instructions for use (IFU) to follow:
  - Pay attention to whether pre-cleaning is required.
  - Wet a cloth with product and apply to surface, and assure the surface remains wet for the specified time (e.g., 1-10 minutes depending on product and organism).
  - Allow surfaces to air dry instead of wiping off if time allows.
  - Understand some surfaces may require a rinse with soap and water to remove residual disinfectants that can be toxic to children, plus any surface that food may touch will have to be cleaned after it is disinfected.
  - Store products out of the reach of children if kept in classrooms where children will be present.

Assign Responsibility: Specify who is responsible for each part and time of the process.

Training: Provide training to all staff who will be expected to clean and disinfect.

KEEP IN MIND

*Keep in mind that the best practice is to have trained custodial staff utilize disinfectant products. The authors of this handbook realize that school resources may not allow hiring of additional custodial staff during periods of outbreaks and other staff will need to assist.*

RESOURCES

US EPA - Cleaning and Disinfecting Best Practices EPA.gov

Cleaning for Healthier Schools ct.gov
**CHECKLIST OF HIGH TOUCH SURFACES**

Develop a checklist specific to your school. See sample disinfecting schedule for outbreaks below. Left columns are high-touch surfaces, middle columns are frequency, and right columns are for listing staff responsible for those areas.

### CLASSROOM

<table>
<thead>
<tr>
<th>Surface</th>
<th>MTWTF Frequency</th>
<th>Time</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Door Handle</td>
<td></td>
<td></td>
<td>Teachers/Enviromental Services Staff</td>
</tr>
<tr>
<td>Light Switches</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student Desks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work Tables</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learning Aids</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pencil Sharpener</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computer key-boards, mouse, track pads</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ABHR bottles</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faucets</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Childrens toys</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### LUNCHROOM

<table>
<thead>
<tr>
<th>Surface</th>
<th>MTWTF Frequency</th>
<th>Time</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tabletops</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chair arms</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rails, tray counters</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### LIBRARY

<table>
<thead>
<tr>
<th>Surface</th>
<th>MTWTF Frequency</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worktables</td>
<td></td>
<td>Librarian/Enviromental Services Staff</td>
</tr>
<tr>
<td>Pencil sharpener</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computer keyboards, mouse, trackpads</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Telephone headsets and buttons</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hands-on training aids</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Copier lid &amp; control panel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>File Cabinet &amp; Drawer pulls</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reading mats/ common areas should be specified</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faucets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Childrens toys</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### HALLWAYS:

<table>
<thead>
<tr>
<th>Surface</th>
<th>Frequency</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Door handles</td>
<td>Depends on school type and how often students are in the hallways between classes</td>
<td></td>
</tr>
<tr>
<td>Hand sanitizer dispensers</td>
<td>Elementary schools may be less often than middle and high schools</td>
<td></td>
</tr>
<tr>
<td>Water fountains &amp; dispensers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stairway handrails</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elevator buttons</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Enviromental Services Staff
**BATHROOMS/SHOWERS/LOCKER ROOMS**

<table>
<thead>
<tr>
<th>Surface</th>
<th>Frequency</th>
<th>Responsible Party</th>
</tr>
</thead>
<tbody>
<tr>
<td>Door Handle</td>
<td>Minimum of once a day</td>
<td>Coaches/PE teacher Environmental Services Staff</td>
</tr>
<tr>
<td>Light Switches</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lockers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Showers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benches</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**HEALTH OFFICE**

<table>
<thead>
<tr>
<th>Surface</th>
<th>Frequency</th>
<th>Responsible Party</th>
</tr>
</thead>
<tbody>
<tr>
<td>Door Handle</td>
<td>Per established facility routine protocol</td>
<td>Health Office staff/Environmental Services Staff</td>
</tr>
<tr>
<td>Light Switches</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chairs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Worktables/surfaces</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computer keyboards, mouse, track pads</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ABHR bottles/dispensers</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**BUS**

<table>
<thead>
<tr>
<th>Part</th>
<th>Frequency</th>
<th>Responsible Party</th>
</tr>
</thead>
<tbody>
<tr>
<td>Handles</td>
<td>Before and after students are seated, a minimum of daily</td>
<td>Bus Drivers</td>
</tr>
<tr>
<td>Seatback</td>
<td>Any time there is visible soiling or contamination of surfaces</td>
<td>Bus Drivers</td>
</tr>
</tbody>
</table>

**GYMS**

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Frequency</th>
<th>Responsible Party</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lift equipment</td>
<td>Before and after each practice when outbreak identified. Anytime surface contamination with body fluids occurs</td>
<td>Coaches/Environmental Services Staff</td>
</tr>
<tr>
<td>Wrestling mats</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balls</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
REGULATIONS AND REPORTING REQUIREMENTS

School nurses or those acting in the capacity of a school nurse must, in accordance with state and federal statutes:

- Notify the local public health department or the DHHS Division of Public Health of cases or suspected cases of reportable diseases or outbreaks and suspected outbreaks of diseases as affecting students and/or other school-affiliated personnel and which present a reasonable threat to the safety or health of a student and/or other school-affiliated personnel; and

- Cooperate with public health authorities in obtaining information needed to facilitate the investigation of cases and suspected cases, or outbreaks and suspected outbreaks of diseases affecting students and/or other school-affiliated personnel.

All information disclosed to a public health authority is confidential and not to be released to outside parties.

173 NAC 3-003 NE DHHS regulation requires that all children showing signs or symptoms of a contagious, or infectious disease be sent home as soon as safely possible.

- Children should not be allowed to return to school until the student no longer shows any signs of acute illness, or until they have been fever-free for 24 hours without the use of fever-lowering medication.

- Teachers are instructed to review signs and symptoms of communicable disease, including fever, flushed face, headache, aches in muscles and joints, unexplained tiredness or listlessness, nasal congestion, and sore throat.

- The minimum isolation and control methods for confirmed disease cases can be found in 173 NAC 3 attachment 1.

173 NAC 3-004 NE DHHS regulation requires the proper school authority, school board, or board of education, to be notified when a child is sent home due to a suspected contagious or infectious disease.

- When a school nurse identifies a case or suspected case of a disease that is required to be reported (in this instance a reportable respiratory infection), they must report the case to the LHD.

- For more information on preventing outbreaks in schools, administrators and teachers can reference the CDC's Guidance for School Administrators to Help Reduce the Spread of Seasonal Influenza in K-12 Schools, Cleaning and Disinfecting Schools in Flu Season, or Healthy Schools, Healthy People.

- It is important to recognize that many of the actions used to reduce spread of flu will also help slow the spread of other respiratory illnesses. More resources about preventing the spread of influenza in schools in Nebraska can be found on Flu Information for Schools.

Source: Reporting an outbreak (Title 173 1-007.04)

Included in this Section

- Regulations And Reporting Requirements
- Free Infection Prevention and Control Guidance for Schools Through Nebraska ICAP
- Absenteeism Surveillance System
- Screening Tips for Respiratory Disease Season Outbreaks
- Action Steps for Your School
- Communication Tips
- Suggestions On School Communication During a Respiratory Disease Outbreak (Table)
- Guidance For Parents On COVID-19 In English and Spanish
- Influenza Handout for Parents in English and Spanish
When a respiratory outbreak is identified, all Nebraska school districts can request infection control guidance and free consultations on infection control related issues from Nebraska’s Infection Control Assessment and Promotion Program (ICAP). For more information about ICAP and how to contact them, please visit the Nebraska ICAP website.

Infection Prevention and Control in NE Schools

**Nebraska ICAP** is working with DHHS to build and strengthen general Infection Prevention and Control capacity in Nebraska schools. *

- Perform **free** onsite and/or remote infection prevention and control (IPC) assessments in schools (upon request) to identify improvement opportunities
- Develop strategies, tools, and resources to help schools with identified IPC gaps mitigation
- Serve as a just-in-time resource to address IPC questions for school IPC program leaders
- Build basic IPC remote training program for school staff responsible for IPC activities in their settings

*The program is funded by Nebraska DHHS through an ELC grant.*

Visit us at:
icap.nebraskamed.com

To schedule a free IPC assessment for your school, contact us by email, form, or phone:

icap@nebraskamed.com

Complete this form

402-552-2881
8am – 4 pm
M-F

For more information:
SCHOOL ABSENTEEISM SURVEILLANCE SYSTEM

Schools are encouraged to take part in the Nebraska School Absenteeism Surveillance program to help DHHS track disease-related absences and to add to important statewide respiratory surveillance.

- Schools will complete a weekly survey that captures the number of absences, the number of schools/classrooms closed, and the reasons for absences.
- If your school is not currently enrolled in this surveillance program, please contact your local health department for steps on getting enrolled.
- For more information about our School Absenteeism Surveillance program, please contact your local health department.

Student Absences due to illness, by Week Ending Date, 2022-23

Student absences from the school year 22-23 from the Student Absenteeism Surveillance System
School Health Screening

Implementation Tips During Respiratory Disease Season Outbreaks

The purpose of this document is to provide general recommendations for student and staff safety as schools make plans to conduct the required school health screenings for hearing, vision, dental, and height and weight. If your school is experiencing an outbreak, postpone screenings until outbreak is over. Find the full text of the school health screening rules and regulations here: Title 173 Chapter 7.

Students:

- Hand hygiene: Have students wash hands or use hand sanitizer prior to screening.
- Face coverings: Students who are able to wear face coverings may do so for screening.
- Exclude students with symptoms of illness, such as vomiting, diarrhea, fever, and respiratory distress. Screen them when they are feeling better and symptom free.

Nurses and Other Screeners:

- Hand hygiene: Wash hands frequently or sanitize them frequently, such as, between students.
- Height/weight, hearing, and vision screening: Screener should wear a surgical mask or better (K95 or N95). Gloves and eye protection are considered optional but may be used. Wearing a face shield in addition to a mask is recommended when screening students that cannot wear a face covering.
- Dental screening: Screener should wear gloves, surgical mask or better (K95 or N95), and eye protection (safety glasses or face shield).

Cleaning and Disinfecting:

- Surfaces in direct contact with students should be disinfected between uses.
- High touch surfaces should be disinfected twice daily. A specific list of high touch surfaces should be made for each area.
- Consult the manufacturer’s directions for the best solutions for cleaning and disinfecting screening equipment. Any EPA-registered disinfectant is acceptable; however, know the contact time needed for proper disinfection. Considerations should be made to use disinfectants that are safer for students with asthma, such as using hydrogen peroxide or alcohol wipes rather than bleach.
- Disposable eye occluders may be used for vision screening. Frames for near vision screening can be disinfected with alcohol wipes. Disposable earpiece/headphone covers may be used for hearing screening. Audiometers and headphones should be cleaned and disinfected according to instructions from manufacturer. For weight screening, students should take their shoes off. Consider having each student place a paper towel on the scale before stepping on.
Implementation Tips During Respiratory Disease Outbreaks

Spacing, Environment, and Other Infection Control Tips:

- Schools may choose to screen smaller groups of students and space them throughout the year (screenings can be done at any time during the school year).
- Conduct screenings in a space large enough to accommodate physical distancing, is well ventilated, and has not been occupied by any sick student or staff. If available, use portable HEPA filters to augment existing ventilation. Multiple units may be needed for large spaces.
- Rooms where screenings are conducted should be thoroughly cleaned and disinfected before and after use.
- Use rooms with a separate entrance and exit when possible.
- Screenings can be conducted in the classroom so the students stay in place.
- For dental screenings, team a screener with a person to record results.
- Document the date, time, and location where screenings occur.
- School health teams should consider stocking infection prevention supplies for use during higher rates of illness. Supplies to consider include disinfectant wipes, adult and child sized masks, facial tissue, and alcohol-based hand sanitizer.

Reminders:

- Screening results may be taken from physical examination, visual evaluation, or dental examination reports if equivalent screening results are available and documented.
- The student may be excused from hearing, vision, and/or dental screening if the parent brings a signed statement from a physician, PA, or APRN stating that the child has had these screenings done in the past 6 months. Parents may refuse height and weight screening if they bring in a signed and dated statement of refusal (this must be done annually).
- Students opting for year-long remote learning still need to comply with screening regulations. They either need to come to school for screening or have a signed statement (see above).

Further Information:

- AAPOS: [Pediatric Vision Screening Guidance during the COVID-19 Pandemic](#)
- ASHA Audiology: [Infection Prevention and Control for Audiology Equipment](#)
- ASTDD: [School Nurses The Key to Good Oral Health During COVID-19](#)
- ASTDD/NASN: [Considerations for School Nurses in Return to School: Dental Screening](#)
- CDC: [Hand Hygiene in Schools](#)
- CDC: [Project Firstline (training for healthcare infection control)](#)
- EPA: [List N: Disinfectants for Use Against Sars-COV-2](#)
- Nebraska ICAP: [School Facility Resources](#)
- NASN: [PPE requirements for school nurses/health professionals](#)
- Prevent Blindness: [Considerations for Children’s Vision Screening Programs During the COVID-19 Pandemic](#)

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ACTION STEPS FOR YOUR SCHOOL DURING RESPIRATORY OUTBREAKS

IMPROVE VENTILATION AND INDOOR AIR QUALITY:

- Ensure HVAC units have preventative maintenance and settings on ventilation and consider an HVAC update that includes use for smoke/air quality concerns.
- Use portable HEPA filter machines in classrooms or other crowded areas; ensure air filtration units are functional and are the appropriate size for the area; and make sure filters are changed according to the manufacturer’s directions.
- See Ventilation section for more details (on page 26)

ENHANCED CLEANING MEASURES:

- See Enhanced Cleaning for Schools (on page 45)

SEPARATE HEALTHY STAFF & STUDENTS FROM THOSE WHO ARE SICK:

- Have a procedure in place for separating sick students and staff from those who are well and for informing parents. Share procedures with parents and students ahead of time.
- Designate a specific area in the school (e.g., near the entrance) where children with signs and symptoms of respiratory illness can wait to be picked up. Follow these tips:
  - Keep the area well-ventilated.
  - Ensure school nurses or staff are present.
  - Provide the sick student with a medical mask if available.
  - Clean, disinfect and sanitize the area once the student leaves.

ADDITIONAL MEASURES TO CONSIDER:

- Provide alcohol-based hand sanitizer, masks, tissues, and trash receptacles at school entrances and ensure they are stocked regularly.
- Increase frequency of cleaning and disinfection.
- Limit traffic flow (e.g., different doors for entry and exit, one-way hallways).
- Restrict sick workers from duty and provide clear instructions for when it is safe to return to work.
- Implement sick leave policies that are non-punitive, flexible, and consistent with public health policies.
- Support use of masks by staff and/or students.

COMMUNICATE:

We encourage school administration and health staff to collaborate on what, how, and when to communicate. Schools may also consult with their local health departments for assistance on crafting messages for their school communities. Below are some suggestions your school may use to reinforce good hygiene and prevention practices when in the midst of a respiratory outbreak. Schools may also communicate about resources for families, such as where to get free or low cost vaccines or COVID-19 testing.
## Suggestions on School Communication During a Respiratory Disease Outbreak

<table>
<thead>
<tr>
<th><strong>What to Communicate:</strong></th>
<th><strong>How to Communicate:</strong></th>
<th><strong>Examples:</strong></th>
</tr>
</thead>
</table>
| Importance of good hand hygiene | • Use handwashing posters in or near bathrooms, in main corridors, and in health offices.  
• Provide signage by hand sanitizer  
• Have staff remind the younger students  
• Incorporate handwashing activities into lesson plans | Handwashing Posters from Nebraska Students (Part 1)  
Training & Education | Handwashing | CDC |
| How to cover your cough/sneeze with tissue or elbow, dispose of tissue | • Posters, reminders from staff | Cover Your Cough Poster for Health Care - MN Dept. of Health (state. mn.us) |
| Watch for signs and symptoms of respiratory disease. Emphasize importance of early detection of illnesses to prevent spread. | • Signage on doors of main entrances, emails to parents and school staff, newsletters, social media | Symptoms of COVID-19 (page 101)  
Everyday actions can help fight germs, like flu (at the end of this section) |
| Stay home when sick (students) | • Provide clear instructions for when to stay home and when it is safe to return to school.  
• Provide a point of contact (such as school nurse) for questions. | Parent Guidance on COVID-19 (at the end of this section)  
• Symptom-based School Exclusion Infographic for Parents (Part 4) |
| Stay home when sick (staff) | • Provide clear instructions for when to stay home and when it is safe to return to work.  
• Provide signage in staff lounges, reinforce guidelines at staff meetings. | Stay-Home-from-Work-Poster.pdf (cdc.gov) |
| Vaccinate to prevent respiratory illness | • Encourage staff and students to protect themselves and others by being up to date on flu and COVID vaccines. Provide list of local vaccination sites or free/low-cost clinics, such as VFC providers. For staff, see current recommendations for adult immunizations, including pneumococcal and the RSV vaccine for adults 60 years of age and older. | See Vaccination section:  
Fruitful COVID-19 Vaccine Campaign - Children’s Nebraska (www.childrensnebraska.org/fruitful)  
CDC Digital Media Toolkit: 2023-2024 Flu Season | CDC (page 123)  
Find a COVID-19 or flu vaccine near you at vaccines.gov |
| Test for COVID-19 when symptomatic | • Educate school community on free testing options, such as ordering home tests from Covidtests.gov. Uninsured people who are symptomatic or exposed may find free testing locations at https://testinglocator.cdc.gov/ | Covid-19 at home testing digital toolkit at www.covidtests.gov |
COMMUNICATION TIPS FOR SCHOOLS

KEEP PREVENTION GUIDELINES SHORT AND SPECIFIC.

► Provide clear, simple preventions (e.g., “Wash hands for 20 seconds after sneezing in elbow or tissue”)

► Provide clear, simple prohibitions: (e.g., “Do not come to work if you have fever, cough, and sneezing”)

► Instead, relay this information as such: “Please stay home from work if you are currently sick” (e.g., have a fever or persistent cough) to prevent others from becoming sick.

Ensure your prevention guidelines reflect local, state, national, and global standards to avoid discrepancies. Conflicting guidelines can lead to applying no prevention measures and poor compliance.

► Local (follow your Local Health Department guidance)

► State (NE DHHS)

► National (CDC)

► Global (WHO)

Plan to train all employees, staff, and visitors about your facility’s prevention procedures in the moment and for the future event of a respiratory outbreak.

► For example, if masks are recommended, ensure greeters are providing and teaching proper mask usage for all visitors.

► Regularly teach students about respiratory hygiene and infection control.

Promote responsibility and praise that all staff and visitors play a significant role in preventing the spread of respiratory diseases.

► Assure that management and leadership teams are supportive of employees and visitors for extra time or effort required to adhere to prevention measures.

The following pages are free communication resources that can be copied and given to parents.
GUIDANCE FOR PARENTS ON COVID-19

The following is general guidance for parents of children in Nebraska schools. Please follow the guidance of your child’s school district or health department.

WHAT TO DO IF...

YOUR CHILD HAS COVID-19 SYMPTOMS:

Symptoms of COVID-19 may include a fever or chills, cough, shortness of breath or difficulty breathing, fatigue, muscle or body aches, headache, new loss of taste or smell, runny nose, sore throat, nausea or vomiting, or diarrhea.

- Test and isolate: Have your child COVID tested immediately if possible. If the test is negative, repeat in 48h. Have them stay home and away from others.
- Stay home when sick: Any child who has a fever, cough, sore throat, vomiting or diarrhea should stay home, even if their COVID-19 test was negative. If your child has underlying medical conditions, younger than 5 years of age, and/or has worsening symptoms, talk to your doctor about testing for other respiratory illnesses like influenza or if antiviral treatment is indicated.
- Wear a mask if out in public and symptoms are present.

YOUR CHILD TESTS POSITIVE FOR COVID-19:

Make sure your child stays comfortable and drinks plenty of liquids. Contact their doctor if you have questions about medications or if illness gets worse. Be mindful of their mental health needs as well. Provide them lots of care and reassurance as a COVID diagnosis may cause your child to be worried.

- Keep your child home and away from others (isolate) for at least 5 days, starting with the day that symptoms began (day 0). If your child does not have any symptoms but tested positive for COVID, then, day 0 starts with the date of positive test.
- Call your school to let them know your child will be absent due to COVID.
- If your child has no fever and symptoms have gone away, they may return to school after Day 5. They must wear a mask when around others until Day 10.
- Continue to stay at home if fever persists or symptoms do not improve.

YOUR CHILD IS EXPOSED TO SOMEONE INFECTED WITH COVID-19

- Have your child wear a mask for 5 days after exposure.
- Know that your child can still develop COVID-19 up to 10 days after exposure.
- If your child has no symptoms, have your child tested for COVID 5 days after exposure.
- If test is positive, isolate for at least 5 days (see above)
- If test is negative, your child may go to school
  - If the test is negative but your child feels sick or has COVID symptoms, they should stay home.

COVID-19 Testing: What You Need to Know

CDC.gov
Confusion, hard to wake up or stay awake
Pale, gray, or blue lips or nail beds
Pressure or pain in the chest
Difficulty breathing, severe shortness of breath

ANY OF THE FOLLOWING SYMPTOMS:

GET EMERGENCY CARE IF YOUR CHILD HAS ANY OF THE FOLLOWING SYMPTOMS:

Difficulty breathing, severe shortness of breath
Pressure or pain in the chest
Pale, gray, or blue lips or nail beds
Confusion, hard to wake up or stay awake

YOU HAVE QUESTIONS ABOUT COVID-19 TESTING OR VACCINES:

Speak to your child’s doctor
Understand the availability of tests and vaccines may vary
For free or low-cost tests or vaccines:
  ▶ Call your local health department
  ▶ Call your nearest federally qualified health center
    (find one at www.howtogetcare.org)
  ▶ Find flu and COVID-19 vaccines near you (vaccines.gov)

Self-tests, or at-home tests, are antigen tests that can be taken anywhere without having to go to a specific testing site. Read self-test package inserts thoroughly and follow the instructions closely when performing the test.

COVID-19 Testing: What You Need to Know

Free COVID-19 Tests
Visit COVIDTests.gov to order 4 additional free FDA-authorized COVID-19 tests. Every home in the U.S. is eligible to order 4 free at-home tests beginning November 30, 2023. If you did not order 4 tests earlier in the fall, you can place two orders for a total of 8 tests.

Order Your Tests Today!

When you get tested:
• Make sure to test at the right time
• Choose the right type of test for your circumstance

CDC Centers for Disease Control and Prevention
COVID-19
COVID-19 Testing: What You Need to Know
Updated Sept. 25, 2023
Search COVID-19

Order Your Tests Today!
ORIENTACIÓN PARA PADRES SOBRE EL COVID-19

La siguiente es una guía general para padres de niños en las escuelas de Nebraska. Siga las instrucciones del distrito escolar de su hijo o del departamento de salud.

¿QUÉ HACER SI...

SU HIJO TIENE SÍNTOMAS DE COVID-19:

Los síntomas de COVID-19 pueden incluir fiebre o escalofríos, tos, dificultad para respirar, fatiga, dolores musculares o corporales, dolor de cabeza, nueva pérdida del gusto o del olfato, secreción nasal, dolor de garganta, náuseas, vómitos o diarrea.

- Hacer la prueba y aislar: haga que su hijo(a) sea sometido a una prueba de COVID inmediatamente, si fuese posible. Si la prueba es negativa repetirla en 48 horas. Haga que se quede en casa y lejos de los demás.
- Quedarse en casa cuando esté enfermo: cualquier niño(a) que tenga fiebre, tos, dolor de garganta, vómitos o diarrea debe quedarse en casa, incluso si su prueba de COVID-19 fue negativa. Si su hijo tiene afecciones médicas subyacentes, es menor de 5 años y/o sus síntomas empeoran, hable con su médico sobre la posibilidad de realizar pruebas para detectar otras enfermedades respiratorias como la influenza.
- Use una mascarilla si está en público y presenta síntomas.

SU HIJO TIENE UNA PRUEBA POSITIVA POR COVID-19:

Asegúrese de que su hijo(a) se mantenga cómodo y beba muchos líquidos. Comuníquese con su médico si tiene preguntas sobre los medicamentos o si la enfermedad empeora. Mantenga en cuenta también sus necesidades de salud mental. Bríndele mucha atención y tranquilidad, ya que un diagnóstico de COVID puede preocupar a su hijo(a).

- Mantenga a su hijo en casa y alejado de los demás (aislado) durante al menos 5 días desde el primer día que tuvo síntomas (día 0). Si su hijo no tuvo síntomas, pero tuvo una prueba de COVID positiva, el día 0 comienza con el día de la prueba positiva.
- Llame a su escuela para informarles que su hijo estará ausente debido a COVID.
- Si su hijo no tiene fiebre y los síntomas han desaparecido, puede regresar a la escuela después del 5to día. Debe usar una mascarilla cuando esté cerca de otras personas hasta el 10mo día.
- Continúe quedándose en casa si la fiebre persiste o los síntomas no mejoran.

SU HIJO HA ESTADO EXPUESTO A ALGUIEN INFECTADO CON COVID-19:

- Haga que su hijo use una mascarilla durante 5 días después de haber sido expuesto.
- Sepa que su hijo aún puede desarrollar COVID-19 hasta 10 días después de la exposición.
- Si su hijo no tiene síntomas, hágale una prueba de COVID 5 días después de la exposición.
- Si la prueba es positiva, aislar durante al menos 5 días (ver arriba)
- Si la prueba es negativa, su hijo puede ir a la escuela.
- Si la prueba es negativa pero su hijo se siente enfermo o tiene síntomas de COVID, debe quedarse en casa.
Las vacunas contra el COVID-19 son seguras y efectivas, y gratis. Todas las personas de 6 meses de edad o más pueden recibir la vacuna actualizada contra el COVID-19.

SI TIENE PREGUNTAS SOBRE LAS PRUEBAS O LAS VACUNAS DE COVID-19:

- Hable con el médico de su hijo
- Para obtener pruebas o vacunas gratuitas o de bajo costo:
  - Lléme a su departamento de salud local (enlace)
  - Lléme a su centro de salud calificado a nivel federal más cercano www.howtogetcare.org
  - Encuentre vacunas contra la gripe y el COVID-19 cerca de usted en vacunas.gov
  - Tenga en cuenta que la disponibilidad de pruebas y vacunas puede variar https://www.vaccines.gov/

OBTENGA ATENCIÓN DE EMERGENCIA SI SU HIJO TIENE ALGUNO DE LOS SIGUIENTES SÍNTOMAS:

- Dificultad para respirar, falta de aire grave
- Presión o dolor en el pecho
- Labios o base de las uñas pálidos, grises o azules.
- Confusión, dificultad para despertar o permanecer despierto

Para obtener más información sobre las pruebas de COVID-19, visite a Pruebas de detección del COVID-19: información importante (Pruebas de COVID-19: lo que necesita saber | Centros para el Control y la Prevención de Enfermedades)
Everyday Preventive Actions Can Help Fight Germs, Like Flu

1. Take time to get a flu vaccine.
2. Take everyday preventive actions that help slow the spread of germs that cause respiratory (nose, throat, and lungs) illnesses, like flu.
3. If you get sick with flu, take prescription antiviral drugs if your doctor prescribes them. Early treatment is especially important for older people, young children, people with certain chronic health conditions, and pregnant people.

How does flu spread?
Flu viruses are thought to spread mainly from person to person through droplets made when people with flu cough, sneeze, or talk. Less often, a person might get flu by touching a surface or object that has flu virus on it and then touching their own mouth, nose, or possibly eyes. Many other viruses spread the same way. People infected with flu may be able to infect others beginning 1 day before symptoms develop and up to 5 to 7 days after becoming sick. That means you may be able to spread flu to someone else before you know you are sick as well as while you are sick. Young children, those who are severely ill, and those who have severely weakened immune systems may be able to infect others for longer than 5 to 7 days.

What are everyday preventive actions?
• Avoid close contact with people who are sick.
• While sick, limit contact with others as much as possible to keep from infecting them.
• Cover your nose and mouth with a tissue when you cough or sneeze. Throw it in the trash after you use it and wash your hands.
• Wash your hands often with soap and water for at least 20 seconds. If soap and water are not available, use an alcohol-based hand rub.
• Avoid touching your eyes, nose and mouth. Germs spread this way.
• Clean and disinfect surfaces and objects that may be contaminated with germs that can cause respiratory illnesses like flu.
• For flu, CDC recommends that you (or your child) stay home for at least 24 hours after fever is gone except to get medical care or for other necessities. Fever should be gone without the use of a fever-reducing medicine. The stay-at-home guidance for COVID-19 may be different.
• In the context of the COVID-19 pandemic, local governments or public health departments may recommend additional precautions be taken in your community. Follow those instructions.
What additional steps can I take at work to help stop the spread of germs that can cause respiratory illness, like flu?

- Find out about your employer’s plans for outbreaks of flu or another illness and whether flu vaccinations are offered on site.
- Routinely clean and disinfect frequently touched objects and surfaces like doorknobs, keyboards, and phones, to help remove germs.
- Make sure your workplace has an adequate supply of tissues, soap, paper towels, alcohol-based hand rubs, and disposable wipes.
- Train others on how to do your job so they can cover for you in case you or a family member gets sick and you have to stay home.
- If you begin to feel sick while at work, go home as soon as possible.

What additional preventive actions can I take to protect my child from germs that can cause respiratory illness, like flu?

- Find out about plans if your child’s school, childcare program, or college has an outbreak of flu or another illness and whether flu vaccinations are offered on-site.
- Make sure your child’s school, childcare program, or college routinely cleans and disinfects frequently touched objects and surfaces, and that they have a good supply of tissues, soap, paper towels, alcohol-based hand rubs, and disposable wipes on-site.
- Ask how sick students and staff are separated from others and who will care for them until they can go home.
- In the context of the COVID-19 pandemic, local governments or public health departments may recommend additional precautions be taken in your community. Follow those instructions.

Everyday preventive actions can help slow the spread of germs that can cause many different illnesses and may offer some protection against flu.
Tomar medidas preventivas diarias puede ayudar a combatir los microbios, como los de la influenza

Los CDC recomiendan tomar tres medidas para combatir la influenza.

La primera y más importante medida es vacunarse contra la influenza cada año.

1. Si se enferma de influenza, tome los medicamentos antivirales si su médico se los receta. El tratamiento temprano es especialmente importante para las personas de edad avanzada, los niños muy pequeños, las personas con determinadas afecciones crónicas y las mujeres embarazadas.

2. Tome medidas preventivas diarias que puedan disminuir la propagación de los microbios que causan enfermedades respiratorias (nariz, garganta y pulmones) como la influenza. Este volante contiene información sobre las medidas preventivas diarias.

¿Cómo se propaga la influenza?

Se cree que los virus de la influenza se propagan principalmente de persona a persona a través de las gotitas que se forman cuando las personas enfermas tosen, estornudan o hablan. Aunque no sucede a menudo, una persona podría contraer la influenza al tocar una superficie o un objeto donde esté el virus y luego tocarse la boca, la nariz o posiblemente los ojos. Hay muchos otros virus que se transmiten también de esta manera. Las personas infectadas por el virus de la influenza pueden infectar a otras desde 1 día antes de que se presenten los síntomas y hasta 5 a 7 días después de enfermarse. Esto significa que usted puede transmitir el virus de la influenza antes de saber que está enfermo, de la misma manera que cuando está enfermo. Los niños pequeños, las personas gravemente enfermas y todas aquellas que tengan el sistema inmunitario muy debilitado pueden infectar a los demás por más de 5 a 7 días.

¿Qué son las medidas preventivas diarias?

- Trate de evitar el contacto cercano con las personas enfermas.
- Si usted, o su hijo, presenta síntomas similares a los de la influenza, los CDC recomiendan que se quede en casa por al menos 24 horas después de que haya pasado la fiebre, excepto para recibir atención médica o por otras necesidades. La fiebre debe haber desaparecido sin la ayuda de medicamentos para reducirla.
- Mientras esté enfermo, limite lo más que pueda el contacto con los demás para evitar contagiarlos.
- Cúbrase la nariz y la boca con un pañuelo desechable cuando tosa o estornude. Después de usarlo, bótilo a la basura y lávese las manos.
- Lávese frecuentemente las manos con agua y jabón durante al menos 20 segundos. Si no hay agua y jabón disponibles, use un desinfectante para manos a base de alcohol.
- Evite tocarse los ojos, la nariz y la boca. Los microbios se propagan de esta manera.
- Limpie y desinfecte las superficies y los objetos que puedan estar contaminados con microbios que puedan causar enfermedades respiratorias como la influenza.
- Si ocurre un brote de influenza o de otra enfermedad, siga los consejos de las autoridades de salud pública. Esto puede incluir información sobre cómo aumentar la distancia entre las personas y otras medidas.

Para obtener más información, visite: https://espanol.cdc.gov/enes/flu/ o llame al 1-800-CDC-INFO
¿Cuáles otras medidas puedo tomar en el trabajo para evitar la propagación de los microbios que causan enfermedades respiratorias como la influenza?

