



# **School Nurse Bootcamp 2024**

## **Communicable Disease Update**

August 6, 2024

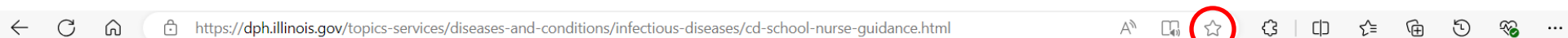
# Overview

- Review School Nurse Chart – Rachel Deerwester
- Discuss of new CDC School Guidance – Rachel Deerwester
- Vaccine Preventable Diseases – Jodi Morgan
- Tools for Tickborne Disease Prevention – Samantha Kerr

# [Communicable Disease School Nurse Guidance \(illinois.gov\)](https://dph.illinois.gov/topics-services/diseases-and-conditions/infectious-diseases/cd-school-nurse-guidance.html)

https://dph.illinois.gov/topics-services/diseases-and-conditions/infectious-diseases/cd-school-nurse-guidance.html

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## Diseases & Conditions

Alzheimer's Disease ▾

Asthma ▾

Cancer ▾

Chronic Diseases ▾

Diabetes ▾

Diseases A-Z List

HIV/AIDS ▾

# Communicable Disease School Nurse Guidance

 **Download Communicable Disease School Nurse Guidance**

## Eye, Ear, Nose, Throat, and Respiratory

Teach effective, handwashing, good respiratory hygiene and cough etiquette  
Colds are caused by viruses; antibiotics are not indicated.

For all diseases:

Good handwashing and hygiene practices; proper disposal of soiled tissues; avoid sharing linens;  
proper disinfection of surfaces and toys; cough into elbow or clothing when tissues unavailable.



	Disease/ Illness	Mode of Transmission	Symptoms	Incubation Period	Period of Communicability	Criteria for Exclusion from School*	Reporting Requirement	Prevention & Control Measures
LABORATORY	Bronchiolitis, Bronchitis, Common Cold, Croup, Ear Infection, Pneumonia, Sinus Infection and Most Sore Throats (respiratory diseases caused by many different viruses and occasionally bacteria)	Breathing in respiratory droplets containing the pathogen after an infected person exhales, sneezes, or coughs -Direct contact with respiratory secretions from an infected person -Touching a contaminated object then touching mouth, nose or eyes	Variable, including runny nose, watery eyes, fatigue, coughing, and sneezing. May or may not have fever	Variable	Variable, often from the day before symptoms begin up to 5 days after onset	No exclusion unless febrile or other symptoms meeting exclusion criteria are present	May depend of etiology/organism Report unusual illness, clusters of cases above baseline for group and time of year, or increased/unusual severity of illness to the local health department	Teach effective, handwashing, good respiratory hygiene and cough etiquette. Colds are caused by viruses; antibiotics are not indicated.
	Conjunctivitis, Bacterial or Viral (Pink eye)  <a href="http://www.cdc.gov/conjunctivitis/index.html">http://www.cdc.gov/conjunctivitis/index.html</a>	Contact with an infected person's skin, body fluid or through contact with a contaminated surface and then touching mucus membranes/eyes	Red eyes, usually with some discharge or crusting around eyes; may be itchy, sensitive to light, or watery Bacterial: may have yellow/greenish discharge; may affect one or both eyes Allergic and chemical conjunctivitis usually affects both eyes	Bacterial: Unknown. Viral: Varies with etiology	Bacterial: from onset of symptoms until after start of antibiotics, or as long as there is discharge from the eye Viral: variable, before symptoms appear and while symptoms are present (Allergic and chemical conjunctivitis is not contagious.)	Bacterial, Viral, or unknown etiology: Exclude if conjunctivitis is accompanied by symptoms of systemic illness or if the child is unable to keep hands away from eye.  Childcare rules: exclude if purulent drainage until after 24 hours of treatment <a href="http://www.illga.gov/commission/carl/admincode/089/089004070G03100R.html">http://www.illga.gov/commission/carl/admincode/089/089004070G03100R.html</a>	Not required to be reported May notify local health department of large clusters of cases or cases with unusual severity of illness	<b>For all diseases:</b>  <b>Good handwashing</b> and hygiene practices; proper disposal of soiled tissues; avoid sharing linens; proper disinfection of surfaces and toys; cough into elbow or clothing when tissues unavailable

## Example for Pink Eye (Conjunctivitis)

Separate by Categories:

Eye, Ear, Throat & Respiratory

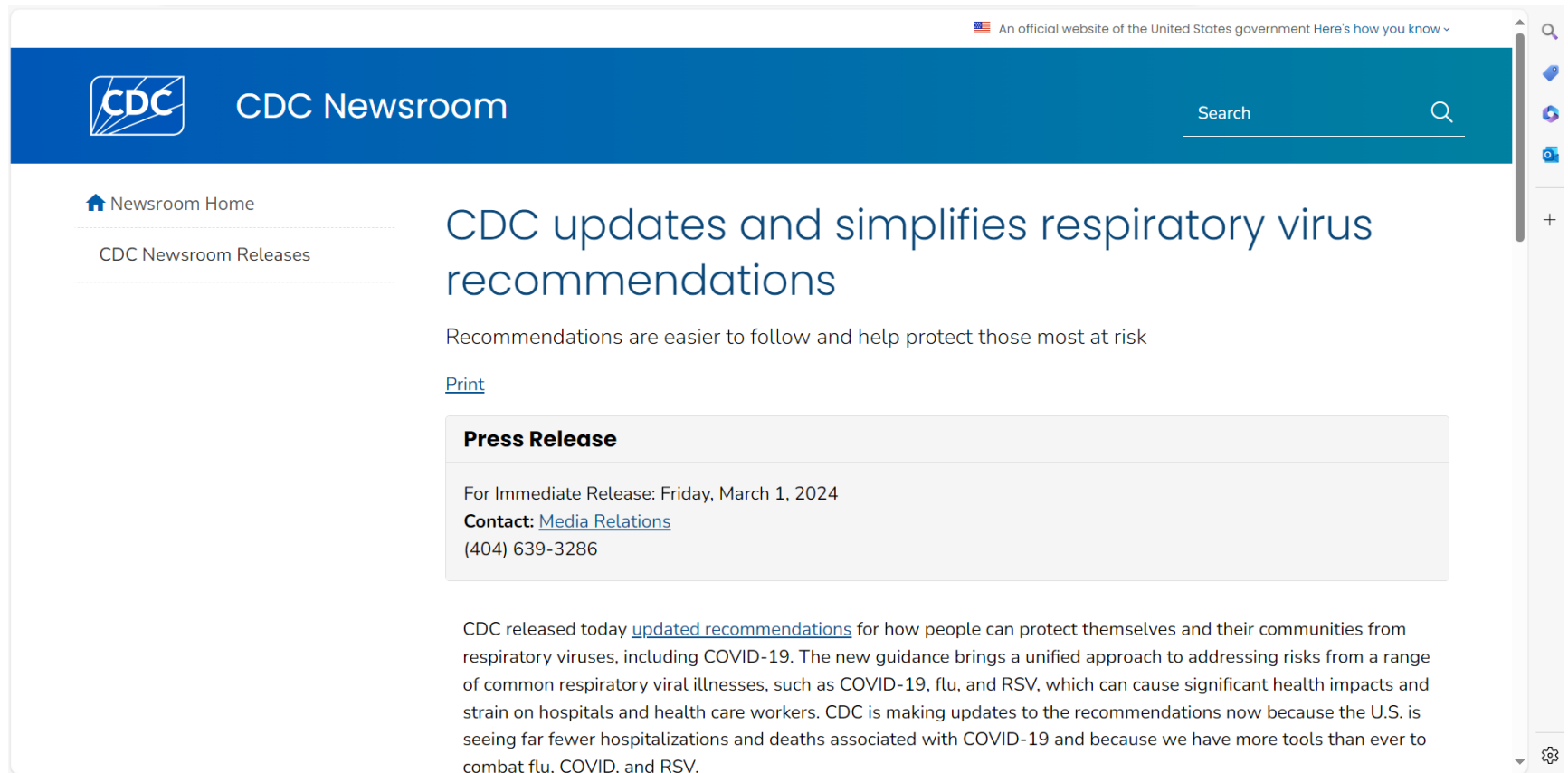
Gastrointestinal Illness

Meningitis

Skin Conditions and Rashes


Animal bites


# CDC COVID-specific guidance for the general public was discontinued in March 2024




The screenshot shows the CDC Newsroom website. At the top, there is a blue header with the CDC logo and the text "CDC Newsroom". To the right of the header is a search bar with the word "Search" and a magnifying glass icon. Below the header, on the left side, there is a navigation menu with a home icon and the text "Newsroom Home", and below that, "CDC Newsroom Releases". The main content area features a large blue headline: "CDC updates and simplifies respiratory virus recommendations". Below the headline, there is a sub-headline: "Recommendations are easier to follow and help protect those most at risk". To the left of the main text, there is a "Print" link. Below the main text, there is a "Press Release" section with a grey background. Inside this section, it says "For Immediate Release: Friday, March 1, 2024", "Contact: [Media Relations](#)", and "(404) 639-3286". At the bottom of the page, there is a paragraph of text: "CDC released today [updated recommendations](#) for how people can protect themselves and their communities from respiratory viruses, including COVID-19. The new guidance brings a unified approach to addressing risks from a range of common respiratory viral illnesses, such as COVID-19, flu, and RSV, which can cause significant health impacts and strain on hospitals and health care workers. CDC is making updates to the recommendations now because the U.S. is seeing far fewer hospitalizations and deaths associated with COVID-19 and because we have more tools than ever to combat flu, COVID, and RSV."

