Communicable Disease Guide for Schools & Day Care Centers 2015

Will County Health Department
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INTRODUCTION

Educational institutions provide a unique environment for the transmission of communicable diseases. This guide was developed by the Will County Health Department (WCHD) to furnish school officials, school nurses, health care providers and other interested persons with information on the control of communicable diseases. It provides information on some important reportable and non-reportable communicable diseases and conditions that school and day care centers encounter routinely. More detailed information on many of these diseases can be obtained from the Illinois Department of Public Health (IDPH) web site www.dph.illinois.gov or from the web site of the U.S. Centers for Disease Control and Prevention www.cdc.gov.

Time frames for reporting of all reportable diseases can be found in the Illinois Reportable Disease List on page 2 of this document. Prompt reporting to the Will County Health Department of all cases of communicable diseases can greatly reduce opportunities for these diseases to spread.

Information related to exclusion from school and day care is noted in bold (underlined) in the “Control of Cases” and “Control of Contacts” sections under each disease. For more information, refer to the following IDPH rules and regulations:

Control of Communicable Diseases (77 III. Adm. Code 690)
Child Health Examination Code (77 III. Adm. Code 665)
Immunization Code (77 III. Adm. Code 695)
College Immunization Code (77 III. Adm. Code 694)
Control of Sexually Transmissible Diseases Code (77 III. Adm. Code 693)

They can all be accessed through the IDPH website at www.dph.illinois.gov.

A copy of this document can also be found at www.willcountyhealth.org under the Epidemiology and Communicable Disease Section.

Illinois Department of Public Health

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 within the number of days or hours indicated in parentheses.

*For reporting purposes, "immediate" means as soon as possible within three hours.

Anaplasmosis (7d)
Any suspected bioterrorist threat (immediate)*
Any unusual case or cluster of cases that may indicate a public health hazard (immediate)*
Anthrax (immediate)*
Arboviruses (including WNV) (7d)
Babesiosis (7d)
Botulism, foodborne (immediate)*
Botulism, infant, wound, other (24h)
Brucellosis (24h, unless bioterrorism suspected, then immediate)*
Chancroid (7d)
Chlamydia (7d)
Cholera (24h)
Creutzfeldt-Jakob Disease (7d)
Cryptosporidiosis (7d)
Cyclosporiasis (7d)
Diphtheria (immediate)*
Drug-resistant organism, extensively (7d)
Ehrlichiosis (7d)
Enteric *E. coli* infections (STEC, O157:H7, ETEC, EPEC, EIEC) (24h)
Foodborne or waterborne outbreaks (24h)
Gonorrhea (7d)
Haemophilus influenzae, invasive (24h)
Hantavirus pulmonary syndrome (24h)
Hemolytic uremic syndrome, post diarrheal (24h)
Hepatitis A (24h), B (7d), C (7d), D (7d)
Histoplasmosis (7d)
HIV infection (7d)
Influenza, deaths in <18 yr olds (7d)
Influenza A, variant (immediate)*
Influenza, ICU admissions (24h)
Legionellosis (7d)
Leprosy (7d)
Leptospirosis (7d)
Listeriosis (7d)
Lyme disease (7d)
Malaria (7d)
Measles (24h)
Mumps (24h)
N. meningitidis, invasive (24h)
Ophthalmia neonatorum (gonococcal) (7d)
Outbreaks of public health significance (24h)
Pertussis or whooping cough (24h)
Plague (immediate)*
Poliomyelitis (immediate)*
Psittacosis (7d)
Q fever (24h unless bioterrorism suspected then immediate)*
Rabies, human and potential human exposure and animal (24h)
Reye syndrome (7d)
Rubella (24h)
Salmonellosis, other than typhoid (7d)
Severe Acute Respiratory Syndrome (SARS) (immediate)*
Shigellosis (7d)
Smallpox (immediate)*
Smallpox vaccination, complications of (24h)
Spotted fever rickettsioses (7d)
S. aureus, Methicillin resistant (MRSA) clusters (two or more lab confirmed cases) in a community setting (24h)
S. aureus, Methicillin resistant (MRSA) in infants <61 days (24h)
S. aureus infections with intermediate or high level resistance to vancomycin (24h)
Streptococcal infections, Group A, invasive including STSS and necrotizing fasciitis (24 h)
S. pneumoniae, invasive in those <5 yrs (7d)
Syphilis (7d)
Tetanus (7d)
Toxic shock syndrome due to *S. aureus* (7d)
Trichinosis (7d)
Tuberculosis (7d)
Tularemia (24h unless bioterrorism suspected then immediate)*
Typhoid fever (24h)
Typhus (24h)
Varicella (chickenpox) (24 h)
Vibriosis (non cholera) (7d)
Yersiniosis (7d)

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
- patient's name, date of birth, age, sex, race/ethnicity, address and telephone number
- physician's name, address and telephone number
- method of diagnosis, if available

TO REPORT A CASE

contact your local health department:

During regular business hours, call 815 - 727 - 8481.

For emergencies after business hours, call 815 - 727 - 8480.

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

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Animal Bites (potential for rabies)

Reportable to WCHD: Report bites to Will County Animal Control.

Recommend Note Home: No

Incubation Period: In animals, the incubation period has not been specifically established. In humans, symptoms of rabies usually appear within three to eight weeks, but it can be days or years following the time of exposure. Once symptoms appear, rabies is almost always fatal.

Signs and Symptoms: In animals, rabies may result in behavior changes, e.g., a nocturnal animal appearing during daylight hours; a wild animal allowing humans to approach it; a domesticated animal appearing overly aggressive or overly docile; an animal exhibiting excess salivation, difficulty walking, or having a stunned or paralyzed appearance; or, in the case of a bat, difficulty flying. In humans, rabies is often preceded by a sense of apprehension, headache, fever, malaise, and subtle changes in personality or cognition; pain is often associated with the site of a previous animal bite.

Communicability Period: In dogs, cats and ferrets, this period is usually three to seven days before signs of illness due to rabies and throughout the course of the disease. In other animals, particularly wild animals, the period of communicability is not specifically established and may be lengthy before signs of rabies appear. Many wild animals, for example, bats, raccoons, skunks, foxes, coyotes, wolves and other biting mammals, may carry rabies. Rabbits, opossums, squirrels, chipmunks, rats and mice are rarely infected with rabies virus, Exposures to birds, fish, amphibians or reptiles never pose a risk of rabies. Cats, dogs livestock may get rabies if they are not vaccinated.

Method of Transmission: Transmission occurs when a person is exposed to the saliva of a rabid animal through a bite or scratch or when the animal's saliva contacts a fresh abrasion or mucous membrane. Transmission also can occur if there is exposure to a rabid animal's brain tissue or cerebrospinal fluid.

Control of Cases: Animal bites and scratches should be cleansed immediately by washing the bite site with soap and water; some may require medical attention. **When there is any question about an animal bite or contact with a bat having the potential for rabies exposure, it should be reported to WCHD.** Bites from some species, such as bats, may go undetected due to small teeth size, so the local health authority should be contacted to determine if rabies preventive treatment is recommended and if animal control should be notified.

Control of Contacts: No restrictions.

General Measures: Educate children to avoid any domestic or wild animal that is acting strangely, is sick or is unfamiliar to them. Teach children to report any contact with a wild animal or any unfamiliar domestic animal to an adult and to inform an adult any time they are bitten or scratched by any animal. Ensure that dogs, cats and ferrets are fully vaccinated against rabies.

Check www.cdc.gov for advice about animals in schools and day care settings.

Bed Bugs in Schools and Day Care Centers

Actual bed bug infestations in schools are uncommon, more often a few bed bugs will hitchhike from an infested home on a student's possessions. Bed bugs that hitch a ride into the school in one student's backpack could be carried home by another student. Schools are not likely to develop breeding populations of bed bugs because the bugs feed exclusively on blood taken from persons asleep or at rest. In contrast, daycare centers may be more likely to develop serious bed bug problems in rooms where children nap. Having guidelines for preventing and handling bed bugs if and when they appear is critical to reducing bed bug problems.