- Pregunte sobre los planes que tiene su empleador en caso de un brote de influenza o de otra enfermedad y si se ofrecen vacunas contra la influenza en su lugar de trabajo.
- Limpie de manera habitual los objetos y las superficies que se tocan con más frecuencia, como las manijas de las puertas, los teclados y teléfonos, para ayudar a eliminar los microbios.
- Asegúrese de que en su lugar de trabajo haya un suministro adecuado de jabón, toallas de papel, pañuelos desechables, desinfectantes para manos a base de alcohol y toallitas húmedas desechables.
- Enséñele a otras personas cómo hacer su trabajo para que lo puedan cubrir en caso de que usted o alguien de su familia se enferme y tenga que quedarse en casa.
- Si comienza a sentirse mal en el trabajo, váyase a casa lo antes posible.

¿Qué otras medidas preventivas puedo tomar para proteger a mis hijos de los microbios que causan las enfermedades respiratorias, como la influenza?

- Pregunte sobre los planes que tienen en la escuela, la guardería o la universidad de sus hijos en caso de un brote de influenza o de otra enfermedad y si se ofrecen vacunas contra la influenza en esos establecimientos.
- Asegúrese de que en la escuela, la guardería o la universidad de su hijo limpien los objetos y las superficies que se tocan con mayor frecuencia y que tengan suministros suficientes de jabón, pañuelos desechables, toallas de papel, desinfectantes para manos a base de alcohol y toallitas húmedas desechables.
- Pregunte cómo mantendrán alejados a los estudiantes y a los miembros del personal que estén enfermos y quién los cuidará hasta que se puedan ir a su casa.

Las medidas preventivas diarias pueden ayudar a disminuir la propagación de microbios que causan muchas enfermedades diferentes, y pueden ofrecer alguna protección contra la influenza.
KEY POINTS

- Gastroenteritis can be caused by a number of viruses, but most commonly by norovirus, a highly contagious virus that is easily transmitted in crowded areas such as schools.
- Proper cleaning and disinfection is important to prevent viral spread.
- Call your local public health department for assistance.
- Use the checklist in the section below to respond to norovirus outbreaks.

INCLUDED IN THIS SECTION

- Nebraska Norovirus Outbreak Data
- GI outbreak checklist
- Communication tools for parents and staff

NOROVIRUS OUTBREAKS BY SETTING, NEBRASKA, 2017-2022

NOROVIRUS OUTBREAKS REPORTED NEBRASKA, 2017-2022

<table>
<thead>
<tr>
<th>Month of Outbreak</th>
<th>Number of Outbreaks</th>
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<tbody>
<tr>
<td>January</td>
<td>35</td>
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<td>February</td>
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<td>November</td>
<td>5</td>
</tr>
<tr>
<td>December</td>
<td>5</td>
</tr>
</tbody>
</table>

- Healthcare Facilities 69%
- Child Care 13%
- Restaurants/Food 8%
- School/College 7%
- Other 3%
GASTROINTESTINAL DISEASE OUTBREAK CHECKLIST:

REPORT

☐ Report the possible outbreak to your local health department when you detect an increase in GI illness above the expected baseline, or “normal” rate (e.g., double the normal absence rate due to vomiting and diarrhea).

☐ Information your local health department will ask for:
  • What date did the earliest illness start?
  • How many students do you have in the school? How many have been ill?
  • How many staff members do you have in the school? How many have been ill?
  • What are the GI symptoms being reported?
  • Duration of illness?
  • Have the ill individuals been in one grade, classroom, or activity group or spread across the school?
  • Have any kitchen staff been ill?

DOCUMENT

☐ Use the GI illness linelist report to document illness among staff and students.
  • You may also pull this information from your attendance system and send. Please try to include as much of the information on the logs as you can in the report.

Gather information such as recent activities, events, field trips etc., held during the week prior to the first illness (especially if food was served).
  • Determine when and where there were any vomiting incidents or diarheal accidents in the facility.

Send the completed GI illness linelist report to your local health department 7 days after last illness.
  • 7 days (or 3 incubation periods) after the last illness reported is a good window to ensure the outbreak is over.

STAFF

☐ Monitor for staff (teachers, substitute teachers, administrative, kitchen) illness using GI illness linelist report.

☐ For viral GI illness, such as Norovirus, have staff stay home from work for at least 48 hours after vomiting/diarrhea has ended.

☐ Make sure staff are aware of the outbreak and prevention measures (including handwashing, sending ill students home promptly, and asking for cleaning assistance if needed).

GROUPING

☐ Try to keep all staff who worked with sick students in the same classroom or area to limit the spread of infection.

☐ In settings such as boarding schools or college dormitories, sick students should use separate toilets and be housed separately from well students, if possible. Be sure to keep sick persons who are waiting to be picked up away from others. Sick persons should not be sitting in common areas such as hallways.

GROUP ACTIVITIES/SPORTS

☐ Consider postponing or canceling group activities, such as communal meals, sporting events, or social/recreational groups, field trips, until the outbreak is over. This will minimize person-to-person contact and transmission risk.

ANIMALS/PETS

☐ Animals can be entertaining and educational. Animals can carry germs and cause GI illness, even if they look healthy. If you plan to have an animal in your classroom, whether it’s a class pet or for a hands-on learning experience, be aware of the risks and how to prevent illness.

☐ Create specific areas for interaction with animals. Do not allow animals to roam freely around the classroom, especially in areas where food or drink is prepared, served, or eaten.

☐ Children, students, and staff should wash their hands with water and soap right after handling animals, their food, or their habitats (cages, terrariums, aquariums, water bowls, and toys).

☐ Clean and disinfect all areas where animals have been.

☐ Childcare facilities must follow the animal/pets policy by NDHHS Licensure.
GASTROINTESTINAL DISEASE OUTBREAK CHECKLIST:

**CLEAN AND DISINFECT**

- Notify custodial staff of special cleaning considerations. Immediately clean and disinfect the facility. Cleaning is the first step of any disinfection process to remove organic matter or soils. Disinfecting kills viruses and bacteria on surfaces using chemicals.

- Focus on frequently touched surfaces and objects (e.g., bathrooms, door handles, light switches, faucets, counters, tables, water foundations, diaper changing stations, potty chairs, toys in younger classrooms).
  - Clean all surfaces with soap and water. Rinse.
  - Disinfectant with a norovirus claim (EPA). Check that the label on your disinfectant specifically says that it is effective against norovirus. Use as directed.
  - Use concentrations of (1000 to 5,000 ppm) (5 to 25 tablespoons of household bleach [5% to 8%] per gallon of water). Use this bleach dilution calculator. (Page 22)
    - Wear PPE (gloves, face shield) and use ventilation when applying this solution.
  - Bleach has a 10-minute contact time.

- Clean and disinfect at least daily until the outbreak is over (1 week after last illness onset).

- Clean up vomiting or diarrheal incidents immediately.
  - Remove all individuals in the immediate area for a period that allows for the air to be completely cleared of any airborne particles that may have been produced during the incident and clean up process.
  - Use proper procedures such as gloves and masks to protect those doing the cleaning from getting sick.
  - Never use a vacuum or a hose to clean up vomit. Vomit particles can aerosol into the air.

**FOOD SERVICE/DINING**

- Contact your kitchen department to determine if kitchen staff are ill. Add them to the GI illness linelist report and document they are a food handler on the line list.
  - Notify your local health department if kitchen staff are ill so that a sanitarian can work with the kitchen to implement other prevention measures.

- Continue to monitor kitchen staff illnesses during the outbreak.

- Clean and sanitize all kitchen and dining area surfaces with an approved EPA product.

- Prohibiting students from participating in meal preparation, table-setting, and food service.

- Discontinue all self-service food/drinks (e.g., salad bars, food sharing table) and have kitchen staff or other adults serve. This includes serving utensils, water pitchers, salt and pepper shakers, cups, etc.

- Running dishes, utensils, and cups through a dishwasher (using hot water and dishwasher detergent) immediately after use; consider using single-use dining materials if reusable ones are not available and cannot be thoroughly cleaned.

- Encourage food handlers and food managers to become certified in the ServSafe Food Safety Program to improve food safety.

- For Norovirus, exclude ill kitchen staff from work for 48 hours after diarrhea/vomiting have stopped.

- According to The Nebraska Food Code, food handlers who are diagnosed or suspected with any of the following infectious diseases are required to report to their manager and shall be excluded from work:
  - Salmonella*
  - Shiga toxin-producing E.coli (STEC)*
  - Norovirus
  - Shigella*
  - Salmonella Typhoid Fever or Paratyphoid Fever*
  - Hepatitis A

*Some diseases may require may proof of negative stool cultures before returning to food handling duties OR more than 7 calendar days have passed since becoming asymptomatic OR did not develop symptoms and more than 7 days have passed since diagnosis. Further details on these exclusions can be found on NDHHS’s website.

**COMMUNICATION OF OUTBREAK**

- It is recommended to inform staff, students, parents or legal guardians of an outbreak at your facility/school and to include signs and symptoms and prevention measures to use at home and school. Local health departments can assist with creating a letter of notification. You can find an example of a notification letter below.

**FACILITY/SCHOOL CLOSURE**

- In general, childcare facilities/schools are not required to close during a GI outbreak, but it is important to consult with the local health department. In some situations, closures may be considered on a case-by-case basis if a large number of illnesses are occurring, recommended control measures have not been effective, and closure is needed to perform effective environmental cleaning.

**NOROVIRUS INFORMATION FOR PARENTS:**

Norovirus Illness: Key Facts (cdc.gov) The “Key Facts” document from CDC is not available as a Spanish pdf online. However, the CDC norovirus page is available in Spanish. https://www.cdc.gov/norovirus/index-sp.html If looking for Spanish norovirus information to print out for parents, consider printing this page: Prevención de infecciones por norovirus | CDC
Sparkle and Shine

1. Wet
2. Get soap
3. Scrub
4. Rinse
5. Dry

Wash your hands every time!

Unicorn by Carter from Blue Hill
Sample letters to parents on GI illness/norovirus outbreak in school

[Date]
[Organization
[Address, City, State Zip]
[Organization Phone Number]

Dear Parent/Guardian:

We have become aware of a possible viral gastroenteritis outbreak among students [AND/OR STAFF] at [SCHOOL NAME]. We are working closely with the [SCHOOL OR HEALTH DEPARTMENT NAME] in response to this increase in illness. [ENTER INFORMATION HERE IF SCHOOL IS INTENDING TO CLOSE.]

Norovirus is the most common virus that causes gastroenteritis. These viruses are easily transmitted through food, by person-to-person contact, or through contaminated surfaces. The virus spreads easily in the home as well. Norovirus is sometimes called the “stomach flu” but is not related to influenza (the flu).

Norovirus symptoms include nausea, vomiting, diarrhea, and stomach cramping. People may also experience low-grade fever, headache, weakness, and muscle aches. Symptoms can begin as early as 12 hours after exposure to the virus or as late as 48 hours. The symptoms of norovirus usually last 1 to 2 days.

People with norovirus usually fully recover without medical attention. Those with severe diarrhea should drink lots of liquids. If your child has bloody diarrhea or high fever, please contact your doctor. These are not symptoms of norovirus.

Children and staff with symptoms of viral gastroenteritis should be excluded from school or other group activities until 48 hours after their symptoms have stopped.

The best way to limit the spread of these viruses is frequent hand washing for at least 20 seconds using soap and warm running water, being sure to completely clean all areas of hands and under fingernails. Hand sanitizer does not work well against norovirus. Most household cleaners are ineffective against norovirus, but bleach will work as a disinfectant. Please refer to the CDC’s website on norovirus for information on cleaning and disinfection. www.cdc.gov/norovirus/

Further information about norovirus and how to limit its spread can be found at [LHD WEBSITE URL] or you can contact [CONTACT NAME] at [CONTACT INFORMATION, I.E. PHONE/E-MAIL].

Sincerely,

[Signature]

[HEALTH OFFICER, HEALTH DEPARTMENT NAME or PRINCIPAL, SCHOOL NAME]
Estimado Padre / Guardián:

Nos hemos dado cuenta de un posible brote de gastroenteritis viral entre los estudiantes [Y/O PERSONAL] de la escuela [SCHOOL NAME]. Estamos trabajando muy de cerca junto con [SCHOOL OR HEALTH DEPARTMENT NAME] en respuesta a este aumento de enfermedades. [Enter the following sentence if school is intending to close, then add the date of school closure in the blank: Las clases estarán canceladas en estas fechas_______]

El norovirus es el virus más común que causa gastroenteritis. Estos virus se transmiten fácilmente a través de los alimentos, por contacto de persona a persona o a través de superficies contaminadas. El virus también se propaga fácilmente en el hogar. Al norovirus a veces se le llama “gripe estomacal”, pero no está relacionado con la influenza (gripe).

Los síntomas del norovirus incluyen náuseas, vómitos, diarrea y calambres estomacales. Las personas también pueden presentar fiebre leve, dolor de cabeza, debilidad y dolores musculares. Los síntomas pueden comenzar tan pronto como 12 horas después de ser expuesto al virus o tan tarde como 48 horas después. Los síntomas del norovirus suelen durar de 1 a 2 días.

Las personas con norovirus suelen recuperarse por completo sin necesitar atención médica. Las personas con diarrea intensa deben beber muchos líquidos. Si su hijo tiene diarrea con sangre o fiebre alta, comuníquese con su médico. Estos no son síntomas del norovirus.

Los niños y el personal con síntomas de gastroenteritis viral deben ser excluidos de la escuela u otras actividades grupales hasta 48 horas después de que hayan desaparecido los síntomas.

La mejor manera de limitar la propagación de estos virus es lavarse las manos con frecuencia durante al menos 20 segundos utilizando jabón y agua corriente tibia, asegurándose de limpiar completamente todas las áreas de las manos y debajo de las uñas. Los productos de limpieza domésticos son ineficaces contra el norovirus. La lejía es el único medio confiable para la desinfección. Consulte el sitio web de los Centros para el Control de Enfermedades -CDC (cdc.gov/norovirus/index-sp.html) acerca del Norovirus para obtener información sobre guías para la limpieza y desinfección.

Puede encontrar más información sobre el norovirus y cómo limitar su propagación en [LHD WEBSITE URL] o puede comunicarse con [CONTACT NAME] al [CONTACT INFORMATION, I.E. PHONE/E-MAIL].

Atentamente,

[Signature]

[HEALTH OFFICER, HEALTH DEPARTMENT NAME or PRINCIPAL, SCHOOL NAME]
We Don’t Want Germs by Sutton from Bennington
PART 03

Included in this section:

2 Nebraska School Immunization Laws FAQ
4 Tracking Immunizations
5 Vaccine Survey
6 Vaccines for Children Program
6 VFC Information for Parents
COVID vaccine information for parents
Vaccine Schedule Information For Parents
Tools for School Nurses
Sample parent letter: Vaccination Requirements for Nebraska Schools (K-12)
## Nebraska School Immunization Laws FAQ

### WHERE ARE THE REGULATIONS ON IMMUNIZATIONS FOUND?

The full regulations can be found here: Title 173 (nebraska.gov)
You may also find information at: dhhs.ne.gov/immunizations

### WHAT IMMUNIZATIONS ARE REQUIRED?

Each student must be protected by immunizations against the following diseases, unless otherwise exempted from this requirement under the provisions of 173 NAC 3-010:

- Measles, Mumps, Rubella
- Diphtheria
- Invasive pneumococcal disease
- Tetanus
- Pertussis
- Polio
- Hemophilus Influenzae type b (Hib)
- Hepatitis B
- Varicella

### STUDENT AGE GROUP | REQUIRED VACCINE
--- | ---
**Ages 2 through 5 years enrolled in a school based program not licensed as a child care provider** | • 4 doses of DTaP, DTP or DT vaccine  
• 3 doses of Polio vaccine  
• 3 doses of Hib vaccine or 1 doses of Hib given at or after 15 months of age  
• 3 doses of pediatric Hepatitis B vaccine  
• 1 dose of MMR or MMRV given on or after 12 months of age  
• 1 dose of varicella (chickenpox) or MMRV given on or after 12 months of age. (Written documentation- including year of varicella disease from parent, guardian, or health care provider will be accepted)  
• 4 doses of pneumococcal or 1 dose of pneumococcal given on or after 15 months of age.

**Students entering school (Kindergarten or 1st grade depending on the school district’s entering grade)** | • 3 doses of DTaP, DTP, or TD vaccine,  
1 dose on or after the 4th birthday  
• 3 dose of Polio vaccine  
• 3 doses of pediatric Hepatitis B vaccine (or 2 doses of adolescent vaccine if student is 11-15 years)  
• 2 doses of MMR or MMRV vaccine, given on or after 12 months of age and separated by at least 1 month  
• 2 doses of varicella (chickenpox) or MMRV given on or after 12 months of age. (Written documentation-including year-of varicella disease from parent, guardian or health care provider will be accepted. If the child has had varicella disease, they do not need the vaccination.)

**Students entering 7th grade** | • Must be current with above vaccinations AND receive 1 dose of Tdap (contain Pertussis booster)

**Students transferring from outside the state at any grade** | • Must be immunized appropriately according to grade entered
WHO NEEDS IMMUNIZATIONS?
Each student must be protected against the diseases previously listed and submit immunization records. Any student who does not comply with these requirements must not be permitted to enroll in school, unless they have an exemption or are provisionally enrolled.

WHAT KIND OF IMMUNIZATION EXEMPTIONS ARE ALLOWED IN NEBRASKA?
Nebraska only allows medical and religious exemptions. Personal belief exemptions are not allowed. Students with exemptions on file may need to be excluded from school if there is an outbreak of a vaccine-preventable disease.

According to regulations (NAC 173 3-010), immunization is not required for a student’s enrollment in any school in this state if he or she submits either of the following:

MEDICAL EXEMPTION: A statement signed by a physician, physician assistant, or nurse practitioner stating that, in the health care provider’s opinion, the specified immunization(s) required would be injurious to the health and well-being of the student or any member of the student’s family or household; or

RELIGIOUS AFFIDAVIT: An affidavit signed by the student or, if he or she is a minor, by a legally authorized representative of the student, stating that the immunization conflicts with the tenets and practice of a recognized religious denomination of which the student is an adherent or member or that immunization conflicts with the personally and sincerely followed religious beliefs of the student.

NOTE: Religious affidavits are required to be notarized.

WHAT IF A STUDENT HAS ALL OF THE REQUIRED IMMUNIZATIONS, BUT NOT ALL OF THE REQUIRED DOSES?
The student may attend school due to something called provisional enrollment. A student may be provisionally enrolled in a school in Nebraska if he or she has:

• begun the immunizations against the specified diseases prior to enrollment AND
• continues the necessary immunizations as rapidly as is medically feasible.

Essentially, the student needs at least one of every required immunization, and they need to have a plan to complete the requirements as soon as possible, or at least by the end of the school year (9 months).

WHAT IF A STUDENT IS UP TO DATE ON IMMUNIZATIONS, EXCEPT FOR ONE THAT THE PARENT DOES NOT INTEND TO GET?
This would require documentation of a medical or religious exemption.

IF A STUDENT HAS A VACCINE EXEMPTION ON FILE, DO I NEED AN UPDATED ONE EVERY YEAR?
Nebraska does not require students to have vaccine exemptions updated yearly; however, districts may have policies on this.

IF A STUDENT HAS A MEDICAL VACCINE EXEMPTION ON FILE FROM A DOCTOR IN IOWA, CAN THIS BE USED IN MY (NEBRASKA) SCHOOL?
Yes, the medical exemption can be from an out-of-state physician.

HELP PROTECT THEM WITH ROUTINE VACCINES.
Obtain immunization records from parents prior to the beginning of school (see sample parent letter). Direct them to contact their primary care office if they do not have records.

Most schools will utilize a School Information System, or SIS, to help track students’ immunization records.

Many healthcare providers use the state system called NESIIS- Nebraska State Immunization Information System.

School nurses may obtain access to NESIIS to view immunizations and demographic information by filling out this form: https://dhhs.ne.gov/epi%20docs/NESIIS_Enrollment_Form.pdf

• They will not be able to add or edit information in NESIIS.

• See: NESIIS - Providers and Schools
All public and private schools are required to provide immunization data on students. Schools will receive notice from DHHS that the vaccine survey is due and given a link. **Data submission is due by November 15th annually.**

**DATA INCLUDES, BUT NOT LIMITED TO:**

- School Contact information
- Number of students in age group
- Vaccines received
- Vaccines exempt

**WHILE IMMUNIZATION RECORDS ARE TO BE KEPT FOR ALL STUDENTS, ONLY THE FOLLOWING GROUPS ARE REQUIRED TO BE REPORTED:**

- Students entering school for the first time (typically Kindergarteners)
- Seventh graders
- All out-of-state transfers, including foreign exchange students.

The figures below show the results of the Nebraska vaccine survey (data courtesy of DHHS). Overall, Nebraska students have very good vaccine coverage rates.
The Book

VACCINES FOR CHILDREN (VFC) PROGRAM

While all students are required to receive their immunizations, schools may not know where to send students who need them. That is why schools should familiarize themselves with the VFC program and where local vaccine providers are located so they have a free or low-cost place to refer families to.

This program helps ensure all children have a chance to receive their vaccinations and maintain their health. A child is eligible for the VFC program if they are younger than 19 years of age and is one of the following:

- Medicaid-eligible
- Uninsured
- Underinsured - meaning the child has health insurance but
  - Doesn’t cover vaccines
  - Doesn’t cover certain vaccines
- Covers vaccines but has a fixed dollar limit or cap for vaccines. Once that fixed dollar amount is reached, a child is then eligible.
- American Indian or Alaska Native

Underinsured children are eligible to receive vaccines at Federally Qualified Health Centers (FQHC), Rural Health Clinics (RHC), or select public clinics.

The Vaccines for Children (VFC) program helps ensure that all children have a better chance of getting their recommended vaccines. VFC has helped prevent disease and save lives.

CDC estimates that vaccination of children born between 1994 and 2021 will:

- Prevent 472 million illnesses (29.8 million hospitalizations)
- Help avoid 1,052,000 deaths
- Save nearly $2.2 trillion in total societal costs (that includes $479 billion in direct costs)

www.cdc.gov/vaccines/vfcprogram/
Did You Know Your Child Can Get Free Vaccines?

Vaccines for Children Can Help

The Vaccines for Children (VFC) program provides free vaccines to children who qualify. About half of American children less than 19 years old receive VFC vaccine.

Is my child eligible for the VFC Program?
Children are eligible if it is before their 19th birthday and they:
• Qualify for Medicaid
• Don’t have insurance
• Are American Indian or Alaska Native

Children whose insurance doesn’t cover some or all routinely recommended vaccines (underinsured) can still get vaccines through VFC if they go to a Federally Qualified Health Center or Rural Health Clinic.

Where can I go to get my child vaccinated?
• Ask if your child’s doctor or nurse is a VFC provider. Nationally, there are thousands of health care providers enrolled in the VFC program.
• If your child does not have a doctor, ask if your local public health department provides vaccines.
• Visit a Federally Qualified Health Center (FQHC) or Rural Health Clinic (RHC).

How much will I have to pay?
• All routinely recommended vaccines are free through the VFC Program.
• Doctors can charge fees to give each shot. However, they cannot refuse to vaccinate your child if you are unable to pay these fees.
• The doctor can charge additional fees for the office visit or non-vaccine services such as an eye exam or blood test.

Where can I get more information?
• Ask your child’s doctor’s office if they participate in VFC.
• If you don’t have a regular doctor’s office:
  - See if your state has a searchable website for VFC providers.
  - Call your state’s or local health department.
  - Visit findahealthcenter.hrsa.gov to find a Federally Qualified Health Center.

Learn more at CDC.gov/vaccines/programs/vfc/parents/
¿Sabía que a su hijo lo pueden vacunar de manera gratuita?

El Programa Vacunas para Niños puede ayudar

El Programa Vacunas para Niños (VFC, por sus siglas en inglés) proporciona vacunas gratuitas a los niños que reúnan los requisitos. En los Estados Unidos, aproximadamente la mitad de los niños menores de 19 años de edad reciben vacunas del VFC.

¿Reúne mi hijo los requisitos para el Programa VFC?
Los niños reúnen los requisitos si no han cumplido los 19 años y en los siguientes casos:
• Son elegibles para Medicaid
• No tienen seguro
• Son indoamericanos o nativos de Alaska

Los niños cuyo seguro no cubra algunas o todas las vacunas que se recomiendan de manera rutinaria (con poca cobertura de seguro) aún pueden recibir vacunas a través del programa VFC si van a un Centro de Salud Federalmente Calificado o Centro Médico Rural.

¿Cuánto tendré que pagar?
• A través del Programa VFC, todas las vacunas recomendadas de manera rutinaria son gratuitas.
• El médico puede cobrar por la aplicación de cada dosis. Sin embargo, no puede negarse a vacunar a su hijo si usted no puede pagar el cargo.
• El médico puede cobrar cargos adicionales por la visita al consultorio o los servicios que no sean de vacunación, como un examen de los ojos o análisis de sangre.

¿A dónde puedo llevar a vacunar a mi hijo?
• Pregunte si el médico o enfermero de su hijo es un proveedor del VFC. A nivel nacional, miles de consultorios de proveedores están inscritos en el Programa VFC.
• Si su hijo no tiene un médico, pregunte si el departamento de salud pública local provee vacunas.
• Visite un Centro de Salud Federalmente Calificado (FQHC, por sus siglas en inglés) o Centro Médico Rural (RHC, por sus siglas en inglés).

¿Dónde puedo obtener más información?
• Pregunte si el consultorio médico de su hijo participa en el VFC.
• Si no tiene un consultorio médico habitual:
  - Vea si su estado tiene un sitio web donde pueda buscar proveedores del VFC.
  - Llame al departamento de salud local o estatal.
  - Consulte findahealthcenter.hrsa.gov para encontrar un Centro de Salud Federalmente Calificado.
**ADDITIONAL INFORMATION**

More posters and parent fact sheets on the COVID-19 vaccine are available to download in multiple languages:
- www.childrensnebraska.org/fruitful
- maxthevaxne.org

Flu shot posters and information:
Seasonal Flu Partner Resources Center | CDC  
www.cdc.gov/flu/resource-center

---

**Kids Vaccinated**

140,993  
Kids fully vaccinated

28% of kids K-6 grade fully vaccinated

57% of kids 7-12 grade fully vaccinated

Goal = increase # kids’ vaccinations/month

---

**Provider Supported**

242  
Health care providers signed Statement of Support

18 communities represented by Statement of Support

Goal = grow support statewide/month

---

$55,953 earned media/press value

Goal = increase impressions/month

---

Amplifying the power against COVID-19 through vaccination for kids!

---

**DATO SOBRE LA INFLUENZA:**
La vacuna contra la influenza no puede darle influenza.

VacunateContraLaInfluenza.org

---

Una vacuna hoy día para mantener al virus alejado

Protejamos a los estudiantes contra el COVID-19.

---

#Fruitful
Peel Good. Get Vaxxed.

Let’s protect students against COVID-19.

The CDC and American Academy of Pediatrics recommend that everyone 6 months and older be vaccinated lickety-split.

Make this year more appealing by getting vaccinated as soon as possible. For more information go to ChildrensOmaha.org/covid

Talk to Your Doctor About the COVID-19 Vaccine Today!
Protejamos a los estudiantes contra el COVID-19.

El Centro para el Control y la Prevención de Enfermedades (CDC) y la Academia de Pediatría de los Estados Unidos ahora recomiendan que todos los niños a partir de los 6 meses de edad sean vacunados.

Mantengamos seguros a todos. Ponga de su parte y vacúnese tan pronto como sea posible.

Para obtener más información, visite la página web ChildrensOmaha.org/covid

¡Hable con su doctor hoy mismo acerca de la vacuna!
VACCINE SCHEDULE INFORMATION FOR PARENTS

The CDC has colorful, parent-friendly versions of the recommended immunization schedule and the diseases that the immunizations prevent on their website for children birth – age 6 and 7-18 years. These are available in English and Spanish. Vaccine Schedules for Parents | CDC www.cdc.gov/vaccines/parents/schedules/index.html

### 2023 Recommended Immunizations for Children from Birth Through 6 Years Old

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<thead>
<tr>
<th>VACCINE</th>
<th>Birth</th>
<th>1 MONTH</th>
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**FOOTNOTES**

1. If your child misses a shot recommended for their age, talk to your child’s doctor about additional vaccines that may be needed. You may need to leave after completing the series of shots at a later date.

2. If your child has any medical conditions that make them more susceptible to infection, talk to your child’s doctor about additional vaccines that may be needed.

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Tdap Vaccine for Preteens and Teens

All preteens should get one Tdap shot when they are 11 or 12 years old to help protect against tetanus, diphtheria, and whooping cough. Talk to your child’s doctor or nurse if they haven’t gotten this vaccine yet.

Why does my child need a Tdap vaccine?

Babies and young children get shots called DTaP to help protect them from diphtheria, tetanus, and whooping cough (pertussis). But as children get older, the protection from these shots starts to decrease. The Tdap vaccine helps protect your preteen or teen from the same diseases as the DTaP shots.

<table>
<thead>
<tr>
<th>Disease</th>
<th>Symptoms/Complications</th>
<th>Is it serious?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tetanus</td>
<td>• Spasms (painful muscle cramps in the jaw and neck muscles or stomach)</td>
<td>• Yes. Kids who get tetanus could spend weeks in intensive care.</td>
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<td>• Breathing problems</td>
<td>• As many as 1 out of 5 people who get tetanus will die from it.</td>
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<td>• Painful muscle stiffness all over the body</td>
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<td>Diphtheria</td>
<td>• Thick coating in the back of the throat that can make it hard to breathe and swallow</td>
<td>• Yes. About 1 out of 10 people who get diphtheria will die from it.</td>
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<td>• Paralysis</td>
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<td>• Heart failure</td>
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<tr>
<td>Whooping Cough</td>
<td>• Bad cough that can make it difficult to breathe after coughing fits</td>
<td>• Yes. It can be serious for people of all ages, but especially serious, even deadly, for babies.</td>
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<td>• Cough that can last for many weeks</td>
<td>• Whooping cough can also cause your child to miss school and other activities.</td>
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<td>• Violent coughing fits with vomiting, which can lead to broken ribs</td>
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</tbody>
</table>

Is the Tdap vaccine safe for my child?

Researchers have studied the Tdap shot very carefully and it is shown to be very safe. Like any vaccine or medicine, the Tdap shot can cause side effects. The most common side effects are mild and include redness and soreness in the arm where the shot was given, headache, fever, or tiredness.

Some preteens and teens might faint after getting the Tdap vaccine or any shot. To help avoid fainting and injuries related to fainting, preteens and teens should sit or lie down when they get a shot and then for about 15 minutes after getting the shot. Serious side effects from the Tdap shot are rare.

How can I get help paying for these vaccines?

Most health insurance plans cover routine vaccinations. The Vaccines for Children (VFC) program also provides vaccines for children 18 years and younger who are uninsured, underinsured, Medicaid-eligible, American Indian, or Alaska Native. Learn more at www.cdc.gov/Features/VFCprogram.

Talk to your child’s doctor or nurse about the Tdap vaccine, or visit www.cdc.gov/vaccines/Tdap
Vacuna Tdap para preadolescentes y adolescentes

A todos los preadolescentes se les debería poner la vacuna Tdap a los 11 o 12 años para ayudar a protegerse contra el tétanos, la difteria y la tosferina. Hable con el médico o personal de enfermería de su hijo si todavía no le han puesto esta vacuna.

¿Por qué mi hijo necesita la vacuna Tdap?

A los bebés y los niños pequeños se les aplica la vacuna llamada DTaP para protegerlos contra la difteria, el tétanos y la tosferina (pertussis). Sin embargo, cuando los niños crecen, la protección de estas vacunas empieza a disminuir. La vacuna Tdap ayuda a proteger a su preadolescente o adolescente contra las mismas enfermedades que la vacuna DTaP.

<table>
<thead>
<tr>
<th>Enfermedad</th>
<th>Síntomas y complicaciones</th>
<th>¿Es grave?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tétanos</td>
<td>- Espasmos (calambres dolorosos en los músculos de la mandíbula y el cuello o en el estómago). - Problemas respiratorios. - Rigidez muscular dolorosa en todo el cuerpo.</td>
<td>- Sí. Los niños que contraen el tétanos podrían pasar semanas en cuidados intensivos. - Hasta 1 de cada 5 personas que contraen el tétanos muere.</td>
</tr>
<tr>
<td>Difteria</td>
<td>- Recubrimiento espeso en la parte de atrás de la garganta que puede causar dificultad para respirar y tragar. - Parálisis. - Insuficiencia cardiaca.</td>
<td>- Sí. Alrededor de 1 de cada 10 personas que contraen difteria muere como consecuencia de la enfermedad.</td>
</tr>
<tr>
<td>Tosferina</td>
<td>- Tos intensa que puede hacer difícil respirar después de los ataques de tos. - Tos que puede durar por muchas semanas. - Ataques violentos de tos con vómitos, que puede provocar la quebradura de costillas.</td>
<td>- Sí. Puede ser grave para las personas de todas las edades, pero especialmente para los bebés, para quienes incluso puede ser mortal. - La tosferina también puede causar que su hijo pierda días de escuela y otras actividades.</td>
</tr>
</tbody>
</table>

¿Es la vacuna Tdap segura para mi hijo?

