

Management of

Chronic Infectious Diseases in Schoolchildren



Revised Edition
2003

**Illinois State Board of Education
and
Illinois Department of Public Health**

FOREWORD

The Illinois State Board of Education, the Illinois Department of Public Health, and the Illinois General Assembly place a high priority on the need to prevent the spread of infectious diseases in schools. By using the information and procedures described in this document, it is hoped that the health and regular school attendance of students can be improved so that they may attain their maximum potential for learning.

Historically, the *Management of Chronic Infectious Diseases in Schoolchildren* was developed by a task force that was formed in 1985. This task force was charged with the responsibility of developing recommendations to assist school policymakers to establish reasonable and practical guidelines for school personnel to follow when working with children who have infectious diseases (a list of the original task force members appears in Appendix F).

The first edition of this publication was printed and distributed in January 1987. The task force was reconvened in 1987 to make recommendations for the 1989 revision. To date, more than 20,000 copies of that revision have been distributed to the field.

Effective January 1, 1990, Public Act 86-890 (105 ILCS 5/10-21.11) required school boards "To develop policies and adopt rules relating to the appropriate manner of managing children with chronic infectious diseases, not inconsistent with guidelines published by the State Board of Education and the Illinois Department of Public Health." This is the document referenced in that law.

During 2000, another task force was convened to update the document with the most current information concerning how to maintain school programs that will meet the health and educational needs of students who have chronic infectious diseases and to prevent the spread of diseases in the school setting (the task force members are listed in Appendix F). It is hoped that this revision will assist local school district personnel in their efforts to maintain procedures and policies that will not compromise the safety of a classroom or a student's right to an education.

Recipients of this document are encouraged to reproduce it as necessary. The document may also be accessed electronically at www.isbe.net/spec-ed or www.idph.state.il.us. A limited number of additional printed copies are available from the Illinois State Board of Education (ISBE) Public Information Center, 866/262-6663 (toll free). If you have questions or concerns regarding the establishment of a disease prevention program, contact your local health department or the Illinois Department of Public Health (IDPH), Division of Infectious Diseases, 217/785-7165. Questions about this document may be directed to IDPH or ISBE at the phone numbers provided.

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TABLE OF CONTENTS

CHAPTER ONE: Development of an Infectious Disease Program	1
Introduction	1
Policies and Procedures	2
Implementing and Maintaining the Infectious Disease Program.....	4
CHAPTER TWO: Infectious Diseases	6
Cytomegalovirus (CMV) Infections	6
Hepatitis B	7
Hepatitis C.....	9
Herpes Simplex.....	10
Human Immunodeficiency Virus Infection and AIDS	11
CHAPTER THREE: Procedures for School Management of Infectious Diseases	13
Guidelines for Establishing Infectious Disease Prevention Procedures	13
Guidelines for Maintaining a Safe, Healthful School Environment	15
Procedures for Cleaning Up Body Fluid Spills.....	16
Guidelines for Maintaining a Clean School Environment.....	18
Special Procedures for Early Childhood, Day Care, and Special Classroom Settings	19
Selecting an Appropriate Disinfectant and Sanitizer.....	21
APPENDIX A: Legal Citations.....	23
APPENDIX B: Disinfectants and Chemical Sanitizing Agents Preparation, Concentration, and Stability.....	29
APPENDIX C: Glossary	30
APPENDIX D: Bibliography.....	32
APPENDIX E: Illinois State Board of Education Video Resource.....	33
APPENDIX F: Acknowledgements	35

CHAPTER ONE

DEVELOPMENT OF AN INFECTIOUS DISEASE PROGRAM

INTRODUCTION

This document contains the “guidelines” referenced in the Illinois School Code (105 ILCS 5/10-21.11 and 105 ILCS 5/34-18.13) and cited in the Illinois Department of Public Health Regulations (77 Illinois Administrative Code 697.410). Each attendance center should also have a copy of the Illinois Department of Public Health *Communicable Disease Guide* to serve as a guide in managing acute communicable diseases that commonly occur in schoolchildren. The *Management of Chronic Infectious Diseases in Schoolchildren* document along with the *Communicable Disease Guide* should provide schools with the information that is necessary to prevent the spread of many acute and/or chronic infectious diseases among schoolchildren.

