

State of Washington
Office of Superintendent of Public Instruction
Department of Health

Infectious Disease Control Guide for School Staff



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April 2004

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Infectious Disease Control Guide for School Staff

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Table of Contents	Page
Acknowledgements.....	i
Appendices.....	v
Acronyms.....	vii
Introduction.....	1
Exclusion from School.....	3
General Considerations.....	5
Common Indicators of Infectious Diseases in Children.....	6
Acquired Immunodeficiency Syndrome (AIDS).....	9
Athlete’s Foot (Tinea Pedis).....	12
Bites.....	14
Animal.....	14
Human.....	16
Chickenpox (Varicella).....	18
Common Cold.....	21
Conjunctivitis (Pink Eye).....	23
Cytomegalovirus Infection (CMV).....	25
Diarrhea.....	27
Diphtheria.....	29
Fifth Disease (Erythema Infectiosum).....	31
Foodborne Disease.....	33
Hand, Foot, and Mouth Disease (HFMD).....	36
Hepatitis.....	38
Hepatitis A, Viral (HAV).....	38
Hepatitis B, Viral (HBV).....	41
Hepatitis C, Viral (HCV).....	45

Table of Contents (cont.)	Page
Herpes Simplex Virus, Oral Area (Cold Sores).....	48
Herpes Zoster (Shingles).....	51
Impetigo.....	53
Infectious Mononucleosis (Mono).....	55
Influenza.....	57
Lice (Pediculosis).....	59
Body Lice (Pediculosis Humanus Corporis).....	59
Crab Lice (Pediculosis Humanus Pubis).....	60
Head Lice (Pediculosis Humanus Capitus).....	61
Measles.....	66
Meningitis.....	69
Mosquito-borne Illness.....	72
Mumps.....	74
Norovirus (Norwalk-like).....	76
Pertussis (Whooping Cough).....	78
Pinworms.....	81
Poliomyelitis (Polio).....	83
Ringworm (Tinea).....	85
Rubella (Three-day Measles).....	87
Scabies.....	89
Sexually Transmitted Disease (STD).....	92
Chlamydia.....	93
Gonorrhea (Clap, Strain, Dose).....	95
Herpes Simplex Virus, Genital Area.....	97
Non-Gonococcal Urethritis (NGU).....	99
Syphilis.....	101
Vaginitis.....	103

Table of Contents (cont.)	Page
Smallpox.....	105
Streptococcal Sore Throat and Scarlet Fever.....	107
Tetanus (Lockjaw).....	110
Tuberculosis (TB).....	112
Warts (Verrucae).....	115
Index.....	181

Appendix I:	Immunization Law RCW 28A.210.060-170.....	116
Appendix II:	RCW 28A.210.010 Contagious Diseases, Limiting Contact— Rules and Regulations.....	118
Appendix III:	Chapter 246-110 WAC Contagious Disease—School Districts and Day Care Centers	
	WAC 246-110-001 Purpose	
	WAC 246-110-010 Definitions	
	WAC 246-110-020 Control of Communicable (Contagious) Disease	
	WAC 246-101-415 Responsibilities of Child Day Care Facilities	
	WAC 243-101-420 Responsibilities of Schools.....	120
Appendix IV:	Chapter 246-100 WAC Communicable and Certain Other Diseases	
	WAC 246-100-006 Purpose	
	WAC 246-100-011 Definitions	
	WAC 246-100-021 Responsibilities and Duties—Health Care Providers.....	125
Appendix V:	Chapter 246-101 WAC Notifiable Conditions	
	WAC 246-101-101 Notifiable Conditions and the Health Care Provider	
	WAC 246-101-105 Duties of the Health Care Provider	
	WAC 246-101-110 Means of Notification	
	WAC 246-101-115 Content of Notification	
	WAC 246-101-120 Handling of Case Reports and Medical Information.....	133
Appendix VI:	Washington State School Directors' Associations, Policy 3414—Infectious Disease.....	143

Appendix VII:	Chapter 246-366 WAC Primary and Secondary Schools.....	145
Appendix VIII:	Guidelines for Handling Body Fluids in Schools.....	148
Appendix IX:	Guidelines for the Placement of Children and Adolescents Infected with the Human Immunodeficiency Virus (HIV).....	158
Appendix X:	RCW 70.24.110 Minors—Treatment, Consent, Liability for Payment for Care.....	163
Appendix XI:	RCW 28A.230.020 Common School Curriculum— Fundamentals in Conduct.....	165
Appendix XII:	Local Health Jurisdictions.....	167
Appendix XIII:	Resources.....	172
Appendix XIV:	Sample Local School District Lice Policies	
	1. Permissive Nit Policy (Spokane School District)	
	2. No Nit Policy (Davenport School District).....	178

Acronyms

AIDS	Acquired Immunodeficiency Syndrome
CDC	Centers for Disease Control and Prevention
CMV	Cytomegalovirus Infection
DOH	Washington State Department of Health
DT	Diphtheria/Tetanus
DTaP	Diphtheria/Tetanus/acellular Pertussis vaccine
DTP	Diphtheria/Tetanus/Pertussis vaccine
HAV	Hepatitis A Virus
HBIG	Hepatitis B Immune Globulin
HBV	Hepatitis B Virus
HCV	Hepatitis C Virus
HIV	Human Immunodeficiency Virus
HSV	Herpes Simplex Virus
IDRH	Infectious Disease and Reproductive Health
MMR	Measles, Mumps, and Rubella vaccine
NGU	Non-Gonococcal Urethritis
OSPI	Office of Superintendent of Public Instruction
PPE	Personal Protective Equipment
RCW	Revised Code of Washington
STD	Sexually Transmitted Disease
TB	Tuberculosis
Td	Tetanus/Diphtheria
VZIG	Varicella-Zoster Immune Globulin
WAC	Washington Administrative Code

Introduction

This material is provided to schools in the state of Washington to assist district staff members in their efforts to preserve and protect the health of both students and employees. Infectious diseases are very common in the school-age child. Because several of the diseases addressed in this manual are vaccine-preventable, it is expected that their incidence in the state will be reduced with the continued implementation of the immunization law (RCW 28A.210.060-170, see Appendix I). School districts should always refer to the most updated version of the specific law or regulation.

The following pages contain guidelines for the control and reporting of diseases in the school-age population in the state of Washington. Schools are urged to consult with their local health jurisdictions for specific measures to be used in handling individual cases or outbreaks of disease. A number of diseases, although contagious, are not covered in this guide since they are not often seen in school or in people of school age. **We have attempted to include information on the effects of childhood diseases on adults in the school setting when the effects are unusual or particularly serious, such as in chickenpox, cytomegalovirus, Fifth disease, measles, mumps, and rubella.**

RCW 28A.210.010 Contagious Diseases, limiting contact—Rules and regulations, requires the State Board of Health, in consultation with the Superintendent of Public Instruction, to “adopt rules and regulations regarding the presence of persons on or about any school premises who have, or who have been exposed to, contagious diseases deemed by the state board of health as dangerous to the public health.” (See Appendix II.)

Chapter 246-110 WAC Contagious Disease—School District and Day Care Centers was adopted for the purpose of governing the presence on or about any school or child care center premises of susceptible persons who have, or have been exposed to, an infectious disease. The law intends also that appropriate recommendation be made to the parent when medical treatment is necessary, and that parents be guided to an appropriate source of community sponsored medical care and/or their primary licensed health care provider. Additionally, WAC 246-110-010 defines school as “each building, facility, and location at or within which any or all portions of a preschool, kindergarten, and grades one through twelve program of education and related activities are conducted for two or more children by or in behalf of any public school district and by or in behalf of any private school or private institution subject to approval by the state board of education.” (See Appendix III.)

Another WAC, 246-101-420 Responsibilities of schools, establishes some steps required of local school districts. (See Appendix III.) The following are the requirements listed in this WAC:

1. Notify your local health jurisdiction of disease that may be associated with the school.
2. Cooperate in monitoring influenza.
3. Consult with a licensed health care provider or your local health jurisdiction for information regarding infectious disease, when necessary.
4. Cooperate in investigations.

Confidentiality of medical information is also addressed in WAC 246-101-420. School staff with knowledge of a person diagnosed with a notifiable condition may only release that information to others who are responsible for protecting the health of the public through control of disease. Additionally, schools are required to implement policies and procedures to maintain confidentiality of medical information possessed by the school. Child care programs may refer to WAC 246-101-415 Responsibilities of child day care facilities for similar requirements. (See Appendix III.)

It is clear that some diseases are “nuisance” diseases and are not considered particularly dangerous to the community’s health. Some examples of nuisance diseases are ringworm and infestation with lice or scabies. While these conditions may not have high priority with local health jurisdictions and are not a significant threat to health, they do cause considerable anguish and disruption to schools. Therefore, close cooperation and consultation between school district administrators and local health jurisdictions is essential for effective control of “nuisance” diseases in schools.

Exclusion from School

The local health officer is the primary resource in the identification and control of infectious disease in the community, including child care centers and schools. School staff knowing of a case or suspected case of a notifiable disease such as contained in Chapter 246-110 WAC (see Appendix III), shall report the name and other identifying information to the principal or school nurse. The school is required in WAC 246-101-420 (see Appendix III) to notify their local health jurisdiction. Additionally, both Chapter 246-100 WAC Communicable and certain other diseases and Chapter 246-101 WAC Notifiable conditions (see Appendices IV and V), define “health care provider” as “any person having direct or supervisory responsibility for the delivery of care who is: a) Licensed or certified in this state under Title 18 RCW...” As health care providers licensed under Title 18 RCW, school nurses (registered nurses) shall follow the requirements of the following WACs (see Appendix V):

- WAC 246-101-101 Notifiable conditions and the health care provider.
- WAC 246-101-105 Duties of the health care provider.
- WAC 246-101-110 Means of notification.
- WAC 246-101-115 Content of notification.
- WAC 246-101-120 Handling of case reports and medical information.

Local health officers may require reporting of additional diseases and conditions within their respective jurisdictions.

The local health officer shall take whatever action he/she deems necessary to control or eliminate the spread of the disease. There are several options available to the local health officer:

1. Close the affected school(s).
2. Close other schools in the local health officer’s jurisdiction.
3. Cause the cessation of selected school activities or functions.
4. Exclude any students, staff, and volunteers who are infected with or deemed susceptible to the disease (WAC 246-110-020, see Appendix III).

The local health officer is also required to discuss the ramifications of his/her actions with the superintendent of the school district prior to taking action and provide the board of directors and superintendent with a written order directing them to take action. See WAC 246-110-020, Appendix III, for additional requirements.

It is recommended that each school district prepare and adopt, in advance, a policy addressing infectious disease so that, when necessary, appropriate action may be taken and parent/guardian is notified without delay. The Washington State School Directors' Association (WSSDA) offers model policies and procedures for local school

districts. Appendix VI is WSSDA's model district policy and procedures, Policy No. 3414—Infectious Diseases. Contact WSSDA regarding other health related sample policies. See Resources, Appendix XIII, for contact information.

For temporary exclusion of inadequately immunized (susceptible) students during a disease outbreak, refer to the *Immunization Manual for Schools, Preschools and Child Care Facilities*, effective spring 2002. See Resources, Appendix XIII, for source.

For information and recommendations on implementation of the Washington Industrial Safety and Health Act, Chapter 296-62-08001, Bloodborne Pathogens, consult the Office of Superintendent of Public Instruction publication *Guidelines for Implementation of Hepatitis B and HIV School Employee Trainings*. See Resources, Appendix XIII, for source.

General Considerations

Exposure to a variety of infectious diseases in a school population is inevitable. This guide provides information to school personnel regarding appropriate actions to identify infectious diseases, to access appropriate health care for students and staff, and to control the spread of disease.

At-Risk Populations

In any school population, there are certain individuals who may have a higher risk of complications if exposed to specific diseases. Students and staff with anemia; immunodeficiencies; who are pregnant; and/or who have chronic disease, nutritional deficiencies, or debilitating illness should be informed of the possible risks of acquiring an infection. The responsibility of the school is not to determine the extent of that risk, but to inform these individuals and to encourage consultation with their licensed health care provider. The licensed health care provider will assess the risk and make appropriate recommendations for further action or treatment.

Handwashing and Hand Sanitizers

Frequent handwashing is the most important technique for preventing the transmission of disease. Proper handwashing requires the use of soap and water and vigorous washing under a stream of temperate (warm), running water.

Hand sanitizers may be used but are not believed to be as effective as washing with soap and water. There is no guidance available on the use of hand sanitizers outside the hospital setting. Hand sanitizers are never appropriate when there is significant contamination such as would occur during a visit to a petting zoo or farm, after changing a diaper, or after using the bathroom.

Home/Hospital

Home/hospital instruction is provided to students who are temporarily unable to attend school for an estimated period of 4 weeks or more because of physical disability or illness. Tutoring is provided to **students who are ill or disabled**, requiring instruction at home or in a hospital. The program does not provide tutoring to students caring for an infant or a relative who is ill. Detailed information may be found at the Office of Superintendent of Public Instruction (OSPI) Health Services Web site at <http://www.k12.wa.us/healthservices> or by contacting the OSPI Health Services office at 360-725-6040.

Common Indicators of Infectious Diseases in Children

Introduction

Since classroom teachers spend several continuous hours a day with their students, they are often in an excellent position to detect early physical and behavioral changes in students at school. Teachers may observe differences in the usual pattern for a particular student, and deviation from a developmental “norm” for students of a given age.

The physical and behavioral “indicators” listed below are nonspecific and do not in themselves suggest the presence of an infection.

Appetite

Often, a student who is ill or becoming ill with an infection will exhibit changes in eating habits. He/she may “pick at” solid foods, eat lightly, want only certain foods, and/or prefer liquids.

Behavior

Irritability may be associated with illnesses, often because of the accompanying fatigue, fever, and discomfort. Play activities may diminish and the student may become lethargic (drowsy or indifferent).

Fever

Parent/guardian and school staff may exhibit a great deal of anxiety about fever, and yet fever does not automatically require therapy. It rarely causes harmful effects in itself, according to several scientific studies. Repeated low-grade fever may occur as the result of physiological changes in the body and may not cause any discomfort to the student.

Students with fever over 100.4°F (38°C) may need to be sent home from school, especially if other symptoms are apparent. The student’s parent/guardian should be notified.

Symptomatic treatment of any illness in the school setting should be avoided unless the parent/guardian has complied with school policy on the administration of oral medications for symptomatic treatment of illness or injury. Aspirin should not be administered for viral illnesses because of the possible association with Reye syndrome.

Skin Color

A pasty, pale appearance may signal an illness, especially if it is a change from a student's normal skin color. A new yellow tinge to the eyes or skin, or a flushed appearance with rosy cheeks and glassy or red eyes, may also indicate an illness.

Rash

The diagnosis of rashes can be very difficult and even a licensed health care provider may require lab tests to confirm whether a certain disease is present. If a referral to a licensed health care provider is made, advise the student's parent/guardian to inform their licensed health care provider's office staff of the presence of a rash illness so that appropriate medical isolation can be arranged during the visit.

Itchiness of the rash is not a signal of infectiousness or noninfectiousness, however, itching should also be evaluated. A rash can be a symptom of a serious or nonserious condition.

Change in Bowel Habit

Diarrhea may accompany a number of infectious diseases. Conversely, sluggishness of the bowels and constipation may occur, sometimes with abdominal cramps. Cramps can be due to the inactivity of the ill student and the dehydration that often occurs during infections.

Nasal Discharge and Obstruction

Clear nasal discharge may signal a cold or it may indicate an allergic reaction, especially if accompanied by watery eyes. Yellow or green discharge may indicate an infection (usually viral) or obstruction by a foreign body. Breathing may be noisy. If breathing is labored, immediate medical referral is indicated.

Sore Throat

A sore throat can be a minor problem. However, it may also accompany potentially more significant infections such as streptococcal pharyngitis, infectious mononucleosis, or even serious generalized illnesses. Check for accompanying fever and notify the parent/guardian. Recommend medical evaluation if the sore throat is accompanied by fever, difficulty swallowing, and/or swollen lymph nodes (glands).

Cough

Coughs accompany some chronic conditions, allergic conditions, and many infectious diseases. Persistent coughs (lasting 3 weeks or more), especially with other symptoms such as fever, loss of appetite, and weight loss, need medical evaluation.

Earache and Discharge From Ear

A student may complain, pull at the ear, or put a hand to the ear if there is discomfort. When there is an earache, particularly when blood or pus is seen running from the ear, the student needs to be referred for medical care.

Pain (Back, Limbs, Neck, Stomach)

Leg and back pains are not uncommon during the course of infectious diseases. Stomach pains or cramps usually do not signal serious disease in children, although appendicitis must be considered when abdominal pain is severe or persistent. Gastrointestinal disturbances such as vomiting, diarrhea, and constipation may be accompanied by abdominal pain. The student who is absent frequently for abdominal pain should receive medical evaluation.

Note

Since this material has been developed for the purpose of assisting school nurses, principals, secretaries, and teachers in making decisions about the public health implications of certain disease situations, a statement here about the exclusion of an affected student from school or from certain school activities is necessary. Prompt identification is important to the control of infectious diseases. Therefore, throughout this guide, distinguishing characteristics of various infectious diseases are given, along with the school's responsibility for intervention.

It is clear that, in addition to deciding whether a student should attend school, the administrator or his/her designee must also evaluate whether the disease has implications for the student's participation in such activities as physical education, athletics, field trips, and lunchroom work. For example, the student who may possibly infect others with a disease that can be spread via droplets, fecal-oral contamination, or sores on the skin should not work in food services until approved to do so by the school nurse, licensed health care provider, or public health official. At the same time, good personal hygiene such as washing hands after using the bathroom and before handling food, must be emphasized. In addition to proper handwashing techniques, it is required that food handlers, where practical, wear single-service gloves (WAC 246-215 Food Service).

Acquired Immunodeficiency Syndrome (AIDS)

Description

Acquired Immunodeficiency Syndrome (AIDS) is the final stage of an infection caused by the Human Immunodeficiency Virus (HIV). Special white blood cells that coordinate the body's fight against infection (CD4 lymphocytes) are killed by the virus as the HIV infection progresses, making the person vulnerable to other serious infections and cancers. These infections, that would not be a threat to people with normal immune systems, are called opportunistic infections. The virus also multiplies in the central nervous system, destroying brain cells, and may cause memory loss, personality changes, and dementia late in the course of the illness. Infection with HIV may have several results:

1. Most infected people remain without symptoms for many years after infection. These people develop antibodies to HIV but have no other signs of infection. Although they have no symptoms, these HIV-infected persons can still infect others through needle sharing, sexual intercourse, or through blood exposure to eyes, mucous membranes, or cuts or sores in the skin.
2. Some people with HIV infections develop opportunistic infections or have nonspecific symptoms such as lymphadenopathy (swollen glands), loss of appetite, chronic diarrhea, weight loss, fever, and fatigue. The signs and symptoms of HIV may be very mild or quite severe. For example, some children with HIV infection may have life-threatening diarrhea, while others feel well. The number of HIV-symptomatic people who go on to develop AIDS is the subject of many current studies.
3. Studies show 50 percent of HIV-infected people are diagnosed with AIDS within 10 years after infection. AIDS is a life-threatening condition. Opportunistic infections may eventually overwhelm the immune system, resulting in death. Several drugs are now available that help reduce or halt the progression of some of these opportunistic infections. Many more drugs are being tested in clinical trials. In 1996, the Food and Drug Administration approved the first protease inhibitors; a class of drugs that inhibits HIV and increases the number of CD4 lymphocytes. Early diagnosis is crucial in assisting HIV-infected people to obtain appropriate medical and psychological care.

Mode of Transmission

HIV has not been shown to be transmitted through casual contact such as occurs in the normal school setting. HIV is transmitted through sexual intercourse, through sharing needles or syringes, and through contact with blood or its components from infected individuals. When a student with HIV infection or AIDS is enrolled in public school, no real risk is present to other students unless the student has severe behavioral problems that make blood-to-blood contact likely. The student, however, may be particularly

Acquired Immunodeficiency Syndrome (AIDS) (cont.)

susceptible to infectious disease (see page 11, No. 6). Universal precautions will be effective in eliminating any threat of infection with HIV. (See *Guidelines for Handling Body Fluids in Schools*, Appendix VIII.)

Antibody Development and the Incubation Period

Antibodies to HIV usually appear in a person's blood from 3 weeks to 3 months after infection with the virus. In rare instances, it may take as long as 6 months for children or adults to develop antibodies. Infants born to infected mothers may have maternal antibodies that disappear between 12 and 18 months after birth. If the baby is infected, it will not produce its own antibodies until its immune system is developed, at about 18 months. There are tests available to diagnose HIV infection in infants. The incubation period for the symptoms of HIV infection (AIDS) may depend on many factors, including: (1) the immune status of the infected person, (2) how the person was infected (sharing needles or injection equipment versus sexual intercourse), and (3) access to medical care or treatment facilities. Estimates of possible incubation periods for symptoms range from a few months to several years for children infected at birth to over 10 years in adults who were infected through sexual intercourse.

Infectious Period

People with HIV infection or AIDS are infected with the virus for life. A majority of HIV-infected people will have positive virus cultures from blood and semen. Tears and saliva contain very few, if any, viral particles and are not considered significant modes of transmission. Recent dental research has shown that saliva contains enzymes that inhibit HIV, including HIV in the blood cells of saliva. Saliva containing visible blood is considered potentially infectious under the Washington Industrial Safety and Health Act (WISHA) bloodborne pathogens standard (WAC 296-62-08001).

Household contact is not considered a significant mode of transmission. Children acquire the infection from their infected mothers before birth or, in rare cases, during a blood transfusion. Over 60 percent of infected children have been born to mothers who were intravenous drug users or sex partners of intravenous drug users. Washington State currently has few diagnosed pediatric AIDS cases.

School/Nurse Responsibility

1. Function as:
 - a. The liaison with the student's licensed health care provider.
 - b. The HIV/AIDS-infected student's advocate in the school (assist in problem resolution, arrange for accommodations, answer questions, and educate staff).

Acquired Immunodeficiency Syndrome (AIDS) (cont.)

- c. A member of the local advisory panel (see *Guidelines for the Placement of Children and Adolescents Infected with the Human Immunodeficiency Virus [HIV]*, Appendix IX).
2. Maintain and enforce confidentiality for the student. The consent to exchange information and medical records is governed by the Family Educational Rights and Privacy Act (FERPA), the Health Insurance Portability and Accountability Act (HIPAA), RCW 70.24.105, and Chapter 70.02 RCW. Refer to *Guidelines for Handling Health Care Information in School Records*. (See Resources, Appendix XIII, for source.) Therefore, pregnant teachers who may be exposed to HIV or AIDS should be advised that there might be some risk to their health and the health of their fetus.
3. Act as a resource and provide inservice education for school staff, parent/guardian, and local school boards on infectious diseases as well as on *Guidelines for Handling Body Fluids in Schools* (see Appendix VIII) and *Guidelines for Handling Health Care Information in School Records*. (See Resources, Appendix XIII, for source.)
4. Make referral to licensed health care provider promptly for acute symptoms.
5. Use cleaning precautions with all body fluids as outlined in *Guidelines for Handling Body Fluids in Schools*, Appendix VIII.
6. Inform parent/guardian to keep the immunocompromised student at home during outbreaks of diseases potentially serious for the student such as chickenpox, measles, and influenza. They should consult with their licensed health care provider and the licensed health care provider should determine whether the individual should stay home from school.

Resources

Clinicians can call San Francisco General's 24-hour bloodborne pathogen hotline (National Clinician's Prophylaxis Hotline) at 1-888-448-4911 for the latest post exposure treatment information, or visit their Web site at <http://www.ucsf.edu/hivcntr>.

For online decision-making support for clinicians, visit NEEDLESTICK! at UCLA's Emergency Medicine Center at <http://www.needlestick.mednet.ucla.edu>.

Access AIDS treatment information at <http://www.hivatis.org>.

Athlete's Foot (Tinea Pedis)

Description

Athlete's foot is a skin infection caused by a fungus in which there is scaling, cracking, and peeling between the toes and on the feet. There may be vesicles (blisters) with thin, watery fluid. Itching and foul odor may occur. Athlete's foot is seen more commonly after puberty.

Mode of Transmission

Athlete's foot is spread through contact with a fungus, either by direct contact with the skin lesions or indirect contact with contaminated floors, showers, or articles used by the infected person.

Incubation Period

Variable (thought to be 2–3 weeks).

Infectious Period

Athlete's foot is infectious as long as the fungus is present on the skin and on contaminated surfaces.

School/Nurse Responsibility

Make referral to licensed health care provider in severe cases when there is a secondary infection or if the condition does not improve with over-the-counter anti-fungal topical preparations.

Control of Spread

1. Thorough, frequent cleansing and **drying** of gymnasium, shower, and pool area floors is essential.
2. Instruct individuals with athlete's foot to **keep feet dry**, exposing their feet to the air whenever possible. Careful drying of toes after bathing is important. Clean, dry socks should be worn after applying anti-fungal cream or powder and should be laundered thoroughly before wearing again. One hundred percent synthetic and wool socks retain moisture and should be avoided. Topical medications for fungus will usually clear up the infection, although in persistent cases, oral treatment may be necessary.

Athlete's Foot (Tinea Pedis) (cont.)

Future Prevention and Education

Physical and health education teachers can be helpful in preventing the spread of athlete's foot by ensuring the proper cleansing of gyms and showers and by instructing students about the causes, means of transmission, and prevention of this condition. The student with an active infection should not use areas where the infection can be transmitted, such as swimming pools.

Bites

Animal Bites

Description

Most schoolroom bites are from laboratory or small pet animals such as white mice, gerbils, guinea pigs, and hamsters. Bites from these animals are generally minor injuries and since the animals are not wild, there is very little risk of rabies or other diseases.

Bites from certain wild or ill mammals do carry a risk of transmitting rabies. The risk of rabies exposure varies by region. In different parts of the United States rabies has been associated with bats, raccoons, foxes, skunks, coyotes, and occasionally other animals bitten by a rabid animal. In Washington State, bats and, very rarely, dogs or cats have been rabid. Squirrels, rodents, and animals raised indoors and kept in cages have essentially no risk of carrying rabies.

Rabies is almost always a fatal disease once the person develops symptoms. Prompt vaccination following an animal bite can reliably prevent rabies from developing. All animal bites should be evaluated by your local health jurisdiction or a designated authority.

Mode of Transmission

Animal bites can transmit infectious conditions such as rabies and tetanus. A bite may also become infected with skin organisms such as staphylococcus or streptococcus. Some snakes are toxic. Exotic animals (not from North America) may carry other serious infections. In 2003, rodents from Africa brought monkey pox into the United States, infecting other animals and causing human illness.

Incubation Period

Typically 3–8 weeks for rabies. The incubation period ranges from 9 days to 7 years.

Infectious Period

Animals with rabies may be infectious for various periods of time. Rabid animals may not show classic symptoms of rabies such as foaming at the mouth or aggressive behavior.

Bites (cont.)

School/Nurse Responsibility

1. Provide basic first aid immediately, washing the wound thoroughly with soap and water.
2. Notify parent/guardian.
3. Report to your local health jurisdiction of any animal bites or known toxic snake bites immediately. (Evaluation of the animal may be necessary.)
4. Make referral to licensed health care provider for evaluation of the bite and for additional medical care if needed for bruising, skin damage, or other injury.
5. Make referral to licensed health care provider for tetanus booster, if needed.
6. Contain the animal only if it is safe to do so. For example, put a bucket over a bat on the ground.
7. If a bat or wild animal is the biting animal, do not touch or move the animal.

Future Prevention and Education

1. Teach students not to touch wild or unfamiliar animals, particularly bats or animals that are acting sick.
2. Do not allow students or teachers to bring wild animals onto school property.
3. Discourage students from bringing exotic animals onto school property.
4. Advise students to wash their hands properly with soap and vigorous washing under a stream of temperate (warm) running water. Hand sanitizers are never appropriate when there is significant contamination such as would occur when touching an animal.
5. Refer to the *Health and Safety Guide Section for K–12 Schools in Washington* at <http://www.k12.wa.us/SchFacilities/HealthSafetyGuide.aspx>.

Bites (cont.)

Human Bites

Description

Human bites have a higher complication and infection rate than animal bites. Wounds of the lips and the folds and tissue surrounding the fingernails account for most of the self-inflicted bite wounds that come to the attention of medical personnel. Occlusional bites (those made by the upper and lower teeth closing) may affect any part of the body, but most often affect the ends of the index and long fingers. About 10–20 percent of human bites seen in emergency rooms are “love nips,” and these injuries may come to the attention of school nurses. Bites to the hands are more serious and more frequently become infected. Human bites may also be caused by, or have reason to be investigated for, child abuse.