Investigadores han estudiado la vacuna Tdap con mucha atención, y ha mostrado ser muy segura. Como cualquier otra vacuna o medicamento, la vacuna Tdap puede causar efectos secundarios. Los efectos secundarios más frecuentes son leves e incluyen enrojecimiento y dolor en el brazo en donde se aplicó la inyección, dolor de cabeza, fiebre o cansancio.

Algunos adolescentes y preadolescentes podrían desmayarse después de que se les ponga la vacuna Tdap o cualquier inyección. Para prevenir los desmayos y las lesiones relacionadas con los desmayos, los preadolescentes y adolescentes deberían sentarse o acostarse cuando les pongan la vacuna y permanecer en esa posición durante 15 minutos después de recibir la vacuna. Los efectos secundarios graves de la vacuna Tdap son raros.

¿Cómo puedo obtener ayuda para pagar estas vacunas?

La mayoría de los planes de seguro médico cubren las vacunas de rutina. El Programa Vacunas para Niños (VFC) también proporciona vacunas a los niños de 18 años y menores sin seguro médico, con seguro médico insuficiente, que reúnan los requisitos para recibir Medicaid, o que sean indioamericanos o nativos de Alaska. Infórmese más en https://www.cdc.gov/vaccines/programs/vfc/parents/qa-flyer-sp.html.
Dear Parent/Guardian:

Children are required to be immunized in order to attend a public or private school in Nebraska. Here are the immunization requirements for students entering Nebraska schools:

<table>
<thead>
<tr>
<th>DISEASE NAME</th>
<th>IMMUNIZATION REQUIREMENT</th>
</tr>
</thead>
</table>
| Diphtheria, Tetanus, Pertussis | • 3 doses DTaP, DTP, DT, or Td vaccine with at least 1 dose given no earlier than 4 days before 4 years of age  
• Students enrolling in 7th grade must provide evidence of having 1 booster dose of a tetanus, diphtheria, and pertussis (Tdap) vaccine, given on or after 7 years of age. |
| Polio                          | 3 doses of polio vaccine                                                               |
| Hepatitis B                    | 3 doses of pediatric hepatitis B vaccine, or, if the alternate hepatitis B vaccination schedule is used, 2 doses of a licensed adult hepatitis B vaccine specified for adolescents 11-15 years of age |
| Measles, Mumps, Rubella        | 2 doses of MMR vaccine with the first dose given no earlier than 4 days before the first birthday and the 2 doses separated by at least 28 days |
| Varicella (chickenpox)         | 2 doses of varicella vaccine with the first dose given no earlier than 4 days before the first birthday and the 2 doses separated by at least 28 days, or documentation of the disease. |

• Parents must provide the school with a medical exemption or religious affidavit to refuse any of the required vaccines.
• For more information on school requirements, go to: https://dhhs.ne.gov/immunizations.
• You can find free or low-cost immunizations by going to your Local Health Department, Federally Qualified Health Center, or local Vaccines for Children provider.

Please give a copy of your child’s immunization records or exemptions to the school by:

Emailing them to: __________________________________________
Faxing them to: ____________________________________________
Mailing them to: ____________________________________________
Other ______________________________________________________

Your school needs these records by (insert date).

Thank you, and if you have questions, please contact: ____________________________________________

Sincerely,

Signature

[TITLE OR SCHOOL NAME]
Ejemplo de carta para los padres:
Requerimientos de vacunación para las escuelas de Nebraska (K-12)

Estimado padre/guardianes:

Es obligatorio que los niños estén vacunados para asistir a una escuela pública o privada en Nebraska. Aquí están los requerimientos para los estudiantes que ingresan a las escuelas de Nebraska.

<table>
<thead>
<tr>
<th>NOMBRE DE LA ENFERMEDAD:</th>
<th>REQUISITOS DE VACUNACIÓN:</th>
</tr>
</thead>
</table>
| Difteria, tétanos, tos ferina | • 3 doses DTaP, DTP, DT, or Td vaccine with at least 1 dose given no earlier than 4 days before 4 years of age  
                           • Students enrolling in 7th grade must provide evidence of having 1 booster dose of a tetanus, diphtheria, and pertussis (Tdap) vaccine, given on or after 7 years of age. |
| Polio | 3 doses of polio vaccine |
| Hepatitis B | 3 doses of pediatric hepatitis B vaccine, or, if the alternate hepatitis B vaccination schedule is used, 2 doses of a licensed adult hepatitis B vaccine specified for adolescents 11-15 years of age |
| Sarampión, Paperas, Rubéola | 2 doses of MMR vaccine with the first dose given no earlier than 4 days before the first birthday and the 2 doses separated by at least 28 days |
| Varicela | 2 dosis de la vacuna contra la varicela con la primera dosis administrada no antes de 4 días antes del primer cumpleaños y las 2 dosis separadas por al menos 28 días, o documentación de haber tenido la enfermedad |

• Los padres deben proporcionar a la escuela una excepción médica o una declaración jurada religiosa para rechazar cualquiera de las vacunas requeridas.

• Para obtener más información sobre los requisitos escolares, visite: https://dhhs.ne.gov/immunizations.

• Puede encontrar vacunas gratuitas o de bajo costo acudiendo a su Departamento de Salud Local, Centro de Salud Federalmente Calificado o proveedor local de Vacunas para Niños.

Por favor entregue una copia de los registros de vacunación o excepciones de su hijo a la escuela:

• Enviándolos por correo electrónico a: ________________________  
• Enviándolos por fax a: _____________________________________  
• Enviándolos por correo a:___________________________________  
• Otro ___________________

Su escuela necesita estos registros antes del (insert date).

Gracias, y si tiene preguntas, por favor comuníquese con: ________________________________

Sincerely,

[Signature]

[TITLE OR SCHOOL NAME]
PART 04

Included in this section:

- Disease-Specific Guidance for Schools
- Symptom-based School Exclusion Infographic for Parents
- Insects and Biting Pests
- General Actions for the School Staff on Staying Safe While Caring for Sick Students
According to state regulation (Title 173, 3-003), children showing any signs or symptoms of a contagious or infectious disease are required by law to be sent to their homes immediately, or as soon as safe and proper conveyance can be found. Furthermore, the law requires that when a school nurse (or an individual acting in the capacity of a school nurse) identifies a case or suspected case of a reportable disease, s/he must report that case to the local public health department or the DHHS Division of Public Health (NAC 173 3-004.02). However, identifying potential diseases can be challenging and stressful for school staff that may not see these conditions arise very often. We developed the following pages as a guide for schools in order to help staff be compliant with these regulations and increase their knowledge of infectious diseases and how to care for students. This manual is designed to provide specific disease prevention and control guidelines consistent with national standards and best practices from the CDC, NASN, AAP, Nebraska DHHS, and other organizations.

First provided is general guidelines for staff to protect themselves from potentially infectious exposures, such as vomitus or weeping rashes.

The infographic that follows is to help parents and school staff understand what signs and symptoms could indicate need for exclusion from school activities.

Next provided are syndrome based and disease-specific guidelines for the treatment, control and reporting of diseases often seen primarily in the school-age population but that can affect school staff members. Schools should consult with their local health department to obtain guidance in handling individual cases or disease outbreaks. Not all diseases are covered in this guide because they are not often seen in schools or in childhood and adolescent age groups. Please note, this guide is also not intended to be inclusive of adult/employee illness or disease, but attempts to highlight important exposure risks, particularly to high risk groups such as pregnant or immunocompromised individuals.
*Generally, students may return to school if they have not had fever for 24 hours without use of fever-reducing medication, such as acetaminophen or ibuprofen. Certain illnesses, such as COVID-19, may require the student to stay home for longer.*
CAMPYLOBACTER

A type of bacteria that can cause infection of the intestines. Campylobacter infection, or campylobacteriosis, is caused by Campylobacter bacteria. It is the most common bacterial cause of diarrheal illness in the United States. Ingestion of very few of the bacteria can lead to illness, which makes taking care when preparing food very important. For example, you should not use the same cutting board for raw meat and for fruits and vegetables or cheeses that will not be cooked prior to eating, and handwashing between steps in cooking is advised. Animals, including cattle and chicken, may carry the bacteria without any signs of infection themselves. Milk may be easily contaminated, which is why pasteurization is so important.

**Signs and Symptoms:**
- Diarrhea (often bloody)
- Fever
- Vomiting
- Abdominal cramping
- Malaise

**Incubation and Contagious Period:**
- **Incubation:** 2 - 5 days
- **Contagious Period:** Excretion of Campylobacter is shortened by antibiotic treatment. Without treatment, excretion of bacteria typically continues for 2 to 3 weeks (and up to 7 weeks in some cases) and relapse of symptoms may occur.

**Spreads by:**
- Fecal-oral route
- Contaminated water or food (poultry, unpasteurized dairy)
- Contact with animals (cattle, poultry, cats, dogs)

**Prevent Spread at School By:**
- Washing hands with soap and water before eating, after using the restroom and after touching animals.
- Cleaning and disinfecting fecal or vomiting accidents immediately.
- Ensure food served is from licensed food sources and food is prepped, washed, cooled, cooked, and served properly.
- If a cluster is suspected, report to your local health department.

**Care for Student:**
- Encourage the child to rest and drink fluids at home.
- Advise parents to call their child’s doctor if symptoms worsen.
- Treatment may be needed in severe cases.
- Do not have child prepare food for others while ill with diarrhea.

**PPE and Staff Safety Precautions:**
- Wash hands with soap and water.
- Ensure proper cleaning and disinfection of surfaces that may have become contaminated with feces.

**Exclude When:**
- Has blood or mucus in stool.
- Stool is not contained or having accidents.
- Stool frequency exceeds 2 stools above normal.
- In an outbreak, the local health departments determine exclusion of an infected child or staff member is needed.

**Students May Return When:**
- Once stool is contained by a diaper or when toilet-trained children do not have accidents
- Stool frequency is no more than 2 stools above normal for the child.
- Fever free.
Campylobacter Questions and Answers

“Campylobacter” bacteria are the second most frequently reported cause of foodborne illness. A comprehensive farm-to-table approach to food safety is necessary in order to reduce campylobacteriosis. Farmers, industry, food inspectors, retailers, food service workers, and consumers are each critical links in the food safety chain. This document answers common questions about the bacteria “Campylobacter,” describes how the Food Safety and Inspection Service (FSIS) of the U.S. Department of Agriculture (USDA) is addressing the problems of “Campylobacter” contamination on meat and poultry products, and offers guidelines for safe food handling to prevent bacteria, such as “Campylobacter,” from causing illness.

Q. What is Campylobacter?
A. Campylobacter [pronounced “kamp-e-lo-back-ter”] is a gram negative, microaerophilic bacterium and is one of the most common bacterial causes of diarrheal illness in the United States. Campylobacter jejuni, the strain associated with most reported human infections, may be present in the body without causing noticeable illness. Campylobacter organisms can be found everywhere and are commonly found in the intestinal tracts of cats, dogs, poultry, cattle, swine, rodents, monkeys, wild birds, and some humans. The bacteria pass through the body in the feces and cycle through the environment. They are also found in untreated water.

Q. What harm can Campylobacter bacteria cause?
A. Infection caused by Campylobacter bacteria is called campylobacteriosis and is usually caused by consuming unpasteurized milk, raw or undercooked meat or poultry, or other contaminated food and water, and contact with feces from infected animals. While the bacteria can exist in the intestinal tracts of people and animals without causing any symptoms or illness, studies show that consuming as little as 500 Campylobacter cells can cause the illness.

Symptoms of Campylobacter infection, which usually occur within 2 to 10 days after the bacteria are ingested, include fever, abdominal cramps, and diarrhea (often bloody). In some cases, physicians prescribe antibiotics when diarrhea is severe. The illness can last about a week.

Complications can include meningitis, urinary tract infections, and possibly reactive arthritis (rare and almost always short-term), and rarely, Guillain-Barre syndrome, an unusual type of paralysis. While most people who contract campylobacteriosis recover completely within 2 to 5 days, some Campylobacter infections can be fatal, resulting in an estimated 124 deaths each year.

Q. Are more people becoming ill from campylobacteriosis?
A. The Foodborne Diseases Active Surveillance Network (FoodNet) found a decline, in the rates of infection in 2009 for Campylobacter (30% decrease), in comparison with the previous three years of surveillance (1996 to 1998). Still, according to the Centers for Disease Control and Prevention (CDC), campylobacteriosis causes an incidence of about 13 cases per 100,000 population diagnosed in the United States annually.

FoodNet is a collaborative project among CDC, the 10 Emerging Infections Program sites (EPIs), USDA, and the U.S. Food and Drug Administration (FDA). One of the objectives of FoodNet is to measure effectiveness of a variety of preventive measures in reducing the incidence of foodborne illness attributable to the consumption of meat, poultry, and other foods.

Q. Who is most susceptible?
A. Anyone may become ill from Campylobacter. However, infants and young children, pregnant women and their unborn babies, and older adults, are at a higher risk for foodborne illness, as are people with weakened immune systems (such as those with HIV/AIDS, cancer, diabetes, kidney disease, and transplant patients).
CHICKENPOX (VARICELLA)

Chickenpox is a highly contagious disease caused by the varicella-zoster virus (VZV). It can cause an itchy, blister-like rash and in severe cases, as many as 500 lesions may be present. The chickenpox rash usually first appears on the chest, back, and face, then spreads over the entire body. The virus spreads easily by air, droplets, and touching fluid from lesions. Be aware, scratching can introduce bacteria and lead to secondary bacterial infection.

**Signs and Symptoms:**
- Fever
- Lack of energy
- Cough
- Itchy, red rash that turns into small blisters, often with a small halo of redness around them ("dewdrops on a rose petal"). They pop and scab over time.
- Rash often starts on trunk or scalp.
- Students will have rash, blisters, and scabs at the same time. Illness typically lasts 4-7 days.

**Incubation and Contagious Period:**
- Incubation: 2-3 weeks
- Contagious period: Two days before lesions appear until all lesions have scabbed over.

**Spreads by:**
- Breathing in viral particles from the air in aerosols or droplets
- Contact with respiratory secretions
- Touching fluid from blisters after they pop

**Prevent Spread at School By:**
- Perform hand hygiene
- Disinfect desk and shared surfaces
- Open classroom windows if able or use other methods to improve ventilation
- Encourage families to vaccinate their children

**Care for Student:**
- Tell students not to itch. Itching can cause skin infection by introducing bacteria from skin and nails.
- Have parents call the student’s doctor

*Do not give aspirin to ill children — it may lead to Reye's syndrome (brain swelling, liver failure)*

**PPE and Staff Safety Precautions:**
- Surgical mask and disposable gloves
- Alert pregnant women, unvaccinated staff members and parents of immune-suppressed or children who are incompletely vaccinated (0 or 1 dose received) of possible exposure so they can discuss possible prophylaxis with their doctor. Adults and children need two doses of chickenpox vaccine to be fully protected.
- *Report infection to local health department*

**Exclude When:**
- *Exclude until all lesions are crusted; avoid contact with susceptibles. No exclusion of contacts. Alert parents of immune-suppressed child(ren) of possible exposure.
- If student develops rash 5-26 days after receiving chickenpox vaccine and rash is only around site of injection they do not need to be excluded. Cover rash with bandage and clothing.

**Students May Return When:**
- All skin lesions are scabbed
- Immunized students that have a mild infection may not develop blisters or scabs, just red spots or no rash at all. In this case, students may return when no new red bumps have appeared in last 24 hours.

*Text is from the Minimum Isolation Periods and Control Measures in Title 173 Chapter 3 (nebraska.gov)*
Note: Chickenpox rash can have vesicles (clear) or pustules (cloudy) as rash evolves and that new lesions come in crops, so patient will have lesions in different stages at the same time. The bottom photo shows a mild rash of breakthrough varicella in an immunized child.

Top & bottom photos from CDC. Middle photo from Skin Deep dftbskindeep.com

RESOURCES

Varicella (Chickenpox)
HealthyChildren.org

Chickenpox (Varicella) | CDC
www.cdc.gov/chickenpox
# COMMON COLD

The term “common cold” is used to describe symptoms of a runny nose, congestion, sneezing and cough. Colds can be caused by a large number of very infectious viruses that are more common in the fall and winter but can occur year-round. In fact, children may have a cold eight or more times a year.

| Signs and Symptoms: | Runny and/or stuffy nose  
Sneezing  
Sore throat  
Cough  
May have low-grade fever (100.4 to 102.2) |
|---------------------|------------------------------------------------------------------------------------------------------------------|
| Incubation and Contagious Period: | **INCUBATION**: 12-72 hours  
**CONTAGIOUS PERIOD**: in most cases, person may be infectious from 1 day prior to symptoms, most infectious for 2-4 days when symptomatic, but may be contagious for a week or longer |
| Spreads by: | Direct contact with infected person or common objects and surfaces  
Inhaling infectious particles when infected person coughs or sneezes |
| Prevent Spread at School By: | Perform hand hygiene  
Teach students to cough/sneeze into their elbows or facial tissues  
Disinfect desk and shared surfaces |
| Care for Student: | No treatment needed  
Encourage student to sleep and drink plenty of fluids  
Have parents call the student’s doctor if they have fever > 100.4, chills, no appetite, or cough for over 10 days |
| PPE and Staff Safety Precautions: | Wash hands with soap and water |
| Exclude When: | Do not need to exclude, unless meets other exclusion criteria (see Symptom-base School Exclusion Infographic for Parents on page 83)  
Do not exclude contacts |
| Students May Return When: | N/A |
**COMMON COLD**

How long can symptoms linger with a typical cold?

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cold</th>
<th>Flu</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sore throat</td>
<td>8 days</td>
<td></td>
</tr>
<tr>
<td>Headache</td>
<td>9-10 days</td>
<td></td>
</tr>
<tr>
<td>Congestion</td>
<td>&gt; 14 days</td>
<td></td>
</tr>
<tr>
<td>Runny nose</td>
<td>&gt; 14 days</td>
<td></td>
</tr>
<tr>
<td>Cough</td>
<td>&gt; 14 days</td>
<td></td>
</tr>
</tbody>
</table>

This table compares the typical features of a cold to influenza, but remember that not everyone will develop symptoms or have the same symptoms when infected.

---

RESOURCES

Sneezing, stuffy and runny nose? You might have a cold. Colds are one of the most frequent reasons for missed school and work. Every year, adults have an average of 2 to 3 colds, and children have even more.

This table compares the typical features of a cold to influenza, but remember that not everyone will develop symptoms or have the same symptoms when infected.

**IS IT A COLD OR FLU?**

<table>
<thead>
<tr>
<th>Signs and Symptoms</th>
<th>Cold</th>
<th>Flu</th>
</tr>
</thead>
<tbody>
<tr>
<td>Symptom onset</td>
<td>Gradual</td>
<td>Abrupt</td>
</tr>
<tr>
<td>Fever</td>
<td>Rare</td>
<td>Usual</td>
</tr>
<tr>
<td>Aches</td>
<td>Slight</td>
<td>Usual</td>
</tr>
<tr>
<td>Chills</td>
<td>Uncommon</td>
<td>Fairly common</td>
</tr>
<tr>
<td>Fatigue, weakness</td>
<td>Sometimes</td>
<td>Usual</td>
</tr>
<tr>
<td>Sneezing</td>
<td>Common</td>
<td>Sometimes</td>
</tr>
<tr>
<td>Chest discomfort, cough</td>
<td>Mild to moderate</td>
<td>Common</td>
</tr>
<tr>
<td>Stuffy nose</td>
<td>Common</td>
<td>Sometimes</td>
</tr>
<tr>
<td>Sore throat</td>
<td>Common</td>
<td>Sometimes</td>
</tr>
<tr>
<td>Headache</td>
<td>Rare</td>
<td>Common</td>
</tr>
</tbody>
</table>

#FIGHT FLU

Preventing and Treating Common Cold | CDC

Common Cold | CDC.gov

SCAN
CONJUNCTIVITIS (PINK EYE)

Usually known as pink eye, this is an infection (or irritation) of the thin lining of the white part of the eye and inner surface of the eyelids (conjunctivae). It can be caused by several different bacteria and viruses but may also be due to non-infectious reasons such as seasonal allergies or exposure to chemicals. Please note – pink eye is highly contagious especially in this population.

<table>
<thead>
<tr>
<th>Signs and Symptoms:</th>
<th>BACTERIAL:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Painful, itchy, red eye</td>
</tr>
<tr>
<td></td>
<td>• Thick, green/yellow pus coming from eye (more than just a thin layer)</td>
</tr>
<tr>
<td></td>
<td>• Pus reappears within minutes of wiping the eye</td>
</tr>
<tr>
<td></td>
<td>• Student has hard time opening eye when they wake up</td>
</tr>
<tr>
<td></td>
<td>• Affects 1 or both eyes</td>
</tr>
<tr>
<td>VIRAL:</td>
<td>• Swollen, pink eyes</td>
</tr>
<tr>
<td></td>
<td>• Clear, watery discharge</td>
</tr>
<tr>
<td></td>
<td>• Often sensitive to light</td>
</tr>
<tr>
<td></td>
<td>• Affects 1 or both eyes</td>
</tr>
<tr>
<td>ALLERGIC:</td>
<td>• Itchy, red eyes with tearing</td>
</tr>
<tr>
<td></td>
<td>• Typically both eyes affected</td>
</tr>
<tr>
<td>CHEMICAL:</td>
<td>• Red, watery eye</td>
</tr>
<tr>
<td></td>
<td>• Common after swimming</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Incubation and Contagious Period:</th>
</tr>
</thead>
<tbody>
<tr>
<td>INCUBATION: • Bacterial: Unknown • Viral: Variable</td>
</tr>
<tr>
<td>CONTAGIOUS PERIOD: • Bacterial: Until medication started, or symptoms end • Viral: Until symptoms end</td>
</tr>
</tbody>
</table>

| Spreads by: | • BACTERIAL OR VIRAL: Direct contact with infected person or common objects and surfaces |
|            | • ALLERGIC OR CHEMICAL: not infectious |

<table>
<thead>
<tr>
<th>Prevent Spread at School By:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Hand hygiene</td>
</tr>
<tr>
<td>• Disinfect desk and shared surfaces</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Care for Student:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Ask students to stop rubbing their eyes</td>
</tr>
<tr>
<td>• Urge medical care. Have parents call the student’s doctor for treatment suggestions</td>
</tr>
<tr>
<td>• Most resolve without treatment even if bacterial cause</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PPE and Staff Safety Precautions:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Hand hygiene with soap and water</td>
</tr>
<tr>
<td>• Wear disposable gloves</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Exclude When:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• *Exclude symptomatic cases.</td>
</tr>
<tr>
<td>• *No exclusion of contacts.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Students May Return When:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• *May return when eye is normal in appearance or with documentation from physician that child is no longer infectious.</td>
</tr>
</tbody>
</table>

*Text is from the Minimum Isolation Periods and Control Measures in Title 173 Chapter 3 (nebraska.gov)
People often call conjunctivitis “pink eye” because it can cause the white of the eye to take on a pink or red color. The best method for preventing Conjunctivitis spread is good hand hygiene.

**RESOURCES**

[Pinkeye (Conjunctivitis)](HealthyChildren.org)

[Pink Eye (Conjunctivitis) | CDC](www.cdc.gov/conjunctivitis)

**SCAN**
HELP PROTECT YOURSELF FROM GETTING & SPREADING PINK EYE (CONJUNCTIVITIS)

PINK EYE IS OFTEN HIGHLY CONTAGIOUS.

IT CAN BE CAUSED BY

- Viruses (very contagious)
- Bacteria (very contagious)
- Allergens, like pollen (not contagious)
- Irritants, like smoke or dust (not contagious)

SYMPTOMS USUALLY INCLUDE:

- Redness or swelling
- Watery eyes
- A gritty feel
- Itchiness, irritation, or burning
- Discharge
- Crusting of the eyelids or eyelashes

SEE A DOCTOR IF YOU HAVE PINK EYE ALONG WITH ANY OF THE FOLLOWING:

- Eye pain
- Sensitivity to light or blurred vision
- Intense eye redness
- Symptoms that get worse or don’t improve
- A weakened immune system, for example from HIV or cancer treatment
- Pre-existing eye conditions

Newborns with symptoms of pink eye should see a doctor right away.

A doctor can usually diagnose the cause of pink eye based on symptoms and patient history.

PROTECT YOURSELF AND OTHERS FROM PINK EYE

- Wash your hands often with soap and water, and help young children do the same. Wash hands especially well after touching someone with pink eye or their personal items.
- Avoid touching or rubbing your eyes. This can worsen the condition or spread it to your other eye.
- Avoid sharing personal items, such as makeup, eye drops, towels, bedding, contact lenses and containers, and eyeglasses.
- Do not use the same eye products for your infected and non-infected eyes.
- Stop wearing contact lenses until your eye doctor says it’s okay.
- Clean, store, and replace your contact lenses as instructed by your eye doctor.

WWW.CDC.GOV/PINKEYE
PROTÉGETE PARA NO CONTRAER LA CONJUNTIVITIS
Y EVITA TRANSMITIRLA

A MENUDO LA CONJUNTIVITIS ES MUY CONTAGIOSA

PUEDEN SER CAUSADAS POR:
- Virus (muy contagiosos)
- Bacterias (muy contagiosas)
- Sustancias que causan alergias como el polen (no contagiosas)
- Irritantes como el humo o el polvo (no contagiosos)

LOS SÍNTOMAS GENERALMENTE INCLUYEN:
- Enrojecimiento o inflamación
- Lagrimeo
- Picor, irritación o ardor
- Lagañas en los párpados o las pestañas
- Secreciones
- Dolor en los ojos
- Sensibilidad a la luz o visión borrosa
- Enrojecimiento intenso de los ojos
- Síntomas que empeoran o no mejoran
- El sistema inmunitario debilitado, por ejemplo, a causa del VIH o un tratamiento contra el cáncer
- Condiciones preexistentes en los ojos

CONSULTA A UN MÉDICO SI TIENES OTROS SÍNTOMAS:
- Los recién nacidos que muestren signos de conjuntivitis deben ser examinados por un médico inmediatamente.

PROTÉGETE Y PROTEGE A LOS DEMÁS
- Lava tus manos frecuentemente con agua y jabón, y ayuda a los niños pequeños a que hagan lo mismo. Lava bien tus manos después de tocar a alguien que tenga conjuntivitis o luego de tocar sus artículos personales.
- Evita tocarte o frotarte los ojos. Esto puede empeorar su condición o contagiar al otro ojo.
- Deja de usar lentes de contacto hasta que tu médico te diga que ya puede hacerlo.
- Evita compartir artículos personales como maquillaje, gotas para los ojos, toallas, ropa de cama, lentes de contacto y sus contenedores, y espejuelos.
- No uses en el ojo que no está infectado los mismos productos para los ojos que uses en el ojo infectado.
- Limpia, guarda y reemplaza tus lentes de contacto según las instrucciones de tu médico.

WWW.CDC.GOV/CONJUNCTIVITIS/INDEX-SP.HTML
COVID-19 (coronavirus disease 2019) is a disease caused by a virus named SARS-CoV-2 that can be very contagious and spreads quickly. It most often causes respiratory symptoms that can feel much like a cold, the flu, or pneumonia, but other parts of your body may also be affected by the disease. Most people with COVID-19 have mild symptoms, but some people become severely ill. Antiviral medications have been developed, but are mostly not approved for younger children or easily accessible. Vaccination remains the most effective means of reducing hospitalization and death from infection.

**Signs and Symptoms:**

- Fever or chills
- Shortness of breath or difficulty breathing
- Muscle or body aches
- New loss of taste or smell
- Congestion or runny nose
- Diarrhea

**Incubation and Contagious Period:**

- **Incubation:** 2-10 days (average of 2-4 days)
- **Contagious Period:** From 2 days before until 10 days after symptoms appear

**Spreads by:**

- COVID-19 spreads when an infected person breathes out droplets and very small particles that contain the virus.
- These droplets and particles can be breathed in by other people or land on their eyes, noses, or mouth.
- In some circumstances, they may contaminate surfaces they touch.

**Prevent Spread at School By:**

- Follow CDC guidance for K-12 schools
- Stay up to date on COVID-19 vaccinations
- Good hand hygiene and respiratory etiquette
- Increase ventilation
- Mask children 2 years and older if indicated by health department during an outbreak
- Reduce crowding
- Staff and students should stay home when sick

**Care for Student:**

- If a student becomes ill with symptoms of COVID-19, have them wear a mask if available and move them into a well-ventilated space until they can be picked up by parent or guardian.
- Encourage student to be tested, be familiar with local testing resources. Free home tests can also be ordered at www.covid.gov/tests
- Give family information about COVID-19 and current guidelines for isolation (link to handout for families)

**PPE and Staff Safety Precautions:**

- Wear a mask around any student with symptoms of COVID-19

**Exclude When:**

- Student has confirmed COVID-19 diagnosis
- Symptomatic student has other criteria for exclusion

**Students May Return When:**

- Day 0 = day of symptom onset (or day of positive test if asymptomatic)
- If no symptoms, student may return after 5 days of isolation (return day 6), then wear a mask for an additional 5 days.
- If mild symptoms, student may return after 5 days of isolation if fever free for 24 hours without the use of fever-reducing medications. Student should wear a mask for an additional 5 days.
- If moderate to severe symptoms, student may return after 10 days of isolation (day 11)
- Student should continue to isolate if fever persists or symptoms do not improve
- IF symptoms recur or worsen, count as new day 0 and restart isolation
Know the symptoms of COVID-19, which can include the following:

- Cough, shortness of breath, or difficulty breathing
- Congestion, sore throat, fever, or chills
- Fatigue, headache, or body aches
- Nausea, vomiting, or diarrhea
- New loss of taste or smell

If you are experiencing any of these symptoms, get tested for COVID-19.

Symptoms can range from mild to severe and appear 2–14 days after you are exposed to the virus that causes COVID-19.

Seek medical care immediately if you or someone you know has Emergency Warning Signs of COVID-19:

- Trouble breathing
- Persistent pain or pressure in the chest
- New confusion
- Difficulty waking or staying awake
- Pale, gray, or blue-colored skin, lips, or nail beds, depending on skin tone

This is not a list of all possible symptoms. Please call your healthcare provider for any other symptoms that are severe or concerning to you.
**CRYPTOSPORIDIOUM OR CRYPTO**

Cryptosporidium is a microscopic parasite that causes the diarrheal disease cryptosporidiosis. Both the parasite and the disease are commonly known as “Crypto.” While this parasite can be spread in several different ways, water (drinking water and recreational water) is the most common way to spread the parasite. Because it is not readily killed by chlorination of pool water, exclusion from use of swimming pools for at least 2 weeks AFTER symptoms improve is imperative to prevent spread of infection.