An official website of the United States government [Here's how you know](#) ✓

 CDC Newsroom

Search 

 Newsroom Home

CDC Newsroom Releases

## CDC updates and simplifies respiratory virus recommendations

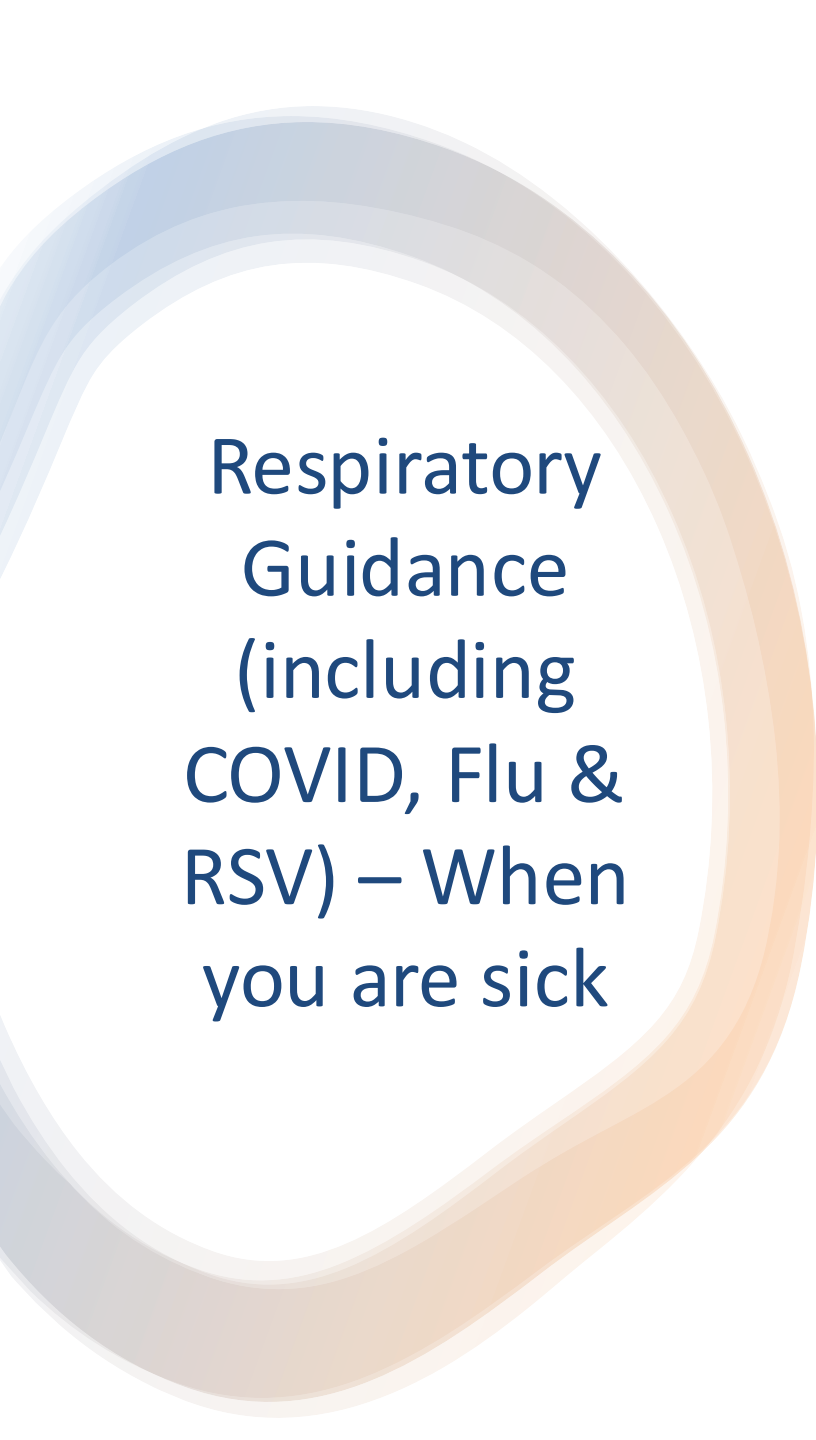
Recommendations are easier to follow and help protect those most at risk

[Print](#)

### Press Release

For Immediate Release: Friday, March 1, 2024  
Contact: [Media Relations](#)  
(404) 639-3286

CDC released today [updated recommendations](#) for how people can protect themselves and their communities from respiratory viruses, including COVID-19. The new guidance brings a unified approach to addressing risks from a range of common respiratory viral illnesses, such as COVID-19, flu, and RSV, which can cause significant health impacts and strain on hospitals and health care workers. CDC is making updates to the recommendations now because the U.S. is seeing far fewer hospitalizations and deaths associated with COVID-19 and because we have more tools than ever to combat flu, COVID, and RSV.




## Respiratory Guidance (including COVID, Flu & RSV) – When you are sick

- Use [precautions to prevent spread](#), including staying home and away from others (including people you live with who are not sick) if you have respiratory symptoms.
- You can go back to your normal activities when, for at least 24 hours, both are true:
  - Your symptoms are getting better overall, **and**
  - You have not had a fever (and are not using fever-reducing medication).
- When you go back to your normal activities, take added precaution over the next 5 days, such as taking additional [steps for cleaner air](#), [hygiene](#), [masks](#), [physical distancing](#), and/or [testing](#) when you will be around other people indoors. This is especially important to protect people with factors that increase their risk of severe illness from respiratory viruses.
-



## Science Brief

### Prevention and Control of Respiratory and Gastrointestinal Infections in Kindergarten through Grade 12 (K-12) Schools

 [PDF - 683 KB]

This science brief presents findings from a review of research studies focused on school-based strategies to prevent and control respiratory and gastrointestinal infections. The studies reviewed in this brief informed and supported development of the Guidance for Preventing Spread of Infections in K-12 Schools. Previous literature reviews have been published about infection prevention in schools, and most have focused on single intervention strategies such as hand washing, cleaning and disinfection, or contact tracing

# Finding: Layered Strategies Work!

In a large nationwide survey of adults with at least one school-aged child in the household, there was a positive association between in-person schooling and testing positive for COVID-19 when there were low levels of mitigation measures; but, when seven or more mitigation measures were reported, a significant relationship with COVID-19 was no longer observed.

A study from Norway showed that children had a limited role in the transmission of COVID-19 and were rarely index cases, especially when schools implement layered, non-pharmaceutical interventions

By implementing multicomponent strategies or layered approaches, schools can substantially reduce the risk of infectious disease and safeguard the well-being of students, staff, and families.



# Conclusion

- Standard precautions like handwashing, staying home when sick, respiratory etiquette, regular surface cleaning and disinfection, and ventilation can help decrease infectious disease transmission and are relatively inexpensive and feasible to implement daily.
- Vaccination is a proven public health intervention; schools can support vaccination uptake by supporting school located vaccination efforts as well as tailored education interventions for parents and families.
- In times of outbreaks, additional measures such as mask-wearing, physical distancing, and testing may be indicated. Based on the studies in this review, multicomponent or layered IPC approach gives the most protection against infectious illnesses, including influenza, COVID-19, and gastrointestinal diseases.





### [Home](#) School Preparedness

[Before, During, and After School  
Emergencies](#)

**[Preventing Spread of Infections  
in K-12 schools](#)**

# Preventing Spread of Infections in K-12 Schools

[Print](#)

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[Fact Sheet: Help Your Child's School Prevent the Spread  
of Infections](#)

# New CDC Guidance

# Everyday Strategies to Prevent and Control the Spread of Infections

Take steps for  
cleaner air

Cleaning,  
sanitizing, and  
disinfecting

Hand washing

Respiratory  
etiquette

Vaccinations

# Clean, Sanitize, Disinfect

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- **Cleaning** with commercial cleaners that contain soap or detergent decreases the number of germs on surfaces and reduces risk of infection from surfaces in your facility. Cleaning alone removes most types of harmful germs (like viruses, bacteria, parasites, or fungi) from surfaces.
- **Sanitizing** reduces the remaining germs on surfaces after cleaning.
- **Disinfecting** can kill harmful germs that remain on surfaces after cleaning. By killing germs on a surface after cleaning, disinfecting can further lower the risk of spreading disease.



# Disinfectant Choice

- Use EPA website to choose disinfectant product specific to the organism you are wanting to kill.
- Search by organism claim:
- Make sure to choose the right chemical for the job!

Information about listed products is current as indicated by the dates on the lists.

- [EPA's Registered Antimicrobial Products Effective as Sterilizers \[List A\]](#)
- [EPA's Registered Antimicrobial Products Effective Against \*Mycobacterium tuberculosis\* \(TB\) \[List B\]](#)
- [EPA's Registered Antimicrobial Products Effective Against Norovirus \(Feline calicivirus\) \[List G\]](#)
- [EPA's Registered Antimicrobial Products Effective Against Methicillin-resistant \*Staphylococcus aureus\* \(MRSA\) and/or Vancomycin Resistant \*Enterococcus faecalis\* or \*faecium\* \(VRE\) \[List H\]](#)
- [EPA's Registered Antimicrobial Products for Medical Waste Treatment \[List J\]](#)
- [EPA's Registered Antimicrobial Products Effective Against \*Clostridium difficile\* Spores \[List K\]](#)
- [EPA's Registered Antimicrobial Products Effective Against Ebola Virus \[List L\]](#)
- [EPA's Registered Antimicrobial Products Effective Against Avian Influenza \[List M\]](#)
- [Disinfectants for Use Against SARS-CoV-2 \[List N\]](#)
- [Disinfectants for Use Against Rabbit Hemorrhagic Disease Virus \(RHDV2\) \[List O\]](#)
- [EPA's Registered Antimicrobial Products Effective Against \*Candida auris\* \[List P\]](#)
- [Disinfectants for Emerging Viral Pathogens \(EVPs\) \[List Q\]](#)
- [EPA's Registered Antimicrobial Products Effective Against Bloodborne Pathogens \(HIV, Hepatitis B and Hepatitis C\) \[List S\]](#)

# How to Read a Disinfectant Label

Read the entire label.

The label is the law!