Remember that although tetanus may be the first infection that comes to mind in connection with a bite, other infections, severe bruising, or skin cuts may occur. These injuries may require first aid and possibly referral for medical care.

Incubation Period

Development of infection from a bite depends on the depth of the wound, the extent of tissue damage, and the type of infecting bacteria. Up to 45 percent of the anaerobic gram-negative bacilli isolated from human bite wounds may be antibiotic resistant (penicillin and β -lactamase positive). Viridians streptococci have been the most common wound isolates; *S. aureus* occurs in 40 percent of wounds; and *H. influenzae*, *Bacterioides* spp., *Peptostreptococcus* spp., and *Fusobacterium nucleatum* are also found.

Infectious Period

Bacteria in the mouth or on the skin can cause serious infections. There has not been clearly documented rabies transmission between humans.

School/Nurse Responsibility

1. Provide basic first aid immediately, washing the wound thoroughly with soap and water. Remember that bites to the hand have greater potential for infection.
2. Notify parent/guardian of the bite.
3. Make referral to licensed health care provider for evaluation of the bite and for additional medical care, if needed, for bruising, skin damage, or other injury.
4. Make referral to licensed health care provider for tetanus booster, if needed.

Bites (cont.)

5. Investigate bites for child abuse, if necessary.
6. Retain thorough documentation and evidence.

Chickenpox (Varicella)

Description

Chickenpox (varicella) is an acute viral illness of sudden onset characterized by fever, fatigue, and a generalized eruption of the skin. Each lesion begins as a small dewdrop-like vesicle (blister) that scabs over in 3–4 days. These lesions tend to be more abundant on the trunk than on the arms and legs. Lesions in the eyes and mouth may not appear typical and may not have vesicles (blisters).

The illness can be more severe in teens and adults than in younger children. Use of antiviral medication such as acyclovir, may decrease the number of lesions and duration of outbreak of lesions but seems most beneficial if prescribed within 24 hours of rash development.

Infection early in pregnancy may be associated with congenital malformations in 2 percent of cases. Newborns who develop chickenpox disease between the ages of 5–10 days and those whose mothers develop the disease 5 days prior to or within 2 days after delivery are at increased risk of developing severe generalized chickenpox.

Mode of Transmission

Transmission of this highly contagious disease is person-to-person by direct contact, droplets or airborne spread of secretions of the respiratory tract, or indirectly through articles freshly soiled by discharges from vesicles (blisters) and mucous membranes of infected persons. Chickenpox is not transmitted to or from animals.

Incubation Period

10–21 days, usually 14–16 days.

Infectious Period

Chickenpox is infectious from 1–2 days before the rash appears, to the time when the last crop of vesicles (blisters) are dry and crusted (usually 5–6 days after start of rash).

School/Nurse Responsibility

1. Report to your local health jurisdiction of individual cases is not required.
2. Report to your local health jurisdiction of outbreaks (eight or more cases) is required.

Chickenpox (Varicella) (cont.)

3. Referral to licensed health care provider is optional. If a referral is made, advise parent/guardian to inform their licensed health care provider's office staff of the presence of a rash illness so that appropriate medical isolation can be arranged for the visit.
4. Notify the student's classmates' parent/guardian of the presence of chickenpox.
5. During outbreaks in schools, inform students and staff with certain high-risk conditions (anemia, immunodeficiencies, and pregnancy) of the possible risks of acquiring the infection. Individual student health plans for high-risk students should include planning for exclusion, in consultation with the student's licensed health care provider, to avoid contact with specific infections.
6. Inform the parent/guardian that children with chickenpox should not receive aspirin because of its possible association with Reye syndrome.

Control of Spread

1. Exclude students from school until all lesions have crusted.
2. Clean or dispose of articles soiled with nose and throat discharges.
3. Instruct students not to share items that may be contaminated with saliva such as beverage containers.
4. Cover mouth with tissue when coughing or sneezing. If no tissue is available, encourage students to "catch your cold in your elbow" by covering their mouth and nose with the crook of their arm and coughing or sneezing into their shirt or coat sleeve.
5. Encourage proper handwashing techniques.
6. Make referral of susceptible persons for immunization within 72 hours of exposure.
7. Dispose bandages that have been in contact with the vesicles (blisters) in a biohazard bag.
8. Disinfect surfaces that have been in direct contact with fluid from the vesicles (blisters).

Chickenpox (Varicella) (cont.)

Future Prevention and Education

1. High-risk children are being given varicella-zoster immune globulin (VZIG) when exposed to varicella. VZIG is effective in modifying or preventing the disease if given within 96 hours after exposure. It is also indicated for newborns of mothers who develop varicella within 5 days prior to, or 48 hours after, delivery.
2. A live virus varicella vaccine was licensed in the United States in 1995. The Washington State Vaccine Advisory Committee recommends that all children be routinely immunized between the ages of 12–18 months. Varicella vaccine is strongly recommended for all susceptible children by their thirteenth birthday. Persons over the age of 13 years without a reliable history of disease can be tested to determine immunity or can be vaccinated.

Common Cold

Description

The common cold is a viral upper-respiratory infection that inflames the lining of the nose and throat. Symptoms include runny nose, watery eyes, sneezing, coughing, aches, pains, and occasionally fever. Colds are caused by viruses, not by drafts or failure to wear a coat.

Mode of Transmission

The common cold is transmitted by direct contact, droplets from sneezing or coughing, or sharing utensils.

Incubation Period

12–72 hours is usual; may be up to several days.

Infectious Period

The common cold is infectious 1 day before the onset of symptoms until a week or more after onset.

School/Nurse Responsibility

1. Report to your local health jurisdiction is not necessary.
2. Make referral to licensed health care provider if symptoms of significance persist beyond 14 days, or if secondary complications develop.

Control of Spread

1. Clean or dispose of articles soiled with nose and throat discharges.
2. Instruct students not to share items that may be contaminated with saliva such as beverage containers.
3. Cover mouth with tissue when coughing or sneezing. If no tissue is available, encourage students to “catch your cold in your elbow” by covering their mouth and nose with the crook of their arm and coughing or sneezing into their shirt or coat sleeve.
4. Encourage proper handwashing techniques.
5. Exclusion from school is not necessary unless student is feeling ill.

Common Cold (cont.)

Future Prevention and Education

1. Colds are generally self-limiting and disappear on their own without complications. If the student develops ear pain, severe sore throat, difficulty breathing, or symptoms beyond 10 days, advise the parent/guardian to call their licensed health care provider.
2. Colds do not respond to antibiotics. Do not use aspirin during viral infections because of its possible association with Reye syndrome.

Conjunctivitis (Pink Eye)

Description

Conjunctivitis is a common infectious disease of one or both eyes caused by several types of bacteria and viruses. The eye waters profusely, appears extremely red, and feels irritated. The eyelid may be swollen and the student may complain of itching, pain, and sensitivity to light. Vision is usually normal. There may be drainage of mucous and pus or clear liquid.

Mode of Transmission

Conjunctivitis is spread through contact with discharge from eye or respiratory passages or through contaminated fingers or personal articles such as eye cosmetics or contact lenses.

Incubation Period

24–72 hours.

Infectious Period

Conjunctivitis is infectious during active infection (until symptoms have resolved).

School/Nurse Responsibility

Make referral to licensed health care provider.

Control of Spread

1. Exclude student from school and refer to licensed health care provider if there is white or yellow drainage from the eye, altered vision, and/or redness of the eyelid or skin surrounding the eye. Minimal redness to the white of the eye with no other symptoms is not grounds for exclusion.
2. Readmit to school upon licensed health care provider approval (with or without treatment).
3. Report to your local health jurisdiction **clusters** of cases, regardless of the suspected cause of conjunctivitis.
4. Educate students not to share eye cosmetics, contact lenses, or equipment touching the eye such as microscopes.

Conjunctivitis (Pink Eye) (cont.)

Future Prevention and Education

Reinforce the use of good personal hygiene. Remember that a source of infection for girls with recurrent infections may be contaminated eye makeup. If such is suspected, the mascara or eyeliner should be discarded. After treatment is completed, a fresh supply should be used.

Note

Other causes of red and weeping eyes include allergies, drugs, chemicals, and systemic illnesses. They are handled according to the underlying cause, but generally do not require exclusion from school unless the student is very uncomfortable.

Cytomegalovirus Infection (CMV)

Description

Cytomegalovirus infection (CMV) is a member of the herpesvirus group that includes herpes simplex, varicella, and Epstein Barr. CMV is fairly common (between 50–85 percent of the United States population tests positive by the age of 40 years) and is usually asymptomatic in healthy children. If symptoms do occur they may mimic those of infectious mononucleosis (sore throat, fever, fatigue, and swollen glands).

CMV is spread by contact with secretions or excretions of a previously infected person. In adults, CMV is probably sexually transmitted. Because CMV infection is so common and signs of disease rarely occur in healthy adults and school-age children, testing students for CMV is not recommended. During outbreaks in schools, students and staff with certain high-risk conditions (anemia, immunodeficiencies, and pregnancy) should be informed of the possible risks of acquiring the infection. Pregnant women or those of childbearing age, should always follow proper handwashing techniques, especially if working in a child care setting.

Incubation Period

3–12 weeks.

Infectious Period

CMV is infectious months to episodically for years.

CMV is common among the general population; infected neonates (infants less than the age of 4–6 weeks) may excrete the virus for 5–6 years. Anywhere from 8–60 percent of infants begin shedding the virus during the first year of life.

School/Nurse Responsibility

1. Implement universal precautions. See *Guidelines for Handling Body Fluids in Schools*, Appendix VII.
2. Instruct staff who care for infants in proper methods of diaper changing and disposal of soiled materials.

The risk of spread of CMV infection to childcare personnel, women of childbearing age, is not fully known. Until more data are available on occupational infections and the potential risk of exposure to pregnant workers, female employees in their reproductive years should be informed that a significant percentage of infected children may be present in any childcare setting and that care for any infants and children should include hygiene measures such as washing hands after each contact with urine and

Cytomegalovirus Infection (CMV) (cont.)

respiratory-tract or other potentially infectious secretions, and careful handling and disposal of diapers and other articles known to be contaminated with urine and other secretions.

-Morbidity and Mortality Weekly Report, 1985, 34:49–51.

A woman's susceptibility to the disease can be determined by means of a blood titer (test). On the basis of the test and in consultation with her licensed health care provider, a decision can be made on acceptable risk in unusual school settings involving frequent, sustained contact with secretions or urine.

3. Wash hands after contact with respiratory secretions, urine, or feces, and properly discard any material contaminated with secretions or excretions, such as tissues or diapers.

Control of Spread

1. Wash hands after diaper changes and after contact with body secretions, especially urine and saliva.
2. Avoid kissing infected infants.
3. Take care in handling diapers, and properly dispose of articles soiled with body fluids.
4. Avoid sharing beverage containers and eating utensils and follow universal precautions.

Diarrhea

Description

Infectious diarrhea, sometimes with abdominal pain, nausea, vomiting, and fever, may have a number of causes. Organisms causing diarrhea are most commonly viruses, but may include bacteria and parasites like amoeba, Giardia, and intestinal worms. The kinds and severity of symptoms will vary according to the causative organism and the resistance of the person infected. Fecal-oral contamination (carrying the infection from human waste to the mouth) is a common method of transmission. Infection can also be transmitted by contaminated food, water, or swimming water. Salmonella is carried by animals, including cows, birds, and reptiles, and can be transmitted if animal waste is carried to a person's mouth. Determining the specific cause of infectious diarrhea is very difficult in a school setting. All cases of persistent diarrhea in students, especially if accompanied by fever and cramps, should be referred for medical care. There may be a common source of infection if there are multiple cases in a given classroom, school, outdoor education program, pool, or other locations within a short period of time.

	Description	Incubation	Infectious Period	Duration
Viral Gastroenteritis (also called stomach flu)	Low fever, vomiting, cramps, diarrhea, body aches, headache	Usually 24–72 hours	During illness and shortly thereafter	1–2 days
Salmonella*	Cramps, diarrhea, nausea, vomiting, may have blood or pus in stool, may have fever	6–72 hours (usually 12–36)	During illness and as long as organism is in stool (usually 1–4 weeks)	Variable (days to weeks)
Shigella*	Diarrhea, fever, vomiting, cramps, may have blood or pus in stool	1–7 days (usually 2–4)	During illness and as long as organism is in stool (usually 1–4 weeks)	Variable (days to weeks)
<i>E. coli</i> O157:H7*	Diarrhea, cramps, may have blood in stool or severe complications	1–9 days (usually 3–4)	During illness and as long as organism is in stool (usually 1–4 weeks)	Variable (days to weeks)
Giardia+	Frequent, pale greasy diarrhea; cramps; bloating; fatigue; weight loss; may be asymptomatic	5–25 days or longer; median 7–10 days	During entire infection, which may be asymptomatic	Variable (weeks to months)

* Requires a case report to your local health jurisdiction within 1 day of diagnosis.

+ Requires a case report to your local health jurisdiction within 3 days of diagnosis.

Diarrhea (cont.)

School/Nurse Responsibility

1. Report to your local health jurisdiction groups or clusters of suspected food or waterborne illness immediately.
2. Report to your local health jurisdiction confirmed cases of Salmonella, Shigella, *E. coli* O157:H7, viral hepatitis A, or Giardia. Food handlers with diarrhea should be cleared by a licensed health care provider or their local health jurisdiction before returning to work. The school's responsibility for all students, staff, and parents/guardians who prepare food cannot be overemphasized. The importance of proper handwashing techniques, refrigeration, cooking, and serving of food must be stressed. Raw milk and raw eggs should not be served. Food must be protected against contamination.
3. Instruct students and staff regarding proper handwashing techniques after using the bathroom, before eating, and after changing diapers.

Control of Spread—Giardiasis

1. This diarrheal disease is caused by protozoan parasites. Local outbreaks generally occur from contaminated water supplies and less often from fecally-contaminated food.
2. The infected individual may show no symptoms. Therefore, proper handwashing techniques and appropriate disposal of feces and materials contaminated with fecal material must be completed.
3. Surfaces where diapers are changed must be disinfected after each use. (See *Guidelines for Handling Body Fluids in Schools*, Appendix VIII.)
4. In the event of two or more symptomatic cases that appear linked, investigation to determine the source of infection must be carried out. Contact your local health jurisdiction for assistance in the epidemiological investigation and for control procedures.

Future Prevention and Education

The main methods of prevention are reinforcement of principles of personal hygiene such as proper handwashing techniques after using the bathroom, surveillance for further cases, and exclusion from work of food handlers with diarrhea or open skin sores. Students will be kept at home only during the times that symptoms make them uncomfortable or when their local health jurisdiction so advises. Persons ill with diarrhea should not swim in pools or lakes and should not handle food eaten by others until symptoms are gone.

Diphtheria

Description

Diphtheria is an extremely rare, acute infection of the mouth, pharynx, nose, or skin characterized by an inflamed throat and the appearance of a grayish membrane. The lymph nodes of the neck tend to be enlarged and there may be marked swelling of the neck. Diphtheria is usually transmitted from person-to-person by airborne droplets from an infected person or carrier. It may be a very serious disease with extreme toxicity and frequent complications, including heart muscle involvement and respiratory obstruction or paralysis. Death occurs in 5–10 percent of cases. Childhood vaccination has almost eliminated diphtheria in this country.

Incubation Period

Usually 2–5 days.

Infectious Period

Diphtheria is usually infectious for 14 days or less but may be longer. People who have been treated with antibiotics are generally infectious for only 1–2 days after treatment is started. Carriers (persons who are infected but not ill) may shed the organism for an extended period and are infectious.

School/Nurse Responsibility

1. Report to your local health jurisdiction of confirmed cases is mandatory. Follow your local health jurisdiction's recommendation regarding exposed, susceptible persons.
2. Make referral to licensed health care provider of suspicious cases immediately.

Control of Spread

1. Your local health officer will advise the school when readmission is permissible. Generally, exclusion from school is mandatory until there are two negative cultures more than 24 hours apart, and more than 24 hours after the cessation of antibiotic treatment.
2. Unimmunized or inadequately immunized school contacts are at risk of infection. Additional doses of a diphtheria-containing vaccine and prophylactic antibiotics may be recommended for close contacts of a case.
3. Close contacts of a child with a known case should be excluded until their cultures are negative and your local health jurisdiction clears them to return.

Diphtheria (cont.)

Future Prevention and Education

1. All children should be immunized with a three-dose series of diphtheria-containing vaccine in the first year of life. A booster dose should be given during the second year of life and again at the time of school entry. Booster doses of tetanus and diphtheria toxoids (Td) should be given at 10-year intervals throughout a lifetime. Td is given to all individuals over the age of 7 years.
2. Clean or dispose of articles soiled with nose and throat discharges.
3. Instruct students not to share items that may be contaminated with saliva such as beverage containers.
4. Cover mouth with tissue when coughing or sneezing. If no tissue is available, encourage students to “catch your cold in your elbow” by covering their mouth and nose with the crook of their arm and coughing or sneezing into their shirt or coat sleeve.
5. Encourage proper handwashing techniques.

Immunization Requirement, State of Washington

The minimum requirement for school entry is four doses of a diphtheria-containing vaccine (DTaP, DTP, or DT) with the student receiving the fourth dose on or after their fourth birthday. The minimum requirement for students over the age of 7 years is three doses of any diphtheria-containing vaccine, with the third dose given on or after their fourth birthday.

Fifth Disease (Erythema Infectiosum)

Description

Fifth disease, also known as erythema infectiosum, is a mild rash illness caused by human parvovirus B19. It usually occurs in students in late winter and early spring, sometimes in clusters or outbreaks. The illness is characterized first by headache, body ache, sore throat, low-grade fever, and chills. These symptoms are usually mild and resolve after a few days. Then, following a week of no symptoms, a bright red rash appears on the cheeks giving a “slapped face” appearance, sometimes with a “lacy” rash on the arms and legs. The rash is benign but can fade and recur for a few days or a few weeks, especially in response to changes in environmental temperature. Adults may not develop the rash but sometimes experience pains in the joints of their hands and feet. Approximately 25 percent of adults who contract the infection have no symptoms.

Although the illness is usually mild and, in many cases goes unnoticed, the virus has been associated with miscarriages and stillbirths if a pregnant woman acquires the illness during the first half of pregnancy. The risk of fetal death is less than 10 percent after proven maternal infection in the first half of pregnancy. Also, the illness has been associated with worsening of symptoms in some individuals with chronic blood disorders such as sickle cell anemia. Immunosuppressed people may develop severe, chronic anemia if exposed to Fifth disease.

Mode of Transmission

Fifth disease is spread by respiratory droplets and from mother to fetus.

Incubation Period

Estimated to be 4–20 days to development of rash.

Infectious Period

Individuals with Fifth disease are probably contagious only from respiratory secretions early in the illness. Thus, by the time the rash appears, the individual is no longer contagious. Immunosuppressed people with chronic infection may be infectious for months to years.

School/Nurse Responsibility

1. No treatment is indicated for this illness and it is not necessary to exclude the ill student from school unless there is discomfort from symptoms.
2. Inform known pregnant women of potential exposure and make referral to licensed health care provider.

Fifth Disease (Erythema Infectiosum) (cont.)

3. During outbreaks in schools, inform students and staff with certain high-risk conditions (anemia, immunodeficiencies, and pregnancy) of the possible risks of acquiring the infection. Individual student health plans for high-risk students should include planning for exclusion, in consultation with the student's licensed health care provider, to avoid contact with specific infections.

Control of Spread

1. Wash hands after contact with respiratory secretions and dispose of facial tissues containing respiratory secretions.
2. Pregnant women with sick children at home are advised to wash hands frequently and to avoid sharing eating utensils.
3. Clean or dispose of articles soiled with nose and throat discharges.
4. Instruct students not to share items that may be contaminated with saliva such as beverage containers.
5. Cover mouth with tissue when coughing or sneezing. If no tissue is available, encourage students to "catch your cold in your elbow" by covering their mouth and nose with the crook of their arm and coughing or sneezing into their shirt or coat sleeve.
6. Encourage proper handwashing techniques.

Future Prevention and Education

1. Pregnant teachers who may be exposed to Fifth disease should be advised that there might be some risk. They should seek consultation with their licensed health care provider and their licensed health care provider should determine whether or not they should stay home. However, much needs to be learned about the potential risks to pregnant women. The virus is quite prevalent in the general community. Approximately 50 percent of adults demonstrate immunity to Fifth disease.
2. A serologic test is available and can be used to determine if a pregnant woman is immune, susceptible, or recently infected with parvovirus. The pregnant woman's licensed health care provider and their local health jurisdiction are responsible for determining risk and recommending any intervention.

Foodborne Disease

Description

Foodborne disease is a broad term referring to many different kinds of infections and poisonings that are spread by food. Foodborne disease can be caused by bacteria, viruses, parasites, chemicals, naturally occurring poisonous plants, and other agents. Depending on the agent and the patient, foodborne disease often manifests with any combination of the following: diarrhea (with or without blood), vomiting, nausea, abdominal cramps, fever, decreased energy, headache, loss of appetite, sore throats, and allergic reactions. In rare cases, kidney failure, blood clotting disorders, neurological symptoms, blood stream infections, and death can result.

Mishandled or contaminated food is the leading cause of diarrheal illness in the United States. *Campylobacter jejuni* gastroenteritis is the most common reported cause of diarrheal illness in Washington State. Norovirus or other nonspecific viral agents are a common cause of what is often called “stomach flu” and can be spread by contaminated food, contaminated water, or person-to-person transmission. The extent to which foodborne viral gastroenteritis contributes to school absenteeism appears significant, but remains undocumented. Other common causes of foodborne illnesses include *Clostridium perfringens*, Salmonella, *E. coli* O157:H7, *Bacillus cereus*, and viral hepatitis A. Staphylococcal food poisoning is now very rare in Washington State.

Foodborne disease is usually self limiting. Treatment is usually supportive and focused on fluid replacement and, in some cases, fever control. More aggressive treatment may be indicated in severe cases as prescribed by the licensed health care provider.

Mode of Transmission

The transmission of foodborne illness often requires one or more of the following conditions: serving raw or inadequately cooked foods (meat, milk, eggs), bacterial multiplication in food held at room temperature instead of being chilled or kept hot, cross-contamination of food with raw meat or poultry, or contamination of food by an infected food handler.

Foodborne Disease (cont.)

Incubation Period	Examples	Usual Incubation Periods
Chemical poisonings	Copper Pesticides Mushrooms	15 minutes to 2 hours (sometimes up to 4 hours)
Bacterial enterotoxins	<i>Staphylococcus aureus</i> <i>Clostridium perfringens</i> <i>Bacillus cereus</i>	30 minutes to 5 hours 8–22 hours 30 minutes to 5 hours (vomiting) 8–16 hours (diarrhea)
Bacterial, viral infections	Campylobacter Salmonella <i>E. coli</i> O157:H7 Shigella	18 hours to 5 days

Infectious Period

Infected food service workers may be infectious before, during, and after symptoms, depending on the agent, the patient, and treatment received. For example, a case of salmonellosis treated with antibiotics may remain infectious for several weeks after symptoms have ceased.

School/Nurse Responsibility

1. Exclude food handlers with gastrointestinal upsets, enteric disease, and respiratory infections from working with food or food contact surfaces for at least 24 hours after the symptoms have ceased or until any applicable public health recommendations have been satisfied. (There are special requirements for food handlers with Shigella.)
2. Report to your local health jurisdiction of possible or confirmed foodborne illnesses immediately. (See Appendix V and the above chart.)
3. Assist local and state public health investigators with obtaining laboratory samples and interviewing cases and controls in outbreak situations.

Foodborne Disease (cont.)

Control of Spread

1. Ensure safe food handling practices for students and staff in the school environment, especially handwashing, use of gloves, control of food temperatures, rapid cooling, adequate cooking and reheating, protecting food from contamination by raw meats, and preparing food only when feeling well. It is important to note that foods of animal origin or containing animal products and cooked rice, beans, and potatoes must, with few exceptions, be refrigerated (less than 40°F) or held hot (greater than 140°F). Prior to preparing food, teachers and students should be made aware of safe food handling practices.
2. Ensure adequate handwashing facilities for all students and staff handling food (warm water, soap, and paper towels). This is required under Chapter 246-366 WAC (see Appendix VII).
3. Educate students of all ages in proper handwashing techniques after using the bathroom and after touching or handling animals.
4. Provide education on the basic principles of food safety to students in appropriate age groups as determined by intelligence and behavior modification potential. Emphasis should be placed on handwashing, proper cooking, cooling, temperature control, and preventing contamination.
5. Do not allow raw milk or inadequately cooked meat or eggs to be served to students, including during field trips. Have students wash hands after being in an environment with animals, particularly during field trips.
6. Surfaces where diapers are changed must be disinfected after each use (see Appendix VIII).

Hand, Foot, and Mouth Disease (HFMD)

Description

Hand, foot, and mouth disease (HFMD) is a common viral illness of infants and children. It is characterized by fever, sores in the mouth, and a rash with vesicles (blisters). HFMD begins with a mild fever, poor appetite, fatigue, and, frequently, a sore throat. One or two days after the fever begins, sores develop in the mouth. They begin as small red spots that blister and then often become ulcers. They are usually located on the tongue, gums, and inside of the cheeks. The skin rash develops over 1–2 days with flat or raised red spots, some with vesicles (blisters). The rash does not itch and it is usually located on the palms of the hands and soles of the feet. It may also appear on the buttocks. A person with HFMD may have only the rash or the mouth ulcers.

Mode of Transmission

HFMD is spread from person-to-person by direct contact with nose and throat discharges or the stool of infected persons. A person is most contagious during the first week of the illness. HFMD is not transmitted to or from pets or other animals.

Incubation Period

Usually 3–6 days. Fever is often the first symptom.

Infectious Period

HFMD is infectious 2 days before the rash appears and during the acute stage of illness, perhaps longer. Virus may be found in respiratory secretions for several days and in stool for several weeks.

School/Nurse Responsibility

1. Report to your local health jurisdiction clusters of cases.
2. Exclude student only if they are too ill to participate in school activities. Isolation is not necessary.

Future Prevention and Education

1. Clean or dispose of articles soiled with nose and throat discharges.
2. Instruct students not to share items that may be contaminated with saliva such as beverage containers.

Hand, Foot, and Mouth Disease (cont.)

3. Cover mouth with tissue when coughing or sneezing. If no tissue is available, encourage students to “catch your cold in your elbow” by covering their mouth and nose with the crook of their arm and coughing or sneezing into their shirt or coat sleeve.
4. Encourage proper handwashing techniques.

Hepatitis

The word hepatitis means “inflammation of the liver.” Hepatitis can be caused by many things including drugs, toxins, and viruses. Symptoms may include fatigue, loss of appetite, low-grade fever, nausea, abdominal pain, gastrointestinal upset, and, in some cases, jaundice. There are several types of infections classified as viral hepatitis. Each infection is caused by a different virus. They differ in modes of transmission and clinical course. Laboratory and clinical evidence is necessary to distinguish between the types of hepatitis.

Viral Hepatitis A (HAV)

Description

The onset of viral hepatitis A (HAV) infection is usually abrupt with symptoms as described above. HAV varies from a disease that causes no symptoms to a mild illness lasting 1–2 weeks or, rarely, to a severely disabling disease lasting several months. Many cases are mild and without symptoms, especially in children, and are only recognized by liver function tests and laboratory tests of serum and stool.

Mode of Transmission

Transmission of HAV is usually by the fecal-oral route (human waste carried to the mouth) and most often directly from person-to-person from inadequately cleaned hands. It may also be spread by contaminated water or food such as contaminated shellfish. If given within 2 weeks of exposure, immune globulin may prevent infection.

Incubation Period

15–50 days, average 28–30 days.

Infectious Period

Maximum infectiousness occurs during the 2 weeks prior to onset of jaundice, (evidenced by development of a new yellow color to the skin or eyeballs) and probably for 1 week after. Infectiousness falls off dramatically at this point. In cases without jaundice the peak of infectiousness occurs during the latter half of the incubation period or when liver function abnormalities are most evident in blood tests.

Hepatitis (cont.)

School/Nurse Responsibility

1. Report to your local health jurisdiction of acute HAV is mandatory.
2. Make referral to licensed health care provider immediately.
3. Consult with your local health jurisdiction to determine if anyone should receive immune globulin. Under normal circumstances, casual contacts at school (teachers, classmates, etc.) are not at significant risk for contracting the disease. In the unusual circumstance of a school-centered epidemic, immune globulin is recommended for prevention (prophylaxis) for close contacts.
4. Enforce ban on food handling by infected staff or students until cleared by your local health jurisdiction.
5. Transmission at child care centers and among preschool groups is more common than in schools. Child care centers should stress measures to eliminate the danger of fecal-oral transmission by enforcing proper handwashing techniques after every diaper change and before eating. Immune globulin may be necessary for staff and attendees when there is a child care outbreak.

