



# Preventing the Spread of Infections in K-12 Schools

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# Agenda



- Introduction
- How Infectious Diseases Spread
- Infectious Diseases that can be Prevented in K-12 Settings
- Actions to Prevent and Control the Spread of Infections
- Conclusion and Local Resources





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# Introduction

# Introduction



## Schools provide safe environments that support student health and well-being.

- It is important that schools have plans in place that can help reduce illness and illness-related absenteeism by preventing the spread of common infections.
- Reducing illness and student absences also means:
  - Maintaining student access to other important school services,
  - Protecting families of students and staff from infection,
  - Preventing parents, and other caregivers from missing work to care for a sick child, and
  - Preventing staff illness to ensure schools remain fully-staffed.



# Introduction



**Schools should work with their local public health partners and engage parents, caregivers, and other community partners to create an emergency operations plan which includes a section on infectious diseases.**

- Schools should have clear, consistent, and accessible communication between administrators, parents, caregivers, and staff.
- Communication strategies should consider the needs of people with limited English proficiency, who require language services, and individuals with disabilities who require accessible formats.





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# How Infectious Diseases Spread

# How Infectious Diseases Spread



## Germs can spread through:

- **Contact:** A healthy person comes into direct contact with (touches) germs from a sick person.
- **Sprays and splashes:** A sick person coughs, sneezes, or vomits. This creates droplets that carry germs short distances.
- **Inhalation (breathing in):** Small germs can spread through the air and stay in the air for a long time. These germs can be inhaled.
- **Vectors:** Insects such as mosquitoes, ticks, and fleas can spread infections to people and animals.



# How Infectious Diseases Spread



## Infections can spread in schools through:

- Shared objects,
- Close contact with others,
- Students playing closely together,
- Lack of cleaning and disinfection routines and appropriate supplies, and/or
- Lack of proper ventilation.





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# **Infectious Diseases that can be prevented in K-12 settings**

# Infectious Diseases that can be prevented in K-12 settings



- **Viral respiratory illnesses (which affect the lungs and other parts of the respiratory system), including:**
  - COVID-19
  - Influenza
  - Respiratory syncytial virus (RSV)
- **Viral respiratory illnesses can spread from person-to-person when:**
  - An infected person coughs or sneezes.
  - A person gets virus droplets from a cough or sneeze in their eyes, nose, or mouth.
  - A person touches a surface, like a doorknob, that has the virus on it and then touches their face.



# Infectious Diseases that can be prevented in K-12 settings



- **Gastrointestinal (GI) illnesses (which affect the digestive system), including:**

- Norovirus
- Rotavirus



- **GI illnesses spread through:**

- Eating or drinking contaminated food or drink.
- Contact with an infected person, such as sharing food or utensils, eating food handled by them, or changing diapers of a sick child without washing your hands properly afterwards.
- Touching contaminated surfaces or objects, and then touching one's mouth before handwashing.
- Sharing contaminated bathroom surfaces with an infected person.
- Cleaning up vomit or diarrhea from an infected person without proper protective equipment, such as gloves, mask, and covering for clothes.



# Infectious Diseases that can be prevented in K-12 settings



- **Other illnesses, such as:**

- Head Lice
- Pink eye
- Rabies
- Ringworm



# Infectious Diseases that can be prevented in K-12 settings



- **Head lice can spread from person-to-person through:**
  - Head-to-head contact with a person who already has head lice.
  - Wearing clothing, such as hats, scarves, or coats worn by a person with head lice.
  - Using infested combs, brushes, or towels
  - Lying on a bed, couch, pillow, carpet, or stuffed animal that has been in contact with a person with head lice.



# Infectious Diseases that can be Prevented in K-12 Settings



- **Pink eye caused by viruses and bacteria can spread from person-to-person through:**
  - Close personal contact, such as touching or shaking hands.
  - Contact with droplets from the air after an infected person coughs or sneezes.
  - Touching objects and surfaces with germs on them, then touching one's eyes before washing one's hands.



# Infectious Diseases that can be Prevented in K-12 Settings



- **Rabies can spread to people and pets through:**
  - Bites and scratches from an infected animal.
  - An infected animal's saliva getting directly into a person or pet's mucous membranes in the eyes, nose, and mouth.
- **Ringworm of the skin can spread through:**
  - Direct skin contact with people and animals who are infected.
  - Sharing personal items (e.g., towels, clothing, bedding).
  - Contact with moist surfaces, like shower stall or locker room floors.





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# Actions to Prevent and Control the Spread of Infections

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**Schools can promote health and supportive environments for in-person learning by implementing comprehensive prevention strategies.**

The Centers for Disease Control and Prevention (CDC) released consolidated, evidence-based guidance for preventing the spread of infections in K-12 settings.

