

# Infectious Disease Control Guide for School Staff

2014

Student Support

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# **Acronyms**

CDC Centers for Disease Control and Prevention

CDI Clostridium Difficile Infections

CMV Cytomegalovirus Infection

DOH Washington State Department of Health

DOSH Division of Occupational Safety and Health

DT Diphtheria/Tetanus

DTaP Diphtheria/Tetanus/Acellular Pertussis vaccine

DTP Diphtheria/Tetanus/Pertussis vaccine

ESD Educational Service District

HAV Hepatitis A Virus

HBIG Hepatitis B Immune Globulin

HBV Hepatitis B Virus

HCV Hepatitis C Virus

HFMD Hand, Foot and Mouth Disease

HIV Human Immunodeficiency Virus

HSV Herpes Simplex Virus

HPV Human Papilloma Virus

ICP Infection Control Program

IDRH Infectious Disease and Reproductive Health

LHJ Local Health Jurisdiction

MMR Measles, Mumps, and Rubella Vaccine

MRSA Methicillin Resistant Staphylococcus Aureous

NGU Non-Gonococcal Urethritis

OSPI Office of Superintendent of Public Instruction

PPE Personal Protective Equipment

RCW Revised Code of Washington

STI Sexually Transmitted Infection

TB Tuberculosis

Td Tetanus/Diphtheria

Tdap Tetanus/ Diphtheria/Acellular Pertussis vaccine

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 Washington State immunization law (RCW 28A.210.060-170, see Appendix I) <a href="http://apps.leg.wa.gov/rcw/default.aspx?cite=28A.210.060">http://apps.leg.wa.gov/rcw/default.aspx?cite=28A.210.060</a>. School districts should always refer to the most updated version of the specific law or regulation on the Department of Health (DOH) Web site.

The following pages contain guidelines for the control and reporting of diseases in the school-age population and among staff members of schools in the state of Washington. Because the authority for control of diseases of public health significance lies with local health jurisdictions, schools should consult with their local health jurisdiction for guidance regarding 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 because they are not often seen in school or in people of school age. For some conditions, we have included information on the effects that childhood diseases could have on adults when those effects are unusual or particularly serious in adults. Examples include chickenpox, cytomegalovirus, Fifth disease, measles, mumps, and rubella. Otherwise, this guide is not intended to be inclusive of adult/employee illness or disease.

RCW 28A.210.010 Contagious Diseases, Limiting Contact—Rules and Regulations (<a href="http://apps.leg.wa.gov/rcw/default.aspx?cite=28A.210.010">http://apps.leg.wa.gov/rcw/default.aspx?cite=28A.210.010</a>) requires the State Board of Health, in consultation with the Superintendent of Public Instruction (OSPI), 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 (http://apps.leg.wa.gov/wac/default.aspx?cite=246-110-001)

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

(http://apps.leg.wa.gov/wac/default.aspx?cite=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 (<a href="http://apps.leg.wa.gov/wac/default.aspx?cite=246-101-420">http://apps.leg.wa.gov/wac/default.aspx?cite=246-101-420</a>) establishes some steps required of local school districts (see Appendix III). The following are the requirements listed in this WAC:

- Notify your <u>local health jurisdiction</u> of suspected or confirmed disease cases or outbreaks that may be associated with the school. Note that schools are not responsible for notifiable conditions reporting if a health care provider or laboratory makes the initial diagnosis of the case. A school should report an outbreak that is associated with the school whether or not it involves a notifiable condition and should report any suspected cases of notifiable conditions that are not yet diagnosed.
- 2. Cooperate with the <u>local health jurisdiction</u> in monitoring influenza.
- 3. Consult with a licensed health care provider or your local health jurisdiction for information regarding infectious diseases, when necessary.
- 4. Cooperate as requested by the <u>local health jurisdiction</u> in investigations of diseases of public health significance.

Confidentiality of medical information is also addressed in WAC 246-101-420 (<a href="http://apps.leg.wa.gov/wac/default.aspx?cite=246-101-420">http://apps.leg.wa.gov/wac/default.aspx?cite=246-101-420</a>). School staff with knowledge of a person diagnosed with a notifiable condition may release that information only 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 (<a href="http://apps.leg.wa.gov/wac/default.aspx?cite=246-101-415">http://apps.leg.wa.gov/wac/default.aspx?cite=246-101-415</a>) for similar requirements (see Appendix III).

It is clear that some diseases are "nuisance" diseases that, while not considered particularly dangerous to the community's health, do cause considerable anguish and disruption to schools. Some examples of include ringworm and infestation with lice or scabies. Because they are not a significant threat to health, these conditions may not be "high priority" for a <u>local health jurisdiction</u>; nevertheless, consultation between school district administrators and local health jurisdictions is important for effective control of "nuisance" diseases in schools.

# Disease Reporting, Control, and Exclusion

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. School staff should also report suspected or confirmed outbreaks associated with the school. The school is required in WAC 246-101-420 (see Appendix III) to notify their local health jurisdiction of outbreaks associated with a school as well as suspected cases of notifiable conditions (e.g., suspected pertussis). 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 (http://apps.leg.wa.gov/wac/default.aspx?cite=246-101-101).
- WAC 246-101-105 Duties of the health care provider (http://apps.leg.wa.gov/wac/default.aspx?cite=246-101-105).
- WAC 246-101-110 Means of notification (http://apps.leg.wa.gov/wac/default.aspx?cite=246-101-110).
- WAC 246-101-115 Content of notification (<a href="http://apps.leg.wa.gov/wac/default.aspx?cite=246-101-115">http://apps.leg.wa.gov/wac/default.aspx?cite=246-101-115</a>).
- WAC 246-101-120 Handling of case reports and medical information (<a href="http://apps.leg.wa.gov/wac/default.aspx?cite=246-101-120">http://apps.leg.wa.gov/wac/default.aspx?cite=246-101-120</a>).

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.
- Cause the cessation of selected school activities or functions.
- Exclude any students, staff, and volunteers who are infected with or deemed susceptible to the disease (WAC 246-110-020 (<a href="http://apps.leg.wa.gov/wac/default.aspx?cite=246-110-020">http://apps.leg.wa.gov/wac/default.aspx?cite=246-110-020</a>), 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 diseases in students so that, when necessary, appropriate action is taken and the 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, Policy No. 3414—Infectious Diseases. Contact WSSDA regarding other health related sample policies. See Appendix XIII, for contact information.

For temporary exclusion of inadequately immunized (susceptible) students and staff during a disease outbreak, refer to the Washington State Department of Health (DOH) *Immunization Manual for Schools, Preschools and Child Care Facilities.* See resources, Appendix XIII, for source. Also consult with the <u>local health jurisdiction</u>.

For information and recommendations on implementation of the Washington Industrial Safety and Health Act, Chapter <u>Chapter 296-823</u>, Bloodborne Pathogens, consult the Office of Superintendent of Public Instruction publication *Guidelines for Implementation of School Employee Training on HIV/AIDS and Other Bloodborne Pathogens (April 2011).* See Resources, Appendix XIII, for source, or your local office of the Department of Health and Safety www.lni.wa.gov.

## **General Considerations**

Exposures to a variety of infectious diseases in a school population are not unexpected and may even be inevitable. This guide provides information to school personnel regarding appropriate actions that can be taken to identify infectious diseases, to assure 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 or immunodeficiencies, and those who are pregnant are all considered "high risk." In addition, those who have chronic disease, nutritional deficiencies, or debilitating illness should also 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 whenever there is increased risk of exposure to an infectious disease and to encourage them to consult with their licensed health care provider. The licensed health care provider will assess the risk and make appropriate recommendations for treatment of his/her patient.

# **Hand Washing and Hand Sanitizers**

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

Hand sanitizers are not as effective as washing with soap and water and should not be used as a replacement for standard hand washing with soap and water. When hand washing facilities are not available, an ethanol alcohol-based (minimum 62 percent) hand sanitizer can be used, preferably in fragrance-free gel or foaming form. Hands must be washed with soap and running water as soon as feasible. Hand sanitizers are never appropriate when there is significant contamination such as occurs during a visit to a petting zoo or farm, after handling an animal, after changing a diaper, after playing outside, before preparing food or eating, after touching an infected wound, or after using the bathroom. Hand sanitizers have not been shown to be effective against norovirus or *Clostridium difficile* spores or for soiled hands. Caution is recommended to avoid accidental ingestion or abuse of hand sanitizers by students.

## 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 OSPI Health Services Web site at <a href="http://www.k12.wa.us/healthservices">http://www.k12.wa.us/healthservices</a> 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 who are ill at school. Teachers may observe differences in the usual pattern for a particular student.

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 experience concern about fever, and yet fever does not automatically require intervention. Several scientific studies have shown that fever rarely causes harmful effects in itself. Recurrent low-grade fever may occur as the result of physiological changes in the body and may not cause any discomfort to the student.

Fever is a concern when it suggests the presence of an infectious disease. 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 undertaken only if 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. The development of any of the following may also indicate an illness:

- a yellow tinge to the eyes or skin.
- a flushed appearance with rosy cheeks and glassy or red eyes.

#### Rash

The differential diagnosis of rash illnesses can be very difficult and even a licensed health care provider (HCP) will often require lab tests to confirm whether a certain disease is present. If measles or rubella is suspected, the school must notify the <u>local health jurisdiction</u> immediately. If a referral to a HCP is made, advise the student's parent/guardian to inform their HCP 's office staff of the presence of a rash illness so that appropriate medical isolation can be arranged prior to the visit.

Itchiness of the rash is not a signal of infectiousness or non-infectiousness, however, itching should also be evaluated. A rash can be a symptom of a serious or non-serious condition. Rashes can have an infectious or a non-infectious cause.

## **Change in Bowel Habit**

Diarrhea may accompany a number of infectious diseases. Conversely, an intestinal infection can also cause sluggishness of the bowels and constipation, sometimes with abdominal cramps. Cramps can be due to inactivity, a change in the ill student's level of activity, or to dehydration that often occurs during infections. Cramping accompanied by fever and bloody diarrhea are always serious medical concerns and should be immediately referred to a health care provider for evaluation.

Diarrhea or even apparently normal feces following the resolution of diarrhea may carry an infectious organism that can transmit to others in a school setting. The local health jurisdiction may require that children or employees with certain infections not return to school until testing negative for the infection.

If a student vomits or has diarrhea at school, contact the school nurse for guidance. If the school nurse is not available contact the parent and have the child go home for further observation.

## **Nasal Discharge and Obstruction**

Clear nasal discharge may signal an infection such as a cold or it may indicate an allergic reaction, especially if accompanied by watery eyes. Yellow or green discharge may indicate an infection or obstruction by a foreign body. Breathing may be noisy if the nasal passages are obstructed. If breathing is labored, immediate medical referral is indicated.

#### **Sore Throat**

A sore throat can be a minor problem, but it can also indicate more significant infections such as streptococcal pharyngitis, infectious mononucleosis, or other serious generalized illnesses. If the sore throat is accompanied by fever, difficulty swallowing,

and/or swollen lymph nodes (glands), notify the parent/guardian and recommend medical evaluation.

## Cough

Some chronic conditions or allergic conditions are accompanied by a cough. However, a cough may also indicate an infectious disease. Persistent coughs, especially with other symptoms such as episodes of coughing followed by gagging, or a whooping sound, vomiting, fever, loss of appetite, or 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)

Pain in the body and limbs may be a normal part of the growth process, especially in adolescents. However, leg and back pains can also be seen during the course of infectious diseases. Stomach pains or cramps may 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 (see section on Change in Bowel Habits above). The student who is absent frequently for abdominal pain should receive medical evaluation.

## **Note**

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. 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.

When a notifiable condition is suspected, the <u>local health jurisdiction</u> should be contacted. In addition to assisting the administrator or his/her designee in deciding whether a student should attend school, the local health jurisdiction can also assist in evaluating whether the disease has implications for the student's participation in such activities as physical education, athletics, field trips, and lunchroom work. For example, a student who may possibly infect others with a disease that can be spread via droplets, fecal-oral contamination, or sores on the skin cannot work in food services until approved to do so by the school nurse, licensed health care provider, or public health official.

# **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 blisters with thin, watery fluid. Athlete's foot usually causes itching, stinging, and burning. Foul odor may occur. Athlete's foot is a common infection in adolescents and adults, but relatively uncommon in children. Similar fungal infections occurring on the body or head are called ringworm (see Ringworm).

## **Mode of Transmission**

Athlete's foot is spread through contact with skin scales containing fungi, or with fungi in damp areas, such as swimming pools, locker rooms, and showers. It can also be spread through family household members.

#### Incubation Period

Unknown.

## Infectious Period

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

# School Staff/Nurse Responsibility

- 1. Over-the-counter topical medications are usually sufficient to treat athlete's foot. In persistent, severe cases, or when a secondary infection is suspected, referral to licensed health care provider may be necessary.
- 2. Maintain and support confidentiality for the student.

## **Control of Spread**

- 1. Utilize standard precautions (see Appendix VIII, *Guidelines for Handling Body Fluids in Schools*).
- Refer to district infection control program protocols and policy for infectious diseases.
- 3. The fungus that causes athlete's foot thrives in damp, moist environments. Therefore, thorough, frequent cleansing and **drying** of gymnasium, shower, and pool area floors are essential.
- 4. Students with an active infection should not use wet or damp areas withere the infection can be transmitted.

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

- 5. Instruct individuals with athlete's foot to:
  - Keep feet dry, especially between the toes. Thoroughly dry feet and toes
    when wet from water or sweat.
  - Remove shoes and socks to expose feet to the air whenever possible.
  - Wear clean, dry socks or stockings made of natural material, such as cotton, or a synthetic fabric designed to draw moisture away from the feet.
  - Change socks or stockings more than once a day, as necessary.

## **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 and drying of locker rooms, showers, and pool areas, particularly floors.

Instruct students about the causes, means of transmission, and prevention of this condition.

# **Bed Bugs**

## **Description**

Bed bugs are oval, rust colored, wingless insects up to a quarter inch long. They bite but are not known to spread any human diseases. The insects hide between mattresses or in crevices during the day and feed on human blood at night. The bites are small raised red bumps, often in a line, that may be itchy or painful. Bed bugs occur primarily in buildings with shared housing, such as hotels, motels, and apartment buildings.

It is rare for a school to have bed bug infestations because bed bugs feed at night. Bed bugs could be brought in on student, staff clothing, or belongings.

## **Mode of Transmission**

Transmission occurs through contact with personal articles such as bedding or clothing that are infested. Animals do not transmit bed bugs.

#### **Incubation Period**

Bed bugs can survive months between blood meals.

## **Infectious Period**

Bed bugs do not spread diseases between people.

# School Staff/Nurse Responsibility

- 1. If a bed bug is found on a student, their clothing, or belongings, it is NOT necessary to send the student home; however, the parent or guardian should be notified.
- 2. Make referral to licensed health care provider as needed for diagnosis if bed bugs are observed or suspected.
- 3. If bed bugs are detected, collect a sample for identification by a professional. Bed bugs can closely resemble other insects, so accurate identification is essential.
- 4. Instruct the family to wash school clothing and other personal items taken to school, such as backpacks, in 130° F water. Machine-dry using the hottest setting for at least 20 minutes.
- 5. Assess family situation and if necessary assist the family with community resources.
- 6. Maintain and support confidentiality for the student.

## **Control of Spread**

1. Utilize standard precautions (see Appendix VIII, *Guidelines for Handling Body Fluids in Schools*).

# **Bed Bugs (cont.)**

- 2. Refer to district infection control program protocols and policy for infectious diseases.
- 3. If a bed bug is tentatively identified, a person experienced with bed bug identification should thoroughly inspect the area.
- 4. Thoroughly clean the building location where the bed bug was found. Professional advice may be needed. Vacuum carpeting and crevices. Wash fabric items and dry in a hot dryer. Personal items such as coats and backpacks should be stored in plastic containers or bags (both at home and at school) while the problem is being resolved.
- 5. Monitor and re-inspect the classroom and personal belongings/storage areas.

#### **Future Prevention and Education**

General cleanliness measures will protect against bed bugs in schools:

- 1. Eliminate clutter that can shelter pests, such as cardboard boxes.
- 2. Seal cracks and crevices in walls.
- 3. Minimize upholstered furniture in the classroom. Launder floor pillows, mats, and other shared fabric items regularly and dry in a hot dryer.
- 4. Vacuum carpeted areas regularly.
- 5. Backpacks and coats can spread pests such as bed bugs. Use separate lidded plastic containers or bags for these items and for lost and found collections.

## Resources

Bed Bugs: What Schools Should Know (May 2010)

Michigan Bed Bug Working Group

http://www.michigan.gov/documents/emergingdiseases/Bed\_bugs\_schools\_293498\_7.pdf

Washington State University School Integrated Pest Management. Pest Press - Bed Bugs (2011)

http://schoolipm.wsu.edu/bedbugs.html

Washington State Department of Health. Bed Bugs http://www.doh.wa.gov/CommunityandEnvironment/Pests/BedBugs.aspx

## **Bites**

## **Animal Bites**

# **Description**

Bites from animals carry several different risks:

- 1. Trauma and damage to tissue.
- 2. Infection by organisms from the animal including the possibility of rabies.
- 3. Infection by human skin organisms and environmental organisms introduced into the wound.
- 4. Toxic exposures (e.g., certain snakes or spiders, which are not appropriate for school settings).

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. 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 require first aid and referral for medical care. Rare infections, such as lymphocytic choriomeningitis virus have been spread from mice or hamsters. Animal feces, which can contaminate the entire animal, can transmit infections such as salmonellosis and hand washing with soap and water is important after handling animals.

Bites from certain wild or ill mammals carry a risk of transmitting rabies. The risk of rabies exposure varies by region. In Washington State, bats and, very rarely, dogs or cats have been rabid. Elsewhere in the United States, rabies has been associated with bats, raccoons, foxes, skunks, coyotes, and occasionally other animals bitten by a rabid animal. Rabbits, rodents, squirrels, and any animals raised indoors and kept inside in cages have minimal risk of carrying rabies.

Rabies is almost always a fatal disease once the person develops symptoms. Prompt medical treatment following an animal bite can reliably prevent rabies from developing. Any suspected human exposure to rabies from an animal should be evaluated by your <u>local health jurisdiction</u> or a designated authority.

#### Mode of Transmission

Bacteria in an animal's mouth may cause an infection. A bite may also become infected with skin organisms. Certain animal bites can transmit infectious conditions such as rabies. Imported animals, including dogs, may be rabid. Exotic animals (not from North America) may carry other serious infections.

#### Incubation Period

Skin infections typically occur within a few days of the initial trauma. The incubation period for rabies is typically 3–8 weeks, but 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 aggression.

## School Staff/Nurse Responsibility

- 1. Provide basic first aid immediately, washing the wound thoroughly with soap and water.
- 2. Utilize standard precautions (see Appendix VIII, *Guidelines for Handling Body Fluids in Schools*).
- 3. Refer to district infection control program protocols and policy for infectious diseases.
- 4. Notify parent/guardian.
- Immediately report to your local health jurisdiction suspected rabies exposure or known toxic snake or spider bites. Evaluation of the animal may be necessary. Washington Department of Health also recommends you report finding dead or ill bats to your <u>local health jurisdiction</u>.
- 6. 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.
- 7. Make referral to licensed health care provider for tetanus booster, if needed.
- 8. If a bat or wild animal is the biting animal, do not touch or move the animal.

  Contain the animal only if it is safe to do so. For example, put a bucket over a bat on the ground.
- If a student receives an animal bite, report the incident to your local animal control agency.
- 10. Maintain and support confidentiality for the student.
- 11. Refer to district policy and procedure related to animals in the classroom. If the District does not have a policy and procedure, consider adopting them. Guidance is available from the DOH School Environmental Health and Safety Program.

- 12. If the bite occurred on school grounds, during school hours, or while in the care of school staff, report to building administrator and document incident per district policy and procedure.
- 13. Retain thorough documentation and evidence.

## **Future Prevention and Education**

- 1. Teach students not to touch wild or unfamiliar animals, particularly bats or any 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*, Section O: Animals in Schools and Appendix F: Animals in the Classroom at <a href="http://www.k12.wa.us/SchFacilities/Publications/pubdocs/CompleteSafety&HealthManual2002-2003.pdf">http://www.k12.wa.us/SchFacilities/Publications/pubdocs/CompleteSafety&HealthManual2002-2003.pdf</a>.
- 6. Under the 2011 notifiable conditions rule revisions, the WAC was modified to no longer require reporting of all animal bites. Only those situations in which human exposure to rabies is suspected are reportable to the <u>local health jurisdiction</u>. For the purposes of reporting, "Suspected Rabies Exposure" includes two conditions listed in the 2011 rule revisions:
  - Rabies, suspected human exposure (due to a bite from or other exposure to an animal that is suspected of being infected with rabies); and
  - Animal bites (when human exposure to rabies is suspected).
- 7. The Washington State Department of Health School Environmental Health and Safety Program recommends that districts have animal polices and procedures that at a minimum:
  - a. Allow in school facilities only those animals, other than service animals, approved under written policies or procedures.
  - b. Address for any animals allowed in school facilities measures to prevent:
    - i. Injuries caused by wild, dangerous, or aggressive animals;

- ii. Spread of diseases from animals known to commonly carry those diseases including, but not limited to, rabies, psittacosis, and salmonellosis;
- iii. Allergic reactions;
- iv. Exposure to animal wastes; and
- v. Handling animals or their bedding without proper handwashing afterward.
- c. Address service animals in the school facility that are not well behaved or present a risk to health and safety.

#### Resources

- WAC 246-100-191 Animals general measures to prevent human disease http://apps.leg.wa.gov/wac/default.aspx?cite=246-100-191
- WAC 246-100-192 Animals in public settings Measures to prevent human disease <a href="http://apps.leg.wa.gov/wac/default.aspx?cite=246-100-192">http://apps.leg.wa.gov/wac/default.aspx?cite=246-100-192</a>
- WAC 246-100-197 Rabies Measures to prevent human disease <a href="http://apps.leg.wa.gov/wac/default.aspx?cite=246-100-197">http://apps.leg.wa.gov/wac/default.aspx?cite=246-100-197</a>
- National Association of State Public Health Veterinarians Animals in Public Settings Compendium

## **Human Bites**

# **Description**

Human bites have a higher complication and infection rate than animal bites. Wounds of the lips and the tissue surrounding the fingernails account for most self-inflicted bites that come to the attention of medical personnel. Occlusional bites (made by the upper and lower teeth closing) may affect any part of the body, but most often 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. Human bites to the hands are generally 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. Organisms may be antibiotic resistant. Common organisms are streptococci and *S. aureus*. Other organisms are *H. influenzae*, *Bacterioides* spp., *Peptostreptococcus* spp., and *Fusobacterium nucleatum*.

## **Infectious Period**

Bacteria in the mouth or on the skin can cause serious infections. There has never been clearly documented rabies transmission between humans.

# School Staff/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. Utilize standard precautions (see Appendix VIII, *Guidelines for Handling Body Fluids in Schools*).
- 3. Refer to district infection control program protocols and policy for infectious diseases.
- 4. Notify parent/guardian of the bite.
- 5. 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.
- 6. Make referral to licensed health care provider for tetanus booster, if needed.

- 7. Investigate bites for child abuse, if necessary.
- 8. Report to building administrator and document incident per district policy and procedure.
- 9. Retain thorough documentation and evidence.
- 10. Maintain and support confidentiality for the student.

# Chickenpox (Varicella)

# **Description**

Chickenpox (varicella) is an acute viral illness characterized by a rapid onset of 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 also occur.

A vaccine is available to prevent the disease. However, sometimes people who have had the vaccine will still get chickenpox (called 'breakthrough disease'). If vaccinated people do get chickenpox, it is usually very mild. They will have fewer spots which may not appear typical and may not have vesicles (blisters), and they are less likely to have a fever, and usually recover faster.

Although the total number of varicella cases is declining, a shift of the remaining varicella disease burden to middle school years is being observed. In 1995, the median age of varicella infection ranged from 3–5 years in vaccinated persons and from 5–6 years in unvaccinated persons. By 2005, the median age increased to 6–8 years in vaccinated persons and 13–19 years in unvaccinated persons.

This illness is often 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 is most beneficial if started within 24 hours of rash development.

If a pregnant woman gets **varicella** during the first 20 weeks of pregnancy, her baby has a 1 in a 100 risk of having serious birth defects. Pregnant women who have been exposed to somebody with chickenpox should contact their doctor immediately. Those who are not sure if they had chickenpox can have a blood test to see if they are protected against the virus.

#### **Mode of Transmission**

Transmission of this highly contagious disease is person-to-person by direct contact, through 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

Persons with varicella are considered infectious from 1–2 days before the rash appears and until all lesions are crusted over (average range, 4–7 days after rash onset).

# Chickenpox (Varicella) (cont.)

# School Staff/Nurse Responsibility

The identification of a single case of varicella should trigger intervention measures because this case could lead to an outbreak. Varicella outbreaks have been documented in highly vaccinated populations and vaccinated persons acted as the index cases in several outbreaks. Because one case of chickenpox in a school represents the potential for an outbreak, the <u>local health jurisdiction</u> should be notified whenever chickenpox occurs in a school environment.

- Referral to a licensed health care provider is recommended. During an outbreak, laboratory confirmation of varicella is recommended for one or more cases (regardless of the patients' vaccination status), especially at the beginning of the outbreak. 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 during the visit can be arranged.
- 2. Notify classmates' parent/guardian of the presence of chickenpox in the class (or at the school) as appropriate.
- 3. Any time a case of chickenpox occurs in a school, inform students and staff with certain high-risk conditions (anemia, immunodeficiencies, and pregnancy) of the increased risks of acquiring the infection. Refer them to their licensed health care provider for guidance. Individual student health plans for high-risk students should include planning for exclusion, in consultation with the student's licensed health care provider, as a way to avoid contact with specific infections.
- 4. Inform the parents/guardians that children with chickenpox should not receive aspirin because of its possible association with Reye Syndrome.
- 5. Maintain and support confidentiality for the student.

## **Control of Spread**

- 1. Screen for school vaccine entry requirement.
- 2. Utilize standard precautions (see Appendix VIII, *Guidelines for Handling Body Fluids in Schools*).
- 3. Refer to district infection control program protocols and policy for infectious diseases.
- 4. Exclude students with chickenpox from school until all lesions have crusted.
- 5. Parents of children without evidence of varicella immunity should be advised to have their child vaccinated with the appropriate dose or, if vaccination is contraindicated or refused, exclude the child from school up to 21 days after the last case is identified.

# **Chickenpox (Varicella) (cont.)**

- 6. If a student develops a rash following varicella vaccination, refer to primary care provider for decision regarding communicability and safe return to school.
- 7. Clean or dispose of any articles soiled with nose and throat discharges.
- 8. Instruct students never to share items that may be contaminated with saliva such as beverage containers.
- 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 hand techniques.
- 11. Dispose of bandages that have been in contact with the vesicles (blisters) in appropriate bagged receptacle.
- 12. Disinfect surfaces that have been in direct contact with fluid from the vesicles (blisters) (see Appendix VIII, *Guidelines for Handling Body Fluids in Schools*).

# Clostridium difficile (C. difficile)

## **Description**

Clostridium difficile is a toxin-producing, spore-forming bacterium that can cause infectious diarrhea. *C. difficile* infections (CDI) are most commonly found in older adults who are in hospitals or long-term care facilities; they often occur after antibiotic therapy for another infection. Healthy people usually don't become ill even if the bacteria are in their intestines. However, in recent years, some *hospitalized individuals and* otherwise healthy people who are not taking antibiotics or hospitalized have become ill with CDI.

Watery diarrhea (three or more times a day for two or more days) and fever are the most common symptoms of CDI. Loss of appetite, nausea, and abdominal pain can also occur. Some people recover without treatment when they stop taking the antibiotic that precipitated the CDI. With more serious infections treatment with a specific antibiotic that targets the C. *difficile* bacterium may be necessary. Because Washington State does not conduct surveillance for *CDI*, the number of CDIs occurring in school-aged children is unknown, but likely remains rare.

## **Mode of Transmission**

*C. difficile* is spread through the feces, most commonly by touching contaminated items or surfaces. Health care providers who do not wash their hands between patients can transfer the infection from one patient to another.

#### Incubation Period

Variable, since *C. difficile* can be in the intestine without causing an infection until antibiotics are taken.

#### Infectious Period

People can have *C. difficile* in their intestines without having an infection, and could spread the bacteria to others through their feces.

## School Staff/Nurse Responsibility

- 1. Refer suspected cases to licensed health care provider.
- Report groups or clusters to the local health jurisdiction immediately.
- 3. Refer food handlers with diarrhea to a licensed health care provider or their local health jurisdiction so they can be cleared before returning to work. The school's responsibility for all students, staff, and parents/guardians who prepare food or handle shared food cannot be overemphasized. The importance of proper handwashing techniques must be stressed to employees, volunteers, and students.

# Clostridium difficile (C. difficile) (cont.)

- 4. Assure that diaper changing areas or other surface/items contaminated with diarrheal stool are cleaned and disinfected with EPA-registered detergents/disinfectants that kill *C. difficile* spores or a 1:10 bleach solution (see Appendix VIII, *Guidelines for Handling Body Fluids in Schools*).
- 5. Instruct students and staff regarding proper hand washing techniques.
- 6. Maintain and support confidentiality for the student.

# **Control of Spread**

- 1. Utilize standard precautions (see Appendix VIII, *Guidelines for Handling Body Fluids in Schools*).
- 2. Refer to district infection control program protocols and policy for infectious diseases.
- 3. Encourage good personal hygiene and proper hand washing techniques after going to the bathroom, before and after preparing food, before and after eating, after sneezing, coughing, or using tissue, before feeding a baby, before and after changing diapers, after touching dirty laundry, after touching garbage or trash, after taking off disposable gloves, and after touching animals or animal waste. This is the most important means of preventing the spread of intestinal diseases. Soap and water is the best choice for hand hygiene when someone is infected with *C. difficile* because alcohol-based hand sanitizers will not destroy *C. difficile* spores.
- 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).
- 5. Do not allow a child or staff person who was infected with *C. difficile* to return to school until the person has been diarrhea-free for at least 48 hours.
- Carry out proper handwashing techniques, dispose of feces-contaminated materials properly, and clean and disinfect areas contaminated by feces appropriately because an infected individual may show no symptoms.
- 7. Always use gloves when changing diapers. Remove and dispose of gloves properly following diaper change and wash hands with soap and water immediately. Surfaces where diapers are changed must be cleaned and disinfected after each use. If a surface is visibly dirty, a cleaner or detergent must be used first, then the surface should be rinsed, then disinfected. A 1:10 solution of chlorine bleach is needed to kill C. difficile spores with a minimum wet contact time of 5 minutes, or an EP-registered detergent/disinfectant for killing C.