Control of Spread

1. Exclude cases from school until cleared by a licensed health care provider to return.
2. Illness among a student's family members may be the tip-off of possible HAV transmission to the classroom. Students may be infectious and spread the disease even though they do not themselves show signs of illness.
3. Immune globulin should be administered to family or other close contacts of cases as soon as possible. It is effective only when given within 2 weeks of exposure. Your local health jurisdiction will advise schools as to the appropriate course of action.
4. Using gloves during diaper changing and paying strict attention to handwashing are required in child care settings.
5. Discourage sharing of beverage containers.

Hepatitis (cont.)

Future Prevention and Education

1. A safe and effective vaccine is available and recommended for persons of the age of 2 years and older who are traveling or working in countries with high or intermediate risk of HAV infection. Other groups that should be offered vaccine include men who have sex with men, intravenous drug users, and persons who have chronic liver disease. HAV vaccine is not routinely recommended for health care workers or persons attending or working in child care centers. It is given in two doses, the second dose 6 months after the first or, in a newer version approved for adults, it is combined with hepatitis B shots.
2. HAV is generally spread by fecal-oral transmission. Students should be instructed in proper handwashing techniques before eating and after using the bathroom. Personal hygiene, especially careful handwashing after every diaper change and before eating, is important.
3. Because HAV is transmitted through food and water as well as person-to-person, no student or adult with suspected HAV, or in a family with HAV cases, should be allowed to work as a food handler.

Hepatitis (cont.)

Viral Hepatitis B (HBV)

Description

The onset of viral hepatitis B (HBV) infection is generally more gradual and subtle than viral hepatitis A (HAV) but with the following symptoms: anorexia, nausea, vomiting, abdominal discomfort, and sometimes jaundice. Severity of the disease can vary from nonapparent cases, recognized by serological tests, to a rapidly worsening fatal illness. Most people recover from the infection, though up to 5 percent of adults born in the United States become chronic carriers of the disease and are infectious indefinitely. The rate of chronic carriers for people from other parts of the world is 1–20 percent. Carriers are at risk of developing chronic liver disease and liver cancer. Since about 50 percent of those infected have no symptoms, persons may not know they have HBV but still may be able to infect others.

Mode of Transmission

HBV is transmitted by exposure to infected blood or blood products, vaginal fluids, semen, and possibly saliva. HBV is transmitted from person-to-person by contaminated syringes, needles and other instruments (including ear piercing instruments), intravenous drug use, sexual contact, household contact with an infected person, or from an infected mother to her infant. Transmission occurs through mucous membranes or nonintact skin. High rates of infection have been found among illegal intravenous drug users, men who have sex with men, patients on hemodialysis, residents of long-term care institutions, and those requiring frequent transfusions. If given within 2 weeks of exposure, hepatitis B immune globulin (HBIG) may prevent infection.

Incubation Period

45–160 days, average 120 days.

Infectious Period

Blood and body fluids are contagious prior to and for weeks after jaundice. Blood from experimentally infected volunteers has been shown to be infectious many weeks before the onset of any symptoms, throughout the clinical course of the illness, and, in some cases, into a carrier state that may continue for the rest of the person's life.

Hepatitis (cont.)

School/Nurse Responsibility

1. Report to your local health jurisdiction is mandatory.
2. Make referral to licensed health care provider for acute symptoms.
3. Consult with your local health jurisdiction to determine if anyone should receive HBIG. Under normal circumstances, casual contacts at school (teachers, classmates, etc.) are not at significant risk for contracting the disease. In the unusual circumstance of a school-centered epidemic, HBIG is recommended for prevention (prophylaxis) for close contacts.
4. Enforce strict confidentiality of health care information.
5. Use cleaning precautions with all body fluids as outlined in *Guidelines for Handling Body Fluids in Schools*, Appendix VIII.

Control of Spread

1. Consult with your local health jurisdiction if there is any question about when the infected person may return to school after recovery.
2. HBIG is not indicated for casual school contacts, although HBIG and HBV vaccine may be administered to certain contacts if blood transmission occurs.
3. Use cleaning precautions with all body fluids as outlined in *Guidelines for Handling Body Fluids in Schools*, Appendix VIII.
4. Employers are required to provide evaluation for employees exposed to blood or other potentially infectious material under the WISHA bloodborne pathogens standard (WAC 296-62-08001).

Future Prevention and Education

1. Routine HBV vaccine is recommended for all children and adolescents from birth through the age of 18 years. It is a three-dose series with the second and third doses given 1–6 months after the first. Expect new formulations in the future.

Hepatitis (cont.)

2. School staff having frequent and routine contact with blood, skin lesions, saliva, or infected secretions (such as occurs in doing first aid or health/nursing procedures) of an HBV-infected individual, or with those in a high-risk group (de-institutionalized mentally disabled, individuals from certain areas of Asia and Africa) should receive the HBV vaccine. The chief means of transmission to school staff would probably occur through contamination of wounds or lacerations or by exposure of mucous membranes to infected blood. Contact your local health jurisdiction and/or Washington State Department of Labor and Industries industrial hygiene consultant to evaluate the need for individual school staff to be immunized. School staff with designated job duties that may involve exposure to blood must be offered the vaccine. Their employer is responsible for complying with all provisions of the WISHA bloodborne pathogens standards. For additional information, see *Guidelines for Implementation of Hepatitis B and HIV School Employee Trainings* (available from OSPI Health Services at 360-725-6040). For WISHA standards on occupational exposure to bloodborne pathogens, see WAC 296-62-08001 and the WISHA Web site at <http://www.lni.wa.gov/wisha/>.
3. In institutions for the developmentally disabled, vaccination of classroom contact is strongly encouraged if a classmate who is a HBV carrier behaves aggressively or has special medical problems that increase the risk of exposure to his/her blood or serous secretions.
-*Mortality and Morbidity Weekly Report*, February 9, 1990, see page 15.
4. Persons in casual contact with carriers in settings such as schools and offices, are at minimal risk of HBV infection and vaccine is not routinely recommended for them.
-*Mortality and Morbidity Weekly Report*, February 9, 1990, see page 16.
5. If exposure to blood or serous secretions from an infected person occurs through a needlestick, a cut or wound, or through the eyes or mucous membranes, treatment with HBIG and/or HBV vaccine may be indicated. Referral of employees after an exposure incident for evaluation and treatment by a licensed health care provider is required by the WISHA bloodborne pathogens standard.
6. Using gloves during diaper changing and paying strict attention to handwashing are required in child care settings.

Hepatitis (cont.)

Immunization Requirement, State of Washington

Completion of the three-dose series of HBV vaccine is required for all children in Grades K–6 for school year 2003–04. The requirement will move up a school grade each year. School year 2009–10 will require HBV vaccine for all students Grades K–12. Adolescents should be strongly encouraged to complete the vaccine series if they have not already done so.

Hepatitis (cont.)

Viral Hepatitis C (HCV)

Description

The signs and symptoms of viral hepatitis C (HCV) infection are indistinguishable from those of hepatitis A or B. However, the vast majority of people acutely infected with HCV (up to 90 percent) have no symptoms and the infection is frequently not recognized. Up to 80 percent of infections will become chronic and up to 20 percent of those chronically infected will develop cirrhosis after many years of infection. HCV is currently the most common indication in the United States for a liver transplant. Similar to viral hepatitis B (HBV), chronically infected persons carry the virus and may infect others.

Mode of Transmission

HCV is transmitted primarily by exposure to infected blood and other body fluids and, prior to the routine HCV screening of blood products, was transmitted by blood products. Currently, most HCV infections are acquired through sharing of contaminated injection equipment. HCV can also be transmitted through sex or from mother to infant during childbirth, however, this is much less common than with HBV. Unfortunately, there is no effective method of post exposure prevention (prophylaxis) for HCV.

Incubation Period

2 weeks to 6 months, average 6–9 weeks.

Infectious Period

Blood and other potentially infectious materials are contagious days to weeks before the onset of symptoms. Those with a chronic infection are infectious indefinitely. HCV is not as easily transmitted as HBV.

School/Nurse Responsibility

1. Report to your local health jurisdiction of acute and chronic cases is mandatory.
2. Make referral to licensed health care provider for acute symptoms.
3. Enforce strict confidentiality of health care information.

Hepatitis (cont.)

Control of Spread

1. Consult with your local health jurisdiction if there are any questions about the school attendance of a student with HCV.
2. Unlike HBV, there is no effective treatment to prevent infection after exposure. There would be no need to provide any preventive measures for routine school contacts. Employers are required to provide evaluation for employees exposed to blood or other potentially infectious materials under the WISHA bloodborne pathogens standard (WAC 296-62-08001).
3. To disinfect materials contaminated with blood or other potentially infectious materials, and for the correct disposal of contaminated sharps, see *Guidelines for Handling Body Fluids in Schools*, Appendix VIII.
4. Using gloves during diaper changing and paying strict attention to handwashing are required in child care settings.

Future Prevention and Education

1. There is currently no effective vaccine to prevent HCV. The primary means of transmission to school staff would probably occur through contamination of wounds or lacerations, or by exposure of mucous membranes to blood or other potentially infectious material. Employers of staff whose designated job duties may expose them to blood or other potentially infectious material must comply with the provisions under the WISHA bloodborne pathogens standard (WAC 296-62-08001). See *Guidelines for the Implementation of Hepatitis B and HIV School Employee Trainings* (available from OSPI Health Services at 360-725-6040) or the WISHA Web site at <http://www.lni.wa.gov/wisha/> for additional information.
2. If exposure to blood or other potentially infectious material from a person with HCV occurs through a needlestick, a cut or wound, through the eyes, or mucous membranes, exposed employees must be referred for evaluation as required by the WISHA bloodborne pathogens standard, available through their Web site at <http://www.lni.wa.gov/wisha/p-ts/BBPathogens/default.htm>.
3. The Advisory Committee on Immunization Practice recommends that persons with HCV be immunized with viral hepatitis A and HBV vaccines.
4. Instruct all staff in universal precautions and reinforce the training each school year.

Hepatitis (cont.)

The CDC Web site on hepatitis provides updated material on this infection at <http://www.cdc.gov/hepatitis>.

The Washington State Department of Health Web site provides fact sheets on this infection at <http://www.doh.wa.gov/A-Z.htm>.

Clinicians can call San Francisco General's 24-hour bloodborne pathogen hotline (National Clinician's Prophylaxis Hotline) at 1-888-448-4911 for the latest post exposure treatment information or visit their Web site at <http://www.ucsf.edu/hivcntr>.

For online decision-making support for clinicians, visit NEEDLESTICK! at UCLA's Emergency Medicine Center at <http://www.needlestick.mednet.ucla.edu>.

For Washington State information on bloodborne pathogens and training, call Labor and Industries at 1-800-4BESAFE.

Clinicians seeking more information or question and answer sheets on hepatitis topics should consult the CDC Web site at <http://www.cdc.gov/hepatitis>. This site includes a continuing education credit section on HCV.

Herpes Simplex Virus, Oral Area (Cold Sores)

Description

Herpes simplex virus (HSV) is a recurrent, life-long viral infection. New tests indicate that 70 percent of those infected have no symptoms. If symptoms occur, single or grouped vesicles (blister) are usually located around mucous membranes, the lips in the oral area (cold sores), or, more rarely, inside the mouth or on the skin. Two types of HSV exist. Type 1 HSV (orales) has primarily been associated with infections of the oral area. With the advent of new tests, it is known that Type 1 HSV may also cause genital disease. Type 2 HSV (labialis) is most commonly associated with genital disease although it may also cause oral disease. Lesions due to Type 2 HSV are not different in infectiousness or risk to others than lesions due to Type 1 HSV.

Oral infections are extremely common in children, and by adulthood 80 percent of Americans have antibodies to Type 1 HSV.

Herpetic eczema can develop in students infected with HSV and autoinoculation may result in conjunctivitis, herpetic keratitis (inflammation of the cornea), or whitlow. Herpetic whitlow consists of single or multiple vesicular lesions on the distal parts of the fingers.

Mode of Transmission

Both Types 1 and 2 HSV are transmitted by direct contact with infected skin and secretions during periods of asymptomatic or symptomatic viral shedding. The virus may be transmitted during contact sports such as wrestling. HSV lesions are most infectious while they are in the water blister stage.

Incubation Period

2–20 days.

Infectious Period

Skin lesions are infectious until firmly crusted over and healed. The virus can be shed from the site of infection at any time. Sores need **not** be present. The virus can be shed for at least 1 week during primary infections, less (perhaps 3–5 days) during recurrences.

Infectiousness is greatly reduced when lesions have crusted. Spread of HSV from oral lesions is difficult to prevent since these lesions are not easily covered with bandages. Only students with primary infection who do not have control of oral secretions should be excluded from school or child care. Students with uncovered lesions on exposed

Herpes Simplex Virus, Oral Area (Cold Sores) (cont.)

surfaces pose a small potential risk to contacts. Exclusion of students with recurrent infection of cold sores is not indicated.

School/Nurse Responsibility

Cold Sores—Skin Lesions

1. Report to your local health jurisdiction is not required.
2. Cover skin lesions with a bandage or clothing when possible.
3. Avoid direct contact with infected lesions if possible. Wear gloves if direct hand contact to lesions is necessary. Hands must be washed after gloves are removed.
4. Exclude students with skin lesions from contact sports such as wrestling.
5. Children less than the age of 3–4 years should be encouraged to stay home whenever cold sores are present, especially during the primary episode. It is almost impossible to prevent young children from spreading the virus by fingers and/or mouth contact.
6. Registered nurses may assess skin lesions to allow student to return to school-related activities.

Genital Herpes (see page 97 for more information)

1. Report to your local health jurisdiction for initial (primary) genital infection is mandatory.
2. Report of suspected child abuse cases is mandatory.
3. Use gloves if having direct contact with infectious lesions such as diapering.

Control of Spread

1. Advise student to avoid spread by fingers or kissing. Reinforce proper handwashing techniques.
2. Educate student about good personal hygiene and avoiding oral-oral or genital-oral transmission.
3. Instruct students not to share items that may be contaminated with saliva such as lipstick and beverage containers.

Herpes Simplex Virus, Oral Area (Cold Sores) (cont.)

Future Prevention and Education

Provide education and counseling regarding transmission of diseases, recurrence potential, available treatments, and recommended sexual practices to prevent spread.

Herpes Zoster (Shingles)

Description

Herpes zoster, commonly known as shingles, is caused by the chickenpox (varicella) virus. When an individual has chickenpox, the virus infects the nerves and stays dormant until immunity decreases. Herpes zoster represents a recurrence of a previous chickenpox infection. Children who had chickenpox during the first year of life are more likely to develop herpes zoster in adolescence. Otherwise, herpes zoster usually occurs in elderly or immunocompromised individuals. In herpes zoster there is pain, sometimes severe, over the pathways of the sensory nerves under the skin, followed by an outbreak of small vesicles (blisters). It usually lasts 3–4 weeks. The virus, in the vesicle (blister) fluid of a person who has herpes zoster, is contagious and can cause chickenpox in a nonimmune individual. Individuals who are immunocompromised or are being treated for malignancies may develop severe disease with involvement of not only skin but also internal organs. These individuals should be seen by their licensed health care provider as soon as possible if herpes zoster develops.

Incubation Period

Uncertain, but may be years since the virus stays dormant after the chickenpox virus.

Infectious Period

Skin lesions are infectious in the water vesicle (blister) stage until crusted over. The virus can be shed from the site of infection at any time. Herpes zoster has a much lower rate of transmission than that of chickenpox.

School/Nurse Responsibility

1. Report to your local health jurisdiction is not required.
2. Make referral to licensed health care provider if necessary.
3. Advise student not to touch or scratch lesions.
4. Educate student about good personal hygiene, especially proper handwashing techniques.
5. Ensure that lesions are covered with a bandage or clothing when possible. Students with herpes zoster are to be excluded from school if lesions are not covered with a bandage or clothing.
6. Avoid direct contact with infected lesions when possible. Wear gloves if direct hand contact to lesions is necessary. Hands must be washed after gloves are removed.

Herpes Zoster (Shingles) (cont.)

7. Exclude students with lesions from contact sports such as wrestling.

Control of Spread

1. Dispose of bandages that have been in contact with the vesicles (blisters) in a biohazard bag.
2. Disinfect surfaces that have been in direct contact with fluid from the vesicles (blisters).

Future Prevention and Education

Routine administration of varicella vaccine to prevent wild-virus chickenpox disease may reduce the incidence and severity of herpes zoster.

Impetigo

Description

Impetigo is a bacterial skin infection that may begin with small vesicles (blisters) that later may contain pus and become scabbed. Staphylococcal or streptococcal bacteria cause this infection of the skin.

Necrotizing fasciitis (flesh-eating bacteria) is caused by Group A strep; the same bacteria that causes strep throat and impetigo. Unlike strep throat and impetigo, which are common and easy to treat, necrotizing fasciitis is very rare and more difficult to treat. The signs and symptoms are fever with severe pain, swelling, and redness at an open wound site. As with all unidentified rashes, especially those accompanied by fever or illness, make referral to a licensed health care provider. Treatment is early antibiotic therapy. Prevention is practicing good handwashing and keeping all wounds clean.

Mode of Transmission

Impetigo is spread by direct person-to-person contact.

Incubation Period

Variable, 1–5 days.

Infectious Period

Impetigo is infectious until the sores are completely healed.

School/Nurse Responsibility

1. Report to your local health jurisdiction group outbreaks of the disease.
2. Make referral to licensed health care provider. The disease responds very quickly to systemic antibiotic treatment and/or prescription topical antibiotic ointments.

Control of Spread

1. Exclusion from school should be reserved for those with extensive draining lesions and is generally not essential unless the licensed health care provider suggests it. Students should not participate in swimming, body contact sports, or food preparation activities until healed.
2. Antibiotics will decrease the spread of the disease and decrease the incidence of complications from the bacterial infection.

Impetigo (cont.)

3. Good personal hygiene and soap and water cleansing of minor skin breaks will help to prevent spread.

Future Prevention and Education

No vaccine is available. Emphasis on good personal hygiene is recommended.

Infectious Mononucleosis (Mono)

Description

Infectious Mononucleosis (Mono), known as the “kissing disease,” is an acute illness caused by a virus and characterized by fever, sore throat that may resemble strep throat, fatigue, headache, and swollen glands (especially of the neck). There may be a rash, more often in patients who have been treated with amoxicillin/ampicillin. Mono may be very mild or severe. It is recognized more often in adolescents and young adults than in small children. It is a disease that may be difficult to identify and is usually diagnosed through laboratory procedures. Mono is not highly contagious.

Mode of Transmission

Mono is transmitted through close person-to-person contact.

Incubation Period

10–50 days.

Infectious Period

Uncertain, but may be long (several months).

School/Nurse Responsibility

1. Report to your local health jurisdiction is not required.
2. Make referral to licensed health care provider if suspected. Follow medical recommendations for confirmed cases.
3. Modify the student’s schedule if necessary. If periods of fatigue persist, student should be allowed to rest.
4. Request physical activity clearance from licensed health care provider before student returns to school-related physical activities.

Control of Spread

1. Instruct students not to share items that may be contaminated with saliva such as lipstick and beverage containers.
2. There is no specific treatment.
3. Clean or dispose of articles soiled with nose and throat discharges.

Infectious Mononucleosis (Mono) (cont.)

4. Cover mouth with tissue when coughing or sneezing. If no tissue is available, encourage students to “catch your cold in your elbow” by covering their mouth and nose with the crook of their arm and coughing or sneezing into their shirt or coat sleeve.
5. Encourage proper handwashing techniques.

Future Prevention and Education

Provide health education for students and their parent/guardian as to the usual mode of transmission and reinforce that Mono is not highly contagious.

Influenza

Description

Influenza is an acute, mild to severe, viral infection characterized by abrupt onset of fever, headache, fatigue, chills, cough, sore throat, and aching muscles. Runny nose, vomiting, and diarrhea may occur but are rare. Symptoms may last from a few days to several weeks. Annual activity most commonly begins in December or January and continues for two or more months.

Note

Gastrointestinal symptoms alone, often reported as “flu” or “stomach flu,” do not constitute influenza. Diagnosis can be confirmed by laboratory studies.

Mode of Transmission

Influenza is spread from person-to-person by airborne droplets.

Incubation Period

1–3 days.

Infectious Period

The infectious period of influenza is probably limited to 3 days from the time symptoms appear.

School/Nurse Responsibility

1. Report to your local health jurisdiction significant increases in school absenteeism resulting from influenza-like illness. Absenteeism above 10 percent in a school should be reported (WAC 246-101-525).
2. Make referral to licensed health care provider for exceptionally severe cases.

Note

Children with influenza should not receive aspirin during viral infections because of its possible association with Reye syndrome.

Control of Spread

There are no effective measures to control the spread of influenza in schools except to keep students who are symptomatic at home.

Influenza (cont.)

Future Prevention and Education

1. Among the elderly or chronically ill, influenza epidemics are frequently associated with deaths in excess of the number normally expected. Prevention or control is aimed at those at greatest risk from serious illness or death. Annual vaccination in September through December, prior to the expected outbreak, is aimed at protecting these individuals. The vaccine is made each year with the strains of influenza virus expected to cause the most infection. Immunization is recommended for persons who have chronic diseases or who are immunocompromised, and those having close contact with such persons. The Advisory Committee on Immunization Practices recommends that influenza vaccine be included in the routine immunization of children between the ages of 6–23 months. Influenza vaccine should be given yearly.
2. Outbreaks of influenza can cause large increases in absenteeism rather suddenly. Consult your local health jurisdiction to determine the recommendations you should make to students, parents/guardians, and school staff. Often, school cases will signal the onset of an epidemic in the community. Past experience has shown school closure to be ineffective in preventing or aborting influenza outbreaks. However, administrative reasons such as inadequate numbers of substitute teachers to carry on a program, may dictate school closure.
3. Instruct students not to share items that may be contaminated with saliva such as beverage containers.
4. Clean or dispose of articles soiled with nose and throat discharges.
5. Cover mouth with tissue when coughing or sneezing. If no tissue is available, encourage students to “catch your cold in your elbow” by covering their mouth and nose with the crook of their arm and coughing or sneezing into their shirt or coat sleeve.
6. Encourage proper handwashing techniques.

Lice (Pediculosis)

Body Lice (Pediculosis humanus corporis)

Description

Body lice in school children in the United States are rare. Body lice appear as an infestation of the clothing, especially within the seams of inner surfaces. The main signs of body lice infection are itching and the detection of live lice. Scratch marks may indicate the presence of lice. Body lice have been associated with outbreaks of typhus, trench fever, and other epidemic conditions. Body lice are usually found in populations that have experienced disasters and/or difficult life circumstances such as no access to bathing facilities or the ability to change clothing.

Mode of Transmission

Transmission occurs through contact with personal articles such as clothing, especially in the seams of inner surfaces.

Incubation Period

Body lice eggs normally hatch in 7–10 days. Mature body lice are capable of laying eggs 8–10 days after hatching. The adult life span is about 1 month.

Infectious Period

Body lice are infectious as long as lice remain alive in a person's clothing. Body lice cannot live away from a human host; most die within 24 hours.

School/Nurse Responsibility

1. Make referral to licensed health care provider for diagnosis if suspected.
2. Instruct families to wash clothing in hot, soapy water.
3. Assess family situation and assist family with community resources.

Lice (Pediculosis) (cont.)

Crab Lice (Pediculosis humanus pubis)

Description

An infestation of crab lice is usually detected in the pubic hair but may also be found in axillae (armpits) or where there is coarse hair. The primary symptom is itching in the genital area. Nits or crawling lice may be seen.

Mode of Transmission

Crab lice are most frequently transmitted by sexual contact. A common misbelief is that infestation can be spread by sitting on a toilet seat. Crab lice cannot live away from a human host for more than 2 days. Also, lice do not have feet designed to walk or hold on to smooth surfaces such as toilet seats.

Incubation Period

The adult life span is about 1 month.

Infectious Period

Crab lice cannot live away from a human host; most die within 2 days.

School/Nurse Responsibility

1. Make referral to licensed health care provider for diagnosis if suspected.
2. Report of suspected child abuse cases is mandatory. Consider child sexual abuse when crab lice are present in a student who is not sexually active.

Lice (Pediculosis) (cont.)

Head Lice (*Pediculosis humanus capitus*)

Description

Head lice appear as an infestation on the head, eyebrows, or eyelids. Head lice outbreaks are common in the United States among children between the ages of 3–12 years. Signs and symptoms of head lice infestation include:

1. Itching.
2. A tickling feeling of something moving in the hair.
3. The detection of live lice.
4. Sores or scratch marks on the head caused by scratching.

There may also be eggs (nits) or egg cases attached to hairs. Head lice are not a health hazard or a sign of uncleanliness and are not responsible for the spread of any disease. Thus, infestation is principally a nuisance rather than a major threat to the student's well being. Head lice are the cause of much embarrassment, misunderstanding, many unnecessary days lost from school and work, millions of dollars spent on remedies, and many hours spent on the misuse of remedies.

Approaches to controlling the spread of head lice have evolved over the years and continue to evolve. Some chemical agents used in the past to eradicate head lice have proven to be dangerous and toxic to children. The information in this section reflects the current thinking of professional groups regarding head lice in schools.

Mode of Transmission

Transmission of head lice occurs only by direct contact with a live louse through head-to-head contact or through contact with personal articles such as hats or combs. Transmission may be through play at school and at home (slumber parties, sports activities, at camp, on a playground). Other transmission could be through lying on a bed, couch, pillow, or stuffed animal that has recently been in contact with an infected person. Lice cannot jump, hop, or fly. Live lice can be transmitted as long as the lice remain alive on a person's head or on their clothing. Lice cannot live away from a human host; most die within 7 days.

Incubation Period

Head lice eggs normally hatch in 7–10 days. Mature head lice are capable of laying eggs 8–10 days after hatching. The adult life span is about 1 month.

Lice (Pediculosis) (cont.)

Infectious Period

Head lice may be transmitted as long as the lice remain alive on an infested person. Live eggs (nits) may or may not hatch. Only if eggs hatch do they cause further transmission from head to head. As stated above, the adult life span is about 1 month. A student with active head lice infestation has likely had the infestation for a month or more by the time it is discovered. Therefore, that student poses little risk of transmitting live lice to others for 1 day.

By removing nits, the possibility of hatching new lice is minimized.

School/Nurse Responsibility

1. Report to your local health jurisdiction is not required.
2. Identify the signs of a head lice infestation, notify parent/guardian of the suspected case, and advise parent/guardian of the care options, including referral for secondary infection evaluation, if suspected. Information and instructions should be provided to the parent/guardian such as *FIGHT LICE!* (DOH 130-033), which can be ordered from the Department of Health Publications Warehouse by faxing 360-664-2929. Local health jurisdictions may also have materials available to share with families and staff. (See Appendix XIII.)
3. Carry out the following additional steps:
 - a. A student who is found with live lice may, depending on district policy, remain in school and in class until the end of the day. Discretion should be used regarding individual cases. Students should be discouraged from close head-to-head contact with others.
 - b. Siblings and close contacts of the student with live lice should be examined. Arrange to check other students who may have had contact with the student who has the infestation (this might include classmates, siblings, close friends, etc.). Settings where there are small groups of young children such as child care, may want to consider screening all children in the group.
 - c. Remember to keep the student's identity confidential as to avoid undue embarrassment.
 - d. Depending on your school district policy, the student may return to school when the parent/guardian reports having treated the student and the student has no live lice on inspection (see Control of Spread No. 5 below). The student should be re-examined 8–10 days after returning to school to

Lice (Pediculosis) (cont.)

determine that there are no more live lice. As an added preventive intervention, the parent/guardian should be asked to continue to work at removing nits.

Chronic Problems

When students are identified as having repeat or chronic infestations, the school nurse may offer extra assistance. This could include providing opportunities or programs for students to undertake practices to prevent the spread of pests. Nonpesticidal substances (nonmedicated shampoos, conditioners, water soluble gels, oils, etc.) could be made available or recommended along with combing and educating about ongoing good personal hygiene practices. It may be helpful to make home visits or involve public health nurses to ensure treatment is being conducted effectively.