<table>
<thead>
<tr>
<th>Signs and Symptoms:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Acute watery diarrhea</td>
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<tr>
<td>• Fever</td>
</tr>
<tr>
<td>• Vomiting</td>
</tr>
<tr>
<td>• Abdominal cramps</td>
</tr>
<tr>
<td>• Fatigue</td>
</tr>
<tr>
<td>• Lack of appetite/weight loss</td>
</tr>
<tr>
<td>• Dehydration</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Incubation and Contagious Period:</th>
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</thead>
<tbody>
<tr>
<td><strong>Incubation:</strong> 2 – 10 days (average 7 days)</td>
</tr>
<tr>
<td><strong>Contagious Period:</strong> Passage of the parasite in the stool can occur for 2 weeks after symptoms have resolved.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spreads by:</th>
</tr>
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<tbody>
<tr>
<td>• Fecal-oral route</td>
</tr>
<tr>
<td>• Contaminated food (unpasteurized dairy or cider)</td>
</tr>
<tr>
<td>• Swallowing water from water settings such as swimming pools, splash pads, lakes/rivers/streams</td>
</tr>
<tr>
<td>• Contact with animals (cattle, goats, farm animals)</td>
</tr>
<tr>
<td>• Contaminated surfaces such as toys and objects</td>
</tr>
<tr>
<td>• Sexual contact with infected person</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Prevent Spread at School By:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Washing hands with soap and water before eating, after using the restroom and after touching animals.</td>
</tr>
<tr>
<td>• Ensure food served is from licensed food sources and food is prepped, washed, cooled, cooked, and served properly.</td>
</tr>
<tr>
<td>• Exclude from using pool facilities or hot tubs until 2 weeks after diarrhea resolved.</td>
</tr>
<tr>
<td>• If a cluster is suspected, report to your local health department.</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th>Care for Student:</th>
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<tbody>
<tr>
<td>• Encourage the child to rest and drink fluids at home.</td>
</tr>
<tr>
<td>• Advise parents to call their child’s doctor if symptoms worsen.</td>
</tr>
<tr>
<td>• Do not have child prepare food for others while ill with diarrhea.</td>
</tr>
<tr>
<td>• Advise parent/child to restrict swimming or any water play activities for 2 weeks after diarrhea has resolved. Crypto is chlorine resistant.</td>
</tr>
<tr>
<td>• Avoid sexual contact until 2 weeks after diarrhea has resolved.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PPE and Staff Safety Precautions:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Wash hands with soap and water.</td>
</tr>
<tr>
<td>• Ensure proper cleaning and disinfection of surfaces that may have become contaminated with feces.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Exclude When:</th>
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</thead>
<tbody>
<tr>
<td>• Has blood or mucus in stool.</td>
</tr>
<tr>
<td>• Stool is not contained or having accidents.</td>
</tr>
<tr>
<td>• Stool frequency exceeds 2 stools above normal.</td>
</tr>
<tr>
<td>• In an outbreak, the local health departments determine exclusion of an infected child or staff member is needed.</td>
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</tbody>
</table>

<table>
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<tr>
<th>Students May Return When:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Once stool is contained by a diaper or when toilet-trained children do not have accidents</td>
</tr>
<tr>
<td>• Stool frequency is no more than 2 stools above normal for the child.</td>
</tr>
<tr>
<td>• Fever free.</td>
</tr>
</tbody>
</table>
What is Crypto and how can it affect me?
“Crypto,” short for Cryptosporidium, is a germ that causes diarrhea. It is found in the poop of a person who has been infected with Crypto. Crypto is protected by a tough outer shell, which allows it to survive for more than 7 days, even in properly chlorinated pools and water playgrounds. Crypto can cause prolonged diarrhea (lasting 2 weeks or more, during which the diarrhea might stop and start again). Crypto can make anyone sick, but people with weakened immune systems are more likely to become seriously ill when infected with Crypto.

How is Crypto spread in pools?
Crypto is spread by swallowing water that has been contaminated with poop containing Crypto.

You share the water—and the germs in it—with every person who enters the pool. If one person infected with Crypto has diarrhea in the water, the water can be contaminated with tens of millions of Crypto germs. It only takes 10 or fewer germs to cause infection, which means that swallowing even a small amount of contaminated water can make you sick.

Crypto can also be spread by swallowing contaminated water in water playgrounds, hot tubs, lakes, rivers, springs, ponds, streams, and oceans.

How do I protect myself and those I care about?
Because Crypto can stay alive for days, even in properly chlorinated water, stopping the germ from getting in the water in the first place is critical.

All of us can take the following healthy swimming steps:
• Stay out of the water if you are sick with diarrhea.
  » If you have been diagnosed with Crypto, don’t go back in the water until 2 weeks after diarrhea has completely stopped.
  » Don’t poop in the water.
• Don’t swallow the water.
• Take kids on bathroom breaks or check diapers every hour.
  » Change diapers away from the water to keep germs from getting in.

SWIMMERS AND PARENTS
For more information on
• Healthy Swimming, visit www.cdc.gov/healthyswimming
• Diarrhea and Swimming, visit www.cdc.gov/healthywater/swimming/swimmers/rwi/diarrheal-illness.html
• Crypto, visit www.cdc.gov/parasites/crypto/

POOL OPERATORS
For guidelines and resources on how to prevent Crypto and other germs from spreading in recreational water, visit www.cdc.gov/mahc and www.cdc.gov/healthywater/swimming/audience-aquatics-staff.html.
**E. COLI:**

Although many types of Escherichia coli (E coli) bacteria live normally in the intestinal tract, at least 5 types are known to cause diarrhea. These 5 types are STEC, EPEC, ETEC, EAEC and EIEC. Shiga toxin-producing E. coli (STEC), also called enterohemorrhagic E. coli (EHEC), has caused numerous outbreaks in childhood education settings or in large food-related outbreaks (like those associated with hamburger, Brussel sprouts or raw flour) or petting zoo exposures. The most common of the STEC in outbreaks is called O157:H7 (or O157 for short). It may cause a complication known as Hemolytic Uremic Syndrome (HUS) with anemia and significant kidney damage.

| Signs and Symptoms: | • Watery or bloody diarrhea  
| • Abdominal cramps  
| • Fever (usually low grade) |
|---|---|
| Incubation and Contagious Period: | **Incubation:** 3 – 4 days for STEC. Other E. coli types can range from 10 hours to 8 days.  
**Contagious Period:** For STEC, at least 2 weeks and in some cases, much longer. |
| Spreads by: | • Fecal-oral route  
| • Contaminated water or food (undercooked beef, unpasteurized dairy products, raw flour or vegetables if contaminated with animal feces or dirty water)  
| • Contact with animals (cattle, goats, farm animals)  
| • Contaminated surfaces such as toys and objects |
| Prevent Spread at School By: | • Washing hands with soap and water before eating, after using the restroom and after touching animals.  
| • Any symptomatic contacts should be encouraged to have stool culture testing and medical evaluation. In outbreak situations, stool cultures of asymptomatic contacts may aid in controlling spread.  
| • Ensure food served is from licensed food sources and food is prepped, washed, cooled, cooked, and served properly.  
| • Food handlers (staff) diagnosed with Shiga-toxin producing E. coli (STEC) should be excluded until 2 negative stool cultures are collected 24 hours apart OR RESTRICT from highly susceptible population if asymptomatic or symptoms of vomiting or diarrhea resolved, and more than 7 days have passed since the Food Handler became asymptomatic.  
| • For any case of STEC or if a cluster of any type of E. coli is suspected, report to your local health department. |
| Care for Student: | • Encourage the child to rest and drink fluids at home.  
| • Advise parents to call their child’s doctor if symptoms worsen.  
| • Antibiotics are not recommended for STEC.  
| • Children ages 1-4 years are at most risk for developing Hemolytic Uremic Syndrome (HUS).  
| • Do not have child prepare food for others while ill with diarrhea. |
| PPE and Staff Safety Precautions: | • Wash hands with soap and water.  
| • Ensure proper cleaning and disinfection of surfaces that may have become contaminated with feces |
| Exclude When: | • Blood or mucus in stool.  
| • Stool is not contained or having accidents.  
| • Stool frequency exceeds 2 stools above normal.  
| • In an outbreak, the local health departments determine exclusion of an infected child or staff member is needed.  
| • Exclusion is required for children who are childcare/preschool age. 2 negative stool cultures are needed before returning.  
| • No strict exclusion necessary for kindergarten and up. |
| Students May Return When: | • Once stool is contained by a diaper or when toilet-trained children do not have accidents  
| • Stool frequency is no more than 2 stools above normal for the child.  
| • Fever free.  
| • Childcare/preschool aged children should have 2 negative stool cultures (obtained at least 48 hours after any antimicrobial therapy has been discontinued) before returning. |
Escherichia coli (E. coli)

What are E. coli?

E. coli are a large and diverse group of bacteria. Although most strains of E. coli are harmless, others can make people sick. Some kinds of E. coli cause disease by making a toxin called Shiga toxin. The bacteria that make these toxins are called “Shiga toxin-producing E. coli”, or STEC for short. STEC bacteria live in the intestines of many animals and are usually transmitted to people when they eat foods contaminated with the bacteria.

The most commonly reported type of STEC in the United States is O157. Other STEC are called non-O157. Some types of STEC frequently cause severe disease, including bloody diarrhea and hemolytic uremic syndrome, which is a type of kidney failure.

How common is STEC infection?

An estimated 265,000 STEC infections occur each year in the United States. STEC O157 causes about 36% of them.

CDC estimates that STEC causes 3,600 U.S. hospitalizations and 30 deaths each year.

Who gets infected with STEC?

People of any age can become infected with STEC. Groups at highest risk for severe illness include:

- Children younger than 5 years
- Adults older than 65
- People with weakened immune systems, such as people with HIV, diabetes, or undergoing cancer treatment

What are the complications of STEC infection?

Most people recover after 5 to 7 days. However, around 5–10% of people with STEC O157 infection develop a potentially life-threatening complication known as hemolytic uremic syndrome (HUS), a type of kidney failure. Many people require dialysis. Most people with this condition recover within a few weeks, but some suffer permanent kidney damage or die. Young children and older adults are more likely to develop HUS. People infected with non-O157 STEC are much less likely to develop HUS.
DIPHTHERIA (RESPIRATORY)

A highly contagious bacterial infection, diphtheria causes inflammation of the nose, throat, and windpipe. The bacteria produce a toxin that causes inflammation and formation of a dense coating (pseudomembrane) in the throat and airways that can cause life-threatening difficulty breathing or swallowing. The glands of the neck may be very swollen, and the toxin can also damage the heart, kidneys and nervous system. The same bacteria may cause skin infections, but these are not reportable.

**Signs and Symptoms:**
- Fever
- Sore throat and hoarseness
- Thick, white-gray coating of the throat and tonsils (pseudomembrane).
  *The pseudomembrane is highly infectious.*
- Bloody nasal discharge
- Swollen neck
- Difficulty swallowing or breathing

**Incubation and Contagious Period:**
- **INCUBATION:** 2-5 days (range 1-10 days)
- **CONTAGIOUS PERIOD:** Can infect others for up to 4-6 weeks if untreated; usually not communicable 48 hours after appropriate treatment started

**Spreads by:**
- Respiratory droplets from sneezing, coughing, laughing
- Contact with items used by infected person, such as tissues or glasses

**Prevent Spread at School By:**
- Vaccination of students and staff
- Perform hand hygiene

**Care for Student:**
- Notify parents that health department will be involved and child may need immediate medical treatment depending on symptom severity

**PPE and Staff Safety Precautions:**
- Droplet-contact precautions necessary. Mask plus eyewear and gloves preferred.
  *Report immediately by telephone all cases to local and/or state health departments.*

**Exclude When:**
- *Exclude cases.
- *Exclude inadequately immunized close contacts as deemed appropriate by school officials following investigation by the local and/or Nebraska Department of Health and Human Services.

**Students May Return When:**
- Return with a documented physician approval

*Text is from the Minimum Isolation Periods and Control Measures in Title 173 Chapter 3 (nebraska.gov)*
**DIPHTHERIA (RESPIRATORY)**

Diphtheria is a serious infection caused by strains of bacteria, the CDC recommends vaccines for infants, children, teens, and adults to prevent diphtheria.

Swelling of the neck and extensive lymphadenopathy produces the “bull neck” appearance.

Photo credit: Photos of Diphtheria | CDC

Diphtheria causes a characteristic thick, white-grey pseudomembrane which happens when the diphtheria toxin kills the healthy tissue lining the respiratory system and sloughing of the dead tissue occurs. The airway can be involved from the nose and throat all the way down the trachea into the tracheobronchial tree. The pseudomembrane is highly infectious, and when dislodged reveals bleeding and edematous mucosa.

Photo credit: User: Dileepunnikri, CC BY-SA 3.0 https://creativecommons.org/licenses/by-sa/3.0 via Wikimedia Commons

Diphtheria pseudomembrane

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**RESOURCES**

Diphtheria | CDC
www.cdc.gov/diphtheria

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**SCAN**
**PINWORMS (ENTEROBIASIS)**

also known as Threadworm and Seatworm

Pinworms are small, white worms that live in the large intestine. Female worms emerge from the anus at night to lay eggs on the skin. The eggs are too small to see without magnification, but they cause itching in many people. The eggs are largely spread from contaminated hands after itching. Some people may not have symptoms, so if infection recurs, other household members may need treatment.

| Signs and Symptoms: | • Most people have no signs or symptoms  
• May have itching around anus or vagina, particularly at night  
• May see tiny worms in stool or underwear, particularly in the morning |
|---------------------|-------------------------------------------------|
| Incubation and Contagious Period: | **INCUBATION:** 3-8 weeks or longer  
**CONTAGIOUS PERIOD:** Until female worms stop laying eggs. Infective eggs can survive in indoor environments for 2-3 weeks. |
| Spreads by: | • Contact with shared objects or surfaces contaminated from hands that have contacted the perianal area (including toys, bedding, clothing, and toilet seats) |
| Prevent Spread at School By: | • Frequent handwashing  
• Sanitize Clean and disinfect the desk and shared surfaces, including toys |
| Care for Student: | • Keep student’s fingernails short as eggs may be lodged under them when scratching  
• Bathe each morning to remove eggs from skin around anus  
• Change underclothes, bedclothes and sheets frequently  
• Advise parents to contact the student’s doctor. Will need medical treatment.  
• *Careful handwashing essential. |
| PPE and Staff Safety Precautions: | • *Careful handwashing essential.  
• Avoid scratching area  
• Avoid nail biting |
| Exclude When: | • *Exclude until treated as documented by physician.  
• *No exclusion of contacts. |
| Students May Return When: | • *Exclude until treated as documented by physician.  
• Have doctor’s note |

*Text is from the Minimum Isolation Periods and Control Measures in Title 173 Chapter 3 (nebraska.gov)
WHO IS AT RISK FOR PINWORM INFECTION?

Pinworm infection occurs worldwide and affects persons of all ages and socioeconomic levels. It is the most common worm infection in the United States. Pinworm infection occurs most commonly among
- school-aged and preschool-aged children,
- institutionalized persons, and
- household members and caretakers of persons with pinworm infection.

Pinworm infection often occurs in more than one person in household and institutional settings. Child care centers often are the site of cases of pinworm infection.

HOW IS PINWORM INFECTION SPREAD?

Pinworm infection is spread by the fecal-oral route, that is by the transfer of infective pinworm eggs from the anus to someone's mouth, either directly by hand or indirectly through contaminated clothing, bedding, food, or other articles.

Pinworm eggs become infective within a few hours after being deposited on the skin around the anus and can survive for 2 to 3 weeks on clothing, bedding, or other objects. People become infected, usually unknowingly, by swallowing (ingesting) infective pinworm eggs that are on fingers, under fingernails, or on clothing, bedding, and other contaminated objects and surfaces. Because of their small size, pinworm eggs sometimes can become airborne and ingested while breathing.

HOW IS PINWORM INFECTION DIAGNOSED?

Itching during the night in a child's perianal area strongly suggests pinworm infection. Diagnosis is made by identifying the worm or its eggs. Worms can sometimes be seen on the skin near the anus or on underclothing, pajamas, or sheets about 2 to 3 hours after falling asleep.

Pinworm eggs can be collected and examined using the “tape test” as soon as the person wakes up. This “test” is done by firmly pressing the adhesive side of clear, transparent cellophane tape to the skin around the anus. The eggs stick to the tape and the tape can be placed on a slide and looked at under a microscope. Because washing/bathing or having a bowel movement can remove eggs from the skin, this test should be done as soon as the person wakes up in the morning before they wash, bathe, go to the toilet, or get dressed. The “tape test” should be done on three consecutive mornings to increase the chance of finding pinworm eggs. Because itching and scratching of the anal area is common in pinworm infection, samples taken from under the fingernails may also contain eggs. Pinworm eggs rarely are found in routine stool or urine samples.

HOW IS PINWORM INFECTION TREATED?

Pinworm can be treated with either prescription or over-the-counter medications. A health care provider should be consulted before treating a suspected case of pinworm infection. Treatment involves two doses of medication with the second dose being given 2 weeks after the first dose. All household contacts and caretakers of the infected person should be treated at the same time. Reinfection can occur easily so strict observance of good hand hygiene is essential (e.g. proper handwashing, maintaining clean short fingernails, avoiding nail biting, avoiding scratching the perianal area).

Information summarized from CDC: CDC - Enterobiasis - General Information - Frequently Asked Questions
**FIFTH DISEASE**  
(*ERYTHEMA INFECTIOSUM, PARVOVIRUS B19*)

Viral infection that forms rash 4-21 days later. In otherwise healthy children, it usually starts with a mild illness with fever, headache, and runny nose for 7-10 days, then can develop an intensely red “slapped cheek” rash followed by spreading lacey rash. Joint pains are uncommon in children but seen more in adults. Once rash and joint pain appears, the person is likely no longer infectious. Infection is more common in late winter and early spring.

<table>
<thead>
<tr>
<th>Signs and Symptoms:</th>
</tr>
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</table>
| • Fever  
• Fatigue  
• Muscle aches  
• Congestion  
• 4-21 days after symptoms start, student develops red “slapped cheek” rash on face and lace-like rash over rest of body  
• Rash may disappear and reappear with heat |  

<table>
<thead>
<tr>
<th>Incubation and Contagious Period:</th>
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</thead>
</table>
| INCUBATION: 4-14 days (may be up to 21 days)  
CONTAGIOUS PERIOD: No longer infectious once rash appears |  

<table>
<thead>
<tr>
<th>Spreads by:</th>
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| • Contact with respiratory droplets (from talking, coughing, or sneezing)  
• Direct contact with common objects and surfaces  
• Exposure to blood (rare) |  

<table>
<thead>
<tr>
<th>Prevent Spread at School By:</th>
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</table>
| • Perform hand hygiene  
• Clean and disinfect the desk and shared surfaces  
• Teach students to cough/sneeze into their elbows or facial tissue  
• Throw away used facial tissues as soon as they’re used, then clean hands |  

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<th>Care for Student:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Advise parents to contact their child’s doctor if the child has a blood condition, such as chronic hemolytic anemia, sickle cell disease, or immunodeficiencies. The virus may cause temporary inability to make new red cells, leading to severe anemia. These children may not have rash with their illness.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PPE and Staff Safety Precautions:</th>
</tr>
</thead>
</table>
| • Mask recommended when around students with fever and rash  
• Alert students or staff who are pregnant, have chronic hemolytic anemia/sickle cell disease, or immunodeficiency to consult their physician of possible exposure due to risk of severe disease |  

<table>
<thead>
<tr>
<th>Exclude When:</th>
</tr>
</thead>
</table>
| • *Exclude until fever and malaise are gone.  
• *No exclusion of contacts. |  

<table>
<thead>
<tr>
<th>Students May Return When:</th>
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</thead>
<tbody>
<tr>
<td>• *May return with rash; no longer contagious once rash appears.</td>
</tr>
</tbody>
</table>

*Text is from the Minimum Isolation Periods and Control Measures in Title 173 Chapter 3 (nebraska.gov)
FIFTH DISEASE
(erythema infectiosum, parvovirus B19)

Outbreaks in school-aged children are common in late winter and early spring.

RESOURCES
Fifth Disease (Parvovirus B19)
HealthyChildren.org

Parvovirus Symptoms and Complications
www.cdc.gov/parvovirusb19

SIGN AND SYMPTOMS
- A red rash cheeks
- A spotty rash may appear on the chest, arms and legs
HAND, FOOT AND MOUTH DISEASE

This viral infection is common in the summer and fall. It causes red spots and painful blisters in the back of the mouth and on the hands and feet (including on palms and soles). It can also appear in the diaper area.

| Signs and Symptoms: | * Fever  
|                    | * Sore throat with sores in the back of the mouth; may have significant pain with swallowing  
|                    | * Small blisters or red spots on hands and feet, including palms and soles  
|                    | * Sometimes may have pink rash on buttocks and thighs |

| Incubation and Contagious Period: | **INCUBATION**: 3-6 days  
|                                | **CONTAGIOUS PERIOD**: Typically, 1 - 3 weeks. But may be present in stool for months |

| Spreads by: | * Contact with respiratory droplets (from talking, coughing, or sneezing) or saliva of infected person  
|            | * Contact with blisters or blister fluid  
|            | * Contact with feces  
|            | * Direct contact with contaminated common objects and surfaces |

| Prevent Spread at School By: | * Hand hygiene  
|                             | * Clean and disinfect the desk and shared surfaces  
|                             | * Teach students to cough/sneeze into their elbows or facial tissue |

| Care for Student: | * Advise parents to call their child’s doctor if symptoms worsen or student is unable to eat or drink or appears dehydrated  
|                  | * Rash may be severe in people with eczema |

| PPE and Staff Safety Precautions: | * Wash hands with soap and water.  
|                                   | * Staff may wear gloves for any contact with fluid or blisters. |

| Exclude When: | * Exclude cases during acute phase and until fever-free for 24 hours without the use of fever-reducing medication. |

| Students May Return When: | * Has not had fever for 24 hours without use of fever-reducing medication, such as acetaminophen and ibuprofen |

*Text is from the Minimum Isolation Periods and Control Measures in Title 173 Chapter 3 (nebraska.gov)
Despite its scary name, hand, foot, and mouth disease is a common, contagious illness caused by different viruses. It typically affects infants and children under age 5, but older kids and adults can catch it as well.

Top photos: dftbskindeep.com
Bottom photo: CDC

RESOURCES

Hand, Foot & Mouth Disease: Parent FAQs
HealthyChildren.org
Hand, Foot, and Mouth Disease (HFMD)

What it is: a viral illness that causes fever, mouth sores, and a blister-like skin rash on the hands and feet.

Most often seen in children under the age of 5
Occurs most frequently in the summer and fall
Usually not serious but highly contagious

How to care for your child with HFMD at home

- Most children with HFMD disease can be treated at home and recover generally within 10 days.
- Painful mouth sores may result in pain with swallowing. You may give over-the-counter pain medications, such as acetaminophen or ibuprofen, but do not give aspirin to children.
- Dehydration is one of the most common problems resulting from the mouth pain. Make sure your child drinks enough fluids to prevent dehydration.
- See a healthcare provider if the child is not drinking enough to stay hydrated, or if symptoms are unusually prolonged (> 10 days) or severe.

School or Childcare

CDC recommends that children can continue to go to childcare and schools if:

- They have no fever.
- They have no uncontrolled drooling with mouth sores.
- They feel well enough.

Local Health Department (LHD) may require children with HFMD to stay home to control an outbreak.

Prevent the spread

- Wash hands (after bathroom, diaper change, blowing nose, coughing, sneezing, and before and after caring for someone who is sick).
- Teach children how to wash hands and observe/help them wash hands often.
- Clean and disinfect frequently touched surfaces (shared items, including toys).
- Avoid touching your eyes, face and mouth with unwashed hands, and avoid contact with sick people.

ICAP

Children’s Nebraska

September 2023
**Enfermedad de manos, pies y boca (EMPB o por sus siglas en inglés HFMD)**

**Información para padres**

**Qué es:** una enfermedad viral que causa fiebre, llagas en la boca y una erupción cutánea en forma de ampolla en manos y pies.

- En más frecuente en niños menores de 5 años
- Ocurre con mayor frecuencia en verano y otoño.
- Normalmente no es grave pero es muy contagioso

**Cómo cuidar a su hijo con EMPB en casa**

- La mayoría de los niños con EMPB pueden tratarse en casa y suelen recuperarse en 10 días.
- Las llagas en la boca pueden provocar dolor al tragar. Usted puede administrar analgésicos de venta libre, como paracetamol o ibuprofeno. Pero no de aspirina a los niños.
- La deshidratación es uno de los problemas más comunes derivados del dolor de la boca. Asegúrese que su hijo(a) beba suficientes líquidos para evitar la deshidratación.
- Acuda a un médico si el niño no bebe lo suficiente para mantenerse hidratado o si los síntomas son inusualmente prolongados (>10 días) o graves.

**Escuela o guardería**

El CDC recomiendan que los niños puedan seguir asistiendo a la guardería y/o escuela si:
- No Tienen Fiebre
- No tienen babeo incontrolado con llagas en la boca
- Se sienten bien

El Departamento de salud local (LHD) puede exigir que los niños con EMPB se quedan en casa para controlar un brote.

**Para prevenir el contagio**

- Lavarse las manos (después del cambio de pañal, sonarse la nariz, toser, estornudar, y, antes y después de atender a alguien enfermo).
  - Enseñe a los niños como lavarse las manos y ayúdelos a hacerlo de la manera correcta y con frecuencia.
- Limpie y desinfecte las superficies que se tocan con frecuencia (objetos compartidos, incluidos juguetes).
- Evite tocarse los ojos, la cara y la boca con las manos sucias y el contacto con personas enfermas.

**Noviembre 2023**
HEPATITIS A

This viral infection causes liver inflammation and affects one-third of children under 6 years old. Those infected with this virus will have symptoms, and few develop jaundice (yellowing of eyes and skin), but jaundice occurs in most older children and adults. Symptoms typically last several weeks or up to 2 months.

<table>
<thead>
<tr>
<th>Signs and Symptoms:</th>
<th></th>
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<tbody>
<tr>
<td>• Fever</td>
<td></td>
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<tr>
<td>• Nausea</td>
<td></td>
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<tr>
<td>• Loss of appetite</td>
<td></td>
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<tr>
<td>• Abdominal pain</td>
<td></td>
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<tr>
<td>• Yellowing of skin or eyes (jaundice)</td>
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<tr>
<td>• Dark-brown urine</td>
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<table>
<thead>
<tr>
<th>Incubation and Contagious Period:</th>
<th></th>
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<tbody>
<tr>
<td>INCUBATION: 15-50 days (average 28-30 days)</td>
<td></td>
</tr>
<tr>
<td>CONTAGIOUS PERIOD: Two weeks before symptoms begin until seven days after jaundice develops</td>
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<table>
<thead>
<tr>
<th>Spreads by:</th>
<th></th>
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<tbody>
<tr>
<td>• Contact with feces of infected child, often through contact with shared object or surface (fecal-oral route)</td>
<td></td>
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<tr>
<td>• Eating contaminated food or water</td>
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<table>
<thead>
<tr>
<th>Prevent Spread at School By:</th>
<th></th>
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<tbody>
<tr>
<td>• Hand hygiene</td>
<td></td>
</tr>
<tr>
<td>• Disinfect desk and shared surfaces</td>
<td></td>
</tr>
<tr>
<td>• Remind students of the importance of washing hands after using the toilet</td>
<td></td>
</tr>
<tr>
<td>• Encourage hepatitis A vaccine</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Care for Student:</th>
<th></th>
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<tbody>
<tr>
<td>• Encourage the child to rest and drink fluids at home.</td>
<td></td>
</tr>
<tr>
<td>• If severe symptoms, should see their doctor for testing</td>
<td></td>
</tr>
<tr>
<td>• * Immune globulin (IG) or hepatitis A vaccine prevents disease if given within two weeks of exposure. IG to family contacts only.</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>PPE and Staff Safety Precautions:</th>
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<tbody>
<tr>
<td>• Alert staff and parents of unvaccinated children of possible exposure.</td>
<td></td>
</tr>
<tr>
<td>• Encourage them to contact their doctor as they may need vaccine or immune globulin</td>
<td></td>
</tr>
<tr>
<td>• Report infection to local health department</td>
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</table>

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<thead>
<tr>
<th>Exclude When:</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>• *Exclude for no less than 7 days after onset of jaundice</td>
<td></td>
</tr>
<tr>
<td>• *No exclusion of contacts.</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Students May Return When:</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>• Seven days after jaundice begins</td>
<td></td>
</tr>
<tr>
<td>• Have doctor's note.</td>
<td></td>
</tr>
</tbody>
</table>

*Text is from the Minimum Isolation Periods and Control Measures in Title 173 Chapter 3 (nebraska.gov)

RESOURCES

Hepatitis A - FAQs | CDC [cdc.gov/parasites/hepatitis]
Hepatitis A | [HealthyChildren.org]
Vaccination is the best way to prevent hepatitis A.

The hepatitis A vaccine is safe and effective. The vaccine series usually consists of 2 shots, given 6 months apart. Getting both shots provides the best protection against hepatitis A.

You can prevent infection even after you have been exposed.

If you have been exposed to the hepatitis A virus in the last 2 weeks, talk to your doctor about getting vaccinated. A single shot of the hepatitis A vaccine can help prevent hepatitis A if given within 2 weeks of exposure. Depending upon your age and health, your doctor may recommend immune globulin in addition to the hepatitis A vaccine.

Handwashing plays an important role in prevention.

Practicing good hand hygiene—including thoroughly washing hands with soap and warm water after using the bathroom, changing diapers, and before preparing or eating food—plays an important role in preventing the spread of many illnesses, including hepatitis A.

Symptoms

Not everyone with hepatitis A has symptoms. Adults are more likely to have symptoms than children. If symptoms develop, they usually appear 2 to 7 weeks after infection and can include:

- Yellow skin or eyes
- Fever
- Not wanting to eat
- Dark urine or light-colored stools
- Upset stomach
- Diarrhea
- Throwing up
- Joint pain
- Stomach pain
- Feeling tired

Symptoms usually last less than 2 months, although some people can be ill for as long as 6 months.

Diagnosis and treatment

A doctor can determine if you have hepatitis A by discussing your symptoms and taking a blood sample. To treat the symptoms of hepatitis A, doctors usually recommend rest, adequate nutrition, and fluids. Some people will need medical care in a hospital.

International travel and hepatitis A

If you are planning to travel to countries where hepatitis A is common, talk to your doctor about getting vaccinated before you travel. Travelers to urban areas, resorts, and luxury hotels in countries where hepatitis A is common are still at risk. International travelers have been infected, even though they regularly washed their hands and were careful about what they drank and ate.
HERPES SIMPLEX
(COLDSORE VIRUS)

Viral infection that commonly causes blister-like sores in the mouth or around the lips. First infections may cause a febrile illness with blistering of the gums and mouth (gingivostomatitis) and around the lips, though most initial infections in childhood with this virus are asymptomatic. The virus remains suppressed (latent) in the nerve roots, but can reactivate to cause lesions called cold sores or fever blisters, usually at the border of the lip and facial skin. Recurrent outbreaks usually involve the same site each time.

**Signs and Symptoms:**

**First infection:**
- Fever
- Irritable
- Painful, blister-like skin lesion around lips and in mouth (usually in the front portion rather than tonsils and throat)
- May have lesions on fingers or thumb if frequently placed in mouth (herpetic whitlow)
- Lesions may leak fluid and then crust over
- May infect eye

**Recurrent infections:**
- Cluster of blisters on lips without fever

**Incubation and Contagious Period:**

- Incubation: 2-14 days
- 1st Infection: Infectious for a few weeks after symptoms begin
- Recurrent: Infectious for 3-4 days

**Spreads by:**

- Direct contact with saliva, through kissing or shared objects like toothbrushes, cups, silverware, lip gloss, straws
- May spread to another part of student's body by contaminated hands or skin

**Prevent Spread at School By:**

- Perform hand hygiene
- Avoid kissing or nuzzling child
- Do not share food or drink
- Do not touch sores
- Avoid touching eyes
- Disinfect shared toys and surfaces

**Care for Student:**

- Cover body lesions with clothing or bandage
- If any concern for eye involvement (pain, redness, tearing), should be seen promptly by ophthalmologist
- May have severe disease involving other skin areas in persons with eczema
- Encourage good personal hygiene and not to share toiletries with others

**PPE and Staff Safety Precautions:**

- Avoid touching cold sores
- Wash hands
- Do not share items that may be contaminated

**Exclude When:**

- *Exclusion unnecessary.
- *No exclusion of contacts.

**Students May Return When:**

- Generally not excluded

*Text is from the Minimum Isolation Periods and Control Measures in Title 173 Chapter 3 (nebraska.gov)
Once a child is infected with the cold sore virus, it is more likely to return during times when the body’s immune system is run down or the skin becomes irritated from other causes.

Top Photos: dftbskindeep.com
Middlelel Photo: Wikimedia commons Herpes labialis - opryszczka wargowa.jpg
Bottom Photo: dftbskindeep.com

RESOURCES

Cold Sores in Children: Aout the Herpes Simplex Virus HealthyChildren.org
**IMPETIGO**

Skin infection caused by streptococcal ("strep") or staphylococcal ("staph") bacteria. The rash is most commonly crusted with only small blisters (non-bullous), but in some cases large blisters, or bullae, form (bullous impetigo). Rash most often occurs around the nose, mouth, hands and forearms of children. Impetigo may occur as a complication of other skin lesions (bug bites, poison ivy, scrapes and cuts) when bacteria living on the skin gets into the wound.

