

Introduction

This guide was developed by the Illinois Department of Public Health (IDPH) to furnish school officials, health care providers and other interested persons with information on the control of communicable diseases. It provides information on 48 common reportable and non-reportable communicable diseases and conditions. More detailed information on many of these diseases can be obtained from the IDPH Web site (www.idph.state.il.us) or from the Web site of the U.S. Centers for Disease Control and Prevention (CDC) (www.cdc.gov). Both sites have a topics listing that affords easy access to communicable disease-related information.

Those diseases or conditions marked with an asterisk must be reported to a local health department or to IDPH. Time frames for reporting to the health authority are designated for each reportable disease. Prompt reporting to the local health authority of all cases of communicable diseases can greatly reduce opportunities for these diseases to be spread.

Information related to exclusion from day care and school attendance is noted in bold in the "Control of Case" and "Contact" 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)
Control of Tuberculosis Code (77 III. Adm. Code 696)

They can all be accessed through the IDPH Web site, < <u>www.idph.state.il.us/rulesregs/rules-index.htm</u>>.

Appendices to this document provide the recommended immunization schedules for infants and children and for adults, an explanation of and graphics depicting proper handwashing technique, an abbreviated definition of personal hygiene, and a list of regional IDPH offices and local health departments.

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Animal Bites (potential for rabies)

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 can be days or years following the time of exposure. Once symptoms appear, rabies is almost always fatal.

Early 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.

Period of Communicability

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.

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 the local health authority. 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. Should it be determined that a person not capable of knowing a bite occurred (an infant or a sleeping person) has been present in the same room with a bat, rabies post-exposure prophylaxis will be recommended if the bat cannot be tested and found negative for rabies.

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.

Bacterial Vaginosis

Incubation Period

Usually five to seven days

Early Signs and Symptoms

Males are usually asymptomatic but may have mild urethral discharge and/or painful urination; treatment is indicated if a female sexual partner becomes symptomatically reinfected. Females, too, are usually asymptomatic but may have malodorous, gray vaginal discharge.

Period of Communicability

Until adequately treated

Method of Transmission

The disease is primarily caused by vaginal flora imbalance. Occasionally, it will be transmitted from person to person via sexual contact.

Control of Cases

Cases should refrain from sexual intercourse until symptoms have resolved and medication is completed.

Control of Contacts

No restrictions

General Measures

Educate about the transmission of the bacteria through sexual behavior.

Chancroid*

Incubation Period

Three to five days, but may be up to 14 days

Early Signs and Symptoms

Males experience painful, multiple genital lesions and enlarged and tender inguinal nodes unilaterally or bilaterally; inguinal bubo may be present. Females experience usually painless genital lesions, vaginal discharge, painful urination and painful intercourse.

Period of Communicability

Until adequately treated

Method of Transmission

Transmission occurs through direct sexual contact with discharges from open lesions and pus from buboes. Autoinoculation to non-genital sites may occur in infected persons.

Control of Cases

Cases should refrain from sexual intercourse until symptoms have resolved and medication is completed.

Control of Contacts

No restrictions

General Measures

Educate about the transmission of the bacteria through sexual behavior.

^{*} Reportable as soon as possible during normal business hours, but within seven business days, to the local health authority

Chickenpox (Varicella)*

Incubation Period

Can be 10-21 days, but commonly 13-17 days

Early Signs and Symptoms

A sudden onset of mild fever, malaise and itchy rash progresses to vesicular lesions that last three to four days before scabbing.

Period of Communicability

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 formed crusts.

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 not less than five days after the eruption of the last vesicles or until the vesicles become dry. Hospitalized cases should be excluded from immunocompromised susceptible persons for up to 21 days (28 days if varicella-zoster immune globulin is used). Articles soiled by patient discharges from the nose, throat and lesions should be disinfected.

Control of Contacts

Notify staff members and parents when a case of chickenpox is identified. There are no restrictions among immune or susceptible populations. Unvaccinated contacts should be immunized. Varicella vaccine can be effective in preventing or modifying varicella illness if used within three days of initial exposure. Check with the local health department about vaccine availability for susceptible children and adults. Note: A small proportion of persons vaccinated develop a non-infectious varicella-like rash at the site of infection within a week to two weeks of vaccination.

Varicella-zoster immune globulin (VZIG) given within 96 hours of exposure may prevent or modify disease for close contacts with immunosuppression and for high-risk neonates. VZIG supplies are limited and are dispensed to eligible persons by the American Red Cross.

General Measures

Varicella vaccine is routinely recommended for all children between 12-18 months of age unless contraindicated. It is also recommended for all susceptible children by age 13. Susceptible children are those who have not been immunized previously or who do not have a reliable history of chickenpox. Susceptible adults who live or work in environments where the virus is likely should consider vaccination. Persons 13 years of age and older should receive two doses of vaccine.

* Uncomplicated cases are reportable to the local health authority by age, sex and week of onset. Cases with complications, such as meningitis, are reportable within seven business days to the local health authority.

Shingles is the result of a reactivation of infection with the virus that causes chickenpox. See page 44 for information on shingles.

Chlamydia*

Incubation Period

In males, it is poorly defined, probably seven to 14 days or longer. Females are usually asymptomatic.

Early Signs and Symptoms

Males have a mucoid discharge and/or painful urination. Females are usually asymptomatic but may have watery vaginal discharge, painful urination and a cervical mucoid or pus-filled discharge.

Period of Communicability

Until adequately treated

Method of Transmission

The disease is transmitted from person to person via sexual contact; perinatal transmission can occur from mother to infant during birth process.

Control of Cases

Refrain from sexual intercourse until symptoms have resolved and medication is completed.

Control of Contacts

No restrictions

General Measures

Educate about the transmission of chlamydia through sexual behavior.

^{*} Reportable as soon as possible during normal business hours, but within seven business days, to the local health authority

Common Cold

Incubation Period

Usually one to three days

Early Signs and Symptoms

These include runny nose, watery eyes and a generalized tired feeling.

Period of Communicability

One day before onset of symptoms to five days after symptoms begin

Method of Transmission

By direct contact or inhalation of airborne droplets of nose and throat secretions, or, by indirect contact of hands to articles freshly soiled by discharges of the nose and throat

Control of Cases

Cases need not be excluded from school unless fever is present; children excluded due to fever may be readmitted when fever subsides.

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 and proper handwashing before any activity that brings hands in contact with the mouth, e.g., eating, drinking, smoking, etc. Emphasize the importance of proper disposal of used tissues and prompt handwashing after contact with respiratory secretions and after handling articles soiled with respiratory secretions; discourage sharing of glasses, straws, water bottles, eating utensils, etc.

Cytomegalovirus (CMV)

Incubation Period

While not well-defined in all circumstances, illness following transfusion with infected blood usually begins three to 12 weeks following transfusion. Infections acquired during birth are also first demonstrable three to 12 weeks after delivery.

Early Signs and Symptoms

CMV is ubiquitous and asymptomatic infections are the most common. The few who develop symptoms usually have a mononucleosis-like illness with fever, swollen lymph nodes and sore throat. The most severe infections occur in developing fetuses when a previously uninfected pregnant woman is exposed to the virus and may transmit the infection to her fetus. Congenital infection may result in mental retardation, hearing loss or other abnormalities. The vast majority of CMV infections, i.e., 90 percent, do not cause disease.

Period of Communicability

CMV excretion may occur for many months and may persist or be episodic for several years following primary infection.

Method of Transmission

Transmission usually occurs from person to person via direct contact of virus-containing saliva or urine with a break in the skin or a mucous membrane of the eye, nose or mouth. Risk of CMV transmission occurs in all settings where there is close personal contact with and among infants and children. Sexual transmission occurs via exposure to virus in cervical secretions or semen. Perinatal transmission also can occur from mother to infant.

Control of Cases

No restrictions

Control of Contacts

No restrictions

General Measures

Routine hygienic procedures are the most effective method of preventing CMV transmission. CMV circulation is most prevalent in children younger than 2 years of age. Educate women of childbearing age about the potential risks of acquiring CMV infection and the importance of proper handwashing before any activity that brings hands in contact with eyes, nose or mouth, e.g., eating, drinking, smoking, etc. If caregivers of children younger than 2 years of age expect to become pregnant, CMV antibody testing and consultation with a physician can identify if they are immune to CMV; for those women without immunity, temporarily limiting contact with children younger than 2 may reduce the risk. Contact with children that does not involve exposure to saliva or urine poses no risk of CMV transmission.

Diphtheria*

Incubation Period

Usually two to five days, occasionally longer

Early Signs and Symptoms

Moderate fever, swollen lymph glands, sore throat with gray-white patches surrounding inflamed zones

Period of Communicability

Period is variable, but usually two weeks until virulent bacilli have disappeared from discharges and lesions. Carriers may shed organisms for six months or more.

Method of Transmission

Person-to-person spread is by droplet or direct contact with respiratory tract or skin lesions of an infected person or by indirect contact with articles soiled by infected patient's discharges from lesions; raw milk may serve as a vehicle.

Control of Cases

Case must be isolated and excluded from day care or school until two successive cultures from both nose and throat, taken not less than 24 hours apart, are negative for diphtheria bacilli; or when virulence tests prove bacilli to be avirulent. For purposes of releasing a case from isolation, cultures should not be accepted for testing until at least seven days after completion of antibiotic agents. Articles soiled by or in contact with an infected patient must be disinfected.

Control of Contacts

All susceptible contacts should be isolated. All contacts should be cultured from nose and throat and contacts found to be carriers should be kept under quarantine and isolation until case requirements are met. Contacts who are food handlers or in sensitive occupations must be excluded from employment until shown by two successive negative cultures from the nose and throat not to be carriers.

General Measures

Diphtheria vaccine is routinely recommended for all susceptible persons, 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. All individuals should be actively immunized against diphtheria and the immunity should be bolstered by periodic booster inoculations. Persons 6 years of age and older should be given tetanus-diphtheria combined toxoid (Td), either as a primary immunizing agent for diphtheria or as a booster for diphtheria and tetanus, every 10 years. Persons traveling to or through countries where diphtheria is common should ensure that their diphtheria immunization is current.

^{*} Reportable as soon as possible during normal business hours, but within 24 hours, to the local health authority (i.e., within eight regularly scheduled business hours after identifying the case)

E. Coli O157:H7*

Incubation Period

Ranges from two to eight days with a median of three to four days

Early Signs and Symptoms

Diarrhea may range from mild and non-bloody to stools that are virtually all blood. Severe abdominal pain is typical; fever is usually absent. Any child with bloody diarrhea requires immediate medical attention. Asymptomatic infections also can occur.

Period of Communicability

Period can vary: a week or less in adults, but three weeks in one-third of children. Prolonged carriage is uncommon.

Method of Transmission

Mainly by ingestion of contaminated food (most often undercooked ground beef) but also from raw milk, fruit, fruit juices or vegetables contaminated with animal feces. Person-to-person transmission via the fecal-oral route can occur if hygiene is poor and handwashing is inadequate. Waterborne transmission also has been documented, particularly when children in diapers are allowed to enter swimming or wading pools, water parks or beaches.