Control of Spread

1. Screening procedures: Choose a well-lit area. School nurse or designee should examine the student's scalp and hair, especially at the base of the scalp near the nape of the neck and behind the ears. Separate the hair and look for adult lice. A lice egg hatches into a baby louse called a nymph. It looks like an adult head louse, but is much smaller. Nymphs mature into adults about 7 days after hatching. The adult louse is about the size of a sesame seed, has six legs, and is tan to grayish-white in color. In persons with dark hair, the adult louse will look darker. Females lay eggs (nits) and they are usually larger than males. Anything removed from the hair, including particles thought to be eggs (nits), should be confirmed by looking at them through a magnifying glass or low-powered microscope. Finding eggs (nits) within one-quarter of an inch of the scalp indicates likely infestation and the student should be treated. However, finding only hatched eggs (empty nit casings) may simply be evidence of a past infestation. To avoid transmitting live lice from one student to another, examiners should either wash their hands between each student examined or use disposable objects such as tongue depressors, cotton swabs, or coffee stirrers. If gloves are used they do not need to be changed between students if the gloves do not actually touch the hair or scalp (unless live lice are found).
2. Chemical products to kill lice are available over-the-counter and by prescription. Inappropriate use of chemical products may have toxic effects, so package instructions should be followed scrupulously. Chemical treatment is not recommended for children under the age of 2 years. Remove crawling bugs and nits by hand. If the problem persists, the child's health care provider should be consulted. The parent/guardian should be reminded to keep all medication away from small children. **One percent gamma benzene hexachloride lotions (Lindane, Kwell) are not recommended.** Additional information may be found on the CDC Web site at <http://www.cdc.gov/ncidod/dpd/parasites/headlice/>.

Lice (Pediculosis) (cont.)

3. **Students with head lice should not be identified to other students or staff** (except staff who will provide re-checks for re-entry to school). It is not necessary to send home letters of notification to classmates unless required by school district policy.
4. When there is evidence of an **outbreak** in a classroom (such as three students with no close contact except at school, within a consecutive 2-week period) the whole class should be screened.
5. To avoid transmission through objects such as patrol helmets, audio headphones, and sports headgear, wipe the object with a dry paper towel to remove the possibility of live lice on the object. Paper hats such as those worn by lunchroom workers, should be discarded and not exchanged among workers (including student workers). Upholstered items such as rugs, chairs, and pillows, may be vacuumed or ironed. Do not apply insecticides to any surface in the classroom. It is unnecessary and can cause allergic or toxic reactions in students and/or staff.
6. Coats can be hung on the backs of chairs or placed in an individual plastic bag labeled with the student's name. Hats and gloves can be tucked in the sleeves or pockets of the student's coat.
7. Some schools have a "no nit" policy, which requires students to be sent home with directions to the parent/guardian for treatment of lice and the removal of **all** eggs (nits) as a condition of readmission to school. Some schools allow students to return the following day as long as the parent/guardian has documented appropriate treatment for lice and is working at removing remaining eggs (nits) by combing and follow-up treatment if indicated. Policy adoption is made by your local school district and should be determined with guidance from the school nurse (registered nurse) and your local health jurisdiction. (See Appendix XIV for sample policies addressing each approach.)

If a "no nit" policy is implemented, some additional steps may be considered:

- a. If a "no nit" policy is in effect because of an outbreak in a classroom, treated students may be examined to ensure no nits are present before they are allowed to return to the classroom.
- b. At the school nurse's discretion, a "no nit" policy may be imposed on students who are **repeatedly/chronically infested**.
- c. If repeated infestations occur despite proper treatment, unrecognized cases may exist among classmates, companions, or household members. Classes of students and busmates may be screened on a regular basis in this

Lice (Pediculosis) (cont.)

- instance (every 7–10 days). The parent/guardian of affected students may again be notified.
- d. Recommended preventive measures may include screening all students in an affected school the week after school starts and the week after winter and spring vacations.
8. Instruct parent/guardian to:
- a. Follow treatment instructions fully, including not using a crème rinse or combination shampoo/conditioner before using the lice medicine and not re-washing hair for 1–2 days after treatment.
 - b. **Comb** and/or finger-pick out all adult lice, nymphs, and eggs (nits) that are found.
 - c. Notify others that may be affected (school, church, child care, friends, family).
 - d. Examine all household members (including adults) for lice and eggs (nits) and treat only if crawling lice or eggs (nits) are found.
 - e. Soak all combs and brushes for 1 hour in rubbing alcohol or Lysol or wash with soap and hot water (130° F).
 - f. Machine wash all washable clothing and bed linens that the infested person touched during the 2 days before treatment. Use hot water (130° F) to wash clothes. Dry laundry using the hot cycle for at least 20 minutes.
 - g. Dry-clean clothing that is not washable (coats, hats, scarves, etc.) or store all clothing, stuffed animals, comforters, etc., that cannot be washed or drycleaned in a plastic bag and seal for 2 weeks.
 - h. Vacuum floors and furniture. **Do not** use environmental sprays. They can be toxic if inhaled.

Future Prevention and Education

Educate school personnel and the parent/guardian in recognizing and managing a head lice infestation. This could include periodically providing information to families of all students on the diagnosis, treatment, and prevention of head lice. Assure students and their parent/guardian that anyone can get head lice. The parent/guardian should be encouraged to check their student's head for lice if the student is symptomatic.

Measles

Description

Measles is a highly infectious viral disease that can lead to serious complications. These complications include diarrhea, ear infections, pneumonia, encephalitis, and death. Before the introduction of a measles vaccine in 1963 there were more than 500,000 measles cases a year and 500 deaths a year in the United States. A case of measles would be a public health emergency.

Measles begins with symptoms that are very similar to a cold. The symptoms include a cough; runny nose; red, itchy, watery eyes; and a high fever (as high as 103–105°F). About 4 days after the symptoms begin, a raised, red rash will appear. The rash will usually last 5–6 days. The rash will appear at the hairline, then spread to the face and upper neck. Over the next 3 days the rash will spread downward and outward, eventually involving the hands and feet. The rash will fade in the order it appears—from head to feet.

Mode of Transmission

Measles is spread from person-to-person by airborne droplets or by the nasal and throat secretions of an infected person.

Incubation Period

10–12 days from exposure to upper-respiratory symptoms. 14–21 days from exposure to beginning of rash.

Infectious Period

Measles is infectious from the beginning of the respiratory symptoms to 4 days after the appearance of the rash.

School/Nurse Responsibility

1. Report to your local health jurisdiction of suspected cases by telephone is mandatory and must be immediate.
2. Make referral to licensed health care provider. Ask the parent/guardian to inform their provider's office staff of possible measles in order to prevent transmission in the office waiting room.
3. Be alert to any student with a high fever; cough; runny nose; red, itchy, watery eyes; and a rash. Be especially alert to symptoms in students at about 2 weeks after travel to an area with measles cases or contact with somebody coming from an area with measles.

Measles (cont.)

4. Ensure students comply with Washington State immunization requirements. If a case is suspected, prepare a listing of students and staff who may be susceptible—those who are unimmunized, those who were immunized prior to their first birthday, or those who have no documentation of having had the disease or having been immunized.
5. Support school and administrator to exclude susceptible students and staff when advised by your local health officer.
6. Measles vaccine is recommended for all adults born since 1957. Most adults born before 1957 are immune because of prior infection. However, there are still some adults born prior to 1957 that have had neither the vaccine nor the disease and thus remain susceptible. State law does not require documentation of staff immunization. However, in the event of a single case in a school, your local health officer will exclude susceptible staff.

Control of Spread

1. If a student in your school develops confirmed measles, your local health officer may require implementation of the following control measures:
 - a. Exclude confirmed case from school until 4 days after the appearance of rash.
 - b. Exclude students exempted from measles immunization or students without documentation of measles immunization unless those students receive a dose of measles vaccine within a prescribed timeframe.
 - c. Outbreak control measures listed above also apply to all staff at the affected school that are deemed susceptible to measles by your local health jurisdiction.
2. Provide a second dose of measles vaccine to all students with a history of only one dose of measles vaccine. Students not receiving a second dose of measles vaccine during an outbreak may be excluded from school.
3. Instruct students not to share items that may be contaminated with saliva such as beverage containers.
4. Clean or dispose of articles soiled with nose and throat discharges.
5. Cover mouth with tissue when coughing or sneezing. If no tissue is available, encourage students to “catch your cold in your elbow” by covering their mouth

Measles (cont.)

and nose with the crook of their arm and coughing or sneezing into their shirt or coat sleeve.

6. Encourage proper handwashing techniques.

Future Prevention and Education

Measles can be controlled and eventually eliminated if children are vaccinated on time. The current immunization schedule recommends that the first dose be given by the age of 12–15 months. Recommendations are for a second dose to be given between the ages of 4–6 (school entry).

Immunization Requirements, State of Washington

Two doses of live virus measles-containing vaccine, both given on or after the age of 12 months and at least 28 days apart, or laboratory evidence of measles immunity is required for all students at school entry (Grades 1–2 and Grades 6–12 for school year 2002–03). The requirement will move up a grade each year. School year 2006–07 will require 2 doses of measles-containing vaccine for all students Grades K–12.

Meningitis

Description

Meningitis is an infection of the fluid of a person's spinal cord and the fluid that surrounds the brain. The infection is usually caused by bacteria or viruses. Viral meningitis is generally less severe and resolves without treatment. Bacterial meningitis can be very severe and may result in brain damage, hearing loss, disability, and death. The two primary bacteria that cause meningitis are *streptococcus pneumoniae* (Pneumococcal) or *Neisseria meningitides* (Meningococcal). *Hemophilus influenzae* (H. flu) meningitis has been greatly reduced since the 1990s when the *Hemophilus influenzae* type b (Hib) vaccine was introduced. Symptoms may develop over several hours or 1–2 days and include high fever and chills, stiff neck, headache, photophobia (light sensitivity), vomiting, and sometimes a rash, coma, and seizures. Diagnosis is made by a spinal tap. When treatment with antibiotics is started early, the risk of dying from meningitis falls below 15 percent.

Mode of Transmission

Meningitis is transmitted person-to-person through respiratory and throat secretions such as kissing or coughing. It may also be spread by sharing beverage containers, cigarettes, or other smoking-related paraphernalia. It is not transmitted through the air after a person infected with meningitis has left the room. Meningitis is much less contagious than the common cold or influenza.

Incubation Period

Variable depending on the agent, usually 1–7 days.

Infectious Period

Meningitis is infectious until the bacteria is no longer present in discharges from the nose and mouth; susceptible organisms will disappear from the nose and throat within 24 hours after appropriate treatment is started.

School/Nurse Responsibility

1. Report to your local health jurisdiction of confirmed meningococcal meningitis is immediate and mandatory.
2. Referral to licensed health care provider of suspected cases is immediate and mandatory for meningitis.
3. Obtain accurate facts from your local health jurisdiction so appropriate information can be shared with school staff and parent/guardian of exposed students.

Meningitis (cont.)

Control of Spread—Bacterial Meningitis

1. Exclude from school until licensed health care provider releases student.
2. Household or other close contacts of bacterial meningitis should be referred to licensed health care provider for antibiotic prophylaxis.
3. Schoolroom classmates, teachers, or other school personnel usually do not require antibiotic prophylaxis unless they have had prolonged, close exposure, such as best friends sharing lunch. However, classroom contacts should be observed for signs of illness and be advised to seek medical care promptly if any suspicious symptoms occur. Teachers and the parent/guardian should contact their licensed health care provider or local health jurisdiction if they have further questions about preventive measures.
4. Risk of acquiring the disease in a normal classroom situation is typically low. Your local health jurisdiction will advise school staff when students and staff are at risk and what action should be taken.
5. In rare situations, certain types of meningococcal meningitis cause school epidemics, particularly in colleges. Special vaccination programs may be carried out in such circumstances.
6. Instruct students not to share items that may be contaminated with saliva such as beverage containers.
7. Clean or dispose of articles soiled with nose and throat discharges.
8. Cover mouth with tissue when coughing or sneezing. If no tissue is available, encourage students to “catch your cold in your elbow” by covering their mouth and nose with the crook of their arm and coughing or sneezing into their shirt or coat sleeve.
9. Encourage proper handwashing techniques.

Future Prevention and Education

1. The currently available meningococcal vaccine is only protective against four strains of meningococcal bacteria (A, C, Y, W-135). It is not recommended for routine vaccination as it is not effective in children less than the age of 2 years, and because of its relatively short duration of protection. Revaccination may be considered 3–5 years after the initial dose for those persons who remain at high risk.

Meningitis (cont.)

2. Routine meningococcal vaccination is recommended for certain high-risk groups including college freshman (particularly those living in dormitories or residence halls), persons who have certain immunosuppression such as asplenia, laboratory personnel, and travelers to countries of endemic meningococcal disease.
3. Meningococcal vaccine is recommended for use in control of serogroup C meningococcal outbreaks.
4. Pneumococcal vaccine is available to prevent invasive disease due to *streptococcus pneumoniae* in children.

Mosquito-borne Illness

Description

Mosquitoes are a problem because they not only deliver an itchy bite but can also spread serious diseases such as Western equine encephalitis, St. Louis encephalitis, and West Nile encephalitis. Encephalitis is an inflammation of the brain. In other countries, mosquitoes spread malaria and other diseases.

West Nile encephalitis has proven itself a public health threat. As of January 22, 2003, 3989 cases of the illness have been reported to the CDC including 259 fatalities.

West Nile encephalitis affects the central nervous system. Symptoms vary. Approximately 80 percent of people who are infected with West Nile encephalitis will not show any symptoms. Up to 20 percent of the people who become infected will display mild symptoms including fever, headache, body aches, nausea, vomiting, and sometimes swollen lymph glands or a skin rash on the chest, stomach, and back. Symptoms typically last a few days. About 1 in 150 people infected with West Nile encephalitis will develop severe illness. The severe symptoms can include high fever, headache, neck stiffness, stupor, disorientation, coma, tremors, convulsions, muscle weakness, vision loss, numbness, and paralysis. These symptoms may last several weeks and neurological effects may be permanent.

Mode of Transmission

Generally, West Nile encephalitis is spread by the bite of an infected mosquito. Mosquitoes are West Nile encephalitis carriers that become infected when they feed on infected birds. Infected mosquitoes can then spread West Nile encephalitis to humans and other animals when they bite.

Incubation Period

3–14 days for West Nile encephalitis.

Infectious Period

Mosquito-borne illnesses are infectious as long as mosquitoes feed on infected birds.

School/Nurse Responsibility

Make referral to licensed health care provider of suspected cases.

Mosquito-borne Illness (cont.)

Control of Spread

Do not touch a dead bird with bare hands. Contact your local health jurisdiction for instructions on reporting and disposing of the body.

Prevent mosquito bites:

1. Make sure window and door screens are "bug tight." Repair or replace them if needed.
2. Stay indoors at dawn and dusk when mosquitoes are the most active.
3. Wear a long sleeved shirt, long pants, and a hat when going into mosquito-infested areas such as wetlands or woods.
4. Use mosquito repellent when necessary and carefully follow directions on the label, particularly with children.

Reduce mosquito habitat:

1. Empty anything outside that holds standing water such as old tires, buckets, plastic covers, and toys.
2. Change water in birdbaths, fountains, wading pools, and animal troughs weekly.
3. Recycle unused containers (bottles, cans, and buckets) that may collect water.
4. Make sure roof gutters drain properly and do not pool water.
5. Fix leaky outdoor faucets and sprinklers.
6. Drill drainage holes in tire swings so water drains out.
7. Keep children's wading pools empty and on their sides when they are not being used.

Future Prevention and Education

Visit the CDC's West Nile encephalitis Web page for current recommendations regarding prevention and education at <http://www.cdc.gov/ncidod/dvbid/westnile/index.htm>.

Mumps

Description

Mumps is a viral illness characterized by painful inflammation of the glands that lie just above the back angle of the jaw. Involvement can be one-sided or bilateral. Other glands, including those in the floor of the mouth beneath the tongue and below the jaw, may also be involved, although less commonly. Viruses other than mumps may also cause swelling of the parotid glands. Mumps patients may have fever, headache, and mild respiratory symptoms. In post pubertal individuals, the testes may become inflamed in 15–25 percent of males and the ovaries in 5 percent of females. Very rarely sterility can result. The central nervous system may be involved, usually manifested by increased irritability, stiff neck, headache, and even convulsions in some cases. Symptoms of mumps generally resolve after 7–10 days.

Mode of Transmission

Transmission is by direct contact with or droplet spread from the saliva of infected persons. It should be remembered that approximately one-third of all susceptible individuals exposed to mumps will not develop apparent disease but will be infectious.

Incubation Period

16–18 days.

Infectious Period

Mumps is infectious from 3 days before to 4 days after swelling first appears.

School/Nurse Responsibility

1. Report to your local health jurisdiction of mumps cases is mandatory.
2. Make referral to licensed health care provider of suspected cases.

Control of Spread

1. A confirmed case should be isolated until the swelling and other manifestations of the illness have subsided, about 4 days from the onset of swelling.
2. Post exposure vaccination of individuals is not clearly protective against the disease and its complications. However, its use is recommended because:
 - a. It may give protection for current exposure.
 - b. It should induce protection against subsequent exposure.

Mumps (cont.)

3. Instruct students not to share items that may be contaminated with saliva such as beverage containers.
4. Clean or dispose of articles soiled with nose and throat discharges.
5. Cover mouth with tissue when coughing or sneezing. If no tissue is available, encourage students to “catch your cold in your elbow” by covering their mouth and nose with the crook of their arm and coughing or sneezing into their shirt or coat sleeve.
6. Encourage proper handwashing techniques.

Future Prevention and Education

A live, attenuated virus vaccine is available that may be given in combination with the measles and rubella vaccine (MMR) at the age of 12 months. It is required for child care and school entry in Washington State. One dose of vaccine provides excellent long-term immunity. Parents/guardians should be encouraged to have their children vaccinated on time.

Immunization Requirements, State of Washington

One dose of MMR administered on or after the age of 12 months.

Note

Two doses of live virus measles-containing vaccine, both given on or after the age of 12 months and at least 28 days apart, or laboratory evidence of measles immunity is required for all students at school entry (Grades 1–2 and Grades 6–12 for school year 2002–03). The requirement will move up a grade each year. School year 2006–07 will require two doses of measles-containing vaccine for all students Grades K–12.

Norovirus (Norwalk-like)

Description

Norovirus is the official name for the group of viruses previously called Norwalk-like viruses. It is an acute viral infection of the gastrointestinal system. The CDC estimates that 23 million cases of acute gastrointestinal infections are due to norovirus, and that at least 50 percent of all foodborne outbreaks of gastrointestinal infections can be attributed to noroviruses. It is characterized by nausea, vomiting, diarrhea, and abdominal cramps and can include a low-grade fever, chills, headache, muscle aches, and lethargy. There are many different strains of norovirus and people can develop the illness repeatedly when exposed to different strains of the virus. Treatment consists of supportive care, primarily fluid and electrolyte replacement.

Mode of Transmission

Norovirus is easily spread person-to-person by hands, toys, bathroom surfaces, and contaminated food. It may also be transmitted by aerosolized vomitus to persons caring for or cleaning up after acutely ill persons.

Incubation Period

24–48 hours, but can occur within 12 hours of exposure.

Infectious Period

Individuals may remain infectious for up to 1 month after the onset of symptoms.

School/Nurse Responsibility

1. Report to your local health jurisdiction is not required unless a foodborne outbreak is suspected.
2. Exclude food handlers from work until cleared by a licensed health care provider or their local health jurisdiction.
3. Clean thoroughly any contaminated surfaces with a 1:10 percent bleach and water solution or another approved antiviral disinfecting solution. Remove any contaminated clothing or linens immediately.

Norovirus (Norwalk-like) (cont.)

Control of Spread

1. Encourage good personal hygiene and proper handwashing techniques after going to the bathroom, before eating, and after changing diapers.
2. Disinfect surfaces where diapers are changed after each use (see Appendix VIII).

Future Prevention and Education

1. Mechanisms of immunity to norovirus are unclear. It appears that immunity may be strain-specific and lasts only a few months. Therefore, due to the different types of noroviruses, individuals are likely to be repeatedly infected throughout their lifetimes. This may explain the high attack rates in all ages reported in outbreaks.
2. Most foodborne outbreaks of norovirus are likely to arise through direct contamination of food by a handler immediately before its consumption. Outbreaks have frequently been associated with consumption of cold foods, including various salads, sandwiches, and bakery products. Liquid items, such as salad dressing or cake icing that allow the virus to mix evenly, are often implicated as a cause of outbreaks. Food can also be contaminated at its source. Oysters from contaminated waters have been associated with widespread outbreaks of gastroenteritis. Other foods, including raspberries and salads, have been contaminated before widespread distribution and subsequently caused extensive outbreaks.
3. Waterborne outbreaks of norovirus in community settings have often been caused by sewage contamination of wells and recreational water.
4. Prevention of foodborne norovirus is based on the provision of safe food and water. Noroviruses are relatively resistant to environmental challenge. They are able to survive freezing, temperatures as high as 60° C, and have been associated with illness after being steamed in shellfish. Moreover, noroviruses can survive in up to 10 parts per million (ppm) chlorine, well in excess of levels routinely present in public water systems. Despite these features, it is likely that relatively simple measures such as correct handling of cold foods and frequent handwashing, may substantially reduce foodborne transmission of noroviruses.

Pertussis (Whooping Cough)

Description

Pertussis is a highly contagious, bacterial respiratory infection. Children under the age of 1 year are much more liable to suffer serious consequences than older children. Pertussis begins with an upper-respiratory catarrhal stage that is characterized by coughing, sneezing, runny nose, and occasional vomiting. This stage lasts 1–3 weeks. The disease then enters its paroxysmal stage where the coughing is staccato and comes in multiple, exhausting bursts. Each cough is followed by a sudden characteristic “whooping” sound as the child breathes in. Sweating, exhaustion, vomiting, and excessive amounts of thick mucous secretions may accompany the cough. This stage lasts for 2–4 weeks followed by a recovery phase of gradually diminishing coughing for 2–3 weeks. In young infants the disease can be fatal during the paroxysmal phase. In older children who were never immunized, incompletely immunized, or whose immunity has diminished over 10 years or more since the last vaccination, the disease can vary from quite mild to a prolonged (several months) bout of uncomfortable, exhausting coughing episodes. Infection among adults is common but generally milder and is often mistaken for bronchitis.

Mode of Transmission

Transmission of pertussis is usually spread by droplets or direct contact with an infected person.

Incubation Period

Usually 5–10 days, rarely exceeding 21 days.

Infectious Period

Pertussis is most infectious in the upper-respiratory state. Individuals are rarely infectious after the fourth week of the disease. Patients need to be isolated during the first 5 days of antibiotic treatment.

School/Nurse Responsibility

1. Report to your local health jurisdiction of cases is mandatory and immediate.
2. Make referral to licensed health care provider of suspected case for diagnosis and treatment.
3. If pertussis has been confirmed and the student is not treated with antibiotics, he/she should be excluded from school until 4 weeks after the onset of the illness or until the cough has stopped, whichever period is shorter. If treated, the student may return after 5–7 days of treatment.

Pertussis (Whooping Cough) (cont.)

Control of Spread

1. Exclude infected student until the fifth day of antibiotic therapy or, if not treated, until they are no longer coughing, or until 4 weeks after onset, whichever period is shorter.
2. Immunize all unimmunized or incompletely immunized students less than the age of 7 years.
3. Your local health officer will make the decision regarding treatment of school and household contacts.
4. All immunized close contacts may continue to attend school if started on prophylactic antibiotics. At the direction of your local health jurisdiction, unimmunized close contacts should be excluded from school until the infected student has been on antibiotics for 5 days.
5. Instruct students not to share items that may be contaminated with saliva such as beverage containers.
6. Clean or dispose of articles soiled with nose and throat discharges.
7. Cover mouth with tissue when coughing or sneezing. If no tissue is available, encourage students to “catch your cold in your elbow” by covering their mouth and nose with the crook of their arm and coughing or sneezing into their shirt or coat sleeve.
8. Encourage proper handwashing techniques.

Future Prevention and Education

1. Pertussis vaccine, given along with diphtheria and tetanus toxoid (DTaP) in the recommended schedule, is an effective means of prevention.
2. Only acellular pertussis vaccine has been distributed in Washington State since 1996. Acellular preparations (DTaP) of pertussis vaccine produce comparable antibody responses but lower rates of local reactions (fever and fretfulness) at the injection site than after whole-cell diphtheria/tetanus/pertussus (DTP) vaccine.

Pertussis (Whooping Cough) (cont.)

Immunization Requirement, State of Washington

All children should be immunized with a three-dose series of a pertussis-containing vaccine (DTaP) in the first year of life. A booster dose should be given during the second year of life and again at the time of school entry.

The minimum requirement for school entry is four doses of pertussis-containing vaccine with the student receiving the fourth dose on or after their fourth birthday. Pertussis vaccine is not given to persons over the age of 7 years.

Pinworms

Description

Pinworms are a very common condition caused by a small intestinal roundworm. Signs of pinworms include severe anal itching with disturbed sleep, restlessness, and local irritation from scratching. Sometimes vaginitis and rarely abdominal pain are attributed to pinworms. Infection is common and not related to hygiene. People from all socioeconomic and ethnic backgrounds may have pinworms. Diagnosis is made by finding adult worms in feces or in the anal region or by identifying eggs from the anal region.

Mode of Transmission

Transmission of pinworms is spread by infective eggs carried from anus to mouth by hands, from articles of bedding or clothing to mouth, or carried in food or by dust.

Incubation Period

The life cycle from egg to adult takes 2–6 weeks.

Infectious Period

Pinworm eggs are infectious within a few hours after being deposited on the skin and as long as female worms with eggs are present. They can survive up to 2 weeks on clothing, bedding, or other objects. Response to specific antihelminth drugs (drugs that kill parasitic worms) is excellent.

School/Nurse Responsibility

1. Report to your local health jurisdiction is not necessary.
2. Make referral to licensed health care provider.
3. Educate student and family regarding mode of transmission (infectious eggs carried from anus to mouth by hands, from articles of bedding or clothing to mouth, or by food or dust). Teach careful handwashing including careful cleaning of fingernails after using the bathroom and before eating.
4. Encourage good personal hygiene and proper handwashing techniques after going to the bathroom, before eating, and after changing diapers.

Pinworms (cont.)

Control of Spread

1. If condition is recurrent, all members of household should be treated simultaneously.
2. Surfaces where diapers are changed must be disinfected after each use (see Appendix VIII).
3. Encourage proper handwashing techniques.

Poliomyelitis (Polio)

Description

Poliomyelitis (polio), formerly called infantile paralysis, is an extremely rare illness that begins with minor symptoms but may become life threatening. The initial symptoms may include fever, tiredness, gastrointestinal upset, headache, and sore throat. The disease may resolve after 24–48 hours and might be classified as “minor,” or it may progress to include marked stiffness of the neck, back, and limbs. It should be remembered that the poliovirus gains access to nerve structures and in this way could cause paralysis of any muscles, even the muscles of respiration. This made the use of iron lungs necessary when severe polio cases were seen in the past. Wild polio has been eradicated in the Americas. A single case of polio would be a public health emergency.

Mode of Transmission

Transmission of the virus is caused by pharyngeal (throat) droplets and fecal-oral spread.

Incubation Period

3–35 days. 7–14 days is usual for the paralytic form.

Infectious Period

Polio is most infectious just before and after the onset of clinical symptoms. The virus persists in the throat for 1 week after the onset and in the feces for 3–6 weeks. There is no specific medical treatment for polio.

School/Nurse Responsibility

1. Report to your local health jurisdiction of suspected cases is immediate and mandatory.
2. Exclude confirmed cases from school until released by licensed health care provider or your local health jurisdiction.
3. Check susceptibility of contacts and recommend immunization of contacts as appropriate.

Poliomyelitis (Polio) (cont.)

Control of Spread

Immunization of any individual in the epidemic area who is over the age of 6 weeks and who is either unvaccinated, incompletely vaccinated, or uncertain of vaccination history.

Future Prevention and Education

Polio vaccine is required for school and child care entry. Administration of oral (live virus) polio vaccine was discontinued in the United States in 2000.

Immunization Requirement, State of Washington

The minimum requirement for all students is a three-dose series of polio vaccine with the third dose given on or after their fourth birthday.

Ringworm (Tinea)

Description

Ringworm is not caused by a worm, but by various types of fungi. When found in the body it is called tinea corporis; when on the scalp, tinea capitis; when in the groin, tinea cruris; and when on the feet, tinea pedis (athlete's foot). It is a very common infection.

Ringworm begins as a small, red patch or bump that spreads outward, so that each affected area takes on the appearance of a red, scaly, outer ring with a clear central area. Hair may become brittle and break off in gradually spreading areas. Itching sometimes accompanies the infection.

Mode of Transmission

Transmission of ringworm is generally by person-to-person or contaminated article-to-person contact, although rarely, infected animals may be a source for scalp and body infections.