Note: Below is an **example** of information that can be found on a disinfectant label

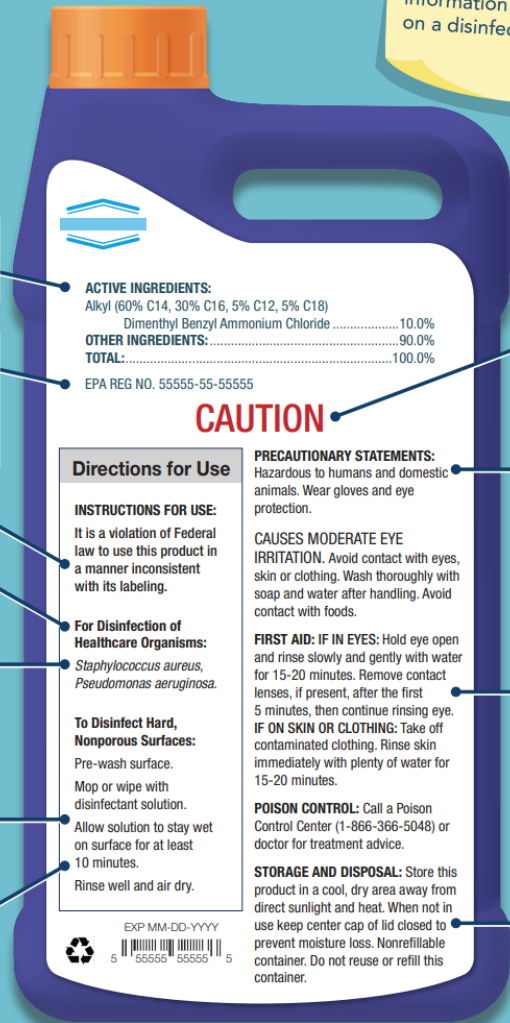
**Active Ingredients:**  
What are the main disinfecting chemicals?

**EPA Registration Number:**  
U.S. laws require that all disinfectants be registered with EPA.

**Directions for Use (Instructions for Use):**  
Where should the disinfectant be used?

What germs does the disinfectant kill?  
What types of surfaces can the disinfectant be used on?  
How do I properly use the disinfectant?

**Contact Time:**  
How long does the surface have to stay wet with the disinfectant to kill germs?



**Signal Words (Caution, Warning, Danger):**  
How risky is this disinfectant if it is swallowed, inhaled, or absorbed through the skin?

**Precautionary Statements:**  
How do I use this disinfectant safely? Do I need PPE?

**First Aid:**  
What should I do if I get the disinfectant in my eyes or mouth, on my skin, or if I breathe it in?

**Storage & Disposal:**  
How should the disinfectant be stored? How should I dispose of expired disinfectant? What should I do with the container?

- Right product
- Right contact time
- Right PPE
- Right Application

# Using Bleach

1. Use appropriate PPE
2. Good ventilation, do not mix
3. Use regular, unscented household bleach
4. Always follow the direction on the bottle

Or use the following bleach solution:

5 Tablespoons (1/3 cup) of bleach per gallon of room  
temperature water

or

4 teaspoons of bleach per quart of room temperature  
water

5. Make a new solution daily.

[Cleaning and Disinfecting with Bleach | Water, Sanitation, and  
Environmentally Related Hygiene \(WASH\) | CDC](#)



# KNOW WHEN TO WASH YOUR HANDS AT SCHOOL



[www.cdc.gov/handwashing](http://www.cdc.gov/handwashing)



CS22403-D



Stay home when sick  
Communicate when  
to return  
Wear appropriate  
PPE when caring for  
ill student



# When to Stay Home or Send Home

- Fever, including a fever with a new rash
- Vomiting more than twice in the preceding 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 and not better explained by another cause such as seasonal allergies

# When to Return per CDC (Consult IDPH School Nurse Chart for Disease-Specific Guidance)

- The child has not had a fever (and is not using fever-reducing medicine) for at least 24 hours.
- Fever with a new rash has been evaluated by a healthcare provider and fever has resolved.
- Uncovered skin sores are crusting, and the child is under treatment from a provider.
- Vomiting has resolved overnight and the child can hold down food / liquids in the morning. (IL Adm Code is 24 hours)
- Diarrhea has improved, the child is no longer having accidents or is having bowel movements no more than 2 above normal per 24-hour period for the child. Bloody diarrhea should be evaluated by a healthcare provider prior to return. (IL Adm Code is 24 hours)
- Respiratory virus symptoms are getting [better overall](#) for at least 24 hours. Students and staff returning after a respiratory illness can consider [additional actions](#) to reduce spread.

# Establish Policies

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1

Allow flexible, non-punitive paid sick leave policies and practices for illnesses

2

Set policies to accommodate individuals who are sick and avoid incentivizing coming to school or work while

3

Support children who are learning at home

# Planning for Outbreaks, Epidemics, and Pandemics

- Emergency Operational Plans: Planning for Infectious Diseases [Infectious Disease | Online Courses | Readiness and Emergency Management for Schools Technical Assistance Center \(ed.gov\)](#)

Additional  
Strategies that  
May Be Used to  
Minimize  
Infectious  
Disease  
Transmission in  
Schools during  
Times of  
Elevated Illness  
Activity or an  
Outbreak/Single  
Case of Highly  
Infectious  
Disease




# Vaccine Preventable Diseases

Vaccine Preventable Disease Surveillance  
Illinois Department of Public Health

# Reportable Vaccine Preventable Diseases

- Acute Flaccid Myelitis
- Chickenpox (Varicella)
- Diphtheria
- Invasive *Haemophilus influenzae* Disease
- Invasive Meningococcal disease (caused by *Neisseria meningitidis*)
- Measles
- Mumps
- Pertussis (whooping cough)
- Rubella
- Polio
- Invasive *Streptococcus pneumoniae* disease in children <age 5 years
- Tetanus



**STOP**  
*and Report Infectious Disease*

**Illinois Reportable Diseases**

Mandated reporters, such as health care providers, hospitals and laboratories, must report suspected or confirmed cases of these diseases to the local health department. Diseases in **bold** are reportable within 24 hours. Diseases marked "immediate" (or in **red**) are reportable as soon as possible within 3 hours. All other conditions not in red or bold are reportable within 7 days.

<p>Anaplasmosis <b>Any suspected bioterrorist threat (immediate)</b> <b>Any unusual case or cluster of cases that may indicate a public health hazard (immediate)</b> <b>Anthrax (immediate)</b> Arboviruses (including WNV) Babesiosis <b>Botulism, foodborne (immediate)</b> <b>Botulism, infant, wound, other</b> <b>Brucellosis*</b> California Encephalitis virus Campylobacteriosis <b>Candida auris**</b> Carbapenem-resistant Enterobacteriaceae (CRE)** Chancroid Chikungunya virus Chlamydia <b>Cholera</b> <b>COVIDSARS-CoV-2 Infection</b> Cryptosporidiosis Cyclosporiasis Dengue viruses 1-4 <b>Diphtheria (immediate)</b> Eastern Equine Encephalitis virus Ehrlichiosis <b>Escherichia coli infections (E. coli O157:H7, and other Shiga Toxin Producing E. coli)</b> <b>Foodborne or waterborne outbreaks</b> Gonorrhea <b>Haemophilus influenzae, invasive</b></p>	<p><b>Hantavirus pulmonary syndrome</b> <b>Hemolytic uremic syndrome, post diarrheal</b> <b>Hepatitis A</b> Hepatitis B, C, D Pregnant hepatitis B carrier Histoplasmosis HIV infection Influenza, deaths in &lt;18 yr olds <b>Influenza A, novel (immediate)</b> <b>Influenza, ICU admissions</b> Jameson Canyon virus Kystone virus La Crosse virus Legionellosis Leptospirosis Listeriosis Lyme disease Malaria Measles Mumps <b>Neisseria meningitidis, invasive</b> <b>Outbreaks of public health significance</b> <b>Peritonitis (whooping cough)</b> <b>Plague (immediate)</b> <b>Poliomyelitis (immediate)</b> Powassan virus Pulmonary <b>Q fever (Coxiella burnetii)*</b> <b>Rabies, human and potential human exposure and animal</b></p>	<p>Reye's syndrome <b>Rubella</b> St. Louis Encephalitis virus Salmonellosis, other than typhoid <b>Severe Acute Respiratory Syndrome (SARS) (immediate)</b> Shigellosis <b>Smallpox (immediate)</b> <b>Smallpox vaccination, complications of</b> Snowshoe hare virus Spotted fever rickettsiosis <b>S. aureus infections with intermediate or high level resistance to vancomycin Streptococcal infections, Group A, invasive including STSS and necrotizing fasciitis</b> <b>S. pneumoniae, invasive in those &lt;5 yrs</b> Syphilis Tetanus Toxic shock syndrome due to <i>S. aureus</i> Trichinosis Trivittatus virus Tuberculosis <b>Tularemia*</b> Typhoid fever Typhus Varicella (chickenpox) Vibriosis (vibrio cholerae) West Nile virus Western Equine Encephalitis virus Yellow Fever virus Zika virus</p>
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\*If bioterrorism suspected then report immediately (within three hours)  
\*\*Reportable to the Extensively Drug-Resistant Organism (XDR) Registry by providers

**Laboratories must report positive test results of these diseases to their local health department within the time frame indicated.**

**All reports are confidential and should include—**


• the disease or condition being reported	• physician's name, address, and telephone number
• patient's name, date of birth, age, sex, race/ethnicity, address, and telephone number	• method of diagnosis, if available

**TO REPORT A CASE**  
contact your local health department:

During regular business hours, call \_\_\_\_\_


For emergencies after business hours, call \_\_\_\_\_

If no local health department is available, contact the  
**Illinois Department of Public Health**  
217-785-7165 • TTY (hearing impaired use only) 800-547-0466