Control of Cases

Exclude until diarrhea ceases for at least 24 hours. Cases who are food handlers are prohibited from performing their job duties until two consecutive stool specimens are negative. Cases who work in sensitive occupations such as health or child care also may be restricted according to current IDPH rules and regulations.

Control of Contacts

No restrictions in the general school population. Household contacts who work as food handlers or in sensitive occupations such as health or child care also may be restricted according to current IDPH rules and regulations.

General Measures

Teach the importance of basic hygiene and proper handwashing. Educate about proper sanitary methods for food preparation, handling, storing and thorough cooking of foods of animal origin, especially ground beef. (Ground beef should be cooked to an internal temperature of 160 degrees Fahrenheit for at least 15-16 seconds.) Children who are not toilet-trained should wear tight fitting rubber or plastic pants before entering public wading or swimming pools, water parks or beaches. Persons with diarrhea should not engage in recreational water activities. Discourage use of common food bowls or shared servings of food items, e.g., popcorn.

^{*} Reportable as soon as possible during normal business hours, but within 24 hours, to the local health authority (i.e., within eight regularly scheduled business hours after identifying the case)

Fever

Incubation Period

Variable, determined by the causative agent

Early Signs And Symptoms

Oral temperature of 100 degrees F or greater

Period of Communicability

Variable, determined by causative agent

Method of Transmission

Fever itself is not transmissible; the causative agent of the fever will determine the mode of transmission.

Control of Cases

Case excluded due to fever may be readmitted when fever subsides, unless fever accompanies disease(s) for which there are other restrictions.

Control of Contacts

There are no restrictions in general school population, unless the causative agent of the fever indicates an appropriate treatment or prophylaxis of identified contacts.

General Measures

Variable, determined by the causative agent

Fifth Disease / Erythema Infectiosum

(Parvovirus B19)

Incubation Period

Variable, usually four to 21 days

Early Signs and Symptoms

This is a mild disease, with low-grade or no fever and a distinct facial rash (slapped-cheek appearance) frequently associated with a lace-like rash on the trunk and extremities. The rash fades within a week but may recur for one to three weeks or longer when the person is exposed to sunlight, heat, cold, exercise or stress. Not all infected persons will develop a rash. A sore throat, respiratory symptoms and abdominal complaints may precede onset of rash.

Period of Communicability

In persons with rash illness alone, the period of infectiousness is before onset of the rash; in the immunosuppressed and persons with severe anemia, communicability may last for months to years.

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 or recreation, 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.

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 (including stillbirth), particularly when continuing close contact occurs with people who have erythema infectiosum infections/fifth disease (at home, at school, in child care or in health care settings). A blood test can determine if the woman has immunity. Pregnant women with sick children at home are reminded to wash hands frequently and to avoid sharing drinking cups or eating utensils. Because of widespread unapparent infections in children and adults, all women, but particularly those with school-age children, are at some degree of risk. Also, persons with certain anemias, like sickle cell anemia or chronic anemia, or persons with immune system impairments may develop serious illness.

Gastroenteritis, Viral

Incubation Period

Variable, usually one to four days

Early Signs And Symptoms

Stomach ache, nausea, vomiting, diarrhea, fever

Period of Communicability

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 and 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 handwashing. Adults should supervise the handwashing of children/youths.

Genital Candidiasis (Yeast)

Incubation Period

Variable

Early Signs and Symptoms

Males are usually asymptomatic. Females may have a white, curdy vaginal discharge, vulvar itching and vaginal soreness.

Period of Communicability

Until adequately treated

Method of Transmission

The infection is transmitted through contact with secretions or excretions of mouth, skin, vagina and especially feces from patients or carriers and by passage from mother to infant during childbirth. Factors predisposing to endogenous spread include antibiotic usage, pregnancy, oral contraceptive usage, menstruation, diabetes mellitus, corticosteroid usage and immunosuppression (including HIV infection).

Control of Cases

Refrain from sexual intercourse until symptoms have resolved and medication is completed.

Control of Contacts

No restrictions

General Measures

Educate about medication compliance and factors that may contribute to repeated episodes.

Genital Warts (Human Papillomavirus, or HPV)

Incubation Period

Average incubation period is two to three months but may range from one to 20 months.

Early Signs and Symptoms

In males, vesicular lesions are accompanied by itching; ruptured lesions form painful ulcers. In females, vesicular lesions are accompanied by itching, vaginal discharge and sometimes bleeding; ruptured lesions (with the exception of cervical lesions) form painful ulcers. Females are more likely to develop flu-like symptoms during initial outbreak. Recurrences in both males and females are likely.

Period of Communicability

When lesions are present and when the virus is being shed asymptomatically (Both male and female can shed the virus asymptomatically.)

Method of Transmission

Person-to-person via direct contact with virus

Control of Cases

Persons with genital or anal lesions should refrain from sexual contact until lesions have resolved.

Control of Contacts

No restrictions

General Measures

Educate about the transmission of HPV through close contact, including sexual behavior(s). Since HPV can be transmitted during periods of asymptomatic viral shedding, condoms should be used consistently and correctly for each episode of sexual intercourse. However, condoms can only protect against transmission when the ulcers or virus are in genital areas that are covered or protected by the condom.

Giardiasis*

Incubation Period

Variable; five to 25 days but sometimes longer

Early Signs And Symptoms

Stomachache, diarrhea, bloating; may recur several times over a period of weeks; asymptomatic infections common

Period of Communicability

Entire period of infection with this parasite

Method of Transmission

Person-to-person via the fecal-oral route; also via food or drinks contaminated by an infected food handler; can be transmitted by contaminated water

Control of Cases

Exclude case from school until clinical recovery, i.e., **absence of diarrhea and fever.** Cases or carriers who are food handlers are prohibited from performing their job duties until three consecutive stool specimens are negative for trophozoites and cysts of *Giardia lamblia*. Cases or carriers who work in sensitive occupations also may be restricted according to current IDPH rules and regulations.

Control of Contacts

No restrictions in general school population; household contacts who are food handlers should be examined for trophozoites and cysts of *Giardia lamblia* and, if positive, should be restricted according to current IDPH rules and regulations. Household contacts who work in sensitive occupations also may be restricted according to current IDPH rules and regulations.

General Measures

Teach the importance of proper handwashing; adults should supervise the handwashing of children/youths. Giardiasis can spread quickly in day care centers. Treatment is recommended.

^{*} Reportable as soon as possible during normal business hours, but within seven business days, to the local health authority

Gonorrhea*

Incubation Period

In males, one to 30 days (typically three to seven days); in females, uncertain, but within 10 days among most women who develop symptoms

Early Signs and Symptoms

In males, there is a discharge and/or painful urination. Females are usually asymptomatic but may have discharge and/or painful urination, bleeding between menstrual periods or excessive menstruation.

Period of Communicability

Until adequately treated

Method of Transmission

The infection is transmitted through contact with exudates from mucous membranes of infected persons, almost always as a result of sexual activity. Perinatal transmission can occur from mother to infant during birth process.

Control of Cases

Refrain from sexual intercourse until symptoms have resolved and medication is completed.

Control of Contacts

No restrictions

General Measures

Educate about the transmission of gonorrhea through sexual behavior.

^{*} Reportable as soon as possible during normal business hours, but within seven business days, to the local health authority

Hand, Foot and Mouth Disease (Coxsackievirus A16)

Incubation Period

Usually three to seven days

Early 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 10 days or infections can be asymptomatic.

Period of Communicability

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. Hand-foot-and-mouth disease 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.

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, e.g., 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)

Incubation Period

Eggs hatch in seven to 10 days.

Early Signs and Symptoms

Scratching of the scalp; pinpoint gray/white eggs (nits) attached securely to the hair shaft

Period of Communicability

Lice or eggs (nits) are viable until destroyed by treatment. A second pediculicide application is recommended seven to 10 days following the first treatment.

Method of Transmission

By direct contact with an infested person, clothing or article

Control of Cases

Exclude case from school until the day after the first shampoo, lotion or cream rinse pediculicide is properly applied.

Control of Contacts

If head lice are found in several children in one classroom, or in more than one classroom in a school, all students need to be examined.

General Measures

Teach the importance of not sharing combs, brushes, hats and coats. Store coats, hats, scarves, etc., separately; if these items are stored on hooks, hang far enough apart to prevent items from touching. Contact your local health authority for recommendations for the control of pediculosis.

Hepatitis A Virus*

Incubation Period

Dose related; 15 to 50 days, average 28 to 30 days

Early Signs And Symptoms

Slight fever, tired feeling, loss of appetite, stomachache, nausea or vomiting are usually followed by jaundice. Young children may have mild diarrhea without jaundice.

Period of Communicability

During the two weeks of illness following the onset of symptoms, or one week after onset of jaundice

Method of Transmission

Person-to-person via the fecal-oral route; also spread via food or drinks contaminated by an infected food handler; can be transmitted by contaminated water

Control of Cases

Exclude case from school during the two weeks of illness following onset of symptoms, or for one week after onset of jaundice. Cases who are food handlers or who work in sensitive occupations are prohibited from performing their job duties during the two weeks of illness following the onset of symptoms, or one week after onset of jaundice.

Control of Contacts

There are no restrictions in general school population; household or other exceptionally close contacts should be given immune globulin (IG) if no more than 14 days have passed since their last exposure to the case.

General Measures

Teach the importance of handwashing; adults should supervise the handwashing of children/youths. IG given longer than 14 days after last exposure to the case is unlikely to prevent infection. If more than one case occurs in a day care center, IG should be considered for additional children, staff and selected households. IG is not indicated for the usual school or office setting.

^{*} Reportable as soon as possible during normal business hours, but within 24 hours, to the local health authority (i.e., within eight regularly scheduled business hours after identifying the case)

Hepatitis B Virus*

Incubation Period

Two weeks to six months, but usually six to nine weeks

Early Signs and Symptoms

Fatigue, loss of appetite, abdominal discomfort, nausea and vomiting, dark urine, light stools and jaundice are common. However, fewer than 50 percent of adults and only about 10 percent of children experience symptoms.

Period of Communicability

The blood, semen, vaginal secretions and serum-derived body fluids of persons with hepatitis B are potentially infectious for many weeks before the onset of symptoms and throughout the clinical course of the disease. About 6 percent to 10 percent of the hepatitis B infections result in chronic carriage.

Method of Transmission

By skin puncture or mucous membrane exposure to blood, serum-derived body fluids or tissues of an infected person; by vaginal, anal or oral intercourse with an infected person; or by perinatal transmission from an infected mother

Control of Cases

No restrictions considered unless the case or carrier has open, uncoverable weeping skin eruptions, exhibits aggressive behavior that poses a risk to others (e.g., biting) or is neurologically handicapped and lacks control of body secretions. Cases and carriers should be evaluated on a case-by-case basis by persons knowledgeable about HBV transmission, the case's specific circumstances, risks to others, etc. Persons previously known to be carriers must never donate blood for blood transfusion.