<table>
<thead>
<tr>
<th>Signs and Symptoms:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Non-bullous: Small fluid-filled blisters which easily burst, leaving small red sore areas which then develop yellow or tan crust (honey or brown sugar appearance)</td>
</tr>
<tr>
<td>• Bullous: large blisters which start clear but may become cloudy; less likely to pop</td>
</tr>
<tr>
<td>• Ecthyma: small punched-out lesion with distinct edges, yellow crusting</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Incubation and Contagious Period:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Incubation:</strong> 4-10 days</td>
</tr>
<tr>
<td><strong>Contagious Period:</strong> Until treated for 24 hours with antibiotics</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spreads by:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Direct contact with lesions or common objects and surfaces</td>
</tr>
<tr>
<td>• Can be spread to other areas of body on the child's hands</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Prevent Spread at School By:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Cover lesions with bandage or clothing</td>
</tr>
<tr>
<td>• Hand hygiene</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Care for Student:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Cover lesions with loose clothing</td>
</tr>
<tr>
<td>• Clip fingernails to reduce injury from scratching</td>
</tr>
<tr>
<td>• Advise parents to contact student's doctor</td>
</tr>
<tr>
<td>• *Good personal hygiene is essential.</td>
</tr>
<tr>
<td>• *Avoid common use of toiletries.</td>
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</tbody>
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<table>
<thead>
<tr>
<th>PPE and Staff Safety Precautions:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Hand hygiene</td>
</tr>
<tr>
<td>• Wear disposable gloves</td>
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<thead>
<tr>
<th>Exclude When:</th>
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</thead>
<tbody>
<tr>
<td>• *Exclude until brought under treatment and acute symptoms resolved.</td>
</tr>
<tr>
<td>• *No exclusion of contacts.</td>
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<table>
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<tr>
<th>Students May Return When:</th>
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<tbody>
<tr>
<td>• Treated and acute symptoms have resolved</td>
</tr>
</tbody>
</table>

*Text is from the Minimum Isolation Periods and Control Measures in Title 173 Chapter 3 (nebraska.gov)
Doctors use antibiotics to treat impetigo. Antibiotics can also help protect others from getting sick.

Top Left: DCD
Top Right: dftbskindeep.com
Middle Photo: CDC
Bottom Photo: dftbskindeep.com

RESOURCES

Impetigo
HealthyChildren.org

Impetigo: All You Need to Know I CDC
www.cdc.gov/groupastrep
# Influenza (Flu)

This viral infection, generally called “the flu,” is contagious and more common during cold weather. The flu infects the nose, throat, and sometimes the lungs; additionally, it can cause mild to severe illness, and at times can lead to death. There are different strains of both influenza A and influenza B that circulate during “flu season”, so a person could get influenza more than once per season. Please note that “stomach flu” and many other respiratory illnesses may be called “flu” colloquially but are not the same disease.

## Signs and Symptoms:
- Fever
- Chills
- Sore throat
- Cough
- Nasal drainage
- Muscle aches
- Fatigue
- Nausea and vomiting

## Incubation and Contagious Period:
- **Incubation**: 24-96 hours
- **Contagious Period**: One day before symptoms begin until one week after, with most contagious period 2-4 days after symptoms start

## Spreads by:
- Contact with respiratory droplets (from talking, coughing, or sneezing)
- Direct contact with common objects and surfaces

## Prevent Spread at School By:
- Encouraging staff and families to get a yearly flu vaccine
- Perform hand hygiene
- Disinfect shared surfaces
- Teach students to cough/sneeze into their elbows or facial tissue
- Stay home when sick (and make sure families and staff understand school sick policies)

## Care for Student:
- Parents should make an appointment with the child’s doctor as use of an antiviral may be indicated

*Do not give aspirin to ill children* – it may lead to Reye’s syndrome (brain swelling, liver failure)

## PPE and Staff Safety Precautions:
- Wash hands

*High risk including asthma, diabetes, pregnancy, immunodeficiency – staff alerts*

## Exclude When:
- *Exclude for duration of illness. No exclusion of contacts.*

## Students May Return When:
- No fever for 24 hours and symptoms improving

*Text is from the Minimum Isolation Periods and Control Measures in Title 173 Chapter 3 (nebraska.gov)
Images on this page are from the CDC’s Influenza Social Media Toolkit and may be distributed freely.

RESOURCES

CDC.gov

Media Toolkit

CDC.gov

DATO SOBRE LA INFLUENZA:
La vacuna contra la influenza no puede darle influenza.

VacunateContraLaInfluenza.org
MEASLES (RUBEOLA)

This is an extremely contagious viral infection and will infect nearly all exposed people who are not already immune. The onset is characterized by fever and the 3 Cs- cough, coryza (runny nose), and conjunctivitis (red eyes). Small white spots inside the cheeks near the molars may be seen (Koplik spots). Unfortunately, the characteristic red blotchy rash does not appear until after the person has been ill for 3-5 days, so many people may have been exposed before the illness is recognized to be measles. Acute measles may include pneumonia and brain infection (encephalitis) which may lead to deafness. Measles destroys antibody producing cells, so risk of other infections is higher for years following infection. Long-term complications include subacute sclerosing panencephalitis (SSPE), a progressive, disabling neurologic disease that is fatal in typically 1-3 years. Presence of measles is increasing with lower vaccination rates.

**Signs and Symptoms:**
- Fever
- Cough
- Coryza (runny nose)
- Conjunctivitis (red, watery eyes)
- Koplik spots: White, grey, or blue 1-3mm raised lesions with red base inside the mouth (usually the inner cheek, less often on roof of mouth)
- After 3-5 days, red blotchy rash starting at the hairline and spreading down and outward
- May develop severe viral pneumonia and/or brain infection (encephalitis) or other complications

**Incubation and Contagious Period:**
- **Incubation:** 8-21 days (average 8-12)
- **Contagious Period:** Five days before rash appears until four days after

**Spreads by:**
- Breathing in viral particles from the air
- Airborne particles can travel long distances along air currents and infect people in a different room than the one where the sick person is. They persist in the air and infection may happen

**Prevent Spread at School By:**
- Immediately isolate student
- Exclusions (see above)
- Contact local health department

**Care for Student:**
- Immediately mask and isolate patient in a room with the door closed. Negative pressure rooms are preferred but may not be available. Use HEPA filter and ventilate room to outside (or open window) if possible.
- Have parents make an appointment with their child’s doctor.

**PPE and Staff Safety Precautions:**
- **Report all cases immediately by telephone to local and state health departments**
- Exclude unimmunized students and staff in the school once first case is found. Immunization before 12 months of age does not count toward required doses.
- Alert staff and parents of unimmunized students of possible exposure.
- Advise staff members who have had fewer than two vaccine doses to get vaccinated, unless they have had the disease (e.g. positive titers) or were born before 1957 (assumed to have been infected). Please be aware that receipt of inactivated vaccine or unknown type 1963-1967 is assumed ineffective and does not count.

**Exclude When:**
- Exclude for duration of illness and for no less than 4 days after onset of rash. Exclude unimmunized students on same campus from date of diagnosis of first case until 14 days after rash onset of last known case or until measles immunization received or laboratory proof of immunity is presented or until history of previous measles infection is verified as per records or the Nebraska Department of Health and Human Services.
- Exposed children and staff who have not been immunized or are immuno-compromised should also be excluded and directed to see their physician for possible prophylaxis and testing

**Students May Return When:**
- Don’t have symptoms and rash started more than four days ago
- Un-immunized students may return 14 days after beginning of rash of last known case (may be weeks after first case identified) OR measles immunization received OR laboratory proof of immunity is presented OR once history of previous measles infection is verified with records or by the Nebraska Department of Health and Human Services

*Text is from the Minimum Isolation Periods and Control Measures in Title 173 Chapter 3 (nebraska.gov)
MEASLES (RUBEOLA)

Left to Right, Top to Bottom:

A: Tiny white spots (Koplik spots) may appear inside the mouth two to three days after symptoms begin.

B: This is a depiction of a child’s face displaying the characteristic maculopapular rash of measles. Note that the eye exhibited the conjunctivitis, or inflammation of the conjunctival membrane that covers the anterior surface of each eye, imparting the red coloration, and marked tear production.

C: This is a maculopapular rash on the face, one of the hallmark symptoms of measles.

D: This is an example of erythematous maculopapular/morbilliform eruption on trunk.

RESOURCES

Measles CDC.org
**MENINGITIS (ACUTE BACTERIAL)**

Meningitis is an inflammation (swelling) of the protective membranes covering the brain and spinal cord and can be severe. Acute bacterial meningitis can be disabling or deadly and requires immediate medical attention. Meningitis should be considered in anyone with fever, headache and stiff neck (resists bending forward to touch chin to chest). Please note this is a category of diagnoses, which may be caused by many different bacteria with their own risk factors and means of spread. In school age children, common causes include Streptococcus pneumonia (pneumococcus), Haemophilus influenzae type b (Hib), and Neisseria meningitidis.

### Signs and Symptoms:
- Sudden onset of fever
- Headache
- Stiff neck (pain when touching chin to chest)
- Nausea
- Vomiting
- Sensitive to light
- Drowsy
- Confusion
- Rash – if large, palpable (raised), blood-filled lesions (purpura) appear, consider as medical emergency

### Incubation and Contagious Period:
- **Incubation:** 2-10 days (average 3-4 days)
- **Contagious Period:** Until student has been taking antibiotics for 24 hours

### Spreads by:
- Contact with respiratory droplets (from talking, coughing, or sneezing)
- Some infections are acquired through contaminated food (e.g. Listeria, Salmonella, E. coli)
- Direct contact with common objects and surfaces

### Prevent Spread at School By:
- Encourage families to vaccinate unimmunized children (pneumococcus, Hib, meningococcal)
- Perform hand hygiene
- Teach students to cough/sneeze into their elbows or facial tissues

### Care for Student:
- Advise parents to **seek immediate medical care.**
- Bacterial meningitis is dangerous and possibly fatal if not treated appropriately

### PPE and Staff Safety Precautions:
- Washing hands
- Advise parents of un- or under-immunized children to call their doctor. May need preventative antibiotics.

### Exclude When:
- *Local or state health authorities will determine appropriate follow-up and investigation on a case-by-case basis.
- *Student should be excluded from school until antibiotic course has been initiated and symptoms have fully resolved, and may return with medical clearance.

### Students May Return When:
- Started antibiotics, have a doctor’s note, and don’t have symptoms

*Text is from the Minimum Isolation Periods and Control Measures in Title 173 Chapter 3 (nebraska.gov)
**WHAT IS MENINGOCOCCAL MENINGITIS?**

Meningococcal bacteria can cause a life-threatening bloodstream infection (sepsis) or meningitis (infection of the lining around the brain), or both.

*It can attack without warning and*  
**SYMPTOMS INCLUDE:**
- High fever
- Stiff neck
- Vomiting
- Headache
- Exhaustion
- Purplish rash

**IT’S MORE COMMON THAN YOU THINK**

Meningococcal meningitis can affect all ages, and it can occur anywhere.

- It is more common among those 16-23 because of how young people socialize
- Meningitis B is more than 5x more common in college students vs. non-college students
- Meningitis B cases have been reported in 30+ college campuses between 2013-January 2023

**FEW ARE FULLY VACCINATED**

against meningococcal meningitis.

- Only 3 out of 10 17-year-olds have received their first dose of the MenB vaccine.
- It can kill in as little as 24 HOURS. Or cause permanent complications: brain damage, hearing loss, learning disabilities or limb amputations.

**WHY DOES THIS MATTER?**

It takes two types of meningitis vaccines – MenACWY and MenB – to be fully vaccinated against meningococcal meningitis, but few people have received both vaccines. Ask your healthcare provider today.

**MAINLY CAUSED BY**

5 types of meningococcal bacteria: A-B-C-W-Y

- It is EASY TO SPREAD from person-to-person.

- sharing anything that comes in contact with SALIVA
- being in CLOSE quarters
- being SNEEZED or coughed upon
- KISSING
- E-CIGS and VAPES

Sources: Centers for Disease Control and Prevention, World Health Organization, National Foundation for Infectious Diseases, Journal of the Pediatric Infectious Diseases Society. See meningitisbactionproject.org for details.
MENINGITIS (VIRAL)

Meningitis is an inflammation (swelling) of the protective membranes covering the brain and spinal cord. Viral meningitis is more common than bacterial meningitis and often less severe. Commonly occurs during summer and early fall when caused by enteroviruses. Meningitis should be considered in anyone with fever, headache and stiff neck (resists bending forward to touch chin to chest). Physical exam alone is not sufficient to distinguish viral meningitis from bacterial meningitis, and patients with known viral infections may develop secondary bacterial meningitis, so prompt medical evaluation should be sought. Close contacts may become infected with the same virus, but very few will likely develop meningitis as a result.

| Signs and Symptoms: | • Sudden onset of fever  
|                     | • Headache  
|                     | • Stiff neck (pain when touching chin to chest)  
|                     | • Nausea  
|                     | • Vomiting  
|                     | • Sensitive to light  
|                     | • Drowsy  
|                     | • Confusion  
|                     | • May have blood-red rash |

| Incubation and Contagious Period: | Incubation: 1-10 days (but more than one virus may cause disease so may vary)  
|                                 | Contagious Period: Until student has no symptoms * to Close contacts of someone with viral meningitis can become infected with the virus that made that person sick. However, these close contacts are not likely to develop meningitis. Only a small number of people who get infected with the viruses that cause meningitis will develop viral meningitis. |

| Spreads by: | • Contact with respiratory droplets (from talking, coughing, or sneezing)  
|            | • Direct contact with common objects and surfaces  
|            | • Contact with feces |

| Prevent Spread at School By: | • Perform hand hygiene  
|                            | • Avoid close contact, such as touching and shaking hands, with people who are sick  
|                            | • Clean and disinfect frequently touched surfaces  
|                            | • Vaccines may prevent certain causes: influenza, MMR, varicella |

| Care for Student: | • Advise parents to call the child’s doctor for evaluation but consider seeking urgent medical care if concerned for more severe disease and/or possible bacterial meningitis |

| PPE and Staff Safety Precautions: | • Washing hands  
|                                  | • Staff and student vaccinations |

| Exclude When: | *Student should be excluded from onset of symptoms until full resolution, and may return with medical clearance. |

| Students May Return When: | Don’t have symptoms and have doctor’s note |

*Text is from the Minimum Isolation Periods and Control Measures in Title 173 Chapter 3 (nebraska.gov)
MENINGITIS (VIRAL)

Viral meningitis (when meningitis is caused by a virus) is the most common type of meningitis. Most people get better on their own without treatment. However, anyone with symptoms of meningitis should see a doctor right away because any type of meningitis can be serious. Only a doctor can determine if someone has meningitis, what is causing it, and the best treatment. Babies younger than 1 month old and people with weakened immune systems are more likely to have severe illness from viral meningitis.

CAUSES Non-polio enteroviruses are the most common cause of viral meningitis in the United States. Only a small number of people infected with enteroviruses will develop meningitis.

OTHER VIRUSES THAT CAN CAUSE MENINGITIS ARE

- Mumps virus
- Non-polio enteroviruses
- Herpesviruses, including Epstein-Barr virus, herpes simplex viruses, and varicella-zoster virus (which causes chickenpox and shingles)
- Measles virus
- Influenza virus
- Arboviruses, such as West Nile virus
- Lymphocytic choriomeningitis virus

PEOPLE AT RISK
People of any age can get viral meningitis. However, some people have a higher risk of getting the disease, including:

- Children younger than 5 years old
- People with weakened immune systems caused by diseases, medications (such as chemotherapy), and recent organ or bone marrow transplantations

Babies younger than 1 month old and people with weakened immune systems are also more likely to have severe illness.

Source: Viral Meningitis | CDC

BACTERIAL vs VIRAL MENINGITIS

<table>
<thead>
<tr>
<th>SYMPTOMS</th>
<th>Bacterial Meningitis</th>
<th>Viral Meningitis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fever</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Chills</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Headache</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Neck stiffness</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Nausea/Vomiting</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Sensitivity to light</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAUSES</th>
<th>Bacterial Meningitis</th>
<th>Viral Meningitis</th>
</tr>
</thead>
<tbody>
<tr>
<td>S. pneumoniae, Group B strep, N. meningitides and others</td>
<td>✓</td>
<td>X</td>
</tr>
<tr>
<td>Enteroviruses, herpesviruses and others</td>
<td>X</td>
<td>✓</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TREATMENT</th>
<th>Bacterial Meningitis</th>
<th>Viral Meningitis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treated with Antibiotics</td>
<td>✓</td>
<td>X</td>
</tr>
<tr>
<td>Risk of severe complications</td>
<td>✓</td>
<td>Rare</td>
</tr>
</tbody>
</table>

RESOURCES

Viral Meningitis | CDC
cdc.gov/meningitis

Viral Meningitis: Causes, Symptoms & Treatment
clevelandclinic.org
MRSA (STAPH BACTERIAL INFECTION)

Staphylococcus aureus ("staph") are bacteria that typically causes skin infections but can cause more serious infections like pneumonia. MRSA (methicillin resistant Staphylococcus aureus) is resistant to the antibiotics usually used to treat skin infections, so appropriate antibiotics must be used. Both resistant (MRSA) and susceptible (MSSA) strains are found commonly in the community, and many people become colonized with them on their skin or in their nose and gut. MRSA boils or abscesses are commonly confused with spider bites.

### Signs and Symptoms:

**Skin infection:**
- Variable: red bumps, pus-filled lesions (abscesses or boils)
- May have fever and large red area around the lesion (cellulitis)

**Other infections:** may involve muscle, joints, heart and bloodstream, or other sites. Symptoms depend on areas involved.

### Incubation and Contagious Period:

- **Incubation:** Variable
- **Contagious Period:** Until lesions no longer drain.
- Some people are carriers (colonized): They are infectious but have no symptoms.

### Spreads by:

- Direct contact with lesions or common objects and surfaces, including shared sports equipment, towels, razors
- Skin to skin contact
- Crowded conditions

### Prevent Spread at School By:

- Perform hand hygiene
- Keep lesions covered at school
- No sharing of personal items

### Care for Student:

- Have parents call the student's doctor – not all infection require systemic antibiotics
- Consider masking student

### PPE and Staff Safety Precautions:

- Good handwashing and sanitation

### Exclude When:

- *Exclusion unnecessary unless directed by physician. Keep lesions covered at school.*

### Students May Return When:

- Receiving proper treatment
- Wound is covered at all times

*Text is from the Minimum Isolation Periods and Control Measures in Title 173 Chapter 3 (nebraska.gov)
MRSA skin infections are transmitted primarily by skin-to-skin contact and by contact with surfaces that have come into contact with someone else’s infection.

MRSA (STAPH BACTERIAL INFECTION)

For School & Daycare | MRSA | CDC
www.cdc.gov/mrsa

Photo Credit: Gregory Moran, M.D.
What is MRSA?

MRSA is methicillin-resistant Staphylococcus aureus, a potentially dangerous type of staph bacteria that is resistant to certain antibiotics and may cause skin and other infections. As with all regular staph infections, recognizing the signs and receiving treatment for MRSA skin infections in the early stages reduces the chances of the infection becoming severe. MRSA is spread by:

- Having direct contact with another person’s infection
- Sharing personal items, such as towels or razors, that have touched infected skin
- Touching surfaces or items, such as used bandages, contaminated with MRSA

What are the signs and symptoms?

Most staph skin infections, including MRSA, appear as a bump or infected area on the skin that may be:

- Red
- Swollen
- Painful
- Warm to the touch
- Full of pus or other drainage
- Accompanied by a fever

What if I suspect an MRSA skin infection?

Cover the area with a bandage and contact your healthcare professional. It is especially important to contact your healthcare professional if signs and symptoms of an MRSA skin infection are accompanied by a fever.

How are MRSA skin infections treated?

Treatment for MRSA skin infections may include having a healthcare professional drain the infection and, in some cases, prescribe an antibiotic. Do not attempt to drain the infection yourself – doing so could worsen or spread it to others. If you are given an antibiotic, be sure to take all of the doses (even if the infection is getting better), unless your healthcare professional tells you to stop taking it.

How can I protect my family from MRSA skin infections?

- Know the signs of MRSA skin infections and get treated early
- Keep cuts and scrapes clean and covered
- Encourage good hygiene such as cleaning hands regularly
- Discourage sharing of personal items such as towels and razors

For more information, please call 1-800-CDC-INFO or visit www.cdc.gov/MRSA.

Developed with support from the CDC Foundation through an educational grant from Pfizer Inc.
¿Qué es SARM?

SARM significa Staphylococcus Aureus Resistente a la Meticilina, un tipo de bacteria potencialmente peligrosa que es resistente a ciertos antibióticos y puede causar infecciones de la piel y de otro tipo. Al igual que con todas las infecciones regulares por estafilococo, reconocer los signos y recibir tratamiento para las infecciones de la piel por SARM en las primeras etapas reduce las posibilidades de convertirse en una infección grave. El SARM se propaga mediante:

- El contacto directo con la infección de otra persona
- El intercambio de objetos personales, tales como toallas o máquinas de afeitar, que hayan tocado la piel infectada
- El contacto con superficies o elementos, tales como vendas usadas, contaminadas con el SARM

¿Cuáles son los signos y síntomas?

La mayoría de las infecciones de la piel por estafilococo, entre las que se incluyen las infecciones por SARM, aparecen como una protuberancia o área infectada en la piel que puede:

- Ser roja
- Estar hinchada
- Ser dolorosa
- Estar caliente al tacto
- Estar lleno de pus u otra secreción
- Estar acompañada de fiebre

¿Qué debo hacer si sospecho que tengo una infección de la piel por SARM?

Cubra el área con una venda y póngase en contacto con su profesional de la salud. Es especialmente importante que se contacte con su profesional de la salud si los signos y síntomas de la infección de la piel por SARM van acompañados de fiebre.

¿Cómo se tratan las infecciones de la piel por SARM?

El tratamiento para las infecciones de la piel por SARM puede incluir el drenaje de la infección por parte de un profesional de la salud y, en algunos casos, la prescripción de un antibiótico. No intente drenar la infección usted mismo, ya que si lo hace podría empeorarla o propagarla a otras personas. Si le administran un antibiótico, asegúrese de tomar todas las dosis (aun si la infección está mejorando), a menos que su profesional de la salud le indique que deje de tomarlo.

¿Cómo puedo proteger a mi familia de infecciones de la piel por SARM?

- Conozca los signos de las infecciones de la piel por SARM y obtenga tratamiento temprano
- Mantenga los cortes y los rasguños limpios y cubiertos
- Fomente una buena higiene, tal como el lavado de manos con regularidad
- Desaliente el intercambio de objetos personales, tales como toallas o máquinas de afeitar.

Para obtener más información, llame al 1-800-CDC-INFO o visite www.cdc.gov/MRSA.

Desarrollado con el apoyo de la Fundación CDC mediante una subvención educativa de Pfizer Inc.
# Mumps

This viral illness typically starts with a few days of fever, headache, muscle aches, tiredness, and loss of appetite. Then most people will have swelling of their salivary glands in front and below the ear (parotitis) when the parotid gland, located in front and below the ear, swells. This is what causes the puffy cheeks and a tender, swollen jaw. It is usually mild but may cause swelling of salivary glands (parotitis). It is uncommon in vaccinated younger children but can be seen in adolescents and adults despite vaccination due to waning of immunity.

| Sign and Symptoms: | • 20-40% of patients do not have symptoms  
| | • 60-70% have pain and swelling below the ear or under the jaw (parotitis)  
| | • Fever  
| | • Earache  
| | • Viral meningitis  
| | • After puberty, swelling of the testicles (orchitis)  
| | • Less common include inflammation of the ovaries (oophoritis), pancreas, breasts |

**Incubation and Contagious Period:**

- **Incubation:** Usually 16 – 18 days (range 12-25 days)
- **Contagious Period:** Seven days before swelling begins until five days after start of symptoms

| Spreads by: | • Contact with respiratory droplets (from talking, coughing, or sneezing)  
| | • Direct contact with common objects and surfaces |

| Prevent Spread at School By: | • Inform staff and parents of unimmunized students of possible exposure and encourage immunization  
| | • Consider masking student |

| Care for Student: | **Supportive**  
| | • Stay hydrated but avoid acidic food (e.g. lemons) that stimulate the salivary gland as it can increase pain  
| | • Ice or heat packs on swollen glands may ease swelling and discomfort.  
| | • Acetaminophen and ibuprofen can reduce fever and help with pain. **Do not give aspirin to ill children** – it may lead to Reye’s syndrome (brain swelling, liver failure) |

| PPE and Staff Safety Precautions: | • Report infection to local health department  
| | • Hand hygiene  
| | • Use Gloves |

| Exclude When: | • *Exclude 5 days from onset of swelling in the neck. No exclusion of contacts. Inform parents of unimmunized students on campus of possible exposure and encourage immunization.  
| | • Local health department let the school know if unimmunized children should be excluded. |

| Students May Return When: | Five days after start of swelling  
| | • If unimmunized students are excluded, they may return after receiving the vaccine OR 26 days after onset of swelling in last case in affected school |

*Text is from the Minimum Isolation Periods and Control Measures in Title 173 Chapter 3 (nebraska.gov)
Mumps - multiple viruses (including flu, enterovirus, EBV, CMV, HIV) can cause parotitis (parotid gland swelling). The child also could have a bacterial infection or autoimmune condition.

Encourage child to see their doctor; discuss with health department; and check student’s vaccination record.

RESOURCES

Mumps
CDC.gov/mumps

Protect Yourself Infographic
CDC
PERTUSSIS (WHOOPING COUGH)

This is a very contagious bacterial infection that may start like a mild cold (fever, runny nose, mild cough) and progresses to severe. Oftentimes, prolonged coughing spells that end in a loud, high-pitched “whooping” sound when the child can at last inhale. Even after treatment, the cough can persist for weeks; the disease is also known as “the 100-day cough.” Outbreaks occur typically every few years, and children 11-18 whose immunity from vaccines is waning are more often affected. Adults may have cough without “whoop”, but it may still be severe.

**Signs and Symptoms:**
- Typical cold symptoms
- Loud, strong cough starts 2-3 weeks later
- Cough may cause vomiting, difficulty breathing, and skin to turn blue
- Student may make high-pitched sound (whoop) when taking a breath after coughing
- Cough may persist for weeks and interrupt sleep and daily activities

**Incubation and Contagious Period:**
- **Incubation:** 5-21 days (typically, 7-10 days)
- **Contagious Period:** Seven days after exposure until three weeks after cough begins
  —When treated with erythromycin, students are only infectious for 5-7 days

**Spreads by:**
- Contact with respiratory droplets (from talking, coughing, or sneezing)

**Prevent Spread at School By:**
- Hand hygiene
- Disinfect desk and shared surfaces
- Encourage families to vaccinate their children
- Make sure staff members are up to date on vaccinations, including Tdap

**Care for Student:**
- Parents should take child to their physician for possible testing and treatment with antibiotics if confirmed.
- Cough medicine probably won’t help, so should only use as advised by provider.
- Encourage fluids and rest. Watch for signs of dehydration.
- Avoid dust and other irritants that might provoke cough.

**PPE and Staff Safety Precautions:**
- Surgical mask and disposable gloves
- Report all cases immediately by telephone to local and state health departments
- Encourage close contacts, including staff, and unimmunized students to contact their doctor. May need preventative antibiotic treatment
  —Monitor students and staff for respiratory symptoms within 21 days of exposure

**Exclude When:**
- Suspicious of infection
- Exclude close contacts who are coughing
  - *Exclude until physician approves return per written documentation.*
  - *Exclude inadequately immunized close contacts as deemed appropriate by school officials following investigation by the local and/or state Department of Health and Human Services.*
  - *Chemoprophylaxis may be considered for family and close contacts.*

**Students May Return When:**
- Have a doctor’s note and have been taking antibiotics for five days
- Children who are not treated may return 21 days after cough began
- Child should feel well enough to participate and cough manageable

*Text is from the Minimum Isolation Periods and Control Measures in Title 173 Chapter 3 (nebraska.gov)
PERTUSSIS (WHOOPING COUGH)

WHOOPING COUGH DISEASE PROGRESSION

Whooping Cough Disease Progression

<table>
<thead>
<tr>
<th>Weeks</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
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</table>

**Early Symptoms: Stage 1**
*May last 1 to 2 weeks*
- Highly contagious
- Runny nose
- Low-grade fever
- Mild, occasional cough

**Later Symptoms: Stage 2**
*Last from 1 to 6 weeks; may extend to 10 weeks*
- Fits of numerous, rapid coughs followed by “whoop” sound
- Vomiting and exhaustion after coughing fits (called paroxysms)

**Recovery: Stage 3**
*Last about 2 to 3 weeks; susceptible to other respiratory infections for many months*
Recovery is gradual. Coughing lessens but fits of coughing may return.

cdc.gov/whoopingcough

RESOURCES

- Diagnosis and Treatment of Whooping Cough (Pertussis)
  www.cdc.gov/pertussis

- Whooping Cough: What Parents Need to Know
  www.healthychildren.org
POLIO MYELITIS
(POLIO, INFANTILE PARALYSIS)

Polio was once one of the most feared diseases in the United States. It is a virus that generally causes mild symptoms or no symptoms at all, but in a significant minority of cases, it can cause paralysis and death. Vaccination prevents the virus from invading the nervous system to prevent the worst outcomes. One case of paralytic polio is enough to declare an outbreak because the virus is spreading amongst people who have milder symptoms. It can still risk spread to susceptible individuals. The inactivated vaccine (IPV) used in the US includes types 1-3 of the virus, but in April 2016, type 2 was removed from the oral vaccine (OPV) used globally, so any OPV after that date do not count towards vaccination completion.

MOST PEOPLE WILL HAVE NO SYMPTOMS

Symptom types
- Abortive polio: a few days of flu-like and GI symptoms
- Non-paralytic polio: viral meningitis (see other section)
- Paralytic polio: may affect different parts of the brain and spinal cord (spinal, bulbar, bulbospinal) causing paralysis of muscles controlling limbs, speaking, swallowing, breathing. Can also cause sensitivity to touch and muscle spasms.

Incubation and Contagious Period:

Incubation: Nonparalytic: usually 3-6 days; Paralysis: usually 7-21 days Range: 3-35 days
Contagious Period: Not accurately known. Most risk 7-10 days before / following onset; possible while virus is excreted. Asymptomatic transmission possible.

Spreads by:
- Contact with respiratory droplets (from talking, coughing, or sneezing) Contact with respiratory droplets (from talking, coughing, or sneezing) or saliva of infected person
- Contact with feces
- Direct contact with contaminated common objects and surfaces (including shared silverware or cups)

Prevent Spread at School By:
- Exclude contacts lacking documentation of immunity
- Hand hygiene

Care for Student:
- Supportive
  - Any concern for neurologic involvement, including difficulties with speech, breathing, swallowing, or moving limbs, or severe headache or tingling in extremities, should be sent urgently for medical evaluation

PPE and Staff Safety Precautions:
- Enteric and droplet
  - Report all cases immediately by telephone to local and state health departments

Exclude When:
- *Exclude until physician approves return.

Students May Return When:
- Have doctor’s note

*Text is from the Minimum Isolation Periods and Control Measures in Title 173 Chapter 3 (nebraska.gov)
POLIO MYELITIS (POLIO, INFANTILE PARALYSIS)

Immunizing every child will stop transmission and ultimately make the world polio free.

Resources:

- What is Polio?
  www.cdc.gov/polio/
- Polio & Vaccines to Prevent Paralytic Polio
  www.healthychildren.org

There is no cure for polio, it can only be prevented. Polio vaccine, given multiple times, can protect a child for life.

POLIO INFECTION KILLS AND INJURES KIDS

Out of 200 kids infected with poliovirus type 1:

1. Will be paralyzed
   up to 5% of those paralyzed will die because polio affects the muscles that help them breathe
2. Will suffer from viral meningitis
191. May have minor or no symptoms

Let's #MakePolioHistory
Cdc.gov/polio

#VaccinesWork
Cdc.gov/globalhealth

#EndPolio
Cdc.gov/polio

The number of human diseases that have been eradicated (just smallpox). Let's change the count.

RESOURCES
RINGWORM AND RELATED DISORDERS

Despite the name (given long ago), ringworm is a fungal infection of the skin. It is very contagious and extremely common. The same type of infection can have different names depending on the body area involved, e.g. athlete’s foot, jock itch, onychomycosis (nail fungal infection), tinea barbae (beard). Ringworm typically begins as a flat, discolored patch with a ring-like shape with a raised scaly border. It may appear red in lighter complexions and brown in darker complexions. It is usually very itchy. More likely when skin is hot and damp, or person has impaired immune system.