Guidelines

- Bed bugs are not known to transmit disease.
- Students should not be excluded from school due to bed bugs.
- Bed bugs are not a sign of bad housekeeping or uncleanliness.
- If a suspected bed bug is found on a student or their belongings, **discreetly** remove the child from the classroom and inspect his/her clothing and belongings along with any bins or lockers used to store the child's belongings.
- Collect any specimens thought to be bed bugs with a tissue or piece of gauze, trying not to crush the bug. Place it in a plastic bag, then double bag it and tape the bag closed. **Have the specimen identified by a qualified professional.**
- Keep potentially infected belongings in a tightly sealed container such as a plastic bag or bin with lid until needed or the child leaves for home. To kill all stages of bed bugs, clothing and other items can be dried in a hot dryer for at least 20 minutes.
- Send bed bug information home with the child to inform parents or guardians that the home may be infested. Include material about bed bugs and how they are controlled, including the need for professionals to confirm and control bed bug infestations. Also consider sending information home with children who may have come in contact with the child or the child's belongings.
- Where it is confirmed or reasonable to believe that bed bugs may be infesting a school or daycare call a pest management professional to inspect all rooms visited by the child and the child's belongings. Rooms where bed bugs occur should be treated to eliminate the bugs. NOTE: It is unlawful to apply most pesticides in public schools and daycare centers with children present. Staff should not bring and use pesticides in the facility. Contact a pest management professional.

Chickenpox (Varicella)

Reportable to WCHD: Yes. Please see the Chicken Pox Reporting Form on page 6.

Recommend Note Home: Yes. Identify and notify susceptible individuals.

Incubation Period: 10 to 21 days

Signs and Symptoms: A sudden onset of mild fever, malaise and itchy rash (more pronounced on the head and neck) progresses to vesicular lesions that last three to four days before scabbing.

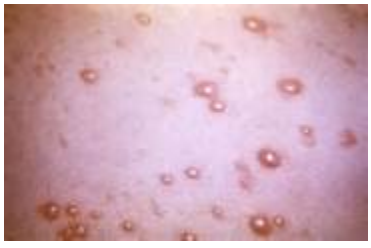
Communicability Period: The disease may be transmitted one to two days before onset of rash through the first four to five days, or until all lesions have crusted.

Method of Transmission: Person-to-person transmission occurs through direct contact with respiratory tract secretions or vesicular fluid from lesions or by indirect contact with articles soiled by an infected patient's vesicular and mucous membrane discharges.

Control of Cases: **Case must be isolated and excluded from school or day care for a minimum of five days after the eruption of the last vesicles or until the vesicles become dry.**

Control of Contacts: There are no restrictions among immune or susceptible populations. Identify and notify susceptible individuals. Susceptible students/staff are those without documented history of chickenpox disease who are unvaccinated, vaccinated with only one dose, or whose immunization status is unknown. Unvaccinated contacts should be immunized. Varicella vaccine can be effective in preventing or modifying varicella illness if used within three days of initial exposure.

General Measures: CDC recommends 2 doses of Chickenpox vaccine for children, adolescents and adults. Children should receive 2 doses of the vaccine, the first at 12 to 15 months old and a second dose at 4 to 6 years old.
Susceptible adults who are at high risk of exposure to varicella or who are in close contact with persons at high risk should consider vaccination.
Pregnant women who get chickenpox are at risk for serious complications and should speak to their healthcare provider to determine if they are protected against chickenpox.



Shingles is the result of a reactivation of infection with the virus that caused chickenpox. See page 27 for information on shingles.

Will County Health Department
Epidemiology & Communicable Disease Program
Phone (815) 727-8481
Fax (815) 727-8833

Chickenpox (Varicella) Reporting Form for Schools and Child Care Facilities

Please complete this form as thoroughly as possible and fax it to (815)727-8833 within 24 hours of initial report.

Date of Report_____

Name of Employee Reporting_____

Facility Name_____

Facility Address_____
(Street)

_____
(City) (Zip)

Facility Phone _____

Student Name_____

Age_____ Date of birth_____ Race_____ Sex_____

Parent /Guardian Name(s) _____

Who reported the absence with chickenpox? _____

Student Address_____
(Street)

_____
(City) (Zip)

Student Home Phone_____

Date(s) of Varicella Vaccination_____ _____

Was diagnosis lab confirmed? _____Yes _____No
Was diagnosis Dr. confirmed? _____Yes _____No (Please fax Dr.'s note.)

Physician's Name_____ Phone_____

Date of Onset of Chickenpox_____ Date confirmed_____

Fever _____Yes _____No Approx. # of pox _____less than 50 _____over 50

Comments_____
_____

Fifth Disease/Erythema Infectiosum

(Parvovirus B19)

Reportable to WCHD: No. However report any unusual case or cluster of cases (2 or more) that may indicate a public health hazard.

Recommend Note Home: Yes. Susceptible women who are pregnant, or who might become pregnant, should be advised of the possibility of acquiring infection and potential risk of complications to the fetus and should discuss concerns with their doctor.

Incubation Period: Variable, usually 4 to 21 days

Signs and Symptoms: The first symptoms of fifth disease are usually mild and include low-grade or no fever, runny nose, headache and a distinct "slapped cheek" facial rash. This may be followed by a lacy red rash on the trunk and limbs that may last 7-10 days. Some people, usually adults can develop pain and swelling in their joints.

Communicability Period: A person infected with parvovirus B19 is contagious during the early part of the illness, before the rash appears.

Method of Transmission: Contact with respiratory secretions, also from woman to fetus when infection occurs during pregnancy.

Control of Cases: Because cases are no longer contagious when the rash appears, there are no restrictions. Exclude case if fever is present or if child does not feel well enough to participate in usual activities.

Control of Contacts: No restrictions

General Measures: Persons should cover their noses and mouths when coughing or sneezing and discard used tissues promptly. Wash hands thoroughly after exposure to respiratory secretions, including handling of soiled tissues and handkerchiefs. Persons should not share straws, cups, glasses, eating utensils, cigarettes, water bottles used during sports, etc. Discourage persons from kissing an infant, toddler or child on the mouth to help prevent the spread of this and other diseases transmitted by respiratory secretions. Persons with certain anemias, or persons with immune system impairments may develop serious illness. Pregnant women should know about potential risks to their baby and discuss this with their doctor.

Gastroenteritis, Viral (Norovirus)

Reportable to WCHD: Isolated single cases are not reportable. Outbreaks are reportable. IDPH describes an acute gastroenteritis outbreak in a school or day care setting as a cluster of four or more persons with acute-onset of vomiting and/or diarrhea in a classroom or in an otherwise defined group of students; or cases in more than 10% of the school's/daycare's census in a single day.

Recommend Note Home: Not for single cases. Consult WCHD if a cluster or outbreak occurs.

Incubation Period: 12-48 hours

Signs and Symptoms: Stomach ache, nausea, vomiting, diarrhea, fever, abdominal cramps. Symptoms usually resolve in 1-3 days even without treatment.

Communicability Period: Variable, during diarrheal illness and for one to several days following resolution of symptoms.

Method of Transmission: Person-to-person via the fecal-oral route; also spread via food or drinks contaminated by an infected food handler or by contaminated water.

Control of Cases: **Exclude case from school until clinical recovery, i.e., absence of diarrhea and fever.**

Control of Contacts: No restrictions.

General Measures: Teach the importance of proper hand washing. Adults should supervise the hand washing of children/youths.

Hand, Foot and Mouth Disease

(Coxsackievirus A16)

Reportable to WCHD: No. However report any unusual case or cluster of cases (2 or more) that may indicate a public health hazard.

Recommend Note Home: No

Incubation Period: 3 to 7 days

Signs and Symptoms: There is usually a mild fever, often a sore throat, loss of appetite, small red spots in the mouth (on the tongue, gums and the inside of the cheeks) that may blister. If there is a rash on the skin, it may be flat or raised red spots that blister. Rash can occur on the palms and fingers of the hands or on the soles of the feet and on the buttocks. Symptoms may last for seven to ten days or infections can be asymptomatic.

Communicability Period: Virus can be excreted before symptoms appear, during illness and for several weeks after symptoms have resolved.

Method of Transmission: The fluid in the blisters or ulcers contains virus, which can be passed to another person through nasal and oral secretions, or from an infected person's feces. HFMD is not transmitted to or from animals or pets; it is not associated with the similarly named disease that can cause serious illness in cattle.

Control of Cases: While there are no restrictions, in a child care facility when multiple cases are occurring, some benefit may be gained by excluding very young children with blisters in their mouths who drool or who have weeping lesions on their hands until their symptoms resolve. In general, most infected children do not need to be excluded unless fever is present or they are not well enough to participate in usual activities. Open sores may still be present and should be covered with a bandage.