Control of Contacts

There are no restrictions in general school population. Infants born to infected mothers should receive hepatitis B immune globulin (HBIG) and begin vaccination within 12 hours of delivery. Sexual or intravenous drug using partners and household contacts of cases and carriers should be vaccinated.

General Measures

Hepatitis B vaccination (three doses) is routinely recommended for all susceptible children during the first 18 months of life and for children not previously vaccinated by 11 or 12 years of age, unless contraindicated. Immunization is required prior to admission to day care, pre-kindergarten programs and fifth grade.

Teach the importance of routinely applying universal precautions with all persons, regardless of HBV infection status, e.g., wear gloves when exposure to blood, blood-containing body fluids, non-intact skin or mucous membranes may occur; perform proper handwashing following these exposures and after gloves are removed; use disinfectants appropriately; and avoid sharing personal grooming articles, like toothbrushes and razors, etc. Educate about the transmission of HBV through perinatal exposure, sexual behaviors, sharing equipment used in preparing or injecting drugs, and tattooing and body piercing when performed under unsanitary conditions.

* Reportable as soon as possible during normal business hours, but within seven business days, to the local health authority

Hepatitis C Virus (HCV)*

Incubation Period

Ranges from two weeks to six months; usually six to nine weeks

Early Signs and Symptoms

Infection is usually asymptomatic (more than 90 percent of cases). Infected persons may have mild illness with insidious onset and loss of appetite, vague abdominal discomfort, nausea and/or vomiting; progression to jaundice is less common than with hepatitis B. A high percentage of HCV-infected persons develop chronic infection (50 percent - 80 percent) that may take 20 or more years to produce symptoms resulting from cirrhosis or liver cancer.

Period of Communicability

Occurs throughout the course of the infection

Method of Transmission

HCV is primarily transmitted through exposure to an infected person's blood or tissue (e.g., through contaminated needles or sharps). Sexual transmission has been documented but occurs far less efficiently and frequently than transmission acquired through blood exposures.

Control of Cases

No restrictions

Control of Contacts

No restrictions

General Measures

Teach the importance of routinely applying universal precautions to all persons, regardless of HCV infection status (e.g., wear gloves when exposure to blood, blood-containing body fluids, non-intact skin or mucous membranes may occur; perform proper handwashing following these exposures and after gloves are removed; use disinfectants appropriately, etc.). Toothbrushes, needles, razors or any personal care item that may have blood contamination should not be shared. Persons infected with HCV should be vaccinated against hepatitis A and B viruses to prevent additional liver damage. Open cuts and sores should be covered. Educate about the risk of acquiring HCV through sharing of needles or syringes used for drug injection and from tattooing and body piercing when done under insanitary conditions.

^{*} Reportable as soon as possible during normal business hours, but within seven business days, to the local health authority

Herpes Simplex Virus - HSV (Cold Sores or Genital Herpes)

Incubation Period

Two to 12 days

Early Signs and Symptoms

Primary infections are without symptoms in 50 percent or more of infected persons; fever and malaise may be present; a sore or ulcer may be accompanied by itching and may be painful; the sore may be raised; lesions can occur on the lip, mouth, throat, eye, external genitalia or vagina. Herpes simplex lesions can also appear on areas of the body such as the torso, arms and legs.

Period of Communicability

During presence of lesions and if the virus is being shed asymptomatically

Method of Transmission

Person-to-person by direct contact with secretions from the herpes simplex sores, from genital secretions or saliva of infected persons

Control of Cases

No restrictions other than students should be excluded from contact sports such as wrestling if active lesions are present on the body (outside the genital area) until lesions have resolved; if large areas of active lesions cannot be covered or if exposure to infectious secretions by other students cannot be avoided, the student infected with herpes simplex should be excluded until lesions are dry and scabbed.

Control of Contacts

No restrictions

General Measures

Condoms can protect against transmission of herpes simplex virus but only when the ulcers or virus are in genital areas that are covered or protected by the condom. Routine personal hygiene measures can help prevent herpes simplex infections from being transmitted; for example, towels, clothing, and eating and drinking utensils should not be shared.

Human Immunodeficiency Virus (HIV) or AIDS*

Incubation Period

The asymptomatic/incubation period is variable, from months to 10 years or longer depending on the progression of disease.

Early Signs and Symptoms

At two to six weeks after infection, patients may develop viral-like illness consisting of fever, sweats, fatigue, malaise, lymphadenopathy and sore throat. Patients may then remain asymptomatic for months to years. Infected infants may fail to thrive.

Period of Communicability

From the time a person becomes infected with HIV through life

Method of Transmission

HIV is spread by sexual contact (vaginally, orally, or anally) with an infected person; by sharing needles and/or syringes or other equipment used for drug injection with someone who is infected; or through transfusion of infected blood or clotting factors. In the health care setting, workers have become infected with HIV after being stuck with needles containing HIV-infected blood. Perinatal transmission may occur before or during birth or through breastfeeding after birth.

Control of Cases

There are no restrictions unless the case has open and uncoverable weeping skin eruptions, has aggressive behavior that poses a risk to others (e.g., biting), or is neurologically handicapped and lacks control of body secretions. Cases should be evaluated on a case-by-case basis by persons knowledgeable about HIV transmission, the case's specific circumstances, risks to others, etc. The physician of an HIV-infected child may determine the patient should be excluded when measles, rubella or chickenpox is occurring at the school.

Control of Contacts

There are no restrictions in the general school population. Prevention measures need to be applied for sexual or intravenous drug using partners.

General Measures

Teach the importance of routinely applying universal precautions with all persons, regardless of known HIV infection status; e.g., wear gloves when exposure to blood, body fluids, non-intact skin or mucous membranes may occur; perform proper handwashing following these exposures and after gloves are removed; use disinfectants appropriately, etc. Educate about the transmission of HIV through sexual behaviors and sharing equipment used in preparing or injecting drugs, and through perinatal transmission.

* Reportable as soon as possible during normal business hours, but within seven business days, to the local health authority

Impetigo

Incubation Period

Variable, commonly four to 10 days

Early Signs And Symptoms

Blisters on skin that open and become covered with yellowish crust; no fever

Period of Communicability

As long as lesions continue to drain or a carrier state persists

Method of Transmission

Person-to-person by direct contact with nasal discharges or with a person who has purulent lesions; hands are the most important means of spread.

Control of Cases

Exclude case from school until 24 hours after treatment begins.

Control of Contacts

No restrictions

General Measures

Keep lesions covered while in school if possible; teach the importance of proper handwashing and emphasize strict personal hygiene. Keep fingernails clean and trimmed.

Infectious Mononucleosis (Epstein-Barr virus, or EBV)

Incubation Period

Four to six weeks

Early Signs and Symptoms

Fever, sore throat, swollen glands and fatigue are common; sometimes the liver and spleen are affected and enlarged. Infections may be asymptomatic.

Period of Communicability

Prolonged; shedding of the virus in oral secretions may persist for a year or more after infection; 15 percent to 20 percent or more of healthy adults who are EBV antibody positive are long-term carriers.

Method of Transmission

The virus is shed through saliva (also by saliva on hands, on toys, when kissing, etc.); virus is shed in saliva during the illness and possibly for a year or more after infection.

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 F or greater or 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 and frequent, proper handwashing before any activity that brings hands in contact with the mouth, e.g., eating, drinking, smoking, etc. Emphasize the importance of proper disposal of used tissues and prompt handwashing after handling articles soiled with respiratory secretions; discourage the sharing of glasses, straws, water bottles, eating utensils, etc.

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

Influenza

Incubation Period

Usually one to five days

Early Signs and Symptoms

Rapid onset of fever, headache, muscle aches, sore throat and dry cough

Period of Communicability

Until three to five days after onset of symptoms in adults, and for up to seven days after onset of symptoms 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 clinical recovery, i.e., absence of fever.

Control of Contacts

No restrictions

General Measures

Vaccine is recommended for children and adults with certain chronic diseases and for persons who provide direct care to others. Groups of persons at highest risk of influenza-related complications are persons 50 years of age or older; residents of nursing homes; and adults and children with chronic pulmonary or cardiovascular disorders and/or chronic metabolic diseases, renal dysfunction, blood disorders or immunosuppression. Otherwise healthy persons 6 months of age and older who wish to reduce their likelihood of becoming ill with influenza should also consider vaccination. Teach the importance of basic hygiene, especially covering the mouth when coughing or sneezing; educate about hand-to-mucous membrane transmission.

Measles*

Incubation Period

About 10 days, but may be seven to 18 days from exposure to onset of fever; rash usually appears about 14 days after exposure, but may be as long as 21 days.

Early Signs and Symptoms

Two- to four-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; rash lasts four to seven days.

Period of Communicability

Highly communicable from slightly before the beginning of the prodromal period to four days after the appearance of the rash

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.

Control of Cases

Cases must be isolated and excluded from school until four days after the appearance of the rash.

Control of Contacts

There are no restrictions among immunized populations. In school or day care and medical facility outbreaks, all susceptible persons should be excluded until 21 days after diagnosis of last case or, if contact becomes ill, for four days after rash develops. Unvaccinated contacts should be immunized. Vaccine administered within 72 hours of exposure and immune globulin administered to exposed infants within six days of exposure may provide protection.

General Measures

Measles vaccine is routinely recommended for susceptible persons, unless contraindicated. Immunization should be given as soon as possible on or after the first birthday and may be given as a part of measles-mumps-rubella (MMR) combined vaccine. Vaccination is required for day care, school and college entry. (For entry into school and college, two doses of measles vaccine, with the second dose given at least 28 days after the first dose, is required.)

Proof of prior measles disease is not acceptable unless laboratory evidence of immunity is presented or documentation noting the date of measles illness is signed by a physician of record. Any physician diagnosis of measles made on or after July 1, 2002, must be confirmed by laboratory evidence.

When measles is prevalent in a community, monovalent measles vaccine may be given to infants 6-11 months old. When vaccine is given prior to the first birthday, a second dose must be given on or after the first birthday and a third dose at 4-6 years of age and prior to school entry.

^{*} Reportable as soon as possible during normal business hours, but within 24 hours to local health authority (i.e., within eight regularly scheduled business hours after identifying a case)

Meningitis, Bacterial*

Incubation Period

Two to 10 days

Early Signs And Symptoms

Sudden onset of fever, headache, stiff neck (except in infants), nausea, often vomiting, a purplish-red rash in some cases, confusion or difficulty awakening from sleep are common, especially in children. In infants, poor feeding, extreme listlessness, irritability and sometimes vomiting may be the only symptoms present.

Period of Communicability

Until bacteria are no longer present in nose and throat secretions

Mode of Transmission

By direct and immediate contact with nose and throat secretions of a person carrying the bacteria, e.g., 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 child care 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 importance of basic hygiene, especially covering the mouth when coughing or sneezing; not sharing glasses, straws, eating utensils; disposing of used tissues properly; washing hands after handling soiled tissues.