# Clostridium difficile (C. difficile) (cont.)

difficile spores (see Appendix VIII, Guidelines for Handling Body Fluids in Schools).

## **Future Prevention and Education**

To prevent the spread of infections from the intestine, including *C. difficile*, wash hands frequently with soap and water. Alcohol-based hand gels do not kill *C. difficile* spores.

Clean surfaces that have been contaminated with feces in the bathroom or diaper changing area or other areas. First use a cleaner or detergent and friction to remove fecal material, rinse with water, then disinfect using a product that contains a 1:10 solution of chlorine bleach or an EPA-registered detergent/disinfectant for killing *C. difficile* spores. Follow the product label for contact time (see Appendix VIII, *Guidelines for Handling Body Fluids in Schools*).

## Common Cold

# **Description**

The common cold is a viral upper-respiratory infection that inflames the lining of the nose and throat. Symptoms include runny or stuffy nose, watery eyes, sneezing, coughing, congestion, mild aches, pains, and occasionally fever. Nasal discharge is usually watery and clear at the onset but may become thick and discolored within a few days. Colds are caused by viruses, not by drafts or failure to dress warmly.

## **Mode of Transmission**

The common cold is transmitted by direct contact, by respiratory droplets from sneezing or coughing, or by sharing items contaminated with saliva or droplets.

#### **Incubation Period**

Usually 2 to 3 days, but occasionally up to 7 days.

#### Infectious Period

The common cold is infectious a few days before the onset of symptoms and while clear, running secretions are present.

# School Staff/Nurse Responsibility

- 1. Reporting to your <u>local health jurisdiction</u> is not necessary.
- 2. Make referral to licensed health care provider if symptoms of significance persist beyond 14 days, or if secondary complications develop.
- 3. Maintain and support confidentiality for the student.

# **Control of Spread**

- 1. Utilize standard precautions (see Appendix VIII, *Guidelines for Handling Body Fluids in Schools*).
- 2. Refer to district infection control program protocols and policy for infectious diseases.
- 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
- 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.

# **Common Cold (cont.)**

- 6. Encourage proper handwashing techniques.
- 7. Exclusion from school is not necessary, regardless of the color or consistency of nasal discharge, unless the student is feeling ill or has a temperature higher than 100.4 degrees Fahrenheit (F) or (38 C).

#### **Future Prevention and Education**

- 1. Colds generally disappear on their own within 14 days. If the student develops ear pain, severe sore throat, difficulty breathing, or exhibits symptoms beyond 10 days, advise the parent/guardian to call their licensed health care provider.
- 2. Colds are a viral infection and do not respond to antibiotics.
- 3. Infants, children, and teenagers should not use aspirin unless prescribed by a health care provider because of its association with Reye Syndrome.

# Conjunctivitis (Pink Eye)

## **Description**

Conjunctivitis is a common infection affecting one or both eyes that causes the white of the eye to appear pink or red. Vision is usually normal; however, the eye may water profusely and feel irritated. Eyelids may be swollen. A discharge of liquid or mucus from the infected eye may occur. Eyelids and lashes may become crusted and stick together as the mucus hardens, particularly while sleeping. The student may complain of itching, pain, or sensitivity to light.

Conjunctivitis is commonly caused by viruses or bacteria that may first manifest in one eye and then spread to the other eye within days. Viral conjunctivitis usually produces a clear, watery discharge. Bacterial conjunctivitis usually produces a thicker, yellow-green discharge. Eyelids stuck together after sleeping are most common with bacterial conjunctivitis. Rare severe causes of conjunctivitis are herpes and gonococcui, which need treatment.

Conjunctivitis may also be caused from allergens, such as cosmetics or pollen; reaction to air pollutants, such as dust or smoke; and foreign bodies in the eye, such as contact lenses. Certain chronic illnesses may also cause conjunctivitis.

## **Mode of Transmission**

Bacterial and viral conjunctivitis are easily spread through contact with discharge from the eye or respiratory passages, or from touching or sharing contaminated items of the infected person, such as eye cosmetics, contact lenses, pillows, towels, and microscope eyepieces.

## **Incubation Period**

The incubation period varies depending on the type of conjunctivitis but is usually a few days.

#### Infectious Period

Bacterial conjunctivitis generally lasts fewer than 5 days, but may persist up to 2–3 weeks. It is contagious while symptoms are present, or until a course of treatment (such as an antibiotic) is started.

The symptoms of viral conjunctivitis are usually worse on days 3–5 of infection, and will usually clear up on their own within 7–14 days. Viral conjunctivitis may be contagious up to 14 days after the appearance of signs and symptoms.

## School Staff/Nurse Responsibility

1. Notify the student's parent or guardian. The family may seek further consultation from a licensed health care provider. The role of antibiotics in treatment of most

# Conjunctivitis (Pink Eye) (cont.)

bacterial conjunctivitis and in prevention of spread is unclear. Health care professionals may vary in how they choose to treat this condition.

- Refer to a licensed health care provider promptly if the conjunctivitis is accompanied by moderate to severe pain in the eye, swelling of the skin around the eye, or vision problems that are not resolved from wiping discharge from the eye.
- 3. If the student wears contact lenses, refer to a licensed eye care provider to determine if the conjunctivitis may be caused from contact lenses or solution. (Contact lenses can be a source of both bacterial and irritant-caused conjunctivitis).
- 4. Maintain and support confidentiality for the student.

# **Control of Spread**

- 1. Utilize standard precautions (see Appendix VIII, Guidelines for Handling Body Fluids in Schools.
- 2. Refer to district infection control program protocols and policy for infectious diseases.
- 3. 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 skip surrounding the eye. Minimal redness to the white of the eye with no other symptoms is not grounds for exclusion.
- 4. Readmit to school upon licensed health care provider approval (with or without treatment).
- 5. Frequent handwashing is the best method to control and prevent the spread of conjunctivitis.
- 6. Wipe eyes as necessary to keep free of discharge. Discard soiled tissue or cotton balls. Use a clean tissue, cotton ball, wash cloth, or towel each time.
- 7. Wash hands after touching infected eyes and items like eyedrop dispenser and eyeglasses.
- 8. Educate students not to share personal items that touch the eyes, such as towels and cosmetics.
- 9. Advise students to throw away and replace cosmetics that were used during the infection.

# Conjunctivitis (Pink Eye) (cont.)

- 10. If the student wears contact lenses, advise the student and parents to consult with a licensed eye care professional. The eye care provider may advise the student to replace the lenses, solution, and case that were used during the infection, or to discontinue use of a particular brand of contact lenses or brand of solution. The eye care professional may also recommend that the lenses be removed and glasses worn until the infection is over.
- 11. Students with conjunctivitis should not use swimming pools.
- 12. Students with conjunctivitis should not share school or classroom equipment that touches the eyes, such as microscopes.
- 13. Report to your local health jurisdiction clusters of cases, regardless of the suspected cause of conjunctivitis.

## **Future Prevention and Education**

Reinforce the practice of frequent handwashing.

Educate students not to share personal items that touch the eyes, such as towels and cosmetics.

Educate students with conjunctivitis not to share school equipment that touches the eyes, such as microscopes.

Remember that a source of recurrent eye infections may be contact lenses, solution, or cosmetics.

Remind students to wear, handle, store, and clean their contact lenses as instructed by their licensed eye care provider.

Remind students that eye cosmetics and applicators used during the infection should be discarded.

Seek to identify and remove the source of possible eye allergens and irritants.

## **Cytomegalovirus Infection (CMV)**

### **Description**

Cytomegalovirus infection (CMV) is a member of the herpes virus group. CMV is a common childhood infection (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). The infection can be severe in immunocompromised persons and newborn infants, and birth defects can occur if a pregnant woman becomes infected.

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 hand washing 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 commonly present in 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 Staff/Nurse Responsibility

1. Instruct staff who care for infants in proper methods of diaper changing and disposal of soiled materials.

There appears to be little risk of CMV-related complications in infants born to mothers who were infected 6 months or more before conception. This group makes up the majority (50 percent–80 percent) of women of child-bearing age in the United States. Among women who were infected with CMV 6 months or more before becoming pregnant, the rate of congenital CMV infection in their infants is approximately 1 percent, and significant illness or abnormalities among these infants appears to be less common than in infants with congenital CMV infection born to women who had a primary CMV infection during pregnancy.

## Cytomegalovirus Infection (CMV) (cont.)

Since CMV is transmitted through contact with infected body fluids, including urine and saliva, contact with young children who are shedding CMV may be a source of exposure to the virus. Pregnant women who have close contact with young children, such as childcare providers and family members, appear to be at a greater risk of CMV infection than persons who do not have ongoing contact with children.

(http://www.cdc.gov/cmv/clinical/at-risk.html)

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. Pregnant women should follow precautions below under Control of Spread.

- 2. 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.
- 3. Maintain and support confidentiality for the student.

### **Control of Spread**

- 1. Utilize standard precautions. (See *Guidelines for Handling Body Fluids in Schools*, Appendix VII).
- 2. Refer to district infection control program protocols and policy for infectious diseases.
- 3. Wash hands after diaper changes and after contact with body secretions, especially urine and saliva.
- 4. Handle diapers carefully, and properly dispose of articles soiled with body fluids.
- 5. Avoid sharing beverage containers and eating utensils.

### Diarrhea

### Description

Infectious diarrhea, sometimes with abdominal pain, nausea, vomiting, or fever, has many causes. Most cases are due to viruses, but other causes include bacteria and parasites like *Giardia*. Type and severity of symptoms vary by the causative organism and the resistance of the person infected. Fecal-oral transmission (carrying an infection from human feces to the mouth) is a common means of infection. Transmission can also be through contaminated food, water, or swimming water. *Salmonella*, *E. coli*, *Cryptosporidium*, and *Giardia* are carried by animals and can be transmitted if animal waste is carried to a person's mouth. Determining the specific cause of infectious diarrhea is difficult in a school setting. A student with severe or persistent diarrhea, especially if accompanied by fever and cramps, should be referred for medical care. A common source of infection could cause multiple cases in a given group (e.g., classroom, school, outdoor education program) within a short period of time.

Agent	Description	Incubation	Infectious Period	Duration
Clostridium Difficile	Watery, diarrhea, fever, sometimes nausea and abdominal pain.	Unknown	During illness, up to 48 hours after diarrhea clears. (may be carrier)	Variable
E. coli O157:H7 and related shiga toxin-producing E. coli <sup>‡</sup>	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 and Cryptosporidium+	Diarrhea (pale, greasy with Giardia); cramps; 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)
Hepatitis A*	Diarrhea, jaundice; may be asymptomatic	5–50 days (usually 28– 30 days)	Before and during symptoms	Variable (usually weeks)
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)
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

- \* Requires a case report to the local health jurisdiction within 1 day of diagnosis or if suspected.
- ‡ Requires a case report to the local health jurisdiction within immediately on diagnosis or if suspected.
- + Requires a case report to the local health jurisdiction within 3 business days of diagnosis or if suspected.

## Diarrhea (cont.)

### School Staff/Nurse Responsibility

- 1. Immediately report to your local health jurisdiction groups or clusters of suspected foodborne or waterborne illness associated with the school.
- 2. Report to your <u>local health jurisdiction</u> parental reports of children infected with notifiable conditions such as *Salmonella*, *Shigella*, Shiga toxin-producing *E. coli*, hepatitis A virus, *Cryptosporidium*, or *Giardia*.
- 3. 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 or handle shared food cannot be overemphasized. The importance of proper handwashing techniques, refrigeration, cooking, and serving of food must be stressed to employees. Raw milk and raw eggs may not be served. Food must be protected against contamination.
- 4. Animals including mammals, birds, reptiles, and amphibians can carry Salmonella, E. coli, Giardia, Cryptosporidium, and other causes of diarrhea. Baby chicks or ducks, wild animals, small "silver dollar" turtles, and animals with diarrhea are not appropriate for classrooms. Children should practice careful handwashing after touching or handling other animals either in school or during field trips. Hand sanitizers are not appropriate for such situations. Handwashing is always recommended before eating. For more information about prevention of human disease from animals, turtles, or birds see:
  - WAC 246-100-191 Animals—general measures to prevent human disease <a href="http://apps.leg.wa.gov/wac/default.aspx?cite=246-100-191">http://apps.leg.wa.gov/wac/default.aspx?cite=246-100-191</a>
  - WAC 246-100-192 Animals in public settings—Measures to prevent human disease <a href="http://apps.leg.wa.gov/wac/default.aspx?cite=246-100-192">http://apps.leg.wa.gov/wac/default.aspx?cite=246-100-192</a>
  - WAC 246-100-201 Psittacosis—Measures to prevent human disease. <a href="http://apps.leg.wa.gov/wac/default.aspx?cite=246-100-201">http://apps.leg.wa.gov/wac/default.aspx?cite=246-100-201</a>
- 5. Instruct students and staff regarding proper handwashing techniques after using the bathroom, before eating, and after changing diapers.
- 6. Refer to district policy on animals in the classroom.
- 7. Maintain and support confidentiality for the student.

#### **Control of Spread**

1. Utilize standard precautions (see *Guidelines for Handling Body Fluids in Schools*, Appendix VII).

## Diarrhea (cont.)

- 2. Refer to district infection control program protocols and policy for infectious diseases.
- 3. A child with diarrhea may transmit the infection to other children in a school setting. The <u>local health jurisdiction</u> may require that children or employees with certain infections not return to school until they test negative for the infection or symptoms resolve.
- 4. An infected individual may show no symptoms. Therefore, proper hand washing techniques and appropriate disposal of feces and materials contaminated with fecal material must be completed.
- 5. Surfaces where diapers are changed must be cleaned, rinsed, and disinfected after each use.
- 6. A child with diarrhea may be infected with *C. difficile*, *Cryptosporidiu*m, or norovirus, which are resistant to many cleansers. A 1:10 bleach solution or wipe, or an EPA-registered detergent/disinfectant for *C. difficile* or noroviruses will be needed to disinfect surfaces or items that may have been in contact with any diarrheal stool (see *Guidelines for Handling Body Fluids in Schools*, Appendix VIII).

#### **Future Prevention and Education**

The main methods of prevention are reinforcement of principles of personal hygiene such as proper hand washing techniques after using the bathroom or touching animals.

Food handlers with diarrhea or open skin sores must be excluded from work. Surveillance for further cases may also be appropriate. Students will be kept at home during the times that symptoms make them uncomfortable or when their health care provider or local health jurisdiction so advises. Students may be excluded for certain transmissible infections until testing negative. Persons ill with diarrhea should not swim in pools or lakes and should not handle food to be eaten by others until symptoms are gone.

School pets and animals encountered on field trips can carry *Salmonella, Giardia, E. coli*, or other organisms. DOH recommends that animals be visitors for educational purposes, not residents, in schools. Hand washing is essential after touching animals and before eating. For more information about animals in school, refer to the Health and Safety Guide listed below.

#### Resources

The Health and Safety Guide Section for K–12 Schools in Washington, Section
 O: Animals in Schools and Appendix F: Animals in the Classroom at
 <a href="http://www.k12.wa.us/SchFacilities/Publications/pubdocs/CompleteSafety&HealthManual2002-2003.pdf">http://www.k12.wa.us/SchFacilities/Publications/pubdocs/CompleteSafety&HealthManual2002-2003.pdf</a>.

## Diarrhea (cont.)

- The National Association of State Public Health Veterinarians Animals in Public Settings Compendium: <a href="http://www.nasphv.org/documentsCompendiumAnimals.html">http://www.nasphv.org/documentsCompendiumAnimals.html</a>
- Washington State Department of Health Salmonella from Chicks and Ducklings: <a href="http://www.doh.wa.gov/YouandYourFamily/IllnessandDisease/AnimalTransmitted">http://www.doh.wa.gov/YouandYourFamily/IllnessandDisease/AnimalTransmitted</a>
   Diseases/SalmonellafromChicksandDucklings.aspx
- Washington State Department of Health Salmonella from Reptiles and Amphibians:
   <a href="http://www.doh.wa.gov/YouandYourFamily/IllnessandDisease/AnimalTransmittedDiseases/SalmonellafromReptilesandAmphibians.aspx">http://www.doh.wa.gov/YouandYourFamily/IllnessandDisease/AnimalTransmittedDiseases/SalmonellafromReptilesandAmphibians.aspx</a>
- Washington State Department of Health Foodborne Illness: <a href="http://www.doh.wa.gov/YouandYourFamily/IllnessandDisease/FoodborneIllnesse">http://www.doh.wa.gov/YouandYourFamily/IllnessandDisease/FoodborneIllnesse</a> s.aspx

## **Diphtheria**

### **Description**

Diphtheria is an acute infection of the mouth, pharynx, nose, or skin characterized by an inflamed throat sometimes accompanied by 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 frequent complications, including heart muscle involvement and respiratory obstruction. Death occurs in 5–10 percent of confirmed cases. However, childhood vaccination has almost eliminated diphtheria in this country. There has not been a case of diphtheria in Washington State for over 30 years.

#### **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 can spread the disease.

## School Staff/Nurse Responsibility

- 1. Report to your <u>local health jurisdiction</u> of suspected diphtheria 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.
- 3. Maintain and support confidentiality for the student.

### **Control of Spread**

- 1. Screen for school vaccine entry requirement.
- 2. Utilize standard precautions (see *Guidelines for Handling Body Fluids in Schools*, Appendix VII).
- Refer to district infection control program protocols and policy for infectious diseases.
- 4. Your local health officer will advise the school about control measures. Generally, exclusion from school is mandatory until there are two negative cultures more than 24 hours apart, collected more than 24 hours after the cessation of antibiotic treatment.

# Diphtheria (cont.)

- 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.
- 6. Close contacts of a person with diphtheria will be excluded until their cultures are negative and your local health jurisdiction clears them to return.

#### **Future Prevention and Education**

- 1. Properly clean or dispose of articles soiled with nose and throat discharges.
- 2. Instruct students never 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 hand washing techniques.

## Fifth Disease (Erythema Infectiosum)

### **Description**

Fifth disease, also known as erythema infectiosum, is a common mild rash illness caused by human parvovirus B19. It usually occurs in students in late winter and early spring, often as clusters or outbreaks. The illness is characterized first by headache, body ache, no or 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 chest, 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 (e.g., hot bath, exposure to sunlight). Adults may not develop the rash but sometimes experience pains in the joints, especially the hands and feet. Approximately 25 percent of adults who contract the infection have no symptoms.

Although the symptoms are usually mild and in many cases goes unnoticed, the virus has been associated with miscarriages and stillbirths for infections acquired by a woman during pregnancy. The risk of fetal death is less than 10 percent after proven maternal infection in the first half of pregnancy. Infection has also been associated with transient aplastic crisis in some individuals with chronic blood disorders such as sickle cell anemia. Immunosuppressed people may develop severe, chronic anemia if infected with Fifth disease. Exposed persons at risk for severe disease should be referred to their health care provider.

#### **Mode of Transmission**

Fifth disease is spread by contact with respiratory secretions. It can also be spread from a pregnant woman to the fetus and through blood transfusion.

#### **Incubation Period**

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

#### Infectious Period

Individuals with mild Fifth disease are probably contagious from respiratory secretions only early in the illness. Thus, by the time the rash appears, the individual is no longer contagious. People with aplastic crisis are infectious up to one week after onset of symptoms. Immunosuppressed people with chronic infection may be infectious for months to years.

## School Staff/Nurse Responsibility

Students with a rash illness, especially if fever and/or other symptoms are
present, should be referred to a health care provider for diagnosis. Students
should not return to school until after the fever is gone (normally for 24 hours)
and the child feels well enough to participate in normal activities. No treatment is

## Fifth Disease (Erythema Infectiosum) (cont.)

indicated for this illness and once diagnosed, it is not necessary to exclude the ill student from school unless a fever is present or there is discomfort from symptoms.

- 2. Inform known pregnant women of potential exposure and make referral to licensed health care provider.
- 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. High-risk students should have individual health plans that include exclusion, in consultation with the student's licensed health care provider, to avoid contact with specific infections.
- 4. Maintain and support confidentiality for the student.

### **Control of Spread**

- 1. Utilize standard precautions (see *Guidelines for Handling Body Fluids in Schools*, Appendix VII).
- 4. Refer to district infection control program protocols and policy for infectious diseases.
- 5. Wash hands after contact with respiratory secretions and dispose of facial tissues containing respiratory secretions.
- 6. Pregnant women with sick children at home are advised to wash hands frequently and to avoid sharing eating utensils.
- 7. Clean or dispose of articles soiled with nose and throat discharges.
- 8. Instruct students not to share items that may be contaminated with saliva such as beverage containers.
- 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 hand washing techniques.

#### **Future Prevention and Education**

The virus causing Fifth disease is quite prevalent in the general community. Approximately 50 percent of young adults demonstrate immunity to Fifth disease resulting from infection in childhood. A serologic test is available and can be used to determine if a pregnant woman is immune, susceptible, or recently infected with

# Fifth Disease (Erythema Infectiosum) (cont.)

parvovirus. However, much needs to be learned about the potential risks to pregnant women.

Students and staff with certain high-risk conditions (anemia, immunodeficiencies, and pregnancy) who may be exposed to Fifth disease should be advised that there might be some risk. Their licensed health care providers and local health jurisdictions 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 a leading cause of diarrheal illness in the United States. Norovirus or other viral agents are probably the most common cause of gastroenteritis (often called "stomach flu") and can be spread by contaminated food, contaminated water, or person to person including contaminated surfaces such as doorknobs and railings. The extent to which viral gastroenteritis contributes to school absenteeism appears significant, but remains undocumented because testing is rarely done. Campylobacter jejuni gastroenteritis is the most commonly diagnosed and reported cause of foodborne illness in Washington State. Other causes of foodborne illnesses reported in Washington include norovirus, Clostridium perfringens, Salmonella, E. coli O157:H7 and related shiga toxin-producing E. coli, Bacillus cereus, and viral hepatitis A.

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

#### **Mode of Transmission**

The transmission of foodborne illness requires one or more of the following conditions: inherently contaminated produce, raw or inadequately cooked contaminated 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 raw poultry, or contamination of food by an infected food handler.

Different agents of foodborne illness have different characteristics. The incubation period and symptoms can suggest the agent. (See the section on Diarrhea for more information about agents.)

## **Foodborne Disease (cont.)**

Agent	Examples	Usual Incubation Periods
Bacteria	Campylobacter Salmonella <i>E. coli</i> O157:H7 Shigella	2–5 days 12–72 hours 1–10 days 2–7 days
Bacterial Enterotoxins	Staphylococcus aureus Clostridium perfringens Bacillus cereus	30 minutes to 5 hours 8–22 hours 30 minutes to 5 hours (vomiting) 8–16 hours (diarrhea)
Chemical poisonings	Copper Pesticides Mushrooms	15 minutes to 2 hours (sometimes up to 4 hours)
Viruses	Norovirus Hepatitis A	12–48 hours 15–50 day (average 30 days)

#### **Infectious Period**

Infected individuals 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. This is important when evaluating infected food handlers for return to work.

### School Staff/Nurse Responsibility

- Immediately report to your <u>local health jurisdiction</u> suspected or confirmed foodborne outbreaks associated with a school (see Appendix V and the above chart).
- 2. Exclude food handlers with gastrointestinal upsets (diarrhea and/or vomiting), enteric disease, and respiratory infections from working with food or food contact surfaces for at least 24 hours after the symptoms have ceased. If a food handler is diagnosed with a disease transmissible through food, the school must get approval from the <u>local health jurisdiction</u> before the food handler can work with food or food contact surfaces.
- 3. Assist local and state public health investigators as appropriate.
- 4. Maintain and support confidentially for the student.

## **Foodborne Disease (cont.)**

### **Control of Spread**

- 1. Utilize standard precautions (see *Guidelines for Handling Body Fluids in Schools*, Appendix VII).
- 2. Refer to district infection control program protocols and policy for infectious diseases.
- 3. A child with diarrhea or vomiting may transmit the infection to other children in a school setting. Your local health jurisdiction may require that children or employees with certain infections not return to school until they test negative for the infection or symptoms resolve.
- An infected individual may show no symptoms. Therefore, proper hand washing techniques and appropriate disposal of feces and materials contaminated with fecal material is always necessary.
- 5. Ensure safe food handling practices for students and staff in the school environment, especially hand washing, use of gloves or utensils when preparing uncooked items, control of food holding temperatures, rapid cooling, adequate cooking and reheating, protecting food from contamination by raw meats, poultry or eggs, and preparing food only when feeling well. It is important to note that, with few exceptions, foods of animal origin (meat, dairy, eggs) or containing animal products, and cooked rice or beans must be refrigerated (less than 40°F) or held hot (greater than 140°F).
- 6. Prior to preparing or serving food in a classroom, teachers and students should be made aware of safe food handling practices and sanitize surfaces where food is prepared or served, including student desks.
- Ensure adequate hand washing 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).
- 8. Educate students of all ages in proper hand washing techniques before eating, after using the bathroom, and after touching or handling animals.
- Provide education on the basic principles of food safety to students as appropriate, based on student's ability to understand and utilize concepts. Emphasis should be placed on hand washing, proper cooking, cooling, temperature control, and preventing contamination.
- 10. Do not allow raw milk or inadequately cooked meat or eggs to be served to students, including during field trips. Also have students wash hands after being in an environment with animals, particularly during field trips.

## **Foodborne Disease (cont.)**

11. Surfaces where diapers are changed must be cleaned, rinsed, and disinfected after each use (see Appendix VIII, *Guidelines for Handling Body Fluids in Schools*). Whenever possible, different staff should change diapers and prepare food for students.

#### **Resources**

 Washington State Department of Health Foodborne Illness: <a href="http://www.doh.wa.gov/YouandYourFamily/IllnessandDisease/FoodborneIllnesses.aspx">http://www.doh.wa.gov/YouandYourFamily/IllnessandDisease/FoodborneIllnesses.aspx</a>

## 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. The sores 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 forming fluid-filled vesicles (blisters). The rash does not itch and is usually located on the palms of the hands and the soles of the feet. It may also appear on the buttocks. A person with HFMD may have only the rash or the mouth ulcers.

Outbreaks of HFMD occur from time to time. Beginning in 2008, large outbreaks of HFMD were reported from Asia (China, Singapore, Vietnam, Mongolia, and Indonesia) due a specific virus (HEV 71). Neurological complications and deaths have been reported from these outbreaks.

#### **Mode of Transmission**

Several related viruses cause HMFD. They are 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 but may shed the virus after symptoms are gone. 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 Staff/Nurse Responsibility

- 1. Students with a rash illness, especially if fever and/or other symptoms are present, should be referred to a health care provider for diagnosis. Students should not return to school until after the fever is gone (normally for 24 hours) and the child feels well enough to participate in normal activities.
- 2. Immediately report to your <u>local health jurisdiction</u> suspected HFMD outbreaks associated with a school.
- 3. Maintain and support confidentiality for the student.

## Hand, Foot, and Mouth Disease (HFMD) (cont.)

4. Exclude students only if they are too ill to participate in school activities. Isolation is not necessary.

### **Control of Spread**

- 1. Utilize standard precautions (see Appendix VIII, *Guidelines for Handling Body Fluids in Schools*).
- 2. Refer to district infection control program protocols and policy for infectious diseases.
- 3. Clean or dispose of articles soiled with nose and throat discharges and wash hands after handling such articles.
- 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 hand washing techniques.

## **Hepatitis**

The word hepatitis is a general term meaning "inflammation of the liver." Symptoms may include fatigue, loss of appetite, low-grade fever, nausea, abdominal pain, gastrointestinal upset, diarrhea, and, in some cases, jaundice (new yellow color of the skin or eyes, with dark urine).

Hepatitis can be caused by many things including drugs, toxins, and viruses. There are several types of infections classified as viral hepatitis, each caused by a different virus. The types of viral hepatitis differ in modes of transmission and clinical course. The signs and symptoms of these infections are indistinguishable so laboratory testing is necessary to distinguish between them. The major types are hepatitis A, hepatitis B, and hepatitis C. These viruses affect only humans.

## **Hepatitis A Virus (HAV) Infection**

### Description

The onset of hepatitis A virus (HAV) infection is usually abrupt with symptoms as described above. HAV infection 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 positive laboratory tests of serum for antibodies to HAV along with abnormalities in liver function tests. There is no chronic infection with HAV.

#### **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. Most cases in Washington result from travel outside the country.

Previous infection or vaccine protects against HAV infection. If given within 2 weeks of exposure, vaccine or immune globulin may prevent infection with HAV in somebody exposed.

#### **Incubation Period**

15–50 days, average 28–30 days.

#### Infectious Period

A person with HAV infection is most likely to spread it during the 2 weeks before onset of jaundice 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. The virus can spread through fecal-oral transmission even if there is no diarrhea.

## Hepatitis (cont.)

### School Staff/Nurse Responsibility

- 1. Immediately report to your <u>local health jurisdiction</u> suspected or confirmed HAV outbreaks associated with a school and any suspected case.
- 2. Refer students or staff with jaundice or acute symptoms to a licensed health care provider immediately.
- 3. Consult with your <u>local health jurisdiction</u> to determine if anyone exposed to a case should receive HAV vaccine or immune globulin. Under normal circumstances, casual contacts at school (teachers, classmates, etc.) are not at significant risk for contracting the disease. Friends sharing food with an infected student may be considered exposed. In the unusual circumstance of a school-centered epidemic, vaccine or immune globulin is recommended for prevention (prophylaxis) of infection in close contacts.
- 4. Enforce strict confidentiality of health care information for known or suspected acute infections.
- 5. Enforce a ban on food handling by infected staff or students until cleared by your local health jurisdiction.
- 6. 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 or vaccine may be necessary for staff, attendees, and family members when there is a child care outbreak.

## **Control of Spread**

- 1. Utilize standard precautions (see Appendix VIII, *Guidelines for Handling Body Fluids in Schools*).
- 2. Refer to district infection control program protocols and policy for infectious diseases.
- 3. Exclude cases from school until cleared by a licensed health care provider to return.
- 4. Illness among a student's family members may be the tip-off of possible HAV transmission in a classroom, particularly among younger children. Students may be infectious and spread the disease even though they do not themselves show signs of illness.

## **Hepatitis (cont.)**

- 5. HAV vaccine or immune globulin should be administered to family or other close contacts of cases as soon as possible. Prevention is effective only when given within two weeks of exposure. Your <u>local health jurisdiction</u> will advise schools as to the appropriate course of action.
- 6. Using gloves during diaper changing and paying strict attention to hand washing are required in child care settings.
- 7. Discourage sharing of beverage containers and food among students.

#### **Future Prevention and Education**

A safe and effective Hepatitis A vaccine is available and routinely recommended for children beginning at 12 months of age. It is given in two doses, the second dose 6 months after the first. Hepatitis A vaccine is not required for school entry.