Control of Contacts: No restrictions

General Measures: Teach the importance of basic hygiene measures such as covering the mouth when coughing or sneezing and frequent, proper handwashing before any activity that brings hands in contact with the mouth, for example, eating, drinking, smoking, etc. Emphasize the importance of proper disposal of used tissues; prompt handwashing after handling articles soiled with oral secretions or discharges from the nose and immediately after diaper changing or toileting; and not sharing glasses, straws, water bottles, eating utensils, etc.

Head Lice (Pediculosis)

Reportable to WCHD: No

Recommend Note Home: Notes home are not recommended, however, schools may wish to follow head lice policies that were established by their own school or district.

Incubation Period: Eggs hatch in 7 to 10 days.

Signs and Symptoms: Scratching of the scalp. Pinpoint gray/white eggs (nits) attached securely to the hair shaft.

Communicability Period: Lice or eggs (nits) are viable until destroyed by treatment. Crawling forms of the louse are communicable; the nits are not.

Method of Transmission: By direct contact with the head of another infested person. Indirect spread through contact with personal belongings of an infested person (such as combs, brushes, hats, clothing) is less likely, but can occur.

Control of Cases: **Exclude case from school at the end of the school day. Case may return to class after appropriate treatment has begun. "No nit" policies should be discontinued.** Cases should be re-inspected by nurse/staff 7-10 days after treatment has begun.

Control of Contacts: No Restrictions. Classroom or school-wide screenings and blanket notification to others of the situation are not recommended.

General Measures: Teach the importance of not sharing combs, brushes, hats, coats, towels, bedding, etc. Store coats, hats, scarves, etc. in individual lockers or on assigned coat hooks. If items are stored on hooks, hang clothing far enough apart to prevent items from touching.

Please consult WCHD if the head lice problem is not resolved despite repeated attempts.

Impetigo

Reportable to WCHD:	No, however report any unusual case or cluster of cases (2 or more) that may indicate a public health hazard.
Note to parents recommended:	No
Incubation Period:	It is usually 1-3 days for streptococcal and 4-10 days for staphylococcal infections.
Signs and Symptoms:	Impetigo may affect skin anywhere on the body but commonly occurs in the area around the nose and mouth. It first appears as a small itchy, inflamed area of skin which blisters. The blisters rupture, release a yellow fluid and develop honey-colored crusts and form scabs.
Communicability Period:	If untreated, oozing sores remain infectious for as long as they persist.
Method of Transmission:	Impetigo is extremely contagious. It can be spread from one person to another through touch or shared items such as clothes, towels, pencils, toys, bedding, etc.
Control of Cases:	Exclude case from school until 24 hours after treatment begins. Sores should be completely covered with a watertight dressing.
Control of Contacts:	No restrictions
General Measures:	Keep lesions covered while in school if possible; teach the importance of proper hand washing and emphasize strict personal hygiene. Keep fingernails clean and trimmed.

Infectious Mononucleosis (Epstein-Barr virus, or EBV)

Reportable to WCHD: No

Recommend Note Home: No

Incubation Period: 4 to 6 weeks.

Signs and Symptoms: Fever, sore throat, rash, head/body aches, fatigue, and swollen lymph nodes in the neck and armpits are common symptoms. Sometimes the liver and spleen are affected and become enlarged, although less common. Infections may also be asymptomatic. Recovery usually occurs in 2-4 weeks; occasionally symptoms may last 6 months or longer.

Communicability Period: Prolonged. The shedding of the virus in oral secretions may persist for a year or more after infection. Some adults may become long-term carriers of the virus.

Method of Transmission: The virus is shed through saliva, also by saliva on hands, toys, and when kissing, etc. The virus is shed in saliva during the illness, and probably for a year or more after becoming infected.

Control of Cases: **There are no restrictions. An infected child does not need to be excluded unless he or she has a fever of 100 degrees or greater, or if he/she is not well enough to participate in usual activities.**

Control of Contacts: **No restrictions.**

General Measures: Teach the importance of basic hygiene measures such as covering the mouth when coughing or sneezing. Teach proper hand washing techniques before any activity that brings the hands into contact with the mouth, e.g., eating, drinking, smoking, etc. Emphasize the importance of the proper disposal of used tissues. Also, educate about the importance of prompt hand washing after handling articles that are soiled with respiratory secretions. Discourage the sharing of glasses, straws, water bottles, eating utensils, food and personal items such as toothbrushes, etc.

Due to the risk of rupture of the spleen, contact sports should be avoided until the physician gives permission.

Influenza

Reportable to WCHD: No

Recommend Note Home: No

Incubation Period: Usually 1 to 4 days, on average 2 days.

Signs and Symptoms: Rapid onset of fever, headache, muscle aches, sore throat and dry cough.

Communicability Period: One day before symptoms develop and up to 5-7 days after becoming sick. Communicability period may be longer in children.

Method of Transmission: By direct contact with droplets of respiratory secretions (influenza virus persists for hours in dried mucus), or through airborne spread in crowded, enclosed spaces.

Control of Cases: **Exclude case from day care or school until 24 hours after they no longer have a fever (100˚F) or signs of a fever without the use of fever-reducing medicine.**

Control of Contacts: **No restrictions.**

General Measures: Seasonal flu vaccination is recommended for everyone 6 months of age and older unless they have a specific contraindication to flu vaccine. Teach the importance of basic hygiene, especially covering the mouth when coughing or sneezing; educate about hand-to-mucous membrane transmission.

Please consider volunteering as one of the sentinel sites in your County for the Influenza like illness (ILI) Surveillance.

School attendance is considered one of the methods to monitor disease activities in the community. Data provided through this reporting will be used to detect and monitor any unusual disease activity/outbreak in the community.

Please report weekly attendance data during the school year by filling out the weekly Summary of School Attendance Form (on page 11) and email to ptodd@willcountyhealth.org or fax it to the Communicable Disease Program at (815) 727-8833.

Will County Health Department
Epidemiology & Communicable Disease Program
501 Ella Ave. Joliet, IL
Phone: (815) 727-8481, Fax: (815) 727-8833

WEEKLY SUMMARY REPORT OF SCHOOL ATTENDANCE

School Name: _____

Address: _____

City: _____

Reporting Person: _____

Phone No: _____

District No: _____

Week: From: _____ **to:** _____

Please consider volunteering as one of the sentinel sites in Will County for the Influenza like illness (ILI) Surveillance. ILI is defined as fever (temperature of 100˚F/38.7˚C or greater) and a cough and/or a sore throat in the absence of a known cause other than influenza. Schools are a valuable asset in monitoring disease activity in the community. Data provided through this reporting will be used to detect and monitor any unusual disease activity/outbreak in the community.

Please report weekly attendance data throughout the year by completing this reporting form and faxing it to the Communicable Disease Program at (815) 727-8833.

Day	Date	Total Enrolled	Total Absent	Total Absent with ILI
Monday				
Tuesday				
Wednesday				
Thursday				
Friday				

Measles

Reportable to WCHD: Yes, as soon as possible.

Recommend Note Home: Yes

Incubation Period: About 10 days, but may be 7 to 18 days from exposure to onset of fever. A rash usually appears about 14 days after exposure. The timetable may be as long as 21 days.

Signs and Symptoms: 2 to 4 day prodromal period with fever (usually 103-105 degrees F), cough, watery eyes and runny nose precedes the red blotchy rash, which usually begins on the face and becomes generalized. The rash lasts from four to seven days.

Communicability Period: Highly communicable beginning 4 days before rash becomes visible to 4 days after the rash appears.

Method of Transmission: Measles is one of the most highly communicable infectious diseases and is primarily spread from person to person by droplets or direct contact with throat and nasal secretions of infected persons or by indirect contact with articles soiled by infected patient's nasal and throat secretions. The virus remains active and contagious on infected surfaces and in the air for up to two hours.

Control of Cases: **Cases must be isolated and excluded from school for at least 4 days after the appearance of the rash.**

Control of Contacts: **There are no restrictions among immunized populations.**

Unvaccinated contacts should be immunized with the MMR vaccine. Students and staff born in or after 1957 who cannot provide adequate evidence of immunity should be vaccinated unless there is a valid contraindication. Exposed persons receiving their second MMR dose and previously unvaccinated persons receiving their first dose as part of the outbreak control may be immediately readmitted to school, but should be monitored for signs and symptoms of measles. Cases that choose not to get the vaccine, or are unable to be vaccinated due to medical reasons, should be excluded from school or child day care until 21 days after rash onset in the last case of measles.