* Reportable as soon as possible during normal business hours, but within 24 hours to local health authority (i.e., within eight regularly scheduled business hours after identifying a case)

Meningitis, Viral (Aseptic Meningitis)*

Incubation Period

Variable, determined by the causative agent, usually two to 10 days

Early Signs and Symptoms

Sudden onset of fever, headache, stiff neck (except in infants), nausea, often vomiting

Period of Communicability

Variable, determined by causative agent

Method of Transmission

Viral meningitis can be transmitted by failure to wash hands after toileting or other contact with infected stool (most frequently viral meningitis is due to a viral infection in the stomach and intestine [enteroviruses]); also 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, 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.

Control of Contacts

No restrictions

General Measures

Teach importance of basic hygiene, especially covering the mouth when coughing or sneezing; not sharing glasses, straws, eating utensils; disposing of used tissues properly; washing hands after handling soiled tissues and after toileting. Prophylactic antibiotics are of no value.

^{*} Reportable as soon as possible during normal business hours, but within seven business days, to the local health authority

Mumps*

Incubation Period

From 12-26 days, commonly 18 days

Early Signs and Symptoms

Fever, pain and swelling of one or more salivary glands causing jaw tenderness

Period of Communicability

From six days before onset of symptoms to nine days after developing swelling

Method of Transmission

Person-to-person spread by droplet or direct contact with patient's throat or nasal secretions

Control of Cases

Cases must be isolated and excluded from school until nine days after the onset of swelling. Hospitalized cases should be isolated for the duration of their illness. Articles soiled by or in contact with an infected patient must be disinfected.

Control of Contacts

There are no restrictions among immunized populations. Unvaccinated contacts should be immunized. Susceptible contacts should be excluded from school or the workplace from the 12th through the 25th day after exposure if other susceptible persons are present in those settings.

General Measures

Mumps vaccine is routinely recommended for all susceptible persons, unless contraindicated. Immunization should be given as soon as possible on or after the first birthday and may be given as part of a measles-mumps-rubella (MMR) combined vaccine. Vaccination is required for day care, school and college entry.

Proof of prior mumps disease requires signed documentation by a physician, including date of illness, or laboratory evidence of mumps immunity.

^{*} Reportable as soon as possible during normal business hours, but within seven business days, to the local health authority

Non-Gonococcal Urethritis/ Non-specific Vaginitis

Incubation Period

Uncertain, variable dependent on the causative organism

Early Signs and Symptoms

In males, there is mucoid to purulent urethral discharge and/or painful urination. Females are usually asymptomatic but may have watery vaginal discharge, painful urination and mucoid to purulent discharge.

Period of Communicability

Until adequately treated

Method of Transmission

Person-to-person transmission is via sexual contact; perinatal transmission can occur from mother to infant during birth process dependent on causative organism.

Control of Cases

Refrain from sexual intercourse until medication is completed.

Control of Contacts

No restrictions

General Measures

Educate about the transmission of various organisms through unprotected sexual behavior.

Pertussis*

Incubation Period

Commonly seven days, almost uniformly within 10 days and not exceeding 21 days

Early Signs and Symptoms

Initial upper respiratory symptoms feature an irritating 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.

Period of Communicability

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 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. Cases without culture confirmation should complete their vaccination series.

Control of Contacts

There are no restrictions among immunized populations. Unvaccinated contacts 6 years of age and younger should be immunized and treated. Susceptible contacts should be excluded from school, day care, and public gatherings for 14 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 is routinely recommended for all susceptible children 6 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.

^{*} Reportable as soon as possible during normal business hours, but within 24 hours, to the local health authority (i.e., within eight regularly scheduled business hours after identifying a case)

Pink Eye (Conjunctivitis)

Incubation Period

One to three days

Early Signs And Symptoms

Pink/redness of the eyes, with white or yellow discharge on the eyelids; eye pain, or redness of the eyelids or skin surrounding the eye may occur.

Period of Communicability

Until active infection resolves

Method of Transmission

By direct contact with discharge from the conjunctivae or upper respiratory tracts of infected persons; from contaminated fingers and other articles, e.g., eye medications

Control of Cases

Exclude case from school until 24 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 handwashing. Allergic conjunctivitis of the eye is not contagious.

Pinworms

Incubation Period

Variable, may be three to six weeks or longer

Early Signs And Symptoms

Perianal itching

Period of Communicability

Usually about three weeks

Method of Transmission

By direct transfer of infective eggs by hand from anus to mouth of the same or another person; indirectly through articles/items contaminated with eggs of the pinworm, e.g., clothing, bedding, food or anything placed in the mouth if handled with unwashed hands contaminated with eggs of the pinworm

Control of Cases

Exclude case from school until 24 hours after treatment begins.

Control of Contacts

No restrictions

General Measures

Teach the importance of proper handwashing. Adults should supervise the handwashing of children/youths. Families should be informed there is a high frequency of reinfection; all members in the household of the case may need to be treated as a group.

Polio*

Incubation Period

Commonly seven to 12 days, with a range from three to 21 days

Early Signs and Symptoms

Headache, fever, nausea and vomiting, malaise and muscle pain that may become progressive with neck and back stiffness and flaccid paralysis

Period of Communicability

Period is variable; virus is present in throat secretions for 36 hours to one week after exposure and in feces from 72 hours to six weeks. Cases are most infectious seven to 10 days both before and after the onset of symptoms.

Method of Transmission

Person-to-person spread by fecal-oral transmission and by direct contact with nose and throat discharges

Control of Cases

Cases must be isolated and excluded from school until the end of the acute phase of disease. Hospitalized cases must be isolated for the duration of their hospitalization. Articles soiled with throat discharges and feces of infected patients must be disinfected.

Control of Contacts

There are no restrictions among immunized populations. Unvaccinated contacts should be immunized and observed for 14 days following last exposure to known case.

General Measures

Polio can be eradicated by maintaining a high level of immunity in the population. Polio vaccine is routinely recommended for all susceptible children, unless contraindicated. Immunizations should be given as soon as possible after 2 months of age and is required prior to admission to day care or school.

* Reportable as soon as possible during normal business hours, but within 24 hours, to the local health authority (i.e., within eight regularly scheduled business hours after identifying a case)

Pubic Lice/"Crabs" (Phthirus pubis)

Incubation Period

If many lice are transmitted at once, the incubation period is short; if few are transmitted, symptoms are delayed for several weeks.

Early Signs and Symptoms

Itching of the genital area; lice or nits in the pubic hair; bluish spots in the pubic area or thighs where lice have bitten

Period of Communicability

Until lice or eggs are destroyed by treatment; a second pediculicide treatment is necessary only if eggs (nits) or lice are found.

Method of Transmission

By close physical contact with an infected person or shared articles such as clothing or linen

Control of Cases

No restrictions

Control of Contacts

No restrictions

General Measures

Clothing and linen that has been used in the past week should be washed in hot water and/or dried in a hot cycle, or dry cleaned. Fumigation of living areas is not necessary. Avoid intimate contact until nits and lice are eradicated.

Rash Illness

Incubation Period

Variable, dependent on the causative agent

Early Signs and Symptoms

Variable signs may be present. To begin identifying possible causes of the rash, it is important to acquire a detailed description of the rash (e.g., color; raised or level with skin; clear or pustular vesicles or pockets; smooth or sandpaper texture; spotted, diffuse, lace-like or slapped cheek appearance; blanched on touch; initial location and spread on body; discomfort due to itching, pain, etc.).

Accompanying symptoms — such as fever, headache, swollen glands — may be present. Runny nose or eyes, cough, sore throat, strawberry tongue, malaise, anorexia, nausea, vomiting, and joint pain also help to further define possible causes.

Period of Communicability

Variable, determined by causative agent

Method of Transmission

Variable, dependent on the causative agent

Control of Cases

Since rash is a hallmark symptom of many infectious diseases, it is important to try to identify the cause of any rash-related illness. Parents of children with rash of unexplained origin (not related to antibiotic treatment or contact dermatitis caused by environmental exposure) with one or more of the symptoms cited above should be notified and asked to consult their family physician for diagnosis and treatment. Rash cases with accompanying illness who are excluded from day care or school may be readmitted when rash and other symptoms subside unless rash accompanies disease(s) for which there are further restrictions.

Control of Contacts

There are no restrictions in general school or day care population unless the causative agent of the rash indicates treatment or prophylaxis of identified contacts.

General Measures

Variable, determined by the causative agent

Respiratory Syncytial Virus (RSV)

Incubation Period

From one to 10 days

Early Signs and Symptoms

Fever and one or more systemic symptoms, such as chills, headache, body aches, malaise and loss of appetite, either alone or in combination with runny nose, sore throat, swollen glands, bronchitis or pneumonia, are usually present. Infants sometimes have gastrointestinal disturbances. Signs and symptoms usually subside in two to five days without complications; however, some infections may be complicated by bacterial sinusitis, otitis media or, less commonly, by bacterial pneumonia.

Period of Communicability

RSV is communicable shortly before onset and for the duration of symptoms, usually three to eight days; in infants, RSV shedding may very rarely persist for several weeks or longer after clinical symptoms subside.

Method of Transmission

RSV is spread through direct contact with respiratory secretions such as breathing them in after an infected person coughs or sneezes; indirectly by hands, soiled tissues and handkerchiefs, eating and drinking utensils, and other articles and environmental surfaces contaminated by respiratory discharges from an infected person.

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 F or greater or 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, frequent and proper handwashing before any activity that brings hands in contact with the mouth, e.g., eating, drinking, smoking, etc. Emphasize the importance of proper disposal of used tissues and prompt handwashing after contact with respiratory secretions and after handling articles soiled with respiratory secretions; discourage the sharing of glasses, straws, water bottles, eating utensils, etc.

Ringworm (of the body and scalp)

Incubation Period

Usually four to 10 days for the body; usually 10 to 14 days for the scalp

Early Signs and Symptoms

Ringworm of the skin is a reddish, ringlike rash that is often itchy or flaky but may be moist and crusted and may burn; 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; raised pus-containing lesions develop occasionally.

Period of Communicability

As long as lesions are present; viable fungus can persist on contaminated items or materials for long periods.

Method of Transmission

By direct skin or scalp contact or indirect contact with items or materials contaminated with fungus from skin, scalp or hairs, e.g., theater seats, barber clippers, combs, brushes, hats, clothing. The same fungi that infect humans can also infect animals such as dogs and cats and infections can be acquired from pets and farm animals. However, animals account for less than 10 percent of cases; some animals, especially cats, may be unapparent carriers.

Control of Cases

Exclude case from school until 24 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 handwashing procedures. Pets with skin rashes should be evaluated by a veterinarian.

Rubella*

Incubation Period

From 14 to 21 days, usually 18 days

Early Signs and Symptoms

Mild disease with low-grade fever, malaise, swollen glands and upper respiratory illness precedes the rash, which lasts for two to three days.