HAV is generally spread by fecal-oral transmission. Students should be instructed in proper hand washing techniques before eating and after using the bathroom. Personal hygiene, especially careful hand washing after every diaper change and before eating, is important.

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 B Virus (HBV) Infection**

### **Description**

The onset of hepatitis B virus (HBV) infection is generally more gradual and subtle than viral HAV but with the same symptoms: anorexia, nausea, vomiting, abdominal discomfort, and sometimes jaundice (new yellow color of the skin or eyes, with dark urine). Severity of the disease can vary from unapparent cases recognized by blood tests, to a rapidly worsening or fatal illness. Most people recover from the infection, though up to 5 percent of adults born in the United States become chronically infected. The overall rate of chronic infection for people from other parts of the world is 1–20 percent. Chronic infection may result in liver damage and liver cancer. Since about 50 percent of infections are without symptoms, persons with acute or chronic HBV infection may not know they have HBV but still may be able to infect others.

#### **Mode of Transmission**

HBV is transmitted by exposure to body fluids including infected blood or blood products, vaginal fluids, semen, and possibly saliva. Transmission from body fluids occurs through mucous membranes or non-intact skin. HBV is transmitted from person to person mainly by contaminated syringes, needles and other instruments (including ear piercing instruments), intravenous drug use, sexual contact, or from an infected mother to her infant. Close contact with an infected person can also result in transmission, particularly in residential facilities. High rates of infection have been found among users of illegal intravenous drugs, 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

During the acute infection, blood and body fluids are most contagious prior to and for weeks after jaundice develops. 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, for the rest of the person's life if the illness develops into a chronic infection.

### School Staff/Nurse Responsibility

- 1. Screen for school vaccine requirement.
- 2. Immediately report to your <u>local health jurisdiction</u> any suspected or confirmed HBV cases. Reporting is mandatory.

## **Hepatitis (cont.)**

- 3. Refer students or staff with jaundice or acute symptoms to a licensed health care provider immediately.
- 4. Consult with your <u>local health jurisdiction</u> 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 facility outbreak, HBIG is recommended for prevention (prophylaxis) for close contacts who may have been exposed.
- 5. Enforce strict confidentiality of health care information for known or suspected acute or chronic infections.
- 6. Use cleaning precautions with all body fluids as outlined in *Guidelines for Handling Body Fluids in Schools*, Appendix VIII.

### **Control of Spread**

- 1. Utilize standard precautions (see Appendix VIII, *Guidelines for Handling Body Fluids in Schools*).
- 2. Refer to district infection control program protocols and policy for infectious diseases.
- 3. Consult with your <u>local health jurisdiction</u> if there are any questions about a person with acute or chronic HBV infection attending or working in a school.
- 4. HBIG is not indicated for casual school contacts, although HBIG and HBV vaccine may be administered to certain contacts if blood transmission occurs.
- 5. Use cleaning precautions with all body fluids as outlined in *Guidelines for Handling Body Fluids in Schools*, Appendix VIII.
- 6. Using gloves during first aid care of students or when handling bloody items and paying strict attention to hand washing are required in child care settings
- 7. Employers are required to provide evaluation for employees exposed to blood or other potentially infectious material under the Washington Industrial Safety and Health Act (WISHA) bloodborne pathogens rule (WAC 296-823). (See <a href="http://www.lni.wa.gov/WISHA/Rules/bbpathogens/default.htm">http://www.lni.wa.gov/WISHA/Rules/bbpathogens/default.htm</a>.)

#### **Future Prevention and Education**

1. A safe and effective vaccine is available and recommended for all children 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.

## **Hepatitis (cont.)**

- 2. School staff with designated job duties that may involve exposure to blood must be offered HBV vaccine. Staff having frequent or routine contact with blood, skin lesions, saliva, or infected secretions (such as occurs in doing first aid, health or nursing procedures) of potentially HBV-infected individuals or high-risk groups (de-institutionalized mentally disabled persons, individuals from certain areas of Asia and Africa) should receive HBV vaccine. Contact your local health jurisdiction and/or Washington State Department of Labor and Industries industrial hygiene consultant to evaluate the need to immunize individual school staff. The employer is responsible for complying with all provisions of the WISHA bloodborne pathogens rule WAC 296-823. For additional information, see Guidelines for Implementation of School Employee Training on HIV/AIDS and Other Bloodborne Pathogens (available from OSPI Health Services at 360-725-6040 or
  - http://www.k12.wa.us/healthservices/pubdocs/GuidelinesHIVBloodborne.pdf).
- 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.
- 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 likely infectious blood or serous secretions 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. Immediate 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. Instruct all staff in standard precautions and reinforce training each school year.

## **Hepatitis C Virus (HCV) Infection**

### **Description**

The onset of hepatitis C virus (HCV) infection is generally more gradual and subtle than viral HAV with the following symptoms: anorexia, nausea, vomiting, abdominal symptoms, and sometimes jaundice (new yellow color of the skin or eyes, with dark urine). The vast majority of people with acute HCV infection (up to 90 percent) have no symptoms so infection is frequently unrecognized. Up to 80 percent of infections become chronic and up to 20 percent of those cases develop cirrhosis after many years. Chronic infection may also result in liver cancer. About 2 percent of the population in the United States is chronically infected and HCV is currently the most common reason for a liver transplant. Worldwide, the overall rate of chronic infection is 3 percent but reaches 10 percent in some countries. Similar to viral HBV, acutely and chronically infected persons may lack symptoms but can still 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 Staff/Nurse Responsibility

- 1. Immediately report to your <u>local health jurisdiction</u> suspected or confirmed HCV cases.
- 2. Refer students or staff with jaundice or acute symptoms to a licensed health care provider immediately.
- 3. Enforce strict confidentiality of health care information for known or suspected acute infections.

## Hepatitis (cont.)

### **Control of Spread**

- 1. Utilize standard precautions (see Appendix VIII, *Guidelines for Handling Body Fluids in Schools*).
- Refer to district infection control program protocols and policy for infectious diseases.
- 3. Consult with your <u>local health jurisdiction</u> if there are any questions about a person with acute or chronic HCV infection attending or working in a school.
- 4. Using gloves during first aid care of students or when handling bloody items and paying strict attention to hand washing are required in child care settings.
- Unlike HAV and HBV, there is no effective treatment to prevent infection after exposure. Employers are required to provide evaluation for employees exposed to blood or other potentially infectious materials under the WISHA bloodborne pathogens rule (<u>WAC 296-823</u>). (See <a href="http://www.lni.wa.gov/WISHA/Rules/bbpathogens/default.htm">http://www.lni.wa.gov/WISHA/Rules/bbpathogens/default.htm</a>.)
- 6. Use cleaning precautions with all body fluids as outlined in *Guidelines for Handling Body Fluids in Schools*, Appendix VIII.

#### **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 cuts or wounds, 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 provisions under the WISHA bloodborne pathogens rule (WAC 296-823). See Guidelines for the Implementation of School EmployeeTraining on HIV/AIDS and Other Bloodborne Pathogens (available from OSPI Health Services at 360-725-6040 or <a href="http://www.k12.wa.us/healthservices/pubdocs/GuidelinesHIVBloodborne.pdf">http://www.k12.wa.us/healthservices/pubdocs/GuidelinesHIVBloodborne.pdf</a> or the WISHA Web site at <a href="http://www.lni.wa.gov/wisha/">http://www.lni.wa.gov/wisha/</a> 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 immediately for evaluation as required by the WISHA bloodborne pathogens rule.
- The Advisory Committee on Immunization Practice recommends that persons with HCV be immunized with HAV and HBV vaccines.
- Instruct all staff in standard precautions and reinforce the training each school year.

## **Hepatitis (cont.)**

#### Resources

- The CDC Web site on hepatitis provides updated material on viral hepatitis at <a href="http://www.cdc.gov/hepatitis">http://www.cdc.gov/hepatitis</a>. Clinicians seeking more information or question and answer sheets on hepatitis topics can also find material at this site.
- The Washington State Department of Health Hepatitis Information: http://www.doh.wa.gov/YouandYourFamily/IllnessandDisease/Hepatitis.aspx
- 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. <a href="http://www.nccc.ucsf.edu/about\_nccc/pepline/">http://www.nccc.ucsf.edu/about\_nccc/pepline/</a>
- For Washington State Department of Labor and Industries information on bloodborne pathogens and training see <a href="http://www.lni.wa.gov/safety/topics/atoz/topic.asp?KWID=39">http://www.lni.wa.gov/safety/topics/atoz/topic.asp?KWID=39</a>.

## Herpes Simplex Virus, Oral Area (Cold Sores)

### **Description**

Herpes simplex virus (HSV) causes a recurrent, life-long viral infection. Of those infected, 70 percent have no symptoms. Symptoms occur as single or grouped vesicles (blister) usually located around mucous membranes, the lips (cold sores), throat, inside the mouth or on the skin (e.g., herpetic whitlow consisting of one or more vesicular lesions on the fingertips). Fever can occur along with the vesicles.

There are two types of HSV. Type 1 HSV (orales) has primarily been associated with infections of the oral area but can cause genital disease. Oral infections are extremely common in children, and by adulthood 80 percent of Americans have antibodies to Type 1 HSV. Type 2 HSV (labalis) is most commonly associated with genital disease but can also cause oral disease. The two types have the same infectiousness or risk to others. Complications include conjunctivitis, keratitis (inflammation of the cornea), herpes infection of existing eczema or meningitis. Infection in the newborn can be severe.

#### **Mode of Transmission**

Types 1 and 2 HSV are both transmitted by direct contact with infected skin and secretions during periods viral shedding, regardless of symptoms. HSV lesions are most infectious while they are in the vesicular stage. The virus may be transmitted from the mouth or skin during contact sports such as wrestling, resulting in localized skin lesions (herpes gladiatorum, commonly called Wrestler's Herpes).

#### **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 to transmit herpes. 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 surfaces pose a small potential risk to contacts except during certain sports. Exclusion of students with recurrent infection of cold sores only is not indicated, but exclude from contact sports if there are skin lesions.

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

### School Staff/Nurse Responsibility

#### Cold Sores—Skin Lesions

- 1. Immediately report to your <u>local health jurisdiction</u> suspected or confirmed herpes outbreaks associated with a school (e.g., among a wrestling team).
- 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. Wash hands after gloves are removed.
- 4. Exclude students with skin lesions from contact sports such as wrestling.
- 5. Conduct routine cleaning of shared sports equipment such as wrestling mats.
- 6. Encourage keeping children less than the age of 3–4 years at home when cold sores are present, especially during the initial episode. It is difficult to prevent young children from spreading the virus by fingers and/or mouth contact.
- 7. Registered nurses may assess skin lesions to allow student to return to school-related activities.
- 8. Maintain and support confidentiality for the student.

Genital Herpes (see page 117 for more information).

- 1. Report suspected initial (primary) genital infection to your local health jurisdiction.
- 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. Utilize standard precautions (see Appendix VIII, *Guidelines for Handling Body Fluids in Schools*).
- Refer to district infection control program protocols and policy on infectious diseases.
- 3. Advise student to avoid spread of HSV by fingers, shared items, or kissing. Reinforce proper hand washing techniques.
- 4. Educate student about good personal hygiene and avoiding oral-oral or genitaloral transmission.

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

- 5. Instruct students not to share items that may be contaminated with saliva such as lipstick and beverage containers.
- 6. Dispose of bandages that have been in contact with the vesicles (blisters) in an appropriate bagged receptacle.
- 7. Disinfect surfaces that have been in direct contact with fluid from the vesicles (blisters).

#### **Future Prevention and Education**

Provide education and counseling regarding transmission of diseases, recurrence potential, available treatments, and recommended sexual practices to prevent spread (see Appendix VIII, *Guidelines for Handling Body Fluids in School*).

## **Herpes Zoster (Shingles)**

### **Description**

Herpes zoster, commonly known as shingles, is caused by the chickenpox (varicella) virus. Herpes zoster represents a recurrence of a previous chickenpox infection. When an individual has chickenpox, the virus infects the nerves and stays dormant. If immunity decreases the person develops shingles. 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.

Herpes zoster causes pain (post-herpetic neuralgia) sometimes severe, over the pathways of the sensory nerves under one body area, followed by an outbreak of small vesicles (blisters) in the same area. It usually lasts 3–4 weeks. 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. The virus, which is present in the vesicle (blister) fluid of a person who has herpes zoster, is contagious and can cause chickenpox in a non-immune individual.

#### **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. Virus from the vesicle fluid of a person with herpes zoster can rarely cause chickenpox in a non-immune individual.

### School Staff/Nurse Responsibility

- 1. Report to your local health jurisdiction is not required.
- Make referral to licensed health care provider if necessary.
- 3. Advise student not to touch or scratch lesions.
- Educate student about good personal hygiene, especially proper hand washing techniques.
- 5. Avoid direct contact with infected lesions if possible. Wear gloves if direct hand contact to lesions is necessary. Wash hands after gloves are removed.
- 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 or cannot be covered with a bandage or clothing.

## Herpes Zoster (Shingles) (cont.)

- 7. Exclude students with skin lesions from contact sports such as wrestling.
- 8. Conduct routine cleaning of shared sports equipment such as wrestling mats.
- 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.
- 10. Maintain and support confidentiality for the student.

### **Control of Spread**

- 1. Utilize standard precautions (see Appendix VIII, *Guidelines for Handling Body Fluids in Schools*).
- Refer to district infection control program protocols and policy for infectious diseases.
- 3. Dispose of bandages that have been in contact with the vesicles (blisters) in an appropriate bagged receptacle.
- 4. 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. Two doses of varicella vaccine are required for school entry. See implementation schedule at <a href="http://www.doh.wa.gov/Portals/1/Documents/Pubs/VaricellaImplementationPlan.pdf">http://www.doh.wa.gov/Portals/1/Documents/Pubs/VaricellaImplementationPlan.pdf</a>

Make sure all students are up to date on varicella vaccine. Notify parent or guardian of inadequately or unimmunized students in the effected classroom(s) that exposure to chickenpox could possibly have occurred.

A vaccine for shingles was licensed in the United States in 2006. Adults 60 years and older should receive a single dose.

## **Human Immunodeficiency Virus (HIV)**

### **Description**

Human Immunodeficiency Virus (HIV) is a virus that can cause Acquired Immunodeficiency Syndrome (AIDS). 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, which 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:

- 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 and sexual intercourse. In rare occasions, HIV can also be transmitted through blood exposure to eyes, mucous membranes, or cuts or sores in the skin.
- 2. Some people with HIV infection 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. Many people living with HIV disease take antiretroviral treatment (ARTs) to control their infection. As new medications are developed, ART continues to become more effective. As a result, HIV-infected persons who are fully adherent to their ART regimens can have undetectable HIV viral loads. Suppressed viral load reduces the health consequences associated with HIV infection and reduces the probability that an HIV-infected person will transmit the virus to an uninfected person. Early diagnosis is crucial in assisting HIV-infected people to obtain appropriate medical care and treatment.
- 4. Untreated, HIV often will lead to AIDS. AIDS is a life-threatening condition. Opportunistic infections may eventually overwhelm the immune system, resulting in death.

#### **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, in rare cases, through contact with blood or its components from infected individuals. When a student with HIV infection or AIDS is enrolled in public

## **Human Immunodeficiency Virus (HIV) (cont.)**

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 susceptible to infectious diseases. Standard 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, and (2) 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 living with HIV disease (including 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 vectors 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 WISHA bloodborne pathogens rule <u>WAC 296-823</u>.

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 or during breastfeeding. Washington State currently has few diagnosed pediatric AIDS cases.

### School Staff/Nurse Responsibility

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

## **Human Immunodeficiency Virus (HIV) (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).
- d. A resource and educator provide in-service 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).
- 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.
- 3. Make referral to licensed health care provider promptly for acute symptoms.
- 4. Use cleaning precautions with all body fluids as outlined in *Guidelines for Handling Body Fluids in Schools*, Appendix VIII.
- 6. Utilize standard precautions (see Appendix VIII, *Guidelines for Handling Body Fluids in Schools*).
- 7. Refer to district infection control program protocol and policy for infectious diseases.
- 8. Inform parent/guardian to keep the immune-compromised 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

Access HIV treatment information at: AIDS Info at National Institutes of Health (NIH): <a href="http://www.aidsinfo.nih.gov/guidelines/

HIV Care—Washington State Department of Health (DOH): <a href="http://www.doh.wa.gov/YouandYourFamily/IllnessandDisease/HIVAIDS/HIVCareClientServices.aspx">http://www.doh.wa.gov/YouandYourFamily/IllnessandDisease/HIVAIDS/HIVCareClientServices.aspx</a>

## **Impetigo**

### **Description**

Impetigo is a common skin infection caused by Streptococcal or Staphylococcal bacteria. Fluid-filled blisters with "honey-colored" scabs often form. Some skin lesions also may appear as red-colored pimples. Lesions may be found on the face, especially around the mouth and nose, but may be found on other areas of the body. Other streptococcal infections include sore throat, scarlet fever, and necrotizing fasciitis (flesheating bacteria). See Streptococcal section.

#### **Mode of Transmission**

The bacteria which cause Impetigo are found normally on the skin. Any injury or break in the skin can permit the bacteria to invade the skin and cause infection.

Impetigo may be acquired most commonly from contact with a person with Impetigo lesions, or less likely from contact with objects or surfaces containing the bacteria. An infected person with sores on one pare of the body can also spread sores to a different location on the body.

#### **Incubation Period**

Sores develop 7 to 10 days after bacteria enter the skin.

#### Infectious Period

Lesions are considered infectious until treatment has been administered for 24 hours. Lesions are less likely to be infectious once the scabbing lesions have healed.

#### School Staff/Nurse Responsibility

- Notify parent or guardian and make make referral to licensed health care
  provider if lesions are identified. The student does not need to be sent home
  prior to the end of the day if the lesions can be covered and kept dry. The
  disease responds very quickly to systemic antibiotic treatment and/or prescription
  topical antibiotic ointments.
- 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.
- 3. Notify your local health jurisdiction if several children develop Impetigo.
- 4. Maintain and support confidentiality for the student.

## Impetigo (cont.)

### **Control of Spread**

- 1. Utilize standard precautions (see Appendix VIII, *Guidelines for Handling Body Fluids in Schools*).
- 2. Refer to district infection control program protocols and policy for infectious diseases.
- 3. Wash hands frequently to prevent spread, especially after coughing or sneezing.
- 4. Students should not participate in swimming, body contact sports, or food preparation activities until all lesions are healed.
- 5. Antibiotics will decrease the spread of the disease and decrease the incidence of complications from the bacterial infection.
- 6. Good personal hygiene and soap and water cleansing of minor skin breaks will help to prevent spread.
- 7. Students should be discouraged from sharing towels, clothing, and other personal items.

#### **Future Prevention and Education**

No vaccine is available.

Skin wounds should be kept clean and observed for possible signs of infection.

## **Infectious Mononucleosis (Mono)**

## **Description**

Infectious mononucleosis (Mono), also known as the "kissing disease," is an acute illness caused by the Epstein-Barr virus (herpes family) and is 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. In the adolescent in particular, there can be swelling and tenderness of the spleen. Mono is a disease that may be difficult to identify and is usually diagnosed through laboratory procedures. It may be important to distinguish mono from other conditions such as Strep throat. Mono is not highly contagious and there is no specific treatment.

### **Mode of Transmission**

Mono is transmitted through close person-to-person contact (including sharing of water bottles).

### **Incubation Period**

10-50 days.

### **Infectious Period**

Uncertain, but may be long (several months).

### School Staff/Nurse Responsibility

- 1. Students with a rash illness, especially if fever and/or other symptoms are present, should be referred to a health care provider for diagnosis. Students should not return to school until after the fever is gone (normally for 24 hours) and the child feels well enough to participate in normal activities.
- Report to your local health jurisdiction is not required.
- 3. Make referral to a licensed health care provider if mono is suspected. Follow medical recommendations for confirmed cases.
- 4. Modify the student's schedule if necessary. If periods of fatigue persist, student should be allowed to rest.
- 5. Request physical activity clearance from licensed health care provider before student returns to school-related physical activities.
- 6. If acute abdominal pain occurs in first 6 weeks of illness after participation in a contact sport, monitor vital signs and arrange immediate evaluation by health care provider.

## Infectious Mononucleosis (Mono) (cont.)

7. Maintain and support confidentiality for the student.

## **Control of Spread**

- 1. Utilize standard precautions (see Appendix VIII, *Guidelines for Handling Body Fluids in Schools*).
- 2. Refer to district infection control program protocols and policy for infectious diseases.
- 3. Instruct students not to share items that may be contaminated with saliva such as lipstick and beverage containers.
- 4. Clean or dispose of articles soiled with nose and throat discharges.
- 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 hand washing 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 (Flu)

## **Description**

Influenza (flu) is an acute viral infection characterized by abrupt onset of fever, headache, fatigue, chills, cough, sore throat, and/or aching muscles. Vomiting and diarrhea may occur but are not common. Infections can be mild to severe with symptoms lasting from a few days to several weeks. Annual activity most commonly occurs between December and April. Complications are more severe for the very young, the very old, and pregnant women.

### Note

Influenza is a disease of the respiratory tract. Gastrointestinal symptoms alone, often reported as "flu" or "stomach flu," do not constitute influenza. Diagnosis can be confirmed by laboratory tests on respiratory secretions.

#### Mode of Transmission

Influenza is spread from person-to-person by respiratory droplets produced when a person coughs, sneezes, or talks.

### **Incubation Period**

1–4 days.

### Infectious Period

People are generally infectious to others beginning 1 day before symptoms start until up to 7 days after becoming sick. Some children can be infectious longer than 7 days.

### School Staff/Nurse Responsibility

- Report to your <u>local health jurisdiction</u> significant increases in school absenteeism resulting from influenza-like illness or clusters of particularly severe infections. (WAC 246-101-525).
- 2. Some local health jurisdictions may request notification of student absenteeism greater than 10 percent during flu season.
- 3. Make referral to licensed health care provider for exceptionally severe cases.
- 4. Maintain and support confidentiality for the student.

#### Note

Children with symptoms of influenza should not receive aspirin because of its possible association with Reye syndrome.

## Influenza (Flu) (cont.)

## **Control of Spread**

- 1. Utilize standard precautions (see Appendix VIII, *Guidelines for Handling Body Fluids in Schools*).
- 2. Refer to district infection control program protocols and policy for infectious diseases
- 3. Annual Influenza vaccination is the most effective way to control the spread of influenza in schools.
- 4. Respiratory and hand hygiene should be encouraged to help reduce the spread of influenza in the classroom setting.
- 5. Students with flu-like illness should be excluded from school until after the fever is gone (normally for 24 hours) and the child feels well enough to participate in normal activities.

#### **Future Prevention and Education**

Annual seasonal influenza shots are recommended for all persons beginning at 6 months of age. Some children 6 months through 8 years require 2 doses one month apart. Persons 9 years and older only need 1 dose of seasonal influenza vaccine annually.

Influenza season in the United States generally occurs sometime between December and April. Two types of vaccine are available in the United States for children—trivalent inactivated influenza vaccine (TIV) and live attenuated influenza vaccine (LAIV). Both types of vaccine are effective in the control of influenza. The vaccine is made each year with the strains of influenza virus expected to cause the most infection. Annual vaccinations should begin with the availability of the seasonal vaccine and continue until flu activity subsides. Influenza has a substantial impact among school-aged children and their contacts. These impacts include school absenteeism, medical care visits, and parental work loss. 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. School closure is not generally recommended during an outbreak unless inadequate number of staff is available to carry on a program.

- 1. In order to limit transmission of influenza in a school, students should be instructed to:
  - Avoid sharing items that may be contaminated with saliva such as beverage containers.
  - Clean or dispose of articles soiled with nose and throat discharges.

# Influenza (Flu) (cont.)

- Cover their mouths 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.
- Use proper hand washing techniques.

## Lice (Pediculosis)

## **Body Lice (Pediculosis humanus corporis)**

## **Description**

Different kinds of lice affect the head, body, and pubic areas.

Body lice are tiny parasitic insects, about the size of a sesame seed. Body lice are most commonly found in crowded and unhygienic conditions, among populations that have experienced disasters and/or difficult life circumstances, with no access to bathing facilities or the ability to change or launder clothing.

Body lice can be found in bedding and clothing, particularly in the inner seams of clothing. Body lice travel to the skin of a human host to feed on blood. The most common sites for lice bites are around the waist, groin and armpits—places where clothing seams are most likely to touch the skin.

Body lice are rare among children in the United States. The main signs of body lice infestation are intense itching, scratch marks, and the detection of lice eggs or moving lice. However, body lice are rarely seen on the body because they are usually sequestered in clothing.

Body lice have been associated with outbreaks of typhus, trench fever, and other epidemic conditions in the past among soldiers and refugees. Secondary bacterial infections may develop due to skin damage from scratching.

#### Mode of Transmission

Transmission occurs through contact with a person who has body lice or with personal articles such as clothing or bedding that are infested. Dogs, cats, and other animals do not transmit lice.

### **Incubation Period**

Body lice eggs (nits) normally hatch in 1 to 2 weeks, depending on the temperature. Mature body lice are capable of laying eggs 9 to 19 days after hatching. The adult life span is about 1 month with access to blood.

#### Infectious Period

Body lice can be spread as long as lice remain alive on the host or in clothing. Body lice are capable of moving to other human hosts and infesting the new host. Body lice cannot live away from a human host for more than 5 to 7 days at room temperature. Nits may survive for a month.

## School Staff/Nurse Responsibility

- 1. Make referral to licensed health care provider for diagnosis if body lice are observed or suspected.
- 2. All family members should be examined and treated simultaneously to avoid reinfestation.
- 3. Instruct the family to wash clothing and other personal items, such as bedding and towels, in 130°F water. Machine-dry using the hottest setting for at least 20 minutes. Temperatures of at least 130°F will kill the lice and eggs.
- 4. Home hot water heater temperatures can be raised to 130°F for washing clothing and bedding, and then returned to lower temperatures for showering and bathing. If water temperatures cannot be adjusted to 130°F, such as with public washing machines located in homeless shelters and laundromats, then infested items should be sealed in a plastic bag for 2 weeks to kill the lice and eggs, and then laundered afterwards to remove the dead lice and eggs.
- 5. Items that cannot be washed or dried in at least 130°F temperatures, or sealed in a plastic bag, may need to be discarded.
- Assess family situation and if necessary assist the family with community resources. Support the family in accessing showering or bathing facilities and regular changes of clean clothing and bedding.
- 7. Maintain and support confidentiality for the student.

### **Control of Spread**

- 1. Utilize standard precautions (see Appendix VIII, *Guidelines for Handling Body Fluids in Schools*).
- 2. Refer to district infection control program protocols and policy on infectious diseases.
- 3. Instruct family members to avoid having close physical contact with a person who is infested, and to avoid sharing bedding or clothing with that person.
- 4. All family members should be examined and treated simultaneously to avoid reinfestation.

### **Future Prevention and Education**

Improved access to bathing and laundering facilities, and access to regular changes of clean clothing, will decrease the likelihood of body lice outbreaks.

## **Crab Lice (Pediculosis humanus pubis)**

## **Description**

Different kinds of lice affect the head, body, and pubic areas.

Crab lice are parasitic insects measuring less than 1/8 of an inch that feed on human blood. Because their bodies and claws resemble sea crabs, they are nicknamed "crab lice" or "crabs." The primary symptom of crab lice is itching in the genital area. Nits (lice eggs) attached to the pubic hair shaft, or crawling lice may be seen. An infestation of crab lice is usually detected in the pubic hair but may also be found less commonly in other places where there is coarse body hair, such as armpits, legs, mustaches, beards, eyebrows, or eyelashes. Crab lice are not likely to be on the scalp or in head hair.

Crab lice do not carry infections. Secondary bacterial infections may develop due to skin damage from scratching. A person with crab lice may also have other sexually-transmitted infections or diseases.

#### **Mode of Transmission**

Crab lice are most frequently transmitted by sexual contact. Crab lice found on children may be a sign of sexual abuse or sexual exposure. However, a child may also become infested with crab lice if he or she shares a communal bed with adults who are infested. Occasionally, crab lice may be transmitted by contact with clothing or bedding of a person infested with lice.

A common misbelief is that crab lice can be spread by sitting on a toilet seat. This is extremely unlikely because lice do not have feet designed to hold on to smooth surfaces such as toilet seats, and lice need a human blood source to survive.

#### **Incubation Period**

Pubic lice eggs (nits) normally hatch in 6–10 day, depending on the temperature. Mature pubic lice are capable of laying eggs 2–3 weeks after hatching. The adult life span is about 1 month with access to blood.

### **Infectious Period**

Body lice can be spread as long as lice remain alive on the host or in clothing. Body lice are capable of moving to other hosts and infesting the new host. Crab lice cannot live away from a human host; most die within 2 days.

### School Staff/Nurse Responsibility

1. Make referral to licensed health care provider for diagnosis and treatment if crab lice are observed or suspected.

- 2. Consider child sexual abuse when crab lice are present in a student who is not sexually active. Reporting of suspected child abuse cases is mandatory.
- 3. Individuals with crab lice should be examined by a licensed health care professional for other sexually transmitted infections or diseases.
- 4. All potentially-affected persons (such as sexual partners or those sharing a bed) should be examined and treated simultaneously to avoid re-infestation.
- 5. Maintain and support confidentiality for the student.

## **Control of Spread**

- 1. Utilize standard precautions (see Appendix VIII, *Guidelines for Handling Body Fluids in Schools*).
- Refer to district infection control program protocols and policy on infectious diseases.
- 3. Instruct family members to avoid having close physical contact with a person who is infested, and to avoid sharing bedding or clothing with that person.

## **Head Lice (Pediculosis humanus capitis)**

## **Description**

Different kinds of lice affect the head, body, and pubic areas.

Head lice are parasitic insects less than 1/8 of an inch in length that feed on blood from the scalp. Lice eggs, called "nits", attach to a hair shaft until they hatch into live lice.

Lice and nits can be found on the head, eyebrows, or eyelashes, but are usually found on the scalp, particularly around and behind the ears and near the neckline at the back of the head. Head lice outbreaks are common in the United States among children between the ages of 3–12 years. Head lice are not a sign of poor hygiene or unclean homes or schools. Students of all socio-economic groups can be affected.

Signs and symptoms of head lice infestation include:

- 1. Itching on the head and scalp.
- 2. A tickling feeling of something moving on the head or in the hair.
- 3. The detection of live lice.
- 4. Nits (lice eggs) or empty cases from hatched lice attached to hairs.
- 5. Sores or scratch marks on the head caused by scratching.
- 6. Irritability and trouble sleeping. (Head lice are most active in the dark.)