Incubation Period

Usually 7–21 days.

Infectious Period

Ringworm is infectious during the duration of skin or scalp lesions and while the fungus persists on contaminated materials.

School/Nurse Responsibility

1. Report to your local health jurisdiction is not necessary.
2. Make referral to licensed health care provider for appropriate diagnosis and treatment of suspected cases.

Control of Spread

1. The student may stay in school after treatment has been started.
2. Instruct students not to share combs, hats, towels, and/or other articles.
3. Careful disinfecting of showers, dressing rooms, and sports equipment (floor, mats, gymnasium equipment) is encouraged, as well as proper laundering of towels and clothing.

Ringworm (Tinea) (cont.)

4. Request physical activity clearance from licensed health care provider before student returns to school-related physical activities.

Future Prevention and Education

Ringworm of the body is not particularly dangerous, has no unusual long-term consequences, and can generally be treated quite effectively with locally applied preparations. A prescribed oral medication may be needed for severe or persistent cases of body ringworm and is necessary to treat all ringworm of the scalp.

Rubella (Three-Day Measles)

Description

Rubella is a relatively mild viral illness. Its importance lies not in the problems it causes for affected children, but rather in the significant congenital defects it may cause in infants whose mothers contracted rubella during the first 12 weeks of pregnancy. The first signs of the childhood illness may be swollen, tender glands, usually at the back of the neck and behind the ears; and a low-grade fever followed by a rash. The rash usually consists of pink to red isolated spots that appear first on the face then spread rapidly to the trunk, biceps, and thigh areas of the extremities with large confluent areas of flushing. The rash fades from the face and trunk in 1–2 days and spreads to the forearms, hands, and feet. Fever is slight or absent. Mild itching may occur. Rubella in adolescents and adults may cause painful or swollen joints. Because many other minor illnesses look like rubella, laboratory tests are required to confirm the diagnosis. Fifty percent of rubella cases are asymptomatic.

Mode of Transmission

Transmission is usually from nasopharyngeal secretions, possibly from feces, urine, or blood of infected persons, or undiagnosed cases. It is also transmitted across the placenta to the fetus.

Incubation Period

12–23 days, usually 16–18 days.

Infectious Period

Rubella is infectious from 7 days prior to 5 days after the appearance of the rash.

School/Nurse Responsibility

1. Report to your local health jurisdiction of suspected cases is immediate and mandatory.
2. Make referral to licensed health care provider for laboratory tests to establish diagnosis and for necessary follow-up of suspected rubella cases.

Control of Spread

1. Students may return to school 5 days after the rash appears. Pregnant contacts of the student should be notified of their exposure and advised to contact their licensed health care provider immediately.

Rubella (Three-Day Measles) (cont.)

2. Instruct students not to share items that may be contaminated with saliva such as beverage containers.
3. Clean or dispose of articles soiled with nose and throat discharges.
4. Cover mouth with tissue when coughing or sneezing. If no tissue is available, encourage students to “catch your cold in your elbow” by covering their mouth and nose with the crook of their arm and coughing or sneezing into their shirt or coat sleeve.
5. Encourage proper handwashing techniques.

Future Prevention and Education

Rubella vaccine is required for school and child care entry in Washington State. A blood test is available to identify those that lack immunity to rubella. Because of the theoretical risk to the fetus, females of childbearing age should receive vaccine only if they say they are not pregnant and are counseled not to become pregnant for 1 month after vaccination.

Immunization Requirements, State of Washington

The minimum requirement is one dose of rubella-containing vaccine (MMR) given on or after the age of 12 months or laboratory documentation of immunity.

Scabies

Description

Scabies is a severe, itchy skin infestation caused by the mite *Sarcoptes scabiei* that burrows in the skin surface. Scabies affects persons from all socioeconomic levels without regard to age, sex, or standards of personal hygiene. Although scabies is more prominent in crowded living conditions and in homes with poor hygiene, everyone is susceptible. It is extremely common among children. The earliest symptoms of scabies are itching, especially at night. Subsequently, little red bumps, like hives, tiny bites, or pimples appear. In more advanced cases, the skin may be crusty or scaly. The female mite prefers warmer sites of the human body. The mite burrows into the outer layer of the skin in tiny red lines about half an inch long and then lays eggs. The parasite tends to be first located in the webs between the fingers or toes, around the wrist, or navel. It can also be commonly found on the backs of elbows, the folds of the armpits, the beltline and abdomen, the creases of the groin, and on the genitalia. In children younger than the age of 2 years, the eruption is generally small vesicles (blisters) and can occur additionally on the head, neck, palms, and soles. Scabies may be severe for immunocompromised persons.

Mode of Transmission

Scabies is transmitted by skin-to-skin contact. The contact may be quite brief such as holding hands. Persons sharing a bed are also at risk. The mites can survive 3–4 days away from human skin.

Incubation Period

Symptoms in persons without previous exposure usually do not occur until 4–6 weeks after exposure to an infected person. Persons who were previously infested are sensitized and, therefore, usually present symptoms 1–4 days after the exposure. Reinfestations are usually milder than the original episode.

Infectious Period

1. Scabies can be transmitted as long as the person remains infested and untreated, including during the interval before symptoms develop.
2. Usually one application of a prescription anti-scabicide to the skin from head-to-toe at bedtime, left on for 8–14 hours, and then washed off the next morning, is successful treatment. A second treatment 1 week later may be recommended for some persons.

Scabies (cont.)

School/Nurse Responsibility

1. Suspect scabies in a rash that causes intense itching, especially at night. Students with mild cases can be sent home at the end of their school day.
2. Make referral to licensed health care provider for diagnosis and treatment of suspected cases. Students can be readmitted the following day after overnight treatment with a topical anti-scabicide cream.
3. Inform parents/guardians who have students in the same classroom of the confirmed case since signs of scabies can occur as late as 1–2 months after exposure. Alert the parent/guardian that their student may have been exposed. Provide symptoms, treatment, and prevention information.
4. If multiple students (10 percent or greater of class or school) are affected:
 - a. Seek assistance from your local health jurisdiction in controlling the outbreak.
 - b. Inform parent/guardian of the outbreak.
5. Encourage parent/guardian to notify the school, all close contacts, and others who have had close skin contact of students with scabies.

Control of Spread

A prescribed topical medication is recommended for treatment.

Future Prevention and Education

1. Scabies is widespread and transmission usually occurs through prolonged, close personal contact. Education about its symptoms and treatment may help those at risk and eliminate spread. It is not serious except that it causes severe itching and secondary infection from scratching. Scabies in students, like lice and pinworms, does not necessarily indicate poor hygiene.
2. If repeated infections occur despite proper treatment, an investigation for unrecognized cases among companions or household members should be undertaken. This should be done in consultation with your local health jurisdiction. The most common cause of treatment failure is inadequate treatment of close personal contacts. All family members should receive prophylactic treatment.

Scabies (cont.)

Because the lesions are the result of a hypersensitive reaction to the mite, itching may continue for 4–6 weeks despite successful treatment. Contact with the licensed health care provider for additional comfort measures may be warranted. More prescriptive scabicide treatment will not relieve the post scabies itch.

Do not attempt to treat scabies with home remedies. Successful eradication includes:

1. Treating all exposed household members at the same time to prevent reinfestation.
2. Applying medication appropriately.
3. Washing all personal items. Bedding and clothing worn next to the skin during the 4 days before initiation of therapy should be laundered in a washing machine with hot water and dried using a hot cycle. The mites do not survive more than 3–4 days without skin contact.
4. Placing items you do not wish to launder in the dryer on the hot cycle for 30 minutes.
5. Dry-cleaning items.
6. Placing items in plastic bags and storing them in the garage for 2 weeks. If the mites do not get a meal within 1 week they will die.
7. Vacuuming the entire house and discarding the used bag. Environmental disinfectants are unnecessary and unwarranted.

Note

Pets do not need to be treated.

Sexually Transmitted Diseases (STD)

Sexually transmitted diseases (STDs) are diseases of various causes that can be transmitted by sexual activity. The STDs that are of the greatest concern include HIV/AIDS, chlamydia, syphilis, genital warts, herpes, non-gonococcal urethritis (NGU), gonorrhea, vaginitis, and hepatitis B. These diseases occur commonly in persons between the ages of 15–29 years. The number of diseases listed in the sexually transmitted category has climbed sharply in recent years. New tests indicate that an emphasis on symptoms is out of date. Screening for asymptomatic infection is important. Consider child sexual abuse when gonorrhea is present in a student who is not sexually active. Call local child protective services.

Future Prevention and Education

1. For confidential information about STDs, call the national STD Hotline at 1-800-227-8922 or choose the STD option of Washington State's AIDS Hotline at 1-800-272-2437.
2. School nurses can order CDC's STD treatment guidelines from the Washington State Department of Health's Office of STD Services at 360-753-5810, or consult the latest guidelines at <http://www.cdc.gov/std/treatment/rr5106.pdf>.
3. The address for the 2003 *Management of STD* training manual is http://www.depts.washington.edu/nnptc/online_training/std_handbook.
4. For access to CDC's STD clinical slides in PowerPoint or graphic files, you must request a user ID and password. You must indicate how you plan to use the slides. To request a password e-mail Sbroadus@cdc.gov.
5. For a large array of dermatology photographs, go to <http://www.dermis.net/doia/mainmenu.asp?zugr=d&lang=e>. Try clicking items in the section on body parts.

Sexually Transmitted Diseases (STD) (cont.)

Chlamydia

Description

Chlamydia is a bacterium that causes infection very similar to gonorrhea. In males, pain on urination and an opaque discharge from the urethra is common **with at least 50 percent having no symptoms**. In females, **70–90 percent are without symptoms**, with the remainder experiencing mucopurulent cervicitis (inflammation of the cervix). If left untreated, complications may occur, including pelvic inflammatory disease in females and epididymitis (inflammation of the testes) in males. This may eventually result in infertility for both sexes.

Mode of Transmission

Chlamydia is transmitted by sexual activity.

Incubation Period

1–30 days, usually 2–10 days.

Infectious Period

Chlamydia may extend for months in untreated cases, especially in asymptomatic cases. Treatment with current CDC-recommended antibiotics ends infectiousness within days.

School/Nurse Responsibility

1. Report to your local health jurisdiction is mandatory.
2. Make referral to licensed health care provider or public health clinic for diagnosis and appropriate therapy. Referral to public health clinic may be made and treatment may be given without notification to parent/guardian if a student of the age of 14 years or older so requests (see RCW 70.24.110, Appendix X).
3. Report of suspected child abuse cases is mandatory.
4. Maintain and enforce confidentiality for the student. The consent to exchange information and medical records is governed by RCW 70.24.105 and Chapter 70.02 RCW. Refer to *Guidelines for Handling Health Care Information in School Records*. (See Resources, Appendix XIII, for source.)

Sexually Transmitted Diseases (STD) (cont.)

Control of Spread

1. Control of spread involves an interview with the patient and tracing of sexual contacts by public health personnel. Notification of public health authorities as soon as possible is essential. Rescreening 3–4 months after completion of treatment is recommended.
2. Middle school and high school students need accurate information about STDs, their causes, and treatment. The symptomless nature of this and certain other STDs should be stressed as well as the sites where treatment can be obtained. (See RCW 28A.230.020, Appendix XI.)

Sexually Transmitted Diseases (STD) (cont.)

Gonorrhea (Clap, Strain, Dose)

Description

Gonorrhea genital infections differ somewhat in presentation in males and females. In males, pain on urination and purulent (pus-like) discharge from the urethra usually occurs 2–8 days after exposure. **Up to 20 percent of males have no symptoms.** In females, gonorrhea may show up as pain on urination or vaginal discharge.

Approximately 50 percent of infected women have no symptoms. Infection can spread to the pelvic areas and even to the joints, heart, brain, and other organs in both males and females. Coexisting chlamydial infection and potential pelvic inflammatory disease should be a concern, along with pharyngeal (throat) and anorectal infections.

Mode of Transmission

Gonorrhea is transmitted by sexual contact.

Incubation Period

1–30 days, usually 2–10 days.

Infectious Period

Gonorrhea may extend for months in untreated cases, especially in asymptomatic cases. Treatment with current CDC-recommended antibiotics ends infectiousness within days.

School/Nurse Responsibility

1. Report to your local health jurisdiction is mandatory.
2. Make referral to licensed health care provider or public health clinic for diagnosis and appropriate therapy. Referral to public health clinic may be made and treatment may be given without notification of parent/guardian if a student of the age of 14 years or older so requests (see RCW 70.24.110, Appendix X).
3. Report of suspected child abuse cases is mandatory.
4. Maintain and enforce confidentiality for the student. The consent to exchange information and medical records is governed by RCW 70.24.105 and Chapter 70.02 RCW. Refer to *Guidelines for Handling Health Care Information in School Records*. (See Resources, Appendix XIII, for source.)

Sexually Transmitted Diseases (STD) (cont.)

Control of Spread

1. Control of spread involves an interview with the patient and tracing of sexual contacts by public health personnel. Notification of public health authorities as soon as possible is essential.
2. No school exclusion is necessary. Patient should receive treatment as soon as diagnosis is confirmed.
3. Report of suspected child abuse cases is mandatory. Consider child sexual abuse when gonorrhea is present in a student who is not sexually active.

Future Prevention and Education

1. Middle school and high school students need accurate information about STDs, their symptoms, causes, treatment, and where treatment can be obtained. The need for referral for interviewing and treating all contacts must be stressed. (See RCW 28A.230.020, Appendix XI.)
2. Antibiotic resistant strains of gonorrhea may increase the risk of spreading this infection. School nurses should work closely with local health jurisdiction staff to better ensure successful treatment.

Sexually Transmitted Diseases (STD) (cont.)

Herpes Simplex Virus, Genital Area

Description

Genital herpes is usually caused by Type 2 herpes simplex virus (HSV), though Type 1 infection in the genital area accounts for 30 percent of infections. As with oral infections, this is a recurrent, life-long, viral infection and is asymptomatic or not recognized in at least two-thirds of those infected. New tests, including serologies, enhance diagnosis. Very large national studies indicate that one-fifth of United States residents over the age of 12 years have antibodies to Type 2 HSV. Lesions are most infectious if fluid-filled vesicles (blisters) are present. Infection can be severe in the newborn.

Genital lesions pose no risk to others unless there is direct contact with infected lesions. Genital herpes infections, due to either Type 1 or Type 2 virus, can be sexually transmitted. It is not acquired from nonsexual sources or objects such as toilet seats.

Mode of Transmission

Both Types 1 and 2 HSV are transmitted by direct contact with infected skin and secretions during periods of asymptomatic or symptomatic viral shedding. Sores need not be present. Transmission to the newborn occurs most commonly at delivery.

Incubation Period

2–20 days.

Infectious Period

There is a life-long potential for spread of infection. Skin lesions are infectious until firmly crusted over and healed. The virus can be shed from the site of infection at any time. Sores need not be present. Intermittent or suppressive therapy with specific antivirals may alleviate outbreaks and viral shedding.

School/Nurse Responsibility

1. Report to your local health jurisdiction is mandatory for initial (primary) genital infection.
2. Report of suspected cases of child abuse is mandatory.

Sexually Transmitted Diseases (STD) (cont.)

3. Provide education and counseling regarding transmission of disease, recurrence potential, and recommended prevention practices to prevent spread.
4. Wear gloves if direct contact with lesions is necessary such as with diapering.
5. Maintain and enforce confidentiality for the student. The consent to exchange information and medical records is governed by RCW 70.24.105 and Chapter 70.02 RCW. Refer to *Guidelines for Handling Health Care Information in School Records*. (See Resources, Appendix XIII, for source.)

Sexually Transmitted Diseases (STD) (cont.)

Non-Gonococcal Urethritis (NGU)

Description

Non-gonococcal urethritis (NGU) is a condition that is caused by a variety of bacteria. In males it is more common than gonorrhea. While chlamydia is the most frequent isolated agent, other agents are involved in a significant number of cases. *Ureaplasma urealyticum*, *Trichomonas vaginalis*, and herpes cause approximately 10–15 percent of NGU cases.

Symptoms are very similar to gonorrhea, with pain and a pus-like to mucous-like discharge from the urethra. Many infected persons have no symptoms. Diagnosis is based on symptoms, laboratory studies, and negative cultures for gonorrhea.

Mode of Transmission

NGU is transmitted by sexual contact.

Incubation Period

Generally 2–21 days or more.

Infectious Period

NGU is infectious for the duration of bacterial infection. Viral causes such as herpes, may mean long-term infectiousness potential.

School/Nurse Responsibility

1. Make referral to licensed health care provider or public health clinic for diagnosis and appropriate therapy. Referral to clinic may be made and treatment may be given without notification of parent/guardian if a student of the age of 14 years or older so requests (see RCW 70.24.110, Appendix X).
2. Report of suspected child sexual abuse cases is mandatory.
3. Maintain and enforce confidentiality for the student. The consent to exchange information and medical records is governed by RCW 70.24.105 and Chapter 70.02 RCW. Refer to *Guidelines for Handling Health Care Information in School Records*. (See Resources, Appendix XIII, for source.)

Sexually Transmitted Diseases (STD) (cont.)

Control of Spread

1. Control of spread involves an interview with the patient and referral of sexual contacts for medical examination and treatment. Schools are required to cooperate with their local health jurisdiction staff in the process of investigation.
2. Recurrent NGU may be due to lack of compliance with treatment, failure to treat sexual partners, or reinfection.

Sexually Transmitted Diseases (STD) (cont.)

Syphilis

Description

Syphilis is an acute and chronic, potentially life-threatening disease caused by a spirochete (bacteria). Infection is characterized first by a local sore, then a secondary rash, followed by a period of latency (no symptoms), and much later by possible involvement of the nervous system, heart, skin, and bone. The most distinctive early sign is called a chancre (a shallow, painless ulcer with a firm border that is usually located on genital surfaces, but possibly on other areas of the body). Within 1–5 weeks (even without treatment) the chancre will usually disappear. A skin rash and/or patches in the throat may then appear and may last 2–6 weeks. At this secondary stage, blood tests for syphilis are always positive (unlike the primary stage that can have negative serologic tests). A period of latency then occurs. Patients may remain asymptomatic throughout life or may progress to the late destructive stages of the disease. In an untreated female, syphilis may be transmitted to a fetus regardless of the stage of the disease.

Mode of Transmission

With the exception of congenital infection, syphilis is transmitted through direct contact with an infectious sore or rash occurring in primary and secondary stages, typically by sexual contact.

Incubation Period

10–90 days, usually 21 days.

Infectious Period

Appropriate antibiotic treatment ends infectiousness within 24 hours. Isolation of patients from school is not required.

School/Nurse Responsibility

1. Report to your local health jurisdiction is mandatory.
2. Make referral to licensed health care provider or public health clinic for diagnosis and appropriate treatment. Referral to clinic may be done and treatment may be given without notification of parent/guardian if a student of the age of 14 years or older so requests (see RCW 70.24.110, Appendix X).

Sexually Transmitted Diseases (STD) (cont.)

3. Maintain and enforce confidentiality for the student. The consent to exchange information and medical records is governed by RCW 70.24.105 and Chapter 70.02 RCW. Refer to *Guidelines for Handling Health Care Information in School Records*. (See Resources, Appendix XIII, for source.)

Control of Spread

1. Control of spread involves an interview with the patient and tracing of all sexual contacts by public health officials for medical examination and treatment. Schools are required to cooperate with their local health jurisdiction staff in the process of investigation.
2. Adequate treatment will limit spread from the primary site to other organs and from one individual to another.

Future Prevention and Education

No vaccine is available. Simultaneous infection with syphilis and other STDs is common. The untreated disease may become a very significant health problem in the years ahead. Congenital syphilis such as the infection of a newborn with syphilis contracted from the mother, is a serious and unnecessary tragedy since this disease can be diagnosed and treated effectively.

Sexually Transmitted Diseases (STD) (cont.)

Vaginitis

Description

Vaginitis is an inflammation of the vagina and is considered the most common infection of the female genital organs.

The most prevalent types of vaginitis are trichomoniasis (trich), candidiasis (yeast), and bacterial vaginosis (*Gardnerella vaginitis*, nonspecific vaginitis). Symptoms include abnormal vaginal discharge, itching, burning, and vaginal odor. Diagnosis is confirmed by laboratory smear, culture, or other test.

Mode of Transmission

Vaginal infections may be transmitted by intimate sexual contact but symptoms also may originate from excessive douching, use of birth control pills, certain antibiotics, and other sources such as allergic reactions to vaginal products.

Incubation Period

Variable depending on the type of vaginitis.

Infectious Period

Vaginitis caused by microorganisms is infectious for the duration of infection.

School/Nurse Responsibility

1. Report to your local health jurisdiction is not required.
2. Make referral to licensed health care provider or public health clinic for diagnosis and appropriate therapy.
3. Report of suspected child abuse cases is mandatory.
4. Maintain and enforce confidentiality for the student. The consent to exchange information and medical records is governed by RCW 70.24.105 and Chapter 70.02 RCW. Refer to *Guidelines for Handling Health Care Information in School Records*. (See Resources, Appendix XIII, for source.)

Sexually Transmitted Diseases (STD) (cont.)

Control of Spread

Although the male is seldom symptomatic with these infections, control of spread and reinfection usually involves concurrent referral of male sexual contacts for medical examination and treatment if the diagnosis is trichomoniasis. Only in this way can the female partner avoid reinfection once therapy is completed.

Smallpox

Description

There has not been a case of smallpox disease in the United States since 1949. The last case of wild-virus smallpox in the world occurred in 1977 in Somalia. A single case of smallpox would be a public health emergency.

Smallpox is an acute infectious viral disease characterized by sudden onset of fever greater than 101°F, fatigue, headache, muscle pain, nausea, vomiting, and backache for 1–4 days before the onset of rash. Lesions begin as raised red spots (papules) and become vesicles (blisters) filled with fluid. Unlike chickenpox, lesions are at the same stage of development at the same time no matter where they are on the body. Crusts begin to form in about 14 days and begin to separate during the third week.

Mode of Transmission

Most transmission of smallpox results from direct face-to-face contact with an infected person, usually within a distance of 6 feet, from physical contact with a person with smallpox, or with contaminated articles.

Incubation Period

7–19 days, usually 12 days.

Infectious Period

Lesions are infectious until the dry crusts have separated. A person with smallpox is sometimes contagious with onset of fever, but the person becomes most contagious with the onset of rash.

School/Nurse Responsibility

1. Report to your local health jurisdiction by telephone is mandatory and must be immediate.
2. Make referral to licensed health care provider of any suspected cases.
3. Refer all close contacts for vaccination within 4 days. This would be accomplished with direction from your local health jurisdiction.

Smallpox (cont.)

Control of Spread

1. Only persons vaccinated for smallpox should examine a potential case.
2. Use gloves for any contact with dressings or with articles soiled with fluid from lesions.
3. Dispose of all dressings in biohazard bags or disinfect with 1:10 bleach and water solution.
4. Exclude confirmed cases from school until all crusts have separated.
5. Maintain respiratory isolation of the case.

Future Prevention and Education

1. In the event of an intentional release of smallpox virus, vaccination would be recommended for those exposed to the initial release, contacts of people with smallpox, and others at risk of exposure.
2. Vaccination of contacts within 4 days of exposure is protective.

In order for school nurses to stay informed on breaking issues related to smallpox, SARS, and bioterrorism diseases and conditions, the following Web sites are recommended:

The Washington State Department of Health Web site: <http://www.doh.wa.gov>.

The Clinician's Biodefense Network, a free electronic communication system for health professionals that is managed and operated by the Center for Civilian Biodefense Strategies at Johns Hopkins University: http://www.hopkinscbn.org/dmz/about_network.html. This site includes information on smallpox vaccination and links to CDC for updates. Registration is free.

The latest SARS information from the CDC: <http://www.cdc.gov/ncidod/sars/>. Health topics A to Z from the CDC: <http://www.cdc.gov/health/default.htm>.

The latest information for clinicians and the public on smallpox: <http://www.bt.cdc.gov/agent/smallpox/index.asp>. This site includes question and answer sheets in languages other than English.

The US Army Medical Research Institute of Infectious Diseases Web site: <http://www.usamriid.army.mil/education/index.html>. This site includes updates, links, and education options along with general information.

The Harborview Medical Center Web site provides background material for clinicians dealing with families from other countries including traumatic stress related to conflicts in the United States and abroad: <http://ethnomed.org/>.

Streptococcal Sore Throat and Scarlet Fever

Description

Streptococcal sore throat is an acute bacterial infection characterized by sore throat, fever, large tonsils with pus on them, or an inflamed pharynx (throat) and tender nodes in the neck. Streptococcal sore throat can occur with very few symptoms. **All sore throats resembling strep throat are not due to strep**, for example, infectious mononucleosis can cause a similar sore throat.

Scarlet fever is the combination of a streptococcal sore throat and a skin rash caused by a toxin produced by certain strains of the strep organism. The rash usually appears on the neck, chest, groin, and axilla (armpits). It usually does not involve the face. Characteristically, it spares the area around the mouth and inside of the elbow. Peeling of the skin, especially of the fingers and toes, may follow the rash. Untreated streptococcal infections can lead to serious complications (rheumatic fever and kidney disease [glomerulonephritis]).

Necrotizing fasciitis (flesh-eating bacteria) is caused by Group A strep; the same bacteria that causes strep throat and impetigo. Unlike strep throat and impetigo, which are common and easy to treat, necrotizing fasciitis is very rare and more difficult to treat. The signs and symptoms are fever with severe pain, swelling, and redness at an open wound site. As with all unidentified rashes, especially those accompanied by fever or illness, make referral to a licensed health care provider. Treatment is early antibiotic therapy. Prevention is practicing proper handwashing techniques and keeping all wounds clean.

Mode of Transmission

Streptococcal infection is usually transmitted by airborne droplets though it can be foodborne. Necrotizing fasciitis (flesh-eating bacteria) is a rare infection (affecting 600 persons in the United States in 1999) that is spread through direct contact with infected persons through an open sore or wound on the skin.

Incubation Period

From 2–5 days.

Infectious Period

Streptococcal disease is most infectious in the acute phase. Untreated, it may be infectious for several weeks. However, if treated with antibiotics, the infectious period can last less than 24 hours. Some individuals can remain carriers for prolonged periods.

Streptococcal Sore Throat and Scarlet Fever (cont.)

School/Nurse Responsibility

1. Report to your local health jurisdiction of all localized outbreaks is mandatory.
2. Make referral to health care provider of students with a symptomatic sore throat and/or unexplained fever.
3. Notify parent/guardian of exposed students with history of rheumatic fever or kidney infection (glomerulonephritis).

Control of Spread

Symptomatic students with positive throat cultures should be excluded until at least 24 hours after antimicrobial treatment is initiated. Students should be able to return to school after 24 hours of appropriate treatment, when they have no fever, and when physically well enough.

1. Symptomatic students with sore throat and fever should be cultured and, if culture-positive, treated appropriately by a licensed health care provider.
2. When throat cultures are performed on a cluster of students to check for strep, there will almost always be some who have a positive test but are without any symptoms. These students need not be excluded from school nor do they require treatment.
3. Epidemic strep infection with significant increases in numbers of sore throats or increases above normal in school absenteeism (above 10 percent) should be referred to your local health jurisdiction for epidemiologic investigation.
4. The culturing of asymptomatic family contacts of a strep case is not considered high priority. Some licensed health care providers will wish to treat these contacts while some will observe for a period of time before treating.
5. No follow-up throat culture is necessary in an otherwise healthy student if that student completed adequate antibiotic treatment. Approximately 10–20 percent of students may still carry streptococci in their throats.
6. No vaccines are available for general use at this time to prevent strep throat.
7. Instruct students not to share items that may be contaminated with saliva such as beverage containers.

Streptococcal Sore Throat and Scarlet Fever (cont.)

8. Clean or dispose of articles soiled with nose and throat discharges.
9. Cover mouth with tissue when coughing or sneezing. If no tissue is available, encourage students to “catch your cold in your elbow” by covering their mouth and nose with the crook of their arm and coughing or sneezing into their shirt or coat sleeve.
10. Encourage proper handwashing techniques.

Future Prevention and Education

1. As with all antibiotic prescriptions, the family should be encouraged to take (or administer to their child) the full course of prescribed treatment, even if the symptoms disappear before all of the medication is used up. Antibiotics are drugs that fight infections caused by bacteria. Years of prescribing antibiotics for nonbacterial infections have promoted the development of antibiotic-resistant bacteria. Antibiotic resistance occurs when bacteria change in some way that reduces or eliminates the effectiveness of drugs designed to cure infections. The bacteria survive and continue to multiply causing more harm. Widespread use of antibiotics promotes the spread of antibiotic resistance. Antibiotics are only effective against bacterial infections not viral infections such as the common cold, most sore throats, and influenza.
2. Routine classroom or school culture surveys to find strep carriers are not justified unless local public health officials determine an unusual prevalence of streptococcal disease or its complications (rheumatic fever and kidney disease [glomerulonephritis]).