State of Illinois  
Illinois Department of Public Health

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FD-353/9373 2M 3/79

Effective 2/8/19  
IOC 19-595 



# VPDs: Role of the School Nurse

## Immunization tracking

- Immunization requirements for school entry
  - Check ICARE, in addition to requesting records from parents/guardians
- Exemptions
  - Maintain exemption tracking list by vaccine, grade, classroom
- Annual reporting to ISBE

## Encourage and support student and staff immunizations

- Coordinate with LHDs and local HCPs to offer immunization clinics/fairs
- One-on-one conversations with vaccine-hesitant parents

# VPDs: Role of the School Nurse

## VPD Case identification and management

- Recognize potential cases
- Exclude if indicated
- Refer to healthcare provider
- Report suspected cases to local health department
- Help identify close contacts who may have been exposed at school/school activities
  - Ensure compliance with contacts who are quarantined from school
- Increase surveillance for additional cases

# VPDs: Role of the School Nurse

## Be prepared for cases and outbreaks

- School policies for exclusion of cases and susceptible contacts, where applicable, are in accordance with IDPH rules.
- Protocols for management of cases and contacts
- Physical space for isolation, if needed.
- Communication and education



# Measles

Photo Source:  
[https://www.cdc.gov/measles/signs-symptoms/photos.html?CDC\\_AAref\\_Val=https://www.cdc.gov/measles/symptoms/photos.html](https://www.cdc.gov/measles/signs-symptoms/photos.html?CDC_AAref_Val=https://www.cdc.gov/measles/symptoms/photos.html)

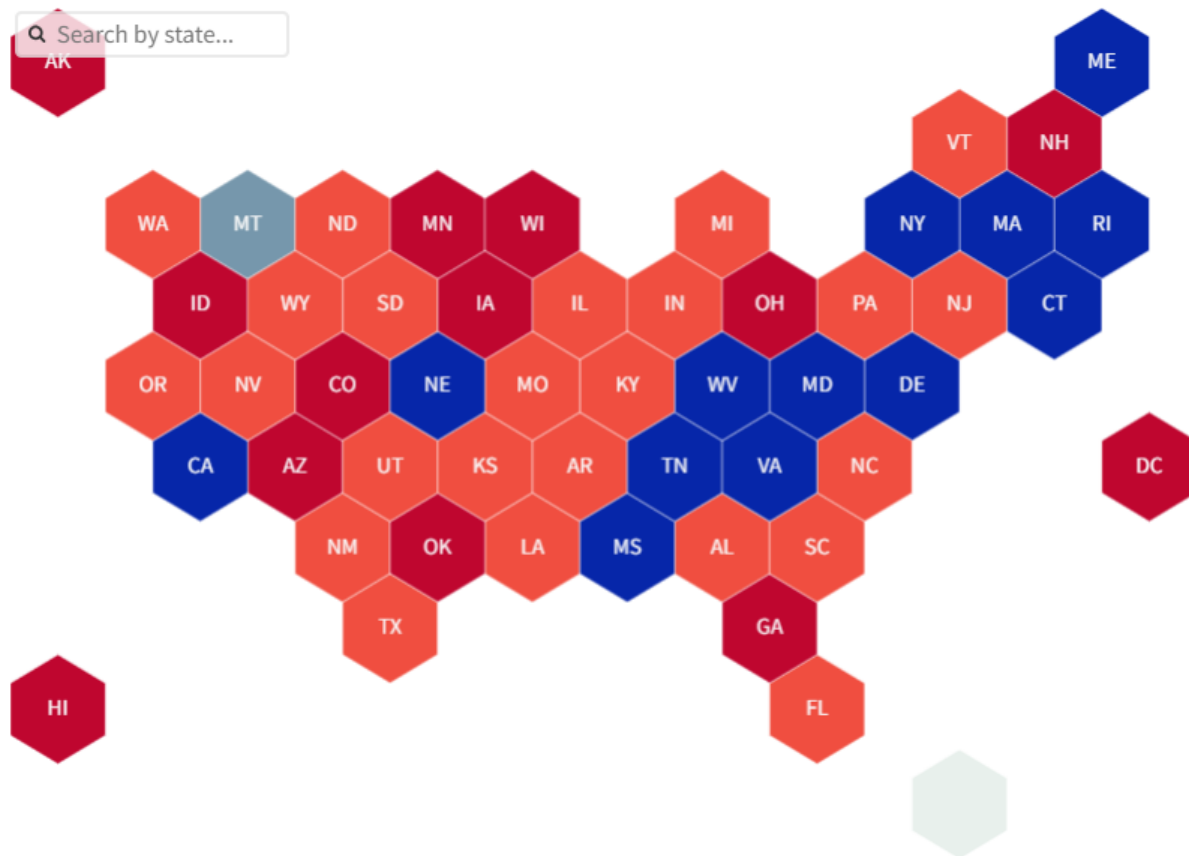
# Measles (Rubeola)

Transmission	Person to person by respiratory droplet, airborne, can remain in air up to 2 hours after a person with measles leaves the room
Incubation period	Ranges from 7-21 days
Infectious period	From 4 days before rash onset through 4 days after rash onset
Symptoms	Prodrome of 2-4 days with fever, cough, coryza, conjunctivitis. Maculopapular rash onset-usually starts in hairline, goes to face and neck and then downward and outward to whole body. Lasts 5-6 days. Fades in order of appearance.
Treatment	No treatment for measles. Supportive care is given.
Prevention	Vaccination; isolation of cases, monitoring of contacts, education

# Measles Cases and Outbreaks- US and Global

- [Measles Cases and Outbreaks | Measles \(Rubeola\) | CDC](#)
- US: As of July 25, 2024, a total of 188 measles cases were reported by 27 jurisdictions: Arizona, California, District of Columbia, Florida, Georgia, Illinois, Indiana, Louisiana, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New Hampshire, New Jersey, New Mexico, New York City, New York State, Ohio, Oregon, Pennsylvania, South Dakota, Vermont, Virginia, Washington, West Virginia, and Wisconsin.

90-94.9% Less than 90% 95%+ Not available



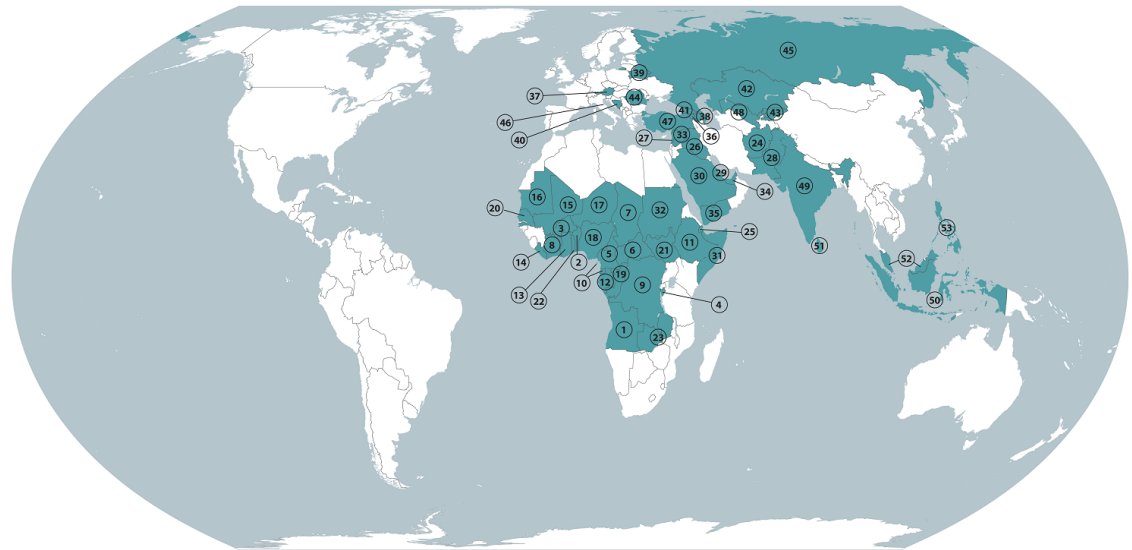
2022-23 data  
from the Centers  
for Disease  
Control and  
Prevention

[Source:](#)  
[Measles](#)  
[Outbreaks Have](#)  
[More Than](#)  
[Tripled. How](#)  
[Schools Can](#)  
[Help](#)  
[\(edweek.org\)](#)  
July 29, 2024.

SOURCE: [U.S. Centers for Disease Control and Prevention](#)

EdW

# Countries with reported measles outbreaks currently



## Measles THN by WHO Region

### AFRICA

1. Angola
2. Benin
3. Burkina Faso
4. Burundi
5. Cameroon
6. Central African Republic
7. Chad
8. Cote d'Ivoire
9. Dem. Rep. of the Congo
10. Equatorial Guinea
11. Ethiopia
12. Gabon
13. Ghana
14. Liberia
15. Mali
16. Mauritania
17. Niger
18. Nigeria
19. Rep. of the Congo
20. Senegal
21. South Sudan
22. Togo
23. Zambia

### EASTERN MEDITERRANEAN

24. Afghanistan
25. Djibouti
26. Iraq
27. Lebanon
28. Pakistan
29. Qatar
30. Saudi Arabia
31. Somalia
32. Sudan
33. Syria
34. United Arab Emirates
35. Yemen

### EUROPE

36. Armenia
37. Austria
38. Azerbaijan
39. Belarus
40. Bosnia and Herzegovina
41. Georgia
42. Kazakhstan
43. Kyrgyzstan
44. Romania
45. Russia
46. San Marino
47. Turkey (Türkiye)
48. Uzbekistan