Unlike body lice, head lice are not a health hazard 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.

Approaches to treating and 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. In some instances, head lice have become resistant to certain treatment methods. The information in this section reflects the current thinking of professional groups regarding head lice in schools.

The American Academy of Pediatrics provides current clinical reports that clarify and update the protocols for diagnosis and treatment of head lice, and provide guidance for the management of infested children in the school setting.

### **Mode of Transmission**

Transmission of head lice occurs most commonly by direct contact with a live louse through head-to-head contact. Transmission may be through play and interaction at school and at home, such as slumber parties, sports activities, at camp and on a

playground. It is uncommon for lice to be spread from inanimate objects such as hats, combs, brushes, pillows, helmets, headphones, or movie theatre seats. This is because head lice are not able to hold onto these materials or survive without the warmth and blood source of a human scalp. Head lice cannot survive away from the scalp for more than 2 days at room temperature. Nits are not easily transmitted because they are glued to the hair shaft.

#### Incubation Period

Head lice eggs (nits) normally hatch in 7–12 days. Mature head lice are capable of laying eggs 9–12 days after hatching. The adult life span is about 1 month.

### Infectious Period

Head lice can be transmitted as long as the lice remain alive. Only live, hatched lice—not nits—spread the infestation. By removing the nits, the possibility of hatching new lice is minimized. Nits found more than a quarter of an inch away from the scalp have already hatched or will never hatch. Nits need warmth from the scalp to remain viable.

## School Staff/Nurse Responsibility

- 1. Reporting to your <u>local health jurisdiction</u> is not required.
- 2. Immediate or long-term exclusion is no longer recommended. Students with live head lice can remain in class and go home at the end of the school day, be treated, and return to school after the appropriate treatment has begun. Students can return to school with nits following treatment. Nits may persist after initial treatment, therefore, students with nits should be allowed back in school the next day. Successful treatment should kill crawling lice.
- Notify parent/guardian of the suspected case. Suggest resources for parents on how to treat head lice, such as those available through the Washington State Department of Health Lice Web page: <a href="http://www.doh.wa.gov/CommunityandEnvironment/Pests/Lice.aspx">http://www.doh.wa.gov/CommunityandEnvironment/Pests/Lice.aspx</a>.
  - Other local health departments not listed on this site may also have materials available to share with families and staff (see Appendix XII for a listing of Washington State health jurisdictions).
- 4. Refer to a licensed health care provider for evaluation of secondary infection (such as skin infections from scratching), if suspected.
- 5. Maintain and support confidentiality for the student.
- 6. Utilize standard precautions (see Appendix VIII, *Guidelines for Handling Body Fluids in Schools*).

- 7. Refer to district infection control program protocol and policy for infectious diseases.
- 8. All family members should be examined and treated simultaneously to avoid reinfestation.
- 9. Discreetly manage lice infestations so that the student is not ostracized, isolated, humiliated, or psychologically traumatized.
- 10. Dispel head lice myths.
- 11. Routine or periodic classroom and schoolwide screenings are no longer recommended.
- 12. Students should be discouraged from close head-to-head contact with others.
- 13. Follow-up with the student and family to ensure that the infestation is being addressed appropriately until the infestation has ended.
- 14. Have pro-active policies and procedures in place for dealing with head lice in schools. Communicate the policy to parents and staff.
- 15. Advocate for discontinuation of "No Nit policies." Inform school administrators of current scientific research, evidenced based practice, recommendations from experts, and for reasons stated below.

#### **NOTE**

Both the American Academy of Pediatrics (AAP) and the National Association of School Nurses (NASN) advocate discontinuing "No Nit" policies (which require students to be free of lice and nits before returning to school). Such policies are not effective in controlling head lice outbreaks for the following reasons:

- Many nits are more than 1/4 inch from the scalp, which means they have already
  hatched and have left an empty casing, or will not hatch because they are too far
  away from the warm scalp to survive the nit stage.
- Nits are naturally attached or "glued" to hair shafts and are unlikely to transfer to other students.
- Unnecessary absenteeism negatively affects students, families, and schools.
- Misdiagnosis of nits is common during nit checks conducted by non-medical personnel.

### **Future Prevention and Education**

- 1. 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.
- 2. Assure students, parents/guardians, and staff that anyone can get head lice, and it is not an indication of lack of cleanliness. The parent/guardian should be encouraged to check their student's head for lice if the student is symptomatic.
- 3. Educate school personnel and parents about the revised guidelines regarding "No Nit" school policies.
- 4. The use of chemical sprays or "bug bombs" to treat the environment within the school setting is not recommended due to potential toxicity, harm to humans, and their lack of efficacy.
- 5. Minimize upholstered furniture in classrooms. Launder floor pillows, mats, and other shared fabric items regularly and dry in a hot dryer.

### Resources

American Academy of Pediatrics: Head Lice Policy (2002)

Statement of reaffirmation (2009)

Policy revision (2010)

http://aappolicy.aappublications.org/cgi/content/full/pediatrics;110/3/638

American School Health Association (2005). School Policies in the Management of Pediculosis. http://www.ashaweb.org/files/public/Resolutions/Pediculosis.pdf.

Centers for Disease Control and Prevention, Head Lice Information for Schools, <a href="http://www.cdc.gov/parasites/lice/head/schools.html">http://www.cdc.gov/parasites/lice/head/schools.html</a>.

National Association of School Nurses, <u>Position statement: Pediculosis Management in</u> the School Setting. (2011)

National Association of School Nurses, S.C.R.A.T.C.H: Head Lice Community Education Program

http://www.nasn.org/ToolsResources/SCRATCHHeadLiceResources.

Washington State Department of Health, Head Lice <a href="http://www.doh.wa.gov/CommunityandEnvironment/Pests/Lice.aspx">http://www.doh.wa.gov/CommunityandEnvironment/Pests/Lice.aspx</a>.

### **Measles**

## **Description**

Measles is a highly infectious viral disease that can lead to serious complications. These complications include ear infections, diarrhea, pneumonia, encephalitis, and even 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. Measles is now mainly related to international travel by persons who are not fully protected by vaccination with the measles, mumps, rubella (MMR) vaccine. A single case of measles is considered a public health emergency.

Measles begins with cold-like symptoms. The symptoms include a cough; runny nose; red, itchy, watery eyes; and a high fever (as high as 103–105°F). Two to four days after the symptoms begin; a raised, red rash will appear on the head and spread downward to become a full-body rash, usually lasting 5–6 days. People with measles appear quite ill.

#### **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**

About 10 days (range 7–18 days) from exposure to upper-respiratory symptoms. The average time from exposure to beginning of rash is 14 days.

#### Infectious Period

Measles is infectious from one day before the beginning of the respiratory symptoms (usually about 4 days before the rash onset) to 4 days after the appearance of the rash.

### School Staff/Nurse Responsibility

- 1. Screen for school vaccine entry requirement.
- 2. Any student with a rash illness, especially if fever and/or other symptoms are present, should be referred to a health care provider for diagnosis.
- 3. Report to your <u>local health jurisdiction</u> of suspected cases by telephone is mandatory and must be immediate.
- 4. Refer to a licensed health care provider for assessment. Assure that the provider's office staff is informed about possible measles before patient arrival in order to prevent transmission in the office waiting room.

## Measles (cont.)

- 5. 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 two weeks after international travel or travel to an area with known measles cases or after contact with someone with recent international travel or travel to an area with measles that has had a rash illness in the past 2–3 weeks.
- 6. Ensure students comply with Washington State immunization requirements (two documented doses of MMR vaccine). If a case is suspected, prepare a list of students and staff who may be susceptible—those who are unimmunized, or those who have no documentation of having had the disease or having been immunized with two doses of MMR.
- 7. Support school administrator in exclusion of susceptible students and staff as advised by your local health officer.
- 8. Measles vaccine is recommended for all adults born since 1957. Most adults born before 1957 are immune because they had measles 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 of measles in a school, staff will have to produce proof of immunity or vaccination, and your local health officer will exclude susceptible staff.
- 9. Maintain and support confidentiality for the student.

## **Control of Spread**

- 1. Utilize standard precautions. Measles is highly contagious through respiratory aerosols. (see Appendix VIII, *Guidelines for Handling Body Fluids in Schools*).
- 2. Refer to district infection control program protocols and policy for infectious diseases.
- 3. If a student in your school develops confirmed measles, your local health officer may require implementation of the following control measures:
  - Exclude confirmed case from school until four full days have passed since the appearance of rash.
  - Exclude students exempted from measles immunization or students without documentation of measles immunization for 21 days after last exposure, regardless of vaccine doses or immunoglobulin received after exposure.
  - c. Outbreak control measures listed above also apply to all staff at the affected school.

## Measles (cont.)

- 4. Provide a second dose of measles vaccine to all students with a history of only one dose of measles vaccine. Students that do not receive a second dose of measles vaccine during an outbreak will be excluded from school.
- 5. Instruct students never 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 hand washing techniques.

### **Future Prevention and Education**

Measles can be controlled and eventually eliminated if children are vaccinated fully and on time.

## **Meningitis**

## **Description**

Meningitis is an infection of the fluid of a person's spinal cord and the fluid that surrounds the brain. The infection can be 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). Haemophilus influenzae (H. flu) meningitis, which occurs mainly in children under five years, has been greatly reduced since the 1990s when the Haemophilus influenzae type b (Hib) vaccine was introduced. There are also vaccines for Pneumococcal and Meningococcal disease, but neither is required for school entry. Symptoms of bacterial invasive disease can include bacteremia, meningitis, infected joints, or pneumonia and usually develop guickly (over several hours or up to 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 and a blood or joint culture, depending on the symptoms. When treatment with antibiotics is started early, the likelihood of survival is increased.

### **Mode of Transmission**

Meningococcal disease is transmitted person-to-person through direct contact with respiratory and throat secretions such as through kissing or coughing in close proximity. It may also be spread by sharing beverage containers, cigarettes, or other smoking-related paraphernalia. It is not transmitted through the air after an infected person has left the room. Meningococcal disease is less contagious than the common cold or influenza. Outbreaks in schools or communities are extremely rare in this country. Both meningococcal and pneumococcal organisms are often found in the upper respiratory tract of healthy persons.

### **Incubation Period**

Variable depending on the agent, for meningococcal disease usually 2–10 days, for pneumococcal disease usually 1–4 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 Staff/Nurse Responsibility

1. Report to your <u>local health jurisdiction</u> immediately suspected or confirmed cases of meningitis or outbreaks associated with a school.

## Meningitis (cont.)

- 2. Report to your <u>local health jurisdiction</u> of confirmed invasive meningococcal disease is immediate and mandatory.
- 3. Referral to licensed health care provider of suspected cases is immediate and mandatory for meningitis.
- 4. Obtain accurate facts from your local health jurisdiction so appropriate information can be shared with school staff and parent/guardian of exposed students.
- 5. Maintain and support confidentiality for the student.

### **Control of Spread—Bacterial Meningitis**

- 1. Utilize standard precautions (see Appendix VIII, *Guidelines for Handling Body Fluids in Schools*).
- 2. Refer to district infection control program protocols and policy for infectious diseases.
- 3. Exclude from school until licensed health care provider releases student in consultation with your local health jurisdiction.
- 4. Household or other close contacts that may have been exposed to the respiratory secretions of a person with meningococcal disease should be referred to licensed health care provider for possible antibiotic prophylaxis.
- 5. 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.
- 6. 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.
- 7. In rare situations, certain types of meningococcal organisms cause clusters of cases, particularly in colleges. Special vaccination programs may be carried out in such circumstances. Your local health jurisdiction will provided specific guidance in these situations.
- 8. Instruct students not to share items that may be contaminated with saliva such as beverage containers.

## **Meningitis (cont.)**

- 9. Clean or dispose of articles soiled with nose and throat discharges.
- 10. 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.
- 11. Encourage proper hand washing techniques.

### **Future Prevention and Education**

- Current available meningococcal vaccines are protective against only four strains
  of meningococcal bacteria (A, C, Y, W-135). There are two kinds of
  meningococcal vaccine in the United States. Meningococcal conjugate vaccine
  (MCV4) is the preferred vaccine for people 55 years of age and younger.
  Meningococcal polysaccharide vaccine (MPSV4) is the only meningococcal
  vaccine for people older than 55.
- 2. Vaccination with a MCV4 vaccine is recommended routinely starting at age 11 years with revaccination at age 16 years. The meningococcal conjugate vaccines can be used at ages as early as 9 months for certain high risk infants/toddlers.
- 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.
- Meningococcal vaccine is recommended for use in control of serogroup C meningococcal outbreaks.
- 5. Pneumococcal vaccine is available to prevent invasive disease due to *Streptococcus pneumoniae* in children.
- Meningococcal vaccine is not required, but schools in Washington State are
  required to provide educational material about meningococcal disease to parents
  and guardians: <a href="http://apps.leg.wa.gov/RCW/default.aspx?cite=28A.210.080">http://apps.leg.wa.gov/RCW/default.aspx?cite=28A.210.080</a>.

### Resources

National Association of School Nurses (NASN) Voices of Meningitis Campaign <a href="http://www.nasn.org/ToolsResources/Immunizations/VoicesofMeningitisChallenge">http://www.nasn.org/ToolsResources/Immunizations/VoicesofMeningitisChallenge</a>

## Methicillin Resistant Staphylococcus Aureus (MRSA)

## **Description**

Staphylococcus aureus (S. aureus) is a bacterium that normally occurs on the skin. S. aureus can cause minor skin infections such as boils or impetigo. Rarely, S. aureus causes more serious infections of the bloodstream, urine, lungs, or other organs or tissues. An antibiotic resistant form, methicillin resistant S. aureus (MRSA), causes the same types of infections as antibiotic sensitive forms, but is harder to treat. Combined with influenza infection, MRSA pneumonia can be severe or fatal.

MRSA skin infections may be abscesses, impetigo, boils, or an infected open wound, causing fever, reddening, pain, warmth, swelling, and pus. The infection may be mistaken for a spider bite. Even without a culture for MRSA, any draining skin lesion should be considered infectious. There are no specific data for Washington about MRSA, but past studies suggest that the infection occurs at typical rates in the state.

### **Mode of Transmission**

Skin bacteria such as *S. aureus* spread by direct person-to-person contact, by shared items, or through contaminated surfaces. Shared items at schools could include towels, soap, razors, sports equipment such as helmets, and clothing.

### **Incubation Period**

Variable, since *S. aureus* can be on the skin or in the nares (nostrils) or an extended period before causing infection in a wound.

#### Infectious Period

People can have MRSA on the skin and not be infected, but spread the bacteria to others. Any boil, abscess, or open wound could have *S. aureus* or other bacterial infection.

## School Staff/Nurse Responsibility

- 1. Refer suspected cases to a licensed health care provider. MRSA may be treated with local care only or antibiotics may be appropriate.
- Report to your <u>local health jurisdiction</u> of individual cases is not required. If a cluster of three or more cases occurs in a single classroom or athletic team, notify your local health jurisdiction.
- 3. Follow standard precautions when doing wound care or touching a patient's mucous membranes. Wear gloves and wash hands immediately after removing the gloves.
- 4. Maintain and support confidentiality for the student.

## Methicillin Resistant Staphylococcus Aureus (MRSA) (cont.)

## **Control of Spread**

- 1. Utilize standard precautions (see Appendix VIII, *Guidelines for Handling Body Fluids in School*).
- 2. Refer to district infection control program protocols and policy for infectious diseases.
- 3. Cover any wound that is draining or has pus with a clean, dry bandage that is closed on all four sides.
- 4. If a draining wound cannot be safely covered, consult with health care provider to determine when it is safe for a student to return.
- 5. Consult with the health care provider to determine when it is appropriate for the student with skin lesions to return to a contact sport. Examine the wound to insure that it is not open and/or draining prior to their return.
- 6. Individuals with compromised immune systems may need to consult with their health care provider to determine if it is safe for them to be in a classroom with a student recovering from a MRSA infection.

## Return to play

The determination to return to sports following referral for a skin infection or diagnosis of MRSA or other skin infection is made by the school nurse in collaboration with the student's physician and/or the <u>local health jurisdiction</u>. It is made on a case by case basis using health information and is not a set number of days.

## CDC Guidance for Excluding Students with MRSA Infections from School

Unless directed by a physician, students with MRSA infections should not be excluded from attending school.

http://www.cdc.gov/mrsa/groups/advice-for-school-officials.html

All students should be instructed in the following, including students with possible or known MRSA infections:

1. Wash hands thoroughly with soap and water only, if soap and water **is not** available, use a generous amount of alcohol-based (62 percent plus) hand rub: before, or if not available, using an alcohol-based hand rub before eating, after bathroom use, and especially after changing bandages, touching nares (nostrils), mouth, eyes, wounds, drainage, other bodily fluids.

## Methicillin Resistant Staphylococcus Aureus (MRSA) (cont.)

- 2. Do not share personal items such as towels or razors.
- 3. Keep cuts and scrapes clean and covered with a bandage until healed.
- 4. Avoid contact with other people's wounds or bandages.

### **Future Prevention and Education**

The school should clean potentially contaminated surfaces with an EPA-registered disinfectant labeled effective against MRSA.

Clean health clinic surfaces frequently including cots and change or use disposable covers for pillows. Schools should establish cleaning procedures with EPA-registered disinfectants for frequently touched surfaces and surfaces that come into direct contact with the skin. There are special recommendations for sports settings:

- 1. Exclude athletes with active skin and soft tissue infections from participating in wrestling or other contact sports unless the wound can be properly covered.
- Exclude athletes with active skin and soft tissue infections from use of common use water facilities such as pools, whirlpools, or therapy pools unless cleaned between users.
- 3. Encourage use of a barrier (towel or layer of clothing) between the skin and shared equipment as well as surfaces such as benches.
- 4. Establish routine disinfectant cleaning of shared surfaces such as benches in weight-room, shower, pool areas, and wrestling mats (see *Guidelines for Handling Body Fluids in Schools*, Appendix VIII, L. Athletics).
- 5. Strongly encourage showering with soap immediately after participating in sports involving close personal contact (e.g. wrestling and football).
- 6. Strongly encourage athletes to wash athletic clothing after each use.
- 7. Require athletes to report skin lesions to coaches and require coaches to assess athletes regularly for skin infections and report findings to the school nurse.

#### Resources

Centers for Disease Control (CDC):

- MRSA Infections http://www.cdc.gov/mrsa/prevent/schools.html
- Information and guidance for school officials http://www.cdc.gov/mrsa/groups/advice-for-school-officials.html

## Methicillin Resistant Staphylococcus Aureus (MRSA) (cont.)

- Tacoma Pierce County Health Department (TPCHD)—MRSA: <a href="http://www.tpchd.org/health-wellness-1/mrsa-methicillin-resistant-staphylococcus-aureus/">http://www.tpchd.org/health-wellness-1/mrsa-methicillin-resistant-staphylococcus-aureus/</a>
- See the TPCHD Toolkits for Athletics, School Custodians, Elementary, Middle, and High Schools
- Washington State Department of Health—MRSA <a href="http://www.doh.wa.gov/YouandYourFamily/IllnessandDisease/AntibioticResistan-ce/MRSA.aspx">http://www.doh.wa.gov/YouandYourFamily/IllnessandDisease/AntibioticResistan-ce/MRSA.aspx</a>

## **Molluscum Contagiosum**

## **Description**

Molluscum Contagiosum is a viral skin infection (pox family) that causes raised, pearllike papules or nodules on the skin. It is a common infection in children often seen on the face, neck, armpit, arms, and hands.

Typically, the lesion of molluscum begins as a small, painless papule that may become raised up to a pearly, flesh-colored nodule. The papule often has a dimple in the center. The skin lesion commonly has a central core or plug of white, cheesy or waxy material.

The papules are about 2–5 millimeters wide. There is usually no inflammation and subsequently no redness unless there is trauma or a secondary infection. Scratching or other irritation may cause the virus to spread in a line or in groups, called crops. Typically there are a small number of lesions, usually between 2 and 20.

### **Mode of Transmission**

Molluscum lesions are mildly contagious and most often spread to other areas of the infected child's body instead of spreading to other children.

The virus can spread to others through direct contact with a lesion and contaminated objects, such as towels, clothing, or toys. Outbreaks have occasionally been reported in child care centers. Wrestlers or gymnasts may get it through contact with infected mats. Transmission has been associated with swimming pools though epidemiologic studies have failed to demonstrate conclusively how, or under what circumstances, recreational swimming might facilitate Molluscum Contagiosum virus transmission. The virus also spreads by sexual contact. Early lesions on the genitalia may be mistaken for herpes or warts but, unlike herpes, these lesions are painless. Having atopic dermatitis, the most common type of eczema, also increases the risk of getting Molluscum Contagiosum.

#### **Incubation Period**

Little has been verified with regard to the incubation period; however, it is estimated to be between 2 weeks and 6 months.

### **Infectious Period**

The period of communicability is unknown but once the lesions are gone, the individual is no longer contagious. Lesions may persist from a few months to a few years. In healthy individuals, these lesions ultimately disappear without scarring, unless there is excessive scratching, which may leave marks. Individual lesions usually disappear within about 2–3 months. Complete disappearance of all lesions generally occurs within about 6–18 months. The infection may persist and show rapid progression in immunosuppressed people.

## **Molluscum Contagiosum (cont.)**

## **School Staff/Nurse Responsibility**

- Refer to licensed health care provider if there are symptoms suggestive of Molluscum Contagiosum. Because Molluscum Contagiosum is self-limited in healthy individuals, treatment may be unnecessary. Nonetheless, issues such as lesion visibility, underlying atopic disease, and the desire to prevent transmission may prompt therapy. There are a variety of treatment options currently available.
- 2. If possible, keep the area with growths clean and covered with clothing or a bandage to minimize risk of direct contact.
- 3. Participation in close-contact sports such as wrestling and basketball, or those that use shared equipment like gymnastics and baseball should be avoided unless all lesions can be covered by clothing or bandages. Seek guidance from the licensed health care provider to determine when the student can safely return to these activities.
- 4. Swimming should also be avoided unless all growths can be covered by watertight bandages. Personal items (such as towels, goggles, and swim suits) should not be shared. Other items and equipment (such as kick boards and water toys) should be used only when all bumps are covered by clothing or watertight bandages.
- 5. Follow cleaning guidance found in Appendix VIII to minimize the risk of spreading this and other viruses in schools and child care settings. Note that careful cleaning of shared toys or sporting equipment such as wrestling and gymnastic mats, is important.
- 6. Use precautionary measures to minimize the risk of spreading Molluscum Contagiosum in communal swimming pools. Routine disinfection of pools with chlorine, cleaning of pool toys, kickboards, and thorough washing of towels, can help prevent transmission.
- 7. Use standard precautions when there is any risk that you may come into contact with lesions (see Appendix VIII, *Guidelines for Handling Body Fluids in School*).
- 8. Refer to district infection control program protocols and policy for infectious diseases.
- 9. Maintain student confidentiality.

### **Future Prevention and Education**

Inform students that scratching or picking the lesions can spread it to other parts
of the body. In some cases, covering the lesions with a bandage may help stop
scratching and spread of the virus.

# **Molluscum Contagiosum (cont.)**

- Avoid shaving any area with lesions.
- Teach students not to share towels, washcloths, clothing, and other personal items.
- Remind staff and students of the importance of frequent handwashing to reduce the spread of infections.

## **Mosquito-borne Illness**

## **Description**

Mosquitoes are a problem because besides an itchy bite they can spread rare but serious diseases in this country such as Western equine encephalitis, St. Louis encephalitis, and West Nile viral infection. In the United States, West Nile virus infection is the most common of these infections. In other countries, mosquitoes spread malaria and other diseases.

Symptoms of mosquito-borne infectious vary. Around 80 percent of people infected with West Nile virus will not show any symptoms. About 20 percent of people who become infected will display mild symptoms including fever, headache, body aches, nausea, vomiting, and sometimes swollen lymph glands or skin rash on the chest, stomach, and back. These symptoms typically last a few days. About 1 in 150 people infected with West Nile virus will develop severe illness such as encephalitis. Encephalitis is an inflammation of the brain with severe symptoms including high fever, headache, neck stiffness, disorientation, convulsions, muscle weakness, vision loss, numbness, paralysis, and coma. Severe symptoms may last several weeks. Some neurological effects are permanent. Severe illness is much more likely in those over age 50 years and is rare in children. Over 30,000 cases of West Nile virus infection have been reported in this country with 45 cases acquired in Washington State.

### **Mode of Transmission**

Generally, West Nile encephalitis is spread by the bite of an infected mosquito. Mosquitoes become infected with the West Nile virus when they feed on infected birds, particularly crows and related birds. Infected mosquitoes can then spread West Nile encephalitis to humans and other animals when they bite. Rare person-to-person transmission occurs through blood transfusion or from woman to fetus. West Nile virus is not spread through contract or sharing items.

### **Incubation Period**

3-14 days for West Nile encephalitis infection.

### **Infectious Period**

Mosquito-borne illnesses are spread from infected people only rarely, such as through blood transfusion or during pregnancy.

## School Staff/Nurse Responsibility

- 1. Make referral to licensed health care provider of suspected cases.
- 2. Maintain and support confidentiality for the student.

## Mosquito-borne Illness (cont.)

### **Control of Spread**

- 1. Utilize standard precautions (see Appendix VIII, *Guidelines for Handling Body Fluids in Schools*).
- 2. Refer to district infection control program protocols and policy for infectious diseases.
- 3. Do not touch a dead bird with bare hands. Contact your local health jurisdiction for instructions on reporting and disposing of the dead bird.

### Prevent mosquito bites:

- 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. Encourage field trip participants to wear a long sleeved shirt, long pants, and a hat when going into mosquito-infested areas such as wetlands or woods. Prepare students and staff for field trips to such areas.

## 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**

Washington State Department of Health Mosquitoes: http://www.doh.wa.gov/CommunityandEnvironment/Pests/Mosquitoes.aspx

The CDC's West Nile encephalitis Web page: 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 and some bacteria are also known to cause swelling of the parotid glands. Mumps patients may have fever, headache, and mild respiratory symptoms or may have no symptoms other than parotitis. In post pubertal individuals, the testes may become inflamed in males and the ovaries in females. Very rarely sterility can result. The central nervous system may become 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 of 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 still be infectious.

#### **Incubation Period**

16-18 days (range 12-25 days).

### Infectious Period

Mumps virus has been found in the saliva from 7 days before to 9 days after the onset of parotitis (salivary gland infection). However, persons with mumps are most contagious from 2 days before the onset of illness to 4 days after swelling first appears.

### School Staff/Nurse Responsibility

- 1. Report to your local health jurisdiction of mumps cases is mandatory.
- 2. Refer suspected mumps cases to a licensed health care provider.
- 3. Maintain and support confidentiality for the student.

## **Control of Spread**

- 1. Screen for school vaccine entry requirement.
- 2. Utilize standard precautions (see Appendix VIII, *Guidelines for Handling Body Fluids in Schools*).

## Mumps (cont.)

- 3. Refer to district infection control program protocols and policy for infectious diseases.
- 4. A confirmed case should be isolated until the swelling and other manifestations of the illness have subsided, or at least 4 days after the onset of swelling.
  - a. Post exposure vaccination of individuals is not clearly protective against the disease and its complications. However, use of vaccine is recommended because it will protect against any subsequent exposure.
- 5. Instruct students never 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 hand washing techniques.

#### **Future Prevention and Education**

A live, attenuated virus vaccine is available in combination with the measles and rubella vaccine (MMR) at the age of 12 months. Vaccination is required for child care and school entry in Washington State. Parents/guardians should be encouraged to have their children vaccinated on time.

## **Norovirus (Norwalk-like Viruses)**

## **Description**

Norovirus is the term used for the group of viruses previously called Norwalk virus and related viruses causing similar symptoms. Illness is an acute viral infection of the gastrointestinal system characterized by nausea, vomiting, non-bloody diarrhea, and abdominal cramps and can include a low-grade fever, chills, headache, muscle aches, and lethargy. Some persons might experience only vomiting or diarrhea and up to 30 percent of infections are asymptomatic. Symptoms typically resolve without treatment after 1–3 days, but in young children the course could be 4–6 days.

The CDC estimates that 21 million cases of acute gastrointestinal infections are due to norovirus each year, and that at least 50 percent of all foodborne outbreaks of gastrointestinal infections can be attributed to noroviruses. There are many different strains of the viruses and no persisting immunity after infection, so people can and do develop repeated similar illnesses, particularly during childhood. Treatment consists of supportive care, primarily fluid and electrolyte replacement.

### **Mode of Transmission**

Norovirus is primarily shed in stools and is easily spread person-to-person by hands, toys, bathroom surfaces, and contaminated food. It can also be transmitted by aerosolized vomitus to persons nearby. The viruses can persist on surfaces, so infection can occur several days after the initial contamination unless thorough cleaning is done.

### **Incubation Period**

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

### **Infectious Period**

Peak viral shedding is 2–5 days after infection, and may continue for 2 weeks or more. Noroviruses are highly contagious and as few as 10 viral particles may be sufficient for infection.

### School Staff/Nurse Responsibility

- 1. Immediately report to your <u>local health jurisdiction</u> suspected or confirmed foodborne outbreaks associated with a school.
- 2. Exclude food handlers with vomiting or diarrhea from work until cleared by a licensed health care provider or their local health jurisdiction.
- 3. Staff and students should remain home through their illness and for 24 hours after symptoms resolve. The <u>local health jurisdiction</u> may issue additional requirements for food handlers. In the event of a large school-wide occurrence of

## Norovirus (Norwalk-like Viruses) (cont.)

gastrointestinal disease, consult with your local health jurisdiction regarding environmental cleaning and possible closure of food service or the school to stop the cycle of infection.

- 4. Remove any contaminated clothing or linens immediately. Clean thoroughly any contaminated surfaces with a detergent to remove organic material (such as feces). Rinse detergent off surface and then disinfect with an EPA-approved disinfectant for norovirus. Antibacterials such as triclosan and general use disinfectants such as quarternary ammonium compounds are not generally effective against norovirus and related viruses. Bleach solutions for disinfecting must be prepared fresh daily (see Appendix VIII Guidelines for Handling Bodily Fluids).
- 5. Maintain and support confidentiality for the student.

### **Control of Spread**

- 1. Utilize standard precautions (see Appendix VIII, *Guidelines for Handling Body Fluids in Schools*).
- 2. Refer to district infection control program protocols and policy for infectious diseases.
- 3. Encourage good personal hygiene and proper hand washing techniques after going to the bathroom, before eating, and after changing diapers.
- 4. A child with diarrhea or vomiting may transmit the infection to other children in a school setting. Your local health jurisdiction may require that children or employees with certain infections not return to school until they test negative for the infection or symptoms resolve.
- 5. An infected individual may show no symptoms. Therefore, proper hand washing techniques and appropriate disposal of feces and materials contaminated with fecal material must be completed.
- 6. Surfaces where diapers are changed must be cleaned and disinfected after each use (see *Guidelines for Handling Body Fluids in Schools*, Appendix VIII).