Tetanus (Lockjaw)

Description

Tetanus is a very rare bacterial disease. Tetanus growth in a wound produces a toxin that can cause localized spasm and pain in the muscles at the site of injury, or severe generalized muscle spasms most marked in the jaw and neck, generalized pain, even seizures, and death. Tetanus has not been reported in the United States in individuals with adequate primary immunization.

Mode of Transmission

Transmission is through contamination of a wound by soil, dust, water, or articles, especially those that have been contaminated with animal feces or manure. The entry wound may or may not be apparent. Deep puncture wounds are a particular risk.

Incubation Period

3–21 days, usually 8 days.

Infectious Period

None.

School/Nurse Responsibility

1. Provide basic first aid immediately, washing the wound thoroughly with soap and water.
2. Make referral to licensed health care provider for evaluation of the wound for additional medical care if needed.
3. Make referral to licensed health care provider for tetanus booster, if needed.
4. Notify parent/guardian of the wound.

Control of Spread

None.

Future Prevention and Education

Surveillance and education to ensure adequate immunization levels is essential. Tetanus vaccine is required for school entry. Persons with completed childhood schedules of immunization should repeat adult tetanus/diphtheria (Td) every 10 years for a lifetime.

Tetanus (Lockjaw) (cont.)

Immunization Requirement, State of Washington

The minimum requirement for school entry is a four-dose series of a tetanus-containing vaccine (DtaP or DT) with the student receiving the fourth dose on or after their fourth birthday. The minimum requirement for students above the age of 7 years is 3 doses with the third dose given on or after the fourth birthday. Only Td is given to persons of the age of 7 years or older.

Tuberculosis (TB)

Description

Tuberculosis (TB) is a chronic bacterial disease caused by *Mycobacterium tuberculosis* that may affect any part of the body but most commonly attacks the lungs. In children under the age of 15 years, TB frequently settles in other high oxygen-tension areas of the body (bones, joints, brain, spinal tissue, and lymph nodes). The initial infection with TB is systemic and silent, causing no noticeable symptoms. In most healthy children and adults, initial infection does not immediately develop into disease and the individual is not infectious. This condition is known as latent TB infection. Infants, however, are particularly susceptible to rapidly developing disease at the time of initial infection.

Mode of Transmission

Transmission is generally from the inhalation of droplets expelled from a person with pulmonary disease by sneezing, coughing, and even talking. The bacteria are spread through airborne transmission from diseased to susceptible individuals.

Incubation Period

Variable, about 2–10 weeks. From the time the TB bacilli enter the body and begin the infection process, it may take 2–10 weeks to develop a significant or positive skin test using a Purified Protein Derivative (PPD) solution. Most cases of untreated infection (90 percent) become dormant and never progress to active disease. This percentage is notably lower in young children.

Infectious Period

Students with latent TB infection or uncomplicated primary TB are noninfectious and may remain in school or play groups as long as their general health is good. When the TB lesions have broken down in the lungs and have become infectious, infectiousness persists as long as living bacteria are discharged through the bronchi. Specific drug treatment will diminish the infectiousness within weeks. Your local health jurisdiction staff will advise when treated student or staff members may return to school.

Treatment

All individuals who react significantly to the PPD skin test should have an initial chest x-ray to rule out the presence of any active pulmonary disease process. Most infected individuals with latent TB infection will benefit from preventive antibiotic therapy. All diseased individuals must be treated with a minimum of four antituberculous antibiotics for a minimum of 6 months. Your local health jurisdiction TB control office must be consulted regarding specifics of individual cases.

Tuberculosis (TB) (cont.)

School/Nurse Responsibility

1. Report to your local health jurisdiction for suspected or known cases is mandatory (see Chapter 246-101 WAC, Appendix V, or go to <http://www.doh.wa.gov/os/policy/246-101.htm>).
2. Make referral to licensed health care provider of any student identified with TB symptoms for TB assessment. Use of the student's existing licensed health care provider is preferable. Consult with your local health jurisdiction as needed.
3. Assist your local health jurisdiction with contact investigations when an active TB case has been identified in the school. Assist your local health jurisdiction in tuberculin testing of school contacts when indicated.
4. Assist staff to dispel anxiety related to noninfectious cases. Promote understanding within the student and faculty populations regarding TB disease versus TB infection. Consult with your local health jurisdiction TB program for assistance.
5. Do not report positive skin tests to your local health jurisdiction. Do not exclude students because of a positive skin test reaction.

Control of Spread

1. Active cases must be under treatment with anti-TB drugs.
2. Local health officials must clear treated individuals for return to school.
3. Recent skin test converters should have a chest x-ray and medical consultation regarding indication for TB-preventive medication.
4. Students without symptoms are not excluded from school on the basis of a positive skin test indicating latent TB infection alone.
5. Instruct students not to share items that may be contaminated with saliva such as beverage containers.
6. Clean or dispose of articles soiled with nose and throat discharges.
7. Cover mouth with tissue when coughing or sneezing. If no tissue is available, encourage students to "catch your cold in your elbow" by covering their mouth and nose with the crook of their arm and coughing or sneezing into their shirt or coat sleeve.

Tuberculosis (TB) (cont.)

8. Encourage proper handwashing techniques.

Future Prevention and Education

1. No immunization is recommended in the United States. In some countries Bacillus Calmette-Guerin (BCG) vaccine is given. It is not recommended in countries like the United States where the incidence of TB is low.
2. Routine skin testing of students is no longer recommended in Washington State. However, in specific situations or populations, the risk of exposure may be greater than normal (recent studies have shown a higher prevalence of TB in newly-arrived immigrants). In such cases, schools should consult with their local health jurisdictions.
3. Since TB is a potentially serious disease with special problems and concerns relating to its historical significance in the United States, questions should be directed to your local health jurisdiction.
4. The following books are good references for schools: Tuberculosis: School Nurse Handbook (revised 2001) and Guidelines for Initiating A School-based Directly Observed Therapy Program (revised 2002).

Available from:

New Jersey Medical School National Tuberculosis Center
225 Warren Street
Newark, NJ 07101-1709
Phone: 1-800-4TB-DOCS

Warts (Verrucae)

Description

Warts are caused by more than 125 viral types that are the source of skin-colored growths on exposed areas of the skin and mucous membranes. Warts are usually self limited. The appearance depends on the part of the body affected. They may be smooth and flat (as plantar warts on the soles of the feet), raised (as on fingers, knees, and hands), or elongated (as on face and neck). Warts usually do not hurt, but occasionally can be very painful especially if secondary infections occur as a result of scratching. New warts may occur in an individual from picking or scratching the initial wart.

Mode of Transmission

Warts are usually transmitted by direct skin-to-skin contact with a person who is shedding the virus. The transmitter may or may not have symptoms. Contaminated floors and other objects may cause spread of the wart virus. Genital warts are usually sexually transmitted.

Incubation Period

Variable, ranging from 1–8 months but may be as long as several years.

Infectious Period

The infectious period of warts is unknown. The virus is shed at least as long as visible lesions persist and shedding continues intermittently when warts are not present.

School/Nurse Responsibility

1. Make referral to licensed health care provider when warts are extensive and bothersome to the student or parent/guardian. Most warts will disappear spontaneously. Warts may fail to disappear even with repeated treatment and they may recur after an apparent cure. They may be treated with locally applied chemicals, surgery, cautery, or freezing with liquid nitrogen.
2. Clean floors, mats, and other equipment if a large number of cases of plantar warts are present. Students with plantar warts should be urged to wear thongs for showering or be excused from showering until warts disappear.
3. Report of suspected child abuse cases is mandatory. Genital warts in children may be the result of sexual abuse.

Future Prevention and Education

Inform students and staff that transmission may be by direct person-to-person contact.

APPENDIX I
RCW 28A.210.060-170
Immunization Law

RCW 28A.210.060

Immunization program—Purpose.

In enacting RCW [28A.210.060](#) through [28A.210.170](#), it is the judgment of the legislature that it is necessary to protect the health of the public and individuals by providing a means for the eventual achievement of full immunization of school-age children against certain vaccine-preventable diseases.

[1990 c 33 § 190; 1984 c 40 § 3; 1979 ex.s. c 118 § 1. Formerly RCW [28A.31.100](#).]

NOTES:

Severability—1984 c 40: See note following RCW [28A.195.050](#).

Effective date—1979 ex.s. c 118: "This act is necessary for the immediate preservation of the public peace, health, and safety, the support of the state government and its existing public institutions, and shall take effect on September 1, 1979." [1979 ex.s. c 118 § 13.]

Severability—1979 ex.s. c 118: "If any provision of this act or its application to any person or circumstance is held invalid, the remainder of the act or the application of the provision to other persons or circumstances is not affected." [1979 ex.s. c 118 § 16.]

Immunization plan: RCW [43.70.525](#).

APPENDIX II

RCW 28A.210.010

Contagious Diseases, Limiting Contact—Rules and Regulations

RCW 28A.210.010

Contagious diseases, limiting contact—Rules and regulations.

The state board of health, after consultation with the superintendent of public instruction, shall adopt reasonable rules and regulations regarding the presence of persons on or about any school premises who have, or who have been exposed to, contagious diseases deemed by the state board of health as dangerous to the public health. Such rules and regulations shall specify reasonable and precautionary procedures as to such presence and/or readmission of such persons and may include the requirement for a certificate from a licensed physician that there is no danger of contagion. The superintendent of public instruction shall print and distribute the rules and regulations of the state board of health above provided to appropriate school officials and personnel.

[1971 c 32 § 1; 1969 ex.s. c 223 § [28A.31.010](#). Prior: 1909 c 97 p 262 § 5; RRS § 4689; prior: 1897 c 118 § 68; 1890 p 372 § 47. Formerly RCW [28A.31.010](#), [28.31.010](#).]

APPENDIX III

Chapter 246-110 WAC

Contagious Disease—School Districts and Day Care Centers

WAC 246-110-001

Purpose

WAC 246-110-010

Definitions

WAC 246-110-020

Control of Communicable (Contagious) Disease

WAC 246-101-415

Responsibilities of Child Day Care Facilities

WAC 246-101-420

Responsibilities of Schools

WAC 246-110-001—Purpose. The following regulations are adopted by the board of health for the purpose of governing the presence on or about any school or day care center premises of susceptible persons who have, or have been exposed to, a communicable disease. These regulations are in addition to other requirements imposed by chapter [246-100](#) WAC.

In furtherance of the purpose and intent of the law and these regulations, it is recommended that parents of students whose medical supervision seems inadequate should be encouraged to obtain the services of a physician for the child. When the economic situation warrants, the parents should be guided to the appropriate source of community-sponsored medical care. These regulations are not intended to imply that any diagnosis or treatment will be performed by school or day care center personnel.

[Statutory Authority: RCW [43.20.050](#). 92-02-019 (Order 225B), § 246-110-001, filed 12/23/91, effective 1/23/92; 91-02-051 (Order 124B), recodified as § 246-110-001, filed 12/27/90, effective 1/31/91; 90-21-056 (Order 095), § 248-101-011, filed 10/15/90, effective 10/15/90.]

WAC 246-110-010—Definition. As used in this portion of these regulations, these terms shall mean:

- (1) "Contact" means a person exposed to an infected person, animal, or contaminated environment which might provide an opportunity to acquire the infection.
- (2) "Exposure" means such association with a person or animal in the infectious stage of a disease, or with a contaminated environment, as to provide the opportunity to acquire the infection.
- (3) "Susceptible" means a person who does not possess sufficient resistance, whether natural or induced, to a pathogenic agent or disease to prevent contracting that disease when exposed thereto.
- (4) "Communicable disease (contagious disease)" means an illness caused by an infectious agent which can be transmitted from one person, animal, or object to another person by direct or indirect means including transmission via an intermediate host or vector, food, water, or air. Communicable (contagious) diseases include, but are not limited to:
 - (a) Chickenpox
 - (b) Conjunctivitis (bacterial)
 - (c) Diphtheria
 - (d) Giardiasis

- (e) Hepatitis A
- (f) Invasive Haemophilus influenza disease (excluding otitis media)
- (g) Measles
- (h) Meningitis (bacterial)
- (i) Mumps
- (j) Pediculosis
- (k) Pertussis
- (l) Rubella
- (m) Salmonellosis
- (n) Shigellosis
- (o) Tuberculosis

(5) "School" means each building, facility, and location at or within which any or all portions of a preschool, kindergarten and grades one through twelve program of education and related activities are conducted for two or more children by or in behalf of any public school district and by or in behalf of any private school or private institution subject to approval by the state board of education.

(6) "Day care center" means an agency which regularly provides care for a group of children for periods of less than twenty-four hours and is licensed pursuant to chapter [74.15](#) RCW.

(7) "Outbreak" means the occurrence of cases of a disease or condition in any area over a given period of time in excess of the expected number of cases.

[Statutory Authority: RCW [43.20.050](#). 91-02-051 (Order 124B), recodified as § 246-110-010, filed 12/27/90, effective 1/31/91; 90-21-056 (Order 095), § 248-101-021, filed 10/15/90, effective 10/15/90.]

WAC 246-110-020—Control of communicable (contagious) disease. (1)

When there is an outbreak of a contagious disease, as defined in WAC [246-110-010](#), such that there is the potential for a case or cases within a school or day care center, the local health officer, if appropriate, after consultation with the secretary of health or designee shall take all medically appropriate actions deemed to be necessary to control or eliminate the spread of the disease, including, but not limited to:

- (a) Closing the affected school(s) or day care center(s), or part(s) thereof;
 - (b) Closing other schools or day care centers in the local health officer's jurisdiction;
 - (c) Causing the cessation of selected school or day care center activities or functions;
 - (d) Excluding from schools or day care centers in the local health officer's jurisdiction any students, staff, and volunteers who are infected with, or deemed to be susceptible to, the disease.
- (2) Prior to taking action the health officer shall:
- (a) Consult with and discuss the ramifications of action with the superintendent of the school district, or the chief administrator of the day care center or their designees on the proposed action; and
 - (b) Provide the board of directors and the superintendent of the school district or the chief administrator of the day care center a written decision in the form and substance of an order directing them to take action;
- (3) Where these actions have been taken, the local health officer shall, in addition:
- (a) Set the terms and conditions permitting schools or day care centers to reopen; activities and functions to resume; and excluded students, staff and volunteers to be readmitted; and
 - (b) Pursue, in consultation with the secretary of health or designee and school and/or day care officials, the investigation of the source of disease, or order those actions necessary to the ultimate control of the disease.

[Statutory Authority: RCW [43.20.050](#). 92-02-019 (Order 225B), § 246-110-020, filed 12/23/91, effective 1/23/92; 91-02-051 (Order 124B), recodified as § 246-110-020, filed 12/27/90, effective 1/31/91; 90-21-056 (Order 095), § 248-101-221, filed 10/15/90, effective 10/15/90.]

WAC 246-101-415—Responsibilities of child day care facilities. Child day care facilities shall:

- (1) Notify the local health department of cases or suspected cases, or outbreaks and suspected outbreaks of notifiable conditions that may be associated with the child day care facility.
- (2) Consult with a health care provider or the local health department for information about the control and prevention of infectious or communicable disease, as necessary.
- (3) Cooperate with public health authorities in the investigation of cases and suspected cases, or outbreaks and suspected outbreaks of disease that may be associated with the child day care facility.
- (4) Child day care facilities shall establish and implement policies and procedures to maintain confidentiality related to medical information in their possession.

[Statutory Authority: RCW [43.20.050](#). 00-23-120, § 246-101-415, filed 11/22/00, effective 12/23/00.]

WAC 246-101-420—Responsibilities of schools. Schools shall:

- (1) Notify the local health department of cases or suspected cases, or outbreaks and suspected outbreaks of disease that may be associated with the school.
- (2) Cooperate with the local health department in monitoring influenza.
- (3) Consult with a health care provider or the local health department for information about the control and prevention of infectious or communicable disease, as necessary.
- (4) Cooperate with public health authorities in the investigation of cases and suspected cases, or outbreaks and suspected outbreaks of disease that may be associated with the school.
- (5) Personnel in schools who know of a person with a notifiable condition shall release identifying information only to other individuals responsible for protecting the health and well-being of the public through control of disease.
- (6) Schools shall establish and implement policies and procedures to maintain confidentiality related to medical information in their possession.

[Statutory Authority: RCW [43.20.050](#). 00-23-120, § 246-101-420, filed 11/22/00, effective 12/23/00.]

APPENDIX IV

Chapter 246-100 WAC

Communicable and Certain Other Diseases

WAC 246-100-006

Purpose

WAC 246-100-011

Definitions

WAC 246-100-021

Responsibilities and Duties—Health Care Providers

WAC 246-100-006—Purpose. The following rules and regulations are adopted under the authority of chapter [43.20](#) RCW to protect the health and well-being of the public by controlling communicable and certain other diseases.

[Statutory Authority: RCW [43.20.050](#). 91-02-051 (Order 124B), recodified as § 246-100-006, filed 12/27/90, effective 1/31/91; 87-11-047 (Order 302), § 248-100-006, filed 5/19/87.]

WAC 246-100-011—Definitions. The following definitions shall apply in the interpretation and enforcement of chapter [246-100](#) WAC:

- (1) "Acquired immunodeficiency syndrome (AIDS)" means illness, disease, or conditions defined and described by the Centers for Disease Control, U.S. Public Health Service, Morbidity and Mortality Weekly Report (MMWR), December 18, 1992, Volume 41, Number RR-17. A copy of this publication is available for review at the department and at each local health department.
- (2) "AIDS counseling" means counseling directed toward:
 - (a) Increasing the individual's understanding of acquired immunodeficiency syndrome; and
 - (b) Assessing the individual's risk of HIV acquisition and transmission; and
 - (c) Affecting the individual's behavior in ways to reduce the risk of acquiring and transmitting HIV infection.
- (3) "Board" means the Washington state board of health.
- (4) "Case" means a person, alive or dead, having been diagnosed to have a particular disease or condition by a health care provider with diagnosis based on clinical or laboratory criteria or both.
- (5) "Child day care facility" means an agency regularly providing care for a group of children for less than twenty-four hours a day and subject to licensing under chapter [74.15](#) RCW.
- (6) "Communicable disease" means an illness caused by an infectious agent which can be transmitted from one person, animal, or object to another person by direct or indirect means including transmission via an intermediate host or vector, food, water, or air.
- (7) "Contaminated" or "contamination" means containing or having contact with infectious agents or chemical or radiological materials that pose an immediate threat to present or future public health.

- (8) "Contamination control measures" means the management of persons, animals, goods, and facilities that are contaminated, or suspected to be contaminated, in a manner to avoid human exposure to the contaminant, prevent the contaminant from spreading, and/or effect decontamination.
- (9) "Department" means the Washington state department of health.
- (10) "Detention" or "detainment" means physical restriction of activities of an individual by confinement for the purpose of controlling or preventing a serious and imminent threat to public health and may include physical plant, facilities, equipment, and/or personnel to physically restrict activities of the individual to accomplish such purposes.
- (11) "Disease control measures" means the management of persons, animals, goods, and facilities that are infected with, suspected to be infected with, exposed to, or suspected to be exposed to an infectious agent in a manner to prevent transmission of the infectious agent to humans.
- (12) "Health care facility" means:
- (a) Any facility or institution licensed under chapter [18.20](#) RCW, boarding home, chapter [18.46](#) RCW, birthing centers, chapter [18.51](#) RCW, nursing homes, chapter [70.41](#) RCW, hospitals, or chapter [71.12](#) RCW, private establishments, clinics, or other settings where one or more health care providers practice; and
 - (b) In reference to a sexually transmitted disease, other settings as defined in chapter [70.24](#) RCW.
- (13) "Health care provider" means any person having direct or supervisory responsibility for the delivery of health care who is:
- (a) Licensed or certified in this state under Title [18](#) RCW; or
 - (b) Is military personnel providing health care within the state regardless of licensure.
- (14) "HIV testing" means conducting a laboratory test or sequence of tests to detect the human immunodeficiency virus (HIV) or antibodies to HIV performed in accordance with requirements to WAC [246-100-207](#). To assure that the protection, including but not limited to, pre- and post-test counseling, consent, and confidentiality afforded to HIV testing as described in chapter [246-100](#) WAC also applies to the enumeration of CD4 + (T4) lymphocyte counts (CD4 + counts) and CD4 + (T4) percents of total lymphocytes (CD4 + percents) when used to diagnose HIV infection, CD4 + counts and CD4 + percents will be presumed HIV testing except when shown by clear and convincing evidence to be for use in the following circumstances:

- (a) Monitoring previously diagnosed infection with HIV;
- (b) Monitoring organ or bone marrow transplants;
- (c) Monitoring chemotherapy;
- (d) Medical research; or
- (e) Diagnosis or monitoring of congenital immunodeficiency states or autoimmune states not related to HIV.

The burden of proving the existence of one or more of the circumstances identified in (a) through (e) of this subsection shall be on the person asserting such existence.

- (15) "Infectious agent" means an organism such as a virus, rickettsia, bacteria, fungus, protozoan, or helminth that is capable of producing infection or infectious disease.
- (16) "Isolation" means the separation, for the period of communicability or contamination, of infected or contaminated persons or animals from others in such places and under such conditions as to prevent or limit the direct or indirect transmission of the infectious agent or contaminant from those infected or contaminated to those who are susceptible or who may spread the agent or contaminant to others.
- (17) "Local health department" means the city, town, county, or district agency providing public health services to persons within the area, as provided in chapter [70.05](#) RCW and chapter [70.08](#) RCW.
- (18) "Local health officer" means the individual having been appointed under chapter [70.05](#) RCW as the health officer for the local health department, or having been appointed under chapter [70.08](#) RCW as the director of public health of a combined city-county health department, or his or her delegee appointed by the local board of health.
- (19) "Nosocomial infection" means an infection acquired in a hospital or other health care facility.
- (20) "Outbreak" means the occurrence of cases of a disease or condition in any area over a given period of time in excess of the expected number of cases.
- (21) "Post-test counseling" means counseling after the HIV test when results are

provided and directed toward:

- (a) Increasing the individual's understanding of human immunodeficiency virus (HIV) infection;
- (b) Affecting the individual's behavior in ways to reduce the risk of acquiring and transmitting HIV infection;
- (c) Encouraging the individual testing positive to notify persons with whom there has been contact capable of spreading HIV;
- (d) Assessing emotional impact of HIV test results; and
- (e) Appropriate referral for other community support services.

(22) "Pretest counseling" means counseling provided prior to HIV testing and aimed at:

- (a) Helping an individual to understand:
 - (i) Ways to reduce the risk of human immunodeficiency virus (HIV) transmission;
 - (ii) The nature, purpose, and potential ramifications of HIV testing;
 - (iii) The significance of the results of HIV testing; and
 - (iv) The dangers of HIV infection; and
- (b) Assessing the individual's ability to cope with the results of HIV testing.

(23) "Principal health care provider" means the attending physician or other health care provider recognized as primarily responsible for diagnosis and treatment of a patient or, in the absence of such, the health care provider initiating diagnostic testing or therapy for a patient.

(24) "Quarantine" means the limitation of freedom of movement of such well persons or domestic animals as have been exposed to, or are suspected to have been exposed to, an infectious agent, for a period of time not longer than the longest usual incubation period of the infectious agent, in such manner as to prevent effective contact with those not so exposed.

- (25) "School" means a facility for programs of education as defined in RCW [28A.210.070](#) (preschool and kindergarten through grade twelve).
- (26) "Sexually transmitted disease (STD)" means a bacterial, viral, fungal, or parasitic disease or condition which is usually transmitted through sexual contact, including:
- (a) Acute pelvic inflammatory disease;
 - (b) Chancroid;
 - (c) Chlamydia trachomatis infection;
 - (d) Genital and neonatal herpes simplex;
 - (e) Genital human papilloma virus infection;
 - (f) Gonorrhea;
 - (g) Granuloma inguinale;
 - (h) Hepatitis B infection;
 - (i) Human immunodeficiency virus infection (HIV) and acquired immunodeficiency syndrome (AIDS);
 - (j) Lymphogranuloma venereum;
 - (k) Nongonococcal urethritis (NGU); and
 - (l) Syphilis.
- (27) "Spouse" means any individual who is the marriage partner of an HIV-infected individual, or who has been the marriage partner of the HIV-infected individual within the ten-year period prior to the diagnosis of HIV-infection, and evidence exists of possible exposure to HIV.
- (28) "State health officer" means the person designated by the secretary of the department to serve as statewide health officer, or, in the absence of such designation, the person having primary responsibility for public health matters in the state.

(29) "Suspected case" or "suspected to be infected" means the local health officer, in his or her professional judgment, reasonably believes that infection with a particular infectious agent is likely based on signs and symptoms, laboratory evidence, or contact with an infected individual, animal, or contaminated environment.

(30) "Veterinarian" means an individual licensed under provisions of chapter [18.92](#) RCW, veterinary medicine, surgery, and dentistry and practicing animal health care.

[Statutory Authority: RCW [43.20.050](#) (2)(d), [70.05.050](#) and [70.05.060](#) . 03-06-003, § 246-100-011, filed 2/19/03, effective 2/19/03. Statutory Authority: RCW [43.20.050](#). 00-23-120, § 246-100-011, filed 11/22/00, effective 12/23/00. Statutory Authority: RCW [70.24.022](#), [70.24.340](#) and Public Law 104-146. 97-15-099, § 246-100-011, filed 7/21/97, effective 7/21/97. Statutory Authority: Chapter [70.24](#) RCW. 93-08-036 (Order 354B), § 246-100-011, filed 4/1/93, effective 5/2/93. Statutory Authority: RCW [43.20.050](#) and [70.24.130](#). 92-02-019 (Order 225B), § 246-100-011, filed 12/23/91, effective 1/23/92. Statutory Authority: RCW [43.20.050](#). 91-02-051 (Order 124B), recodified as § 246-100-011, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter [70.24](#) RCW. 89-07-095 (Order 325), § 248-100-011, filed 3/22/89; 88-17-057 (Order 317), § 248-100-011, filed 8/17/88. Statutory Authority: RCW [43.20.050](#). 88-07-063 (Order 308), § 248-100-011, filed 3/16/88; 87-11-047 (Order 302), § 248-100-011, filed 5/19/87.]

WAC 246-100-021—Responsibilities and duties—Health care

providers. Every health care provider, as defined in chapter [246-100](#) WAC, shall:

- (1) Provide adequate, understandable instruction in control measures designed to prevent the spread of disease to:
 - (a) Each patient with a communicable disease under his or her care; and
 - (b) Others as appropriate to prevent spread of disease.
- (2) Cooperate with public health authorities during investigation of:
 - (a) Circumstances of a case or suspected case of a notifiable condition or other communicable disease; and
 - (b) An outbreak or suspected outbreak of illness.

Comply with requirements in WAC [246-100-206](#), [246-100-211](#), and chapter [246-101](#) WAC.

- (3) Use protocols established in *Communicable Diseases Manual*, seventeenth edition, James Chin, MD, MPH, editor, 2000, when treating wounds caused by animal bites. A copy of this publication is available for review at the department and at each local health department.

[Statutory Authority: RCW [43.20.050](#). 00-23-120, § 246-100-021, filed 11/22/00, effective 12/23/00. Statutory Authority: RCW [43.20.050](#), [70.24.130](#) and [70.104.055](#). 92-02-019 (Order 225B), § 246-100-021, filed 12/23/91, effective 1/23/92. Statutory Authority: RCW [43.20.050](#). 91-02-051 (Order 124B), recodified as § 246-100-021, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter [70.104](#) RCW. 90-10-036 (Order 049), § 248-100-021, filed 4/26/90, effective 5/27/90. Statutory Authority: RCW [43.20.050](#). 87-11-047 (Order 302), § 248-100-021, filed 5/19/87.]

APPENDIX V

Chapter 246-101 WAC

Notifiable Conditions

WAC 246-101-101

Notifiable Conditions and the Health Care Provider

WAC 246-101-105

Duties of the Health Care Provider

WAC 246-101-110

Means of Notification

WAC 246-101-115

Content of Notification

WAC 246-101-120

Handling of Case Reports and Medical Information

WAC 246-101-101—Notifiable conditions and the health care

provider. This section describes the conditions that Washington's health care providers must notify public health authorities of on a statewide basis. The board finds that the conditions in the table below (Table HC-1) are notifiable for the prevention and control of communicable and noninfectious diseases and conditions in Washington. Principal health care providers shall notify public health authorities of these conditions as individual case reports using procedures described throughout this chapter. Other health care providers in attendance shall notify public health authorities of the following notifiable conditions, unless the condition notification has already been made. Local health officers may require additional conditions to be notifiable within the local health officer's jurisdiction.