Period of Communicability

For about one week before and one week after onset of rash

Method of Transmission

Person-to-person spread by droplet or direct contact with nasopharyngeal secretions or by indirect contact with articles soiled by patient's nose and throat discharges or urine or feces

Control of Cases

Cases should be isolated from school or workplace for seven days after rash onset. All suspect cases should undergo both measles and rubella IgM testing to rule out measles and/or rubella. Local school policies may exclude suspects or cases without a physician release. Hospitalized cases should be isolated for up to seven days after rash onset. Congenitally infected cases should be considered infectious for up to one year.

Control of Contacts

There are no restrictions among immunized populations. Unvaccinated contacts should be immunized, unless contraindicated. Pregnant females exposed to cases should be tested to determine if immunity is present or if infection has occurred.

General Measures

Rubella vaccine is routinely recommended for all susceptible persons, unless contraindicated. Immunization should be given as soon as possible on or after the first birthday and may be given as part of a measles-mumps-rubella (MMR) combined vaccine. Vaccination is required for day care, school and college entry.

Proof of prior rubella disease is not acceptable unless laboratory evidence of immunity is presented.

* Reportable as soon as possible during normal business hours, but within seven business days, to the local health authority

Salmonellosis*

Incubation Period

Six to 72 hours, usually about 12 to 36 hours

Early Signs And Symptoms

Infections are marked by the sudden onset of fever, abdominal pain, diarrhea, nausea and sometimes vomiting, but can be asymptomatic.

Period of Communicability

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

By ingesting raw or undercooked foods of animal origin, e.g., eggs, meat and 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; also 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.

Control of Contacts

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

General Measures

Teach the importance of proper handwashing. Educate about proper sanitary methods for food preparation and for handling, storing and thorough cooking of foods of animal origin; any food service should use pasteurized egg products in place of raw eggs or when eggs are pooled before cooking.

^{*} Reportable as soon as possible during normal business hours, but within seven business days, to the local health authority

Scabies

Incubation Period

First infection, two to six weeks; repeat infection, one to four days

Early Signs And Symptoms

Scratching of small raised red bumps or blisters on skin; intense itching, especially at night

Period of Communicability

Scabies can be transmitted until mites and eggs are destroyed by treatment; a second treatment application is recommended one week following the first treatment.

Method of Transmission

Mites can be transmitted person to person by direct skin-to-skin contact, including during sexual contact; transfer from undergarments and bedclothes occurs only if contaminated immediately beforehand by an infested person.

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; also treat prophylactically caretakers, companions and others who have had skin-to-skin contact with the case.

General Measures

The diagnosis of scabies must be made by a physician, most frequently by skin scraping and microscopic exam for this parasite. Red itchy rashes or blisters can be the result of other conditions/disorders that appear very similar to scabies.

Shigellosis*

Incubation Period

One to seven days

Early Signs And Symptoms

Sudden onset of fever, nausea, diarrhea and sometimes vomiting; can be asymptomatic

Period of Communicability

Usually during the four weeks after illness; infrequently a carrier state may continue for months or longer.

Method of Transmission

Person-to-person via the fecal-oral route; also spread via food or drinks contaminated by an infected food handler; also can be transmitted by contaminated water

Control of Cases

Exclude case from school until clinical recovery, i.e., absence of fever and diarrhea. Cases who are food handlers or who 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 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 handwashing. Adults should supervise the handwashing of children/youths; shigellosis can spread quickly in day care centers.

^{*} Reportable as soon as possible during normal business hours, but within seven business days, to the local health authority

Shingles (Herpes Zoster)

Shingles is the result of a reactivation of infection with the varicella zoster virus, the virus that causes chickenpox. A person is usually infected with this virus early in life.

Incubation Period

Shingles usually appears in adults or older persons but may develop at an earlier age if intrauterine varicella infection, varicella infection before 2 years of age, HIV infection or immunosuppression have occurred.

Early Signs and Symptoms

Fluid-containing lesions normally appear along nerve pathways and will become crusted; usually this occurs in about one week in persons of normal health status. Eruptions may be painful. In persons of normal health status, lesions appear in a group or a crop; in persons with immunosuppression lesions, may be widespread.

Period of Communicability

Until all shingles lesions are crusted

Method of Transmission

The fluid in shingles lesions contains virus that can be spread to another person through direct contact with the fluid when the lesions are not crusted over, or by contact with articles freshly soiled with the fluid from shingles lesions.

Control of Cases

A person with shingles may attend school if lesions can be covered to prevent others from contact with fluid from the lesions. If shingles lesions cannot be covered, the person should be excluded until all lesions are crusted.

Control of Contacts

There are no restrictions among immune or susceptible populations. Varicella vaccine is recommended for all susceptible children, unless contraindicated, between 12 - 18 months of age. It is also recommended that all susceptible children be vaccinated by age 13. Children who have not been immunized previously and who do not have a reliable history of exposure to chickenpox are considered susceptible. Varicella vaccine can be effective in preventing or modifying varicella illness if used within three days of initial exposure.

Varicella-zoster immune globulin (VZIG) given within 96 hours of exposure may prevent or modify disease for close contacts with immunosuppression and for high-risk neonates. VZIG supplies are limited and are dispensed to eligible persons by the American Red Cross.

General Measures

Aspirin should not be given to any child due to risk for a complication known as Reye syndrome, which can be fatal. Any person who has not been immunized against chickenpox, has no reliable history of exposure to chickenpox or has a negative antibody titer for chickenpox, can develop chickenpox following direct or indirect contact with the fluid from shingles lesions before they are crusted over. Check with your local health department about vaccine availability for susceptible children.

Streptococcal Sore Throat and Scarlet Fever

Incubation Period

Usually one to three days

Early Signs And Symptoms

Initial symptoms are fever, sore throat, often enlarged tender 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 appears one to three days after onset of sore throat. Untreated or incompletely treated cases are at risk of developing rheumatic fever or inflammation of the kidney (glomerulonephritis).

Period of Communicability

Untreated, 10 days to weeks; for treated individuals, generally 24 to 48 hours

Method of Transmission

Person-to-person by direct contact with nasal secretions; by ingestion of food contaminated by an infected food handler's nasal secretions or streptococci present on skin; rarely by contact with articles handled by an infected person

Control of Cases

Exclude case from school until 24 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 handwashing. Stress the importance of completing the full course of antibiotics.

^{*} Uncomplicated cases of streptococcal sore throat and scarlet fever are not reportable. Cases with complications, such as acute glomerulonephritis and rheumatic fever, are reportable as soon as possible during normal business hours, but within 24 hours, to the local health authority (i.e., within eight regularly scheduled business hours after identifying a case).

Syphilis*

Incubation Period

From 10 to 90 days, usually 21 days

Early Signs and Symptoms

In the primary stage, chancre, lymphadenopathy; in secondary stage, palmar-plantar rash, nickel-dime lesions, alopecia, mucous patches, malaise, macular rash, papular rash, squamous rash, annular rash or split papules

Period of Communicability

During primary and secondary stages when lesions are present, primarily during sexual contact; perinatally, during any stage

Method of Transmission

By direct contact with infectious exudates from obvious or concealed, moist, early lesions of skin and mucous membranes of infected persons during sexual contact; perinatal transmission from mother to infant

Control of Cases

Refrain from sexual intercourse until symptoms have resolved and medication is completed.

Control of Contacts

No restrictions

General Measures

Educate about the transmission of the organism through sexual behavior.

^{*} Reportable as soon as possible during normal business hours, but within seven business days, to the local health authority.

Trichomoniasis

Incubation Period

Four to 28 days

Early Signs and Symptoms

Males are usually asymptomatic but may have mild urethral discharge and/or painful urination. In females, frothy yellow or green vaginal discharge and vulvar irritation, including swelling, redness and itching, may be present.

Period of Communicability

Until adequately treated

Method of Transmission

Person-to-person via sexual contact

Control of Cases

Refrain from sexual intercourse until symptoms have resolved and medication is completed.

Control of Contacts

No restrictions

General Measures

Educate about the transmission of the organism through sexual behavior.

Tuberculosis (ТВ)*

Early Signs and Symptoms

In latent TB infection (LTBI), none. Pulmonary/laryngeal TB disease causes productive and prolonged cough (duration of >3 weeks), chest pain, fever, chills, night sweats, fatigue, appetite loss and weight loss.

Period of Communicability

With LTBI, none. With pulmonary/laryngeal TB disease, as long as viable tubercle bacilli are being discharged in the sputum. Individuals who are untreated or who are treated inadequately may be infectious intermittently for years.

Method of Transmission

Airborne with inhalation of droplet nuclei produced by a person with pulmonary or laryngeal TB who is coughing, sneezing, laughing, singing, etc.

Control of Cases

Children can attend school or day care if they are considered to be not infectious according to IDPH's rules and regulations for the control of TB (June 1998). TB disease cases who were previously determined to be infectious are considered not infectious for pulmonary or laryngeal TB and can return to normal activities when they have had adequate treatment for two or more weeks, a favorable response to treatment and three consecutive negative smear results from sputum collected on different days. If unable to produce sputum, which often occurs with young children, a case is considered not infectious when his/her physician makes this determination and may return to normal activities when he/she has had adequate treatment for two or more weeks and shows clinical improvement.

Control of Contacts

TB skin testing of all members of the household and other close contacts is required. Contacts with a negative skin test should receive a second skin test 10 to 12 weeks after their last exposure. Persons with positive skin tests should be evaluated for active disease. If active disease is ruled out, these persons should be evaluated for treatment of LTBI. Recent contacts with LTBI are one of the highest risk groups for developing TB and should consider preventive treatment. Children can attend school or day care if they have LTBI whether or not they are being treated.

General Measures

LTBI can be detected about two to 10 weeks after exposure. Approximately 10 percent of individuals who acquire tuberculosis infection and are not given preventive therapy will develop active TB disease during their lifetime. The risk of developing TB disease remains high for the first two years.

In selected areas with a high incidence of TB infection, the TB skin test may be required as a part of the school health examination. Contact your local school board about TB skin testing requirements. Children who are at low risk for TB infection/disease should not be skin tested because many positive tests in low-risk persons do not represent TB infection.

Foreign-born persons from areas where TB is common are among those at higher risk for exposure to or infection with TB.

Conditions that increase the risk of progression from TB infection to TB disease are HIV infection, substance abuse, recent TB infection, chest X-ray that suggests previous TB, diabetes, silicosis, prolonged corticosteroid therapy, immunosuppressive therapy, and cancer of the head and neck.

Individuals with LTBI who are included among those at increased risk for developing TB disease should be evaluated for treatment. Treatment of LTBI should be considered dependent on the results of the TB skin test and risk factors.

Directly observed therapy (DOT) has been shown to be highly effective and is recommended for the administration of the treatment of TB disease and in some cases for the treatment of LTBI. School nurses are encouraged to assist in providing DOT to students with TB and LTBI.