#### **Future Prevention and Education**

1. It appears that immunity for noroviruses 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.

## Norovirus (Norwalk-like Viruses) (cont.)

- 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 cold foods, including salads, sandwiches, and bakery products. Liquid items, such as salad dressing or cake icing that allow the virus to mix evenly, are often implicated in 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. Noroviruses are relatively resistant to environmental challenge. They are able to survive freezing, temperatures as high as 60°C (140 degrees Fahrenheit), and have been associated with illness after being steamed in shellfish. Moreover, noroviruses can survive in up to 10 parts per million (ppm) chlorine, 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, no barehand contact with ready-to-eat food by foodworkers, and frequent hand washing, may substantially reduce foodborne transmission of noroviruses.

### Resources

CDC, MMWR, Updated Norovirus Outbreak Management and Disease Prevention Guidelines, March 4, 2011/60(RR03):1–15.

http://www.cdc.gov/mmwr/preview/mmwrhtml/rr6003a1.htm?s\_cid=rr6003a1\_e

CDC, NCIRD, Norovirus: Technical Fact Sheet

http://www.cdc.gov/ncidod/dvrd/revb/gastro/norovirus-factsheet.htm

## **Pertussis (Whooping Cough)**

## **Description**

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

### **Mode of Transmission**

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

#### Incubation Period

Average 9-10 days, (range 6-21 days).

#### Infectious Period

Pertussis is most infectious during the early catarrhal stage and at the beginning of the paroxysmal stage. Communicability gradually declines and is negligible by 3 weeks after the onset of paroxysms. Patients need to be isolated during the first 5 days of an appropriate antibiotic treatment, but may return when 5 days of antibiotic therapy has been completed, even though they may continue to cough for some time.

### School Staff/Nurse Responsibility

- Report to your <u>local health jurisdiction</u> of cases is mandatory and should be immediate.
- 2. Make referral to licensed health care provider of suspected case for diagnosis and treatment.
- 3. Maintain and support confidentiality for the student.

## Pertussis (Whooping Cough) (cont.)

4. 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. If treated, the student may return after 5 days of treatment have been completed.

### **Control of Spread**

- 1. Screen for school vaccine entry requirement.
- 2. Utilize standard precautions (see Appendix VIII, *Guidelines for Handling Body Fluids in Schools*).
- 3. Refer to district infection control program protocols and policy for infectious diseases.
- 4. Exclude infected student per local health officer recommendation. (Generally until the fifth day of antibiotic therapy or, if not treated, until they are no longer coughing, or until 4 weeks after cough onset, whichever period is shorter.)
- 5. Recommend immunization of all unimmunized or incompletely immunized students less than the age of 7 years with a booster at age 11 years or older.
- 6. Your local health officer will make recommendations regarding treatment of school and household contacts.
- 7. 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 may be excluded from school until an incubation period has passed. In most instances, however all exposed close contacts—regardless of immunization status—are evaluated for symptoms and excluded if symptoms develop in the 21 days after exposure. Exposed close contacts who develop symptoms should be referred to a licensed health care provider for evaluation and treatment.
- 8. Instruct students never to share items that may be contaminated with saliva such as beverage containers.
- 9. Clean or dispose of articles soiled with nose and throat discharges.
- 10. 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.

# Pertussis (Whooping Cough) (cont.)

11. Encourage proper hand washing techniques.

### **Future Prevention and Education**

Pertussis vaccine, given along with diphtheria and tetanus toxoid (Tdap and DTaP) in the recommended schedule, is an effective means of prevention.

#### **Pinworms**

#### **Description**

Pinworms are a very common condition caused by a small intestinal roundworm. Although some infected individuals have no symptoms, pinworm infestation can include severe anal itching with disturbed sleep, restlessness, and local irritation from scratching. Vaginitis and abdominal pain, in rare instances, are attributed to pinworms. People from all socio-economic and ethnic backgrounds may have pinworms. Diagnosis is made by finding adult worms or eggs in 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. Children who have scratched the anal area can have eggs under their fingernails and transmit to others through shared food.

#### **Incubation Period**

The life cycle from egg to adult takes 1–2 months or longer.

#### Infectious Period

Pinworm eggs are infectious within a few hours after being deposited on the skin. The person is infectious as long as female worms are depositing eggs on skin around the anus. The eggs can survive up to 3 weeks on clothing, bedding, or other objects. Response to specific antihelminth drugs (drugs that kill parasitic worms) is excellent, but re-infestation occurs easily.

- 1. Reporting to your <u>local health jurisdiction</u> is not necessary.
- 2. Make referral to licensed health care provider for appropriate diagnosis and treatment of suspected cases.
- 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 hand washing including careful cleaning of fingernails after using the bathroom and before eating.
- 4. Encourage good personal hygiene and proper hand washing techniques after going to the bathroom, before eating, and after changing diapers.
- 5. Maintain and support confidentiality for the student.

# Pinworms (cont.)

## **Control of Spread**

- 1. Utilize standard precautions (see Appendix VIII, *Guidelines for Handling Body Fluids in Schools*).
- 2. Refer to district infection control program protocols and policy for infectious diseases.
- 3. If condition is recurrent, all members of household should be treated simultaneously. Risks and benefits of prescribing antihelminth drugs for children younger than 2 years should be reviewed with medical care provider, because of limited experience in using these drugs with children of this age.
- 4. Surfaces where diapers are changed must be disinfected after each use (see Appendix VIII, *Guidelines for Handling Body Fluids in Schools*).
- 5. Encourage proper hand washing 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." In some instances, however, it may progress to include marked stiffness of the neck, back, and limbs. When the poliovirus gains access to nerve structures it can 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. Although wild polio transmission has ceased in most countries as a result of vaccination programs, it remains endemic in a few areas of the world, and importation remains a threat. A single case of polio would be a public health emergency.

#### Mode of Transmission

Transmission of the virus can occur by contact with pharyngeal (throat) droplets as well as through fecal-oral spread.

#### **Incubation Period**

Range 3–35 days. Commonly 7–14 days for the paralytic form.

#### **Infectious Period**

Not clearly defined, but transmission can occur as long as the virus is shed in the stool. Polio is most infectious in the few days 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 Staff/Nurse Responsibility

- 1. Report to your <u>local health jurisdiction</u> of suspected cases is immediate and mandatory.
- Exclusion of confirmed cases from school would be as directed by or your local health officer.
- 3. Check susceptibility of contacts and recommend immunization of contacts as appropriate.
- 4. Maintain and support confidentiality for the student.

#### Control of Spread

1. Screen for school vaccine entry requirement.

# Poliomyelitis (Polio) (cont.)

- 2. Utilize standard precautions (see Appendix VIII, *Guidelines for Handling Body Fluids in Schools*).
- 3. Refer to district infection control program protocol and policy for infectious diseases.

#### **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. Only inactivated injectable vaccine is used now.

Internationally, polio control is achieved by immunization of any individual in an epidemic area who is over the age of 6 weeks and who is unvaccinated, incompletely vaccinated, or uncertain of vaccination history.

## Ringworm (Tinea)

#### **Description**

Ringworm is not caused by a worm, but by various types of fungi. When found on 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*. (see Athlete's Foot section). 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-toperson contact. Infected animals may be a source for scalp and body infections, although rarely.

#### **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 Staff/Nurse Responsibility

- 1. A report to your <u>local health jurisdiction</u> is not necessary.
- 2. Make referral to licensed health care provider for appropriate diagnosis and treatment of suspected cases.
- 3. Maintain and support confidentiality for the student.

#### **Control of Spread**

- 1. Utilize standard precautions (see Appendix VIII, *Guidelines for Handling Body Fluids in Schools*).
- 2. Refer to district infection control program protocols and policy for infectious diseases.
- Encourage frequent hand washing.
- 4. The student may stay in school after treatment has been started.

# Ringworm (Tinea) (cont.)

- 5. Encourage the student to keep the affected area covered to minimize transmission.
- 6. Instruct students not to share combs, hats, towels, and/or other personal articles.
- 7. Disinfect showers, dressing rooms, and gymnasium (floors, mats, and sports equipment). Follow cleaning and disinfecting guidelines in Appendix VIII.
- 8. Encourage proper laundering of towels and clothing.
- 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.

Instruct students about the causes, means of transmission, and prevention of this condition.

## **Rubella (Three-Day Measles)**

#### **Description**

Rubella is a relatively mild viral illness. Its importance lies not in the problems it causes in the person who acquires the disease, 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 rubella in children 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. Adults may experience a 1–5 day prodrome (early signs of onset), consisting of respiratory symptoms. 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 usually fades within 3 days. Fever is often mild or absent. Some itching may occur. Rubella in adolescents and adults may cause painful or swollen joints (especially in females). Because many other rash illnesses look like rubella, laboratory tests are required to confirm the diagnosis. Up to 50 percent of rubella cases are asymptomatic.

#### **Mode of Transmission**

Transmission is from nasopharyngeal secretions of infected persons. It is also transmitted across the placenta to the fetus. Infants with congenital rubella can shed large quantities of the virus from their respiratory secretions and in the urine.

#### **Incubation Period**

14–17 days, (range 14–21 days).

#### Infectious Period

Rubella is infectious for about 1 week before and at least 4 days after the appearance of the rash.

#### School Staff/Nurse Responsibility

- Report to your <u>local health jurisdiction</u> 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.
- 3. Maintain and support confidentiality for the student.

#### **Control of Spread**

- 1. Screen for school vaccine entry requirement.
- 2. Utilize standard precautions (see Appendix VIII, *Guidelines for Handling Body Fluids in Schools*).

## Rubella (Three-Day Measles) (cont.)

- 3. Refer to District infection control program protocols and policy for infectious diseases.
- 4. Students may return to school on the 5<sup>th</sup> day after the rash appeared.
- 5. Pregnant contacts of the student should be notified of their exposure and advised to contact their licensed health care provider immediately to discuss the status of their immunity to rubella.
- 6. Instruct students never to share items that may be contaminated with saliva such as beverage containers.

#### **Future Prevention and Education**

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.

#### **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 socio-economic levels without regard to age, sex, or standards of personal hygiene. Although scabies is more prominent in crowded living conditions, 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. Scabies usually is spread by direct, prolonged, skin-to-skin contact with a person who has scabies. Contact generally must be prolonged; a quick handshake or hug usually will not spread scabies. Scabies is spread easily to sexual partners and household members. Persons sharing a bed are also at risk. Child care facilitates are also a common site of scabies infestation. 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**

Scabies can be transmitted as long as the person remains infested and untreated, including during the interval before symptoms develop.

- 1. Suspect scabies in a skin rash that causes intense itching, especially at night. Students with mild cases can be sent home at the end of their school day.
- 2. Notification to the parent or guardian for appropriate referral to licensed health care provider is made by the school nurse for diagnosis and treatment of suspected cases. Students can be readmitted the following day after overnight treatment with a prescribed topical anti-scabicide cream.

## Scabies (cont.)

- 3. Discreetly manage scabies cases so that the student is not ostracized, isolated, humiliated, or psychologically traumatized.
- 4. If it is believed that there has been direct, prolonged skin to skin contact in the school setting, the school nurse will inform parents/guardians regarding possible exposure to a student with a confirmed case of scabies. Provide information pertaining to symptoms, treatment, and prevention information as signs of scabies can occur as late as 1–2 months after exposure.
- 5. 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.
- 6. Encourage parent/guardian to notify the school, all close contacts, and others who may have had close skin contact with the effected student.
- 7. Maintain and support confidentiality for the student.

## **Control of Spread**

- 1. Utilize standard precautions (see Appendix VIII, *Guidelines for Handling Body Fluids in Schools*).
- 2. Refer to district infection control program protocols and policy for infectious diseases.
- 3. A prescribed topical medication is recommended for treatment.
- 4. 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. Treatment guidelines include:

- 1. Examining and treating all family members simultaneously to avoid re-infestation.
- 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.

## Scabies (cont.)

- 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.

#### **Future Prevention and Education**

- 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 usually 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.
- 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.
- 3. The use of chemical sprays or "bug bombs" to treat the environment within the school setting is not recommended due to potential toxicity and harm to humans.

#### Resources

CDC Scabies frequently asked questions: http://www.cdc.gov/parasites/scabies/gen\_info/fags.html

Sexually transmitted infections (STIs) are transmitted by sexual activity such as vaginal, oral, or anal sex. The STIs that are of the greatest concern include HIV/AIDS, chlamydia, syphilis, Human Papillomavirus (genital warts, HPV), herpes, gonorrhea, 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, chlamydia, or syphilis is present in a student who is not sexually active. Call local child protective services.

#### **Future Prevention and Education**

- 1. For confidential information about STIs, call the national STI Hotline at 1-800-227-8922 or choose the STI option of Washington State's AIDS Hotline at 1-800-272-2437.
- 2. School nurses can order CDC's STI treatment guidelines from the Washington State Department of Health's Office of STI Services at 360-236-3460, or consult the latest guidelines at <a href="http://www.cdc.gov/std/treatment">http://www.cdc.gov/std/treatment</a>.
- 3. The address for *The Practitioners Handbook for the Management of STDs* is www.STDhandbook.org.
- 4. CDC's STI clinical slides in PowerPoint or graphic files are available at <a href="http://www.cdc.gov/std/training/clinicalslides/">http://www.cdc.gov/std/training/clinicalslides/</a>.
- 5. For a large array of dermatology photographs, go to www.dermis.net/dermisroot/en/home/index.htm.

## Chlamydia

#### **Description**

Chlamydia trachomatis is a bacterium that causes infection of the external and internal genital tract. **Most chlamydial infections are asymptomatic—they have no symptoms.** Pain during urination and an opaque discharge from the urethra are the most common symptoms for males, when they do occur. Symptoms for females include mucopurulent cervicitis (inflammation of the cervix), cervical ectopy (redness) and friability (easily induced bleeding) of the cervix. If left untreated, complications may occur, including pelvic inflammatory disease and chronic pelvic pain 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 involving the penis, vagina, mouth, and/or rectum.

#### **Incubation Period**

7–21 days.

#### Infectious Period

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

- 1. Make referral to licensed health care provider for diagnosis and appropriate therapy. If the referred student is of the age of 14 or older and is otherwise competent, written consent from the student must be obtained prior to disclosing such referral and/or treatment information with the student's parent/guardian (see RCW 70.24.105; RCW 70.24.110, Appendix X).
- 2. Report of suspected child abuse cases is mandatory.
- Maintain and enforce confidentiality for the student. The consent to exchange information and medical records is governed by <u>RCW 70.24.105</u> and <u>Chapter 70.02 RCW</u>.
- 4. If clinical services to support Chlamydia diagnosis and treatment exist at the school (i.e., school-based health center), reporting of all cases diagnosed on site is mandatory. (See <a href="http://www.doh.wa.gov/YouandYourFamily/IllnessandDisease/SexuallyTransmitt">http://www.doh.wa.gov/YouandYourFamily/IllnessandDisease/SexuallyTransmitt</a> edDisease/CaseReports.aspx.)

## **Control of Spread**

 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.

#### **Future Prevention and Education**

Middle school and high school students need accurate information about STIs, 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).

## Gonorrhea (Clap, Strain, Dose)

#### **Description**

Gonorrhea is caused by the bacterium *Neisseria gonorrhoeae*. Gonorrhea genital infections differ somewhat in presentation in males and females. In males, pain during 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 during urination or vaginal discharge. **Most infected females 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 activity involving the penis, vagina, mouth, and/or rectum.

#### **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. *N. gonorrhoeae* changes rapidly so the most up-to-date treatment recommendations should be consulted (www.cdc.gov/std/treatment/default.htm).

- 1. Make referral to licensed health care provider for diagnosis and appropriate therapy. If the referred student is of the age of 14 or older and is otherwise competent, written consent from the student must be obtained prior to disclosing such referral and/or treatment information with the student's parent/guardian (see RCW 70.24.105; RCW 70.24.110, Appendix X).
- Report of suspected child abuse cases is mandatory.
- Maintain and enforce confidentiality for the student. The consent to exchange information and medical records is governed by <u>RCW 70.24.105</u> and <u>Chapter</u> 70.02 RCW.

4. If clinical services to support gonorrhea diagnosis and treatment exist at the school (i.e., school-based health center), reporting of all cases diagnosed on site is mandatory. (See <a href="http://www.doh.wa.gov/YouandYourFamily/IllnessandDisease/SexuallyTransmittedDisease/CaseReports.aspx">http://www.doh.wa.gov/YouandYourFamily/IllnessandDisease/SexuallyTransmittedDisease/CaseReports.aspx</a>.)

## **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**

Middle school and high school students need accurate information about STIs, 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).

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 and discuss any student who reports his/her symptoms have not resolved.

## **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 herpes infections, this is a recurrent, life-long, viral infection but 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 infection, 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 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 and have been shown to reduce transmission.

- 1. Make referral to licensed health care provider for diagnosis and appropriate therapy. If the referred student is of the age of 14 or older and is otherwise competent, written consent from the student must be obtained prior to disclosing such referral and/or treatment information with the student's parent/guardian (see RCW 70.24.105; RCW 70.24.110, Appendix X).
- 2. Report of suspected cases of child abuse is mandatory.

## **Sexually Transmitted Diseases (STI) (cont.)**

- 3. Provide education and counseling regarding transmission of disease, recurrence potential, and recommended prevention practices to prevent spread. Further information can be found at <a href="https://www.ashastd.org">www.ashastd.org</a>.
- If clinical services to support initial herpes diagnosis and treatment exist at the school (i.e. school-based health center), reporting of all cases diagnosed on site is mandatory. <a href="http://www.doh.wa.gov/YouandYourFamily/IllnessandDisease/SexuallyTransmittedDisease/CaseReports.aspx">http://www.doh.wa.gov/YouandYourFamily/IllnessandDisease/SexuallyTransmittedDisease/CaseReports.aspx</a>).
- Maintain and enforce confidentiality for the student. The consent to exchange information and medical records is governed by <u>RCW 70.24.105</u> and <u>Chapter</u> 70.02 RCW.

#### **Future Prevention and Education**

Middle school and high school students need accurate information about STIs, 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).

## **Human Papillomavirus (HPV, Genital Warts)**

#### **Description**

HPV is a group of over 100 strains of virus, 40 of which can infect the genitals. Two strains are responsible for approximately 70 percent of cervical cancers and another two strains cause 90 percent of genital warts. HPV has also been implicated in head/neck cancers, esophageal cancers, penile and anal cancers. The strains that cause warts are not associated with cancer. HPV infections are extremely common. Symptoms can vary; some may have no warts, others many. Warts also vary in appearance often depending upon location. Some may appear to be grayish and hard, others may be soft and pink. When they do occur, they are frequently clustered. Fortunately, most HPV infections do not go on to cause cancer and in most cases are cleared from the body within two years

A vaccine that protects against the four most common strains of HPV is available for both males and females between the ages of 9–26.

#### **Mode of Transmission**

HPV is transmitted through skin-to-skin contact with an infected individual during sexual activity. Warts do not have to be present for infection to occur due to viral shedding.

#### **Incubation Period**

Two weeks to several months.

#### **Infectious Period**

HPV is infectious for duration of the viral infection. Most individuals will clear the infection without intervention within two years.

- 1. Make referral to licensed health care provider for diagnosis and appropriate therapy. If the referred student is of the age of 14 or older and is otherwise competent, written consent from the student must be obtained prior to disclosing such referral and/or treatment information with the student's parent/guardian (see RCW 70.24.105; RCW 70.24.110, Appendix X).
- 2. Report of suspected cases of child abuse is mandatory.
- 3. Provide education and counseling regarding transmission of disease, and recommended prevention practices to prevent spread.

- Maintain and enforce confidentiality for the student. The consent to exchange information and medical records is governed by <u>RCW 70.24.105</u> and <u>Chapter 70.02 RCW</u>.
- 5. There is no reporting requirement for HPV.

#### **Future Prevention and Education**

Middle school and high school students need accurate information about STIs, their symptoms, causes, treatment, and where treatment can be obtained (see RCW 28A.230.020, Appendix XI).

Both males and females can be vaccinated against the most common strains of HPV.

Beginning with sixth grade entry, every public school in the state shall provide parents and guardians with information about human papillomavirus disease and the HPV vaccine at the beginning of every school year (<u>RCW 28A.210.080</u>).

## 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 Staff/Nurse Responsibility

- 1. Make referral to licensed health care provider for diagnosis and appropriate therapy. If the referred student is of the age of 14 or older and is otherwise competent, written consent from the student must be obtained prior to disclosing such referral and/or treatment information with the student's parent/guardian (see RCW 70.24.105; RCW 70.24.110, Appendix X).
- Report of suspected cases of child abuse is mandatory.
- Maintain and enforce confidentiality for the student. The consent to exchange information and medical records is governed by <u>RCW 70.24.105</u> and <u>Chapter</u> 70.02 RCW.

#### **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.

# **Sexually Transmitted Diseases (STI) (cont.)**

2. Recurrent NGU may be due to lack of compliance with treatment, failure to treat sexual partners, or reinfection.

#### **Future Prevention and Education**

Middle school and high school students need accurate information about STIs, their symptoms, causes, treatment, and where treatment can be obtained (see RCW 28A.230.020, Appendix XI).

## **Sexually Transmitted Diseases (STI) (cont.)**

# **Syphilis**

## Description

Syphilis is an acute and chronic, potentially life-threatening disease caused by the bacterium *Treponema pallidum*. Infection is characterized first by a local lesion, 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 mouth/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 lesion 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 appropriately treated patients from school is not required.

- 1. Make referral to licensed health care provider for diagnosis and appropriate therapy. If the referred student is of the age of 14 or older and is otherwise competent, written consent from the student must be obtained prior to disclosing such referral and/or treatment information with the student's parent/guardian (see RCW 70.24.105; RCW 70.24.110, Appendix X).
- Report of suspected child abuse cases is mandatory.
- 3. If clinical services to support syphilis diagnosis and treatment exist at the school (i.e. school-based health center), reporting of all cases diagnosed on site is mandatory.

http://www.doh.wa.gov/YouandYourFamily/IllnessandDisease/SexuallyTransmittedDisease/CaseReports.aspx

 Maintain and enforce confidentiality for the student. The consent to exchange information and medical records is governed by <u>RCW 70.24.105</u> and <u>Chapter</u> 70.02 RCW.

### **Control of Spread**

- 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**

Middle school and high school students need accurate information about STIs, their symptoms, causes, treatment, and where treatment can be obtained (see RCW 28A.230.020, Appendix XI).

No vaccine is available. Simultaneous infection with syphilis and other STIs 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.

## **Trichomoniasis ("Trich")**

#### **Description**

Trichomoniasis is caused by a parasitic protozoa called *Trichomonas vaginalis* and is considered one of the most common sexually transmitted infections.

While trichomoniasis infects both males and females, males seldom have any symptoms. Symptoms for females include abnormal vaginal discharge, itching, burning, and vaginal odor. Diagnosis is confirmed by laboratory smear, culture, or other test. There is evidence linking trichomoniasis infection to low birth weight babies and premature births.

#### **Mode of Transmission**

Trichomoniasis is transmitted through penile-vaginal intercourse.

#### **Incubation Period**

5-28 days.

#### Infectious Period

Trichomoniasis is infectious for the duration of the infection.

#### School Staff/Nurse Responsibility

- 1. Report to your <u>local health jurisdiction</u> is not required.
- 2. Make referral to licensed health care provider for diagnosis and appropriate therapy. If the referred student is of the age of 14 or older and is otherwise competent, written consent from the student must be obtained prior to disclosing such referral and/or treatment information with the student's parent/guardian (see RCW 70.24.105; RCW 70.24.110, Appendix X).
- 3. Report of suspected child abuse cases is mandatory.
- Maintain and enforce confidentiality for the student. The consent to exchange information and medical records is governed by <u>RCW 70.24.105</u> and <u>Chapter</u> 70.02 RCW.

#### **Control of Spread**

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

## **Future Prevention and Education**

Middle school and high school students need accurate information about STIs, their symptoms, causes, treatment, and where treatment can be obtained (see RCW 28A.230.020, Appendix XI).

## **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 for diagnosis and appropriate therapy. If the referred student is of the age of 14 or older and is otherwise competent, written consent from the student must be obtained prior to disclosing such referral and/or treatment information with the student's parent/guardian. (see RCW 70.24.105; RCW 70.24.110, Appendix X).
- 3. Report of suspected child abuse cases is mandatory.
- Maintain and enforce confidentiality for the student. The consent to exchange information and medical records is governed by <u>RCW 70.24.105</u> and <u>Chapter 70.02 RCW.</u>

## **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.

#### **Future Prevention and Education**

Middle school and high school students need accurate information about STIs, their symptoms, causes, treatment, and where treatment can be obtained (see RCW 28A.230.020, Appendix XI).

## **Smallpox**

#### **Description**

The last case of wild-virus smallpox in the world occurred in 1977 in Somalia. There has not been a case of smallpox disease in the United States since 1949. Routine vaccination for smallpox is no longer done. 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 firm vesicles (blisters) often with a central dimple. 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.

Smallpox vaccine is used in special circumstances to vaccinate some military personnel and laboratory workers. The vaccine is created using a different but related virus that causes the same kind of lesion but in a limited area (e.g., site of inoculation).

#### Mode of Transmission

Most transmission of smallpox resulted 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. Vaccine virus can be spread from the vaccine inoculation site or from fresh scabs to another person by hands or skin contact.

#### **Incubation Period**

7–19 days, usually 12 days.

#### Infectious Period

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

- 1. Immediately report to your <u>local health jurisdiction</u> by telephone a suspected case of smallpox or smallpox vaccine rash.
- 2. Make referral to licensed health care provider of any suspected cases.
- 3. Your local health jurisdiction will determine disease control measures.
- 4. Maintain and support confidentiality for the student.

## Smallpox (cont.)

## **Control of Spread**

- 1. Utilize standard precautions (see Appendix VIII, *Guidelines for Handling Body Fluids in Schools*).
- 2. Refer to district infection control program protocols and policy for infectious diseases.
- 3. Only persons with up-to-date vaccination for smallpox should examine a potential case.
- 4. Maintain respiratory isolation of the case if smallpox is suspected. Cover lesions from smallpox vaccine, which is a different virus that is also contagious.
- 5. Use standard precautions including gloves for any contact with dressings or with articles soiled with fluid or scabs from skin lesions.
- 6. Dispose of all dressings in biohazard bags or disinfect dressings with 1:10 bleach and water solution.
- 7. Follow recommendations from your local health jurisdiction about exclusion from school.

#### **Future Prevention and Education**

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.

Vaccination of contacts within 4 days of exposure is protective.

#### Resources

- In order for school nurses to stay informed on breaking issues related to smallpox and bioterrorism diseases and conditions, the following Web sites are recommended:
- The Washington State Department of Health: <a href="http://www.doh.wa.gov">http://www.doh.wa.gov</a>.
- The latest information for clinicians and the public on smallpox: <a href="http://www.bt.cdc.gov/agent/smallpox/index.asp">http://www.bt.cdc.gov/agent/smallpox/index.asp</a>. This site includes question and answer sheets in languages other than English.
- The United States Army Medical Research Institute of Infectious Diseases: <a href="http://www.usamriid.army.mil/education/index.cfm">http://www.usamriid.army.mil/education/index.cfm</a>. This site includes updates, links, and education options along with general information.

# **Smallpox (cont.)**

• 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: <a href="http://ethnomed.org/">http://ethnomed.org/</a>.

# Streptococcal Infections (Sore Throat, Scarlet Fever, Necrotizing Fasciitis)

## **Description**

Streptococcal sore throat (pharyngitis) 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. Students may carry streptococci in their throats but not have symptoms.

Scarlet fever involves a streptococcal sore throat and a skin rash caused by a toxin produced by certain strains of streptococci. The rash usually appears on the neck, chest, groin, and axilla (armpits). It usually does not involve the face. Characteristically, the rash 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.

Impetigo is a superficial skin infection with streptococci or other bacteria. Symptoms include red sores or blisters, often on the face or areas that are scratched like an insect bite (see Impetigo).

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 infection occurs between the skin (in the fascia) and eventually results in tissue damage to the skin and underlying muscle. The signs and symptoms are fever with severe pain, followed by swelling and redness at a 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.

Antibiotics can treat streptococcal infections. Untreated milder streptococcal infections can lead to serious complications (rheumatic fever and kidney disease [glomerulonephritis]).

#### **Mode of Transmission**

Streptococcal infection is usually transmitted by airborne droplets or direct skin contact with an infected person. A person can move the infection from one part of the body to another by scratching. Necrotizing fasciitis is spread through direct contact with infected persons through an open sore or wound on the skin. The wound site may be minor.

#### Incubation Period

From 2-5 days.

# Streptococcal Infections (Sore Throat, Scarlet Fever, Necrotizing Fasciitis) (cont.)

#### 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.

#### School Staff/Nurse Responsibility

- 1. Report to your <u>local health jurisdiction</u> suspected or confirmed outbreaks associated with a school.
- 2. Refer students with a symptomatic sore throat and/or unexplained fever to a health care provider.
- 3. Notify parent/guardian of students with history of rheumatic fever or kidney infection (glomerulonephritis) if there is a cluster of streptococcal pharyngitis at school.
- 4. Maintain and support confidentiality for the student.

#### **Control of Spread**

- 1. Utilize standard precautions (see Appendix VIII, *Guidelines for Handling Body Fluids in Schools*).
- 2. Refer to district infection control program protocols and policy for infectious diseases.
- 3. Students with sore throat and fever should be cultured and, if culture-positive, treated appropriately by a licensed health care provider. Those with a positive throat culture should be excluded until at least 24 hours after antimicrobial treatment is initiated. They should be able to return to school after 24 hours of appropriate treatment, when they have no fever, and when physically well enough to attend. No follow-up throat culture is necessary after treatment.
- 4. When throat cultures are done on a cluster of students to check for strep, there will almost always be some who test positive but are without any symptoms. These students need not be excluded from school nor do they require treatment.
- 5. Significant increases in the number of sore throats or increases above normal in school absenteeism (above 10 percent) should be referred to your local health jurisdiction for epidemiologic investigation.
- 6. The culturing of asymptomatic contacts of a strep case is not generally done except in facility outbreaks (e.g., long term residence facility). Some licensed health care providers will wish to treat these contacts while some will observe for a period of time before treating.