WAC [246-101-105](#), [246-101-110](#), [246-101-115](#), and [246-101-120](#) also include requirements for how notifications shall be made, when they shall be made, the content of these notifications, and how information regarding notifiable conditions cases must be handled and may be disclosed.

Table HC-1 (Conditions Notifiable by Health Care Providers)

Notifiable Condition	Timeframe for Notification	Notifiable to Local Health Dept.	Notifiable to State Dept. of Health
Acquired Immunodeficiency Syndrome (AIDS)	Within 3 work days	✓	
Animal Bites	Immediately	✓	
Asthma, occupational	Monthly		✓
Birth Defects—Autism (<i>Provisional through August 2004</i>)	Monthly		✓
Birth Defects—Cerebral Palsy (<i>Provisional through August 2004</i>)	Monthly		✓
Birth Defects—Fetal Alcohol Syndrome/Fetal Alcohol Effects (<i>Provisional through August 2004</i>)	Monthly		✓
Botulism (foodborne, infant, and wound)	Immediately	✓	
Brucellosis (<i>Brucella</i> species)	Immediately	✓	

Notifiable Condition	Timeframe for Notification	Notifiable to Local Health Dept.	Notifiable to State Dept. of Health
Chancroid	Within 3 work days	✓	
<i>Chlamydia trachomatis</i> infection	Within 3 work days	✓	
Cholera	Immediately	✓	
Cryptosporiasis	Within 3 work days	✓	
Diphtheria	Immediately	✓	
Disease of suspected bioterrorism origin (including): <ul style="list-style-type: none"> • Anthrax • Smallpox 	Immediately	✓	
Disease of suspected foodborne origin (communicable disease clusters only)	Immediately	✓	
Disease of suspected waterborne origin (communicable disease clusters only)	Immediately	✓	
Encephalitis, viral	Within 3 working days	✓	
Enterohemorrhagic <i>E. coli</i> (shiga-like toxin producing infections only) such as <i>E. coli</i> O157:H7 Infection	Immediately	✓	
Giardiasis	Within 3 working days	✓	
Gonorrhea	Within 3 working days	✓	
Granuloma inguinale	Within 3 working days	✓	
<i>Haemophilus influenzae</i> (invasive disease, children under age 5)	Immediately	✓	
Hantavirus pulmonary syndrome	Within 3 working days	✓	
Hemolytic uremic syndrome	Immediately	✓	

Notifiable Condition	Timeframe for Notification	Notifiable to Local Health Dept.	Notifiable to State Dept. of Health
Hepatitis A (acute infection)	Immediately	✓	
Hepatitis B (acute infection)	Within 3 working days	✓	
Hepatitis B surface antigen + pregnant women	Within 3 working days	✓	
Hepatitis B (chronic)—Initial diagnosis, and previously unreported prevalent cases <i>(Provisional through August 2004)</i>	Monthly	✓	
Hepatitis C—Acute and chronic <i>(Provisional through August 2004)</i>	Monthly	✓	
Hepatitis (infectious), unspecified	Within 3 working days	✓	
Herpes simplex, neonatal and genital (initial infection only) <i>(Provisional through August 2004)</i>	Within 3 working days	✓	
Human Immunodeficiency virus (HIV) infection	Within 3 working days	✓	
Legionellosis	Within 3 working days	✓	
Leptospirosis	Within 3 working days	✓	
Listeriosis	Immediately	✓	
Lyme Disease	Within 3 working days	✓	
Lymphogranuloma venereum	Within 3 working days	✓	
Malaria	Within 3 working days	✓	
Measles (rubeola)	Immediately	✓	
Meningococcal disease	Immediately	✓	
Mumps	Within 3 working days	✓	

Notifiable Condition	Timeframe for Notification	Notifiable to Local Health Dept.	Notifiable to State Dept. of Health
Paralytic shellfish poisoning	Immediately	✓	
Pertussis	Immediately	✓	
Pesticide poisoning (hospitalized, fatal, or cluster)	Immediately		✓
Pesticide poisoning (all other)	Within 3 working days		✓
Plague	Immediately	✓	
Poliomyelitis	Immediately	✓	
Psittacosis	Within 3 working days	✓	
Q Fever	Within 3 working days	✓	
Rabies (Confirmed Human or Animal)	Immediately	✓	
Rabis (Including use of post-exposure prophylaxis)	Within 3 working days	✓	
Relapsing fever (borreliosis)	Immediately	✓	
Rubella (including congenital rubella syndrome)	Immediately	✓	
Salmonellosis	Immediately	✓	
Serious adverse reactions to immunizations	Within 3 working days	✓	
Shigellosis	Immediately	✓	
Streptococcus, Group A, Invasive (Indicated by blood, spinal fluid, or other normally sterile site) <i>(Provisional through August 2004)</i>	Within 3 working days	✓	
Syphilis	Within 3 working days	✓	

Notifiable Condition	Timeframe for Notification	Notifiable to Local Health Dept.	Notifiable to State Dept. of Health
Tetanus	Within 3 working days	✓	
Trichinosis	Within 3 working days	✓	
Tuberculosis	Immediately	✓	
Tularemia	Within 3 working days	✓	
Typhus	Immediately	✓	
Vibriosis	Within 3 working days	✓	
Yellow fever	Immediately	✓	
Yersiniosis	Within 3 working days	✓	
Other rare diseases of public health significance	Immediately	✓	
Unexplained critical illness or death	Immediately	✓	

WAC 246-101-105 Duties of the health care provider. Health care providers shall:

- (1) Notify the local health department where the patient resides (in the event that patient residence cannot be determined, notify the local health department where the health care providers practice) regarding:
 - (a) Cases or suspected cases of notifiable conditions specified as notifiable to local health departments in Table HC-1;
 - (b) Cases of conditions designated as notifiable by the local health officer within that health officer's jurisdiction;
 - (c) Outbreaks or suspected outbreaks of disease. These patterns include, but are not limited to, suspected or confirmed outbreaks of chickenpox, influenza, viral meningitis, nosocomial infection suspected due to contaminated food products or devices, or environmentally related disease;
 - (d) Known barriers which might impede or prevent compliance with orders for infection control or quarantine; and

- (e) Name, address, and other pertinent information for any case, suspected case or carrier refusing to comply with prescribed infection control measures.
- (2) Notify the department of health of conditions designated as notifiable to the local health department when:
 - (a) A local health department is closed or representatives of the local health department are unavailable at the time a case or suspected case of an immediately notifiable condition occurs;
 - (b) A local health department is closed or representatives of the local health department are unavailable at the time an outbreak or suspected outbreak of communicable disease occurs.
- (3) Notify the department of pesticide poisoning that is fatal, causes hospitalization or occurs in a cluster.
- (4) Notify the department as specified in Table HC-1 regarding cases of notifiable conditions specified as notifiable to the department.
- (5) Assure that positive cultures and preliminary test results for notifiable conditions of specimens referred to laboratories outside of Washington for testing are correctly notified to the local health department of the patient's residence or the department as specified in Table Lab-1. This requirement can be satisfied by:
 - (a) Arranging for the referral laboratory to notify either the local health department, the department, or both; or
 - (b) Forwarding the notification of the test result from the referral laboratory to the local health department, the department, or both.
- (6) Cooperate with public health authorities during investigation of:
 - (a) Circumstances of a case or suspected case of a notifiable condition or other communicable disease; and
 - (b) An outbreak or suspected outbreak of disease.
- (7) Provide adequate and understandable instruction in disease control measures to each patient who has been diagnosed with a case of a communicable disease, and to contacts who may have been exposed to the disease.
- (8) Maintain responsibility for deciding date of discharge for hospitalized tuberculosis patients.

- (9) Notify the local health officer of intended discharge of tuberculosis patients in order to assure appropriate outpatient arrangements are arranged.

[Statutory Authority: RCW [43.20.050](#) and [70.104.030](#). 00-23-120, § 246-101-105, filed 11/22/00, effective 12/23/00.]

WAC 246-101-110—Means of notification. (1) Conditions designated as:

- (a) Immediately notifiable must be reported by telephone or by secure facsimile copy of a written case report to the local health officer or the department as specified in Table HC-1;
 - (b) Notifiable within three working days must be reported by written case report or secure facsimile copy to the local health officer or department as specified in Table HC-1; and
 - (c) Notifiable on a monthly basis must be reported by written case report or secure facsimile copy to the local health officer or the department as specified in Table HC-1.
- (2) The local health officer may authorize notifications by telephone or secure electronic transmission for cases and suspected cases of notifiable conditions specified as notifiable to local health departments.
 - (3) The state health officer may authorize notifications by telephone or secure electronic transmission for cases and suspected cases of notifiable conditions specified as notifiable to the department.

[Statutory Authority: RCW [43.20.050](#), [70.24.125](#), [70.28.010](#) and [70.104.030](#). 00-23-120, § 246-101-110, filed 11/22/00, effective 12/23/00.]

WAC 246-101-115—Content of notifications. (1) For each condition listed in Table HC-1, health care providers must provide the following information for each case or suspected case:

- (a) Name;
- (b) Address;
- (c) Telephone number;
- (d) Date of birth;
- (e) Sex;
- (f) Diagnosis or suspected diagnosis of disease or condition;

- (g) Pertinent laboratory data, if available;
- (h) Name and address or telephone number of the principal health care provider;
- (i) Name and address or telephone number of the person providing the report; and
- (j) Other information as the department may require on forms generated by the department.

- (2) The local health officer or state health officer may require other information of epidemiological or public health value.

[Statutory Authority: RCW [43.20.050](#), [43.70.545](#), [70.24.125](#), [70.28.010](#) and [70.104.030](#). 00-23-120, § 246-101-115, filed 11/22/00, effective 12/23/00.]

WAC 246-101-120—Handling of case reports and medical

information. (1) All records and specimens containing or accompanied by patient identifying information are confidential.

- (2) Health care providers who know of a person with a notifiable condition, other than a sexually transmitted disease, shall release identifying information only to other individuals responsible for protecting the health and well-being of the public through control of disease;
- (3) Health care providers with knowledge of a person with sexually transmitted disease, and following the basic principles of health care providers, which respect the human dignity and confidentiality of patients:
 - (a) May disclose identity of a person or release identifying information only as specified in RCW [70.24.105](#); and
 - (b) Shall under RCW [70.24.105](#)(6), use only the following customary methods for exchange of medical information:
 - (i) Health care providers may exchange medical information related to HIV testing, HIV test results, and confirmed HIV or confirmed STD diagnosis and treatment in order to provide health care services to the patient. This means that information shared impacts the care or treatment decisions concerning the patient; and the health care provider requires the information for the patient's benefit.
 - (ii) Health care providers responsible for office management are authorized to permit access to a patient's medical information and medical record by

medical staff or office staff to carry out duties required for care and treatment of a patient and the management of medical information and the patient's medical record.

(c) Health care providers conducting a clinical HIV research project shall report the identity of an individual participating in the project unless:

(i) The project has been approved by an institutional review board; and

(ii) The project has a system in place to remind referring health care providers of their reporting obligations under this chapter.

(4) Health care providers shall establish and implement policies and procedures to maintain confidentiality related to a patient's medical information.

[Statutory Authority: RCW [43.20.050](#) and [70.104.030](#). 00-23-120, § 246-101-120, filed 11/22/00, effective 12/23/00.]

APPENDIX VI

Washington State School Directors' Association Policy 3414— Infectious Disease

Infectious Diseases

In order to safeguard the school community from the spread of certain communicable diseases, the superintendent shall implement procedures assuring that all school buildings are in compliance with state board of health rules and regulations regarding the presence of persons who have or have been exposed to infectious diseases deemed dangerous to the public health. Such procedures shall also prescribe the manner in which safeguards are taken to remove the danger to others.

The district shall require that the parents or guardians shall complete a medical history form at the beginning of each school year. The nurse or school physician may use such reports to advise the parent of the need for further medical attention and to plan for potential health problems in school.

The board authorizes the school principal to exclude a student who has been diagnosed by a physician or is suspected of having an infectious disease in accordance with the regulations within the *Infectious Disease Control Guide for School Staff* (SPI, 3-2004). The principal and/or school nurse shall report the presence of suspected case or cases of reportable communicable disease to the appropriate local health authority as required by State Board of Health. Such information concerning a student's present and past health condition shall be treated as confidential. The principal shall cooperate with the local health officials in the investigation of the source of the disease.

The fact that a student has been tested for a sexually transmitted disease, the test result, any information relating to the diagnosis or treatment of a sexually transmitted disease, and any information regarding drug or alcohol treatment for a student must be kept strictly confidential.

Legal References:	RCW 28A.210.010	Contagious diseases, limiting contact—Rules and regulations
	Chapter 246-110 WAC	School districts and day care centers—Contagious diseases
	RCW 70.02	Medical records—Health care information access and disclosure

Adapted with permission from the Washington State School Directors' Association

APPENDIX VII

Chapter 246-366 WAC

Primary and Secondary Schools

WAC 246-366-001

Introduction

WAC 246-366-010

Definitions

WAC 246-366-130

Food Handling

WAC 246-366-001—Introduction. These rules and regulations are established as minimum environmental standards for educational facilities and do not necessarily reflect optimum standards for facility planning and operation.

[Statutory Authority: RCW [43.20.050](#). 91-02-051 (Order 124B), recodified as § 246-366-001, filed 12/27/90, effective 1/31/91; Order 55, § 248-64-210, filed 6/8/71.]

WAC 246-366-010—Definitions. The following definitions shall apply in the interpretation and the enforcement of these rules and regulations:

- (1) "School" - Shall mean any publicly financed or private or parochial school or facility used for the purpose of school instruction, from the kindergarten through twelfth grade. This definition does not include a private residence in which parents teach their own natural or legally adopted children.
- (2) "Board of education" - An appointive or elective board whose primary responsibility is to operate public or private or parochial schools or to contract for school services.
- (3) "Instructional areas" - Space intended or used for instructional purposes.
- (4) "New construction" - Shall include the following:
 - (a) New school building.
 - (b) Additions to existing schools.
 - (c) Renovation, other than minor repair, of existing schools.
 - (d) Schools established in all or part of any existing structures, previously designed or utilized for other purposes.
 - (e) Installation or alteration of any equipment or systems, subject to these regulations, in schools.
 - (f) Portables constructed after the effective date of these regulations.
- (5) "Occupied zone" - Is that volume of space from the floor to 6 feet above the floor when determining temperature and air movement, exclusive of the 3 foot perimeter on the outside wall.
- (6) "Site" - Shall include the areas used for buildings, playgrounds and other school functions.

- (7) "Portables" - Any structure that is transported to a school site where it is placed or assembled for use as part of a school facility.
- (8) "Health officer" - Legally qualified physician who has been appointed as the health officer for the city, town, county or district public health department as defined in RCW [70.05.010](#)(2), or his authorized representative.
- (9) "Secretary" - Means secretary of the Washington state department of health or the secretary's designee.
- (10) "Department" - Means Washington state department of health.

[Statutory Authority: RCW [43.20.050](#). 92-02-019 (Order 225B), § 246-366-010, filed 12/23/91, effective 1/23/92; 91-02-051 (Order 124B), recodified as § 246-366-010, filed 12/27/90, effective 1/31/91; 82-07-015 (Order 225), § 248-64-220, filed 3/9/82; Order 131, § 248-64-220, filed 8/5/76; Order 55, § 248-64-220, filed 6/8/71.]

WAC 246-366-130—Food handling. (1) Food storage, preparation, and service facilities shall be constructed and maintained and operated in accordance with chapters [246-215](#) and [246-217](#) WAC.

- (2) When central kitchens are used, food shall be transported in tightly covered containers. Only closed vehicles shall be used in transporting foods from central kitchens to other schools.

[Statutory Authority: RCW [43.20.050](#). 92-02-019 (Order 225B), § 246-366-130, filed 12/23/91, effective 1/23/92; 91-02-051 (Order 124B), recodified as § 246-366-130, filed 12/27/90, effective 1/31/91; Order 55, § 248-64-340, filed 6/8/71.]

APPENDIX VIII

Guidelines for Handling Body Fluids in Schools

Guidelines for Handling Body Fluids in Schools

The following guidelines are meant to provide simple and effective precautions against transmission of disease for all persons potentially exposed to the blood or body fluids of any student. No distinction is made between body fluids from students with a known disease or those from students without symptoms or with an undiagnosed disease.

Universal Precautions

"Universal precautions" or "universal blood and body fluid precautions" refer to the handling of body fluids from all individuals, not just precautions recommended for those known to be infected with a bloodborne pathogen. Universal precautions were written for staff in health care settings and public safety workers, however, contact by school staff with blood and body fluids is increasingly more likely. The precautions focus on the prevention of transmission of immunodeficiency (HIV) viruses. Potential exposure to bloodborne pathogens is defined as contact with blood or other potentially infectious materials (semen, vaginal secretions, and the fluids that surround the heart, lungs, joints, brain, and unborn child) through percutaneous inoculation (needlesticks with contaminated needles) or contact with an open wound, nonintact skin, or mucous membrane during the performance of normal job duties. Blood is the single most important source of HIV, viral hepatitis B (HBV), viral hepatitis C (HCV), and other bloodborne pathogens in the occupational setting. Infection control efforts for HIV, HBV, HCV, and other bloodborne pathogens must focus on preventing exposures to blood as well as on delivery of HBV immunization to employees with reasonable potential of exposure.

Universal precautions require the use of protective barriers whenever there is a reasonable likelihood of exposure to blood or other body fluids. Protective barriers reduce the risk of exposure of the health care worker's skin or mucous membranes to potentially infective materials. For universal precautions, protective barriers reduce the risk of exposure to blood, body fluids containing visible blood, and other fluids. Examples of protective barriers include gloves, gowns, masks, and protective eyewear. Gloves should reduce the incidence of contamination of hands but they cannot prevent penetrating injuries due to needles or other sharp instruments. Masks and protective eyewear or face shields should reduce the incidence of contamination of mucous membranes of the mouth, nose, and eyes.

-Morbidity and Mortality Weekly Report, June 24, 1988, Vol. 37, No. 27.

Rarely, if at all, would precautions beyond the use of gloves and provisions of ventilation devices to minimize the need for emergency mouth-to-mouth resuscitation be indicated in a school setting.

Guidelines for Handling Body Fluids in School (cont.)

Universal precautions are intended to supplement rather than replace recommendations for routine infection control such as handwashing and using gloves to prevent contamination of hands as described in the sections that follow.

Does Contact with Body Fluids Present a Risk?

The body fluids of all persons should be considered to contain potentially infectious agents (germs). The term “body fluids” includes blood, semen, vaginal secretions, drainage from scrapes and cuts, feces, urine, vomitus, respiratory secretions (nasal discharge), and saliva. Contact with body fluids presents a risk of infection with a variety of microorganisms. In general, the risk is very low and dependent on a variety of factors, including the type of fluid with which contact is made and the type of contact made with it.

Table 1 (page 157) provides examples of particular infectious organisms that may occur in body fluids of children and the respective transmission concerns. Individuals who have no symptoms of illness may carry germs. These individuals may be at various stages of infection (incubating disease, mildly infected without symptoms, or chronic carriers of certain infectious agents including HIV and hepatitis viruses). In fact, transmission of infectious diseases is more likely to occur from contact with infected body fluids of unrecognized carriers than from contact with fluids from recognized individuals because simple precautions are not always carried out. It is for this reason that universal precautions should be used when there is exposure to blood, semen, vaginal secretions, or any body fluid that is visibly contaminated with blood, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids.

Use of Gloves

When possible, direct skin contact with body fluids should be avoided. Disposable gloves should be available in the offices of coaches, custodians, nurses, principals, and staff in school settings such as the gymnasium, play fields, and health room where contact with blood or other body fluids is likely to occur. All other personnel should have access to first aid supplies that include gloves and other barriers. Gloves should be worn when direct hand contact with body fluids is anticipated (treating bloody noses, handling clothes soiled by incontinence, cleaning small spills by hand). Disposable (single use) gloves such as surgical or examination gloves, either vinyl or latex, shall be replaced as soon as possible when contaminated or immediately if they are torn, punctured, or when their ability to function as a barrier is compromised. Hands must be washed afterward. Gloves used for this purpose should be put in a plastic bag or lined trashcan, secured, and disposed of daily. Because of the increasing incidence of allergic reactions to latex in children having multiple medical procedures and in health care staff who wear latex gloves frequently, at the earliest symptoms of an allergic

Guidelines for Handling Body Fluids in School (cont.)

response to latex gloves, their use should be discontinued and medical advice and care sought. Parent/guardian requests for staff to use vinyl gloves when providing nursing care to students such as those requiring clean, intermittent catheterization, must be honored. (See *NIOSH Alert: Preventing Allergic Reactions to Natural Rubber Latex in the Workplace*, Department of Health and Human Services Publication No. 97-135.)

Utility gloves may be cleaned and disinfected for reuse if they show no signs of deterioration. However, they must be discarded if they are cracked, peeling, torn, punctured, or exhibit other signs of deterioration or when their ability to function as a barrier is compromised.

Housekeeping Practices

The employer shall ensure that the worksite is maintained in a clean and sanitary condition and shall determine and implement an appropriate cleaning schedule for rooms where body fluids are present. Schedules shall be as frequent as necessary depending on the area of the school, the type of surface to be cleaned, and the amount and type of soil present. Housekeeping workers must wear appropriate personal protective equipment including general purpose utility gloves during all cleaning of blood or other potentially infectious materials.

Initial cleanup of blood or other potentially infectious materials shall be followed with the use of a United States Environmental Protection Agency (EPA) approved hospital disinfectant that is either tuberculosis (TB) or HBV effective. A solution of 5.25 percent sodium hypochlorite (household bleach) diluted 1:10 with water may also be used. Equipment contaminated with blood or other potentially infectious materials shall be checked routinely and decontaminated, if possible, prior to servicing or shipping. Equipment that cannot be effectively disinfected must be labeled with the international biohazard symbol and contaminated parts documented. Double-bagging prior to handling, storing, and/or transporting infectious waste is necessary if the outside of a bag is contaminated with blood or other potentially infectious materials.

Contaminated Sharps

Broken glassware or discarded needles must not be picked up directly with the hands. Cleanup must be accomplished using mechanical means such as a brush and dustpan, tongs, or forceps. Contaminated, reusable sharps must not be stored or processed in a manner that requires employees to reach by hand into the containers where these sharps have been placed.

Contaminated sharps must be discarded immediately in containers that are closable, puncture resistant, leak proof on sides and bottom, and labeled or color coded. During use, containers for contaminated sharps must be easily accessible to personnel and located as close as possible to the immediate area where sharps are used (health

Guidelines for Handling Body Fluids in School (cont.)

rooms, science classrooms). The containers must be maintained upright throughout use, replaced routinely, and not be allowed to overfill. When moving containers of contaminated sharps from the area of use, they must be closed immediately prior to removal or replacement to prevent spillage or protrusion of contents during handling, storage, transport, or shipping. They must be placed in a secondary container if leakage is possible. The secondary container must be closable, constructed to contain all contents, and prevent leakage during handling, storage, transport, or shipping. The secondary container must also be labeled and color coded. Containers for contaminated reusable sharps must meet all of the qualifications for disposable containers except that they do not need to be closeable, since devices will be removed from these containers.

Contaminated needles and other contaminated sharps must not be bent, recapped, or removed. Shearing or breaking of contaminated needles is prohibited.

Puncture resistant sharps containers should be provided if contaminated sharps (needles) are in the workplace. Disposal of these containers depends on local waste management programs.

Check with the environmental health office of your local health jurisdiction for any additional local infectious waste disposal requirements and for information in the absence of a local infectious waste management program (see Local Health Jurisdictions, Appendix XII, for telephone numbers).

At the state level, additional information can be obtained from the Washington State Department of Health School Environmental Health and Safety Program at 360-236-3072 or the Infectious Disease and Reproductive Health Program at 360-236-3444.

What Should Be Done If Direct Skin Contact Occurs?

In many instances, unanticipated skin contact with body fluids may occur in situations where gloves may not be immediately available (when wiping a runny nose, applying pressure to a bleeding injury outside of the classroom, helping a student in the bathroom). Gloves need not be worn when feeding students or when wiping saliva from skin unless blood is present. In these instances, hands and other affected skin areas of all exposed persons should be routinely washed with soap and water after direct contact has ceased. As much as possible, have the student provide direct care for the wound (applying pressure, washing).

Reminder: Unbroken skin is an excellent barrier to infectious agents. Staff with sores or cuts on their hands (nonintact skin) having contact with blood or body fluids should always wear gloves and double glove if lesions are extensive. Always wash hands with soap and water after removing gloves. If contact with contaminated body fluids to nonintact skin or mucous membranes does occur, the staff member should follow the

Guidelines for Handling Body Fluids in School (cont.)

school's policy for post exposure management and seek medical evaluation of the need for post exposure prophylaxis.

How Should Spilled Body Fluids Be Removed From the Environment?

Most schools have standard procedures already in place for removing body fluids (vomit). These procedures should be reviewed to determine whether appropriate cleaning and disinfection steps have been included. Many schools stock sanitary absorbent agents specifically intended for cleaning body fluid spills. Disposable gloves should be worn when using these agents. The dry material is applied to the area, left for a few minutes to absorb the fluid, and then vacuumed or swept up. An appropriate disinfectant is then applied to the area and allowed to remain wet for at least the minimum time specified by the manufacturer. The vacuum bag or sweepings should be disposed of in a plastic bag. The broom and dustpan should be rinsed in a disinfectant. No special handling is required for vacuuming equipment.

Handwashing Procedures

Proper handwashing requires the use of soap and water and vigorous washing under a stream of temperate (warm) water for approximately 10 seconds. Soap suspends easily removable soil and microorganisms allowing them to be washed off. Running water is necessary to carry away dirt and debris. Rinse under running water. Use paper towels to thoroughly dry hands. Handwashing posters suitable for students are available from the Washington State Department of Health Warehouse by faxing 360-664-2929.

Facilities must provide an adequate supply of running potable water, soap, and single-use towels or hot air drying machines. When provision of handwashing facilities is not feasible, the employer must provide either an appropriate antiseptic hand cleanser in conjunction with clean cloth/paper towels or antiseptic towelettes. When antiseptic hand cleansers or towelettes are used, hands must be washed with soap and running water as soon as feasible. For body fluid cleanup kit requirements for school buses, see *Specifications for School Buses*, September 1, 1996, available from OSPI, Pupil Transportation at 360-725-6120.

Disinfectants

An intermediate level disinfectant should be used to clean surfaces contaminated with body fluids. Such disinfectants will kill vegetable bacteria, fungi, TB, and viruses. The disinfectant should be registered by the EPA for use as a disinfectant in medical facilities and hospitals.

Various classes of disinfectants are listed below. All products must be used in accordance with directions on the container. Hypochlorite solution (bleach) is preferred for objects that may be put in the mouth.

Guidelines for Handling Body Fluids in School (cont.)

1. Phenolic germicidal disinfectant cleaner.
2. Household bleach diluted 1:10 (new solution every day).
3. Quaternary ammonium disinfectant cleaner.
4. Lodophor germicidal detergent with 550 parts per million (ppm) available iodine.

Disinfection of Hard Surfaces and Athletic Mats

All equipment and environmental and working surfaces must be cleaned of obvious contaminants and decontaminated after contact with blood or other potentially infectious materials. Contaminated work surfaces must be decontaminated immediately or as soon as feasibly possible with an appropriate disinfectant after completion of procedures, when surfaces are overtly contaminated, after any spill of blood or other potentially infectious materials, and at the end of the work shift if the surface may have become contaminated since the last cleaning.

In order to provide a safe environment, hard surfaces should be cleaned/disinfected at the conclusion of each day. This includes sporting equipment such as wrestling and gymnastic mats, as well as desk and tabletops used for eating. If an incident occurs where body fluid has contaminated a surface, cleaning and disinfecting should take place prior to allowing activity to continue. The surface should be cleaned of visible contamination and then disinfected. During athletic contests an ample supply of towels should be available. Disposable towels and tissues are recommended. Towels must be used for one individual only and then disposed of in an appropriate receptacle. Gloves must be worn when handling blood or objects contaminated with blood. Competitors who are bleeding, have an open wound, or blood on the uniform shall not participate in an event until proper treatment is administered. The bloodied portion of a uniform must be properly disinfected or the uniform changed before the athlete may participate.

-WIAA Sport Rules for 1992–1993.