Strategies include:

**Vaccinations**

**Handwashing**

**Respiratory Etiquette**

**Staying Home  
When Sick**

**Safely Handling  
Pets and Animals**

**Safely Visiting Oceans,  
Lakes, and Rivers**



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# Vaccinations

# Why Is It Important?



**All states, the District of Columbia, and territories have vaccination requirements for children attending schools.**

- These requirements are important tools for maintaining high vaccination coverage and low rates of vaccine-preventable disease.



# Stay Up-to-Date on Recommended Vaccinations



Schools can promote equitable access to routine and annual vaccinations, including for influenza and COVID-19 for staff and students.

- Provide information about recommended vaccines to staff, students, and families.
- Promote the safety and effectiveness of vaccines.
- Establish supportive policies and practices that make getting vaccinated easy and convenient. For example, developing a workplace vaccination program, or assisting family members in receiving vaccinations.
- Host on-site/school-located vaccination clinics, or connect eligible students and staff to off-site vaccination locations.



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# Handwashing

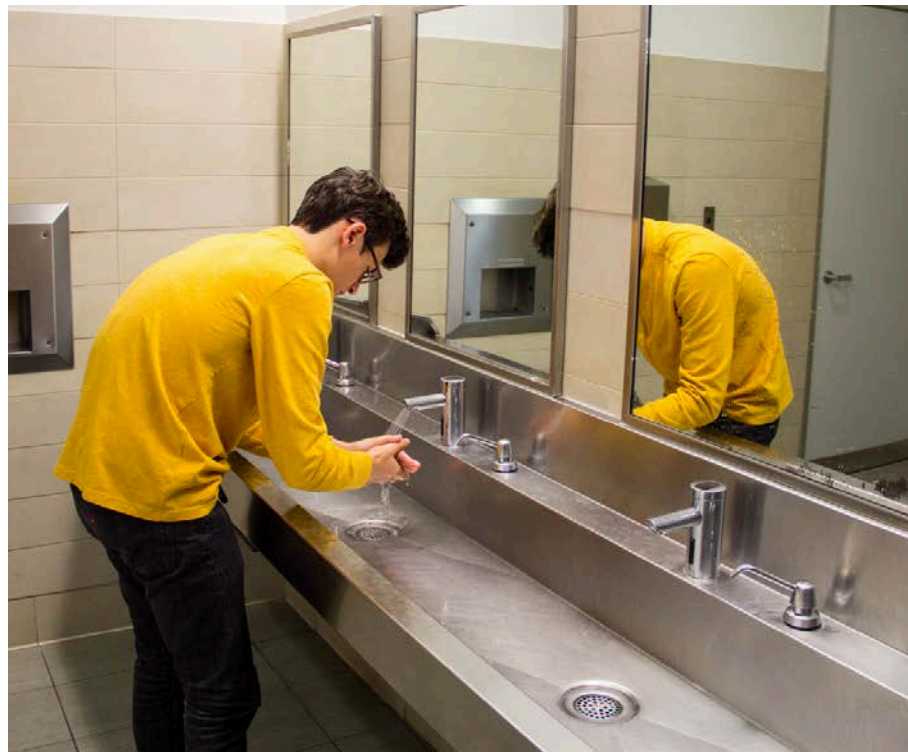
# Why Is It Important?



**Washing hands can keep staff and students healthy and prevent the spread of respiratory and gastrointestinal infections.**

Germs can spread from person-to-person, or from surfaces to people, when a person:

- Touches their eyes, nose, and mouth with unwashed hands.
- Prepares or eats food and drinks with unwashed hands.
- Touches surfaces or objects that have germs on them.
- Blows their nose, coughs, or sneezes into hands and then touches other people's hands or common objects.



# Teaching and Reinforcing Proper Handwashing



- Schools should set routines, or schedule opportunities, for handwashing throughout the day.
  - During times of increased illness spread or absenteeism, schools should evaluate hand hygiene routines and increase those opportunities.
- Schools should provide adequate handwashing supplies (e.g., soap, water, and paper towels) within easy reach.
  - If soap and water are not available, hand sanitizer containing at least 60% alcohol can be provided. Store up, and away, from younger children.



# How Staff and Students Should Wash Their Hands



- **Wet hands** with clean, running water (warm or cold), turn off the tap, and apply soap.
- **Lather hands** by rubbing together with the soap. Lather the backs of hands, between fingers, and under nails.
- **Scrub hands** for at least 20 seconds. Need a timer? Hum the "Happy Birthday" song from beginning to end twice.
- **Rinse hands** well under clean, running water.
- **Dry hands** using a clean towel or an air dryer.