<table>
<thead>
<tr>
<th>Signs and Symptoms:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scalp:</strong></td>
</tr>
<tr>
<td>• Patchy area of dandruff-like scales</td>
</tr>
<tr>
<td>• May have hair loss</td>
</tr>
<tr>
<td>• Scalp may become boggy (kerion)</td>
</tr>
<tr>
<td><strong>Body or feet:</strong></td>
</tr>
<tr>
<td>• Red, circular patch with clear center</td>
</tr>
<tr>
<td>• Cracking and peeling of skin between toes</td>
</tr>
<tr>
<td>• Toenail: discolored, thick, fragile, or cracked</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Incubation and Contagious Period:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Incubation:</strong> 1-3 weeks</td>
</tr>
<tr>
<td><strong>Contagious Period:</strong> Until lesions begin to shrink, or child begins oral treatment</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spreads by:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Skin-to-skin contact with a person who has ringworm (direct contact to lesion).</td>
</tr>
<tr>
<td>• Contact with infected livestock or pets.</td>
</tr>
<tr>
<td>• Contact with a contaminated surface, such as a locker room floor or sweaty gym clothes.</td>
</tr>
<tr>
<td>• Sharing objects with an infected person or animal such as a brush, towel or bedding.</td>
</tr>
<tr>
<td>• Contaminated soil.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Prevent Spread at School By:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Keep lesions covered at school</td>
</tr>
<tr>
<td>• No sharing of personal items</td>
</tr>
<tr>
<td>• Disinfection of surfaces and shared equipment</td>
</tr>
<tr>
<td>• Encourage footwear in public areas like locker rooms and showers</td>
</tr>
<tr>
<td>• Hand hygiene</td>
</tr>
</tbody>
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<thead>
<tr>
<th>Care for Student:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Have parents discuss with their physician, and encourage them to make an appointment with student’s doctor if infection involves scalp or nails, if not improving on treatment, or if unclear if student has a different skin disorder (e.g. eczema), or if immunocompromised</td>
</tr>
<tr>
<td>• Encourage student to keep affected area clean, cool and dry. May need to change clothes (underwear, socks, shirts, etc) if becoming damp.</td>
</tr>
<tr>
<td>• Can be made worse if using topical or oral steroid</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PPE and Staff Safety Precautions:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Athletes cannot participate in contact sports for 72 hours after starting treatment (unless lesions can be kept well covered)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Exclude When:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Do not need to exclude if affected areas can be covered during school</td>
</tr>
<tr>
<td>• If affected areas cannot be covered with clothing/dressing during school, exclude until treatment started</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Students May Return When:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• After treatment is started</td>
</tr>
</tbody>
</table>

*Text is from the Minimum Isolation Periods and Control Measures in Title 173 Chapter 3 (nebraska.gov)
RINGWORM AND RELATED DISORDERS

Ringworm can affect skin on almost any part of the body as well as fingernails and toenails.

RESOURCES

Ringworm
HealthyChildren.org

Symptoms of Ringworm
cdc.gov/fungal/diseases/ringworm

SCAN
RUBELLA AND RELATED DISORDERS

A mild viral infection in most people, symptoms that can include a low-grade fever, sore throat, and a rash that starts on the face and spreads to the rest of the body. If a woman is infected while she is pregnant, rubella can cause a miscarriage or serious birth defects in a developing baby (e.g., heart problems, loss of hearing or eyesight, intellectual disabilities, damage of liver or spleen). The best protection against rubella is MMR (measles-mumps-rubella) vaccine, and it is uncommon in vaccinated children.

| Signs and Symptoms: | • Low-grade fever (100.4 to 102.2)
• Fatigue and general discomfort
• Red or pink rash that starts on the face and spreads over body, lasts three days
• Swollen glands behind ears
• Headache
• Mild pink eye (conjunctivitis)
• Runny nose, cough |
|---------------------|--------------------------------------------------|
| Incubation and Contagious Period: | **Incubation:** 14-21 days (usually 16-18 days)
**Contagious Period:** One week before rash appears until 14 days after it appears; most contagious 3-4 days before rash appears to 7 days after.
25% to 50% of people infected with rubella do not develop a rash or have any symptoms, but they still spread it to others. |
| Spreads by: | • Contact with respiratory droplets (from talking, coughing, or sneezing)
• Direct contact with common objects and surfaces
If a woman is infected with rubella while she is pregnant, she can pass it to her developing baby and cause serious harm (congenital rubella syndrome). |
| Prevent Spread at School By: | • Encouraging parents to vaccinate their children
• Hand hygiene |
| Care for Student: | • Supportive |
| PPE and Staff Safety Precautions: | **Report all cases immediately by telephone to local and state health departments**
• Notify staff members as immunocompromised or pregnant persons on staff or in their households could be severely affected |
| Exclude When: | • Suspicious of infection
• Exclude all unimmunized children
• *Exclude for duration of illness and for no less than 4 days* after onset of rash.
• *Exclude unimmunized students on same campus from date of diagnosis of first case until 23* days after rash onset of last known case or until rubella immunization received or laboratory proof of immunity is presented. |
| Students May Return When: | • 7 days after rash began
• Unimmunized students may return once they receive the vaccine or until local health department determines it is safe for them to return (typically 21 days after onset of rash in last case). |

*Text is from the Minimum Isolation Periods and Control Measures in Title 173 Chapter 3 (nebraska.gov)*
RUBELLA

Left: Rash of rubella on skin of child’s back. Distribution is similar to that of measles, but the lesions are less intensely red.

Right: This baby presented with ‘blueberry muffin’ skin lesions due to congenital rubella syndrome.

Bottom: A young boy who exhibited a blotchy macular rash on his face, arms and chest. He had become infected with the German measles, also known as rubella. This was considered a severe case. Details - Public Health Image Library (PHIL) (cdc.gov)

RESOURCES

German Measles (Rubella)
HealthyChildren.org

Rubella (German Measles)
www.cdc.gov/rubella
**SALMONELLA**

Bacteria that can infect intestines. Salmonella are divided into typhoidal and non-typhoidal groups. Typhoid fever is caused by a type of Salmonella infection that is more serious and can cause outbreaks but is uncommon in the United States. Most Salmonella outbreaks are caused by one of hundred types of nontyphoidal Salmonella serotypes or strains. Salmonellosis usually presents with diarrhea, fever and stomach cramps, which generally last 4-7 days, though some people may be more severely affected or have infection spread to other parts of the body besides the GI tract.

<table>
<thead>
<tr>
<th>Signs and Symptoms:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Diarrhea (can be bloody or mucus)</td>
</tr>
<tr>
<td>• Fever</td>
</tr>
<tr>
<td>• Vomiting or nausea</td>
</tr>
<tr>
<td>• Abdominal cramps</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Incubation and Contagious Period:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Incubation:</strong> 6 – 48 hours for non-typhoidal Salmonella strains.</td>
</tr>
<tr>
<td><strong>Contagious Period:</strong> About half of children younger than 5 years still have Salmonella in their feces/stool 12 weeks after having this infection.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spreads by:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Fecal-oral route</td>
</tr>
<tr>
<td>• Contaminated water or food (eggs, undercooked beef or poultry, unpasteurized dairy products)</td>
</tr>
<tr>
<td>• Contact with animals (live poultry, reptiles, rodents, farm animals)</td>
</tr>
<tr>
<td>• Contact with other children such as a daycare centers.</td>
</tr>
<tr>
<td>• Contaminated surfaces such as toys and objects</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Prevent Spread at School By:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Washing hands with soap and water before eating, after using the restroom and after touching animals.</td>
</tr>
<tr>
<td>• Ensure food served is from licensed food sources and food is prepped, washed, cooled, cooked, and served properly.</td>
</tr>
<tr>
<td>• Consider testing animals for Salmonella before allowing in school facility.</td>
</tr>
<tr>
<td>• Food handlers (staff) diagnosed with Salmonella should be excluded until 2 negative stool cultures are collected 24 hours apart OR RESTRICT from highly susceptible population if asymptomatic or symptoms of vomiting or diarrhea resolved, and more than 7 days have passed since the Food Handler became asymptomatic.</td>
</tr>
<tr>
<td>• If a cluster is suspected, report to your local health department.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Care for Student:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Encourage the child to rest and drink fluids at home.</td>
</tr>
<tr>
<td>• Advise parents to call their child’s doctor if symptoms worsen.</td>
</tr>
<tr>
<td>• Do not have child prepare food for others while ill with diarrhea.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PPE and Staff Safety Precautions:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Wash hands with soap and water.</td>
</tr>
<tr>
<td>• Ensure proper cleaning and disinfection of surfaces that may have become contaminated with feces.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Exclude When:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Blood or mucus in stool or stool is all black.</td>
</tr>
<tr>
<td>• Stool is not contained or having accidents.</td>
</tr>
<tr>
<td>• Stool frequency exceeds 2 stools above normal.</td>
</tr>
<tr>
<td>• In an outbreak, the local health departments determine exclusion of an infected child or staff member is needed.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Students May Return When:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Once stool is contained by a diaper or when toilet-trained children do not have accidents.</td>
</tr>
<tr>
<td>• Stool frequency is no more than 2 stools above normal for the child. Stool consistency may not normalize for longer but should not determine return to school.</td>
</tr>
<tr>
<td>• Fever free.</td>
</tr>
<tr>
<td>• Most strains of Salmonella (exception is typhoidal Salmonella) do not need negative stool samples before returning.</td>
</tr>
</tbody>
</table>
Keep it clean
Before you eat or handle food, wash your hands, food prep tools and surfaces.

Cook to the right temperature
Use a food thermometer to check that foods are cooked to the right temperature:
- 165°F for chicken
- 160°F for ground beef

Watch the clock
Throw out perishable food that has been sitting at room temperature for more than two hours; one hour if it’s 90°F or warmer.

Serve at the right temperature
Keep hot foods at 140°F or warmer, and cold foods at 40°F or colder.

www.cdc.gov/foodsafety
## SCABIES (HUMAN ITCH MITE)

Scabies is a skin infestation caused by small, microscopic mites that tunnel and lay their eggs under the top layers of the skin. Afterwards, it causes small red bumps and severe itching.

### Signs and Symptoms:
- Intense itching, especially at night
- Pimple-like skin rashes (itchy red bumps)
- Small burrows are sometimes seen on the skin

**Most commonly affected areas:**
- Folds in between the fingers and toes
- Folds in thighs and genital area
- Bends at wrists and knees
- The area around the waist (where underwear or clothes sit)
- Under rings, watch bands and bracelets
- The area around the nipples

### Incubation and Contagious Period:

**Incubation:** Symptoms develop in 4-8 weeks in persons who have not been previously infected and sensitized. May have symptoms as soon as 1-4 days if previously infected as the person’s immune system reacts. Scabies can still be spread before symptoms arise.

**Contagious Period:** Until mites and eggs are killed. Mites do not survive off of a person for more than 48-72 hours.

### Spreads by:
- Direct, prolonged skin-to-skin contact with an infected person.
- Indirect spread, through sharing of items such as clothing, is possible but less common.

### Prevent Spread at School By:
- Discourage skin-to-skin contact
- Encourage handwashing
- Hot water washing of any shared clothing (e.g. costumes), linens, or items next to the skin for the 3 days prior to treatment.
- Potentially infested items that cannot be laundered (e.g. stuffed animals) should be placed in plastic bags for at least 4 days.

### Care for Student:
- Advise parents to contact the student’s doctor. Will need medical treatment. Family members also frequently infected whether or not they have symptoms and should also receive treatment.

### PPE and Staff Safety Precautions:
- Gloves and handwashing
- Avoid direct skin-to-skin contact

### Exclude When:
- Suspicious of infection
- *Exclude until the day after treatment is started.
- *No exclusion of contacts.

### Students May Return When:
- *Exclude until the day after treatment is started.

*Text is from the Minimum Isolation Periods and Control Measures in Title 173 Chapter 3 (nebraska.gov)
How to Examine for Scabies

Common Symptoms of Scabies are:

- Itching (worse at night)
- Rash

Look for:

A. Pustule and Pimple-Like Lesions
B. Rash
C. Burrow Lesions (less commonly found)

Look at:

1. Hands
   look between fingers, palms, wrists
2. Elbows
3. Back
   look between shoulder blades
4. Armpits
5. Waist
   look at belt line all the way around
6. Knees
   (Wear gloves for each examination and change gloves between each exam.)

Scabies can look like one of the following:

Photo Credits
1: Sarah Hannam

RESOURCES

CDC - Scabies
cdc.gov/parasites/scabies/

Scabies: A Very Itchy But Curable Rash
HealthyChildren.org
**SHIGELLA**

Bacteria that cause an intestinal infection. Compared with other bacterial causes of diarrhea, Shigella is the most likely to cause outbreaks in ECE or school settings. Such outbreaks may spread to family members and other close contacts of affected children.

### Signs and Symptoms:
- Diarrhea (watery stools with blood or mucus)
- Fever
- Headache
- Abdominal cramps

### Incubation and Contagious Period:
- **Incubation:** 1 – 7 days, average is 1 to 3 days.
- **Contagious Period:** Untreated, Shigella persists in stool for up to 4 weeks.

### Spreads by:
- Fecal-oral route
- Contaminated water or food (eggs, undercooked beef or poultry, unpasteurized dairy products)
- Contact with other children such as a daycare centers.
- Contaminated surfaces such as toys and objects
- Children 5 years or younger, adults who care for young children, and others living in crowded conditions at increased risk of becoming infected with Shigella.
- Sexual contact with an infected person.

### Prevent Spread at School By:
- Washing hands with soap and water before eating, after using the restroom and after touching animals.
- Ensure food served is from licensed food sources and food is prepped, washed, cooled, cooked, and served properly.
- Food handlers (staff) diagnosed with Shigella should be excluded until 2 negative stool cultures are collected 24 hours apart OR RESTRICT from highly susceptible population if asymptomatic or symptoms of vomiting or diarrhea resolved, and more than 7 days have passed since the Food Handler became asymptomatic.

### Care for Student:
- Encourage the child to rest and drink fluids at home.
- Advise parents to call their child’s doctor if symptoms worsen.
- While most Shigella infections will resolve in 2 to 3 days without antibiotics, antibiotics are effective in shortening the duration of diarrhea and eliminating the Shigella bacteria from the stool.
- Do not have child prepare food for others while ill with diarrhea.
- Avoid sexual contact until 2 weeks after diarrhea has resolved.

### PPE and Staff Safety Precautions:
- Wash hands with soap and water.
- Ensure proper cleaning and disinfection of surfaces that may have become contaminated with feces.

### Exclude When:
- Blood or mucus in stool.
- Stool is not contained or having accidents.
- Stool frequency exceeds 2 stools above normal.
- Exclusion is required for children who are childcare/preschool age. 2 negative stool cultures are needed before returning.
- No strict exclusion necessary for kindergarten and up.
- The local health departments determine exclusion of an infected child or staff member is needed to control an outbreak.

### Students May Return When:
- Once stool is contained by a diaper or when toilet-trained children do not have accidents
- Stool frequency is no more than 2 stools above normal for the child.
- Fever free.
- Childcare/preschool aged children should have 2 negative stool cultures
DOES YOUR CHILD HAVE DIARRHEA?

Here’s the poop

Your child’s diarrhea might be caused by a germ called **SHIGELLA**. SHIGELLA are bacteria that cause about **500,000 cases** of DIARRHEA in the United States each year.

Symptoms

Symptoms of **SHIGELLA** illness usually begin 1 to 2 days after becoming infected with the germ, and can include:

- **Diarrhea** (sometimes bloody)
- **Fever**
- **Stomachache**

Protect your family & community!

**SHIGELLA** spreads very easily from one person to another! Stop the spread of **SHIGELLA** by following these easy steps:

- Everyone should wash hands
  - Before preparing food or eating
  - After using the toilet or changing diapers
- Do NOT prepare food if you are ill
- Do NOT share food with anyone if you or your family members are ill
- Stay home from childcare and school while sick or until your health department says it’s safe to return

Steps to get better

- **Drink fluids**
- **Get rest**
- **Talk to your doctor** if you are still sick

Most people feel better in 5 – 7 days.

Visit CDC’s Shigella website for more information: [www.cdc.gov/shigella](http://www.cdc.gov/shigella)

RESOURCES

- Preventing and Controlling Shigellosis | CDC.gov
- Shigella Infections | Healthychildren.org
**SHINGLES / HERPES ZOSTER**

Shingles is caused by reactivation of the chickenpox virus (VZV or varicella). Following an initial infection with chickenpox, the virus remains in a nerve root and is inactive (latent or dormant). It can be reactivated particularly during times of immune suppression, stress, or trauma. Because the virus is within a nerve, symptoms often start with pain in the area supplied by the nerve (dermatome) and later, a rash with a cluster of small clear blisters (vesicles) appears in the same area.

### Signs and Symptoms:
- Itching, tingling or pain in an area of a nerve (dermatome); pain may be severe and persistent (post-herpetic neuralgia)
- Early symptoms may also be a flu-like illness with fever, headache
- May subsequently develop small, grouped blisters (vesicles) with surrounding area of pain. Usually on one side of the body in a single dermatome
- May involve area around and including the eye which can damage sight and needs immediate treatment

### Incubation and Contagious Period:
- **Incubation:** Variable
- **Contagious Period:** Until lesions scab over; scabs do not need to have healed completely

### Spreads by:
- Contact with a lesion can spread the virus (VZV, varicella) to a person who is not immune to chickenpox (no history of disease or vaccination, or immunocompromised). The virus will cause clinical chickenpox in that person, not shingles, in the immediate time frame.
- Severely immunocompromised person may spread by droplet route like in primary chickenpox.

### Prevent Spread at School By:
- Prevent spread of chickenpox virus with hand hygiene and covering of skin rash

### Care for Student:
- Notify parents to contact physician as antiviral and pain medications may be needed. Should seek urgent medical care if area around or including eye is involved, or if student is immunocompromised.
- Calamine lotion or a warm wet towel on the rash can help with itching.

*Do not give aspirin to ill children* – it may lead to Reye’s syndrome (brain swelling, liver failure)

### PPE and Staff Safety Precautions:
- Alert pregnant women, unvaccinated staff members and parents of immune-suppressed or unvaccinated children of possible exposure

### Exclude When:
- Exclude when lesions cannot be covered during school
- *Exclude children with shingles / zoster if the vesicles cannot be covered until after the vesicles have dried.*
- *Individuals with shingles /zoster should be instructed to wash their hands if they touch the potentially infectious vesicles.*

### Students May Return When:
- Lesions have crusted over (usually 7-10 days after appearance) or all lesions can be covered

*Text is from the Minimum Isolation Periods and Control Measures in Title 173 Chapter 3 (nebraska.gov)
SHINGLES/HERPES ZOSTER

Top: Shingles on the face.

Bottom: This view of a patient’s skin revealed a maculopapular rash which had been due to an outbreak of shingles caused by the varicella zoster virus (VZV).

RESOURCES

Shingles (Herpes Zoster)
www.cdc.gov/shingles

SCAN
STREPTOCOCCAL INFECTION (SCARLET FEVER, SCARLATINA, STREP THROAT)

Group A Streptococcus (Streptococcus pyogenes) is a bacterium most commonly referred to as “strep”. It usually lives harmlessly on the skin and in the nose and throat but under some circumstances, it can cause a range of symptoms from mild, localized infections (e.g. Impetigo) to invasive and life-threatening disease.

Strep throat (streptococcal pharyngitis) is most common in school age children, and treatment is important to prevent complications, including rheumatic fever. Note that strep throat is less likely to occur if the child also has runny nose, cough, hoarseness or pink eye (conjunctivitis) as many viral infections can cause pharyngitis.

Scarlet fever or scarlatina is a toxin-mediated complication of strep that is often associated with strep throat. The hallmark rash of scarlet fever is red, rough to the touch (sandpaper rash), and usually prominent in the armpits and groin while sparing the area around the mouth. Children are generally not sicker with scarlet fever than with strep throat, so sicker children should have prompt medical evaluation for other conditions.

**Signs and Symptoms:**
- Sore throat
- Fever
- Headache
- Abdominal pain
- Scarlet fever: Rough “sandpaper-like” rash that starts 12-48 hours after initial symptoms; starts on chest and abdomen, then spreads
- Scarlet fever: may develop white coating on tongue early on, which peels and leaves a red bumpy tongue (strawberry tongue)

**Incubation and Contagious Period:**
- Incubation: 2-5 days (range 1-7 days)
- Contagious Period: 12 hours after treatment started; 10-21 days without treatment

**Spreads by:**
- Contact with respiratory droplets (from talking, coughing, or sneezing)
- Direct contact with common objects and surfaces

**Prevent Spread at School By:**
- Hand hygiene
- No sharing of personal items

**Care for Student:**
- Have a parent make an appointment with the student’s doctor if the student has a severe sore throat lasting longer than 24 hours or a severe sore throat with a rash.

  *Students who appear ill with a sunburn-like rash may be developing toxic shock syndrome (TSS) and should seek urgent medical care.*

**PPE and Staff Safety Precautions:**
- Good hand hygiene and sanitation

**Exclude When:**
- Exclude until afebrile and under treatment for 24 hours.
- *No exclusion of contacts.*
- Early medical care important and usually requires 10 days of antibiotic treatment.
- *Screening for asymptomatic cases not recommended.*

**Students May Return When:**
- No longer have a fever and started treatment at least 12 hours ago (usually at least 2 doses)

*Text is from the Minimum Isolation Periods and Control Measures in Title 173 Chapter 3 (nebraska.gov)
STREPTOCOCCAL INFECTION
(SCARLET FEVER, SCARLATINA, STREP THROAT)

Top Left: The rash is a telltale sign of scarlet fever

Top Right: White Tongue

Middle: At first the tongue might look whitish

Bottom: Later, the tongue may look red and bumpy (strawberry tongue)

White patches on tonsils
Swollen tonsils
Red throat
Whitish coating on the tongue
Swollen lymph nodes

RESOURCES

Strep Throat
CDC.gov

Scarlet Fever
CDC.gov

SCAN
# Pulmonary Tuberculosis

Tuberculosis (or TB) is a disease caused by an infection with the bacterium Mycobacterium tuberculosis. A person could have a TB infection (what used to be called “latent TB”) where the bacteria are present but contained by the body. It may progress to TB disease (previously called “active TB”) which can involve the lungs (pulmonary TB) or other organs. An infection in the lungs is important as only people with pulmonary TB are infectious.

<table>
<thead>
<tr>
<th>Signs and Symptoms:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Fever or chills</td>
</tr>
<tr>
<td>• Unexplained weight loss</td>
</tr>
<tr>
<td>• Fatigue</td>
</tr>
<tr>
<td>• Night sweats</td>
</tr>
<tr>
<td>• Cough lasting longer than 3 weeks, coughing up blood</td>
</tr>
<tr>
<td>• Chest pain</td>
</tr>
<tr>
<td>• Loss of appetite</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Incubation and Contagious Period:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Incubation:</strong> Variable Primary: 4-12 weeks Latent: 1-2 years</td>
</tr>
<tr>
<td>Life-long risk of developing active disease if not treated</td>
</tr>
<tr>
<td><strong>Contagious Period:</strong> Until sputum is free from Tuberculosis bacteria. Often after a few weeks of effective treatment</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spreads by:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Close contact with an infected adult with pulmonary TB</td>
</tr>
<tr>
<td>• Breathing in aerosols from infected person coughing, sneezing, speaking, or singing</td>
</tr>
<tr>
<td>• It is not spread through touching items like clothes or furniture</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Prevent Spread at School By:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• All staff members working in school districts with moderate to high incidence of tuberculosis should consider being tested for TB once, ideally when they start working in school&quot;.</td>
</tr>
<tr>
<td>• Staff members may need to have more testing if they are in close contact to people with higher rates of TB, including travel to certain countries, people experiencing homelessness, and people in correction facilities.</td>
</tr>
<tr>
<td>• If an adult is found to have active TB, adults and children who had contact with the infected adult should be tested.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Care for Student:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Have parents call the student’s doctor</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PPE and Staff Safety Precautions:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Report all cases to the local and state health departments.</td>
</tr>
<tr>
<td>• Student may need to be watched taking their medication (directly observed therapy, DOT)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Exclude When:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Suspicious of infection</td>
</tr>
<tr>
<td>• Do not need to exclude students with non-pulmonary tuberculosis who have no active draining tubercular lesions, and who have been evaluated and declared non infectious by physician to exclude presence of tuberculosis at other sites</td>
</tr>
<tr>
<td>• *Exclude. Physician treatment essential. May return with documented physician approval.</td>
</tr>
<tr>
<td>• *No exclusion of contacts. Skin test contacts and chemoprophylaxis with INH if positive (in absence of disease). Exclusion of nonpulmonary tuberculosis unnecessary.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Students May Return When:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Have doctor’s note (medically cleared)</td>
</tr>
<tr>
<td>• When the health department considers the person noninfectious</td>
</tr>
</tbody>
</table>

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*Text is from the Minimum Isolation Periods and Control Measures in Title 173 Chapter 3 (nebraska.gov)
Think TB!

Recognize possible signs and symptoms of Tuberculosis. Early diagnosis and treatment reduces spread. Contact your Health Department or physician for more information.

PULMONARY TUBERCULOSIS

Tuberculosis Infection (or Latent TB Infection-LTBI) and Tuberculosis Disease are different. Latent tuberculosis patients do not feel sick and do not have any symptoms. The sign of TB infection is a positive reaction to the tuberculin skin test or TB blood test. Those that have Latent TB Infection are not infectious to others.

People with TB disease often have symptoms and may be considered infectious. People with TB disease may have a positive tuberculin skin test or blood test, may have an abnormal chest x-ray or positive sputum smear or culture, and often feel sick with symptoms. Treatment is needed for TB disease. Certain risk factors may predispose children for increased TB risk such as being foreign born, certain medical conditions and being named as a close contact to someone with TB disease.

School nurses may assist the local health department with a contact investigation if needed in the school setting by determining who had significant contact with the TB case. Directly observed therapy (DOT) is strongly encouraged for patients with TB disease and may be performed for patients with TB disease in the school in collaboration with the local health department. Confidentiality must be maintained. Educational information on TB may be provided by the local health department to school staff if requested. If you have TB questions, please reach out to your local health department.

RESOURCES

CDC - TB webpage
www.cdc.gov/tb

Tuberculosis Handbook for School Nurses

Tuberculosis in Children and Teens
HealthyChildren.org
Most biting pests covered in this section do not transmit disease but are included in this handbook to provide an easy reference guide to schools.

The Insects and Biting Pests section was provided by Nebraska Extension. Extension Entomologists provide diagnostic/identification and consultation services on insect-related issues in schools, including research-based guidance on prevention and management best practices, as well as additional educational resources for families.

The Insects and Biting Pests section was provided by Nebraska Extension and authored by entomologists Kait Chapman, M.S., and Jody Green, Ph.D.

School Health Learning Collaborative Video: Biting Pests in Schools - Addressing Health Risks to Students
Wash Wash by Annie from Bellevue
# HEAD LICE

Head lice are small, wingless insects that live on the human head, bite and feed on human blood, but do not spread disease. Cases of head lice are most common in children 3-12 years of age.

## Signs and Symptoms:
- Active infestations of head lice are where live lice are found on the head.
- The most common symptoms of head lice are an itchy scalp and scratching.

## Life Cycle:
- Eggs, called nits, are glued to the hair shaft and are located near the scalp.
- Nits hatch in 6-7 days and reach adulthood approximately 10 days later.
- Head lice can live for approximately 30 days on a human host but only for 24-48 hours when off one’s head.

## Spreads by:
- Head lice are spread primarily by head-to-head contact and secondarily by sharing personal items like hats, brushes, pillows, etc.

## Prevent Spread at School By:
- Request that the student avoid head-to-head contact and sharing of personal items such as hats, helmets, headphones, coats, hairbrushes, etc.
- Treatments (sprays, shampoos) to prevent one from getting head lice are not scientifically proven.

## Care for Student:
- Notify parents or guardians that head lice were found on the child.
- Parents or guardians should be advised to provide treatment via wet combing or the use of pediculicides (lice killers) that are available over the counter or by prescription from a physician.

## Treatment of the School Environment:
- Insecticides used to kill head lice on objects inside the school or home are unnecessary and not recommended.
- Only treat items that were in contact with an affected head 24-48 hours prior.
- Treatment options (if applicable) include vacuuming, laundering and drying items on high heat, and isolating heat-sensitive items.

## Guidance for Exclusion and Return:
- The American Academy of Pediatrics (AAP) and the National Association of School Nurses (NASN) advocate the discontinuance of “no nit” policies in schools as the presence of nits alone does not indicate an active infestation.
- The Nebraska Department of Health and Human Services’ School Health, Communicable Disease Control, and Immunization Standards states that the presence of nits is not a cause for school exclusion nor exclusion of contacts.
- In cases of active head lice infestations, student parents or guardians should be notified and affected persons should be treated.

## RESOURCES
- Head Lice [CDC.gov](https://www.cdc.gov)
- Headllice, School, Your Child - A Helpful Guide
- How to Examine for Head Lice – CDC
How to Examine for Head Lice

How to Examine for Head Lice

Use bright light to look at:
1. Crown of head
2. Bangs
3. Behind both ears
4. Nape of neck

How to inspect:
1. Place gloves on your hands
2. Use fingers to separate hair and create a part. The part should allow you to clearly see the person’s scalp.
3. Look for lice crawling on the scalp where the hair is parted or on the hair shaft. The lice will be dark in color and the size of a poppyseed.
4. Look for nits near hair follicle about ¼ inch from scalp. Nits (eggs) will be white or yellowish-brown. Nits are often more easily seen than lice, especially when the person has dark hair.

Also look behind both ears and near the back of the neck. You may see lice or nits. You may also see bites.
**Head Lice Fast Facts**

- Adults are small (1/16–1/8-inch long), wingless and brown-colored. They have pincher-like claws which help them firmly grasp human hair. Lice feed on blood.
- Head lice develop in three stages: egg, nymph and adult. Female lice lay 8–10 eggs a day, eggs hatch in seven days and mature to an adult in another seven days. Lice live for about 30 days.
- Lice do not jump, fly or crawl long distances.
- Head lice are transmitted through head-to-head contact or immediate sharing of items like hats, combs or headphones.
- There are several products that help to control head lice but you may have to use multiple products multiple times to completely remedy the issue.

**Head Lice and the Return to School**

While we associate head lice with going back to school, the truth is lice are rarely transmitted in schools. Lice are most often transmitted among close friends, cousins, siblings and other relatives during events such as sleepovers, camps and extended visits. It is best to teach your child about situations in which head lice can be transmitted and how to prevent passing it among friends.

**How are Head Lice Transmitted?**

Transmission occurs through close, head-to-head contact, such as hugging, immediate hat or headphone sharing, sharing hair brushes or costume sharing, or sharing a bed or pillow. Lice do not live or breed on inanimate objects or other animals besides human heads. Even items in contact with head lice such as clothes, hats, headphones, blankets, rugs, etc. will have a low risk of transmitting head lice after 24–48 hours of non-use.

**How Can I Tell if my Child has Head Lice?**

An active infestation of head lice is defined as live, moving and feeding individuals. To inspect your child's head, you will need: a bright light, a comb and a magnifying glass. Have your child sit in a chair and comb the hair, close to the scalp, to inspect for adult lice or their eggs.

What you are looking for:

**Viable eggs** — Eggs (aka nits) are less than 1/32-inch long, light brown/yellow/white, oval-shaped, and are glued to one side of the hair shaft. Lice eggs are located no more than 1/4 inch from the scalp and are common at the nape of the neck and close to ears. Hatched eggs are pearly white and remain attached to the hair. Due to hair growth over time, nits are considered non-viable if found 1/4–1/2-inch from the scalp.

**Adults** — Adult lice are 1/16–1/8-inch long, wingless, brown-colored insects. They have pincher-like claws allowing them to firmly grasp hair shaft.

Other symptoms of an active case of head lice include tickling sensations, difficulty sleeping, rashes from scratching and an itchy scalp. Make sure the problem is, in fact, head lice and not dandruff, sand, dirt or hairspray.

**How do I Treat for Head Lice?**

Mechanical treatment includes combing hair with a fine-toothed, metal comb to remove viable nits and lice, repeated every few days for at least two weeks.

In addition, there is a variety of FDA-approved **pediculicides** (lice killers) sold over-the-counter or as a prescription treatment (see table on next page). These products are safe and effective when used as directed.

*Continued on next page*
Be sure to follow directions. Some require a second treatment to kill new nymphs because most pediculicides cannot penetrate eggs. Abide the warnings of minimum age, potential allergic reactions, amount of product and time pediculicide remains on scalp — more is not better.

Objects such as brushes, combs and ponytail holders in contact 24–48 hours prior to treatment can be washed, soaked and dried in temperatures greater than 130°F to kill all stages of lice. Sheets can be laundered in hot water. Upholstery and carpets can be vacuumed — be sure to practice proper vacuum management (i.e. empty and wash canister or discard bag).

To protect children from unnecessary pesticide exposure, insecticide sprays are not recommended for objects in the home.