### SOUTH-EAST ASIA

49. India
50. Indonesia
51. Sri Lanka

### WESTERN PACIFIC

52. Malaysia
53. Philippines

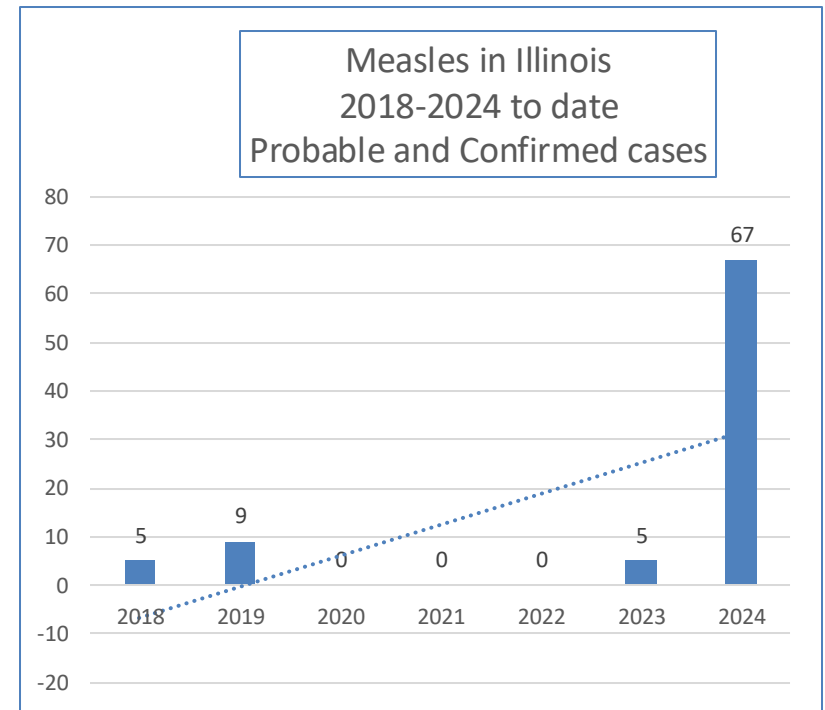
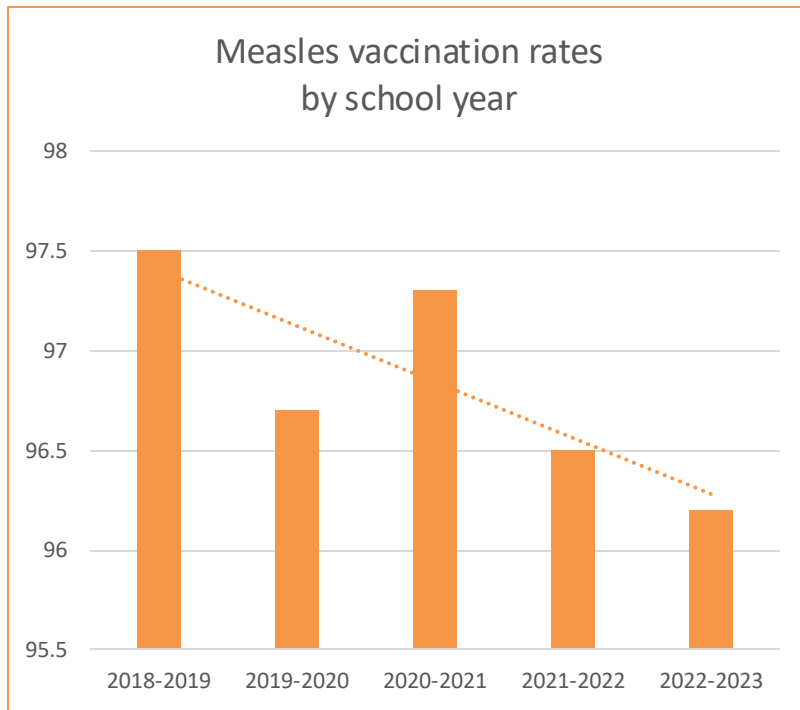


Names and boundary representation are not necessarily authoritative.

[measles\\_global\\_map.png \(1500x1159\) \(cdc.gov\)](https://measles_global_map.png(1500x1159)(cdc.gov))



# Illinois: Measles Vaccination\* and Cases



2023-2024 data are provisional and subject to change

\* School age persons as reported by Illinois schools

Source: <https://dph.illinois.gov/topics-services/prevention-wellness/immunization/coverage-dashboards/school-vaccination-coverage-dashboard.html>

# Measles Outbreak, Chicago, March, 2024

## 67 cases total from late February-mid April

- 57 cases linked to shelter
- Others were community cases where an epi link could not be determined but are linked by time
- Whole genome sequencing in underway at CDC

## Challenges

- Shelter setting-close contact of persons
- Low measles vaccination coverage or status unknown
- How to isolate cases and quarantine contacts?

## Rapid response by CDPH

- Cases isolated in area hospitals as soon as identified,
- Daily assessments and symptom monitoring in shelter,
- Rapid identification and isolation of suspected cases, with prompt testing by IDPH lab
- Concurrent vaccination campaign –started within one day of first case identification
  - By March 11, 93% of shelter residents had received one dose of MMR vaccine
  - Over 30,000 doses of measles-mumps-rubella (MMR) vaccine were administered to Chicago residents during this time
- School exclusion, voluntary quarantine, separate housing for persons at highest risk of severe disease (pregnant, infants, immunocompromised)

Read all about it: <https://www.cdc.gov/mmwr/volumes/73/wr/mm7319a1.htm>

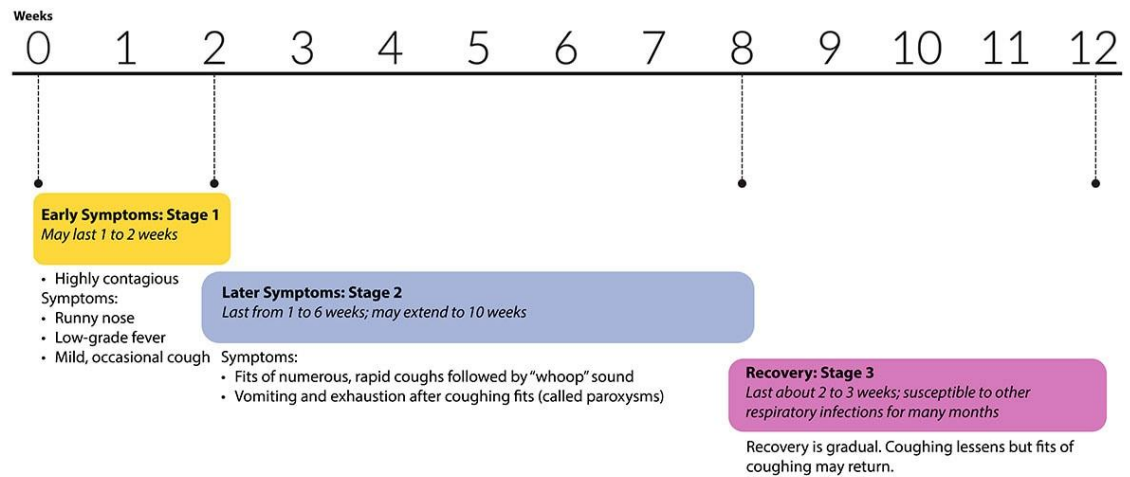
- “Measles Outbreak Associated with a Migrant Shelter — Chicago, Illinois, February–May 2024”

# Measles

- If there is a suspected case at school:
  - Separate from other students. If possible, place in single room while awaiting pick up. Keep that room empty for two hours after the suspect case leaves.
  - The local health department will notify the school if the individual tests positive for measles.
  - If the case is confirmed, the school will send a notification letter to the families of students and staff who may have been exposed to the case at school.
  - Identify all students at school who were exposed and determine if they have presumptive immunity to measles. Students who are not vaccinated will be excluded from school for 21 days after exposure.
    - Exposed staff must also provide presumptive evidence of immunity or are excluded.
  - Cases are excluded through 4 days after rash onset.

# Pertussis

## Whooping Cough Disease Progression



[cdc.gov/whoopingcough](https://cdc.gov/whoopingcough)

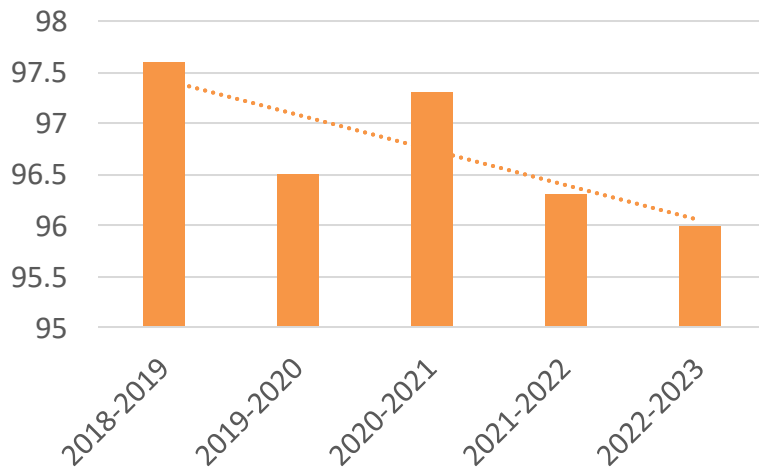
# Pertussis (Whooping cough)

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Transmission	Person to person by respiratory droplet
Incubation period	Ranges from 9-21 days
Infectious period	While symptoms are present up to 21 days after onset, or until completion (5 days) of appropriate antimicrobial therapy
Symptoms	Early symptoms can look like a common cold: congestion, mild cough, low-grade fever. Babies may have dyspnea or apnea and cyanosis. Cough becomes more forceful, may have paroxysms, inspiratory whoop, and post-tussive vomiting. Cough may be present for weeks.
Prevention	Vaccination; exclusion of cases, increased surveillance; good respiratory hygiene. PEP (antimicrobial prophylaxis) for household and high-risk close contacts