General Measures: School nurses/child care providers should review the immunization records of the children and identify those who are not up-to-date with their MMR vaccine. It is recommended that parents be contacted and advised to vaccinate their children if there is not a medical contraindication.

Meningitis, Bacterial

Reportable to WCHD: Yes

Recommend Note Home: Yes, consult with WCHD.

Incubation Period: 3 to 7 days.

Signs and Symptoms: Sudden onset of fever, headache, stiff neck (except in infants), nausea, often vomiting, and light sensitivity. Confusion or difficulty awakening from sleep is common, especially in children. In infants, poor feeding, extreme listlessness, irritability and sometimes vomiting may be the only symptoms present.

Communicability Period: Until bacteria are no longer present in nose and throat secretions, usually within 24 hours of taking an antibiotic.

Mode of Transmission: By direct and immediate contact with nose and throat secretions of a person carrying the bacteria, such as kissing on the mouth, drinking from a shared glass or straw, sharing eating utensils, coughing, or sneezing directly into the face of another person, etc.

Control of Cases: **Exclude case from school until clinical recovery, i.e., absence of fever.**

Control of Contacts: **There are no restrictions. Depending on which bacterium causes illness, an appropriate treatment or prophylaxis may be considered for household contacts and identified close contacts. Close contacts in a childcare facility may be treated. Contact at school does not generally warrant prophylactic treatment.**

General Measures: Vaccination against meningitis caused by *Haemophilus influenzae* type b (Hib) is routinely recommended for all susceptible children 5 years of age and younger, unless contraindicated. Immunization should be given as soon as possible after 2 months of age and is required prior to admission to day care or school.

Teach the importance of basic hygiene, especially covering the mouth when coughing or sneezing. Also, teach children not to share glasses, straws, and eating utensils. The disposing of used tissues in a hygienic manner should be taught as well as washing hands after handling soiled tissues.

Meningitis, Viral (Aseptic Meningitis)

Reportable to WCHD: No

Recommend Note Home: No

Incubation Period: Variable, determined by the causative agent, usually 2 to 10 days.

Signs and Symptoms: Sudden onset of fever, headache, stiff neck (except in infants), nausea, often vomiting.

Communicability Period: Variable, determined by causative agent. Enteroviruses are communicable during and possibly for several weeks after illness. Infected persons who may not seem ill are able to spread infection.

Method of Transmission: Viral meningitis can be transmitted by failure to wash hands after toileting or other contact with infected stool.

Viral meningitis is due to a viral infection in the stomach and intestine (enteroviruses). It can be transmitted by direct contact with nose and throat secretions of a person carrying the virus, e.g., kissing on the mouth, drinking from a shared glass or straw, sharing eating utensils, and by coughing or sneezing directly into the face of another person.

A small number of cases are transmitted by insects such as mosquitoes or ticks (arboviruses).

Control of Cases: **Exclude case from school until clinical recovery, i.e., absence of fever.**

General Measures: **Teach importance of basic hygiene, especially covering the mouth when coughing or sneezing. Instruct children not to share glasses, straws, eating utensils. Teach the proper disposal of used tissues, and stress the importance of washing hands after handling soiled tissues and after toileting.**

Prophylactic antibiotics are of no value.

Methicillin-Resistant *Staphylococcus aureus* (MRSA)

Reportable to WCHD: Maybe. Clusters (two or more lab confirmed cases) in a community setting, and MRSA in infants less than 61 days old should be reported.

Recommend Note Home: Consult with WCHD.

Incubation Period: After a person has become infected with MRSA, it takes 1 to 10 days for symptoms to appear.

Signs and Symptoms: Most infections caused by staph are skin infections, such as pimples or boils and can cause redness and warmth of the infected area, pain, swelling, and may have pus or other drainage. Rarely, the bacteria get into the bloodstream and other body sites and can cause more severe illness.

Method of Transmission: MRSA can be transmitted from person to person through close contact, such as direct skin-to-skin contact with infected persons, sharing contaminated personal items, inadequate personal hygiene, direct contact with contaminated environmental surfaces, and living in certain high risk settings such as dorms, schools, and long term care facilities.

Control of Cases: Students with any open, weeping, or pustule lesion on the skin (other than acne) should be promptly referred to a physician for consultation and treatment. A person with MRSA may attend school if lesions can be completely covered on all four sides to prevent drainage from leaking and possibly contaminating others.

Athletes should be excluded if wounds cannot be properly covered during participation, or if the activity poses a risk to the health of the infected athlete, even if it is covered. Properly covered means that the skin infection is covered by a securely attached bandage or dressing that will contain all drainage and will remain intact throughout the activity.

Control of Contacts: No restrictions.

General Measures: Good infection control steps are very important to reduce the spread of skin infections.

- Proper hand hygiene: Encourage frequent hand washing with soap and warm water, especially after changing bandages or touching an infected wound. Alcohol-based waterless hand sanitizer may be used immediately after contact with an infected wound if soap and water are not available.
- Wound care: Keep draining wounds covered with a clean, dry bandage that completely covers the wound on all four sides and dispose of contaminated dressings in a sealed plastic bag. Wear gloves when changing dressings.
- Avoid sharing personal items: Do not share items that may have come in contact with an infected wound such as towels, washcloths, bars of soap, razors, clothing, certain sports equipment or uniforms and skin lotions. Soiled clothing should be washed with hot water and laundry detergent and dried in a hot dryer to help eliminate bacteria.
- Avoid contact sports: Athletes should be excluded if wounds cannot be properly covered during participation, or if the activity poses a risk to the health of the infected athlete, even if it is covered.
- Clean environmental surfaces: Thoroughly clean and disinfect environmental surfaces and athletic equipment that has been in contact with potentially infectious wound drainage with an EPA registered disinfectant cleaner or a 1:10 dilution of household chlorine bleach.

Mumps

Reportable to WCHD: Yes

Recommend Note Home: Yes. Contact WCHD for guidance.

Incubation Period: Twelve to twenty-six days, commonly 18 days.

Signs and Symptoms: Fever, fatigue, headache, and swelling of one of more salivary glands. The parotid salivary glands are most frequently affected.

Communicability Period: Mumps is contagious a few days prior to and 5 days after the onset of symptoms.

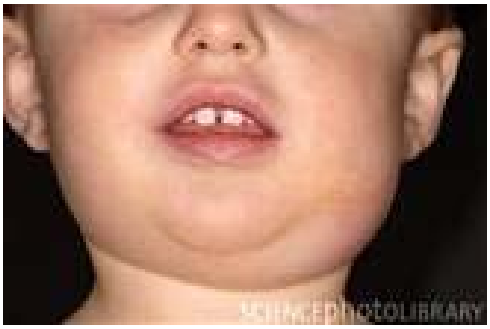
Method of Transmission: Person to person spread by droplet or direct contact with patient's throat or nasal secretions.

Control of Cases: **Cases should be isolated and excluded from school, child care facilities or the workplace until five days after onset of symptoms (parotitis).**

Control of Contacts: **There are no restrictions among immunized populations.**

Unvaccinated contacts should be immunized with the MMR vaccine. Susceptible close contacts should be excluded from school, child care facilities or the workplace from days 12 through 25 after exposure.

General Measures: School nurses/child care providers should review the immunization records of the children and identify those who are not up-to-date with their MMR vaccine. It is recommended that parents be contacted and advised to vaccinate their children if there is not a medical contraindication.
Teach children the importance of good basic hygiene. Do not share eating or drinking utensils. Disinfect articles soiled by or in contact with an infected person.



Pertussis (Whooping Cough)

Reportable to WCHD: Yes

Recommend Note Home: Yes. Consult with WCHD.

Incubation Period: Commonly 7 days, almost uniformly within 10 days, but can take as long as 21 days.

Signs and Symptoms: Initial upper respiratory symptoms, runny nose, sneezing, low-grade fever and a mild cough that develops into a violent, spasmodic cough within one to two weeks. The patient may develop the characteristic "whoop" during the coughing spasms. The symptoms, if left untreated, may last one to two months.

Communicability Period: Highly communicable from the beginning of respiratory symptoms to three weeks after onset of coughing spasms in patients not treated with antibiotics. When treated with the appropriate antibiotics, the communicable period is reduced to five days or less, after the onset of treatment.

Method of Transmission: Person-to-person spread by droplet or direct contact with airborne respiratory secretions or by indirect contact with articles soiled by infected patient's nose and throat discharges.