# Handwashing Video



How to Wash Your Hands Correctly

From a US county public health authority

Share

Wash Hands Before Eating

Watch on YouTube

The image shows a YouTube video player interface. The video title is "How to Wash Your Hands Correctly". Below the title is a dark grey box with the text "From a US county public health authority" and a right-pointing arrow. In the top right corner of the video frame, there is a "Share" button with a white arrow icon. The video content shows two young boys in a kitchen; one is at the sink with his hands under the faucet, and the other is standing next to him. A large red play button is centered over the video. In the bottom right corner of the video frame, there is a blue speech bubble containing the text "Wash Hands Before Eating". At the bottom left of the video player, there is a "Watch on YouTube" button with the YouTube logo.

# How Staff and Students Can Prevent the Spread of Norovirus



- **Wash hands often with soap and water for at least 20 seconds, especially:**
  - After using the toilet or changing diapers.
  - Before eating, preparing, or handling food.
  - Before taking, or giving, someone else medicine.
- **Staff should clean up vomit and diarrhea immediately.**
  - Wear rubber or disposable gloves, wipe the entire area with paper towels, and then throw them in a plastic trash bag.
- **If sick with norovirus, stay home for at least 2 days (48 hours) after symptoms stop.**



# Follow Procedures for Routine Cleaning, Sanitizing, and Disinfecting

- Schools should conduct daily cleaning and sanitizing of surfaces and objects that are often touched (e.g., desks, countertops, doorknobs, computer keyboards, faucet handles, toys).
- Immediately clean surfaces and objects that are visibly soiled with blood or other body fluids.
  - Use gloves and other personal protective equipment.
  - Wipe, or soak up, the blood or body fluid; clean; and then disinfect the surface.
- Refer to local policy/regulation for procedures on disinfecting specific areas of the schools (e.g., food service areas, bathrooms).



# Key Takeaways



**Encourage staff and students to practice healthy habits, like washing their hands often and keeping surfaces and objects clean.**

**Many diseases and conditions can be spread if staff and students do not wash their hands with soap and water.**

**Having staff and students wash their hands with soap and water is one of the best ways to stay healthy.**

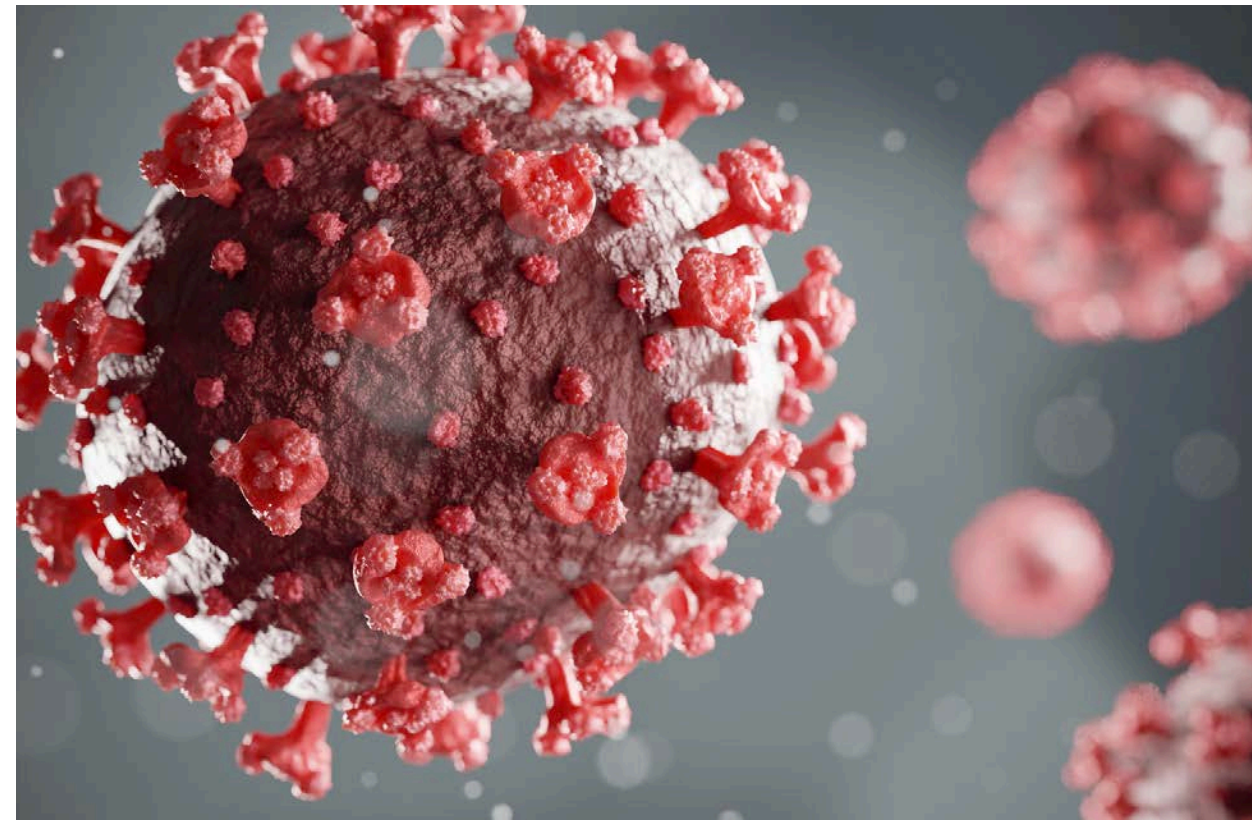
**Schools should also conduct daily cleaning and sanitizing of surfaces.**