The chronic infectious diseases covered in this revised document have been limited to cytomegalovirus (CMV), hepatitis B, hepatitis C, herpes simplex, and human immunodeficiency virus (HIV/AIDS). Specific information regarding the management of other acute and chronic infectious diseases not listed in the manual is available from your local health department or from the Illinois Department of Public Health, Division of Infectious Diseases.

Most individuals who contract a communicable disease have a definite period of time in which they are considered to be contagious. When they have fully recovered from the communicable disease, they are no longer able to transmit the infection to others. In other instances, some individuals may remain capable of transmitting disease for long periods of time after they have recovered from the acute phase of an illness. These individuals are said to have chronic infectious diseases.

Often school personnel and parents have questions regarding the risks of exposure to diseases within the school setting and the appropriate management of students with chronic infectious diseases. This document has been designed to:

- 1) provide answers to some of these questions;
- 2) help school personnel understand how infectious diseases can be transmitted;
- 3) assist school districts in the development and implementation of school programs that will meet the needs of students who have chronic infectious diseases; and
- 4) prevent the spread of such diseases in the school setting.

The most effective means of school management of infectious diseases is to develop a plan before it is needed. In some instances, school districts will be informed of the enrollment of a student who is known to have a chronic infectious disease. There remains a risk that some students are or will be enrolled in school who are unknown carriers of infectious diseases. For this reason, school districts should not wait until a student with an identified chronic infectious disease enrolls in the school to plan a program. It is strongly recommended that school districts establish policies and procedures to reduce the risk of spreading disease, regardless of the presence or absence of a student known to have an infectious disease.

An infectious disease program should include the following elements:

- 1) Policies and procedures related to identification, placement, and school management of students with infectious diseases;
- 2) An infectious disease review team consisting of the school medical advisor, the school nurse, and the school administrator that is responsible for planning and managing the educational program for the individual student with an infectious disease;
- 3) Maintenance of routine hygienic procedures to assure a clean, safe, healthful school environment; and
- 4) Health education/health counseling programs to educate school staff, students, and parents.

POLICIES AND PROCEDURES

The first step in establishing an infectious disease program is the development of appropriate policies and procedures. The school board is legally responsible for the formulation and adoption of all school policies (105 ILCS 5/10-20.5:23 Ill. Adm.Code 1.210 (b)(2)). In view of the scope of an infectious disease program, it is recommended that school officials establish a task force to assist in its development. Members of the task force should include the school administrator, the school medical advisor, the school nurse, and representatives from the school board, local health department, teaching staff, PTA or PTO, custodial staff, food service staff, etc. Sample policies are available from the Illinois Association of School Boards.

The school board should make public its policies on management of students who have chronic infectious diseases. Copies of the school board policies should be distributed to all parents in the district and to all school staff.

Legal Considerations Related to Chronic Infectious Diseases

Federal and state courts have held that children who have chronic infectious diseases are entitled to a free, appropriate public education in the least restrictive environment. The children are covered by the substantive and procedural protections incorporated in the statutes. The following court cases have addressed the rights of students who have chronic infectious diseases: *School Bd. of Nassau County v. Arline*, 480 U.S. 273 (1987); *District 27 Community School Board v. Board of Education of New York*, 130 Misc. 2d 398, 502 N.Y.S.2d 325 (N.Y.Sup.Ct. 1986); *New York State Ass'n. for Retarded Children, Inc. v. Carey*, 612 F.2d 644 (2d Cir. 1979); *Robertson v. Granite City Community Unit School District No. 9*, 684 F. Supp. 1002 (S.D. Ill. 1988); *Doe v. Belleville Public School Dist. No. 118*, 672 F. Supp. 342 (S.D. Ill. 1987); *Thomas v. Atascadero Unified School Dist.*, 662 F. Supp. 376 (C.D. Cal. 1987); *White v. Western School Corp.*, No. 85-1192-C (S.D. Ind.); *In re Ryan White*, 1985-86 EHLR DEC. 507:342 (1986); *Community High School Dist. 155 v. Denz*, 124 Ill. App. 3d 129, 463 N.E. 2d 998 (1984).

School policy must always comply with current laws and regulations relating to infectious diseases, as well as education law. Copies of current guidelines regarding the management of children with chronic infectious diseases are available upon request from the Illinois Department of Public Health or the Illinois State Board of Education.

All students known to have a chronic infectious disease are covered under Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794). Some students who have chronic infectious diseases may, but do not necessarily require special education or adaptive programming. Each student should be individually evaluated to determine the most appropriate educational placement. A health care plan is required for all students who have health problems that qualify under Section 504 or special education.