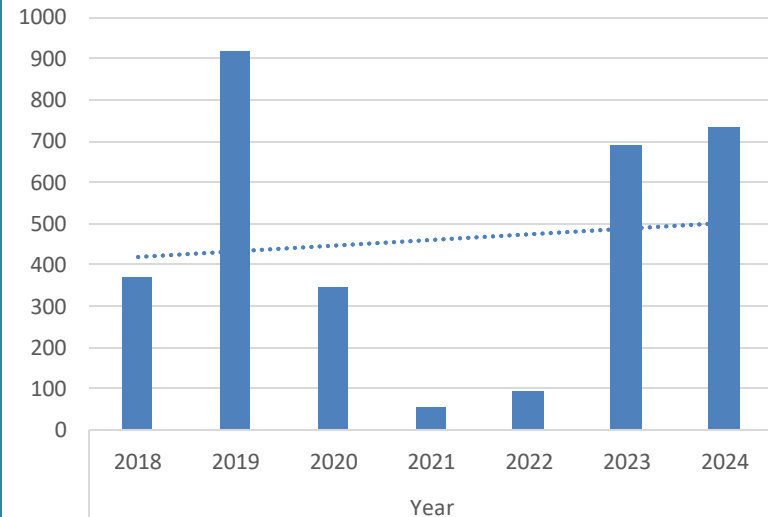
# Pertussis and Prevention in Illinois

DTaP/Tdap/Td Vaccination  
Rates  
by school year



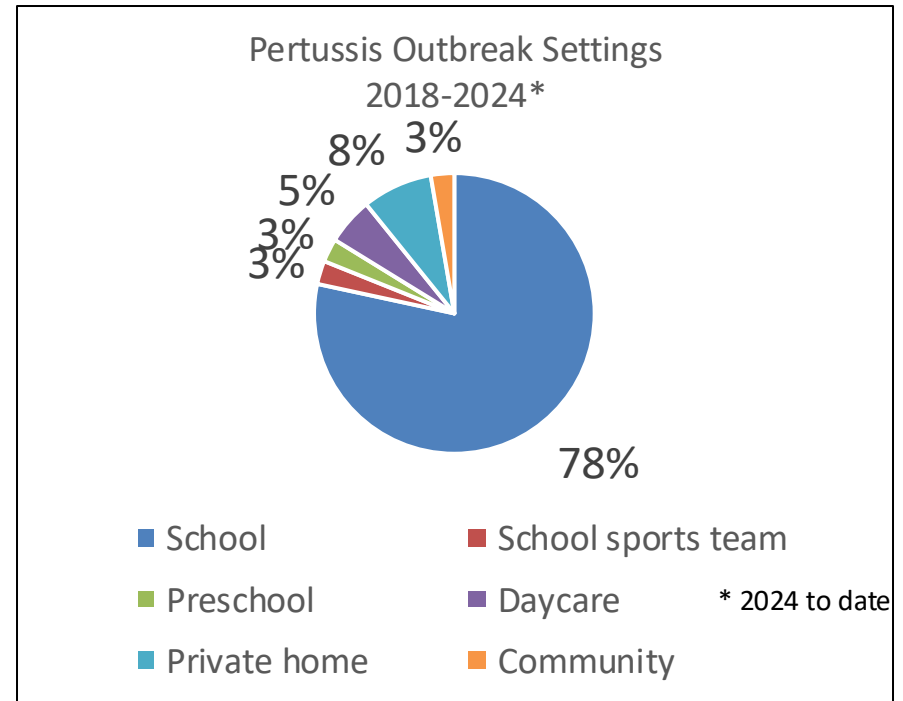
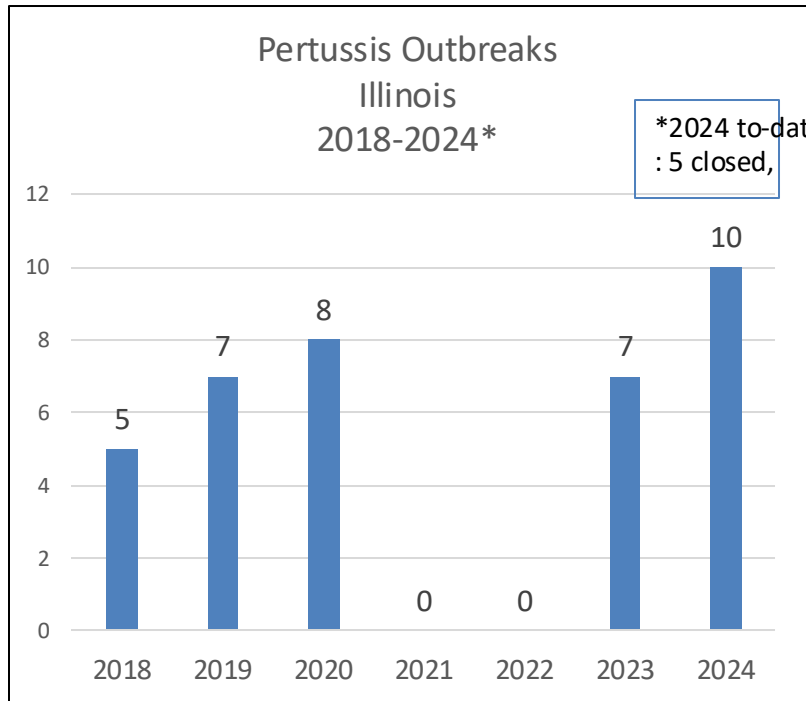
\* School age persons as reported by Illinois schools  
Source: <https://dph.illinois.gov/topics-services/prevention-wellness/immunization/coverage-dashboards/school-vaccination-coverage-dashboard.html>

Pertussis Cases  
Confirmed and probable  
2018-2024 to date



2023-2024 data are provisional and subject to change

# Pertussis Outbreaks, Illinois 2018 to present\*



2023-2024 data are provisional and subject to change

\* 2024 to date

# Pertussis: Treatment and Post-exposure Prophylaxis (PEP)

---



Cases are treated with 5 days of antibiotics

Recommended: Azithromycin, Clarithromycin, Erythromycin, Trimethoprim-sulfamethoxazole



Some contacts are recommended to receive PEP

All household members

Persons at high-risk from pertussis disease

Those who will have contact with high-risk persons

Recommended if within 21 days of first exposure



Multiple round of antibiotics are not recommended when there is continued transmission of pertussis

Instead, monitor for symptoms and initiate treatment



# If there is a Pertussis case at school:

---

- Contacts do not have to be excluded unless they develop symptoms.
- Report suspected to cases to public health.
- Verify cases have completed antibiotic therapy before return to school.
- Increase vigilance for new cases for two incubation periods after last case onset.
  - You can still get pertussis if vaccinated and even if you have had the disease in the past.
- Coordinate with public health as needed for outbreak management and control.
- Educate and communicate on pertussis: prevention, vaccination, control measures.

# Varicella (Chickenpox)



Chickenpox in unvaccinated adult.  
Source: PHIL Photo ID# 4365

Shingles (herpes zoster)



[Source: Photos of Shingles | Shingles \(Herpes Zoster\) | CDC](#)

# Chickenpox (varicella)


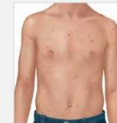
Transmission	Person to person by direct contacts, inhalation of aerosols from the vesicular fluid of skin lesions from chickenpox or zoster (shingles); possibly through infected respiratory aerosols
Incubation period	Ranges from 10-21 days
Infectious period	From 1-2 days before rash appears, any time rash is present, and until rash is completely crusted over. If non-vesicular, until 24 hours of no new lesions appearing
Symptoms	May have a prodrome of fever and malaise 1-2 days prior to onset, rash of itchy fluid-filled blisters (vesicles) and all over the body. May appear in 'crops' or waves with some lesions already healing as new lesions are appearing. Disease may be milder in vaccinated persons, including having a non-vesicular rash.
Prevention	Vaccination; exclusion of cases until rash crusted, increased surveillance for new cases. Shingles lesions should be kept covered.

Source: Do You  
Know What  
Breakthrough  
Varicella  
(Chickenpox)  
Looks Like?  
(cdc.gov)

### Do You Know What Breakthrough Varicella (Chickenpox) Looks Like?


**What is breakthrough varicella?**

Breakthrough varicella is an infection with wild-type varicella zoster virus that occurs in a varicella vaccinated person more than 42 days after vaccination.

Varicella in an Unvaccinated Person	Breakthrough Varicella
	
<ul style="list-style-type: none"><li>• 250-500 lesions</li><li>• Mostly vesicular</li><li>• Fever</li><li>• Illness for 5-7 days</li></ul>	<ul style="list-style-type: none"><li>• &lt;50 lesions</li><li>• Few or no vesicles</li><li>• No or low fever</li><li>• Shorter duration of illness</li></ul>





**How is breakthrough varicella confirmed?**

The best method to confirm breakthrough varicella is laboratory PCR testing of skin lesion specimens—scabs, vesicular fluid, or scrapings of maculopapular lesions.  
[www.cdc.gov/chickenpox/lab-testing/](http://www.cdc.gov/chickenpox/lab-testing/)