Control of Cases: **Cases must be isolated and excluded from school until at least five days after the start of antibiotic therapy.** Articles soiled by or in contact with nose and throat discharges of infected patient must be disinfected.

Control of Contacts: **There are no restrictions among immunized populations.**

Susceptible contacts should be excluded from school, day care, and public gatherings for 21 days after last exposure or until the cases and contacts have received at least five days of a course of an appropriate antimicrobial agent. Pertussis is most dangerous to infants.

General Measures: Pertussis vaccine (DTaP) is routinely recommended for all susceptible children six years of age and younger, unless contraindicated. Immunization should be given as soon as possible after two months of age. It is required prior to admission to day care or school.

Pink Eye (Conjunctivitis)

Reportable to WCHD: No

Recommend Note Home: No

Incubation Period: 1 to 3 days.

Signs and Symptoms: Pink/red, teary, itching, burning eyes. Swollen eyelids, light sensitivity, eye pain. There is a white or yellow discharge that may cause the eyelids to crust over, especially at night.

Communicability Period: Communicability lasts until the active infection resolves itself.
Viral conjunctivitis usually clears in 7-14 days without treatment.
Bacterial conjunctivitis usually clears within 2-3 days or can last up to 2-3 weeks. Topical antibiotics may be prescribed.

Method of Transmission: Viral and bacterial infections may be spread by contact with the secretions from the eyes, nose, and throat. Infection may be from direct contact with someone who has the infection or something that person has touched, such as a used tissue. Allergic conjunctivitis is not contagious.

Control of Cases: **Exclude case from school until twenty-four hours after treatment begins or child is examined by a physician and approved for readmission to school.**

Control of Contacts: No restrictions.

General Measures: Teach the importance of proper hand washing. Avoid touching eyes when infected. Avoid sharing towels, pillows, eye drops, make-up, etc. with others. Dispose of used tissues properly.

Pinworms (Enterobiasis)

Reportable to WCHD: No

Recommend Note Home: No

Incubation Period: Variable, may be two to six weeks or longer.

Signs and Symptoms: Perianal itching.

Communicability Period: Communicability continues as long as the eggs are being discharged on the perianal area and are infective within a few hours of being laid. Eggs remain infective in an indoor environment for about 2 weeks.

Method of Transmission: Direct transfer of infective eggs by hand from anus to mouth of the same or another person. Indirect transmission through articles/items contaminated with eggs of the pinworm, e.g., clothing, bedding, and food. Another form of transmission can be anything placed into the mouth if handled with unwashed hands contaminated with eggs of the pinworm.

Control of Cases: **Exclude case from school until twenty-four hours after treatment begins.**

Control of Contacts: No restrictions.

General Measures: Teach the importance of proper hand washing. Adults should supervise the hand washing of children/youths. Families should be informed that there is a high frequency of reinfection. All members in the household of the case may need to be treated as a group.

Ringworm (of the body and scalp)

Reportable to WCHD: No

Recommend Note Home: No

Incubation Period: Usually 4 to 10 days for the body.
Usually 10 to 14 days for the scalp.

Signs and Symptoms: Ringworm of the skin is a reddish, ring like rash that is often itchy or flaky; it may have a burning sensation, but may also be moist and crusted. The central area often clears as it progresses.
Ringworm of the scalp may leave scaly, balding patches with broken-off hairs that can slowly spread. Occasionally raised pus-containing lesions may develop.

Communicability Period: Viable fungus can persist on contaminated items or materials for long periods as long as lesions are present.

Method of Transmission: By direct contact of skin or scalp or indirect contact with items or materials contaminated with fungus from skin, scalp or hairs, e.g., theater seats, barber clippers, combs, brushes, hats, and clothing. The same fungi that infect humans can also infect animals such as dogs and cats. Infections can be acquired from pets and farm animals. Animals account for less than ten percent of cases. Some animals, especially cats, may be unapparent carriers.

Control of Cases: **Exclude case from school until twenty-four hours after treatment begins and the lesion begins to shrink, unless lesion can be covered. A child need not be excluded if lesion(s) can be covered.**

Control of Contacts: No restrictions.

General Measures: Teach importance of not sharing towels, clothing, combs, brushes, hair accessories, hats, and coats. Store clothing items and coats so that these items are separate from one another. Teach proper hand washing procedures. A veterinarian should evaluate pets with skin rashes.

Salmonellosis

Reportable to WCHD: Yes

Recommend Note Home: No

Incubation Period: 6 to 72 hours, usually about 12 to 36 hours.

Signs and Symptoms: Infections are marked by the sudden onset of fever, abdominal pain, diarrhea, nausea, and sometimes vomiting. Infections due to Salmonellosis can be asymptomatic.

Communicability Period: Extremely variable, usually several days to several weeks. A temporary carrier state occasionally continues for months in infants. Infrequently, individuals may excrete the organism for more than a year. Antibiotics can prolong the period of communicability.

Method of Transmission: Transmission is by ingesting raw or undercooked foods of animal origin, such as eggs, meat, poultry, unpasteurized milk/milk products from infected animals, or by ingesting raw or undercooked foods, not of animal origin, but fecally-contaminated by an infected animal or person. Transmission can also happen person to person via the fecal-oral route.

Control of Cases: **Exclude case from school until clinical recovery, i.e., absence of fever and diarrhea. Cases who are food handlers are prohibited from performing job duties until two consecutive stool specimens are negative.** Cases who work in sensitive occupations may also be restricted according to current IDPH rules and regulations. Household contacts that work in sensitive occupations also may be restricted according to current IDPH rules and regulations.

Control of Contacts: **There are no restrictions in general school population. Household contacts that are food handlers shall be examined for salmonellosis, and, if positive, shall be restricted according to current IDPH rules and regulations.** Household contacts that work in sensitive occupations also may be restricted according to current IDPH rules and regulations.

General Measures: Teach the importance of proper hand washing. Educate about proper sanitary methods for food preparation and for the handling, storing, and thorough cooking of foods of animal origin.
Foodservice operators should use pasteurized egg products in place of raw eggs or when eggs are pooled before cooking.
Wash fruits and vegetables thoroughly.
Avoid direct contact with reptiles such as turtles, iguanas and snakes.

Scabies

Reportable to WCHD: No

Recommend Note Home: No

Incubation Period: First infection may take as long as 2 to 6 weeks. Repeat infection 1 to 4 days.

Signs and Symptoms: Pimple-like irritations, burrows, or rash of the skin, especially found on the webbing between the fingers, the skin folds on the wrist, elbow, abdomen or knee; also may be found on the penis, breast or shoulder blades. There may be intense itching, especially at night.

Communicability Period: Scabies can be transmitted until mites and eggs are destroyed by treatment. A second application is sometimes recommended one week following the first treatment.

Method of Transmission: By direct, prolonged, skin-to-skin contact with a person infected with scabies mites. Infestation is easily spread to sexual partners and household members. It may also occur by sharing clothing, towels and bedding with an infected person. Scabies mites generally do not survive more than 2 to 3 days away from human skin.

Control of Cases: **Exclude case from school until the day after the first scabicide treatment.**

Control of Contacts: There are no restrictions in general school population. Household members and sexual contacts of the case should be treated prophylactically. Caretakers, companions, and others who have had skin-to-skin contact with the case may also need to be treated prophylactically and should consult with their medical provider.

General Measures: A physician must make the diagnosis of scabies. Scabicides used to treat human scabies are available only with a doctor's prescription.

Red itchy rashes or blisters can be the result of other conditions/disorders that appear very similar to scabies.

Shigellosis

Reportable to WCHD: Yes

Recommend Home Note: No

Incubation Period: 12-96 hours (usually 1-3 days) up to 1 week

Signs and Symptoms: The sudden onset of fever, nausea, diarrhea (sometimes bloody), abdominal cramping and sometimes vomiting are indicators of shigellosis. Shigellosis can also be asymptomatic. Symptoms usually resolve within 5-7 days, even without treatment.

Communicability Period: Usually during the four weeks after illness. Infrequently, a carrier may continue for months or longer. Infected persons having no symptoms can still spread the disease to others.

Method of Transmission: Person-to-person via the fecal-oral route. An infected food handler can spread shigellosis by contaminating food or drinks. Contaminated water is also a method of transmission.