# Streptococcal Infections (Sore Throat, Scarlet Fever, Necrotizing Fasciitis) (cont.)

- 7. No vaccines are available for general use at this time to prevent strep throat.
- 8. Instruct students not to share items that may be contaminated with saliva such as beverage containers.
- 9. Clean or dispose of articles soiled with nose and throat discharges.
- 10. 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.
- 11. Encourage proper hand washing techniques.

#### **Future Prevention and Education**

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 taken. Years of prescribing antibiotics for nonbacterial infections and failing to complete the full courses of treatment 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.

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 now a very rare bacterial disease in the United States because of routine immunization with vaccines containing tetanus toxoid. Tetanus growth in a deep 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 who received an adequate primary immunization series.

#### **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 because the bacteria grows in a low-oxygen or oxygen-free environment.

#### **Incubation Period**

Usually 3–21 days, but it may range from 1 day to several months, depending on the character and extent of the wound. The average is 10 days.

#### Infectious Period

None.

#### School Staff/Nurse Responsibility

- 1. Provide basic first aid to wounds immediately, washing thoroughly with soap and water using standard precautions (see Appendix VIII, *Guidelines for Handling Body Fluids in Schools*).
- 2. Make referral to licensed health care provider for evaluation of the wound for additional medical care if needed and a tetanus booster, if needed.
- 3. Notify parent/guardian of the wound.
- 4. Maintain and support confidentiality for the student.
- 5. Refer to district infection control program protocols and policy for infectious diseases.

#### **Control of Spread**

1. Screen for school vaccine entry requirement.

# Tetanus (Lockjaw) (cont.)

#### **Future Prevention and Education**

Tetanus vaccine is required for school entry. Surveillance and education to ensure adequate immunization levels is essential. School immunization requirements for Kindergarten and Grade 6 provide adequate immunization levels. Adults who have not received a Tdap booster should get one, then a booster dose of Td every ten years during their lifetime.

#### **Ticks**

# **Description**

Ticks are eight-legged arthropods that feed on blood from humans and other animals such as rodents and birds. The more familiar hard ticks are found in woody, brushy, or grassy areas. Hard ticks have hard coverings and are usually dark and patterned. Soft ticks lack the hard covering and may be pale to brown. Tick size varies depending on its developmental stage and recent feeding, varying from 1/8 to 1/2 inches in length.

Different species of hard ticks can carry several infectious diseases in the western United States. Diseases and symptoms include:

<u>Lyme disease</u> typically starts with an expanding circular target-shape rash. There may be fever, headache, muscle aches, and joint pain. Rare late symptoms include recurring joint pain, heart disease, and nervous system disorders. The affected ticks are in western Washington.

<u>Babesiosis</u> causes fever, chills, muscle aches, and anemia. The rare cases are from western Washington.

<u>Anaplasmosis</u> causes headache, fever, chills, and muscle aches. The affected ticks are in western Washington.

Rocky Mountain spotted fever typically starts with fever, vomiting, muscle aches, and headache. There may be a rash several days later. Some cases have abdominal pain, diarrhea, and joint pain. The affected ticks are mainly in eastern Washington.

<u>Tularemia</u> can be spread in several ways including tick bite. Symptoms are fever, headache, swollen lymph nodes, and a skin ulcer near the bite. Cases occur throughout the state although tularemia is usually not tick-associated.

<u>Tick paralysis</u> involves progressive paralysis starting in the legs resulting in weakness, numbness, and difficulty walking. If the tick is not removed, breathing muscles may be paralyzed. Cases occur in eastern Washington.

Soft ticks carry relapsing fever that causes fevers which come and go over several weeks or longer. The infection is usually not severe but can cause loss of a pregnancy. Cases occur mainly in eastern Washington. Relapsing fever is the most common tickborne infection reported in Washington.

In Washington there are reports every year of locally-acquired cases of Lyme disease, tularemia, and relapsing fever. These include rare reports of babesiosis, anaplasmosis, Rocky Mountain spotted fever, and tick paralysis.

#### **Mode of Transmission**

Ticks can spread an infection when they attach and bite to get a blood meal.

# Ticks (cont.)

#### Incubation Period

Varies by disease.

#### Infectious Period

Tick-borne diseases are not spread directly among people. The infections can be spread during pregnancy or by blood transfusion.

# School Staff/Nurse Responsibility

- Safe tick removal is described in How to Respond: Illness and Injury at School (2010) page 26, and at: <a href="http://here.doh.wa.gov/materials/how-to-respond-injury-and-illness-at-school">http://here.doh.wa.gov/materials/how-to-respond-injury-and-illness-at-school</a> or on the DOH Ticks Web page: <a href="http://www.doh.wa.gov/CommunityandEnvironment/Pests/Ticks.aspx">http://www.doh.wa.gov/CommunityandEnvironment/Pests/Ticks.aspx</a>
  - Notify parents and recommend they contact their health care provider with questions or concerns. Save the tick, if possible, for identification.
- 2. Advise students not to handle, crush, or attempt to remove ticks.
- 3. If the student reports a known tick bite and the tick is no longer attached, wash the bite site thoroughly with soap and water.
- 4. Utilize standard precautions (see Appendix VIII, *Guidelines for Handling Body Fluids in Schools*).
- 5. Refer to district infection control program protocols and policy for infectious diseases.
- 6. Inform parent of all tick bites and the importance of monitoring the site and any early symptoms of tick-borne illness, particularly "flu-like" symptoms or rash over the next month or so. If symptoms develop, the student should be evaluated by his/her health care provider. Be sure the parent informs the provider about the recent tick bite, when the bite occurred, and where the student most likely acquired the tick.
- 7. Refer suspected cases of any tick-borne illness to a licensed health care provider.
- 8. Maintain and support confidentiality for the student.

### **Control of Spread**

Tick-borne diseases are not expected to be spread in schools.

# Ticks (cont.)

#### **Future Prevention and Education**

Students taking field trips or staying in wood cabins could be at risk for tick exposures. If spending time outdoors in risk areas (woody, brushy, or grassy) students and staff should be instructed to:

- 1. Wear long pants and a long-sleeved shirt. Tuck pant legs into socks or boots and tuck shirt into pants. Ticks on the clothing can be more easily seen and removed.
- 2. Wear light colored, tightly woven clothing. The light color will allow the dark tick to be seen more easily. The tight weave makes it harder for the tick to attach itself.
- 3. If staying overnight in wood cabins or structures in rural or wilderness areas, be sure that the cabins are not infested with rodents that could bring in soft ticks.
- 4. Cabins should be rodent-proofed. Seal all openings in the foundation and walls. Use heavy screen on windows, vents, and other openings. Keep a cleared area of at least 18 inches around the cabin to discourage rodent entry.
- 5. Inspect the cabins for rodent activity
- 6. Securely store and minimize food and snacks within the cabin. Get rid of food wastes away from the cabin to prevent attracting rodents.
- 7. Check thoroughly for ticks after the activity. Inspect areas around the head, neck, and ears. Report presence of tick to school nurse if available or parent.

#### Resources

Centers for Disease Control and Prevention Web site, Ticks: http://www.cdc.gov/ticks/.

Washington State Department of Health, Ticks: <a href="http://www.doh.wa.gov/CommunityandEnvironment/Pests/Ticks.aspx">http://www.doh.wa.gov/CommunityandEnvironment/Pests/Ticks.aspx</a>.

# 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 positive TB 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 usually 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 are treated typically with a minimum of four antituberculous antibiotics for a minimum of six months. Your local health jurisdiction TB control office must be consulted regarding specifics of individual cases.

# **Tuberculosis (TB) (cont.)**

# School Staff/Nurse Responsibility

- Report to your local health jurisdiction for suspected or known cases is mandatory (see Chapter 246-101 WAC, Appendix V, or go to <a href="http://www.doh.wa.gov/PublicHealthandHealthcareProviders/NotifiableConditions\_aspx">http://www.doh.wa.gov/PublicHealthandHealthcareProviders/NotifiableConditions\_aspx</a>).
- 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 <u>local health jurisdiction</u> with contact investigations when an active TB case has been identified in the school. Assist your local health jurisdiction in TB testing of school contacts when indicated.
- 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 TB tests to your <u>local health jurisdiction</u> unless TB testing was performed as part of a contact investigation. Do not exclude students, or staff because of a positive TB test reaction.
- 6. Maintain and support confidentiality for the student.

### **Control of Spread**

- 1. Utilize standard precautions (see Appendix VIII, *Guidelines for Handling Body Fluids in Schools*).
- 2. Refer to district infection control program protocols and policy for infectious diseases.
- 3. Active cases must be under treatment with anti-TB drugs.
- 4. Local health officials must clear treated individuals for return to school.
- 5. Recent TB skin test converters should have a chest x-ray and medical consultation regarding indication for TB-preventive medication.
- 6. Students or staff without symptoms are not excluded from school on the basis of a positive TB test indicating latent TB infection alone.

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

# **Tuberculosis (TB) (cont.)**

and nose with the crook of their arm and coughing or sneezing into their shirt or coat sleeve. Clean or dispose of articles soiled with nose or throat discharges.

7. Instruct students not to share items that may be contaminated with saliva, such as beverage containers.

#### **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.
- Routine TB 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.
- 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.

#### Resources

The following books are good references for schools: <u>Tuberculosis Handbook for School Nurses</u> (revised 2011) and <u>Guidelines for Initiating A School-based Directly Observed Therapy Program</u> (revised 2002).

Available online and in print from:
New Jersey Medical School Global Tuberculosis Institute (GTBI)
225 Warren Street
P.O. Box 1709
Newark, NJ 07101-1709

Washington State Department of Health TB manual:

http://www.doh.wa.gov/YouandYourFamily/IllnessandDisease/Tuberculosis/ProviderMaterials/TBServicesManual.aspx.

# 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. Their names and appearance depends on the part of the body affected. Some warts are called genital, plantar, oral, flat, facial or filiform, common, and periungual warts. 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 Staff/Nurse Responsibility

- 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 and disinfect 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 on their feet for showering or be excused from showering until warts disappear.
- 3. Utilize standard precautions (see Appendix VIII, *Guidelines for Handling Body Fluids in Schools*).
- 4. Refer to district infection control program protocols and policy for infectious diseases.

# Warts (Verrucae) (cont.)

- 5. Sexual abuse must be considered if genital warts are found in children who are beyond infancy and pre-pubital. Report of suspected child abuse cases is mandatory.
- 6. Maintain and support confidentiality for the student.

# **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 <u>28A.210.060</u> through <u>28A.210.170</u>, 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 <u>28A.195.050</u>.

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 <u>43.70.525</u>.

# **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 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 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 provide to appropriate school officials and personnel, access and notice of these rules of the state board of health. Providing online access to these rules satisfies the requirements of this section. The superintendent of public instruction is required to provide this notice only when there are significant changes to the rules.

[2009 c 556 § 3; 1971 c 32 § 1; 1969 ex.s. c 223 § <u>28A.31.010</u>. Prior: 1909 c 97 p 262 § 5; RRS § 4689; prior: 1897 c 118 § 68; 1890 p 372 § 47. Formerly RCW <u>28A.31.010</u>, <u>28.31.010</u>.]

Link – Washington State Legislature <a href="http://apps.leg.wa.gov/rcw/default.aspx?cite=28A.210.010">http://apps.leg.wa.gov/rcw/default.aspx?cite=28A.210.010</a>

# **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 <u>246-100</u> 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 <u>43.20.050</u>. 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:

- "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
- (i) Pediculosis
- (k) Pertussis
- (I) 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 <u>43.20.050</u>. 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 <u>246-110-010</u>, 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 <u>43.20.050</u>. 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, suspected cases, 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, suspected cases, outbreaks, and suspected outbreaks of disease that may be associated with the child day care facility.
- (4) Establish and implement policies and procedures to maintain confidentiality related to medical information in their possession.

[Statutory Authority: RCW <u>43.20.050</u>. 11-02-065, § 246-101-415, filed 1/4/11, effective 2/4/11; 00-23-120, § 246-101-415, filed 11/22/00, effective 12/23/00.]

Link - Washington State Legislature http://apps.leg.wa.gov/wac/default.aspx?cite=246-101-415

# WAC 246-101-420—Responsibilities of schools.

#### Schools shall:

- (1) Notify the local health department of cases, suspected cases, 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, suspected cases, outbreaks, and suspected outbreaks of disease that may be associated with the school.
- (5) 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 <u>43.20.050</u>. 11-02-065, § 246-101-420, filed 1/4/11, effective 2/4/11; 00-23-120, § 246-101-420, filed 11/22/00, effective 12/23/00.]

Link - Washington State Legislature <a href="http://apps.leg.wa.gov/wac/default.aspx?cite=246-101-420">http://apps.leg.wa.gov/wac/default.aspx?cite=246-101-420</a>

# **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 wellbeing of the public by controlling communicable and certain other diseases.

[Statutory Authority: RCW <u>43.20.050</u>. 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.]

Link - Washington State Legislature http://apps.leg.wa.gov/WAC/default.aspx?cite=246-100-006

#### WAC 246-100-011—Definitions.

The following definitions shall apply in the interpretation and enforcement of chapter <u>246-100</u> 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) "Anonymous HIV testing" means that the name or identity of the individual tested for HIV will not be recorded or linked to the HIV test result. However, once the individual testing positive receives HIV health care or treatment services, reporting of the identity of the individual to the state or local public health officer is required.
- (4) "Board" means the Washington state board of health.
- (5) "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.
- (6) "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.

- (7) "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.
- (8) "Confidential HIV testing" means that the name or identity of the individual tested for HIV will be recorded and linked to the HIV test result, and that the name of the individual testing positive for HIV will be reported to the state or local health officer in a private manner.
- (9) "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.
- (10) "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.
- (11) "Department" means the Washington state department of health.
- (12) "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.
- (13) "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.
- (14) "Health care facility" means:
  - (a) Any facility or institution licensed under chapter <u>18.20</u> RCW, boarding home, chapter <u>18.46</u> RCW, birthing centers, chapter <u>18.51</u> RCW, nursing homes, chapter <u>70.41</u> RCW, hospitals, or chapter <u>71.12</u> 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.
- (15) "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.
- (16) "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 <u>246-100-207</u>. 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 <u>246-100</u> WAC also applies to the enumeration of CD4 + (T4) lymphocyte counts (CD4 + counts) and CD4 + (T4) percent of total lymphocytes (CD4 + percent) when used to diagnose HIV infection, CD4 + counts and CD4 + percent 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.
- (17) "Infectious agent" means an organism such as a virus, rickettsia, bacteria, fungus, protozoan, or helminth that is capable of producing infection or infectious disease.
- (18) "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.
- (19) "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.
- (20) "Local health officer" means the individual having been appointed under chapter <u>70.05</u> RCW as the health officer for the local health department, or having been appointed under chapter <u>70.08</u> 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.
- (21) "Nosocomial infection" means an infection acquired in a hospital or other health care facility.
- (22) "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.
- (23) "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.
- (24) "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.
- (25) "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.
- (26) "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.
- (27) "School" means a facility for programs of education as defined in RCW <u>28A.210.070</u> (preschool and kindergarten through grade twelve).
- (28) "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
  - (I) Syphilis.
- (29) "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.
- (30) "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.
- (31) "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.
- (32) "Veterinarian" means an individual licensed under provisions of chapter <u>18.92</u> RCW, veterinary medicine, surgery, and dentistry and practicing animal health care.

[Statutory Authority: RCW <u>70.24.130</u> and <u>70.24.380</u>. 05-11-110, § 246-100-011, filed 5/18/05, effective 6/18/05. Statutory Authority: RCW <u>43.20.050</u> (2)(d), <u>70.05.050</u> and <u>70.05.060</u>. 03-06-003, § 246-100-011, filed 2/19/03, effective 2/19/03. Statutory Authority: RCW <u>43.20.050</u>. 00-23-120, § 246-100-011, filed 11/22/00, effective 12/23/00. Statutory Authority: RCW <u>70.24.022</u>, <u>70.24.340</u> and Public Law 104-146. 97-15-099, § 246-100-011, filed 7/21/97, effective 7/21/97. Statutory Authority: Chapter <u>70.24</u> RCW. 93-08-036 (Order 354B), § 246-100-011, filed 4/1/93, effective 5/2/93. Statutory Authority: RCW <u>43.20.050</u> and <u>70.24.130</u>. 92-02-019 (Order 225B), § 246-100-011, filed 12/23/91, effective 1/23/92. Statutory Authority: RCW <u>43.20.050</u>. 91-02-051 (Order 124B), recodified as § 246-100-011, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter <u>70.24</u> 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 <u>43.20.050</u>. 88-07-063 (Order 308), § 248-100-011, filed 3/16/88; 87-11-047 (Order 302), § 248-100-011, filed 5/19/87.]

Link - Washington State Legislature <a href="http://apps.leg.wa.gov/WAC/default.aspx?cite=246-100-011">http://apps.leg.wa.gov/WAC/default.aspx?cite=246-100-011</a>

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 <u>246-100-206</u>, <u>246-100-211</u>, and chapter <u>24 6-101</u> 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 <u>43.20.050</u>. 00-23-120, § 246-100-021, filed 11/22/00, effective 12/23/00. Statutory Authority: RCW <u>43.20.050</u>, <u>70.24.130</u> and <u>70.104.055</u>. 92-02-019 (Order 225B), § 246-100-021, filed 12/23/91, effective 1/23/92. Statutory Authority: RCW <u>43.20.050</u>. 91-02-051 (Order 124B), recodified as § 246-100-021, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter <u>70.104</u> RCW. 90-10-036 (Order 049), § 248-100-021, filed 4/26/90, effective 5/27/90. Statutory Authority: RCW <u>43.20.050</u>. 87-11-047 (Order 302), § 248-100-021, filed 5/19/87.]

Link - Washington State Legislature http://apps.leg.wa.gov/WAC/default.aspx?cite=246-100-021

#### Note

The Washington State Department of Health currently uses protocols from: Heymann, D. (2008). *Control of Communicable Diseases Manual,* 19<sup>th</sup> ed., American Public Health Association, Washington, D.C.

# **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 Table HC-1 of this section are notifiable for the prevention and control of communicable and noninfectious diseases and conditions in Washington.

- (1) Principal health care providers shall notify public health authorities of the conditions identified in Table HC-1 of this section as individual case reports following the requirements in WAC <u>246-101-105</u>, <u>246-101-115</u>, and <u>246-101-120</u>.
- (2) Other health care providers in attendance, other than the principal health care provider, shall notify public health authorities of the conditions identified in Table HC-1 of this section unless the condition notification has already been made.
- (3) Local health officers may require additional conditions to be notifiable within the local health officer's jurisdiction.

Link - Washington State Legislature http://apps.leg.wa.gov/WAC/default.aspx?cite=246-101-101

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

# WAC 246-101-105—Duties of the health care provider.

Health care providers shall:

- (1) Notify the local health department where the patient resides, or, in the event that patient residence cannot be determined, the local health department in which 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 of WAC <u>246-101-101</u>;
  - (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 including, but not limited to, suspected or confirmed outbreaks of varicella, influenza, viral meningitis, health care-associated 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 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 regarding cases of notifiable conditions specified as notifiable to the department in Table HC-1 of WAC <u>246-101-101</u>.
- (5) Assure that positive preliminary test results and positive final 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 of WAC <u>246-101-201</u>. 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.
- (10) By July 1, 2011, when ordering a laboratory test for a notifiable condition as identified in Table HC-1 of WAC <u>246-101-101</u>, providers must provide the laboratory with the following information for each test order:
  - (a) Patient name;
  - (b) Patient address including zip code;
  - (c) Patient date of birth;
  - (d) Patient sex;
  - (e) Name of the principal health care provider;
  - (f) Telephone number of the principal health care provider;
  - (g) Type of test requested;
  - (h) Type of specimen;
  - (i) Date of ordering specimen collection.

[Statutory Authority: RCW <u>43.20.050</u>. 11-02-065, § 246-101-105, filed 1/4/11, effective 2/4/11. Statutory Authority: RCW <u>43.20.050</u> and <u>70.104.030</u>. 00-23-120, § 246-101-105, filed 11/22/00, effective 12/23/00.]

Link - Washington State Legislature http://apps.leg.wa.gov/WAC/default.aspx?cite=246-101-105

### WAC 246-101-110—Means of notification.

Health care providers shall adhere to the following timelines and procedures:

(1) Conditions designated as immediately notifiable must be reported to the local health officer or the department, as specified in Table HC-1 of WAC <u>246-101-101</u>, immediately at the time of diagnosis or suspected diagnosis. This applies twenty-four hours a day, seven days a week. Each local health jurisdiction, as well as the department, maintains after-hours emergency phone contacts for this purpose. A party sending a report by secure facsimile copy or secure electronic transmission during normal business hours must confirm immediate receipt by a live person.

- (2) Conditions designated as notifiable within twenty-four hours must be reported to the local health officer or the department, as specified in Table HC-1 of WAC <u>246-101-101</u>, within twenty-four hours of diagnosis or suspected diagnosis, seven days a week. Reports during normal public health business hours may be sent by secure electronic transmission, telephone, or secure facsimile copy of a case report. A party sending a report outside of normal public health business hours must use the afterhours emergency phone contact for the appropriate jurisdiction.
- (3) Conditions designated as notifiable within three business days must be reported to the local health officer or department, as specified in Table HC-1 of WAC <u>246-101-101</u>, within three business days. Notification may be sent by written case report, secure electronic transmission, telephone, or secure facsimile copy of a case report; and
- (4) Conditions designated as notifiable on a monthly basis must be reported to the local health officer or the department, as specified in Table HC-1 of WAC <u>246-101-101</u>, on a monthly basis. Notification may be sent by written case report, secure electronic transmission, telephone, or secure facsimile copy of a case report.

[Statutory Authority: RCW <u>43.20.050</u>. 11-02-065, § 246-101-110, filed 1/4/11, effective 2/4/11. Statutory Authority: RCW <u>43.20.050</u>, <u>70.24.125</u>, <u>70.28.010</u> and <u>70.104.030</u>. 00-23-120, § 246-101-110, filed 11/22/00, effective 12/23/00.]

Link - Washington State Legislature <a href="http://apps.leg.wa.gov/WAC/default.aspx?cite=246-101-110">http://apps.leg.wa.gov/WAC/default.aspx?cite=246-101-110</a>

### WAC 246-101-115—Content of notifications.

- (1) For each condition listed in Table HC-1 of WAC <u>246-101-101</u>, health care providers shall provide the following information for each case or suspected case:
  - (a) Patient name;
  - (b) Patient address;
  - (c) Patient telephone number;
  - (d) Patient date of birth;
  - (e) Patient sex;
  - (f) Diagnosis or suspected diagnosis of disease or condition;
  - (g) Pertinent laboratory data, if available;
  - (h) Name of the principal health care provider;

- (i) Telephone number of the principal health care provider;
- (j) Address of the principal health care provider;
- (k) Name and telephone number of the person providing the report; and
- (I) 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  $\underline{43.20.050}$ . 11-02-065, § 246-101-115, filed 1/4/11, effective 2/4/11. Statutory Authority: RCW  $\underline{43.20.050}$ ,  $\underline{43.70.545}$ ,  $\underline{70.24.125}$ ,  $\underline{70.28.010}$  and  $\underline{70.104.030}$ . 00-23-120, § 246-101-115, filed 11/22/00, effective 12/23/00.]

Link - Washington State Legislature <a href="http://apps.leg.wa.gov/WAC/default.aspx?cite=246-101-115">http://apps.leg.wa.gov/WAC/default.aspx?cite=246-101-115</a>

# 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, including the local health department.
- (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 the identity of a person or release identifying information only as specified in RCW 70.24.105; and
  - (b) Shall under RCW <u>70.24.105(6)</u>, 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 <u>43.20.050</u>. 11-02-065, § 246-101-120, filed 1/4/11, effective 2/4/11. Statutory Authority: RCW <u>43.20.050</u> and <u>70.104.030</u>. 00-23-120, § 246-101-120, filed 11/22/00, effective 12/23/00.]

Link - Washington State Legislature http://apps.leg.wa.gov/WAC/default.aspx?cite=246-101-120

# **APPENDIX VI**

# Washington State School Directors' Association (WSSDA) Policy 3414—Infectious Disease Procedure 3414P—Infectious Disease

#### Infectious Diseases

In order to safeguard the school community from the spread of certain communicable diseases the superintendent will 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 will also prescribe the steps that will be taken to remove the danger to others.

The district will require that the parents or guardian 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 most current Infectious Disease Control Guide, provided by the State Department of Health and the Office of the Superintendent of Public Instruction. The principal and/or school nurse will report the presence of suspected case or cases of reportable communicable disease to the appropriate local health authority as required by the State Board of Health. Such information concerning a student's present and past health condition will be treated as confidential. The principal will 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. If the district has a release, the information may be disclosed pursuant to the restrictions in the release.

A school principal or designee has the authority to send an ill child home without the concurrence of the local health officer, but if the disease is reportable, the local health officer must be notified. The local health officer is the primary resource in the identification and control of infectious disease in community and school. The local health officer, in consultation with the superintendent can take whatever action deemed necessary to control or eliminate the spread of disease, including closing a school.

Legal References: Chapter 70.02 RCW Medical records—health care

information access and

disclosure

RCW 28A.210.010 Contagious diseases, limiting

contact—Rules

# Chapter 246-110 WAC

Contagious diseases—School districts and day care centers

# Management References:

Policy & Legal News, February 2013—Policy Revisions

**Adoption Date:** 

**School District Name:** 

Revised: 08.07; 12.11; 02.13

**Classification: Priority** 

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#### **Infectious Diseases**

An infectious disease is caused by the presence of certain microorganisms in the body. Infectious diseases may or may not be communicable or in a contagious state.

Diseases in a contagious state may be controlled by excluding the student from the classroom or by referring the student for medical attention. Staff members of a school must advise the school nurse and principal or designee when a student exhibits\_symptoms of an infectious disease based on the criteria outlined in this procedure. The school nurse and principal or designee must be provided with as much health information as is known about the case in a timely manner so that appropriate action can be initiated. (See Infectious Disease Control Guide for School Staff).

#### **List of Reportable Diseases**

In consultation with the school nurse, the district will report suspected disease or disease with known diagnosis to the local health department as indicated on the Notifiable Conditions page of the Washington Department of Health's website.

#### Cluster of Cases

The occurrence of any generalized (covering greater than 75 percent of the body) rash with or without fever, cough, runny nose, and reddened eyes in a school MUST be reported IMMEDIATELY to the school nurse who will in turn report as necessary to the local health department. Localized rash cases diagnosed as unrelated to a contagious disease, such as diaper rash, poison oak, etc. need not be reported. In addition to rash illnesses, any unusual cluster of infectious disease must be reported to the school nurse.

#### Identification and Follow-Up

- A. The length of absence from school for a student ill from a contagious disease is determined by the directions given in the Infectious Disease Control Guide or instructions provided by the health care provider, or instructions from the local health officer.
- B. The principal has the final responsibility for enforcing all exclusions.
- C. Follow-up of suspected communicable disease cases should be carried out in order to determine any action necessary to prevent the spread of the disease to additional children.

#### Reporting At Building Level

A student with a diagnosed reportable condition will be reported by the school principal or designee to the local health officer (or state health officer if local health officer is not available) as per schedule.

When symptoms of communicable disease are detected in a student who is at school, the regular procedure for the disposition of ill or injured students will be followed unless the student is fourteen years or older and the symptoms are of a sexually transmitted disease. In those instances the student has confidentiality

rights that prohibit notification of anyone but the health department. In all other instances, the principal or designee will:

- 1. Call the parent, guardian or emergency phone number to advise him/her of the signs and symptoms;
- 2. Determine when the parent or guardian will pick up the student;
- 3. Keep the student isolated but observed until the parent or guardian arrives; and
- 4. Notify the teacher of the arrangements that have been made prior to removing the student from school;
- 5. Notify the school nurse to ensure appropriate health-related interventions are in place.

#### **First Aid Procedures**

- A. Students should be asked to wash their own minor wound areas with soap and water under staff guidance when practicable. If performed by staff, wound cleansing should be conducted in the following manner:
  - 1. Soap and water are recommended for washing wounds. Individual packets with cleansing solutions or saline can also be used;
  - 2. Gloves must be worn when cleansing wounds which may put the staff member in contact with wound secretions or when contact with any bodily fluids is possible;
  - Gloves and any cleansing materials will be discarded in a lined trash container that is disposed of daily according to WAC 296-823— Occupational exposure to bloodborne pathogens and included in the most recent OSPI Infectious Disease Control Guide;
  - 4. Hands must be washed before and after treating the student and after removing the gloves; and
  - 5. Treatment must be documented in a health log program.
- B. Thermometers will be handled in the following manner:
  - 1. Only disposable thermometers or non-mercury thermometers with disposable sheath covers and/or temporal scan thermometers\_should be used when taking student's temperatures; and
  - 2. Disposable sheath covers will be discarded in a lined trash container that is secured and disposed of daily. Temporal scan thermometers will be disinfected after each use.

#### **Handling Of Body Fluids**

- A. Body fluids of all persons should be considered to contain potentially infectious agents (germs). Body fluids include blood, semen, vaginal secretions, drainage from scrapes and cuts, feces, urine, vomitus, saliva, and respiratory secretions;
- B. Gloves must be worn when direct hand contact with body fluids is anticipated (e.g., treating nose bleeds, bleeding abrasions), when handling clothes soiled by body fluids (e.g., urine and/or feces), when diapering children, and when sanitizing spaces used for diapering. Hand washing is the most important intervention for preventing the spread of disease and

- C. must take place after gloves are removed and between care of multiple students:
- D. Used gloves must be discarded in a secured lined trash container and disposed of daily according to WAC 296-823 - Bloodborne Pathogens and included in the most recent OSPI Infectious Disease Control Guide. Hands must then be washed thoroughly; and
- E. Self-treatment of minor injury, when reasonable, will be encouraged;
- F. Sharps will be disposed in an approved container. Sharps containers must be maintained upright throughout use, be tamper-proof and safely out of students' reach, be replaced routinely and not be allowed to overfill.
- G. General cleaning procedures will include use of a 10 percent bleach solution to kill norovirus and *C.difficile* spores.

For other universal precautions, the district will comply with WAC 296-823-Bloodborne Pathogens and the OSPI Infectious Disease Control Guideline.

# Treatment of Students with Chronic Medical Conditions (e.g., HIV; AIDS; Hepatitis)

On the disclosure that a student has been identified as having Human Immunodeficiency Virus (HIV) or Acquired Immunodeficiency Syndrome (AIDS) or Infectious Hepatitis, the superintendent, principal, parent, local health officer, school nurse and the student's licensed healthcare provider will confer as necessary and determine the appropriate placement of the student. The student will be accommodated in a least restrictive manner, free of discrimination, without endangering the other students or staff. The student may only be excluded from school on the written concurrence of the public health officer and the student's licensed healthcare provider, that remaining or returning to school would constitute a risk either to the student or to employees or other students. All discussions and records will be treated as confidential, consistent with RCW 70.24.105.