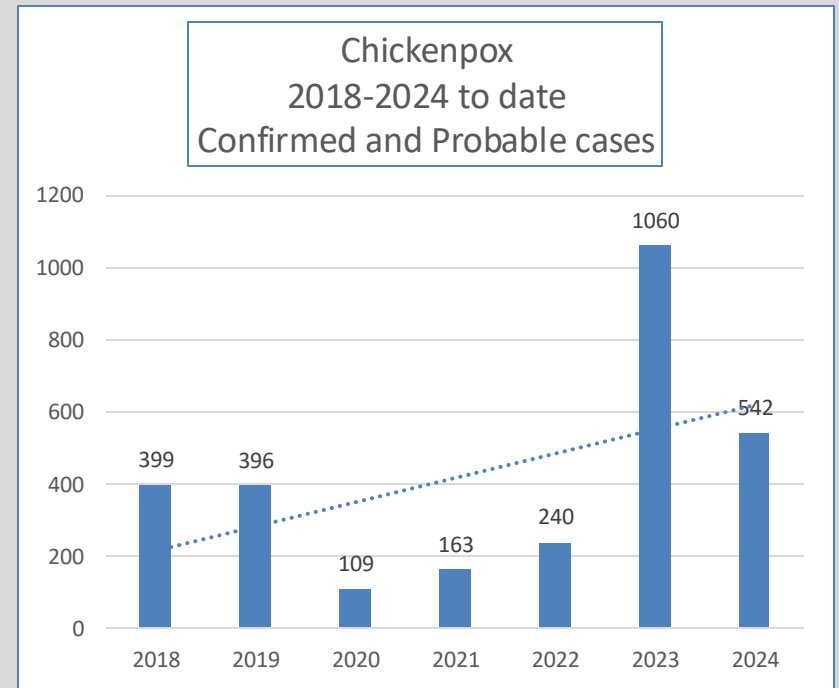
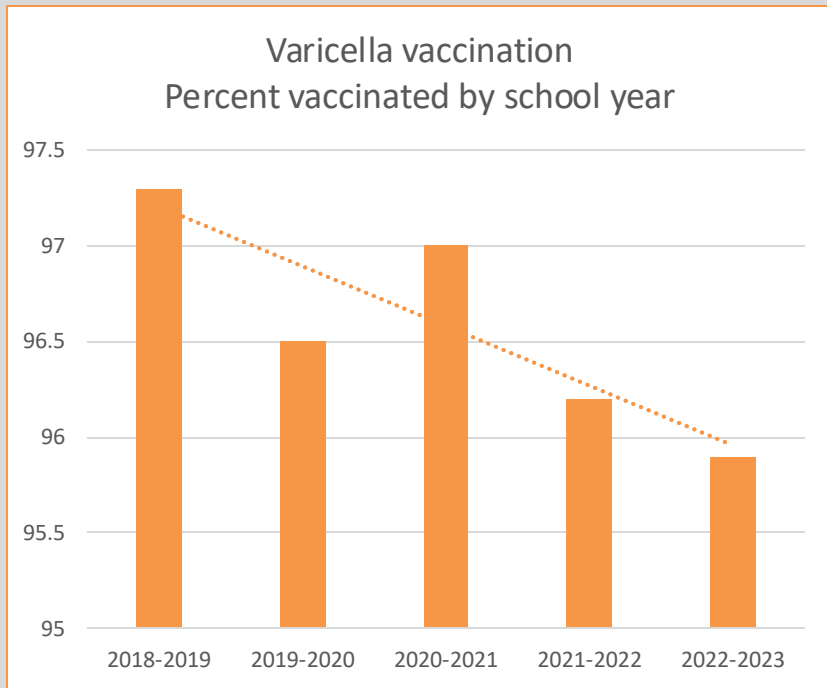
 Centers for Disease Control and Prevention  
National Center for Immunization and Respiratory Diseases

**Why is breakthrough varicella hard to diagnose?**

The rash caused by breakthrough varicella looks similar to other rashes, so it is often difficult to diagnose clinically.

Breakthrough Varicella	Insect Bites
	
Poison Ivy	Ringworm
	

# Illinois: Varicella Vaccination\* and Chickenpox



2023-2024 data are provisional and subject to change

\* School age persons as reported by Illinois schools  
Source: <https://dph.illinois.gov/topics-services/prevention-wellness/immunization/coverage-dashboards/school-vaccination-coverage-dashboard.html>

# If there is a Chickenpox case at school:

- Cases are excluded and cannot return until it has been at least 5 days AND all lesions are crusted. If rash is non-vesicular, they must be 24 hours with no new lesions appearing.
- Report suspected to cases to public health.
- Contacts do not have to be excluded unless they develop symptoms.
- Increase vigilance for new cases for two incubation periods after last case onset.
  - You can still get chickenpox if vaccinated.
- Coordinate with public health as needed for outbreak management and control.
- Educate and communicate on chickenpox: prevention, vaccination, control measures.

# Preparing for VPDs at school

---

- Maintain awareness of students who are non-compliant with vaccination requirements for school attendance or vaccination recommendations.
  - Remind families of students who are not fully vaccinated of the school's exclusion procedures (cases and close contacts) for relevant VPD's.
- Review your school policies and the IDPH Administrative Code Part 690 regarding exclusion of susceptible students and personnel.
- Coordination with Public Health partners
  - Reporting of cases and outbreaks
  - Ensure healthcare staff know school policies and IDPH rules
- Isolation space and PPE in school nurse office/health office
  - Plan/protocol for separating the suspected case from other students. Keep that room empty for two hours after the ill student leaves.
  - Airborne precautions –N95 – for healthcare staff

# Preparing for VPDs at school, cont...

- 
- Identifying exposed contacts
    - Have a process for quickly identifying persons who may have been exposed to a VPD case, including students, staff, visitors, volunteers.
      - Student attendance sheets, staff schedules, visitor and volunteer sign in sheets
      - Have a line list template ready to use for tracking if needed
      - Process to help determine who is susceptible
        - Student exemption list is maintained and current
        - Staff: if you don't have records, be sure to let them know they may have to provide records to Public Health
  - Communication and education
    - Disease information
    - Prevention
    - Current situation including school response
    - Exclusion policies and rules



# Resources

- National Association of School Nurses (NASN): [List of Vaccine Preventable Diseases - National Association of School Nurses \(nasn.org\)](https://www.nasn.org/)
  - VPD information
  - Schedules
  - Resources for communicating with parents/guardians (templates for letters, newsletter examples, etc....)
- [Illinois Department of Public Health: Communicable Disease School Nurse Guidance](#)
- Illinois Control of Communicable Disease Code:
  - <https://www.ilga.gov/commission/jcar/admincode/077/07700690sections.html>
- [Vaccines 101 | History of Vaccines](#): lots of good information on how vaccines work, how they are made, misconceptions, ethical issues, and the future of vaccines.

# TICK REMOVAL AND PREVENTION INFORMATION

[DPH.Vector@illinois.gov](mailto:DPH.Vector@illinois.gov)



# Tick Bite: What to Do

- Use fine-tip tweezers
- Grasp tick as close to the skin as possible and pull straight up
- Clean bite area
- Watch for symptoms

**\*\*Don't Use\*\***

- Nail polish, dish soap, Vaseline, gasoline, fire



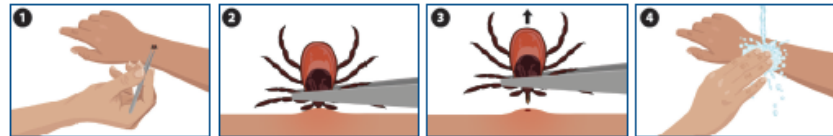
State of Illinois  
Illinois Department of Public Health

## 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 health care provider for identification, put it in rubbing alcohol or place it in a sealed bag/container.



### Consider calling your health care provider

In general, the Centers for Disease Control and Prevention (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 health care provider if you live in an area where Lyme disease is common.

### Watch for symptoms for 30 days

Call your health care provider if you get any of the following:

- Rash
- Headache
- Fever
- Muscle pain
- Fatigue
- 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.



U.S. Department of  
Health and Human Services  
Centers for Disease  
Control and Prevention



# Where to Check for Ticks

- In and around the ears
- Hair line
- Belly button
- Under arms
- Around the waist
- Between the legs
- Back of the knees

## 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.

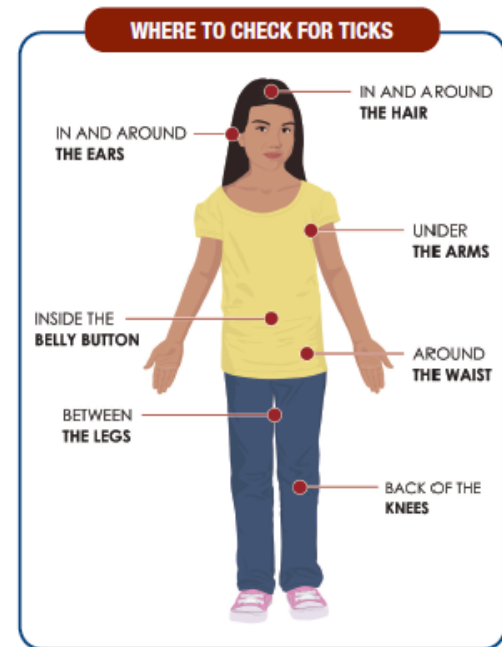
### Can I get sick from a tick that is crawling on me but has not yet attached?

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.




• • • • • [www.cdc.gov/ticks/](http://www.cdc.gov/ticks/) • • • • •

# Educational Information: All about Ticks!

Don't let a tick  
make you sick!

English and Spanish




State of Illinois  
Illinois Department of Public Health

## Don't Let a Tick Make You Sick


*Fight the Bite*

### What is a tick?

Ticks are small bugs that are related to spiders. Like spiders, they have 8 legs, but they don't spin webs like spiders do. There are many kinds of ticks that can make you sick, but the most common tick in Illinois that can make you sick is the blacklegged tick (also called a deer tick). Blacklegged ticks are so tiny they can be mistaken for a freckle or a speck of dirt on your skin. The picture above is a hamburger bun with ticks that are the size of a sesame seed.



This picture is a blacklegged tick on a leaf that has been magnified so you can see what it actually looks like.




### Where do ticks live?

Ticks live close to the ground where there is tall grass, shrubs, and leaves. They wait on tips of tall grass and shrubs and grab on to an animal or human when they walk by. You may come in close contact with ticks when doing outdoor activities in areas ticks live, such as camping, hiking, fishing, mushroom hunting, or walking your dog.

### What do ticks eat?

Unlike spiders that get their food from eating bugs, ticks get their food from drinking blood from the animals and humans they bite. Tick bites don't usually hurt, so most people don't notice when they have been bitten.

### Where to Check for Ticks




### Can a tick bite make me sick?

Tick bites can make people sick, but there are some things you can do to decrease your chances of getting sick after a tick bite.

### What do I do if I see a tick on me?

Tell your parents or another adult right away. They can use tweezers to pull the tick off. Once the tick is removed, be sure to wash the area of the bite with soap and water or disinfectant.