Control of Cases: **Exclude case from school until clinical recovery, i.e., absence of fever and diarrhea. Cases that are food handlers or work in sensitive occupations are prohibited from performing their job duties until two consecutive stool specimens are negative.**

Control of Contacts: **There are no restrictions in the general school population. Household contacts who are food handlers or who work in sensitive occupations shall be examined for shigellosis, and, if positive, shall be restricted according to current IDPH rules and regulations for the control of communicable diseases.**

General Measures: Teach the importance of proper hand washing. Adults should supervise the hand washing of children/youths. Wash hands thoroughly after using the toilet, changing diapers, and before preparing or eating food. Clean and disinfect contaminated areas daily or when soiled.

Shigellosis can spread quickly in day care centers.

Shingles (Herpes Zoster)

Shingles is the result of a reactivation of infection with the varicella zoster virus, the virus that causes chicken pox. (It's actually a reawakening of an old chickenpox infection.)

Reportable to WCHD: No

Recommend Note Home: Maybe. Consult with WCHD.

Incubation Period: None

Signs and Symptoms: Shingles is a painful rash that develops on one side of the face or body. The rash forms blisters that typically scab over in 7 to 10 days and clears up within 2 to 4 weeks. Pain, itching, or tingling may develop at the site 1 to 5 days before the rash appears. The blisters may appear in irregular crops along nerve pathways that form a single stripe around the left or the right side of the body or face.

Communicability Period: Until all shingles blisters are crusted.

Method of Transmission: When persons who have not had chickenpox are exposed to the fluid from the blisters, they may develop chickenpox. Shingles do not spread from person to person.
The fluid in shingles lesions contains virus that can be spread to another person through direct contact with fluid when the lesions are not crusted over, or by contact with articles freshly soiled with the fluid from singles lesions. Persons are not infectious before the blisters appear.

Control of Cases: **A person with shingles may attend school if blisters can be covered to prevent others from contact with fluid from the blisters. The risk of spreading the virus if the blisters are covered is low. If shingles blisters cannot be covered, the person should be excluded until all blisters are crusted.**

Control of Contacts: There are no restrictions among immune or susceptible populations. Varicella vaccine is recommended for all susceptible children, unless contraindicated. Children who have not been immunized previously and who do not have a reliable history or exposure to chickenpox are considered susceptible.

General Measures: Susceptible persons can develop chickenpox following direct or indirect contact with the fluid from shingles blisters before they are crusted over. Follow good hand washing hygiene. Susceptible pregnant women should contact their healthcare providers to determine if they are protected against chickenpox.

Streptococcal Sore Throat and Scarlet Fever

Reportable to WCHD: No

Recommend Note Home: No

Incubation Period: 2 to 4 days

Signs and Symptoms: Initial symptoms are fever, sore throat, often enlarged lymph nodes in neck. Scarlet fever occurs most commonly in association with pharyngitis. Scarlet fever-producing strains of bacteria cause a fine, red rash that feels like sandpaper that appears one to three days after onset of sore throat. As rash fades, skin may peel. The tongue may become bright red with a strawberry-like appearance. Untreated or incompletely treated cases are at risk of developing rheumatic fever or inflammation of the kidney (glomerulonephritis).

Communicability Period: Untreated, ten day to weeks; for treated individuals, generally one to two days.

Method of Transmission: Person-to-person by direct contact with nasal secretions, and by ingestion of food contaminated by an infected food handler's nasal secretions or streptococci present on skin. Transmission is rare when there is contact with articles handled by an infected person.

Control of Cases: **Exclude case from school until twenty-four hours after treatment begins; readmit provided fever is absent.**

Control of Contacts: No restrictions.

General Measure: Teach importance of covering mouth when coughing or sneezing. Educate about the importance of proper hand washing. Stress the importance of completing the full course of antibiotics.

2015 Recommended Immunizations for Children from Birth Through 6 Years Old

Birth	1 month	2 months	4 months	6 months	12 months	15 months	18 months	19–23 months	2–3 years	4–6 years
HepB	HepB			HepB						
		RV	RV	RV						
		DTaP	DTaP	DTaP		DTaP				DTaP
		Hib	Hib	Hib	Hib					
		PCV	PCV	PCV	PCV					
		IPV	IPV	IPV						IPV
				Influenza (Yearly)*						
					MMR					MMR
					Varicella					Varicella
					HepA§					

Is your family growing? To protect your new baby and yourself against whooping cough, get a Tdap vaccine in the third trimester of each pregnancy. Talk to your doctor for more details.

Shaded boxes indicate the vaccine can be given during shown age range.

NOTE: If your child misses a shot, you don't need to start over, just go back to your child's doctor for the next shot. Talk with your child's doctor if you have questions about vaccines.

FOOTNOTES:

* Two doses given at least four weeks apart are recommended for children aged 6 months through 8 years of age who are getting a l g l djsc l x_ &flu' vaccine for the first time and for some other children in this age group.

§ Two doses of HepA vaccine are needed for lasting protection. The first dose of HepA vaccine should be given between 12 months and 23 months of age. The second dose should be given 6 to 18 months later. HepA vaccination may be given to any child 12 months and older to protect against HepA. Children and adolescents who did not receive the HepA vaccine and are at high-risk, should be vaccinated against HepA.

If your child has any medical conditions that put him at risk for infection or is traveling outside the United States, talk to your child's doctor about additional vaccines that he may need.

SEE BACK PAGE FOR MORE INFORMATION ON VACCINE-PREVENTABLE DISEASES AND THE VACCINES THAT PREVENT THEM.

For more information, call toll free
1-800-CDC-INFO (1-800-232-4636)
or visit
http://www.cdc.gov/vaccines

U.S. Department of Health and Human Services
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AMERICAN ACADEMY OF FAMILY PHYSICIANS
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Vaccine-Preventable Diseases and the Vaccines that Prevent Them

Disease	Vaccine	Disease spread by	Disease symptoms	Disease complications
Chickenpox	Varicella vaccine protects against chickenpox.	Air, direct contact	Rash, tiredness, headache, fever	Infected blisters, bleeding disorders, encephalitis (brain swelling), pneumonia (infection in the lungs)
Diphtheria	DTaP* vaccine protects against diphtheria.	Air, direct contact	Sore throat, mild fever, weakness, swollen glands in neck	Swelling of the heart muscle, heart failure, coma, paralysis, death
Hib	Hib vaccine protects against *Haemophilus influenzae* type b.	Air, direct contact	May be no symptoms unless bacteria enter the blood	Meningitis (infection of the covering around the brain and spinal cord), intellectual disability, epiglottitis (life-threatening infection that can block the windpipe and lead to serious breathing problems), pneumonia (infection in the lungs), death
Hepatitis A	HepA vaccine protects against hepatitis A.	Direct contact, contaminated food or water	May be no symptoms, fever, stomach pain, loss of appetite, fatigue, vomiting, jaundice (yellowing of skin and eyes), dark urine	Liver failure, arthralgia (joint pain), kidney, pancreatic, and blood disorders
Hepatitis B	HepB vaccine protects against hepatitis B.	Contact with blood or body fluids	May be no symptoms, fever, headache, weakness, vomiting, jaundice (yellowing of skin and eyes), joint pain	Chronic liver infection, liver failure, liver cancer
Flu	Flu vaccine protects against influenza.	Air, direct contact	Fever, muscle pain, sore throat, cough, extreme fatigue	Pneumonia (infection in the lungs)
Measles	MMR** vaccine protects against measles.	Air, direct contact	Rash, fever, cough, runny nose, pinkeye	Encephalitis (brain swelling), pneumonia (infection in the lungs), death
Mumps	MMR**vaccine protects against mumps.	Air, direct contact	Swollen salivary glands (under the jaw), fever, headache, tiredness, muscle pain	Meningitis (infection of the covering around the brain and spinal cord) , encephalitis (brain swelling), inflammation of testicles or ovaries, deafness
Pertussis	DTaP* vaccine protects against pertussis (whooping cough).	Air, direct contact	Severe cough, runny nose, apnea (a pause in breathing in infants)	Pneumonia (infection in the lungs), death
Polio	IPV vaccine protects against polio.	Air, direct contact, through the mouth	May be no symptoms, sore throat, fever, nausea, headache	Paralysis, death
Pneumococcal	PCV vaccine protects against pneumococcus.	Air, direct contact	May be no symptoms, pneumonia (infection in the lungs)	Bacteremia (blood infection), meningitis (infection of the covering around the brain and spinal cord), death
Rotavirus	RV vaccine protects against rotavirus.	Through the mouth	Diarrhea, fever, vomiting	Severe diarrhea, dehydration
Rubella	MMR** vaccine protects against rubella.	Air, direct contact	Children infected with rubella virus sometimes have a rash, fever, swollen lymph nodes	Very serious in pregnant women—can lead to miscarriage, stillbirth, premature delivery, birth defects
Tetanus	DTaP* vaccine protects against tetanus.	Exposure through cuts in skin	Stiffness in neck and abdominal muscles, difficulty swallowing, muscle spasms, fever	Broken bones, breathing difficulty, death

* DTaP combines protection against diphtheria, tetanus, and pertussis.
** MMR combines protection against measles, mumps, and rubella.