Guidelines for Development of Policies and Procedures Related to Infectious Diseases

The following guidelines are intended to provide local school districts with a framework for developing policies and procedures related to infectious diseases.

1. All children in Illinois, including those with chronic infectious diseases, have a right to a free public education. Students with chronic infectious diseases are eligible for all rights, privileges, and services provided by law and the local policy of each school district.
2. The school should respect the right to privacy of the individual. The Communicable Disease Prevention Act [410 ILCS 315/2a.] regulates who can legally be informed of the identity of a student infected with human immunodeficiency virus (HIV). Legal action may be taken against any person who intentionally or recklessly violates an infected child's rights to confidentiality. The law permits school administrators to inform such other persons as may be necessary that an infected child is enrolled at that school, so long as the child's identity is not revealed. In all cases, knowledge that a student has an infectious disease should be confined to those persons with a direct need to know (e.g., principal, superintendent, school nurse, and student's teacher) or as prescribed by law. Those persons who are informed of the identity of

an infected child must be provided with information concerning any precautions that may be necessary and should be made aware of confidentiality requirements.

3. Students known to have chronic infectious diseases should be individually evaluated in order to determine if their behavior or physical condition poses a high risk of spread of disease. The school infectious disease review team should work with local, regional, or state health officials, the family physician, the student, the student's teacher, and the student's parents to establish the most appropriate education program for a student identified as having an infectious disease. Policies and procedures should be in place to protect the infected student's right to an appropriate education, as well as to ensure a safe classroom environment for all students.
4. As a consequence of the evaluation, there should be a specific plan for the education of the student. This individual student plan should identify the student's educational program and the health-related conditions of the placement. For example, the student is to be educated in a regular classroom with other students except when certain conditions related to the infectious disease are present. Specific health instructions and other relevant information should be included in the plan.
5. In most cases, students with chronic infectious diseases should be allowed to attend school in a regular classroom setting. Adaptations of classroom environment or curricular offerings should be provided as needed by the student. Note: Although most of the case law relating to students with chronic infectious disease is in the area of special education, this does not mean that a student with a chronic infectious disease should automatically be considered for special education placement. Unless the student is otherwise in need of special education, such programs should be considered only as a resource for meeting special needs of the individual child, for example, temporary services in the home or a hospital.
6. Under certain circumstances, it may be necessary to provide the student with an

alternative school program or to remove the student from the school setting for a period of time.

- a. Certain changes in the student's health condition may require temporary removal from his/her regular program. Generally, if the student develops a temporary condition that poses a risk of transmission of disease to others (for example, if the student develops certain open lesions), the student should be removed from the regular program until he or she may be safely returned to the classroom. The decision to remove the student from school should be based upon public health recommendations specific to the transmissibility of disease. Readmission should occur only with medical documentation and after consultation with the school nurse.
 - b. A student with a chronic infectious disease may pose an ongoing risk of transmission to others if the student lacks toilet training, has open sores that cannot be covered, or demonstrates behavior that could result in direct inoculation of potentially infectious body fluids into the bloodstream of others. If any of these circumstances exist, the review team should consult with the student's physician and the local health authorities regarding the risks involved to determine if the student should be educated in an educational environment separate from other students. The school district policies should specifically identify the decision-making process for such placements.
 - c. Exclusion from the school should not be construed as the only response to reduce risk of transmission. The school district should be flexible in its response and should attempt to use the least restrictive means to accommodate the student's needs.
7. State health regulations regarding the health-related exclusion of students who have acute contagious diseases are specific regarding the length of time a student must remain out of school. Recommendations concerning the removal of students who have chronic infectious diseases are not as