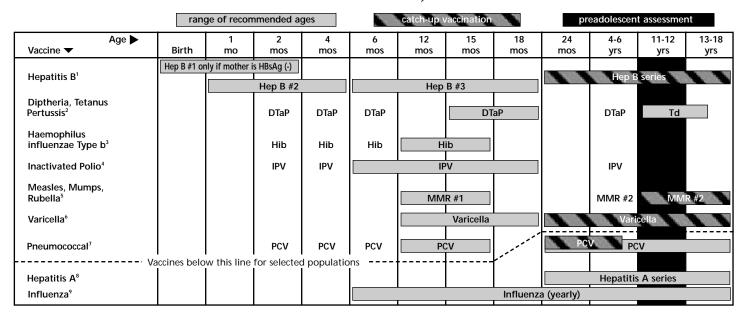
Tuberculin skin testing should be done either before or on the same day as vaccination with a live-virus vaccine or four to six weeks after the live-virus vaccination.

Tuberculin skin testing is not contraindicated for persons who have been vaccinated with BCG.

Treatment of LTBI is not contraindicated for persons who have been vaccinated with BCG.

* Suspected or confirmed cases of TB are reportable within seven days to the local TB control authority, which is usually the local health department. The information in this section applies to pulmonary/laryngeal TB disease. Contact your local TB control authority regarding extrapulmonary disease or diseases caused by mycobacteria other than M. tuberculosis.

Recommended Childhood Immunization Schedule United States, 2002



This schedule indicates the recommended ages for routine administration of currently licensed childhood vaccines, as of December 1, 2001, for children through age 18 years. Any dose not given at the recommended age should be given at any subsequent visit when indicated and feasible. Indicates age groups that warrant special effort to administer those vaccines not previously given. Additional vaccines may be licensed and recommended during the year. Licensed combination vaccines may be used whenever any components of the combination are indicated and the vaccine's other components are not contraindicated. Providers should consult the manufacturers' package inserts for detailed recommendations.

1. Hepatitis B vaccine (Hep B). All infants should receive the first dose of hepatitis B vaccine soon after birth and before hospital discharge; the first dose may also be given by age 2 months if the infant's mother is HBsAgnegative. Only monovalent hepatitis B vaccine can be used for the birth dose. Monovalent or combination vaccine containing Hep B may be used to complete the series; four doses of vaccine may be administered if combination vaccine is used. The second dose should be given at least 4 weeks after the first dose, except for Hib-containing vaccine which cannot be administered before age 6 weeks. The third dose should be given at least 16 weeks after the first dose and at least 8 weeks after the second dose. The last dose in the vaccination series (third or fourth dose) should not be administered before age 6 months.

Infants born to HBsAg-positive mothers should receive hepatitis B vaccine and 0.5 mL hepatitis B immune globulin (HBIG) within 12 hours of birth at separate sites. The second dose is recommended at age 1-2 months and the vaccination series should be completed (third or fourth dose) at age 6 months.

Infants born to mothers whose HBsAg status is unknown should receive the first dose of the hepatitis B vaccine series within 12 hours of birth. Maternal blood should be drawn at the time of delivery to determine the mother's HBsAg status; if the HBsAg test is positive, the infant should receive HBIG as soon as possible (no later than age 1 week).

- 2. Diphtheria and tetanus toxoids and acellular pertussis vaccine (DTaP). The fourth dose of DTaP may be administered as early as age 12 months, provided 6 months have elapsed since the third dose and the child is unlikely to return at age 15-18 months. Tetanus and diphtheria toxoids (Td) is recommended at age 11-12 years if at least 5 years have elapsed since the last dose of tetanus and diphtheria toxoid-containing vaccine. Subsequent routine Td boosters are recommended every 10 years.
- 3. Haemophilus influenzae type b (Hib) conjugate vaccine. Three Hib conjugate vaccines are licensed for infant use. If PRP-OMP (PedvaxHIB® or ComVax® [Merck]) is administered at ages 2 and 4 months, a dose at age 6 months is not required. DTaP/Hib combination products should not be used for primary immunization in infants at ages 2, 4 or 6 months, but can be used as boosters following any Hib vaccine.

- 4. Inactivated polio vaccine (IPV). An all-IPV schedule is recommended for routine childhood polio vaccination in the United States. All children should receive four doses of IPV at ages 2 months, 4 months, 6-18 months, and 4-6 years.
- 5. Measles, mumps, and rubella vaccine (MMR). The second dose of MMR is recommended routinely at age 4-6 years but may be administered during any visit, provided at least 4 weeks have elapsed since the first dose and that both doses are administered beginning at or after age 12 months. Those who have not previously received the second dose should complete the schedule by the 11-12 year old visit.
- 6. Varicella vaccine. Varicella vaccine is recommended at any visit at or after age 12 months for susceptible children, i.e. those who lack a reliable history of chickenpox. Susceptible persons aged >13 years should receive two doses, given at least 4 weeks apart.
- 7. Pneumococcal vaccine. The heptavalent pneumococcal conjugate vaccine (PCV) is recommended for all children age 2-23 months. It is also recommended for certain children age 24-59 months.

 Pneumococcal polysaccharide vaccine (PPV) is recommended in addition to PCV for certain high-risk groups. See MMWR 2000;49(RR-9);1-35.
- 8. **Hepatitis A vaccine**. Hepatitis A vaccine is recommended for use in selected states and regions, and for certain high-risk groups; consult your local public health authority. See *MMWR* 1999;48(RR-12);1-37.
- 9. Influenza vaccine. Influenza vaccine is recommended annually for children age >6 months with certain risk factors (including but not limited to asthma, cardiac disease, sickle cell disease, HIV, diabetes; see *MMWR 2001*;50(RR-4);1-44), and can be administered to all others wishing to obtain immunity. Children aged ≤12 years should receive vaccine in a dosage appropriate for their age (0.25 mL if age 6-35 months or 0.5 mL if aged ≥3 years). Children aged ≤8 years who are receiving influenza vaccine for the first time should receive two doses separated by at least 4 weeks.

For additional information about vaccines, vaccine supply, and contraindications for immunization, please visit the National Immunization Program Website at www.cdc.gov/nip or call the National Immunization Hotline at 800-232-2522 (English) or 800-232-0233 (Spanish).

Amont	1	nt/Adult Immunization Red	T	Т
Agent	Indications	Primary Schedule	Contraindications	Comments
Tetanus and Diphtheria Toxoids Combined (Td)	All adults All adolescents should be assessed at 11-12 or 14-16 years of age and immunized if no dose was received during the previous 5 years.	Two doses 4-8 weeks apart, third dose 6-12 months after the second. No need to repeat doses if the schedule is interrupted. Dose: 0.5 mL intramuscular (IM) Booster: At 10 yearintervals throughout life.	Neurologic or severe hypersensitivity reaction to prior dose.	WOUND MANAGEMENT: Patients with three or more previous tetanus toxoid doses: (a) give Td for clean, minor wounds only if more than 10 years since last dose; (b) for other wounds, give Td if over 5 years since last dose. Patients with less than 3 or unknown number of prior tetanus toxoid doses; give Td for clean, minor wounds and Td and TIG (Tetanus Immune Globulin) for other wounds.
Influenza Vaccine	a. Adults 50 years of age and older. b. Residents of nursing homes or other facilities for patients with chronic medical conditions. c. Persons ≥ 6 months of age with chronic cardiovascular or pulmonary disorders, including asthma. d. Persons ≥ 6 months of age with chronic metabolic diseases (including diabetes), renal dysfunction, hemoglobinopathies, immunosuppressive or immunodeficiency disorders. e. Women in their 2nd or 3rd trimester of pregnancy during influenza season. f. Persons 6 mo18 years of age receiving long-term aspirin therapy. g. Groups, including household members and care givers, who can infect high risk persons.	Dose: 0.5 mL intramuscular (IM) Given annually each fall and winter.	Anaphylactic allergy to eggs. Acute febrile illness.	Depending on season and destination, persons traveling to foreign countries should consider vaccination. Any person > 6 months of age who wishes to reduce the likelihood of becoming ill with influenza should be vaccinated. Avoiding subsequent vaccination of persons known to have developed GBS within 6 weeks of a previous vaccination seems prudent; however, for most persons with a GBS history who are at high risk for severe complications, many experts believe the established benefits of vaccination justify yearly vaccination.
Pneumococcal Polysaccharide Vaccine (PPV)	a. Adults 65 years of age and older. b. Persons ≥ 2 years with chronic cardiovascular or pulmonary disorders including congestive heart failure, diabetes mellitus, chronic liver disease, alcoholism, CSF leaks, cardiomyopathy, COPD or emphysema. c. Persons ≥ 2 years with splenic dysfunction or asplenia, hematologic malignancy, multiple myeloma, renal failure, organ transplantation or immunosuppressive conditions, including HIV infection. d. Alaskan Natives and certain American Indian populations.	One dose for most people* Dose: 0.5 mL intramuscular (IM) or subcutaneous (SC) *Persons vaccinated prior to age 65 should be vaccinated at age 65 if 5 or more years have passed since the first dose. For all persons with functional or anatomic asplenia, transplant patients, patients with chronic kidney disease, immunosuppressed or immunodeficient persons, and others at highest risk of fatal infection, a second dose should be given - at least 5 years after first dose.	The safety of PPV during the first trimester of pregnancy has not been evaluated. The manufacturer's package insert should be reviewed for additional information.	If elective splenectomy or immunosuppressive therapy is planned, give vaccine 2 weeks ahead, if possible. When indicated, vaccine should be administered to patients with unknown vaccination status. All residents of nursing homes and other long-term care facilities should have their vaccination status assessed and documented.
Measles and Mumps Vaccines**	a. Adults born after 1956 without written documentation of immunization on or after the first birthday. b. Health care personnel born after 1956 who are at risk of exposure to patients with measles should have documentation of two doses of vaccine on or after the first birthday or of measles seropositivity. c. HIV-infected persons without severe immunosuppression. d. Travelers to foreign countries. e. Persons entering post-secondary educational institutions (e.g., college).	At least one dose. (Two doses of measles-containing vaccine if in college, in health care profession or traveling to a foreign country with second dose at least 1 month after the first). Dose: 0.5 mL subcutaneous (SC)	a. Immunosuppressive therapy or immunodeficiency including HIV-infected persons with severe immunosuppression. b. Anaphylactic allergy to neomycin. c. Pregnancy. d. Immune globulin preparation or blood/blood product received in preceding 3-11 months. e. Untreated, active TB.	Women should be asked if they are pregnant before receiving vaccine, and advised to avoid pregnancy for 30 days after immunization.
Rubella Vaccine**	a. Persons (especially women) without written documentation of immunization on or after the first birthday or of seropositivity. b. Health care personnel who are at risk of exposure to patients with rubella and who may have contact with pregnant patients should have at least one dose.	One dose. Dose: 0.5 mL subcutaneous (SC)	Same as for measles and mumps vaccines.	Women should be asked if they are pregnant before receiving vaccine, and advised to avoid pregnancy for 3 months after immunization.