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# Respiratory Etiquette

# Why Is It Important?



**Schools can teach and reinforce respiratory etiquette to help keep staff and students from getting and spreading respiratory viruses.**

Respiratory viruses include, but are not limited to:

- COVID-19,
- Influenza,
- Pertussis (whooping cough), and
- Respiratory syncytial virus (RSV).



# Teach and Reinforce Proper Respiratory Etiquette for Staff and Students



Staff and students should always:

- Cover their mouth and nose with a tissue when they cough or sneeze.
- If staff or students do not have a tissue, they should cough or sneeze into their elbow, not their hands.
- Throw away used tissues in the trash.
- Turn or walk away to cough or sneeze.
- Wash their hands, or use hand sanitizer, after blowing their nose, coughing, or sneezing.



# Wear a Mask



- Staff and students can also consider wearing a high-quality, well-fitting face mask to help reduce the spread of respiratory germs.
- Masks create a barrier between infected droplets or particles a person breaths out into the air.
- Masks also help limit the breathing in of droplets that may be put into the air from another person.



# Take Steps for Cleaner Air



- Improving air quality can reduce the number of germs in the air.
  - This can be done by increasing airflow, cleaning the air, or moving gatherings outdoors.
- Cleaner air can reduce the likelihood of disease spread, particularly respiratory viruses.



# Take Steps for Cleaner Air



Schools should implement strategies to have cleaner air.

- Ensure existing HVAC systems are providing the minimum outdoor air ventilation requirement in accordance with ventilation design codes.
- Consider ventilation design, or enhancements, when remodeling or constructing new buildings.
- Open windows, as possible.
  - Use fans to increase the effectiveness of open windows to help draw outdoor air into classrooms and other spaces.
- Use portable air cleaners in spaces with low ventilation.
- Hold some activities outside, such as lunch or social periods.
- Keep bus windows open when it does not create a safety or health hazard.



# Key Takeaways



**Practice proper respiratory etiquette to keep staff and students from getting sick.**

**Cover coughs and sneezes and keep hands clean to help prevent the spread of respiratory illnesses.**

**Wear a mask to help reduce the spread of respiratory germs in schools.**

**Stay up-to-date on recommended vaccines.**



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# Staying Home When Sick

# Why Is It Important?



## Schools can expect that children and staff will get sick during the school year.

- Schools, parents, and caregivers often do not know what specific illness a child may have, so it is best to stay home.
- Staying home when sick can lower the risk of spreading infections to other students and staff.
- Schools must balance the risk of infectious disease spread with educational, social, and mental health needs of children when deciding when students should stay home.



# Encourage Students and Staff to Stay Home When Sick



- Schools can establish policies and practices that support having students and staff stay home when sick.
- Schools can:
  - Allow flexible, paid sick leave for staff.
  - Set policies to accommodate individuals who are sick and avoid incentivizing coming to school or work while sick.
  - Support children who are learning at home because they are sick.



# When to Stay Home from School



Staff and students should stay home if they have any of the following symptoms:

- Fever, including a fever with a new rash.
- Vomiting more than twice in the next 24 hours.
- Diarrhea that causes 'accidents', is bloody, or results in greater than two bowel movements above what the child normally experiences in a 24-hour period.
- Skin sores that are draining fluid on an uncovered part of the body and are unable to be covered with a bandage.
- Respiratory virus symptoms that are worsening or not improving.



# When to Return to School



Staff and students can return to school when:

- Fever free (and not using fever-reducing medicine) for at least 24 hours.
- Fever with a new rash has been looked at by a healthcare provider and fever has resolved.
- Uncovered skin sores are crusting, and they are under treatment of a medical provider.
- Vomiting has resolved overnight and they can hold down food/liquids in the morning.
- Diarrhea has improved, person is no longer having accidents, or having bowel movements more than 2 per 24-hours for a child.
- Respiratory virus symptoms are getting better for at least 24 hours.



# Key Takeaways



**Encourage staff and students to stay home when sick.**

**Staying home when sick can prevent the spread of diseases to staff and students.**

**Schools should develop policies for common illnesses so staff and students know when to stay home.**

**Staff and students should return to school when their symptoms improve.**



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# Safe Handling of Pets and Animals

# Why Is It Important?



**Pets and animals can sometimes carry harmful germs that can make us sick even when they appear healthy.**

- People can come in contact with pets and animals at home, petting zoos, fairs, schools, stores, and parks.
- The diseases people get from animals are called zoonotic diseases.
- Knowing how to safely handle pets and animals can prevent the spread of zoonotic diseases.