Release of information regarding the testing, test result, diagnosis or treatment of a student for a sexually transmitted disease, HIV, drug or alcohol or mental health treatment or family planning or abortion may only be made pursuant to an effective release and only to the degree permitted by the release. To be effective, a release must be signed and dated, must specify to whom the release may be made and the time period for which the release is effective. Students fourteen and older must authorize disclosure regarding HIV, sexually transmitted diseases, or reproductive healthcare issues. Students thirteen and older must authorize disclosure regarding drug or alcohol treatment or mental health treatment. Students of any age must authorize disclosure regarding family planning or abortion. Parents must authorize disclosure pertaining to younger students.

Any disclosure made pursuant to a release regarding reproductive healthcare, including sexually transmitted diseases, HIV/AIDS or drug or alcohol treatment must be accompanied by the following statement:

"This information has been disclosed to you from records whose confidentiality is protected by state law. State law prohibits you from making any further disclosure of it without the specific written consent of the person to whom it pertains, or as otherwise permitted by state law. A general authorization for the release of medical or other information is not sufficient for this purpose."

The district will ensure that newly hired school district employees receive the HIV/AIDS training regarding:

- A. History and epidemiology of HIV/AIDS;
- B. Methods of transmission of HIV;
- C. Methods of prevention of HIV including universal precautions for handling of body fluids;
- D. Current treatment for symptoms of AIDS and prognosis of disease progression;
- E. State and federal laws governing discrimination of persons with HIV/AIDS; and
- F. State and federal laws regulating confidentiality of a person's HIV antibody status.

New employee training will be provided within six months from the first day of employment in the district.

Continuing employees will receive information, within one year of district receipt from OSPI, on new discoveries or changes in accepted knowledge of transmission, prevention, and treatment for HIV/AIDS.

Date: 08.07; 02.13; 09.13

# **APPENDIX VII**

# **Chapter 246-366 WAC Primary and Secondary Schools**

**WAC 246-366-001 Introduction** 

**WAC 246-366-010 Definitions** 

**WAC 246-366-050 Buildings** 

WAC 246-366-060 Plumbing, Water Supply and Fixtures

WAC 246-366-070 Sewage Disposal

**WAC 246-366-130 Food Handling** 

WAC 246-366-150 Exemption

#### Note

Additional environmental health and safety standards for primary and secondary school facilities can be found at the following

link: http://apps.leg.wa.gov/wac/default.aspx?cite=246-366

**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 <u>43.20.050</u>. 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.]

Link - Washington State Legislature http://apps.leg.wa.gov/WAC/default.aspx?cite=246-366-001

**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 <u>43.20.050</u>. 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.]

Link - Washington State Legislature http://apps.leg.wa.gov/WAC/default.aspx?cite=246-366-010

# WAC 246-366-050—Buildings.

- (1) Buildings shall be kept clean and in good repair.
- (2) Instructional areas shall have a minimum average ceiling height of 8 feet. Ceiling height shall be the clear vertical distance from the finished floor to the finished ceiling. No projections from the finished ceiling shall be less than 7 feet vertical distance from the finished floor, e.g., beams, lighting fixtures, sprinklers, pipe work.
- (3) All stairway[s] and steps shall have handrails and nonslip treads.
- (4) The floors shall have an easily cleanable surface.
- (5) The premises and all buildings shall be free of insects and rodents of public health significance and conditions which attract, provide harborage and promote propagation of vermin.
- (6) All poisonous compounds shall be easily identified, used with extreme caution and stored in such a manner as to prevent unauthorized use or possible contamination of food and drink.
- (7) There shall be sufficient space provided for the storage of outdoor clothing, play equipment and instructional equipment. The space shall be easily accessible, well lighted, heated and ventilated.
- (8) Schools shall be provided with windows sufficient in number, size and location to permit students to see to the outside. Windows are optional in special purpose instructional areas including, but not limited to, little theaters, music areas, multipurpose areas, gymnasiums, auditoriums,

- shops, libraries and seminar areas. No student shall occupy an instructional area without windows more than 50 percent of the school day.
- (9) Exterior sun control shall be provided to exclude direct sunlight from window areas and skylights of instructional areas, assembly rooms and meeting rooms during at least 80 percent of the normal school hours. Each area shall be considered as an individual case. Sun control is not required for sun angles less than 42 degrees up from the horizontal. Exterior sun control is not required if air conditioning is provided, or special glass installed having a total solar energy transmission factor less than 60 percent.

[Statutory Authority: RCW <u>43.20.050</u>. 91-02-051 (Order 124B), recodified as § 246-366-050, filed 12/27/90, effective 1/31/91; 82-07-015 (Order 225), § 248-64-260, filed 3/9/82; 79-08-078 (Order 183), § 248-64-260, filed 7/26/79; Order 124, § 248-64-260, filed 3/18/76; Order 55, § 248-64-260, filed 6/8/71.]

Link - Washington State Legislature http://apps.leg.wa.gov/WAC/default.aspx?cite=246-366-050

## WAC 246-366-060- Plumbing, water supply and fixtures.

- (1) Plumbing: Plumbing shall be sized, installed, and maintained in accordance with the state building code. However, local code requirements shall prevail, when these requirements are more stringent or in excess of the state building code.
- (2) Water supply: The water supply system for a school shall be designed, constructed, maintained and operated in accordance with chapter <u>246-290</u> WAC.
- (3) Toilet and handwashing facilities:
  - (a) Adequate, conveniently located toilet and handwashing facilities shall be provided for students and employees. At handwashing facilities soap and single-service towels shall be provided. Common use towels are prohibited. Warm air dryers may be used in place of single-service towels. Toilet paper shall be available, conveniently located adjacent to each toilet fixture.
  - (b) The number of toilet and handwashing fixtures in schools established in existing structures, previously designed or utilized for other purposes shall be in accordance with the state building code. However, local code requirements shall prevail, when these requirements are more stringent or in excess of the state building code.
  - (c) Toilet and handwashing facilities must be accessible for use during school hours and scheduled events.

(d) Handwashing facilities shall be provided with hot water at a maximum temperature of 120 degrees Fahrenheit. If hand operated self-closing faucets are used, they must be of a metering type capable of providing at least ten seconds of running water.

#### (4) Showers:

- (a) Showers shall be provided for classes in physical education, at grades 9 and above. An automatically controlled hot water supply of 100 to 120 degrees Fahrenheit shall be provided. Showers with cold water only shall not be permitted.
- (b) Drying areas, if provided, shall be adjacent to the showers and adjacent to locker rooms. Shower and drying areas shall have water impervious nonskid floors. Walls shall be water impervious up to showerhead heights. Upper walls and ceiling shall be of smooth, easily washable construction.
- (c) Locker and/or dressing room floors shall have a water impervious surface. Walls shall have a washable surface. In new construction, floor drains shall be provided in locker and dressing areas.
- (d) If towels are supplied by the school, they shall be for individual use only and shall be laundered after each use.

[Statutory Authority: RCW <u>43.20.050</u>. 92-02-019 (Order 225B), § 246-366-060, filed 12/23/91, effective 1/23/92; 91-02-051 (Order 124B), recodified as § 246-366-060, filed 12/27/90, effective 1/31/91; 82-07-015 (Order 225), § 248-64-270, filed 3/9/82; 79-08-078 (Order 183), § 248-64-270, filed 7/26/79; Order 124, § 248-64-270, filed 3/18/76; Order 55, § 248-64-270, filed 6/8/71.]

Link - Washington State Legislature <a href="http://apps.leg.wa.gov/WAC/default.aspx?cite=246-366-060">http://apps.leg.wa.gov/WAC/default.aspx?cite=246-366-060</a>

# **WAC 246-366-070 – Sewage disposal.**

All sewage and waste water from a school shall be drained to a sewerage disposal system which is approved by the jurisdictional agency. On-site sewage disposal systems shall be designed, constructed and maintained in accordance with chapters <u>246-272</u> and <u>173-240</u> WAC.

[Statutory Authority: RCW <u>43.20.050</u>. 92-02-019 (Order 225B), § 246-366-070, filed 12/23/91, effective 1/23/92; 91-02-051 (Order 124B), recodified as § 246-366-070, filed 12/27/90, effective 1/31/91; 82-07-015 (Order 225),

Link - Washington State Legislature <a href="http://apps.leg.wa.gov/WAC/default.aspx?cite=246-366-070">http://apps.leg.wa.gov/WAC/default.aspx?cite=246-366-070</a>

## **WAC 246-366-130—Food handling.**

- Food storage, preparation, and service facilities shall be constructed and maintained and operated in accordance with chapters <u>246-215</u> and <u>246-217</u> 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 <u>43.20.050</u>. 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.]

Link - Washington State Legislature <a href="http://apps.leg.wa.gov/WAC/default.aspx?cite=246-366-130">http://apps.leg.wa.gov/WAC/default.aspx?cite=246-366-130</a>

# WAC 246-366-150—Exemption.

The board of health may, at its discretion, exempt a school from complying with parts of these regulations when it has been found after thorough investigation and consideration that such exemption may be made in an individual case without placing the health or safety of the students or staff of the school in danger and that strict enforcement of the regulation would create an undue hardship upon the school.

[Statutory Authority: RCW <u>43.20.050</u>. 91-02-051 (Order 124B), recodified as § 246-366-150, filed 12/27/90, effective 1/31/91; 82-07-015 (Order 225), § 248-64-360, filed 3/9/82; Order 55, § 248-64-360, filed 6/8/71.]

Link - Washington State Legislature http://apps.leg.wa.gov/WAC/default.aspx?cite=246-366-150

For additional WACs in Chapter 246-366 related to building safety in primary and secondary schools please use the following link: http://apps.leg.wa.gov/WAC/default.aspx?cite=246-366

# **Appendix VIII**

# **Guidelines for Handling Body Fluids in School**

#### **Guidelines for Handling Body Fluids in School**

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 or unreported disease.

#### **Handling Body Fluids In Schools**

#### **A. Standard Precautions** (includes universal precautions)

Standard precautions are a newer approach to infection control. Broader than universal precautions (many state laws refer to this term), standard precautions are recommended practice for protection against transmission of bloodborne pathogens and other infectious diseases in the workplace. They combine the major features of universal precautions, and body substance isolation, and are based on the principle that all blood, body fluids, secretions (including respiratory secretions), excretions (except sweat), non-intact skin, and mucous membranes may contain transmissible infectious agents. Standard precautions include a group of infection prevention practices that apply to all persons, regardless of suspected or confirmed infection status, in any setting with delivery of healthcare, including first aid. These precautions address hand hygiene, use of personal protective equipment depending on the anticipated exposure, and safe injection practices. Also, equipment or items in the environment likely to have been contaminated with infectious body fluids must be handled in a manner to prevent transmission of infectious agents (e.g., wear gloves for direct contact, contain heavily soiled equipment, properly clean and disinfect or sterilize reusable equipment).

NOTE: In its 2007 update, Centers for Disease Control and Prevention (CDC) added respiratory hygiene/cough etiquette to their standard precautions. Respiratory hygiene has become a standard practice in school and community influenza control plans. This includes use of masks when providing healthcare to a person with a potential respiratory infection as well as everybody covering coughs and sneezes.

(Excerpted from Centers for Disease Control and Prevention (CDC), 2007 Guideline for Isolation Precautions in Hospitals.) http://www.cdc.gov/hicpac/2007IP/2007isolationPrecautions.html

The key steps to preventing spread of disease related to body fluids at school include:

- Frequent hand washing;
- Using gloves when providing direct health care;

 Washing hands after removing gloves and before working with the next person.

#### **B. General Precautions**

- Eating, drinking, smoking, applying cosmetics or lip balm, and handling contact lenses are prohibited in work areas where there is a reasonable likelihood of occupational body fluid exposure.
- Food and drink shall not be kept in refrigerators, freezers, shelves, cabinets, or on countertops or bench tops where blood or other potentially infectious materials are present.

### C. Hand Washing Procedures

- Recommend hand washing procedure:
  - Use a plain (non-antimicrobial) liquid soap for routine hand washing with temperate (warm) water, scrub vigorously for at least 15 seconds and then rinse under a stream of warm water. Soap suspends soil and microorganisms, allowing them to be washed off. Running water is necessary to carry away dirt and debris.
  - Use an antimicrobial agent or waterless antiseptic agent for specific circumstances, e.g., control of outbreaks or infections when soap and water are not available.
  - Use paper towels to turn off the water faucet.
  - Use fresh paper towels to thoroughly dry hands.
  - Use paper towels to open any exit door.
  - Use paper towels to turn off bathroom lights.
  - Wash hands after touching any body fluid or contaminated object.
  - Wash hands after gloves are removed and between patients.
  - Take means to avoid chapped or cracked skin on hands if providing healthcare.
  - Facilities must provide an adequate supply of running potable water at a temperate temperature (85°–110°F), soap, and single-use towels or hot-air drying machines <a href="http://apps.leg.wa.gov/WAC/default.aspx?cite=246-366-060">http://apps.leg.wa.gov/WAC/default.aspx?cite=246-366-060</a>.

• Bar soap should not be used. Disposable, non-refillable liquid soap

dispensers are preferred. Antimicrobial soaps have no benefit over plain

- soaps and are linked to antibiotic resistance development, endocrine disruption, and environmental problems. Fragrance-free soaps are less sensitizing.
- Hand sanitizers should never replace standard hand washing with soap and water; however, when hand washing facilities are not available an ethanol alcohol-based (minimum 62 percent) hand sanitizer can be used, preferably in fragrance-free gel or foaming form. Enough sanitizer should be used to wet the hands for at least 15 seconds or longer if indicated by the manufacturer. Remember, alcohol hand sanitizers have not been shown to be effective against norovirus or Clostridium difficile spores or for soiled hands. Hands must be washed with soap and running water as soon as feasible. Take precautions to avoid accidental ingestion or abuse by students.

#### D. Use of Gloves

- When possible, direct skin contact with body fluids should be avoided.
- Disposable non-latex gloves should be available in the offices of coaches, custodians, nurses, principals, and staff in school settings such as the gymnasium, play fields, preschool, 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, which includes gloves.
- 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) non-latex gloves must 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.
- Gloves, after use involving contact with body fluids, should be placed in a plastic bag or lined trash can, secured, and disposed of daily.
- Because of the increasing incidence of allergic reactions to latex, only non-latex gloves should be used.
- General-purpose utility gloves may be cleaned and disinfected for reuse if they show no signs of deterioration. However, utility gloves 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.
- Unbroken skin is an excellent barrier to infectious agents. Staff with sores
  or cuts on their hands (non-intact skin) having contact with blood or body
  fluids should always double glove if lesions are extensive.

- Instruction to staff who are at risk for exposure to body fluids should include:
  - Staff should change gloves between tasks on the same student/staff person after contact with material which may have a high concentration of microbes.
  - Staff, including bus drivers/monitors and trip sponsors, should be taught how to properly remove gloves.
  - Gloves need not be worn when feeding students, or when wiping saliva from skin, unless blood is present or the caregiver has cuts or wounds on their hands.
  - Staff should always wash hands with soap and water after removing gloves.
  - 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). In these instances,
    hands and other affected skin areas of all exposed persons should
    be thoroughly washed with soap and water as soon as possible.
  - As much as possible, have the injured student provide direct care for the wound (applying pressure, washing).
  - If contact with contaminated body fluids by non-intact skin or mucous membranes does occur, the staff member should follow the school's policy for post-exposure management and seek medical evaluation of the need for post-exposure prophylaxis.

#### **E. Contaminated Sharps**

- Students should be advised to report found needles, broken glass, or other sharps, but not touch them.
- Staff and students should be reminded to take care to prevent injuries when using needles and other sharps.
- Broken glassware, discarded needles, and other sharps 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, by staff wearing appropriate protective gloves. Broken glass should be disposed of in a container which keeps others from being cut.
- Contaminated, reusable sharps must not be stored or processed in a manner which requires employees to reach by hand into the containers where these sharps have been placed.

- Contaminated needles and other contaminated sharps must not be bent, recapped, or removed.
- Shearing or breaking of contaminated needles is prohibited.
- Contaminated sharps must be discarded immediately in containers which are closable, puncture resistant, leak proof on sides and bottom, and labeled or color-coded.
- 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 rooms, science classrooms).
- Sharps 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 they do not need to be closeable, since devices will be removed from these containers.
- 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 Appendix XII).

# F. Cardiopulmonary Resuscitation (CPR)

• Use resuscitation shields with one-way valve (mouth-to-mouth, mouth-to-nose, mouth-to-nose and mouth) during CPR.

#### **G.** General Housekeeping Practices

• The employer must ensure that the worksite is maintained in a clean and sanitary condition and determine and implement an appropriate cleaning schedule for rooms where body fluids are present.

- Housekeeping workers must wear appropriate personal protective equipment, including general-purpose utility gloves, during all cleaning of blood or other potentially infectious materials.
- Cleaning schedules must 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 contamination present. High-use surfaces should be cleaned more frequently.
- General cleaning involves soap/detergent and water. Cleaning with soap and water with wiping, particularly with microfiber cloths, will remove dirt and organic matter and the majority of microorganisms. In cases of contamination with body fluids, bathrooms, and high-touch surfaces, registered disinfectants or appropriate bleach solutions will kill most of the organisms which are left. Floors and walls do not need to be disinfected.
- Encourage frequent hand-washing to reduce general contamination. It is recommended that students wash their hands before and after computer use.

#### H. Disinfectants

- Disinfectants are U.S. Environmental Protection Agency (<u>EPA</u>) registered antimicrobials that are recommended for use on hard inanimate surfaces and objects to kill or inactivate infectious organisms, though not necessarily their spores. Disinfectants do not sterilize a surface. Sterilizers destroy or eliminate all forms of microbial life including fungi, viruses, and all forms of bacteria and their spores. Sanitizers reduce the level of microorganisms to levels considered safe for general purposes.
- There are several classes of disinfectants which are registered by their
  effectiveness against specific microorganisms as well as their
  effectiveness on types of hard surfaces. Many of the active ingredients in
  disinfectant products are skin, eye, and respiratory irritants. Schools must
  have a Material Safety Data Sheet (MSDS) on hand for each chemical
  purchased. Manufacturer label instructions must be followed, including
  those for personal protective equipment.
- Label instructions on cleaning products and disinfectants must be followed. Wash surfaces with a soap or detergent product to remove debris and microorganisms, rinse with water, and follow with an EPAregistered disinfectant or appropriate bleach solution to kill microorganisms. The area to be disinfected must stay wet for the length of time indicated on the label to kill the microorganisms.
- If a surface is not visibly dirty, it can be cleaned and disinfected with an EPA registered product that combines cleaner and disinfectant. The label instructions must be followed.

- If a surface is visibly dirty, it should be cleaned first (using friction) with an EPA registered product that combines cleaner and disinfectant or it must be cleaned with a cleaner first, then rinsed, then disinfected with an EPAregistered disinfectant.
- When choosing a disinfectant, determine what microorganisms you want to protect against and the area it is to be used in. For general disinfection, choose a product that is effective against most bacteria and viruses and lists schools as a recommended site. Methicillin-resistant *Staphylococcus* aureus (MRSA) and influenza viruses are killed by several types of disinfectants. Nonenveloped viruses such as noroviruses are more difficult to kill than vegetative (growing) bacteria and enveloped viruses such as influenzas. A 1:10 bleach solution of household (5-6 percent) bleach with a one minute wet time is necessary to kill noroviruses. Some bacteria, such as Clostridium difficile, form reproductive spores. While the vegetative forms of bacteria are killed by a range of disinfectants, bacterial spores are not. A 1:10 bleach solution of household (5-6%) bleach with a minimum five-minute wet contact time is necessary to kill C. difficile spores. EPA has also registered at least three cleaner/disinfectant wipe products with 1:10 bleach which are effective against *C. difficile* (vegetative and spores) and noroviruses, when used as directed. Never mix cleaners and disinfectants, or any other chemicals, unless the labels indicate it is safe to do so. Never soak wipe cloths or mops in a class of disinfectant that is different from the disinfectant you were using on the cloth or mop to clean a surface or item. For example, chlorine bleach must never be mixed with ammonia or acids such as vinegar. (Do not mop with a quaternary ammonia compound and then soak the mop in a bleach solution.)
- Eye protection, in addition to gloves, may be necessary when mixing or diluting chemicals read and follow the labels.
- Disinfectants should be used in well ventilated areas. Never use disinfectant or pesticide foggers in schools or spray disinfectants into the air. They are to be used on hard surfaces and should be breathed as little as possible.
- Product shelf life for disinfectants and expiration dates should be followed.
- Disinfecting wipes, particularly alcohol wipes, are recommended for electronic items that are touched often. Make sure the wipe is suitable for the surface and the surface will stay wet the required contact time.
- Bleach solutions:
  - Sodium hypochlorite (bleach) is a common and effective sanitizer, disinfectant, and sporicide, depending on the concentration and the "kill" time – the time the surface stays wet with the bleach solution.

- Bleach used as a disinfectant must be regular strength (5.25 percent) or ultra (6.0 percent), plain, unscented liquid sodium hypochlorite. Do not use scented, powdered, splash-less, or colorsafe "bleach." Check the label.
- Bleach solutions for disinfection or sanitizing must be prepared fresh daily. Add the required amount of bleach to cool water to reduce fumes. Eye protection and gloves should be used when diluting full strength bleach. The Department of Labor and Industries Core Safety Rules, WAC <u>296-800-15030</u>, require an emergency eye wash within 50 feet or 10 seconds of full strength bleach being used. See <u>DOSH Directive 13.0</u> for details.
- Bleach is a disinfectant, not a cleaner. Surfaces must be cleaned with soap and water before the bleach solution is used. Bleach rapidly loses efficacy in the presence of organic material. Do not mix soap/detergent in with bleach.
- After application of the bleach solution, the surface does not need to be rinsed, but does need to be dry before using.
- Bleach dilutions:
  - Sanitizing (food contact surfaces, bottles, mouthed toys, etc.) (50-100 ppm)
    - 1/16 tsp bleach/1 cup water
    - 1 tsp bleach/1 gallon water
    - Immerse for at least 2 minutes
    - Air dry
  - Disinfecting (diaper area, bathrooms, non-diarrheal stools) (500-600 ppm)
    - ¾ tsp bleach/1 cup water
    - 1 TBSP bleach/1 quart water
    - ¼ cup bleach/1 gallon water
    - Area must stay wet at least 2 minutes.
  - Sporicide/Noroviruses/Hanta viruses (5000+ ppm)
    - 1 part bleach to 9 parts water1½ cups bleach/1 gallon water

- Wet contact time for sporicide: 5+ minutes
- Wet contact time for Noroviruses: 1+ minute
- Wet contact time for rodent droppings: 10 minutes
- See DOH Hantavirus webpage for specifics: <a href="http://www.doh.wa.gov/YouandYourFamily/l">http://www.doh.wa.gov/YouandYourFamily/l</a> llnessandDisease/Hantavirus.aspx
- This is an extremely concentrated bleach solution.
   Protect eyes, skin, and clothing during preparation and use. Keep the area well ventilated.
- Bleach wipes and stable bleach solutions
  - Bleach wipes-There are at least two EPA registered 1:10 bleach wipes on the market that also contain a detergent and are registered for use against *C. difficile* spores and noroviruses in addition to being effective against several types of vegetative bacteria.
  - Stable bleach solutions There is at least one EPA registered 1:10 bleach solution available that contains a detergent and is registered for use against *C. difficile* spores and noroviruses in addition to being effective against several types of vegetative bacteria.
  - Use of these stabilized commercial products would address many of the safety concerns with mixing and using strong bleach solutions.

### I. Procedures for Cleaning and Disinfection of Hard Surfaces

- The employer must ensure those who are cleaning wear non-latex or utility gloves or other protective equipment. There should not be exposure of open skin or mucous membranes to blood or body fluids being cleaned.
- Disposable towels or tissues should be used whenever possible, and mops should be cleaned and soaked in disinfectant after use, following label instructions. Microfiber clothes and mops can be machine washed and dried.
- Contaminated disposable items (tissues, paper towels, diapers) should be handled with disposable gloves and disposed of properly.
- Cleaning and disinfection of hard surfaces, including sporting equipment such as wrestling and gymnastic mats, as well as desk and tabletops used for eating, should be done routinely at the conclusion of each day. (Some products clean and disinfect in one application, if the surface is not noticeably dirty.)

- Following an outbreak of an infectious disease, sanitize all toys and educational materials with hard surfaces in pre-school and kindergarten classes.
- When surfaces are noticeably dirty, clean immediately, or as soon as feasibly possible, with soap and water, followed by an appropriate disinfectant after completion of cleaning procedures. When products contain both detergents and disinfectants, you can clean first with the product; then use a fresh wipe or cloth to disinfect the surface.
- Surfaces where diapers are changed must be cleaned and disinfected after each use. If a surface is visibly dirty, a cleaner or detergent must be used first, then the surface disinfected.
- Diaper changing areas or other surfaces/items contaminated with diarrheal stool must be cleaned then disinfected with EPA-registered disinfectants that kill *Clostridium difficile* spores or a 1:10 household chlorine bleach solution, freshly made up daily. A 1:10 bleach solution is necessary to kill either *C. difficile* spores (five minute wet contact time) or norovirus (one minute wet contact time).
- Surfaces must be intact to be cleaned and disinfected. Ripped or torn equipment must be repaired or replaced.

#### J. Blood or Body Fluid Spills

- Many schools stock sanitary absorbent agents specifically intended for cleaning body fluid spills. The dry material is applied to the area, left for a few minutes to absorb the fluid. Carefully collect the absorbent material without causing dust or aerosolization. Clean and disinfect the area. Soiled surfaces should be promptly cleaned with soap and water. After cleaning a spill, apply an appropriate disinfectant to the area and allow to remain wet for at least the minimum time specified by the manufacturer. Use an EPA registered hospital disinfectant, which is either tuberculosis (TB) effective or HIV and HBV effective. A solution of six percent sodium hypochlorite (unscented household bleach) diluted 1:10 with water may also be used.
- Diarrheal stools must be assumed to be potentially contaminated with Clostridium difficile or noroviruses, requiring cleaning, followed by disinfection with a 1:10 bleach solution or EPA registered 1:10 bleach solution or wipe.
- Dispose of non-reusable cleaning equipment.
- Wash hands with soap and water after removing gloves.

#### K. Cleaning up vomit

- Vomit should be presumed to be contaminated with noroviruses, which are highly infective. Clear individuals from the area. Cover the vomit with a disposable cloth to reduce potential airborne contamination. Soak with soap and water over the cloth.
- Use face masks with eye protection or a face shield, gloves, and aprons
  when cleaning up vomit. Paper towels or other towels used to clean-up
  vomit should be immediately placed in a sealed trash bag for disposal.
- Discard any uncovered food in the area.
- Clean contaminated surfaces with soap and water. Then disinfect with a
  fresh 1:10 bleach solution or EPA-registered 1:10 bleach wipe, with at
  least a one minute contact time. EPA registered disinfectants for
  noroviruses can also be used.
- Any food contact surfaces must then receive a clear water rinse and a final wipe down with a regular sanitizing bleach solution.

#### L. Athletics

- During athletic contests or practice, an ample supply of towels should be available. Disposable towels and tissues are recommended for clean-up, cloth towels for showering or bathing.
- Disposable 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.
- During sporting events or practice, competitors who are bleeding, have an open wound, or blood on the uniform shall not participate in an event until proper treatment is administered and contaminated surfaces cleaned and disinfected. This may mean the player may be kept out of play.
- The bloodied portion of a uniform must be properly disinfected or the uniform changed before the athlete may participate. (See Laundry below.)
- Mats should be cleaned and disinfected before and after practice and matches and immediately following any release of bodily fluids. When mats are rolled up, all sides of mats should be cleaned before they are rolled up.
- Mats must be smooth and intact to be cleaned and disinfected effectively. Repair or dispose of torn or eroded mats.

- Disinfectants for athletic mats must be EPA registered for the purpose and effective against at least MRSA, herpes, ringworm, and impetigo. Label instructions must be followed.
- Mops, buckets, and cleaning clothes should be designated for athletic areas. Microfiber clothes and mops have been shown to be more effective, easier to clean, and use, than the old cloth ones. Mop heads should be laundered at least weekly.
- Those who are cleaning should wear non-latex or utility gloves or other
  protective equipment and should avoid exposure of open skin or mucous
  membranes to blood or body fluids.
- Wet contact time must be met for adequate disinfection.
- Excess dust, dirt, hair, and particulates must be removed with designated push brooms or dust mops prior to cleaning, looking for tears or loose tape.
- At least every two weeks, tape on floors or surfaces should be removed to allow thorough cleaning underneath.
- Bleach disinfection solution must be made fresh daily.
- All equipment and mats, including wall mats, where athletes have skin contact, must be cleaned and disinfected.

#### M. Procedures for Cleaning and Disinfection of Carpets/Rugs

- The employer must ensure that those who are cleaning wear non-latex or utility gloves or other protective equipment and avoid exposure of open skin or mucous membranes to blood or body fluids.
- Soiled rugs or carpets should be cleaned and disinfected promptly after a blood or body fluid spill. Feces-contaminated carpet should be disposed of.
- If necessary, mechanically remove body fluid with disposable towels or an appropriate wet vacuum extractor. Avoid aerosolization of material.
- Apply a sanitary absorbent agent on soiled area (follow manufacturer's directions). Let dry and re-vacuum.
- Spray with white vinegar solution (one ounce vinegar to one quart cool water).
- Blot area with paper towels.
- The area should then be disinfected with an EPA approved disinfectant followed by an application of bacteriostatic rug shampoo.

- The vacuum bag or sweepings should be disposed of in a plastic bag.
- Disinfect vacuuming and other equipment used in clean up.
- Dispose of non-reusable cleaning equipment.

#### N. Disposal of Blood-Containing Materials

- The employer must ensure school custodians wear utility gloves for disposing of soiled items, plastic bags containing soiled items, and whenever there is a risk of puncture.
- If a towel, cloth, or item of clothing is so saturated with blood it would drip blood if compressed, then it should be disposed of in a biohazard bag or container.
- Place other items which contain bodily fluids or excretions in a plastic bag, tie it, and place it in a second plastic bag. The second bag should then be tied.
- 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.
- Equipment contaminated with blood or other potentially infectious materials must be checked and decontaminated, if possible, prior to servicing or shipping.
- Equipment which cannot be effectively disinfected must be labeled with the international biohazard symbol and contaminated parts documented.
- Waste, such as bloody tissues (not saturated with blood), should be disposed of properly in a plastic-lined trash can. It is not considered hazardous material, so it can be thrown away in the school dumpster.
- Dispose of all regulated waste according to applicable state and county regulations.