### Commonly Used Pediculicides (as of 9/20/2016)

<table>
<thead>
<tr>
<th>Brand Name</th>
<th>(Active Ingredient)</th>
<th>Minimum Age</th>
<th>Hair Condition</th>
<th>Time on Hair</th>
<th>Comb to remove dead lice &amp; eggs</th>
<th>Second Treatment</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nix®</td>
<td>(Permethrin lotion, 1%)</td>
<td>2 months</td>
<td>Damp, but washed</td>
<td>10 minutes</td>
<td>Yes</td>
<td>Only if live lice after 7 days</td>
<td>Over the counter Kills lice, not eggs</td>
</tr>
<tr>
<td>Rid®</td>
<td>(Pyrethrins, 33%, piperonyl butoxide, 4%)</td>
<td>2 years</td>
<td>Dry</td>
<td>10 minutes</td>
<td>Yes</td>
<td>Required after 7–10 days</td>
<td>Over the counter Kills lice, not eggs Do not use if allergic to ragweed</td>
</tr>
<tr>
<td>Ulesfia® lotion</td>
<td>(Benzyl alcohol lotion, 5%)</td>
<td>6 months</td>
<td>Dry</td>
<td>10 minutes</td>
<td>Not required</td>
<td>Required after 7 days</td>
<td>Prescription medication Kills lice, not eggs Dosage depends on length of hair</td>
</tr>
<tr>
<td>Sklice®</td>
<td>(Ivermectin lotion, 0.5%)</td>
<td>6 months</td>
<td>Dry</td>
<td>10 minutes</td>
<td>Yes</td>
<td>No</td>
<td>Prescription medication Kills lice, new nymphs</td>
</tr>
<tr>
<td>Ovide®</td>
<td>(Malathion lotion, 0.5%)</td>
<td>6 years</td>
<td>Dry</td>
<td>8 – 12 hours</td>
<td>Not required</td>
<td>Only if live lice after 7 – 9 days</td>
<td>Prescription medication Kills lice, some eggs Flammable product</td>
</tr>
<tr>
<td>Natroba®</td>
<td>(Spinosad, 0.9% topical suspension)</td>
<td>4 years</td>
<td>Dry</td>
<td>10 minutes</td>
<td>Not required</td>
<td>Only if live lice after 7 days</td>
<td>Prescription medication Kills lice, eggs</td>
</tr>
</tbody>
</table>

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**Are There any Natural Remedies to Protect my Head from Head Lice?**

There are no scientifically proven preventative treatments or protective shields to protect one’s scalp from head lice. We do not recommend any home remedies posted on the internet. They may irritate the scalp and skin, damage hair and have little to no effect on head lice.

**What are the Reasons our Household Struggles to Control Head Lice?**

Some reasons for ineffective lice treatment are misdiagnosis, improper treatment, lack of thoroughness, insecticide resistance and repeated reinfestation.

Treatment with pediculicides must be methodical and thorough, following the directions included with the product to break the louse life cycle. Performing a pediculicide hair treatment combined with combing, will kill and physically remove lice and nits.

Check heads periodically and treat all family members with active lice at the same time to prevent reinfection between treated and contagious members. Treating heads with pediculicides when no live lice are present will not deter or kill lice at a later time, and only exposes individuals to unnecessary insecticides.

If lice are a persistent problem in your family, consider who and what activities may be the source of the active infestation. Discourage close head-to-head contact with other children and sharing personal items such as brushes, caps, headphones and pillows. Launder and dry linens and clothes, vacuum carpeting and bag any items that cannot be laundered.

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For more information, contact your local Extension office. Nebraska Extension locations can be found at [http://extension.unl.edu](http://extension.unl.edu)

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Reference to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement by the University of Nebraska–Lincoln is implied.
Los hechos rápidos sobre los piojos:

- Los adultos son pequeños (1/16–1/8-pulgada de largo), sin alas y del color marrón. Tienen garras como pinzas las cuales les ayudan a agarrar al pelo humano. Los piojos se alimentan de la sangre.
- Los piojos se desarrollan en tres etapas: liendre (huevo), ninfa, y adulto. Las hembras ponen 8–10 huevos al día, los huevos nacen en siete días, y se maduran a ser piojos adultos en otros siete días más. Los piojos viven por aproximadamente 30 días.
- Los piojos no saltan, vuelan, ni reptan por largas distancias.
- Se transmiten los piojos por contacto directo de cabeza a cabeza o por transporte pasivo por medio de cosas como gorros, peines, auriculares.
- Hay varios productos que ayudan a controlar los piojos, pero es posible que se tendrá que usar múltiples productos, múltiples veces para completamente remediar el asunto.

¿Hasta dónde se extienden los piojos?
Se contagian los piojos mayormente entre amigos cercanos, primos, hermanos, y otros familiares durante los eventos como las fiestas de pijamas, campamentos, y visitas largas. Lo mejor es enseñar a su hijo sobre cómo los piojos se contagian y cómo prevenirlo.

¿Cómo se transmiten los piojos?
La transmisión ocurre por contacto cercano de cabeza a cabeza, tal como con abrazar, tomar las fotos de “selfi”, o compartir cosas como gorros, auriculares, cepillos/peines, disfraz, camas, o almohadas. Los piojos no viven ni se reproducen en los objetos o en otros animales aparte de la cabeza humana. Hasta los artículos en contacto con los piojos como ropa, gorros, auriculares, mantas, alfombras, etcétera tendrán un riesgo bajo de transmitir los piojos después de 24–28 horas sin uso.

¿Cómo puedo averiguar si mi hijo tiene los piojos?
Se definen una infestación activa de los piojos como individuales vivas que están moviendo y alimentándose. Para inspeccionar la cabeza de su hijo, usted necesitará: la luz brillante, el peine, y la lupa. Mientras su hijo se siente en la silla, usted le peinará el cabello, cerca al cuero cabelludo, para buscar los piojos adultos o las liendres.

¿Qué buscar:
- **Los huevos viables:**
  Los huevos (liendres) son menores de 1/32-pulgada de largo, de colores claros de marrón/amarillo/blanco, con forma de óvalo, y están pegados a un lado del tallo del pelo. Las liendres quedan no más de 1/4-pulgada (6mm) del cuero cabelludo y están usualmente en la nuca o cerca los orejas. Los cascarones de los huevos son blancos y se quedan conectado al pelo. Debido al crecimiento del pelo, las liendres no son viables si se las encuentran 1/4–1/2-pulgada del cuero cabelludo.

  **Adultos:**
  Los piojos adultos son 1/16–1/8-pulgada de largo, sin alas, y del color marrón. Tienen garras como pinzas para agarrar al tallo del pelo. Otros síntomas de casos activos de los piojos incluyen las sensaciones de cosquillas, dificultades de dormir, sarpullidos de rascarse, y el cuero cabelludo picazón. Asegúrese de que el problema es, de hecho, los piojos y no sea caspa, arena, suciedad, o laca de peinado.

¿Cómo se tratan los piojos?
El tratamiento mecánico incluye peinar el pelo con un peine de metal y de dientes finos para sacar las liendres viables y los piojos, repetido cada tres días por lo menos por dos semanas. Adicionalmente, hay varios **pediculicidas** (matadores de los piojos) que son aprobados por el...
Part 4 /// INFECTIOUS DISEASES AND PESTS

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FDA (Administración de Comida y Drogas) que se venden en las farmacias de venta libre o como prescripción (véase el cuadro anterior). Estos productos son seguros y efectivos cuando se usan como dirigidos. Algunos productos requieren un segundo tratamiento para matar liendres nuevas porque la mayoría de los pediculicidas no pueden penetrar los huevos. Siga las advertencias sobre la edad mínima, las reacciones alérgicas posibles, la cantidad del producto para usar, y el plazo de tiempo en el pericráneo — mayor tiempo no es mejor.

Se puede lavar, remojar, y secar los objetos en contacto con los piojos 24–48 horas antes del tratamiento como cepillos, peines, y bandas elásticas (para pelo) en temperaturas mayor de 130°F para matar los piojos de cada etapa. Se necesitan pasar la aspiradora por las telas o alfombras y luego quitar la bolsa o el contenido de la casa. Para proteger a los niños de exposición innecesaria de pesticidas, no se recomiendan usar los aerosoles de insecticidas para objetos en el hogar.

¿Hay algunos remedios naturales para proteger la cabeza de los piojos?

No hay ningún tratamiento preventivo ni protector para proteger el pericráneo de los piojos. No recomendamos ningún remedio casero del internet, los cuales podrían irritar el cuero cabelludo y la piel, dañar el pelo, y tener bajo efecto en los piojos.

¿Por cuáles razones nuestro hogar lucha controlar los piojos?

Algunas razones por tratamiento inefectivo de los piojos son diagnóstico erróneo, tratamiento inapropiado, falta de rigor, resistencia al insecticida, e infestación repetida.

El tratamiento con pediculicidas debe ser metódico y meticuloso, siguiendo directamente las instrucciones del producto para parar el ciclo de vida de los piojos. Usar un tratamiento con pediculicida en combinación con el uso del peine matará y sacará físicamente los piojos y las liendres.

Examine regularmente las cabezas de los familiares y tratar los que tengan piojos activos de una vez para prevenir otra infestación entre los familiares tratados y contagiosos. Usar el tratamiento con pediculicida en una cabeza sin piojos vivos no impide o mata los piojos posteriormente, sólo expone los individuos a insecticidas innecesarios.

Si los piojos son un problema persistente en la familia, considere quiénes y cuáles actividades son las fuentes de la infestación. Disuada el contacto cercano de cabeza a cabeza con otros niños y el compartir de cosas personales como cepillos, peines, gorros, auriculares, y almohadas. Lave y seque los blancos y la ropa, pase la aspiradora, y saque del hogar las cosas que no se puede lavar.

### Pediculicidas comúnmente usados (a partir de 9/20/2016)

<table>
<thead>
<tr>
<th>Nombre de la marca (Ingrediente activo)</th>
<th>Edad mínima</th>
<th>Condición del pelo</th>
<th>Tiempo en el cabello</th>
<th>Peine para eliminar los piojos muertos y los huevos</th>
<th>Segundo tratamiento</th>
<th>Notas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nix® (Permethrin loción, 1%)</td>
<td>2 meses</td>
<td>cabello húmedo, pero lavado</td>
<td>10 minutos</td>
<td>sí</td>
<td>Sólo si piojos vivos después de 7 días</td>
<td>Medicamentos de venta libre Mata los piojos, no huevos</td>
</tr>
<tr>
<td>Rid® (Pyrethrins, 33%, piperonyl butoxide, 4%)</td>
<td>2 años</td>
<td>cabello seco</td>
<td>10 minutos</td>
<td>sí</td>
<td>Requerido después de 7–10 días</td>
<td>Medicamentos de venta libre Mata los piojos, no huevos No usar si es alérgico a la ambrosia</td>
</tr>
<tr>
<td>Ulesfia® loción (Benzyl alcohol loción, 5%)</td>
<td>6 meses</td>
<td>cabello seco</td>
<td>10 minutos</td>
<td>no requerido</td>
<td>Requerido después de 7 días</td>
<td>Prescripción médica Mata los piojos, no huevos La dosis depende de la longitud del cabello</td>
</tr>
<tr>
<td>Sklice® (Ivermectin loción, 0.5%)</td>
<td>6 meses</td>
<td>cabello seco</td>
<td>10 minutos</td>
<td>sí</td>
<td>No</td>
<td>Prescripción médica Mata los piojos, Nuevas ninñas</td>
</tr>
<tr>
<td>Ovide® (Malathion loción, 0.5%)</td>
<td>6 años</td>
<td>cabello seco</td>
<td>8–12 horas</td>
<td>no requerido</td>
<td>Sólo si piojos vivos después de 7–9 días</td>
<td>Prescripción médica Mata los piojos, algunos huevos Producto inflamable</td>
</tr>
<tr>
<td>Natroba® (Spinosad, 0.9% suspensión tópica)</td>
<td>4 años</td>
<td>cabello seco</td>
<td>10 minutos</td>
<td>no requerido</td>
<td>Sólo si piojos vivos después de 7 días</td>
<td>Prescripción médica Mata los piojos, huevos</td>
</tr>
</tbody>
</table>

El ciclo de vida de los piojos. La mayoría de los tratamientos de pediculicida no son efectivos con las liendres, por lo tanto se requieren un segundo tratamiento después de siete días.
**BEDBUGS**

Scientific name: *Cimex lectularius*, Bed bugs are wingless insects that bite and feed on human blood, but do not spread disease. Bed bugs do not live on the human body and instead are most often found in homes and other lodgings where people sleep.

| Signs and Symptoms: | • Signs of bed bugs include live bugs, cast exoskeletons, eggs, and bed bug fecal/blood stains on a person’s belongings.  
• Bites may cause allergic reactions in some individuals.  
• Bed bug bites cannot be diagnosed based on the skin reaction alone. |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Identification:</td>
<td>Bed bugs are oval-shaped and flat with size ranging from as small as a poppy seed as an egg to as large as an apple seed as an adult.</td>
</tr>
</tbody>
</table>
| Spreads by:         | • Bed bugs are primarily spread by hitchhiking on belongings, including bags, backpacks, and clothing or outerwear stored near beds or sitting areas.  
• Bed bugs prefer dark, tight spaces to hide, including seams, between the pages of books, and behind pictures and posters on walls. |
| Prevent Spread at School By: | • Isolate items of concern in resealable bags or plastic bins with lids.  
• Request that the student visit the health office for inspection of items prior to attending class in the morning. |
| Care for Student:   | • Notify parents or guardians that bed bugs or suspected bed bug bites were found on the child.  
• Use clothes dryer on high heat for 20 minutes to kill bed bugs on any clothing brought from home.  
• Parents or guardians should be advised to contact a pest management professional or treat the home for bed bugs. |
| Treatment of the School Environment: | • Any suspected bed bugs should be collected in a resealable plastic bag and identified by a professional.  
• Report the finding to the principal and custodial services and follow school protocol. |
| Guidance for Exclusion and Return: | • Exclusion from school is not necessary. |
BEDBUGS

RESOURCES

Bedbug Bites
HealthyChildren.org

Bed Bug Management | Nebraska Extension in Lancaster County (unl.edu)

Bed Bugs and Schools | US EPA
www.epa.gov/ipm/bed-bugs-and-schools

2022 Dealing with Bed Bugs
(unl.edu)
Managing bed bugs can be a major challenge for any school. School nurses are often called upon to provide vital information to students, parents, teachers, and administrators. These tips on identifying, managing and preventing bed bugs will help you to effectively respond if bed bugs appear in your school.

If You Think You Have Spotted a Bed Bug

• Collect and keep it intact for proper identification.
• Discretely remove the student from class but do not send him/her home or exclude them from school.
• Check the student’s clothing and belongings for possible bed bugs.
• Inspect the area around where the bug was found.

Have a Positive Bed Bug ID?

• Oversee the case until the problem is resolved.
• Tell the child’s parents about the bed bug sighting.
• Provide the student and parents with information on bed bug control.

What to Tell Parents

• Having a bed bug infestation does not mean their home isn’t clean.
• A true bed bug infestation is unlikely in the school.
• It is not necessary for the school to close because of bed bugs.
• Students should limit the items they bring to school.
• Students should store school supplies in protective boxes at home and not under or near beds or couches.

Finding a confirmed bed bug on a student or their belongings may not mean their home or school is infested.

Successful Bed Bug Management

• Uses a combination of strategies such as prevention, inspection, vacuuming, steam/heat treatment, and, if needed, pesticides.
• Recognizes that pesticides alone may not eliminate bed bugs.
• Involves placing clothes in a dryer on high heat for at least 30 minutes to kill any bed bugs.
• May include professional steam or radiant heat treatments.

Bed Bug Hot Spots in Schools

• Student and staff closets, lockers, coats and backpacks.
• Faculty lounges, classrooms or other areas with upholstered furniture or cots.
• Dormitories or other sleeping areas.

Learn more at epa.gov/bedbugs
School Response Flowchart
(adapted from Michigan Bed Bug Working Group)

Bed bug found in/on:

Student’s clothing or belongings
- Discreetly bring student to school nurse
- Examine clothes and belongings
- Collect specimen

• Notify student’s parents
• Send home educational materials

Evidence of infestation at home
- Encourage parents to treat for infestation
- Provide educational assistance

If instances are repeated, enlist appropriate social agencies

Evidence of infestation
- Follow IPM plan and treat for infestation
- Notify staff and parents of findings and treatment

No evidence of infestation
- Maintain vigilance

Classroom/Environment
- Trained pest management professional inspects for bed bugs

No evidence
- Follow IPM plan and treat for infestation
- Notify staff and parents of findings and treatment

Evidence of infestation
- Follow IPM plan and treat for infestation
- Notify staff and parents of findings and treatment

No evidence of infestation
- Maintain vigilance
Bed bugs are blood-feeding insects that can live in your home. When they feed on you they can create small, itchy bumps (like a mosquito bite). This guide will help to clear up misconceptions about bed bugs.

Bed bugs start as eggs the size of a grain of sugar and go through five stages of development before becoming adults.

- Poppy seed and bed bug egg. (1 mm)
- Sesame seed and bed bug nymph. (2 mm)
- Flax seed and bed bug nymph. (4 mm)
- Apple seed and bed bug adult. (6 mm)

Bed bugs cannot transmit diseases to people. Bed bugs feed at night because we are easy to get to and less likely to notice them, not because they fear light. Leaving lights on won’t stop them.

Bed bugs do not jump or fly, they can run and walk well though!

Bed bugs like to be near you in your bed but can also be found in a variety of other spots in your home.

- Nightstand
- Poster/picture frame
- Mattress/box springs
- Wall outlet
- Chair
- Pants cuff
- In a suitcase

They are good hitchhikers.

How do so many people end up with bed bugs?

Bed bugs like to be near you in your bed but can also be found in a variety of other spots in your home.

- Bed bug feces
- Magnified bed bug exoskeleton
- Egg cluster
- Bed bug before feeding

If you fear you have bed bugs, you should inspect all of the previously mentioned places for signs of bed bugs; including fecal spots, shed skins, eggs clusters, and live insects.

Words and photos by Extension Educators Jody Green and Jonathan Larson
Art and design by: Justin Stewart (justin3000.com)
**BED BUG INFORMATION FOR PARENTS**

**BED BUG CONTROL ON A BUDGET.**

You should begin with an inspection and confirmation of a bed bug infestation. You need to find out where the pests are.

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**STEP 1 - BAGGING ITEMS FOR TRANSPORT AND CONTROL**

Collect your clothing, bedding, and items like stuffed animals and place them in a plastic bag. **Do NOT throw them away.**

---

**STEP 2 - USING HEAT AND COLD**

Transport your bags of collected items to your laundry room or laundromat. Remove items from bags and run them through the dryer on **high heat for 30 minutes**. Do not reuse the bags to transport your items as bed bugs may be loose in them.

If you have items that can’t be put in a dryer, you can freeze the item for **4 days at 0°F** to kill bed bugs.

---

**STEP 3 - MANUALLY REMOVING BED BUGS**

Use an extra sticky lint roller and vacuum cleaner with a nozzle extension, paired with a pantyhose (assembly shown below) to remove all visible bed bugs.

Once finished, remove the pantyhose, tie it closed, and kill captured bed bugs.

---

**STEP 4 - TREATMENT WITH INSECTICIDES**

There are many insecticides on the market. If you want good control of your bed bug problem get aerosol products containing cyfluthrin & imidacloprid (example: Bayer Bed Bug and Flea) or resmethrin & imidaclorpid (example: Bedlam Plus). Avoid products that are mostly made of alcohol. If you are treating wall voids or behind electrical outlets, a dust product containing silica dust will be most effective as opposed to diatomaceous earth.

---

**STEP 5 - MONITORING FOR RE-INFESTATION**

Use mattress encasements and bed bug interceptors to monitor for new bed bugs over the course of 6-8 months after you treat.

If persistent infestation occurs, contact a professional for help.

---

Do you want to hire a professional pest control operator?

- **NO**
  - Consult the back of this guide.

- **YES**
  - **BED BUG INFORMATION FOR PARENTS**
BED BUG INFORMATION FOR PARENTS

BED BUG CONTROL (NO LONGER) ON A BUDGET

Hiring someone for treatment of bed bugs is challenging. Be ready to:
- Check company’s credentials
- Help prepare the treatment area
- Leave treatment area for 4-6 hours
- Prepare for multiple visits
- Pay the cost: $200-1000 per room

Two main types of treatment:

**Goal:** to treat infested areas with contact and residual insecticide where bed bugs are hiding.

**Goal:** to bring infested areas up to lethal temperatures so bed bugs cannot live.

**Chemical**

- Residual treatment in crack and crevices
- Risk of pesticide exposure
- Insecticide resistance
- Eggs are not susceptible
- Multiple treatments

**Heat**

- No residual or protection against bed bugs
- No chemicals or risk of insecticide poisoning
- No resistance
- Kills all life stages of bed bugs
- One treatment

There are differences between treatments.

Regardless of the type of treatment, consider Step 5 (front of this guide) to continue to monitor and remain vigilant. Bed bugs can find a way to hitchhike back into your home.

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Nebraska Extension educational programs abide with the nondiscrimination policies of the University of Nebraska–Lincoln and the United States Department of Agriculture.
<table>
<thead>
<tr>
<th>MYTH</th>
<th>FACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>You can’t see a bed bug.</td>
<td>You should be able to see adult bed bugs, nymphs and eggs with your naked eye.</td>
</tr>
<tr>
<td>Bed bugs transmit diseases.</td>
<td>There have been no cases or studies that indicate bed bugs transmit diseases between humans.</td>
</tr>
<tr>
<td>Bed bugs live in dirty places.</td>
<td>Bed bugs won’t come out if the room is brightly lit.</td>
</tr>
<tr>
<td>Bed bugs are not attracted to dirt and grime; they are attracted to warmth, blood and carbon dioxide. However, clutter offers more hiding spots.</td>
<td>While bed bugs prefer darkness, keeping the light on at night won’t deter these pests from biting you.</td>
</tr>
</tbody>
</table>

To read more Myth vs Fact visit: https://www.epa.gov/bedbugs/bed-bug-myths
FLEAS

Order: Siphonaptera
Fleas prefer to feed on the blood of pets and wildlife but will bite humans when given the opportunity. In the U.S., some fleas may carry pathogens that cause plague, murine typhus, and cat scratch disease (CSD.) If accidentally swallowed, fleas can also spread tapeworms to people.

<table>
<thead>
<tr>
<th>Signs and Symptoms:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Flea bites are usually located on the lower legs, but children may experience bites all over their body.</td>
</tr>
<tr>
<td>• Bites can be painful and result in red, raised welts.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Identification:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Adult fleas are 1/16” to 1/8” long and flattened side-side.</td>
</tr>
<tr>
<td>• Fleas do not fly but have hind legs that specialize in jumping.</td>
</tr>
<tr>
<td>• Flea eggs, larvae, and pupae live off of the host and are found in the environment where the animal spends most of its time (e.g., pet bedding, rugs, carpet, sofas, etc.)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spreads by:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Fleas do not live on children, but can be transported to school on clothing, backpacks, and other items.</td>
</tr>
<tr>
<td>• Most students experiencing flea bites have a pet in the home, but it is possible for a home without pets to have fleas.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Prevent Spread at School By:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Isolate the student’s belongings in resealable bags or plastic bins with lids.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Care for Student:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Notify parents or guardians that fleas or suspected flea bites were found on the child.</td>
</tr>
<tr>
<td>• Use clothes dryer on high heat for 20 minutes to kill fleas on any clothing brought from home.</td>
</tr>
<tr>
<td>• Parents or guardians should be advised to contact a veterinarian to treat any pets in the home, contact a pest management professional or treat the home environment for fleas.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Treatment of the School Environment:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Any suspected fleas should be collected in a resealable plastic bag and identified by a professional.</td>
</tr>
<tr>
<td>• Report the finding to the principal and custodial services and follow school protocol.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Guidance for Exclusion and Return:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Exclusion from school is not necessary.</td>
</tr>
</tbody>
</table>

RESOURCES

- Fleas (CDC) [www.cdc.gov/fleas](http://www.cdc.gov/fleas)
- Integrated Flea Control [unl.edu](http://unl.edu)
FLEAS

A Bug's Life

Fun facts
- Feed on warm-blooded animals
- Most common flea on dogs
- Adults get bitten below knee, children get bitten all over torso
- Families without pets can get fleas from wildlife and feral animals
- Do not fly, but can jump 150 times their height or 8” vertically

Identification
- Signs: Flea dirt (feces) in pet’s fur
  - Larva: Legless and worm-like living in pet resting areas away from light
  - Adult: Reddish-brown, wingless, less than 1/8” long, flattened from the side, backward projecting spines, hardened body, found on the pet or animal it is feeding on

Management
- Treat all pets according to veterinarian, even indoor pets
- Wash and vacuum pet resting areas
- Indoor insecticide application by professional company
- Exterior treatment may be needed
- Wildlife removal of outdoor animals nesting under porch or crawlspace

Photos: J. Green

Phone: 402-444-7804 Email: Douglas-Sarpy@unl.edu

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TICKS

Order: Ixodida
Ticks are small arachnids that bite and feed on human and animal blood and can transmit a variety of pathogens that cause disease. Different species of ticks may transmit different pathogens.

| Signs and Symptoms: | • Ticks are most often found on the head, under armpits, behind knees, and around the waist.  
• Ticks can feed and remain embedded for 7-10 days and are more likely to transmit disease-causing pathogens the longer they remain attached. |
|---------------------|---------------------------------------------------------------------------------------------------------------|
| Tick-borne illnesses: | • Different species of ticks transmit different disease-causing pathogens, with some signs and symptoms of illness being indistinguishable between diseases.  
• Collect and keep ticks to be used at the discretion of parents and guardians for tick identification and/or testing.  
• If illness symptoms occur, families should work with a physician to begin treatment. |
| Tick Habitat: | • Ticks may be found anywhere there are animal hosts but are primarily associated with grassy and woodland habitats.  
• Ticks find hosts by “questing” i.e., waiting on grass or foliage for a human or animal to brush by. Ticks do not jump or fall onto hosts from above. |
| Tick Bite Prevention: | • After outdoor activity, urge students to perform regular, full-body tick checks on themselves.  
• Encourage students to practice safety, including using EPA-approved skin repellents such as DEET and picaridin when needed. |
| Care for Student: | Removal of embedded ticks (care for student)  
• The only recommended method of removing embedded ticks is using tweezers to grasp the tick as closely to the skin as possible and pulling straight out.  
• After the tick is removed, the bite area should be disinfected.  
• Removed ticks should be kept for identification and used at the discretion of the student’s parents or guardians. |
| Treatment of the School Environment: | n/a |
| Guidance for Exclusion and Return: | • Exclusion from school is not necessary. |
Nebraska Ticks: Identification and Prevention

Ticks can be active all year round, but May/June is regarded as high tick season in Nebraska. An increase in outdoor activities such as trail running, hiking, camping and morel mushroom hunting take place in prime tick habitat.

Ticks are blood feeders and have the potential to vector some serious diseases of both people and pets. The two most common ticks found in eastern Nebraska this time of year are the American dog tick, *Dermacentor variabilis*, and the lone star tick, *Amblyomma americanum*.

**Identification**

Ticks have two body parts and eight legs (larvae or “seed ticks” have six) and require a blood meal to develop from larva to nymph, nymph to adult and produce eggs. Tick species can be distinguished from one another by the size of the mouthparts and the pattern or markings on the scutum, which is the area located behind the tick’s head. The male's scutum covers the entire body, whereas the female has a small scutum.

American dog ticks are found in areas with little or no tree cover, such as grassy fields, along roads, walkways and trails. They have short mouthparts and an ornate scutum.

Lone star ticks are found in woodland areas with dense undergrowth. The adult female has a single white spot on her scutum, which can be seen when engorged. They have long mouthparts.

Ticks found in Nebraska are three-host ticks, which means they require a different host for each stage. The entire life cycle may take up to two years to complete. The biggest risks for tick-borne disease comes in May through August. Ticks find their hosts by waiting patiently with their front legs extended at host-height, which is the ground for small rodents and knee height for larger mammals such as deer, dogs and humans. When an unsuspecting host brushes against the claws of a questing tick, the tick hangs on and begins to crawl upward. Contrary to popular belief, ticks do not jump or fall onto hosts from above.

Once a tick has found a host, it cuts the skin with its saw-like mouthparts and drives a rigid feeding apparatus with backwards spines deep into the skin. This securely anchors the tick in place while feeding. Ticks have the ability to feed and remain embedded for several days (7–10) if undisturbed. The longer the tick remains attached, the more likely it will transmit pathogens, if infected. Scientists believe that no infection will occur if the tick is removed within 24 hours.

**Prevention**

It is important to prevent and remove ticks before they get a chance to transmit disease. Here are some actions you can take to protect yourself.

- Wear long pants, tucked into white socks for quick detection and removal.
- Perform regular, full body, tick checks on your person and children, and if possible, shower within two hours of coming in from outdoors. On people, American dog ticks are most often found on the head and around the ears. In addition to these areas, lone star ticks can be found under armpits, around waist, behind knee and in groin area.
- Put outdoor clothes in the dryer on high for 30 minutes to kill ticks on clothing. Ticks will survive the wash cycle and can easily escape the laundry hamper and seek out a host.
- Designate clothing for your outdoor excursions and treat clothing and shoes with a permethrin clothing spray, which can repel ticks for up to six washings.
- Purchase pre-treated clothing designed to repel insects that can last through 70+ washes.
- Protect your pets using a tick prevention program through your veterinarian.
- If your dog is on a flea and tick program, continue to perform regular tick checks. Ticks are most often found on the dog’s head, in and around the ears, neck, armpits and between the toes. Use pointy tweezers to remove...
them, collect and discard ticks in a way they cannot escape.

- Remove embedded ticks as soon as possible using pointy tweezers, grasping the tick as close to the skin’s surface and pulling straight out. After removing the tick, disinfect affected skin with rubbing alcohol and keep tick for identification. There are various methods and devices available, but this is the best method.
- Understand the limitations of DEET repellents against ticks when applied to skin. Products with higher percentages of DEET will protect for a longer period of time, but anything over 30 percent does not offer greater protection and is unnecessary.

### Tick-borne Illnesses

Until recently, Nebraska did not have established populations of black-legged tick (*Ixodes scapularis*), and past cases of Lyme disease were considered rare and attributed to ticks from out of the state, either by traveling people or wildlife. As of 2022, state health officials have identified established populations in Douglas, Sarpy, Saunders and Thurston counties. It is now important for Nebraskans to understand Lyme disease and how to avoid acquiring it.

Early signs of Lyme disease and STARI (transmitted by the lone star tick) are indistinguishable, so it is a good idea to keep ticks that have been removed for identification. If symptoms occur, work with a physician and begin treatment of oral antibiotics such as doxycycline. For any symptoms lasting after the course of antibiotics, contact an infectious disease specialist.

<table>
<thead>
<tr>
<th>Tick</th>
<th>Distribution</th>
<th>Associated Illness and Infectious Agent</th>
<th>Symptoms of Illness</th>
</tr>
</thead>
</table>
| **American dog tick**
*Dermacentor variabilis*        | Found statewide throughout Nebraska              | Rocky Mountain spotted fever (RMSF)    | Fever and/or red spotty rash beginning at wrist and ankles then spreading to trunk. Can begin 2–5 days after onset of fever. Some never develop rash. Treat with antibiotics in first few days of symptoms. |
|                               |                                                  | Bacteria: *Rickettsia rickettsii*      |                                                                                     |
| **Lone star tick**
*Amblyomma americanum*        | Found in eastern, southern, and central Nebraska | Tularemia                               | High fever and/or skin ulcer at site of bite. Ulcer accompanied by swelling of regional lymph glands in armpit or groin. Treat with antibiotics in first few days of symptoms. |
|                               |                                                  | Bacteria: *Francisella tularensis*     |                                                                                     |
| **Black-legged tick**
*Ixodes scapularis*            | Found (established) in Douglas, Sarpy, Saunders and Thurston counties. | Human ehrlichiosis                     | Fever, headache, fatigue, muscle aches 1–2 weeks following tick bite. Treat with antibiotics in first few days of symptoms. |
|                               |                                                  | Bacteria: *Ehrlichia chaffeensis*      |                                                                                     |
|                               |                                                  | Southern tick-associated rash illness (STARI) | Rash nearly identical to Lyme with the expanding “bulls eye” lesion around the tick bite within 7 days. Treat with antibiotics in first few days of symptoms. |
|                               |                                                  | Agent unknown                          |                                                                                     |
|                               |                                                  | Tularemia                               | High fever and/or skin ulcer at site of bite. Ulcer accompanied by swelling of regional lymph glands in armpit or groin. Treat with antibiotics in first few days of symptoms. |
|                               |                                                  | Bacteria: *Francisella tularensis*     |                                                                                     |
|                               |                                                  | Heartland virus                         | Fever, fatigue, drop in white blood cells and platelets. Rare virus with no test or treatment. |
|                               |                                                  | Virus: Phlebovirus                     |                                                                                     |
|                               |                                                  | Alpha-gal allergy or red meat allergy  | Can present as hives, skin rash, stomach cramps, sneezing, headaches, asthma and/or anaphylaxis reaction after eating red meat. Must avoid meat trigger. |
|                               |                                                  |                                       |                                                                                     |
|                               |                                                  | **Lyme disease**                        | Fever, headache, fatigue, rash nearly identical to STARI with expanding “bulls eye” lesion around tick bite. Can begin 3–30 days after bite. Treated with antibiotics in first few days of symptoms. If left untreated, infection can spread to joints, heart and nervous system. |
|                               |                                                  | Bacteria: *Borrelia burgdorferi*       |                                                                                     |
DON'T LET TICKS KEEP YOU INDOORS.