# Encourage the Safe Handling of Pets and Animals



- Schools can supervise children around pets.
- Schools can encourage children not to:
  - Kiss their pets,
  - Hold pets close to their faces, or
  - Allow pets to lick their face or mouth.

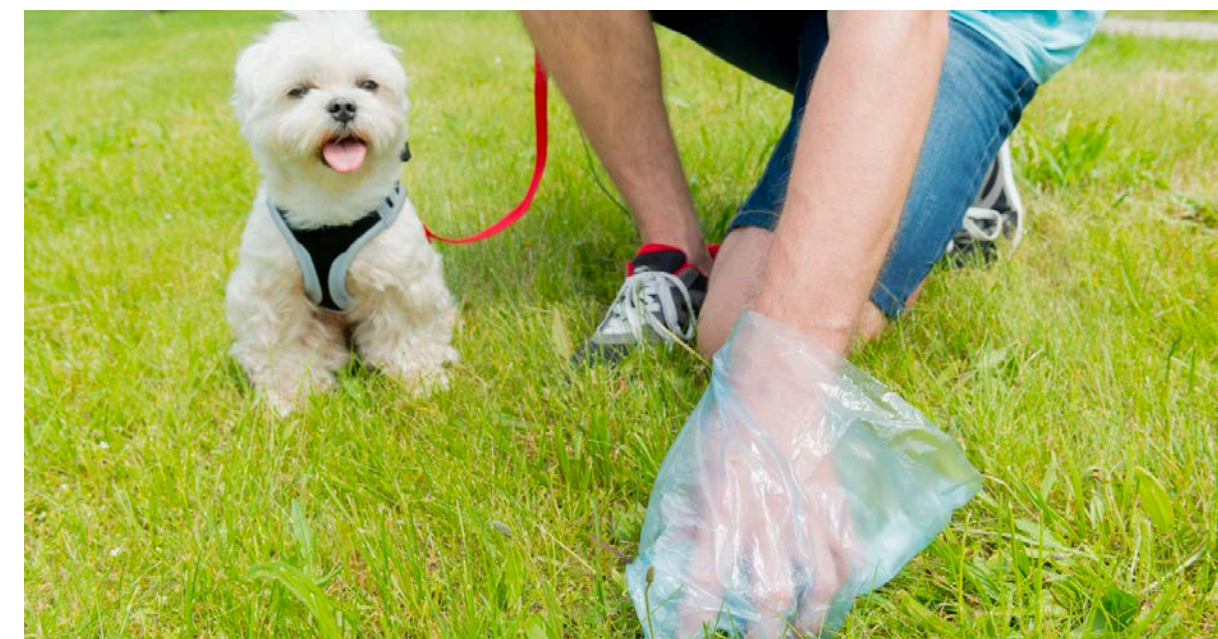


# Properly Handle Pets and Animals



Staff and students should:

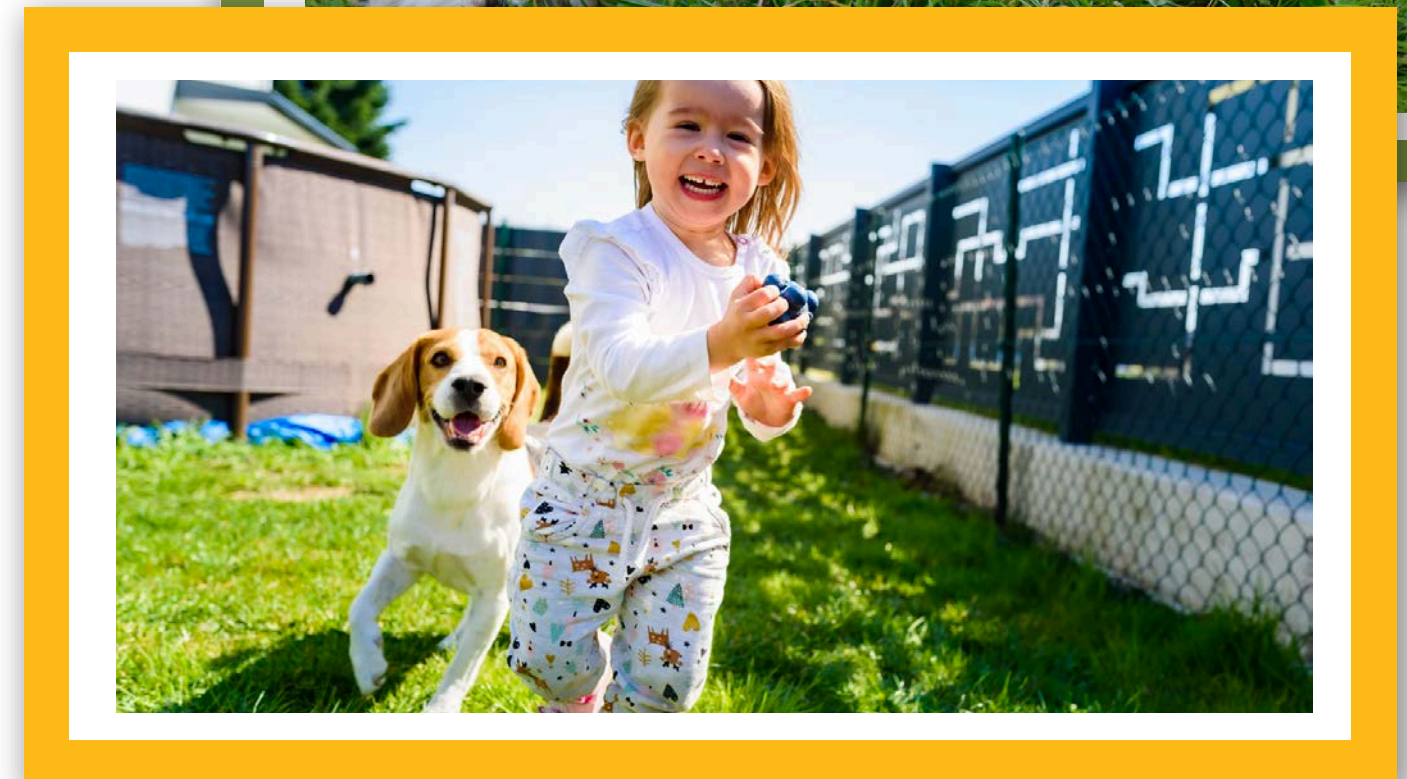
- Always wash their hands after handling or being around animals or their waste, food, or supplies.
- Keep pets and their supplies out of the kitchen or other areas where you prepare, serve, or eat food.
- Clean up after animals properly.
- Report any sick, injured, or dead animals found on campus. Do not touch or pick up.



# Properly Handle Pets and Animals



- Avoid rough play with animals to prevent bites and scratches.
- Clean bites and scratches immediately with soap and water, and seek medical care if:
  - The wound is serious or becomes red, painful, warm, or swollen;
  - The animal appears sick; or
  - If you do not know the vaccination status of the animal.
- Enjoy wildlife from a safe distance.



# Key Takeaways



**There are many health benefits of owning a pet, however, pets can sometimes carry harmful germs that can make us sick even when the pet appears healthy.**

**Zoonotic diseases are caused by germs that spread between animals and people.**

**Young children, older adults, and people with weakened immune systems are more likely to get sick from these germs.**

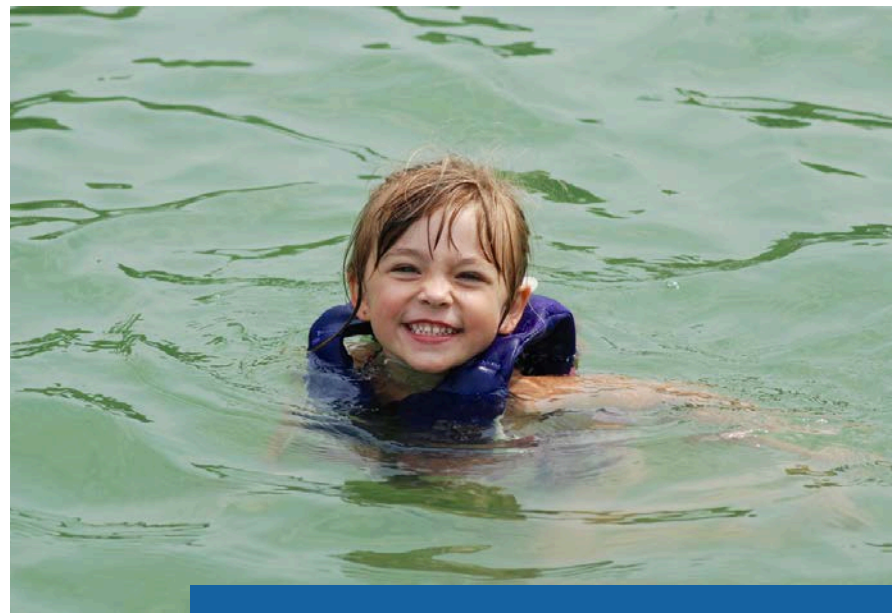
**Practice healthy habits to stay healthy while enjoying pets and other animals.**



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# Safely Visiting Oceans, Lakes, and Rivers