Appendix B Summary of Adolescent/Adult Immunization Recommendations

Agent	Indications	Primary Schedule	Contraindications	Comments
Hepatitis B Vaccine	a. Persons with occupational risk of exposure to blood or blood-contaminated body fluids. b. Clients and staff of institutions for the developmentally disabled. c. Hemodialysis patients. d. Recipients of clotting-factor concentrates. e. Household contacts and sex partners of those chronically infected with HBV. f. Family members of adoptees from countries where HBV infection is endemic, if adoptees are HBsAg+. g. Certain international travelers. h. Injecting drug users. i. Men who have sex with men. j. Heterosexual men and women with multiple sex partners or recent episode of a sexually transmitted disease. k. Inmates of long-term correctional facilities. l. All unvaccinated adolescents.	Three doses: second dose 1-2 months after the first, third dose 4-6 months after the first. No need to start series over if schedule interrupted. Can start series with one manufacturer's vaccine and finish with another. Dose (Adult): intramuscular (IM) Recombivax HB®: 10 _g/1.0 mL (green cap) Engerix-B®: 20 _g/1.0mL (orange cap) Dose (Adolescents 11-19 years): intramuscular (IM) Recombivax HB®: 5 _g/0.5 mL (yellow cap) Engerix-B®: 10 _g/0.5 mL (light blue cap) Booster: None presently recommended.	Anaphylactic allergy to yeast.	a. Persons with serologic markers of prior or continuing hepatitis B virus infection do not need immunization. b. For hemodialysis patients and other immunodeficient or immunosuppressed patients, vaccine dosage is doubled or special preparation is used. c. Pregnant women should be sero-screened for HBsAg and, if positive, their infants should be given postexposure prophylaxis beginning at birth. d. Post-exposure prophylaxis: consult ACIP recommendations, or state or local immunization program.
Poliovirus Vaccine: IPV - Inactivated Vaccine; OPV - Oral (live) Vaccine	Routine vaccination of those >18 years of age residing in the U.S. is not necessary. Vaccination is recommended for the following high-risk adults: a. Travelers to areas or countries where poliomyelitis is epidemic or endemic. b. Members of communities or specific population groups with disease caused by wild polioviruses. c. Laboratory workers who handle specimens that may contain polioviruses. d. Health care workers who have close contact with patients who may be excreting wild polioviruses. e. Unvaccinated adults whose children will be receiving OPV.	Unimmunized adolescents/adults: IPV is recommended - two doses at 4-8 week intervals, third dose 6-12 months after second (can be as soon as 2 months) Dose: 0.5 mL subcutaneous (SC) or intramuscular (IM). Partially immunized adolescents/adults: Complete primary series with IPV (IPV schedule shown above). OPV is no longer recommended for use in the United States.	IPV: Anaphylactic reaction following previous dose or to streptomycin, polymyxin B, or neomycin.	In instances of potential exposure to wild poliovirus, \adults who have had a primary series of OPV or IPV may be given 1 more dose of IPV. Although no adverse effects have been documented, vaccination of pregnant women should be avoided. However, if immediate protection is required, pregnant women may be given IPV in accordance with the recommended schedule for adults.
Varicella Vaccine	a. Persons of any age without a reliable history of varicella disease or vaccination, or who are seronegative for varicella. b. Susceptible adolescents and adults living in households with children. c. All susceptible health care workers. d. Susceptible family contacts of immunocompromised persons. e. Susceptible persons in the following groups who are at high risk for exposure: persons who live or work in environments in which transmission of varicella is likely (e.g., teachers of young children, day care employees, residents and staff in institutional settings) or can occur (e.g., college students, inmates and staff of correctional institutions, military personnel) nonpregnant women of childbearing age international travelers	For persons ≤ 13 years of age, one dose. For persons 13 years of age and older, two doses separated by 4-8 weeks. If ≥ 8 weeks elapse following the first dose, the second dose can be administered without restarting the schedule. Dose: 0.5 mL subcutaneous (SC)	a. Anaphylactic allergy to gelatin or neomycin. b. Untreated, active TB. c. Immunosuppressive therapy or immunodeficiency (including HIV infection). d. Family history of congenital or hereditary immunodeficiency in first-degree relatives, unless the immune competence of the recipient has been clinically substantiated or verified by a laboratory. e. Immune globulin preparation or blood/blood product received in preceding 5 months. f. Pregnancy.	Women should be asked if they are pregnant before receiving varicella vaccine, and advised to avoid pregnancy for one month following each dose of vaccine.
Hepatitis A Vaccine	a. Persons traveling to or working in countries with high or intermediate endemicity of infection. b. Men who have sex with men. c. Injecting and non-injecting illegal drug users. d. Persons who work with HAV-infected primates or with HAV in a research laboratory setting. e. Persons with chronic liver disease. f. Persons with clotting factor disorders. g. Consider food handlers, where determined to be cost-effective by health authorities or employers.	HAVRIX®: Two doses, separated by 6-12 months. Adults (18 years of age and older) - Dose: 1.0 mL intramuscular (IM); Persons 2-17 years of age: Dose: 0.5 mL (IM). VAQTA®: Adults (18 years of age and older): Two doses, separated by 6 months. Dose: 1.0 mL intramuscular (IM); Persons 2-17 years of age: Two doses, separated by 6-18 months; Dose: 0.5 mL (IM)	A history of hypersensitivity to alum or the preservative 2-phenoxyethanol	The safety of hepatitis A vaccine during pregnancy has not been determined, though the theoretical risk to the developing fetus is expected to be low. The risk of vaccination should be weighed against the risk of hepatitis A in women who may be at high risk of exposure to HAV.

Adapted from the recommendations of the Advisory Committee on Immunization Practices (ACIP). Foreign travel and less commonly used vaccines such as typhoid, rabies, and meningococcal are not included.

^{**}These vaccines can be given in the combined form measles-mumps-rubella (MMR). Persons already immune to one or more components can still receive MMR.

Illinois Department of Public Health Proper Handwashing





1. Wet hands with soap and warm water.

3. Rinse under warm running water. 2. Rub hands for 20 seconds. Get under fingernails and between fingers.



5. Turn off water and paper towel. Throw towel away.



Appendix D

Personal Hygiene

Definition: In the field of infectious disease control, personal hygiene refers to those protective measures — primarily the responsibility of the individual — that promote health and limit the spread of infectious diseases, chiefly those transmitted by direct contact.

Such measures include the following:

- washing hands with soap and water immediately after toileting and always before handling food or eating;
- keeping hands and unclean articles, or articles that have been used for toilet purposes by others, away from the mouth, nose, eyes, ears, genitalia and wounds (Examples of these articles are hairbrushes, toothbrushes, razors, nail clippers, nail brushes and make-up; earrings for pierced ears and jewelry used for body piercing also should not be shared.);
- avoiding the use of shared or unclean eating utensils, drinking cups, sports water bottles, towels, handkerchiefs, combs, hairbrushes, cigarettes, and smoking pipes;
- avoiding exposure of other persons to spray from the nose and mouth when coughing, sneezing, laughing or talking; always covering the mouth when coughing or sneezing; and always washing the hands when they become soiled with oral or respiratory secretions;
- washing hands thoroughly before and after providing first aid or personal care to any individual and always after diaper changing; and
- keeping the body clean by frequent soap-and-water baths or showers.

Adapted from *Control of Communicable Diseases Manual*, 17th edition, James Chin, M.D., M.P.H., editor. Published by the American Public Health Association, Washington, D.C., 2000.

Appendix E

Illinois Department of Public Health Regional Offices

CHICAGO REGIONAL OFFICE

4212 W. St. Charles Road Bellwood, IL 60104-1146 Telephone 708-544-5300 Fax 708-544-5343

CHAMPAIGN REGIONAL OFFICE

2125 S. First St. Champaign, IL 61820-7499 Telephone 217-278-5900 Fax 217-244-3866

EDWARDSVILLE REGIONAL OFFICE

22 Kettle River Drive Glen Carbon, IL 62034 Telephone 618-656-6680 Fax 618-656-5863

MARION REGIONAL OFFICE

2309 W. Main St. Marion, IL 62959-1195 Telephone 618-993-7010 Fax 618-993-7052

PEORIA REGIONAL OFFICE

5415 N. University St. Peoria, IL 61614-4784 Telephone 309-693-5360 Fax 309-693-5118

ROCKFORD REGIONAL OFFICE

4302 N. Main St. Rockford, IL 61103-1209 Telephone 815-987-7511 Fax 815-987-3334

WEST CHICAGO REGIONAL OFFICE

245 W. Roosevelt Road, Building 5 West Chicago, IL 60815 Telephone 630-293-6800 Fax 630-293-6908

Local Health Departments in Illinois

Adams County Health Department

333 N. Sixth St. Quincy, IL 62301 Telephone 217-222-8440 Fax 217-222-8508

Bond County Health Department

503 S. Prairie Greenville, IL 62246 Telephone 618-664-1442 Fax 618-664-1744

Boone County Health Department

1204 Logan Ave. Belvidere, IL 61008-4031 Telephone 815-544-2951 Fax 815-544-2050

Brown County Health Department

111 W. Washington St. Mount Sterling, IL 62353 Telephone 217-773-2714 Fax 217-773-2425

Bureau County Health Department

526 Bureau Valley Parkway Perry Plaza Princeton, IL 61356 Telephone 815-872-5091 Fax 815-872-5092

Carroll County - No local health department

Cass County Health Department

331 S. Main St. Virginia, IL 62691 Telephone 217-452-3057 Fax 217-452-7245

Champaign County Public Health Department c/o Champaign-Urbana Public Health District

710 N. Neil St. P.O. Box 1488 Champaign, IL 61824-1488 Telephone 217-352-7961 Fax 217-352-0126

Chicago Department of Public Health

DePaul Center 333 S. State St., Second Floor Chicago, IL 60604 Telephone 312-747-9872 Fax 312-747-9739

Christian County Health Department

902 W. Springfield Road Taylorville, IL 62568 Telephone 217-824-4113 Fax 217-824-4380

Clark County Health Department

P.O. Box 266 997 N. York St. Martinsville, IL 62442 Telephone 217-382-4207 Toll-Free 1-888-382-4207 Fax 217-382-4226

Clay County Health Department

601 E. 12th St. Flora, IL 62839 Telephone 618-662-4406 Fax 618-662-2801

Clinton County Health Department

930-A Fairfax St. Carlyle, IL 62231 Telephone 618-594-2723 Fax 618-594-5474

Coles County Health Department

825 18 th St. P.O. Box 1064 Charleston, IL 61920-9391 Telephone 217-348-0530 Fax 217-348-5322

Cook County Department of Public Health

1010 Lake St., Suite 300 Oak Park, IL 60301 Telephone 708-492-2010 Fax 708-492-2900

Crawford County Health Department

301 S. Cross, Commercium Bldg., Suite 249 Robinson, IL 62454 Telephone 618-544-8798 Fax 618-544-9398

Cumberland County Health Department

Box 130

Toledo, IL 62468

Telephone 217-849-3211

Fax 217-849-3121

DeKalb County Health Department

2550 N. Annie Glidden Road

DeKalb, IL 60115

Telephone 815-758-6673

Fax 815-748-2478

DeWitt-Piatt Bi-County Health Department

910 Route 54 East

P.O. Box 518

Clinton, IL 61727

Telephone 217-935-3427 or 935-8416

Fax 217-935-4037

Douglas County Health Department

1250 E. U.S. Highway 36

Tuscola, IL 61953

Telephone 217-253-4137

Fax 217-253-3421

DuPage County Health Department

111 N. County Farm Road

Wheaton, IL 60187

Telephone 630-682-7400

Fax 630-462-9261

East Side Health District

Clinic: 638 N. 20 th St.