Last updated January 04ˢ 2013 • CS245366-A -

2015 Recommended Immunizations for Children from 7 Through 18 Years Old

7–10 YEARS	11-12 YEARS	13-18 YEARS
Tdap [1]	Tetanus, Diphtheria, Pertussis (Tdap) Vaccine	Tdap
	Human Papillomavirus (HPV) Vaccine (3 Doses)[2]	HPV
MCV4	Meningococcal Conjugate Vaccine (MCV4) Dose 1[3]	MCV4 Dose 1[3] / Booster at age 16 years
Influenza (Yearly)[4]		
Pneumococcal Vaccine[5]		
Hepatitis A (HepA) Vaccine Series[6]		
Hepatitis B (HepB) Vaccine Series		
Inactivated Polio Vaccine (IPV) Series		
Measles, Mumps, Rubella (MMR) Vaccine Series		
Varicella Vaccine Series		

These shaded boxes indicate when the vaccine is recommended for all children unless your doctor tells you that your child cannot safely receive the vaccine.

These shaded boxes indicate the vaccine should be given if a child is catching-up on missed vaccines.

These shaded boxes indicate the vaccine is recommended for children with certain health conditions that put them at high risk for serious diseases. Note that healthy children **can** get the HepA series[6]. See vaccine-specific recommendations at www.cdc.gov/vaccines/pubs/ACIP-list.htm.

FOOTNOTES

[1] Tdap vaccine is recommended at age 11 or 12 to protect against tetanus, diphtheria and pertussis. If your child has not received any or all of the DTaP vaccine series, or if you don't know if your child has received these shots, your child needs a single dose of Tdap when they are 7 -10 years old. Talk to your child's health care provider to find out if they need additional catch-up vaccines.

[2] All 11 or 12 year olds – both girls *and* boys – should receive 3 doses of HPV vaccine to protect against HPV-related disease. The full HPV vaccine series should be given as recommended for best protection.

[3] Meningococcal conjugate vaccine (MCV) is recommended at age 11 or 12. A booster shot is recommended at age 16. Teens who received MCV for the first time at age 13 through 15 years will need a one-time booster dose between the ages of 16 and 18 years. If your teenager missed getting the vaccine altogether, ask their health care provider about getting it now, especially if your teenager is about to move into a college dorm or military barracks.

[4] Everyone 6 months of age and older—including preteens and teens—should get a flu vaccine every year. Children under the age of 9 years may require more than one dose. Talk to your child's health care provider to find out if they need more than one dose.

[5] Pneumococcal Conjugate Vaccine (PCV13) and Pneumococcal Polysaccharide Vaccine (PPSV23) are recommended for some children 6 through 18 years old with certain medical conditions that place them at high risk. Talk to your healthcare provider about pneumococcal vaccines and what factors may place your child at high risk for pneumococcal disease.

[6] Hepatitis A vaccination is recommended for older children with certain medical conditions that place them at high risk. HepA vaccine is licensed, safe, and effective for all children of all ages. Even if your child is not at high risk, you may decide you want your child protected against HepA. Talk to your healthcare provider about HepA vaccine and what factors may place your child at high risk for HepA.

For more information, call toll free 1-800-CDC-INFO (1-800-232-4636) or visit http://www.cdc.gov/vaccines/teens

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Vaccine-Preventable Diseases and the Vaccines that Prevent Them

Diphtheria (Can be prevented by Tdap vaccine)

Diphtheria is a very contagious bacterial disease that affects the respiratory system, including the lungs. Diphtheria bacteria can be passed from person to person by direct contact with droplets from an infected person's cough or sneeze. When people are infected, the diptheria bacteria produce a toxin (poison) in the body that can cause weakness, sore throat, low-grade fever, and swollen glands in the neck. Effects from this toxin can also lead to swelling of the heart muscle and, in some cases, heart failure. In severe cases, the illness can cause coma, paralysis, and even death.

Hepatitis A (Can be prevented by HepA vaccine)

Hepatitis A is an infection in the liver caused by hepatitis A virus. The virus is spread primarily person-to-person through the fecal-oral route. In other words, the virus is taken in by mouth from contact with objects, food, or drinks contaminated by the feces (stool) of an infected person. Symptoms include fever, tiredness, loss of appetite, nausea, abdominal discomfort, dark urine, and jaundice (yellowing of the skin and eyes). An infected person may have no symptoms, may have mild illness for a week or two, or may have severe illness for several months that requires hospitalization. In the U.S., about 100 people a year die from hepatitis A.

Hepatitis B (Can be prevented by HepB vaccine)

Hepatitis B is an infection of the liver caused by hepatits B virus. The virus spreads through exchange of blood or other body fluids, for example, from sharing personal items, such as razors or during sex. Hepatitis B causes a flu-like illness with loss of appetite, nausea, vomiting, rashes, joint pain, and jaundice. The virus stays in the liver of some people for the rest of their lives and can result in severe liver diseases, including fatal cancer.

Human Papillomavirus (Can be prevented by HPV vaccine)

Human papillomavirus is a common virus. HPV is most common in people in their teens and early 20s. It is the major cause of cervical cancer in women and genital warts in women and men. The strains of HPV that cause cervical cancer and genital warts are spread during sex.

Influenza (Can be prevented by annual flu vaccine)

Influenza is a highly contagious viral infection of the nose, throat, and lungs. The virus spreads easily through droplets when an infected person coughs or sneezes and can cause mild to severe illness. Typical symptoms include a sudden high fever, chills, a dry cough, headache, runny nose, sore throat, and muscle and joint pain. Extreme fatigue can last from several days to weeks. Influenza may lead to hospitalization or even death, even among previously healthy children.

Measles (Can be prevented by MMR vaccine)

Measles is one of the most contagious viral diseases. Measles virus is spread by direct contact with the airborne respiratory droplets of an infected person. Measles is so contagious that just being in the same room after a person who has measles has already left can result in infection. Symptoms usually include a rash, fever, cough, and red, watery eyes. Fever can persist, rash can last for up to a week, and coughing can last about 10 days. Measles can also cause pneumonia, seizures, brain damage, or death.

Meningococcal Disease (Can be prevented by MCV vaccine)

Meningococcal disease is caused by bacteria and is a leading cause of bacterial meningitis (infection around the brain and spinal cord) in children. The bacteria are spread through the exchange of nose and throat droplets, such as when coughing, sneezing or kissing. Symptoms include nausea, vomiting, sensitivity to light, confusion and sleepiness. Meningococcal disease also causes blood infections. About one of every ten people who get the disease dies from it. Survivors of meningococcal disease may lose their arms or legs, become deaf, have problems with their nervous systems, become developmentally disabled, or suffer seizures or strokes.

Mumps (Can be prevented by MMR vaccine)

Mumps is an infectious disease caused by the mumps virus, which is spread in the air by a cough or sneeze from an infected person. A child can also get infected with mumps by coming in contact with a contaminated object, like a toy. The mumps virus causes fever, headaches, painful swelling of the salivary glands under the jaw, fever, muscle aches, tiredness, and loss of appetite. Severe complications for children who get mumps are uncommon, but can include meningitis (infection of the covering of the brain and spinal cord), encephalitis (inflammation of the brain), permanent hearing loss, or swelling of the testes, which rarely can lead to sterility in men.

Pertussis (Whooping Cough) (Can be prevented by Tdap vaccine)

Pertussis is caused by bacteria spread through direct contact with respiratory droplets when an infected person coughs or sneezes. In the beginning, symptoms of pertussis are similar to the common cold, including runny nose, sneezing, and cough. After 1-2 weeks, pertussis can cause spells of violent coughing and choking, making it hard to breathe, drink, or eat. This cough can last for weeks. Pertussis is most serious for babies, who can get pneumonia, have seizures, become brain damaged, or even die. About two-thirds of children under 1 year of age who get pertussis must be hospitalized.