# Why Is It Important?



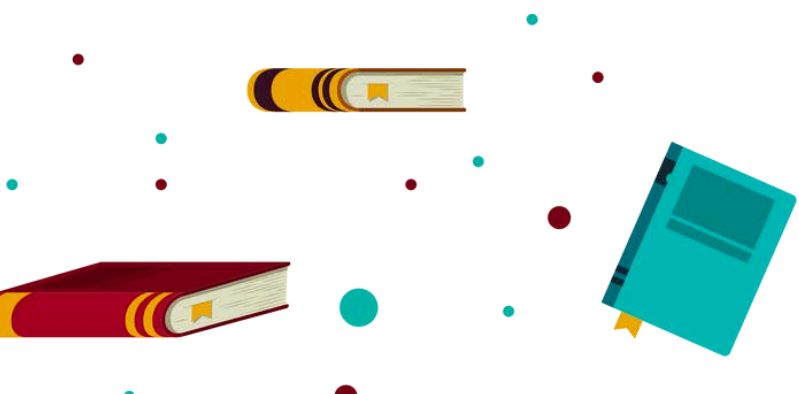
**Water from natural bodies of water like oceans, lakes, or rivers, can have germs that make us sick.**

- Germs found in the water and sand often come from human or animal feces (poop).
- Germs can be carried into swim areas by heavy rain, or from humans or animals pooping in or near the water.
- Water contaminated with these germs can make a person sick if swallowed. It can also cause an infection if someone gets into the water with an open cut or wound.

# Encourage Safety When Visiting Oceans, Lakes, and Rivers



- Schools should encourage students not to:
  - Swallow the water.
  - Put sand in their mouth.
  - Poop in the water.
- Every hour, schools can take kids on bathroom breaks.
- Children in diapers should use product(s) designed for water use.

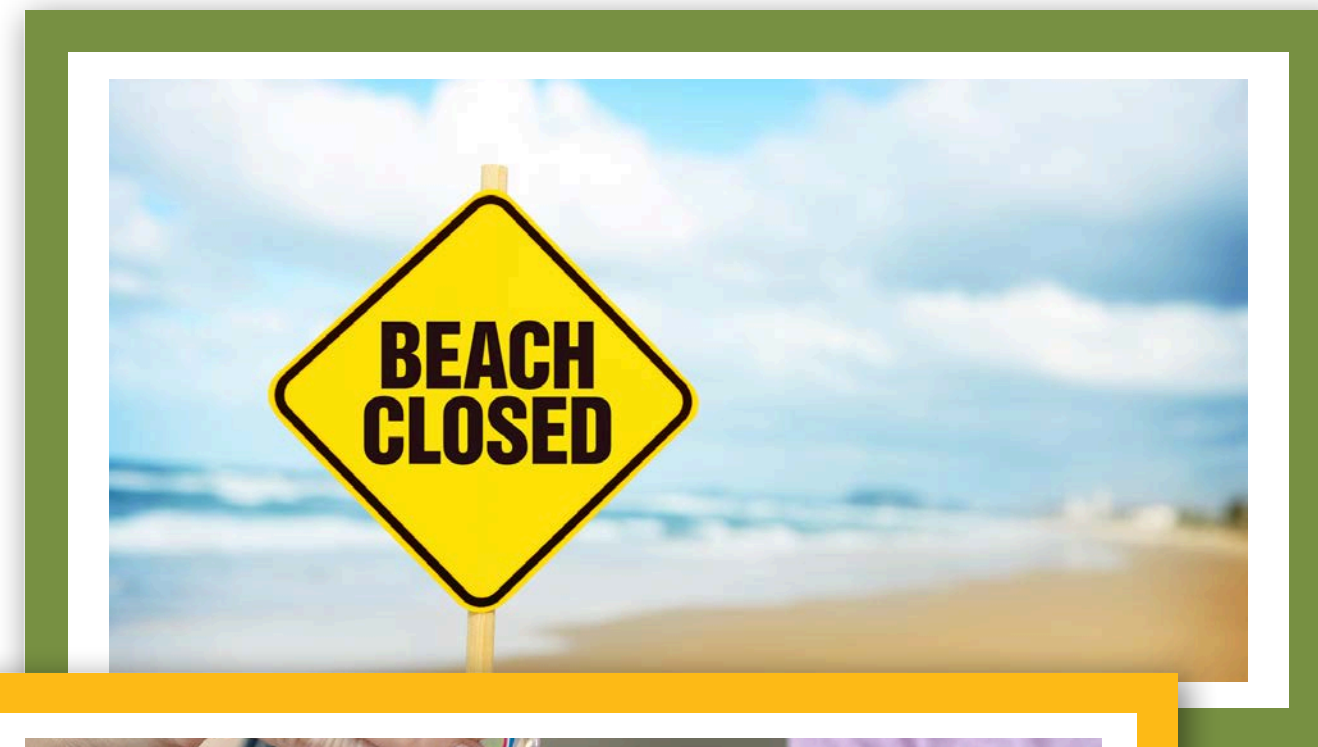


# How to Safely Visit Oceans, Lakes, and Rivers



Staff and students should:

- Check online to find out if the swim area is currently monitored, under advisory, or closed for health or safety reasons.
- Wash hands for 20 seconds before eating food, especially if they have been playing in or touching sand.
- If soap and water are not available, use an alcohol-based hand sanitizer that contains at least 60% alcohol.