Ticks are active year-round - not just in the summer. By following precautionary measures against ticks and practicing safe tick removal, you will be ready to enjoy the great outdoors!

PREVENT
Use EPA-approved repellents (DEET, picaridin, etc.). Tuck pants into socks.

CHECK
Check yourself, children and pets for ticks. Circles above highlight areas ticks prefer.

REMOVE
Use tweezers, grasp tick as close to the skin as possible and pull straight out.

TAG & GO
Become a citizen scientist and help researchers better understand where ticks are present and what health risks they may pose.

Submit tick photos to: inaturalist.org/projects/tick-tag-go

TickTagGo.unl.edu

Scan me to find iNaturalist!

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NO DEJE QUE LAS GARRAPATAS LE IMPIDAN SALIR DE CASA.

Las garrapatas están presentes todo el año, no sólo en verano. Siguiendo las medidas de precaución contra las garrapatas y eliminándolas de forma segura, estará listo para disfrutar del aire libre.

**PREVENGA**
Utilice repelentes aprobados por la EPA (DEET, picaridina, etc.). Meta los pantalones por dentro de los calcetines.

**REVISE**
Revise su cuerpo, el de sus hijos y el de sus mascotas en busca de garrapatas. Los círculos de arriba indican las zonas preferidas por las garrapatas.

**ELIMINE**
Si la garrapata está enganchada, agárela lo más cerca posible de la piel con unas pinzas y tire hacia fuera.

**ETIQUETE y VAMOS**
Conviértase en un ciudadano científico y ayude a los investigadores a comprender mejor dónde están presentes las garrapatas y qué riesgos pueden suponer para la salud.

Envíe fotos de garrapatas a: inaturalist.org/projects/tick-tag-go

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Tick Bite: What to Do

Tick bites can make people sick. Below are some steps that you can take after a tick bite to reduce your chances of getting sick and how to get treatment promptly if you do get sick.

Remove the tick as soon as possible

1. Use fine-tipped tweezers to grasp the tick as close to the skin as you can.
2. Pull upward with steady, even pressure. Don’t twist or jerk the tick.
3. After removing the tick, clean the bite area and your hands with rubbing alcohol or soap and water.
4. Dispose of the tick by flushing it down the toilet. If you would like to bring the tick to your healthcare provider for identification, put it in rubbing alcohol or place it in a sealed bag/container.

Consider calling your healthcare provider

In general, CDC does not recommend taking antibiotics after tick bites to prevent tickborne diseases. However, in certain circumstances, a single dose of doxycycline after a tick bite may lower your risk of Lyme disease. Consider talking to your healthcare provider if you live in an area where Lyme disease is common.

Watch for symptoms for 30 days

Call your healthcare provider if you get any of the following:

- Rash
- Fever
- Fatigue
- Headache
- Muscle pain
- Joint swelling and pain

Treatment for tickborne diseases should be based on symptoms, history of exposure to ticks, and in some cases, blood test results. Most tickborne diseases can be treated with a short course of antibiotics.
Common questions after a tick bite

Should I get my tick tested for germs?

Some companies offer to test ticks for specific germs. CDC strongly discourages using results from these tests when deciding whether to use antibiotics after a tick bite.

- Results may not be reliable. Laboratories that test ticks are not required to meet the same quality standards as laboratories used by clinics or hospitals for patient care.
- Positive results can be misleading. Even if a tick contains a germ, it does not mean that you have been infected by that germ.
- Negative results can also be misleading. You might have been bitten unknowingly by a different infected tick.

Can I get sick from a tick that is crawling on me but has not yet attached?

Ticks must bite you to spread their germs. Once they attach to you, they will feed on your blood and can spread germs. A tick that is crawling on you but not attached could not have spread germs. However, if you have found a tick crawling on you, it’s a sign there may be others: do a careful tick check.

How long does a tick need to be attached before it can spread infection?

Depending on the type of tick and germ, a tick needs to be attached to you for different amounts of time (minutes to days) to infect you with that germ.

Your risk for Lyme disease is very low if a tick has been attached for fewer than 24 hours. Check for ticks daily and remove them as soon as possible.
Washing Hands in Every Language by Esmeralda from Lincoln
PART 05
Included in this section:

184 About Bloodborne Pathogens
185 Keep Employees Safe at Work
186 Developing an Exposure Control Plan
195 Best Practices for BBP Training
197 Cleaning Up Blood and Body Fluid Spills
198 Disposal of Infectious Waste
Bloodborne pathogens are infectious microorganisms in blood that can cause disease. These pathogens include, but are not limited to, hepatitis B (HBV), hepatitis C (HCV) and human immunodeficiency virus (HIV). The following information summarizes how to avoid occupational exposure to these pathogens and prevent infection.

HIV (Human Immunodeficiency virus)

The risk of HIV transmission from occupational exposure varies by type of exposure. Only 1 confirmed case has been reported since 1999 (data from Dec. 2013). However, this is in the context of implementation of post-exposure prophylaxis.

- Splashes of body fluids with blood in them are near zero risk.
- Fluid with blood splashes to intact skin or mucous membranes is also extremely low risk.
- Percutaneous (needle-stick) injury is less than 1% but it depends on type of exposure (hollow vs non hollow needle, needle size, depth etc.).

Prevention includes use of gloves, googles, and other barriers when anticipating contact with blood or body fluids, washing hands after contact with blood and body fluids, careful handling and disposal of sharp instruments, use of safety devices to prevent needle-stick injuries.

NOTE

Postexposure prophylaxis (PEP) for HIV includes use of antiretroviral drugs that can stop HIV seroconversion, but should be started within 72 hours of a possible exposure (preferably first 2 hours when it has maximum efficacy).

Preventing New HIV Infections | Guidelines and Recommendations | HIV/AIDS | CDC.

HEPATITIS B

Hepatitis B is a vaccine preventable liver infection and is spread when blood, semen, or other body fluids from an infected person enters the body of someone who is not infected. Symptoms include fatigue, poor appetite, stomach pain, nausea, and jaundice, but not all people with HVB have symptoms. Left untreated, a long-term, chronic infection can lead to serious or life-threatening health issues.

- 2,157 cases of acute hepatitis B were reported to the CDC in 2020.
- Rates of reported acute hepatitis B remains low in children and adolescents aged 0-19 years with the implementation of childhood hepatitis B vaccines in 1991. Figure 2.4 of 2019 Viral Hepatitis Surveillance report | CDC
- Hepatitis B vaccinations among adults continues to be suboptimal even though the vaccines show well-established safety and efficacy.
- CDC recommends screening tests to people who have never been infected with HBV and did not complete an HBV vaccine series or are known vaccine non-responders.

Under OSHA’s Bloodborne Pathogens Standard, “employers must offer free hepatitis B vaccinations to all employees with occupational exposure to blood or other potentially infectious materials”.

Hepatitis C

Hepatitis C is spread through contact with blood from infected persons. Sharing needles is the most common method of spread but can occur from occupational exposures. Hepatitis C is usually a short-term illness, but more than 50% of cases will become long-term (chronic). Chronic hepatitis C can lead to cirrhosis and liver cancer. People with chronic hepatitis C often have no symptoms and do not feel sick, so infections go undetected until signs of advanced liver disease appear. Hepatitis C is treatable, but there is no vaccine available.
SHA (Occupational Safety and Health Act) provides the minimum safety standards for workplaces that schools use to guide their policies and practices. The authors of this book strongly recommend that schools follow federal OSHA standards to safeguard the health and safety of employees and because failure to do so could put schools at risk of liability. The following pages of this section describe what is required for schools to meet this standard and provide resources to assist them in the process.

**EMPLOYERS ARE RESPONSIBLE TO:**

01) Have an Exposure Control Plan

02) Implement Universal Precautions

03) Have engineering controls to prevent exposures. (e.g., self-sheathing needles)

04) Have written policies that address work practices that reduce exposures

05) Provide PPE (personal protective equipment) for staff

06) Offer free HBV (Hepatitis-B Vaccine) to staff at risk

07) Make post-exposure evaluation and follow-up available to all employees who experience exposure at no cost to the employee

08) Use labels and signs to communicate hazards

09) Provide information and training on bloodborne pathogens, hepatitis B vaccination, medical evaluation, post exposure follow-up and PPE use

10) Maintain employee medical training record to document compliance with this regulation

OSHA FACTSHEET BLOODBORNE PATHOGENS STANDARD:OSHA FACTSHEET PPE

All of the requirements of OSHA’s Bloodborne Pathogens standard can be found in Title 29 of the Code of Federal Regulations at 29 CFR 1910.1030. The standard's requirements state what employers must do to protect workers who are occupationally exposed to blood or other potentially infectious materials (OPIM), as defined in the standard.

That is, the standard protects workers who can reasonably be anticipated to come into contact with blood or OPIM as a result of doing their job duties.
Many districts already have exposure control plans in place. If your school district does not, we recommend developing a plan to give direction to staff in the event of an exposure to blood or body fluid, to prevent transmission of disease, and to be compliant with OSHA’s minimum standards. Many templates are available for schools to adapt and are listed below.

**WHAT NEEDS TO BE IN THE PLAN:**

- Determine how exposure to body fluids will be handled.
- Establish who to notify when exposures occur.
  - Districts should establish 24-hour access to notification and management.
  - Notification should be immediate to achieve maximal benefit of post-exposure prophylaxis (if needed).
- Establish where to get medical evaluation post exposure and follow up at no cost to employee.
  - Tailored to the facility. Facility insurance may cover expenses, so check with the insurance carrier to determine the best process for coverage of incidents before one occurs to prevent delays in treatment. Also check with insurance carrier to determine where to have staff/students go after an exposure if treatment is needed.
- Exposure control implementation methods (how the facility prevents exposures)
- Universal Precautions
- Engineering and work practice controls (prevention of sharps injury)
- Personal protective equipment—location and who is responsible for ensuring availability.
- Housekeeping (laundry, cleaning, infectious waste management)
- Evaluation of every job-related task to determine the likelihood of exposure to blood, blood products, and potentially infectious materials.
- Housekeeping items include how to handle laundry and clean up (i.e., broken glass).
- Hepatitis B Vaccination—Offered and provided for free.
- Exposure evaluation and follow-up to communicate hazards, including training.

**EXPOSURE CONTROL TEMPLATES:**

- Nebraska Department of Labor: Blood Borne Pathogen Program
- OSHA: APPENDIX D MODEL EXPOSURE CONTROL PLAN (osha.gov)
- Wisconsin Department of Public Instruction: Bloodborne Pathogens Exposure Control Plan

**EXPOSURE CONTROL PLAN REVIEW:**

Employers must update the plan annually to reflect changes in tasks, procedures, and positions that affect occupational exposure, and also technological changes that eliminate or reduce occupational exposure.
Annual Review of Exposure Control Plan
(insert school district name)

The Exposure Control Plan has been reviewed on the date below.

<table>
<thead>
<tr>
<th>Reviewed By Please Print</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
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<tr>
<td>Position</td>
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Date

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New tasks and procedures which affect occupational exposure

Annual evaluation of available engineering controls, including engineered safer needle devices

Modification of former tasks and procedures which affect occupational exposure

New or revised employee positions with occupational exposure
IMPLEMENT UNIVERSAL PRECAUTIONS (OR STANDARD PRECAUTIONS):

UNIVERSAL PRECAUTIONS (UP), originally recommended by the CDC in the 1980s, was introduced as an approach to infection control to protect workers from HIV, HBV, and other bloodborne pathogens in human blood and certain other body fluids, regardless of a patients’ infection status. Universal Precautions is an approach to infection control in which all human blood and certain human body fluids are treated as if they are known to be infectious.

STANDARD PRECAUTIONS (SP), introduced in 1996, added additional infection prevention elements to UP in order to protect healthcare workers not only from pathogens in human blood and certain other body fluids, but also pathogens present in body fluids to which UP does not apply. SP includes hand hygiene; the use of certain types of PPE based on anticipated exposure; safe injection practices; and safe management of contaminated equipment and other items in the patient environment. Standard Precautions are applied to all patients even when they are not known or suspected to be infectious.

IDENTIFY AND USE ENGINEERING CONTROLS:

Engineering controls are devices that isolate or remove the bloodborne pathogens hazard from the workplace.

- Sharps and needle handling, to include sharps containers.
  - Sharps containers: Puncture proof, leak proof, and non-spillable.
  - Self-sheathing needles and safer medical devices, such as sharps with engineered sharps-injury protection and needless systems.

- Clean-up of blood and body fluid processes. Consider developing spill kits for cleaning up blood and body fluids to be kept at point of use.
  - Include absorbent material (paper towels), gloves, plastic bag to dispose of materials in, and an FDA-approved disinfectant.

- Training on injection safety measures and practices yearly for all staff who handle sharps.

IDENTIFY AND ENSURE THE USE OF WORK PRACTICE CONTROLS:

These are practices that reduce the possibility of exposure by changing the way a task is performed, such as appropriate practices for handling and disposing of contaminated sharps, handling specimens, handling laundry, and cleaning contaminated surfaces and items.

PROVIDE PERSONAL PROTECTIVE EQUIPMENT (PPE), SUCH AS GLOVES, GOWNS, EYE PROTECTION, AND MASKS:

Employers must clean, repair, and replace this equipment as needed. Provision, maintenance, repair and replacement are at no cost to the worker.

MAKE AVAILABLE HEPATITIS B VACCINATIONS TO ALL WORKERS WITH OCCUPATIONAL EXPOSURE.

This vaccination must be offered after the worker has received the required bloodborne pathogens training and within 10 days of initial assignment to a job with occupational exposure.

- Sample Hep B Vaccination Form (Page 170)
- Sample Hep B Declination Form (Page 171)
Hepatitis B Vaccination Record

(insert name of school district)

I understand that, due to my occupational exposure to blood or other potentially infectious materials, I may be at risk of acquiring hepatitis B virus (HBV) infection. I have been given information on the hepatitis B vaccine, including information on its efficacy, safety, method of administration, and benefits of being vaccinated, and I understand that the vaccine and vaccination will be offered free of charge.

I, ______________________________, have completed the following inoculations using:

☐ Recombivax - HB Vaccine or ☐ Enerix -B Vaccine

<table>
<thead>
<tr>
<th>Inoculation 1 - Date</th>
<th>Given at</th>
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<tr>
<td>Inoculation 2 - Date</td>
<td>Given at</td>
</tr>
<tr>
<td>Inoculation 3 - Date</td>
<td>Given at</td>
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</table>

If a health-care worker has ongoing contact with blood or OPIM and is at ongoing risk for injuries with sharp instruments or needlesticks, then s/he must be tested for the antibody to hepatitis B surface antigen one to two months after the completion of the above three-dose vaccination series.

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Need for repeat of series:  ☐ Yes  ☐ No
I understand that, due to my occupational exposure to blood or other potentially infectious materials, I may be at risk of acquiring hepatitis B virus (HBV) infection. I have been given the opportunity to be vaccinated with hepatitis B vaccine at no charge to myself. However, I decline hepatitis B vaccination at this time. I understand that by declining this vaccine, I continue to be at risk of acquiring hepatitis B, a serious disease. If in the future I continue to have occupational exposure to blood or other potentially infectious materials and I want to be vaccinated with hepatitis B vaccine, I can receive the vaccination series at no charge to me.

Employee Name  Please Print

Employee Signature  Date
MAKE AVAILABLE POST-EXPOSURE EVALUATION AND FOLLOW-UP TO ANY OCCUPATIONALLY EXPOSED WORKER WHO EXPERIENCES AN EXPOSURE INCIDENT.

An exposure incident is a specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood or OPIM. This evaluation and follow-up must be at no cost to the worker and includes documenting the route(s) of exposure and the circumstances under which the exposure incident occurred; identifying and testing the source individual for HBV and HIV infectivity, if the source individual consents or the law does not require consent; collecting and testing the exposed worker's blood, if the worker consents; offering post-exposure prophylaxis; offering counseling; and evaluating reported illnesses. The healthcare professional will provide a limited written opinion to the employer and all diagnoses must remain confidential.

POSTEXPOSURE PLAN INCLUDES:

- Who (responsible person) to report to when an exposure occurs.
- Where to go for treatment. An occupational exposure is considered an urgent medical concern and should be managed immediately by going to an ER. Employers usually have insurance that covers these types of expenses and may have requirements of where care and treatment are provided at.

TESTING:

- Source individual’s blood shall be tested and documented as soon as feasible after consent is obtained to determine HBV and HIV infectivity. If consent cannot be obtained, responsible person shall document that legal consent cannot be obtained.
- Exposed employee shall be offered the option of having their blood tested for HBV and HIV serological status. Consent should be obtained prior to collecting blood.

DOCUMENTATION:

- Route of exposure and the circumstances that the exposure occurred.
- Record and track exposures to review annually for trends.

SAMPLES:

- Sample School Exposure Incident Investigation Form (Page 173)
- Sample Sharps Injury Log (Page 174)

NOTE

PEP (POSTEXPOSURE PROPHYLAXIS):

It is imperative that treatment of PEP be started within 24 hours to achieve optimal effect.

- Not all pharmacies and ER’s stock HIV medications. Find out where staff will need to go in order to obtain HIV prophylaxis in your areas.
## Sample School Exposure Incident Investigation Form

### School Exposure Incident Investigation Form

*(insert name of school district)*

<table>
<thead>
<tr>
<th>Date of Incident</th>
<th>Time of Incident</th>
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<tbody>
<tr>
<td>Location</td>
<td>Person(s) Involved</td>
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</table>

### Potentially Infectious Materials Involved

<table>
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<tr>
<th>Type</th>
<th>Source</th>
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**Circumstances (what was occurring at the time of the incident)**

**How the incident was caused (accident, equipment malfunction, and so forth; list any tool, machine, or equipment involved)**

**Personal protective equipment and engineering controls being used at the time of the incident**

**Actions taken (decontamination, clean-up, reporting, and so forth)**

**Training of employee**

**Recommendations for avoiding repetition of the incident, including any recommended changes to the ECP (Exposure Control Plan)**
### Sample Sharps Injury Log

<table>
<thead>
<tr>
<th>Date of Injury</th>
<th>Employee Job Title/Category</th>
<th>Location of Incident</th>
<th>Work Area</th>
<th>Brand/Type of Sharp</th>
<th>Description of Incident</th>
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Needle-Stick/Sharps Injury Log

(insert name of school district)

(insert dates)
RECORDKEEPING, TRACKING AND TRENDING REQUIREMENTS

- Responsible person shall maintain medical records. All records shall be kept confidential and shall be retained for at least the duration of employment plus 30 years.

- Responsible person shall maintain staff training records for three years from the date of training.
  - Training dates and sessions
  - Names and job titles of all persons attending training sessions.

USE LABELS AND SIGNS TO COMMUNICATE HAZARDS.

Warning labels must be affixed to containers of regulated waste; containers of contaminated reusable sharps; refrigerators and freezers containing blood or OPIM; other containers used to store, transport, or ship blood or OPIM; contaminated equipment that is being shipped or serviced; and bags or containers of contaminated laundry, except as provided in the standard. Facilities may use red bags or red containers instead of labels.

In HIV and HBV research laboratories and production facilities, signs must be posted at all access doors when OPIM or infected animals are present in the work area or containment module.

STAFF TRAINING REQUIREMENTS:

Employers always should train workers about sources of infectious agent exposure and appropriate precautions for preventing infections. Education to all staff on initial assessment and yearly is a requirement of State OSHA plans.

Bloodborne Pathogens covered in training include HIV, Hepatitis B, and Hepatitis C specific training, along with vaccination and post exposure prophylaxis.
Meeting the OSHA Standard for Bloodborne Pathogens constitutes best practice and protects the health and safety of school staff. The following information is designed to help school nurses apply the OSHA BBP standard to training their school staff.

WHY TRAIN STAFF ON BBP? School nurses are professionals with the knowledge to carry out BBP training, which is one of the components of the OSHA BBP standard.

WHO NEEDS TO BE TRAINED? School employees, especially those at high risk of BBP exposure (such as Environmental Services Staffs).

WHEN DO THEY NEED TO BE TRAINED? Upon hire and annually after that. Also employees may need training if their job or responsibilities change.

WHAT DO THEY NEED TO BE TRAINED ON? Materials must be in a language common to employees and appropriate in content and vocabulary to their educational and literacy levels.

THE TRAINING PROGRAM NEEDS TO CONTAIN THE FOLLOWING ELEMENTS:
- A general explanation of the epidemiology and symptoms of bloodborne diseases
- An explanation of the modes of transmission of bloodborne pathogens
- An explanation of the employer’s exposure control plan and the means by which the employee can obtain a copy of the plan
- An explanation of how to recognize activities that may involve exposure to blood and other potentially infectious material
- An explanation of the use and limitations of methods that will prevent or reduce exposure, including appropriate engineering controls, work practices and personal protective equipment (PPE)
  - Information on the types, proper use, location, removal, handling, decontamination and disposal of PPE
  - An explanation of the basis for selecting PPE
- Information on the efficacy, safety, benefits and method of administration of the Hepatitis B vaccine, and its availability, free of charge, to employees with an occupational hazard exposure
- Information on the appropriate actions to take and people to contact in an emergency involving blood or other potentially infectious material
- An explanation of the procedure to follow if an exposure incident occurs, including the method of reporting the incident and the medical follow-up that will be made available
- Information on the post-exposure evaluation and follow-up that the employer is required to provide for the employee following an exposure incident
- An explanation of the signs and labels and/or color coding required by 29 CFR 1910.1030(g)(1)
- An opportunity for questions and answers with the person conducting the training session
- An accessible copy of the regulatory text of this standard and an explanation of its contents

BEST PRACTICES FOR BBP TRAINING (Bloodborne Pathogen)
HOW DO THEY NEED TO BE TRAINED?

There are many options, including but not limited to live lecture, Zoom webinar, PowerPoint, videos, quizzes, handbooks, handouts, or online learning modules. School staff can decide which works best for them, but trainers need to be accessible to trainees to answer questions.

WHAT RECORDS/DOCUMENTATION NEEDS TO BE KEPT?

- Dates of all training sessions
- Contents/summary of the training sessions
- Names and qualifications of instructors
- Names and job titles of employees attending the training sessions.

WHERE CAN SCHOOLS GET MORE INFORMATION ON THE OSHA STANDARD?

Bloodborne Pathogens - Overview | Occupational Safety and Health Administration (osha.gov)

WHAT ARE SOME EXAMPLES OF BBP TRAINING FOR SCHOOLS?

Training video from ESU 8: Bloodborne Pathogens in Schools (https://www.youtube.com/watch?v=hd2I7pVO80)

Wisconsin Department of Public Instruction: Bloodborne Pathogens (https://dpi.wi.gov/sspw/pupil-services/school-nurse/communicable-diseases/bloodborne)

Some schools may have access to online BBP training through the school’s insurance company.
BLOOD AND BODY FLUID SPILLS OR SOILING

01. Wear disposable medical gloves for any blood and body fluid cleanup.

02. Always use disposable towels to clean objects and surfaces contaminated with blood and body fluids (stool, urine, vomit) and discard in a plastic-lined, covered waste container.

03. Scrub the area with soap or detergent and water to remove blood or body fluids and discard paper towels. Rinse the area with clean water. Prevent exposure by avoiding splashing any contaminated fluids.

04. Disinfect immediately using bleach solution or another appropriate disinfecting product on any items and surfaces contaminated with blood and body fluids (stool, urine, vomit). Make sure bleach solution is mixed to a proper concentration for killing BBP. See How to Safely Work with Bleach (page 22)

05. Allow surface to air dry.

06. Discard disposable gloves. If using utility gloves, follow cleaning/disinfecting procedure.

07. Wash hands immediately.

Source: Minnesota (Hennepin County) Infectious diseases in childcare settings and schools manual, Section 2: Cleaning, sanitizing, and Disinfecting. https://www.hennepin.us/childcaremanual
DISPOSAL OF INFECTIOUS WASTE

WHAT BODY FLUIDS ARE CONSIDERED INFECTIOUS WASTE?

Body fluids include semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, peritoneal fluid, pericardial fluid, amniotic fluid and any other body fluid visibly contaminated with blood.

Blood, blood products and body fluids are considered infectious wastes if it is a pourable quantity.

All infectious waste in Nebraska must be rendered non-infectious or sent for disposal at a permitted facility.

WHAT IS CONSIDERED NON-INFECTIOUS MEDICAL WASTE?

Non-infectious medical waste includes bandages, dressings, human waste, and bedding that have not been contaminated with something that is considered infectious and can be disposed of in regular trash.

Blood and body fluids can be absorbed by disposable materials (e.g., paper towels) so that they are not dripping or pourable and be disposed of in regular trash.

WHAT ARE CONSIDERED SHARPS?

Items that can potentially transmit disease by breaking the human skin, such as items used for diagnosis, treatment or immunization. (i.e., needles, razor blades, scalpels, blood vials, used slides, glass products, lancets).

Sharps that are contaminated shall be contained in leak proof, puncture proof, containers that remain upright throughout use. Containers shall be located as close as possible to the immediate area of use and easily accessible.

Consider working with a local health clinic, hospital, or other healthcare facility type for disposal of sharps containers if produce a small quantity.

NOTE

In Nebraska, schools, churches, and government agencies are regulated facilities, the same as businesses. They do not qualify for any household exemption.

RESOURCES

NDEE Pubs Forms (ne.gov)

ICAP Team - Disposal of Medical Waste and Sharps in Schools
PART 06

Included in this section:

201 ESU Map
202 Local Health Department Map
203 Medicaid Unwinding Flyer

RESOURCES
All the Steps on Proper Hand Washing

Wash your hands every day but get them wet first.

Then, you need to lather them with soap.

Next, you need to scrub your hands together with soap.

After, you need to rinse your hands under the water.

Finally, you need to dry them with a towel or a paper towel.

All the Steps by Kendyl from Fullerton
Make sure your kids stay covered!
Medicaid renewals are coming.

Attention Parents! Is your child insured through Medicaid in Nebraska? Changes are coming to Medicaid. It is important to know how these changes could affect your Medicaid coverage for your loved ones. If you or your child are currently enrolled in Medicaid, it is important to know that you may need to renew your coverage. The renewal process is simple and can be completed online, by mail, or by phone.

✅ Step 1: Update your contact information
Make sure that Nebraska Medicaid has your most up-to-date contact information. This includes your mailing address, email, and phone number.

✅ Step 2: Check your mail often
You may receive a printed letter explaining you or your child’s eligibility for Medicaid. This letter will tell you how to renew your coverage.

✅ Step 3: Fill out your renewal form by the due date
If you or your child are still eligible, fill out the renewal form and return it to Nebraska Medicaid at the address provided. There is a specific due date and timeframe that this form needs to be filled out.

You can also visit www.accessnebraska.ne.gov to sign in to your account to renew your coverage online. You may need to provide updated information about your income, family size, and other personal details.

Contact a Navigator today for free assistance
www.howtogetcare.org
¡Atención, padres! ¿Su hijo está asegurado mediante Medicaid en Nebraska? Vienen cambios a Medicaid. Es importante saber cómo podrían afectar estos cambios su cobertura de Medicaid para sus seres queridos. Si usted o su hijo están inscritos actualmente en Medicaid, es importante que sepa que quizás deba renovar su cobertura. El proceso de renovación es sencillo y se puede realizar en línea, por correo o por teléfono.

✔ Paso 1: Actualice su información de contacto
Asegúrese de que Nebraska Medicaid tiene su información de contacto más actualizada. Esto incluye su dirección de correo postal, correo electrónico y número de teléfono.

✔ Paso 2: Revise a menudo su correo electrónico
Es posible que reciba una carta impresa explicando la elegibilidad de usted o de su hijo para Medicaid. Esta carta le dirá cómo renovar su cobertura.

✔ Paso 3: Rellene su formulario de renovación antes de la fecha límite
Si usted o su hijo siguen siendo elegibles, rellene el formulario de renovación y devuélvalo a Nebraska Medicaid a la dirección suministrada. Hay una fecha límite y un tiempo específicos en que debe rellenarse este formulario.

También puede visitar www.accessnebraska.ne.gov para iniciar sesión en su cuenta a fin de renovar su cobertura en línea. Quizás tenga que proporcionar información actualizada sobre sus ingresos, el tamaño de la familia y otros datos personales.

Comuníquese hoy mismo con un Navegador para que le ayude
www.howtogetcare.org
How Can I Tell if my Child has Head Lice?

There are several products that help to control head lice but lice do not jump, fly or crawl long distances. Head lice develop in three stages: egg, nymph and adult. Adults are small (1/16–1/8-inch long), wingless and moving and feeding individuals. To inspect your child’s head, allow them to firmly grasp human hair. Lice feed on blood.

Female lice lay 8–10 eggs a day, eggs hatch in seven days and them firmly grasp human hair. Lice feed on blood.

Hatched eggs are pearly white and remain attached to the hair. Due to hair growth over time, nits are considered non-viable of non-use.

How are Head Lice Transmitted?

An active infestation of head lice is defined as live, adult head lice such as clothes, hats, headphones, blankets, rugs, etc. Animals besides human heads. Even items in contact with sharing hair brushes or costume sharing, or sharing a bed or such as hugging, immediate hat or headphone sharing, in which head lice can be transmitted and how to prevent extended visits. It is best to teach your child about situations other relatives during events such as sleepovers, camps and often transmitted among close friends, cousins, siblings and fact, head lice and not dandruff, sand, dirt or hairspray. scratching and an itchy scalp. Make sure the problem is, in which head lice can be transmitted and how to prevent completely remedy the issue.

You may have to use multiple products multiple times to effective when used as directed. (see table on next page).

Adults —

Viable eggs —

Eggs

Egg or nit attached to hair

Egg or nit attached to hair

1/32-inch long, light brown/

1/16–1/8-inch long, wingless, brown-colored, insects. They have pincher-like claws which help

1/19

1/14

1/10

1/6

1/3

1/2

1/1

1

Head Lice Fast Facts

Extension Educators

Jim Kalisch, UNL Department of Entomology

Barb Ogg, Extension Educator Emeritus

What you are looking for:

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What you are looking for:
Drs. Jody M. Green and Jonathan L. Larson
Extension Educators

Head Lice Fast Facts

• Adults are small (1/16–1/8-inch long), wingless and brown-colored. They have pincher-like claws which help them firmly grasp human hair. Lice feed on blood.

• Head lice develop in three stages: egg, nymph and adult. Female lice lay 8–10 eggs a day, eggs hatch in seven days and mature to an adult in another seven days. Lice live for about 30 days.

• Lice do not jump, fly or crawl long distances.

• Head lice are transmitted through head-to-head contact or immediate sharing of items like hats, combs or headphones.

• There are several products that help to control head lice but you may have to use multiple products multiple times to completely remedy the issue.

Head Lice and the Return to School

While we associate head lice with going back to school, the truth is lice are rarely transmitted in schools. Lice are most often transmitted among close friends, cousins, siblings and other relatives during events such as sleepovers, camps and extended visits. It is best to teach your child about situations in which head lice can be transmitted and how to prevent passing it among friends.

How are Head Lice Transmitted?

Transmission occurs through close, head-to-head contact, such as hugging, immediate hat or headphone sharing, sharing hair brushes or costume sharing, or sharing a bed or pillow. Lice do not live or breed on inanimate objects or other animals besides human heads. Even items in contact with head lice such as clothes, hats, headphones, blankets, rugs, etc. will have a low risk of transmitting head lice after 24–48 hours of non-use.

How Can I Tell if my Child has Head Lice?

An active infestation of head lice is defined as live, moving and feeding individuals. To inspect your child’s head, you will need: a bright light, a comb and a magnifying glass. Have your child sit in a chair and comb the hair, close to the scalp, to inspect for adult lice or their eggs.

What you are looking for:

Viable eggs —

Eggs (aka nits) are less than 1/32-inch long, light brown/yellow/white, oval-shaped, and are glued to one side of the hair shaft. Lice eggs are located no more than 1/4 inch from the scalp and are common at the nape of the neck and close to ears. Hatched eggs are pearly white and remain attached to the hair. Due to hair growth over time, nits are considered non-viable if found 1/4–1/2-inch from the scalp.

Adults —

Adult lice are 1/16–1/8-inch long, wingless, brown-colored insects. They have pincher-like claws allowing them to firmly grasp hair shaft. Other symptoms of an active case of head lice include tickling sensations, difficulty sleeping, rashes from scratching and an itchy scalp. Make sure the problem is, in fact, head lice and not dandruff, sand, dirt or hairspray.

How do I Treat for Head Lice?

Mechanical treatment includes combing hair with a fine-toothed, metal comb to remove viable nits and lice, repeated every few days for at least two weeks. In addition, there is a variety of FDA-approved pediculicides (lice killers) sold over-the-counter or as a prescription treatment (see table on next page). These products are safe and effective when used as directed. Continued on next page