Soiled surfaces should be promptly cleaned with disinfectant such as household bleach (diluted 1:10). Disposable towels or tissues should be used whenever possible and mops should be rinsed in disinfectant. Those who are cleaning should wear latex gloves or other protective equipment and should avoid exposure of open skin or mucous membranes to the blood or body fluids.

Guidelines for Handling Body Fluids in School (cont.)

Disinfection of Rugs

Apply a sanitary absorbent agent, let dry, and vacuum. If necessary, mechanically remove body fluid with a dustpan and broom, then apply rug shampoo (a germicidal detergent) with a brush, and revacuum. Rinse dustpan and broom in disinfectant. If necessary, wash brush with soap and water. Dispose of nonreusable cleaning equipment as noted above.

Care of Cleaning Equipment

Mops should be soaked in disinfectant after use and rinsed thoroughly or washed in hot water cycle before rinse. Disposable cleaning equipment and water should be disposed of down the sewer system or placed in a plastic bag as appropriate. Nondisposable cleaning equipment (buckets) should be thoroughly rinsed in the disinfectant. All bins, pails, cans, and similar receptacles intended for reuse that have a reasonable likelihood of becoming contaminated with blood or other potentially infectious materials must be inspected and decontaminated on a regularly scheduled basis and cleaned and decontaminated immediately, or as soon as feasible, upon visible contamination. The disinfectant solution should be promptly disposed of down the sewer system. Remove gloves and discard in appropriate receptacles. Wash hands.

Laundry Instructions for Clothing Soiled with Body Fluids

The most important factor in laundering clothing contaminated in the school setting is elimination of potentially infectious agents by use of soap and water. Clothes should be washed at 140–160°F. The addition of bleach will further reduce the number of potentially infectious agents. Clothing soaked with body fluids should be washed separately from other items. Presoaking may be required for heavily soiled clothing. Otherwise, wash and dry as usual. If the material is bleachable, add one-half cup of household bleach to the wash cycle. If the material is not colorfast, add one-half cup of nonchlorine bleach (Clorox II, Borateem) to the wash cycle.

If presoaking is required to remove stains (blood, feces) use gloves to rinse or soak the item in cold water prior to bagging. Student clothing should be bagged and sent home for washing with appropriate directions to the parent/guardian. Contaminated disposable items (tissues, paper towels, diapers) should be handled with disposable gloves and disposed of properly.

Contaminated School Staff Laundry

Reusable Personal Protective Equipment (PPE) and other nondisposable items (towels used to wipe up body fluid, etc.) that are soaked through with body fluids should be rinsed and placed in plastic bags that are labeled with the international biohazard

Guidelines for Handling Body Fluids in School (cont.)

symbol or color coded. Whenever contaminated laundry is wet and presents a reasonable likelihood of soak-through or leakage from the bag or container, the laundry must be placed and transported in bags or containers that prevent soak-through and/or leakage of fluids to the exterior. The employer must ensure that employees who have contact with contaminated laundry wear protective gloves and other appropriate PPE. When a facility ships contaminated laundry off-site to a second facility that does not utilize universal

precautions in the handling of all laundry, the facility generating the contaminated laundry must place laundry in bags or containers that are labeled or color coded. These labels must be fluorescent orange/orange-red or predominately so, with lettering or symbols in a contrasting color. Required labels are to be affixed as close as feasible to the container by string, wire, adhesive, or other method that prevents their loss or unintentional removal. Red bags or containers may be substituted for labels.

Guidelines for Handling Body Fluids in Schools was prepared by Elaine Brainerd, MA, RN, Connecticut State Department of Education, in consultation with James Hadler, MD, MPH, Chief, Epidemiology Section and Patricia Checko, MPH, Epidemiology Program, Connecticut State Department of Health Services, December 1984. The original text was updated in 2001 to comply with the CDC recommendations and WISHA requirements by the Washington State Department of Labor and Industries and the Office of Superintendent of Public Instruction.

Table 1
Potential Transmission of Infectious Agents in a School Setting

Body Fluid/Source	Potential Infectious Agent	Potential Route of Transmission
Blood <ul style="list-style-type: none"> • cuts/abrasions • nosebleeds • menses • contaminated needle 	Hepatitis B and C viruses HIV Cytomegalovirus	Percutaneous inoculation (needlestick) Inoculation of cuts, abrasions, dermatitis, or mucous membranes
Feces <ul style="list-style-type: none"> • incontinence • diarrhea 	Bacteria— <i>Campylobacter</i> , <i>Salmonella</i> , <i>Shigella</i> , <i>E coli</i> O157:H7 Parasites— <i>Giardia</i> , <i>Cryptosporidium</i> , <i>Cyclospora</i> Viruses—Norovirus, rotavirus, enteroviruses, Hepatitis A virus	Oral ingestion from contaminated hands, objects
Urine <ul style="list-style-type: none"> • incontinence 	Cytomegalovirus Rubella	Oral or percutaneous inoculation from contaminated hands, objects
Vomit	Norwalk Rotavirus	Oral inoculation from contaminated hands, objects Respiratory inoculation from respiratory droplets
Semen/Vaginal Fluid	Hepatitis B and C viruses HIV Gonorrhea Syphilis Chlamydia Other STDs	Sexual contact including by mucous membranes or contact with nonintact skin
Fluid from Skin or Mucous Membrane Lesions	Herpes Varicella Staphylococcus, Streptococcus (impetigo)	Inoculation of cuts, abrasions, dermatitis, or mucous membranes Direct contact of contaminated articles with intact skin or mucous membranes.

APPENDIX IX

Guidelines for the Placement of Children and Adolescents Infected with the Human Immunodeficiency Virus (HIV)

WASHINGTON STATE DEPARTMENT OF HEALTH

Guidelines for the Placement of Children and Adolescents Infected with the Human Immunodeficiency Virus (HIV)

Problem Statement

As of May 31, 2003, diagnosed cases of Acquired Immunodeficiency Syndrome (AIDS) in persons under the age of 20 years accounted for less than 1 percent of the total number of cases reported in Washington State since 1981. However, since 1999, reporting of Human Immunodeficiency Virus (HIV) infection cases has been required. Of these cases, more than 3.5 percent are persons under the age of 20 years. The Washington State Department of Health (DOH) anticipates additional infected children and adolescents will be identified in the future, some of whom will develop AIDS.

To avoid unwarranted fear and confusion by students, teachers, child care personnel, and school administrators, this statewide policy on the placement in school of children and adolescents infected with HIV has been developed. These recommendations apply to all children and adolescents from preschool through Grade 12 and address child care situations as well. They are based on the most recent scientific data available and will be revised as appropriate.

Background

HIV, the virus that causes AIDS, is spread from an infected person to an uninfected person by sexual intercourse, sharing needles or injection equipment, transfusion or accidental injection of blood or blood products, and from mother to child during the perinatal period. Although HIV can be isolated from other body fluids, it is found in quantity only in blood, semen, and vaginal fluids. Transmission has been documented from blood, semen, vaginal fluids, and, rarely, in breast milk.

The majority of HIV-infected children under the age of 13 years acquire the virus from their infected mothers during the perinatal period. Transmission usually occurs during the late pregnancy or during the birth process. The use of antiretroviral therapy by HIV-infected pregnant women has substantially reduced the risk of infection for their children. Before 1985, some children became infected through blood or blood products that contained HIV. This small risk was significantly reduced after April 1985, when routine screening of blood and plasma donors for HIV antibodies was instituted. Of the pediatric AIDS cases (under the age of 13 years) reported nationally to the CDC as of December 2001, 91 percent have occurred in children whose mother was infected or was at risk of acquiring HIV infection, 7 percent of the cases have occurred among children who have received blood or blood products. For the remaining 2 percent, investigations are incomplete, due to the death of the patient, or the patient's refusal to be interviewed because the disease transmission was the result of other risk factors.

Guidelines for the Placement of Children and Adolescents Infected with the Human Immunodeficiency Virus (HIV) (cont.)

Based on surveys conducted by the CDC, casual person-to-person contact (as would normally occur among children) does not transmit HIV. **None of the identified cases of HIV infection or AIDS in the United States is known to have been transmitted in the school setting.**

The following guidelines are based on recommendations developed by the CDC and by the National Association of State Boards of Education (NASBE), published in *Someone in School Has AIDS: A Complete Guide to Education Policies Concerning HIV Infection*, 1986, and in the NASBE Policy Update, *Updating State Policies for Students with HIV Infection*, December 1998.

These guidelines are the official policy of DOH. All school districts and health districts should inform parents/guardians, students, and educators regarding HIV and its transmission. In addition, Chapter 392-198 WAC, Training—School employees—HIV/AIDS requires:

1. **Mandatory** and supplemental course content for training school district employees regarding the transmission, prevention, and treatment of HIV/AIDS.
2. Significant new discoveries or changes in accepted knowledge of transmission, prevention, and treatment for HIV/AIDS be provided to all public school employees as directed by DOH.
3. All newly hired employees shall receive HIV/AIDS training as described in this WAC within 6 months from the first day of employment in the district.

Children and adolescents through Grade 12 are referred to as “children” in the following:

Guidelines

1. Children infected with HIV, except for those subject to conditions described in No. 3 below, should be allowed to attend school and before and after school care in an unrestricted manner, because of the apparent nonexistent risk of transmission of HIV in these settings. The student should be considered eligible for all rights, privileges, and services provided by law and local policy of the school districts or child care settings. The mere presence of HIV-infected students in these settings does not pose a risk to other students or to child care or school employees.
2. For most HIV-infected children, the benefits of a normal school setting would outweigh the risks of their acquiring potentially serious infections in that setting. Assessment of the risk to the immunosuppressed student of attending school

Guidelines for the Placement of Children and Adolescents Infected with the Human Immunodeficiency Virus (HIV) (cont.)

(Grades K–12) in an unrestricted setting is best made by the student’s licensed health care provider who is aware of the student’s immune status.

3. Children who display aggressive behavior such as biting, and those who have other medical conditions such as uncoverable oozing lesions, may require a more restrictive environment regardless of their HIV infection status. Individual judgments need to be made regarding the placement of children with questionable behavior, impaired neurologic development, or other medical conditions in the typical school or child care setting. These decisions, for children Grades K–12, are best made at the local school district level using the team approach.

The team may include: the student’s licensed health care provider; the parent/guardian of the student; the principal, school nurse, and teacher from the proposed education setting; and a representative of your local health jurisdiction. In child care settings, the team should include: the student’s licensed health care provider, the student’s parent/guardian, the child care administrator, and a representative of the local health department. Signed consent from the parent/guardian or student over the age of 14 years is required before the diagnosis and health care information is made available to the team.

4. Because other infections may be present in blood or body fluids and children may be unknowingly infected with HIV, all schools and child care facilities should adopt infection control procedures for handling blood or body fluids—universal precautions. School nurses, teachers, other school or child care employees, and children Grades K–12 should be appropriately educated regarding these procedures.

Cleanup of surfaces contaminated with blood or other potentially infectious materials shall be performed with a United States Environmental Protection Agency approved hospital disinfectant that is either tuberculosis or viral hepatitis B effective, or a solution of 5.25 percent sodium hypochlorite (household bleach) diluted 1:10 with water. Those cleaning must wear appropriate Personal Protective Equipment including general purpose utility gloves during all cleaning of blood or other potentially infectious materials.

5. Mandatory screening of students for HIV infection, as a condition of school or child care entry, is prohibited by law.
6. Those involved in the care and education of HIV-infected children should respect the individual’s right to privacy and the confidentiality of school and medical records. The persons who are aware of the student’s condition (general condition but not HIV status) should be limited to the minimum “needing to know” to assure

Guidelines for the Placement of Children and Adolescents Infected with the Human Immunodeficiency Virus (HIV) (cont.)

proper care of the student. Law prohibits unauthorized disclosure of a person's status with regard to any sexually transmitted disease. RCW 70.24.105 describes to whom and under which circumstances the disclosure of a person's HIV status may occur. Chapter 70.02 RCW governs the exchange of health care information among providers.

APPENDIX X

RCW 70.24.110

Minors—Treatment, Consent, Liability for Payment for Care

RCW 70.24.110

Minors—Treatment, consent, liability for payment for care.

A minor fourteen years of age or older who may have come in contact with any sexually transmitted disease or suspected sexually transmitted disease may give consent to the furnishing of hospital, medical and surgical care related to the diagnosis or treatment of such disease. Such consent shall not be subject to disaffirmance because of minority. The consent of the parent, parents, or legal guardian of such minor shall not be necessary to authorize hospital, medical and surgical care related to such disease and such parent, parents, or legal guardian shall not be liable for payment for any care rendered pursuant to this section.

[1988 c 206 § 912; 1969 ex.s. c 164 § 1.]

APPENDIX XI

RCW 28A.230.020

Common School Curriculum—Fundamentals in Conduct

RCW 28A.230.020

Common school curriculum—Fundamentals in conduct.

All common schools shall give instruction in reading, penmanship, orthography, written and mental arithmetic, geography, the history of the United States, English grammar, physiology and hygiene with special reference to the effects of alcohol and drug abuse on the human system, science with special reference to the environment, and such other studies as may be prescribed by rule or regulation of the state board of education. All teachers shall stress the importance of the cultivation of manners, the fundamental principles of honesty, honor, industry and economy, the minimum requisites for good health including the beneficial effect of physical exercise and methods to prevent exposure to and transmission of sexually transmitted diseases, and the worth of kindness to all living creatures and the land. The prevention of child abuse may be offered as part of the curriculum in the common schools.

[1991 c 116 § 6; 1988 c 206 § 403; 1987 c 232 § 1; 1986 c 149 § 4; 1969 c 71 § 3; 1969 ex.s. c 223 § [28A.05.010](#). Prior: 1909 p 262 § 2; RRS § 4681; prior: 1897 c 118 § 65; 1895 c 5 § 1; 1890 p 372 § 45; 1886 p 19 § 52. Formerly RCW [28A.05.010](#), [28.05.010](#), and [28.05.020](#).]

NOTES:

Effective date—1988 c 206 §§ 402, 403: See note following RCW [28A.230.070](#).

Severability—1988 c 206: See RCW [70.24.900](#).

Child abuse and neglect—Development of primary prevention program: RCW [28A.300.160](#).

Districts to develop programs and establish programs regarding child abuse and neglect prevention: RCW [28A.230.080](#).

APPENDIX XII

Local Health Jurisdictions

Local Health Jurisdictions	Phone
Adams County Health District Environmental Health (Othello) http://www.co.adams.wa.us/departments/default.asp?DeptID=10	509-659-3315 509-488-2031
Asotin County Health District Environmental Health http://www.co.asotin.wa.us/asotin/health.html	509-758-3344 509-758-3344
Benton-Franklin Health District Environmental Health http://www.bfhd.wa.gov	509-943-2614 509-582-7761
Chelan-Douglas Health District Environmental Health http://www.cdhd.wa.gov	509-886-6400 509-886-6450
Clallam County Department of Health and Human Services Environmental Health http://www.clallam.net/healthservices/	360-417-2274 360-417-2258
Columbia County Public Health District Environmental Health	509-382-2181 509-382-2181
Cowlitz County Health Department Environmental Health http://www.co.cowlitz.wa.us/health	360-414-5599 360-414-5592
Garfield County Health District Environmental Health	509-843-3412 509-843-3412
Grant County Health District Environmental Health http://www.granthealth.org	509-754-6060 509-754-6060
Grays Harbor County Public Health and Social Services Department Environmental Health http://www.co.grays-harbor.wa.us/info/pub_svcs/envhealth.html	360-532-8665 360-249-4413
Island County Health Department Environmental Health http://www.islandcounty.net/health/	360-679-7350 360-679-7345

Local Health Jurisdictions (cont.)

Phone

Jefferson County Health and Human Services Environmental Health http://www.co.jefferson.wa.us/health/default.htm	360-385-9400 360-385-9436
Kitsap County Health District Environmental Health http://www.wa.gov/kitsaphealth/	360-337-5235 360-337-5291
Kittitas County Health Department Environmental Health http://www.co.Kittitas.wa.us/health/	509-962-7515 509-962-7698
Klickitat County Health Department Environmental Health http://www.doh.wa.gov/LHJMap/No_Web.htm#Klickitat	509-773-4565 509-773-4565
Lewis County Public Health Environmental Health http://www.co.lewis.wa.us/healthsocialservices/health.htm	360-740-1223 360-740-1277
Lincoln County Health Department Environmental Health http://www.co.Lincoln.wa.us/publichealth.htm	509-725-1001 509-725-2501
Mason County Department of Health Services Environmental Health http://www.co.mason.wa.us/health/default.html	360-427-9670 360-427-9670 x358
Northeast Tri-County Health District Environmental Health http://homepage.plix.com/tricohealth	509-684-1301 509-684-2262
Okanogan County Health District Environmental Health http://www.okanogancounty.org/ochd/index.htm	509-422-7140 509-422-7144
Pacific County Health and Human Services Department Environmental Health http://www.co.pacific.wa.us/health/index.htm	360-875-9343 360-875-9356
Public Health – Seattle and King County Environmental Health http://www.metrokc.gov/health	206-296-4600 206-296-4932

Local Health Jurisdictions (cont.)	Phone
San Juan County Department of Health and Community Services Environmental Health http://www.co.san-juan.wa.us/apages/health.html	360-378-4474 360-378-4474
Skagit County Department of Health Environmental Health http://www.skagitcounty.net	360-336-9380 360-336-9380
Skamania County Health Department Environmental Health	509-427-5138 509-427-5138
Snohomish Health District Environmental Health http://www.snohd.org	425-339-5210 425-339-5250
Southwest Washington Health District Environmental Health http://www.swwhd.wa.gov	360-397-8215 360-397-8122
Spokane Regional Health District Environmental Health http://www.srhd.org	509-324-1500 509-324-1560
Tacoma-Pierce County Health Department Environmental Health http://www.tpchd.org	253-798-6500 253-798-6470
Thurston County Public Health and Social Services Department Environmental Health http://www.co.Thurston.wa.us/health	360-786-5581 360-786-5455
Wahkiakum County Department of Health and Human Services Environmental Health http://www.cwcoq.org/humanservices.html	360-795-6207 360-795-6207
Walla Walla County-City Health Department Environmental Health http://www.co.walla-walla.wa.us/health.htm	509-527-3290 509-527-3290
Whatcom County Health Department Environmental Health http://www.co.whatcomcounty.us/Health/index.jsp	360-676-6720 360-676-6724

Local Health Jurisdictions (cont.)

Phone

Whitman County Health Department
Environmental Health

509-397-6280
509-397-6282

<http://www.whitmancounty.org/PubHealth>

Yakima Health District
Environmental Health

509-575-4040
509-249-6507

<http://www.co.Yakima.wa.us/health/default.html>

APPENDIX XIII

Resources

Resources

References

Chin, James, *Control of Communicable Disease Manual*, 17th ed., American Public Health Association, Washington, D.C., 2000.

“Guidelines for Prevention of Transmission of HIV and HBV to Health Care and Public Safety Workers,” *Morbidity and Mortality Weekly Report*, Vol. 38, No. S-6, June 23, 1989.

Report of the Committee on Infectious Diseases, 25th ed., American Academy of Pediatrics, Elk Grove Village, I.L., 2000.

School Health: Policy and Practice, 5th ed., American Academy of Pediatrics, Elk Grove Village, I.L., 1993.

Immunization Manual for Schools, Preschool and Child Care Facilities, Spring 2002.

Available from:
Washington State Department of Health
Web site: <http://www.doh.wa.gov/cfh/immunize>

Wald and Engelberg, *Natural History of Genital Herpes Simplex Virus Type 1 Infection*, *Sex. Trans. Inf.*, 2003, 30:174–177.

Questions about the *Infectious Disease Control Guide for School Staff* should be directed to:

Gayle Thronson, RN, M.Ed.
Health Services Program Supervisor
Office of Superintendent of Public Instruction
Old Capitol Building
PO Box 47200
Olympia, WA 98504-7200

Phone: 360-725-6040
TTY: 360-664-3631
Fax: 360-664-3028
E-mail: gthronson@ospi.wednet.edu

Resources (cont.)

Videos

1. *A Soap Opera* is a 15-minute videotape on handwashing and other cleanup procedures. The tape is entertaining and informative. It addresses preventive and cleanup procedures for the school setting including school buses.

Available on loan from:
Gayle Thronson, RN, M.Ed.
Health Services Program Supervisor
Office of Superintendent of Public Instruction
Phone: 360-725-6040
TTY: 360-664-3631

2. *Infection Control in Child Care Settings*, 1989 (includes videotape, manual, and test packet). This videotape instructional unit addresses the concerns of caregivers in limiting the spread of infection. Handwashing and toileting techniques are demonstrated. Methods for cleaning and disinfecting toys, sheets, and other articles are given along with tips on recognizing children who are ill. Recommendations on policy development for the care of sick children are discussed. Length: 26 minutes.

Available on loan from:
Special Education Administrator in each Educational Service District

3. *Vaccines and Your Baby*, 2002.

Available on loan from:
Vaccine Education Center at the Children's Hospital of Philadelphia
3615 Civic Center Blvd., ARC Room 1202
Philadelphia, PA 19104-4399
Phone: 215-590-9990 Fax: 215-590-2025
E-mail: vaccines@email.chop.edu
Web site: <http://www.vaccine.chop.edu>

4. *Vaccines: Separating Fact From Fear*

Available on loan from:
Vaccine Education Center at the Children's Hospital of Philadelphia
3615 Civic Center Blvd., ARC Room 1202
Philadelphia, PA 19104-4399
Phone: 215-590-9990 Fax: 215-590-2025
E-mail: vaccines@email.chop.edu
Web site: <http://www.vaccine.chop.edu>

Resources (cont.)

5. *Universal Precautions for School Staff* is a 16-minute videotape specific to school situations including school buses.

Available on loan from any Educational Service District with a media library or:
Office of Superintendent of Public Instruction
HIV/AIDS Program
Phone: 360-725-6364
TTY: 360-664-3631

Web Sites

American Academy of Pediatrics (AAP)

Web site: <http://www.aap.org> or <http://www.seattlechildrens.org>

California Department of Education

Web site for online video catalogue: <http://www.cde.ca.gov/cdepress>

Centers for Disease Control and Prevention (CDC)

Web site: <http://www.cdc.gov/>

Index to specific disease information: <http://www.cdc.gov/health/default.htm>

Influenza Information

Web site: <http://www.cdc.gov/germstopper>

National Immunization Program

Web site: <http://www.cdc.gov/nip>

Emerging Diseases

Web site: <http://www.cdc.gov/ncidod/eid/>

Children's Hospital and Medical Center

Web site: <http://www.cshcn.org>

Dermatology Online Atlas (includes pictures and rashes)

Web site: <http://www.dermis.net>

Emergency Contraception

Web site: <http://ec.Princeton.edu>

Food and Drug Administration (FDA)

Web site: <http://www.fda.gov>

Immunization Action Coalition

Web site: <http://www.immunize.org>

Resources (cont.)

Medline

Web site: <http://www.nlm.nih.gov/medlineplus>

National Association of School Nurses (NASN)

Web site: <http://www.nasn.org>

Occupational Safety and Health Administration (OSHA)

Web site: <http://www.osha.gov>

Washington State Department of Health (DOH)

Web site: <http://www.doh.wa.gov>

Communicable Disease

Epidemiology Web site: <http://www.doh.wa.gov/EHSPHL/Epidemiology/>

HIV/AIDS Web site: http://www.doh.wa.gov/cfh/HIV_AIDS/Prev_Edu/default.htm

STD Web site: <http://www.doh.wa.gov/cfh/STD/>

Immunization Program

Web site: <http://www.doh.wa.gov/cfh/immunize>

School Web site: <http://www.doh.wa.gov/cfh/immunize/>

Distribution Center

7745 C Arab Road

Olympia, WA 98504-7845

Fax to order materials: 360-664-2929

E-mail to order materials: immunematerial@doh.wa.gov

School Environmental Health and Safety Program

Web site: <http://www.doh.wa.gov/ehp/ts/school.htm>

Washington Industrial Safety and Health Act

Web site: <http://www.lni.wa.gov/wisha/>

Washington State Legislature

Web site for information on WACs and RCWs:

<http://search.leg.wa.gov/pub/textsearch/default.asp>

Resources (cont.)

Poster

A poster depicting proper handwashing techniques is available in two sizes: 8 x 11 and 11 x 15. The poster is titled, "BE A GERM BUSTER. WASH YOUR HANDS." It is laminated.

Available from:

Washington State Department of Health
Distribution Center
7745 C Arab Road
Olympia, WA 98504-7845

Fax to order materials:
360-664-2929

E-mail to order materials:
immunematerial@doh.wa.gov

APPENDIX XIV

Sample Local School District Lice Policies

Permissive Nit Policy

Spokane School District Policy 8212—Communicable Diseases

No Nit Policy

Davenport School District Policy

Communicable Diseases

Conditions of exclusion from school are stated in the procedure describing communicable diseases.

Pediculosis: A student with untreated symptoms/sign of pediculosis shall be excluded from school until treated. Removal of as many nits as possible following treatment should be encouraged.

Legal References:	RCW 28A.210.010	Contagious diseases, limiting contact—Rules and regulations
	Chapter 246-110 WAC	School districts and day care centers—Contagious diseases
	RCW 70.02	Medical records—Health care information access and disclosure

Adapted with permission from the Spokane School District.

STUDENTS Head Lice

The effective control of spreading the "nuisance disease" lice (pediculosis) in the schools is a district concern. Repeated cases of lice can adversely affect the learning environment for the infested student as well as noninfested students. Repeated infestations by a student increases the risk of additional students becoming infested. To control the spread of infestation, the following shall apply to students infested with lice:

1. When detected, a student with infestation shall be kept out of school until the student is nit free.
2. "Out of school" excludes the student from use of school facilities or grounds, whether for school activities or not, and attendance at school activities.

Legal References: WAC 246-100-071 Responsibility for reporting
and cooperating with the local
health department.

Infectious Disease Control Guide for School Staff, OSPI (SPI 3/04)

Adapted with permission of the Davenport School District.

Index

A

Acquired Immunodeficiency Syndrome, 9–11
AIDS, 9–11
Athlete's Foot, 12–12
Animal Bites, 14–15

B

Bites, 14–17
Body Lice, 59

C

Chickenpox, 18–20
Chlamydia, 93–94
Clap, 95–96
CMV, 25–26
Cold Sores, 48–50
Common Cold, 21–22
Conjunctivitis, 23–24
Crab Lice, 60
Cytomegalovirus Infection, 25–26

D

Diarrhea, 27–28
Diphtheria, 29–30
Dose, 95–96

E

E. coli O157:H7, ??
Erythema Infectiosum, 31–32

F

Fifth Disease, 31–32
Foodborne Disease, 33–35

G

Giardia, ??
Gonorrhea, 95–96

H

Hand, Foot, and Mouth Disease, 36–37
Head Lice, 61–65
Hepatitis, 38–47

H

Hepatitis A, Viral, 38–40
Hepatitis B, Viral, 41–44
Hepatitis C, Viral, 45–47
Herpes Labialis, 48–50
Herpes Oralis, 48–50
Herpes Simplex Virus, 48–50
Herpes Simplex Virus, Genital Area, 97–98
Herpes Zoster, 51–52
HIV, 9–11
Human Bites, 16–17
Human Immunodeficiency Virus, 9–11

I

Impetigo, 53–54
Infectious Mononucleosis, 55–56
Influenza, 57–58

J

K

L

Lice, 59–65
Lockjaw, 110–111

M

Measles, 66–68
Meningitis, 69–71
Mono, 55–56
Mosquito-borne Illness, 72–73
Mumps, 74–75

N

NGU, 99–100
Non-Gonococcal Urethritis, 99–100
Norovirus, 76–77
Norwalk-like, 76–77

O

Index (cont.)

P

Pediculosis, 59–65
Pediculosis Humanus Capitus, 61–65
Pediculosis Humanus Corporis, 59
Pediculosis Humanus Pubis, 60
Pertussis, 78–80
Pink Eye, 23–24
Pinworms, 81–82
Polio, 83–84
Poliomyelitis, 83–84

Q

R

Ringworm, 85–86
Rubella, 87–88

S

Salmonella, ??
Scabies, 89–91
Scarlet Fever, 107–109
Sexually Transmitted Disease, 92–104
Shigella, ??
Shingles, 51–52
Smallpox, 105–106
STD, 92–104
Strain, 95–96
Streptococcal Sore Throat, 107–109
Syphilis, 101–102

T

TB, 112–114
Tetanus, 110–111
Three-Day Measles, 87–88
Tinea, 85–86
Tinea Pedis, 12–13
Tuberculosis, 112–114

U

V

Vaginitis, 103–104
Varicella, 18–20

V

Verrucae, 115–116

W

Warts, 115–116
Whooping Cough, 78–80

X

Y

Z