# When to Stay Out of the Water



Staff and students should stay out of the water if:

- Signs say the swim area is closed.
- The water looks cloudier than usual, is discolored, or smells bad.
- There are heavy rains and/or floods. Rain water and flood water can be contaminated with human and animal poop.
- They see any pipes draining into or around the water.
- They are sick with diarrhea.
- They have an open cut or wound (especially from a surgery or piercing).



# Key Takeaways



**Spending time in oceans, lakes, and rivers can help people stay active, but the water people swim, play, and relax in can also spread germs.**

**Swallowing water from natural bodies of water like oceans, lakes, or rivers can make a person very sick.**

**If contaminated water gets into an open cut or wound it may lead to an infection.**

**Taking a few steps when visiting these places can help protect everyone from germs.**

***Note: Inhaling aerosolized oceans, lakes, or river water cannot give you gastrointestinal illnesses.***



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# Conclusion and Local Resources

# Conclusion



**Everyday actions help keep staff and students healthy by minimizing the spread of infections in school settings.**

- Having strategies in place can help prevent the spread of common illnesses (e.g., gastroenteritis, colds, influenza) and maximize school participation.
- The below actions can help prevent the spread of an infection:
  - Stay up-to-date on vaccinations.
  - Wash hands.
  - Clean, sanitize, and disinfect.
  - Take steps for cleaner air.
  - Follow respiratory etiquette.
  - Safely handle pets and animals.
  - Safely visit oceans, lakes, and rivers.
  - Staying home when sick.

# Local Resources



## County of San Diego:

- COVID-19 Community Sector Support: K-12 Sector
- K-12 Disease and Vaccine Educational Materials
- Measles (Rubeola)
- Public Health Investigation and Response:  
South Region Gastrointestinal Illness Concerns
- Respiratory Viruses (COVID-19, Flu, and RSV)
- San Diego County Air Pollution Control District

**Vaccinations**

Vaccines work with your child's immune system to prevent serious diseases. It is important for children to stay up-to-date on routine vaccinations.

**STUDENTS IN GRADES TK/K-12 ARE REQUIRED TO SHOW PROOF OF THE FOLLOWING VACCINES:**

- Diphtheria, Tetanus, and Pertussis (DTaP, DTP, Tdap, or Td) — 5 doses
- Polio (OPV or IPV) — 4 doses
- Hepatitis B — 3 doses
- Measles, Mumps, and Rubella (MMR) — 2 doses
- Varicella (Chickenpox) — 2 doses

**STUDENTS ADVANCING TO 7TH GRADE NEED RECORDS OF:**

- Tetanus, Diphtheria, Pertussis (Tdap) — 1 dose
- Varicella (Chickenpox) — 2 doses

**SAVE YOUR CHILD'S VACCINATION RECORDS:**

- Schools, summer camps, athletic teams, college, international travel, and more may require vaccination records.
- Some people keep their child's records with other important documents, like birth certificates and passports.

**Handwashing**

Washing hands can keep students and families healthy. This action helps to prevent the spread of respiratory and gastrointestinal infections.

**HOW STUDENTS AND FAMILIES SHOULD WASH:**

- **Wet hands** with clean, running water (warm the tap, and apply soap).
- **Lather hands** by rubbing together with the backs of hands, between fingers, and under
- **Scrub hands** for at least 20 seconds. Need a "Happy Birthday" song from beginning to end.
- **Rinse hands** well under clean, running water
- **Dry hands** using a clean towel or an air dryer

**WHEN STUDENTS AND FAMILIES SHOULD WASH:**

- After bathroom breaks.
- Before lunch, or
- After playing outside.
- After blowing their nose, coughing, or sneezing

**Measles  
Mumps  
Rubella**

Everything You Need to Know about the MMR Vaccine

**More Questions?**  
Connect with a County of San Diego Public Health Nurse for more information:

**Phone Number**  
1 (866) 358-2966 OPTION 5

**E-mail Address**  
PHS-IZPHN.HHSA@sdcounty.ca.gov

Scan here to learn more about MMR vaccination on the hz.org website

**Safely Visit Oceans, Lakes, and Rivers**

Water from natural bodies of water like oceans, lakes, or rivers, can have germs that make us sick.

Knowing how to safely visit these bodies of water can prevent the spread of diseases.

# Thank You!



## Contact Us



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**[SIDPRP Website](#)**



*The Public Health Services department, County of San Diego Health and Human Services Agency, has maintained national public health accreditation, since May 17, 2016, and was re-accredited by the Public Health Accreditation Board on August 21, 2023.*





# Any Questions?



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