### What if I get sick after a tick bite?

If you get a fever, skin rash, headache, sore muscles or feel really tired up to 30 days after a tick bite or being in an area where ticks live, tell your parents. They should call your doctor to see if you need to be tested for a tick illness and if you need medicine.


### How can I keep ticks away from me?

When you go outside, wear insect repellent that has DEET and stay out of wooded areas and places with tall grass and weeds where ticks live.


If you go where ticks live, wear long sleeves and long pants and tuck your pants in your socks and walk in the center of trails. When you come back inside, take a bath or shower and let your parents check you for ticks.

Your pets can also get ticks, so always check them when they come in from outside.

### Where to Check Your Pet for Ticks



*Some images have been provided by the CDC.*




Estado de Illinois  
Departamento de Salud Pública de Illinois

## No dejes que una garrapata te enferme


*Combate la picadura*

### ¿Qué es una garrapata?

Las garrapatas son pequeños insectos relacionados con las arañas. Al igual que las arañas, tienen 8 patas, pero no tejen telarañas. Hay muchos tipos de garrapatas que pueden enfermarte, pero la más común en Illinois es la garrapata de patas negras (también llamada garrapata del venado). Las garrapatas de patas negras son tan pequeñas que pueden confundirse con una peca o una mota de suciedad en la piel. La imagen de arriba muestra un pan de hamburguesa con garrapatas del tamaño de una semilla de sésamo.



Esta foto es una garrapata de patas negras en una hoja que ha sido ampliada para que pueda ver como se ve realmente.



### ¿Dónde viven las garrapatas?

Las garrapatas viven cerca del suelo, donde hay hierba alta, arbustos y hojas. Esperan en las puntas de la hierba alta y los arbustos y se agarran a un animal o a un ser humano cuando pasan cerca. Puede entrar en contacto con garrapatas al realizar actividades al aire libre en áreas donde viven garrapatas, como acampar, hacer senderismo, pescar, buscar hongos o pasear a su perro.

### ¿Qué comen las garrapatas?

A diferencia de las arañas que se alimentan de insectos, las garrapatas se alimentan de la sangre de los animales y humanos a los que pican. Las picaduras de garrapata no suelen doler, por lo que la mayoría de la gente no se da cuenta de que le han picado.

### ¿Cómo puedo mantener las garrapatas alejadas de mí?

Cuando salgas, ponte repelente de insectos que tenga DEET y mantente lejos de las áreas boscosas y de los lugares con hierba alta y maleza donde viven las garrapatas.

Si vas a un lugar donde viven garrapatas, lleva manga y pantalones largos, mírelos los pantalones por dentro de los calcetines y camina por el centro de los senderos. Cuando vuelvas adentro, báñate o dúchate y deja que tus padres te revisen para ver si tienes garrapatas.


Tus mascotas también pueden contraer garrapatas, así que revisalas siempre que vengan de fuera.

### ¿Puedo enfermarme de una picadura de garrapata?

Las picaduras de garrapata pueden enfermarte a las personas, pero hay algunas cosas que puedes hacer para disminuir las probabilidades de enfermarte después de una picadura de garrapata.

### ¿Qué hago si veo una garrapata sobre mí?


Diselo inmediatamente a tus padres o a otro adulto. Pueden utilizar unas pinzas para quitar la garrapata. Una vez que hayas retirado la garrapata, asegúrate de lavar el área de la picadura con agua y jabón o desinfectante.




### ¿Qué pasa si me enfermo después de una picadura de garrapata?

Si tienes fiebre, erupciones en la piel, dolor de cabeza, dolor muscular o sientes mucho cansancio hasta 30 días después de una picadura de garrapata o de haber estado en una zona donde viven garrapatas, díselo a tus padres. Ellos deben llamar a tu médico para ver si necesitas que te hagan pruebas para detectar una enfermedad causada por garrapatas y si necesitas medicamentos.

### Dónde buscar garrapatas en tu cuerpo



### Dónde buscar garrapatas en las mascotas



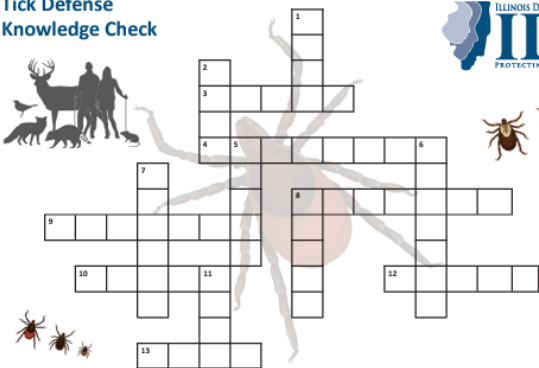
*Algunas imágenes han sido proporcionadas por los CDC.*

# Tick Interactive Crossword Puzzle

## Tick defense knowledge check

## English and Spanish

**Tick Defense Knowledge Check**



**ACROSS**


- How many legs does a tick have?
- An adult should always use this tool to remove a tick.
- An outdoor activity that can bring you in close contact with ticks.
- Ticks are so small they can be mistaken for this.
- Ticks eat this.
- Ticks wait on this for animals and people to walk by.
- Places to check your body for ticks are in and around the hair and \_\_\_\_\_, under the arms, inside the belly button, around the waist, between the legs, and the back of the knees.

**DOWN**

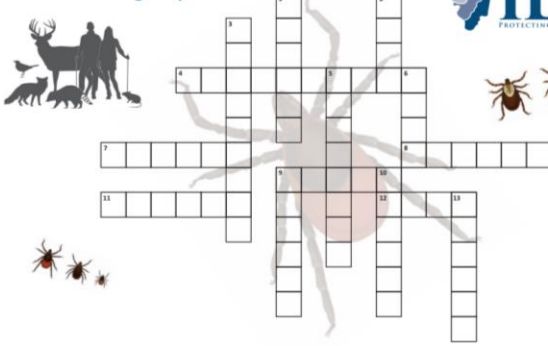
- If you get sick after a tick bite, this may appear on your skin.
- Before going into areas where ticks live, wear insect repellent that contains this.
- After removing a tick, wash the bite area with soap and \_\_\_\_\_.
- Ticks are related to these creepy crawlers that spin webs.
- If you get sick after a tick bite, tell your parents on their own call your \_\_\_\_\_.
- When you come inside from an area where ticks are, \_\_\_\_\_ yourself for ticks.
- The most common tick that can make you sick is a blacklegged tick, which is also called a \_\_\_\_\_ tick.

**Cross Word Puzzle Answers**  
Across: 3. Elf, 4. Tick, 5. Wading, 6. Camping, 7. Fleas, 8. Fleas, 9. Fleas, 10. Fleas, 11. Fleas, 12. Fleas, 13. Fleas.  
Down: 1. Eight, 2. Dog, 3. Flea, 4. Tick, 5. Wading, 6. Camping, 7. Fleas, 8. Fleas, 9. Fleas, 10. Fleas, 11. Fleas, 12. Fleas, 13. Fleas.

**ILLINOIS DEPARTMENT OF PUBLIC HEALTH IDPH**  
PROTECTING HEALTH. IMPROVING LIVES.



### Verifica tu aprendizaje: Defensa contra garrapatas




**HORIZONTAL**

- Una actividad al aire libre que puede ponerte en contacto cercano con las garrapatas.
- Si te enfermas después de una picadura de garrapata, díselo a tus padres para que llamen a tu \_\_\_\_\_.
- Los lugares para revisar tu cuerpo en busca de garrapatas son dentro y alrededor del pelo y las \_\_\_\_\_, debajo de los brazos, dentro del ombligo, alrededor de la cintura, entre las piernas y detrás de las rodillas.
- Las garrapatas son tan pequeñas que pueden confundirse con esto.
- Las garrapatas esperan aquí a que pasen animales y personas.
- Después de quitar una garrapata, lavar el área de la picadura con jabón y \_\_\_\_\_.

**VERTICAL**

- La garrapata más común que puede enfermarte en Illinois es la garrapata de patas negras, o garrapata del \_\_\_\_\_.
- Antes de entrar en áreas donde viven las garrapatas, usa repelente de insectos que contenga esto.
- Cuando vuelvas a casa de un área donde viven las garrapatas, asegúrate de \_\_\_\_\_ que no haya garrapatas.
- Si te enfermas después de una picadura de garrapata, esto puede aparecer en tu piel.
- ¿Cuántas patas tiene una garrapata?
- Un adulto siempre debe usar esta herramienta para quitar una garrapata.
- Las garrapatas comen esto.
- Las garrapatas están relacionadas con estos espeluznantes rastreadores que tejen redes.

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# 2024 ILLINOIS TICKBORNE DISEASE CONFERENCE

**October 22, 2024 • Champaign, IL**

**Registration begins at 8am  
Conference Agenda 9am - 5pm**

**I Hotel & Illinois Conference Center  
1900 S. 1st St., Champaign, IL 61820**



## TAKING A BITE OUT OF TICKBORNE DISEASE

The 2024 Illinois Tickborne Disease Conference aims to bring together clinicians, researchers, local health departments, and other leaders in the field of Lyme and tickborne diseases. Featured speakers include CDC experts, notably Dr. William Nicholson and Dr. Susan Visser, as well as national academic leaders, such as Dr. Brian Fallon from Columbia University and Dr. Scott Commins from University of North Carolina.

TOP TICKBORNE  
DISEASE EXPERTS  
FROM AROUND THE  
NATION

IN-PERSON & VIRTUAL  
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MORE THAN SIX CONTINUING  
EDUCATION CREDITS FOR MD,  
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**REGISTER  
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▶ TICKBORNE DISEASE CASE STUDIES AND PRACTICAL APPLICATION ▶

# Tickborne Disease Conference

October 22, 2024

- 6 Continuing Education Credits for Doctors, Nurses, Physicians Assistants and more!
- In- Person & Virtual Attendance Options





**THANK YOU**

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