#### O. Procedures for Cleaning and Disinfection of Cleaning Equipment

- The employer must ensure employees who have contact with cleaning equipment wear protective gloves.
- Soak mops in disinfectant after use and rinse thoroughly, or wash in a hot water cycle before rinsing.
- Place disposable cleaning equipment in a plastic bag as appropriate.
- Dispose of water down the sewer system.

- Rinse non-disposable cleaning equipment (such as buckets) thoroughly in disinfectant.
- All bins, pails, cans, and similar receptacles intended for reuse and 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.
- Dispose of used disinfectant solution down the sewer system.
- Promptly remove gloves and discard in appropriate receptacles.
- Wash hands.

# P. Procedures for Cleaning and Disinfection of Clothing and Linens soiled with Body Fluids

- Soiled linens should be handled as little as possible and with minimal agitation.
- The employer must ensure employees who have contact with contaminated laundry wear protective gloves and other appropriate personal protective equipment (PPE).
- All soiled linens should be placed in plastic bags at the location where they were used.
- 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, which prevent soak-through and/or leakage of fluids to the exterior.
- Reusable PPE and other non-disposable items (towels used to wipe up body fluid, etc.) soaked through with body fluids should be placed in plastic bags labeled with the international biohazard symbol or color-code.
- Required labels are to be affixed as close as feasible to the container by string, wire, adhesive, or other method, which prevents their loss or unintentional removal. Red bags or containers may be substituted for labels.
- If the school does its own laundry (gym towels, sports uniforms, etc.) or sends it out, the goal is to remove infectious agents by the use of soap and water (140-160 degrees F) AND dry bleach (which will not affect fabric colors). To work effectively, the washing machine must not be overloaded. Clothing soaked with body fluids should be washed separately from other items. Pre-soaking may be required for heavily soiled clothes.

- Student clothing that is soiled with body fluid, including feces, should be bagged and sent home for washing with appropriate directions to the parent/guardian.
- Clean laundry should never be placed in baskets or other receptacles that have held dirty laundry unless they are cleaned and disinfected between dirty and clean use.

#### Q. Signs and Labels

- Warning labels must be affixed to containers of regulated waste. Labels should be fluorescent orange or orange-red with contrasting color writing. Red bags may be substituted for labels.
- WAC <u>299-823-14060</u>—Handle regulated waste properly and safely, from the <u>Bloodborne Pathogens Standard chapter 296-823 WAC</u> uses the term "regulated waste," to refer to the following categories of waste:
  - liquid or semi-liquid blood or other potentially infectious materials (OPIM);
  - items contaminated with blood or OPIM and which would release these substances in a liquid or semi-liquid state if compressed;
  - items that are caked with dried blood or OPIM and are capable of releasing these materials during handling;
  - contaminated sharps; and
  - pathological and microbiological wastes containing blood or OPIM.

Link – Washington State Legislature, Handle regulated waste properly and safely <a href="http://apps.leg.wa.gov/wac/default.aspx?cite=296-823-14060">http://apps.leg.wa.gov/wac/default.aspx?cite=296-823-14060</a>

According to the Occupational Safety and Health Administration (OSHA), <a href="http://www.osha.gov/pls/oshaweb/owadisp.show\_document?p\_table=INTERPRETATIONS&p\_id=27092">http://www.osha.gov/pls/oshaweb/owadisp.show\_document?p\_table=INTERPRETATIONS&p\_id=27092</a>.

It is the employer's responsibility to determine the existence of regulated waste. This determination should not be based on actual volume of blood, but rather on the potential to release blood, (e.g., when compacted in the waste container).

Bandages that are not saturated to the point of releasing blood or OPIM if compressed, would not be considered regulated waste. Similarly, discarded feminine hygiene products do not normally meet the criteria for regulated waste as defined by the Bloodborne Pathogens Standard. Beyond these guidelines, it is the employer's responsibility to determine the existence of regulated waste.

Table 1
Potential Transmission of Infectious Agents in a School Setting

Body Fluid/Source	Potential Infectious	Potential Route of	
		Transmission	
Blood	Agent Hepatitis B virus Hepatitis C virus HIV Cytomegalovirus  Bacteria—Campylobacter, Salmonella, Shigella, E coli O157:H7 and related E. coli, Clostridium difficile Parasites—Giardia, Cryptosporidium, Cyclospora Viruses—Noroviruses, rotavirus, enteroviruses,	Percutaneous inoculation (needlestick)  Inoculation of cuts, abrasions, dermatitis, or mucous membranes  Oral ingestion from contaminated hands, objects	
Fluid from Skin or Mucous Membrane Lesions	hepatitis A virus  Herpes Varicella  Staphylococcus, methicillin-resistant Staphylococcus aureus (MRSA) Streptococcus (impetigo)	Inoculation of cuts, abrasions, dermatitis, or mucous membranes  Direct contact of contaminated articles with intact skin or mucous membranes.	
Semen/Vaginal Fluid	Hepatitis B virus Hepatitis C virus HIV Gonorrhea Syphilis Chlamydia Other sexually transmitted infections	Sexual contact including by mucous membranes or contact with nonintact skin	
Urine • incontinence	Cytomegalovirus Rubella	Oral or percutaneous inoculation from contaminated hands, objects	
Vomitus	Norovirus Rotavirus	Oral inoculation from contaminated hands, objects  Respiratory inoculation from respiratory droplets	

#### Resources

Guidelines for Handling Body Fluids in School are based on OSPI's *Guidelines* for Implementation of School Employee Training on HIV/AIDS and Other Bloodborne Pathogens, April 2011, pages 13-21 http://www.k12.wa.us/HealthServices/pubdocs/GuidelinesHIVBloodborne.pdf

State of Washington Department of Labor and Industry Administrative Policy Number ES.C.4.2 - Minors and Blood borne Pathogens in Non-medical Settings. <a href="http://www.lni.wa.gov/WorkplaceRights/files/policies/esc42.pdf">http://www.lni.wa.gov/WorkplaceRights/files/policies/esc42.pdf</a>

WAC 296-125-030 (24) Prohibited and hazardous employment — All minors. <a href="http://apps.leg.wa.gov/wac/default.aspx?cite=296-125-030">http://apps.leg.wa.gov/wac/default.aspx?cite=296-125-030</a>

Washington State Department of Labor and Industries Bloodborne Pathogens WAC 296-823 http://www.lni.wa.gov/wisha/rules/bbpathogens/default.htm

# **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**

In order to ensure that the rights of all children in Washington to public education are protected and to provide clarity regarding standard health practices, this statewide guidance on school placement of children and adolescents infected with HIV in schools has been developed. These recommendations apply to all children and adolescents from preschool through Grade 12 and address child care settings as well. They are based on the most recent scientific data available and will be revised as appropriate.

From 2006-2010 newly, diagnosed cases of Human Immunodeficiency Virus (HIV) infection in persons under the age of 20 years accounted for three percent of the total number of cases reported in Washington State. Acquired Immune Deficiency Syndrome (AIDS) is a late stage of HIV infection that is life threatening. The rate of newly diagnosed children and adolescents has remained stable since HIV became a reportable condition in Washington. The Washington State Department of Health (DOH) anticipates children and adolescents will continue to be diagnosed in the future.

In spite of years of education about HIV/AIDS, both children and adults who are infected with HIV still suffer from significant societal stigma. As treatment options improve and become more accessible, HIV positive children and youth generally experience better health and quality of life, thereby increasing the number of children and youth with HIV who are able to and interested in participating in regular school programs.

Access to a quality education free from harassment is a right for all children, including those living with HIV. The rights of HIV-positive students, as well as staff members, in school environments are governed by several laws, including the Rehabilitation Act of 1973, the Americans with Disabilities Act (ADA), the Individuals with Disabilities Education Act (IDEA), the Family Educational Rights and Privacy Act (FERPA), and numerous state laws. (Center for HIV Law and Policy, 2012).

#### **Background**

HIV, the virus that causes AIDS, is spread from an infected person to an uninfected person by unprotected sexual intercourse, sharing needles or injection equipment, transfusion or accidental exposure to infected 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, breast milk.

HIV is NOT transmitted by casual person-to-person contact (as would normally occur among children) or exposure to saliva, tears or sweat. None of the identified cases of HIV infection or AIDS in the United States is known to have been transmitted in a school setting or while playing sports.

According to the Washington State Department of Health, from 2002 to 2007 there were 34 new cases of HIV infection reported among youth below the age of 20, representing 1 percent of the total number of new cases in Washington. Only 4 cases of pediatric HIV infection were reported during that time period. The Center for Disease Control and Prevention (CDC) provides the following information about HIV infection among young Americans.

- In 2009, young persons accounted for 39 percent of all new HIV infections in the United States. For comparison's sake, persons aged 15–29 comprised 21 percent of the United States population in 2010.
- Young men who have sex with men (MSM), especially those of minority races and ethnicities, are at increased risk for HIV infection. In 2009, young MSM accounted for 27 percent of new HIV infections in the US and 69 percent of new HIV infections among persons aged 13–29. Among young black MSM, new HIV infections increased 48 percent from 2006 through 2009.
- In 2009, young blacks accounted for 65 percent (5,404) of diagnoses of HIV infection reported among persons aged 13–24 years.
- In 2008, an estimated 22 percent of persons aged 13–24 living with diagnosed HIV infection were infected through hemophilia, blood transfusion, birth, or unknown transmission mode, with the majority being infected parentally.

#### **Guidelines for the Placement of HIV-Positive Children and Adolescents**

The following guidelines are based on recommendations developed by the CDC and the National Association of State Boards of Education (NASBE) 2001, published in <u>Someone in School Has AIDS: A Complete Guide to Education Policies Concerning HIV Infection, 2<sup>nd</sup> Edition and in NASBE Policy Update from Updating State Policies for Students with HIV Infection, 2001.</u>

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

- 1. Discrimination based on HIV status is explicitly barred, in accordance with the federal American with Disabilities Act.
- 2. Mandatory screening of students for HIV infection, as a condition of school or child care entry, is prohibited by law.
- Children infected with HIV, except for those subject to conditions described in No. 6 below, should be allowed to attend school and before

- 4. and after school care in an unrestricted manner. 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.
- 5. Those involved in the care and education of children should respect the individual's right to privacy and the confidentiality of school and medical records. 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 governs the exchange of health care information among providers.

Students are not required to disclose their HIV status to school staff. It is possible that a parent could request a 504 accommodation or Individual Education Plan (IEP); however, signed consent from the parent/guardian or student over the age of 14 years is required before health care information can be shared. The nurse might further protect the confidentiality of this information by using broad language when describing the need for the accommodation rather than providing a specific diagnosis.

- 6. 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 (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.
- 7. All children who display aggressive behavior such as biting, and those who have other medical conditions such as un-coverable 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.
- All schools and child care facilities should utilize standard precautions and adopt infection control procedures for handling blood or body fluids. School nurses, teachers, other school or child care employees, and children Grades K–12 should be appropriately educated regarding these procedures (see Appendix VIII).

### **HIV/AIDS Training for School Employees**

Chapter 392-198 WAC, Training—School employees—HIV/AIDS requires:

- 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.

# **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.]

Link - Washington State Legislature http://apps.leg.wa.gov/rcw/default.aspx?cite=70.24.110

#### Resources:

- Providing Health Care to Minors under Washington Law
- Age of Consent

# **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 <u>70.24.900</u>.

Child abuse and neglect—Development of primary prevention program: RCW <u>28A.300.160</u>.

Districts to develop programs and establish programs regarding child abuse and neglect prevention: RCW <u>28A.230.080</u>.

Link - Washington State Legislature http://apps.leg.wa.gov/rcw/default.aspx?cite=28A.230.020

# **APPENDIX XII**

# Washington State Local Health Jurisdictions

Local Health Jurisdictions	Phone
Adams County Health District Environmental Health (Othello) <a href="http://www.co.adams.wa.us/departments/default.asp?DeptID=10">http://www.co.adams.wa.us/departments/default.asp?DeptID=10</a>	509-659-3315 509-488-2031
Asotin County Health District Environmental Health <a href="http://ac-hd.org/">http://ac-hd.org/</a>	509-758-3344
Benton-Franklin Health District Environmental Health <a href="http://www.bfhd.wa.gov">http://www.bfhd.wa.gov</a>	509-460-4200 509-460-4205 509-786-1633
Chelan-Douglas Health District Environmental Health <a href="http://www.cdhd.wa.gov">http://www.cdhd.wa.gov</a>	509-886-6400 509-886-6450
Clallam County Department of Health and Human Services Environmental Health <a href="http://www.clallam.net/healthservices/">http://www.clallam.net/healthservices/</a>	360-417-2200 360-417-2258
Clark County Public Health Environmental Health <a href="http://www.clark.wa.gov/public-health/index.asp">http://www.clark.wa.gov/public-health/index.asp</a>	360-397-8000 360-397-8428
Columbia County Public Health District Environmental Health <a href="http://www.columbiaco.com/">http://www.columbiaco.com/</a>	509-382-2181 509-382-2181
Cowlitz County Health Department Environmental Health <a href="http://www.co.cowlitz.wa.us/health">http://www.co.cowlitz.wa.us/health</a>	360-414-5599 360-414-5592
Garfield County Health District Environmental Health <a href="http://co.garfield.wa.us/health">http://co.garfield.wa.us/health</a>	509-843-3412
Grant County Health District Environmental Health <a href="http://www.granthealth.org">http://www.granthealth.org</a>	509-754-6060 509-754-6060

# **Local Health Jurisdictions (cont.)**

Grays Harbor County Public Health and Social Services	Phone
Environmental Health <a href="http://www.co.grays-harbor.wa.us/info/pub_svcs/envhealth.html">http://www.co.grays-harbor.wa.us/info/pub_svcs/envhealth.html</a>	360-532-8631 360-249-4413
Island County Health Department Environmental Health <a href="http://www.islandcounty.net/health/">http://www.islandcounty.net/health/</a>	360-679-7351 360-679-7350
Jefferson County Health and Human Services Environmental Health <a href="http://www.jeffersoncountypublichealth.org/">http://www.jeffersoncountypublichealth.org/</a>	360-385-9400 360-385-9444
Kitsap County Health District Environmental Health <a href="http://www.kitsappublichealth.org/">http://www.kitsappublichealth.org/</a>	360-337-5235 360-337-5235
Kittitas County Health Department Environmental Health <a href="http://www.co.Kittitas.wa.us/health/">http://www.co.Kittitas.wa.us/health/</a>	509-962-7515 509-933-7515
Klickitat County Health Department Environmental Health <a href="http://www.klickitatcounty.org/health/">http://www.klickitatcounty.org/health/</a>	509-493-5058 509-773-4565
Lincoln County Health Department Environmental Health <a href="http://www.co.lincoln.wa.us/Health%20Department/">http://www.co.lincoln.wa.us/Health%20Department/</a>	509-725-1001 509-725-2501
Mason County Department of Health Services Environmental Health <a href="http://www.co.mason.wa.us/health/index.php">http://www.co.mason.wa.us/health/index.php</a>	360-427-9670 360-482-5269 ext. 274
Northeast Tri-County Health District Environmental Health <a href="http://www.netchd.org/">http://www.netchd.org/</a>	509-684-5048 509-684-2262
Okanogan County Health District Environmental Health <a href="http://www.okanogancounty.org/ochd/">http://www.okanogancounty.org/ochd/</a>	509-422-7140 509-422-7144
Pacific County Health and Human Services Department Environmental Health <a href="http://www.co.pacific.wa.us/health/index.htm">http://www.co.pacific.wa.us/health/index.htm</a>	360-875-9343 360-875-9356

Local Health Jurisdictions (cont.)	Phone
Public Health – Seattle and King County Environmental Health <a href="http://www.kingcounty.gov/healthservices/health.aspx">http://www.kingcounty.gov/healthservices/health.aspx</a>	206-296-4600 206-205-4394
San Juan County Department of Health and Community Services Environmental Health <a href="http://sanjuanco.com/health/default.aspx">http://sanjuanco.com/health/default.aspx</a>	360-378-4474 360-378-4474
Skagit County Department of Health Environmental Health <a href="http://www.skagitcounty.net/Common/asp/default.asp">http://www.skagitcounty.net/Common/asp/default.asp</a> <a href="http://www.skagitcounty.net/Common/asp/default.asp">http://www.skagitcounty.net/Common/asp/default.asp</a> <a href="http://www.skagitcounty.net/Common/asp/default.asp">http://www.skagitcounty.net/Common/asp/default.asp</a> <a href="http://www.skagitcounty.net/Common/asp/default.asp">http://www.skagitcounty.net/Common/asp/default.asp</a>	360-336-9380 360-336-9380
Skamania County Health Department Environmental Health <a href="http://www.skamaniacounty.org/community-health/">http://www.skamaniacounty.org/community-health/</a>	509-427-3881 509-427-3881
Snohomish Health District Environmental Health <a href="http://www.snohd.org">http://www.snohd.org</a>	425-339-5200 425-339-5250
Spokane Regional Health District Environmental Health <a href="http://www.srhd.org">http://www.srhd.org</a>	509-324-1500 509-324-1560
Tacoma-Pierce County Health Department Environmental Health <a href="http://www.tpchd.org">http://www.tpchd.org</a>	253-798-6410 253-798-6470
Thurston County Public Health and Social Services Department Environmental Health <a href="http://www.co.Thurston.wa.us/health">http://www.co.Thurston.wa.us/health</a>	360-867-2500 360-867-2667
Wahkiakum County Department of Health and Human Services Environmental Health <a href="http://www.co.wahkiakum.wa.us/depts/health/">http://www.co.wahkiakum.wa.us/depts/health/</a>	360-795-6207 360-795-6207
Walla Walla County-City Health Department Environmental Health <a href="http://www.co.walla-walla.wa.us/departments/phd/index.shtml">http://www.co.walla-walla.wa.us/departments/phd/index.shtml</a>	509-524-2650 509-524-2662

# **Local Health Jurisdictions (cont.)**

Whatcom County Health Department	Phone
Environmental Health <a href="http://www.co.whatcom.wa.us/health/index.jsp">http://www.co.whatcom.wa.us/health/index.jsp</a>	360-676-6724 360-676-6724
Whitman County Health Department Environmental Health <a href="http://www.whitmancounty.org/PubHealth">http://www.whitmancounty.org/PubHealth</a>	509-397-6280 509-397-6280
Yakima Health District Environmental Health <a href="http://yakimahealthdistrict.org/w/">http://yakimahealthdistrict.org/w/</a>	509-575-4040 509-575-4040

# **APPENDIX XIII**

# Resources

#### Resources

#### A. References

ACIP immunization recommendations available at: <a href="http://www.cdc.gov/vaccines/pubs/ACIP-list.htm">http://www.cdc.gov/vaccines/pubs/ACIP-list.htm</a>

American Academy of Pediatrics (2012). *Red Book: Report of the Committee on Infectious Diseases*, 29<sup>th</sup> ed., Elk Grove Village, IL.

American Academy of Pediatrics (2009). School Infectious Disease Guidance, Infection Control Measures. Elk Grove Village, IL, pages 19-29.

American Academy of Pediatrics (2004). *School Health: Policy and Practice*, 6<sup>th</sup> ed., Elk Grove Village, IL.

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Guidelines for Handling Body Fluids in School are based on OSPI's *Guidelines* for Implementation of School Employee Training on HIV/AIDS and Other Bloodborne Pathogens (2011) pages 13-21.

http://www.k12.wa.us/HealthServices/pubdocs/GuidelinesHIVBloodborne.pdf

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http://www.cdc.gov/mmwr/preview/mmwrhtml/rr6007a1.htm?s cid=rr6007a1 e

Immunization Manual for Schools, Preschool and Child Care Facilities (2012).

Available from:

Washington State Department of Health

Web site: http://www.doh.wa.gov/CommunityandEnviron

site: <a href="http://www.doh.wa.gov/CommunityandEnvironment/Schools/Immunization/SchoolManual.aspx">http://www.doh.wa.gov/CommunityandEnvironment/Schools/Immunization/SchoolManual.aspx</a>

National Association of State Boards of Education (NASBE) 2001. Someone at School has AIDS: A Complete Guide to Education Policies Concerning HIV Infection. Alexandria, VA:

NASBE. <a href="http://nasbe.org/index.php?option=com\_content&view=article&id=120:policies-concerning-students-and-staff-with-hiv-infection&catid=78:model-policies&Itemid=372">http://nasbe.org/index.php?option=com\_content&view=article&id=120:policies-concerning-students-and-staff-with-hiv-infection&catid=78:model-policies&Itemid=372</a>

Siegel, JD., Rhinehart, E., Jackson, M., Chiarello, L.,& the Healthcare Infection Control Practices Advisory Committee (2007). *Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings*. <a href="http://www.cdc.gov/hicpac/pdf/isolation/Isolation2007.pdf">http://www.cdc.gov/hicpac/pdf/isolation/Isolation2007.pdf</a>

State of Washington Department of Labor and Industry Administrative Policy Number ES.C.4.2 - Minors and Blood borne Pathogens in Non-medical Settings. http://www.lni.wa.gov/WorkplaceRights/files/policies/esc42.pdf

Tacoma Pierce County Heath Department – School MRSA guidelines <a href="http://www.tpchd.org/health-wellness-1/diseases-conditions/methicillin-resistant-staphylococcus-aureus-mrsa/">http://www.tpchd.org/health-wellness-1/diseases-conditions/methicillin-resistant-staphylococcus-aureus-mrsa/</a>

WAC 296-125-030 (24) Prohibited and hazardous employment — All minors. <a href="http://apps.leg.wa.gov/wac/default.aspx?cite=296-125-030">http://apps.leg.wa.gov/wac/default.aspx?cite=296-125-030</a>

## B. Videos, DVD's, Curriculum, Reference Books, and other Materials

1. Office of Superintendent of Public Instruction (OSPI)

Health Services A–Z Index of Health Topics http://www.k12.wa.us/HealthServices/Resources.aspx

HIV and Sexual Health Education <a href="http://www.k12.wa.us/HIVSexualhealth/default.aspx">http://www.k12.wa.us/HIVSexualhealth/default.aspx</a>

Washington State Department of Health—Immunization and Child Profile Office

Forms and Publications (flyers, fact sheets, brochures, letters) <a href="http://www.doh.wa.gov/YouandYourFamily/Immunization/Formsan">http://www.doh.wa.gov/YouandYourFamily/Immunization/Formsan</a> dPublications/Forms.aspx

#### **Posters**

A poster depicting proper handwashing techniques is available in multiple languages. The poster is titled, "BE A GERM BUSTER WASH YOUR HANDS" and is available at: <a href="http://here.doh.wa.gov/materials/be-a-germ-buster">http://here.doh.wa.gov/materials/be-a-germ-buster</a>

A poster encouraging handwashing is available in several sizes in both English and Spanish. The poster is titled, "WashYourHandsingTon" and is available

at: <a href="http://www.doh.wa.gov/YouandYourFamily/IllnessandDisease/Flu/WashYourHandsingTon.aspx">http://www.doh.wa.gov/YouandYourFamily/IllnessandDisease/Flu/WashYourHandsingTon.aspx</a>

A poster promoting respiratory hygiene is available in multiple languages. The poster is titled, "Cover Your Cough" and is available at: <a href="http://here.doh.wa.gov/materials/cover-your-cough">http://here.doh.wa.gov/materials/cover-your-cough</a>

- 3. Washington State School Nurse Corps Resources:
  - Online School Nurse Resource Guide: https://library.nwesd.org/snc/school-nurse-resource-guide
  - School Health Services—A Guide Book for School Administrators, Nurses and School Personnel <a href="http://www.esd105.org/index.php/educational-services/learning-support/school-nurse-corps">http://www.esd105.org/index.php/educational-services/learning-support/school-nurse-corps</a>
  - Lending libraries for individual listings of available resources please see the links below to the 9 Educational Service District (ESD) School Nurse Corp Program Web sites:

ESD School Nurse Corps (SNC) Lending Libraries	Contact/Phone Number
ESD 101— http://www.esd101.net/site/Default.aspx?PageID=743	SNC Administrator, Team Leader, or SNC Administrative
Link to Lending Library materials list: https://library.nwesd.org/sites/library.nwesd.org/files/image	Assistant (509) 789-3538
s/users/u24/Section_14/ESD_101_Library_WebPg_2.doc	` '
<b>ESD 105</b> — <u>http://www.esd105.org/index.php/educational-services/learning-support/school-nurse-corps</u>	SNC Administrator 509.455.3129
Library is not online, call SNC Administrator or assistant for items that are available for loan	Admin. Asst. 509.454.5304
ESD 112—http://esd112.org/nursecorps/ Library currently being updated, please contact SNC	SNC Administrator 360.750.7500 x 215
Administrator or assistant for further information regarding	Program Secretary
resources. ESD 113—http://esd113.org/domain/45	360.750.7500 x 335 SNC Director 360.464.6866
Resource Library – <a href="http://esd113.org/Page/322">http://esd113.org/Page/322</a>	SNC Admin. Secretary 360.464.6865
Olympic ESD 114— http://www.oesd.wednet.edu/Page/398	SNC Nurse Specialist 360.478.6871
Contact SNC Nurse Specialist or SNC secretary for items that are available for loan	SNC Secretary 360.337.5438
<b>ESD 123</b> — <u>http://www.esd123.org/schoolhealthservices</u> Resource Library – Contact Administrator or Assistant	School Health Services Administrator - 509.544.5715
	School Health Services Assistant - 509.544.5721
North Central ESD 171—http://www.ncesd.org/page/443 North Central ESD Libraries –	SNC Administrator (509)665-2625
http://media.dymaxion.ca/ncesd/ School Nursing Materials— http://media.dymaxion.ca/display/077?kw=%2A&md=807	SNC administrative assistant (509) 665-2639

NWESD 189—http://www.nwesd.org/nurse	SNC Administrator
SNC Lending Library –	360.299.4013
https://library.nwesd.org/snc/lending-library	SNC Administrative Assistant
	360.299.4073
Puget Sound ESD—	SNC Administrator
http://psesd.org/index.php?option=com_content&task=vie	Seattle Area – 425.917.7796
w&id=128&Itemid=675	Tacoma Area – 253.778.7796
Resource Library –	
http://www.psesd.org/index.php?option=com_content&tas	
k=view&id=629&Itemid=294	

#### D. Web sites

American Academy of Pediatrics (AAP)

Web site: <a href="http://www.aap.org">http://www.aap.org</a>

California Department of Education

Web site: <a href="http://www.cde.ca.gov/index.asp">http://www.cde.ca.gov/index.asp</a>

2010 Educational Resources

Catalog: http://www.cde.ca.gov/re/pn/rc/documents/catalog2010.pdf#search=onli

ne%20video%20catalogue&view=FitH&pagemode=none

Centers for Disease Control and Prevention (CDC)

Web site: <a href="http://www.cdc.gov/">http://www.cdc.gov/</a>
Index to specific disease

information: http://www.cdc.gov/health/default.htm

Influenza Information

Web site: <a href="http://www.cdc.gov/germstopper">http://www.cdc.gov/germstopper</a>

National Immunization Program

Web site: http://www.cdc.gov/vaccines/

**Emerging Diseases** 

Web site: <a href="http://www.cdc.gov/ncidod/eid/">http://www.cdc.gov/ncidod/eid/</a>

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: <a href="http://www.fda.gov">http://www.fda.gov</a>

Immunization Action Coalition

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

Medline

Web site: <a href="http://www.nlm.nih.gov/medlineplus">http://www.nlm.nih.gov/medlineplus</a>

National Association of School Nurses (NASN)

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

Occupational Safety and Health Administration (OSHA)

Web site: <a href="http://www.osha.gov">http://www.osha.gov</a>

Seattle Children's

Web site: <a href="http://www.seattlechildrens.org/">http://www.seattlechildrens.org/</a> Center for Children with Special Health Needs

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

School Nurse Organization of Washington (SNOW)

Web site: http://www.schoolnurseorganizationofwashington.org/

Washington State Department of Health (DOH)

Web site: <a href="http://www.doh.wa.gov">http://www.doh.wa.gov</a>

Communicable Disease Web site:

http://www.doh.wa.gov/AboutUs/ProgramsandServices/DiseaseControlandHealthStatistics/CommunicableDiseaseEpidemiology.aspx

Communicable Disease reporting Web site:

http://www.doh.wa.gov/PublicHealthandHealthcareProviders/NotifiableConditions/ListofNotifiableConditions.aspx

Epidemiology Web site:

http://www.doh.wa.gov/AboutUs/ProgramsandServices/DiseaseControlandHealthStatistics.aspx

HIV/AIDS Web site:

http://www.doh.wa.gov/YouandYourFamily/IllnessandDisease/HIVA IDS/Prevention.aspx

How to Respond: Injury and Illness at School (2010)

http://here.doh.wa.gov/materials/how-to-respond-injury-and-illness-at-school

STD Web site:

http://www.doh.wa.gov/PublicHealthandHealthcareProviders/PublicHealthLaboratories/CommunicableDiseaseMicrobiology/SexuallyTransmittedDiseases.aspx

Viral hepatitis (adult):

http://www.doh.wa.gov/YouandYourFamily/IllnessandDisease/Hepa titis.aspx

Washington State Department of Health Resources (cont.)

Immunization and Child Profile Program Web site:

http://www.doh.wa.gov/YouandYourFamily/Immunization/Vaccines.

School Environmental Health and Safety Web

site: <a href="http://www.doh.wa.gov/CommunityandEnvironment/Schools/E">http://www.doh.wa.gov/CommunityandEnvironment/Schools/E</a> nvironmentalHealth.aspx

Pests Web

site: <a href="http://www.doh.wa.gov/CommunityandEnvironment/Pests.aspx">http://www.doh.wa.gov/CommunityandEnvironment/Pests.aspx</a>

Immunization Forms:

http://www.doh.wa.gov/YouandYourFamily/Immunization/FormsandPublic ations/Forms.aspx

Fax to order materials: 360-236-3481

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

School Immunizations Web site:

http://www.doh.wa.gov/YouandYourFamily/Immunization.aspx

School Environmental Health and Safety Program Web site:

http://www.doh.wa.gov/AboutUs/ProgramsandServices/EnvironmentalPublicHealth/EnvironmentalHealthSafetyandToxicology/Schools.aspx

Health Education Resource Exchange (H.E.R.E)

Web site: http://here.doh.wa.gov/

Washington Industrial Safety and Health Act

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

Washington State Department of Labor and Industries

Bloodborne Pathogens WAC 296-823

http://www.lni.wa.gov/wisha/rules/bbpathogens/default.htm

Washington State Legislature

Web site for information on WACs and

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

Washington State Risk Management Pool

http://www.wsrmp.com/

Washington State School Directors Association

http://www.wssda.org/

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

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

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