East St. Louis, IL 62205

Clinic Telephone 618-874-4713

Fax 618-875-5038

Edgar County Public Health Department

502 Shaw Ave.

Paris, IL 61944

Telephone 217-465-2212

Fax 217-465-1121

Edwards County - No local health department

Effingham County Health Department

901 W. Virginia

P.O. Box 685

Effingham, IL 62401

Telephone 217-342-9237

Fax 217-342-9324

Egyptian Health Department

1412 U.S. 45 North

Eldorado, IL 62930-9324

Telephone 618-273-3326

Fax 618-273-2808

Evanston Health Department

Evanston Civic Center

2100 Ridge Ave.

Evanston, IL 60201

Telephone 847-866-2952

Fax 847-448-8125

Fayette County Health Department

509 W. Edwards,

P.O. Box 340

Vandalia, IL 62471

Telephone 618-283-1044

Fax 618-283-5038

Ford-Iroquois Public Health Department

114 N. Third St.

Watseka, IL 60970

Telephone 815-432-2483

Fax 815-432-2198

Franklin-Williamson Bi-County

Health Department

Williamson County Airport

120 Express Drive

Marion, IL 62959-9808

Telephone 618/993-8111

Fax 618-993-6455

Fulton County Health Department

700 E. Oak St.

Canton, IL 61520

Telephone 309/647-1134

Fax 309-647-9545

Greene County Health Department

310 Fifth St.

Carrollton, IL 62016

Telephone 217-942-6961 or 942-6962

Fax 217-942-3904

Grundy County Health Department

1320 Union St.

Morris, IL 60450

Telephone 815-941-3113

Fax 815-941-2389

Hamilton County Health Department

County Courthouse, Room 5

McLeansboro, IL 62859

Telephone 618-643-3522

Fax 618-643-2390

Hancock County Health Department

73 S. Adams Ave., Box 357 Carthage, IL 62321 Telephone 217-357-2171 Fax 217-357-3562

Henderson County Health Department

P.O. Box 220

Gladstone, IL 61437-0220 Telephone 309-627-2812 Fax 309-627-2793

Henry County Health Department

4424 U.S. Highway 34 Kewanee, IL 61443 Telephone 309-852-0197 Fax 309-852-0595

Jackson County Health Department

415 Health Department Road P.O. Box 307 Murphysboro, IL 62966 Telephone 618-684-3143 Fax 618-687-1255

Jasper County Health Department

106 E. Edwards St. Newton, IL 62448 Telephone 618-783-4436 Fax 618-783-4146

Jefferson County Health Department

#1 Doctors Park Road, Suite F Mount Vernon, IL 62864 Telephone 618-244-7134 Fax 618-244-2640

Jersey County Health Department

22416 State Hwy. 109 Jerseyville, IL 62052 Telephone 618-498-9565 Fax 618-498-6291

Jo Daviess County Health Department

9483 U.S. Rt. 20 West P.O. Box 318 Galena, IL 61036 Telephone 815-777-0263 Fax 815-777-2977

Kane County Health Department

1330 N. Highland Ave. Aurora, IL 60506 Telephone 630-897-1124 Fax 630-897-4845

Kankakee County Health Department

1115 Riverlane Drive Bradley, IL 60915 Telephone 815-937-3560 Fax 815-937-3568

Kendall County Health and

Human Services

500A Countryside Center Yorkville, IL 60560 Telephone 630-553-9100 Fax 630-553-0167

Knox County Health Department

1361 W. Fremont St. Galesburg, IL 61401 Telephone 309-344-2224 Fax 309-344-5049

Lake County Health Department

3010 Grand Ave. Waukegan, IL 60085 Telephone 847-360-6769 Fax 847-360-3656

LaSalle County Health Department

717 Etna Road Ottawa, IL 61350 Telephone 815-433-3366 Fax 815-433-9522

Lawrence County Health Department

R.R. #3, Box 414 (physical address) P.O. Box 516 (mailing address) Lawrenceville, IL 62439 Telephone 618-943-3302 Fax 618-943-3657

Lee County Health Department

1315 Franklin Grove Road, Ste. 110 Dixon, IL 61021 Telephone 815-284-3371 Fax 815-288-1811

Livingston County Health Department

P.O. Box 886 310 E. Torrance Ave. Pontiac, IL 61764 Telephone 815-844-7174 Fax 815-842-1063

Logan County Health Department

109 Third St. P.O. Box 508 Lincoln, IL 62656-0508 Telephone 217-735-2317

58 Fax 217-732-6943

Macon County Health Department

1221 E. Condit St. Decatur, IL 62521-1405 Telephone 217-423-6988 Fax 217-423-7436

Macoupin County Health Department

805 N. Broad St. Carlinville, IL 62626 Telephone 217-854-3223 Fax 217-854-3225

Madison County Health Department

2119 Troy Road Edwardsville, IL 62025 Telephone 618-656-6285 Fax 618-692-8905

Marion County Health Department

600 E. Main St. Salem, IL 62881 Telephone 618-548-3878 Fax 618-548-3866

Marshall County Health Department c/o Peoria City/County Health Department

2116 N. Sheridan Road Peoria, IL 61604 Telephone 309-679-6000 Fax 309-685-3312

Mason County Health Department

Rt. 136 East, P.O.Box 557 Havana, IL 62644 Telephone 309-543-2201 Fax 309-543-2063

McDonough County Health Department

505 E. Jackson St. Macomb, IL 61455 Telephone 309-837-9951 Fax 309-837-1100

McHenry County Department of Health

2200 N. Seminary Ave. Woodstock, IL 60098 Telephone 815-334-4510 Fax 815-338-7661

McLean County Health Department

200 W. Front St. Bloomington, IL 61701 Telephone 309-888-5450 Fax 309-452-8479

Menard County Health Department

328 E. Sangamon Petersburg, IL 62675 Telephone 217-632-2810 Fax 217-632-2610

Mercer County Health Department

1007 N.W. Third St. Aledo, IL 61231 Telephone 309-582-3759 Fax 309-582-3737

Monroe-Randolph Bi-County Health Department

2515 State St. Chester, IL 62233-1149 Telephone 618-826-5007 Fax 618-826-5223

Montgomery County Health Department

11191 Illinois Route 185 P.O. Box 128 Hillsboro, IL 62049 Telephone 217-532-2001 Fax 217-532-2089

Morgan County Health Department

345 W. State St. Jacksonville, IL 62650 Telephone 217-245-5111 Fax 217-243-4773

Moultrie County Health Department

2 W. Adams Sullivan, IL 61951 Telephone 217-728-4114 Fax 217-728-2650

Oak Park Department of Public Health

1 Village Hall Plaza Oak Park, IL 60302 Telephone 708-383-6400, ext. 2244 Fax 708-383-1548

Ogle County Health Department

104 S. Fifth St. Oregon, IL 61061 Telephone 815-732-3201, ext. 247 Fax 815-732-7458

Peoria City/County Health Department

2116 N. Sheridan Road Peoria, IL 61604 Telephone 309-679-6000 Fax 309-685-3312

Perry County Health Department

907 S. Main St., P.O. Box 49

Pinckneyville, IL 62274 Telephone 618-357-5371

Fax 618-357-3190

Pike County Health Department

113 E. Jefferson St. Pittsfield, IL 62363-1420 Telephone 217-285-4407 Fax 217-285-4639

Putnam County Health Department c/o Bureau County Health Department Perry

Plaza

526 Bureau Valley Parkway Princeton, IL 61356 Telephone 815-872-5091

Fax 815-872-5092

Richland County No local health department

Rock Island County Health Department

2112 - 25th Ave. Rock Island, IL 61201 Telephone 309-793-1955 Fax 309-794-7091

St. Clair County Health Department

#19 Public Square, Suite 150 Belleville, IL 62220 Telephone 618-233-7703 Fax 618-233-7713

Sangamon County Department of Public Health

2501 N. Dirksen Parkway Springfield, IL 62702 Telephone 217-535-3100 Fax 217-535-3104

Schuyler County Health Department

227 S. Liberty St., P.O. Box 320 Rushville, IL 62681 Telephone 217-322-4373 Fax 217-322-2138

Scott County Health Department

32 E. Market St. Annex Building P.O. Box 115 Winchester, IL 62694 Telephone 217-742-8203 Fax 217-742-8203

Shelby County Health Department

1700 W. South Third St. Shelbyville, IL 62565 Telephone 217-774-9555 Fax 217-774-2355

Skokie Health Department

5127 Oakton Street Skokie, Illinois 60077 Telephone 847-933-8252 Fax 847-673-8606

Southern Seven Health Department

37 Rustic Campus Drive Ullin, Illinois 62992 Telephone 618-634-2297 Fax 618-634-9394

Springfield Department of Public Health

1415 E. Jefferson St. Springfield, IL 62703 Telephone 217-789-2182 Fax 217-789-2203

Stark County Health Department

4424 U.S. Highway 34 Kewanee, IL 61443 Telephone 309-852-3115 Fax 309-852-0595

Stephenson County Health Department

10 W. Linden St. Freeport, IL 61032 Telephone 815-235-8271 Fax 815-232-7160

Stickney Township Public Health District

5635 State Road Burbank, IL 60459 Telephone 708-424-9200 Fax 708-499-5427

Tazewell County Health Department

21306 Illinois Route 9 Tremont, IL 61568-9252 Telephone 309-925-5511 or 477-2223 Fax 309-925-4381

Vermilion County Health Department

200 S. College Danville, IL 61832 Telephone 217-431-2662 Pager 217-444-7138 Fax 217-431-7483

Wabash County Health Department

130 W. Seventh St. Mount Carmel, IL 62863 Telephone 618-263-3873 Fax 618-262-4215

Washington County Health Department

177 S. Washington St. Nashville, IL 62263 Telephone 618-327-3644 Fax 618-327-4229

Warren County - No local health department

Wayne County Health Department

405 N. Basin Road P.O. Box 445 Fairfield, IL 62837 Telephone 618-842-5166 Fax 618- 842-3305

Whiteside County Health Department

18929 Lincoln Road Morrison, IL 61270-9500 Telephone 815-772-7411, ext. 16 24 hour 815-772-4213 Fax 815-772-4723

Will County Health Department

501 Ella Ave. Joliet, IL 60433 Telephone 815-727-8485 Fax 815-727-8484

Winnebago County Health Department

401 Division St. Rockford, IL 61104 Telephone 815-962-5092 Fax 815-962-4203

Woodford County Health Department

109 S. Major Eureka, IL 61530 Office 309-467-3064 Fax 309-467-5104