Pneumococcal Disease

(Can be prevented by Pneumococcal vaccine)

Pneumonia is an infection of the lungs that can be caused by the bacteria called pneumococcus. This bacteria can cause other types of infections too, such as ear infections, sinus infections, meningitis (infection of the covering around the brain and spinal cord), bacteremia and sepsis (blood stream infection). Sinus and ear infections are usually mild and are much more common than the more severe forms of pneumococcal disease. However, in some cases pneumococcal disease can be fatal or result in long-term problems, like brain damage, hearing loss and limb loss. Pneumococcal disease spreads when people cough or sneeze. Many people have the bacteria in their nose or throat at one time or another without being ill—this is known as being a carrier.

Polio (Can be prevented by IPV vaccine)

Polio is caused by a virus that lives in an infected person's throat and intestines. It spreads through contact with the feces (stool) of an infected person and through droplets from a sneeze or cough. Symptoms typically include sudden fever, sore throat, headache, muscle weakness, and pain. In about 1% of cases, polio can cause paralysis. Among those who are paralyzed, up to 5% of children may die because they become unable to breathe.

Rubella (German Measles) (Can be prevented by MMR vaccine)

Rubella is caused by a virus that is spread through coughing and sneezing. In children rubella usually causes a mild illness with fever, swollen glands, and a rash that lasts about 3 days. Rubella rarely causes serious illness or complications in children, but can be very serious to a baby in the womb. If a pregnant woman is infected, the result to the baby can be devastating, including miscarriage, serious heart defects, mental retardation and loss of hearing and eye sight.

Tetanus (Lockjaw) (Can be prevented by Tdap vaccine)

Tetanus is caused by bacteria found in soil. The bacteria enters the body through a wound, such as a deep cut. When people are infected, the bacteria produce a toxin (poison) in the body that causes serious, painful spasms and stiffness of all muscles in the body. This can lead to "locking" of the jaw so a person cannot open his or her mouth, swallow, or breathe. Complete recovery from tetanus can take months. Three of ten people who get tetanus die from the disease.

Varicella (Chickenpox) (Can be prevented by varicella vaccine)

Chickenpox is caused by the varicella zoster virus. Chickenpox is very contagious and spreads very easily from infected people. The virus can spread from either a cough, sneeze. It can also spread from the blisters on the skin, either by touching them or by breathing in these viral particles. Typical symptoms of chickenpox include an itchy rash with blisters, tiredness, headache and fever. Chickenpox is usually mild, but it can lead to severe skin infections, pneumonia, encephalitis (brain swelling), or even death.

If you have any questions about your child's vaccines, talk to your healthcare provider.

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2015 Recommended Immunizations for Adults: **By Age**

If you are this age, talk to your healthcare professional about these vaccines →

If you are this age,	**Flu** *Influenza*	**Td/Tdap** Tetanus, diphtheria, pertussis	**Shingles** *Zoster*	**Pneumococcal** PCV13	**Pneumococcal** PPSV23	**Meningococcal**	**MMR** Measles, mumps, rubella	**HPV** *Human papillomavirus* for women	**HPV** *Human papillomavirus* for men	**Chickenpox** *Varicella*	**Hepatitis A**	**Hepatitis B**	**Hib** *Haemophilus influenzae* type b
19 - 21 years	Flu vaccine every year	1 dose of Tdap* Td booster every 10 years		1 dose	1 or 2 doses	1 or more doses	1or 2 doses	3 doses	3 doses	2 doses	2 doses	3 doses	1 or 3 doses
22 - 26 years									3 doses				
27 - 49 years													
50 - 59 years													
60 - 64 years			1 dose										
65+ year				1 dose	1 dose								

More Information:

There are several flu vaccines available. Talk to your healthcare professional about which flu vaccines is right for you.

* If you are pregnant, you should get a Tdap vaccine during the **3rd trimester of every pregnancy** to help protect your babies from pertussis (whooping cough).

You should get zoster vaccine even if you've had shingles before.

There are two different types of pneumococcal vaccine: PCV13 (conjugate) and PPSV23 (polysaccharide). Talk with your healthcare professional to find out if one or both pneumococcal vaccines are recommended for you.

Your healthcare professional will let you know how many doses you need.

Recommended for you if you did not get it when you were a child.

If you were born in 1957 or after, and don't have a record of being vaccinated or having had measles, mumps and rubella, talk to your healthcare professional about how many doses you may need.

There are two HPV vaccines but only one HPV vaccine (Gardasil®) should be given to men.

If you are a male 22 through 26 years old and have sex with men you should complete the HPV vaccine series if you have not already done so.

Your healthcare professional will let you know how many doses you need.

For more information, call 1-800-CDC-INFO (1-800-232-4636) or visit www.cdc.gov/vaccines

Recommended For You: This vaccine is recommended for you ***unless*** your healthcare professional tells you that you cannot safely receive it or that you do not need it.

May Be Recommended For You: This vaccine is recommended for you if you have certain risk factors due to your health, job, or lifestyle that are not listed here. Talk to your healthcare professional to see if you need this vaccine.

If you are traveling outside the United States, you may need additional vaccines.
Ask your healthcare professional about which vaccines you may need at least 6 weeks prior to your travel.

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

CS251118

2015 Recommended Immunizations for Adults: **By Health Condition**

If you have this health condition, talk to your healthcare professional about these vaccines

If you have this health condition	**Flu** *Influenza*	**Td/Tdap** Tetanus, diphtheria, pertussis	**Shingles** *Zoster*	**Pneumococcal** PCV13	**Pneumococcal** PPSV23	**Meningococcal**	**MMR** Measles, mumps, rubella	**HPV** *Human papillomavirus* for women	**HPV** *Human papillomavirus* for men	**Chickenpox** *Varicella*	**Hepatitis A**	**Hepatitis B**	**Hib** *Haemophilus influenzae* type b
Pregnancy	Flu vaccine every year	*see below	SHOULD NOT GET VACCINE		1 - 2 doses	1 or more doses	SHOULD NOT GET VACCINE	3 doses through age 26 years	3 doses through age 26 years	SHOULD NOT GET VACCINE	2 doses	3 doses	post-HSCT* recipients only
Weakened Immune System		1 dose of Tdap followed by Td booster every 10 years		1 dose	1 - 2 doses		1 or 2 doses			2 doses		3 doses	1 or 3 doses
HIV: **CD4 count less than 200**			1 dose for those 60 years or older			1 or more doses						3 doses	1 or 3 doses
HIV: **CD4 count 200 or greater**				1 dose									
Kidney disease or poor kidney function					1 - 2 doses			3 doses through age 26 years	3 doses through age 21 years				
Asplenia (if you do not have a spleen or if it does not work well)						1 or more doses						3 doses	1 or 3 doses
Heart disease Chronic lung disease Chronic alcoholism				1 dose									
Diabetes (Type 1 or Type 2)						1 or more doses						3 doses	1 or 3 doses
Chronic Liver Disease											2 doses		

More Information:

There are several flu vaccines available. Talk to your healthcare professional about which flu vaccines is right for you.

* If you are pregnant, you should get a Tdap vaccine during the **3rd trimester of every pregnancy** to help protect your babies from pertussis (whooping cough).

You should get zoster vaccine even if you've had shingles before.

There are two different types of pneumococcal vaccine: PCV13 (conjugate) and PPSV23 (polysaccharide). Talk with your healthcare professional to find out if one or both pneumococcal vaccines are recommended for you.

Your healthcare professional will let you know how many doses you need.

Recommended for you if you did not get it when you were a child.

If you were born in 1957 or after, and don't have a record of being vaccinated or having had measles, mumps and rubella, talk to your healthcare professional about how many doses you may need.

There are two HPV vaccines but only one HPV vaccine (Gardasil®) should be given to men.

If you are a male 22 through 26 years old and have sex with men you should complete the HPV vaccine series if you have not already done so.

Your healthcare professional will let you know how many doses you need.

*Hematopoietic stem cell transplant

Recommended For You: This vaccine is recommended for you ***unless*** your healthcare professional tells you that you cannot safely receive it or that you do not need it.

May Be Recommended For You: This vaccine is recommended for you if you have certain other risk factors due to your age, health, job, or lifestyle that are not listed here. Talk to your healthcare professional to see if you need this vaccine.

YOU SHOULD NOT GET THIS VACCINE

If you are traveling outside the United States, you may need additional vaccines.
Ask your healthcare professional about which vaccines you may need at least 6 weeks prior to your travel.

For more information, call 1-800-CDC-INFO (1-800-232-4636) or visit www.cdc.gov/vaccines

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