- clearly defined. The length of time the student with a chronic infectious disease should be kept out of school should be determined on a case-by-case basis depending upon the recommendations of the student's physician, local health officials, and the school's infectious disease review team.
8. Each student should have the right to due process. If the parents or guardians disagree with the student's educational placement or change of placement due to factors described in item #6 on the previous page, there should be a process by which such objections can be considered; the process should include, at a minimum, notice and an opportunity to be heard. Parents or guardians should be offered the opportunity to be heard within ten (10) days of their request. Written policies should be in place to guarantee this process.
 9. The maintenance of confidentiality is of the utmost importance in the case of students who have a chronic infectious disease. See 77 Ill. Adm. Code 697.400 for regulation governing the notification of school staff when a student is reported to have human immunodeficiency virus (HIV/AIDS).
 10. Students with an immune deficiency are susceptible to disease. In some instances, students who have an immune deficiency may need to be removed from the classroom for their own protection, for example, if there is an outbreak of a contagious disease. The decision to remove the student from school should be made by the student's physician and parents/guardians in consultation with the school nurse.
 11. Individual health conditions permitting, a student who is removed from the school should be provided with a continuing education program until it is determined that the student can be safely returned to the classroom. If it is expected that the student will be out of the school setting for more than 10 school days, a home or hospital program may be appropriate. The school district should aim to ensure that the student's educational progress is maintained.
 12. The school nurse should routinely monitor all students identified as having infectious diseases.
 - a. Students should be monitored continuously in order to determine if their behavior or medical condition has altered in such a way as to affect their transmissibility status.
 - b. When a student is removed from normal school attendance, as described in item #6 on the previous page, the student should be placed on a monitoring schedule appropriate to the infectious disease and the condition precipitating the removal or change. Alternative educational programming and reintegrating the student into the public school setting should be a priority.
 - c. Students with infectious diseases should be educated in the least restrictive environment possible. Those children whose behavior or physical condition precludes school attendance should be evaluated to determine when they are ready to return to the classroom.
 13. Universal precautions should always be used for clean up after any student who has an accident or injury at school (See Appendix C). Blood or other body fluids (saliva, vomitus, feces, urine) emanating from any student, including ones known to have infectious diseases, must be treated cautiously. The district policies for managing infectious disease should ensure that all school staff are instructed regarding the use of universal precautions to ensure that hygienic procedures are employed to maintain a safe, clean school environment. See Chapter Three for more details regarding the procedures to be used.

IMPLEMENTING AND MAINTAINING THE INFECTIOUS DISEASE PROGRAM

An effective program requires the full participation and support of all school officials, local health department officials, local physicians, parents, and all school staff. After the infectious disease program and policies

have been developed, the school administrator should delegate to the appropriate school staff the responsibility for implementing and maintaining the program. In delegating the specific tasks, the school administrator must be sure that each staff person fully understands his or her responsibility in implementing the program.

and the methods of preventing the spread of infectious diseases. Formal instructional programs in health, family life, and sex education must comply with state law in the area of chronic infectious diseases.

The school nurse is the most appropriate person to coordinate the school's infectious disease program. The coordinator of the infectious disease program should:

1. Participate in the development of infectious disease policies and procedures;
2. Interpret infectious disease policies and procedures to school personnel, parents, and students;
3. Provide health education and health counseling regarding infectious diseases;
4. Orient, instruct, and supervise the maintenance of hygienic procedures as described in Chapter Three;
5. Develop the health component of the student's educational plan;
6. Monitor and assess students with infectious diseases;
7. Recommend modification of the school program of infected students, as needed;
8. Serve as advocate for the infected student;
9. Act as the liaison between the school, home, community health agencies, and the private medical sector; and
10. Keep up with current information, rules and regulations, policies, and procedures relating to infectious diseases.

Extreme measures to isolate students with chronic infectious diseases are not necessary. Many irrational fears can be mitigated through planned health education and health counseling programs. The school infectious disease task force should plan an ongoing educational program for school staff, students, and parents. The educational program should include information regarding the mode of transmission

CHAPTER TWO

INFECTIOUS DISEASES

An understanding of the different types of infectious diseases is essential in planning and implementing an effective infectious disease management program. This chapter provides a brief description of the chronic infectious diseases most likely to be identified, the ways the diseases are transmitted to others, the methods of preventing the diseases and suggestions on how to manage students who have infectious diseases in the school setting.

Decisions regarding the educational and care setting for an infected student should be based on the behavioral, neurological, and physical condition of the particular student and the expected type of interaction with others in that setting. These decisions are best made using the infectious disease review team, which should include the student where appropriate, the student's parent or guardian, the student's physician, the school nurse, local public health authorities, and personnel associated with the proposed care or educational setting. In each case, risks and benefits to both the infected student and others in the setting should be weighed.

For infected students, including preschool and neurologically handicapped students who lack control of body secretions, or who display behavior such as biting, and students who have uncoverable, oozing lesions, the review team shall consider recommending a more restricted environment.

CYTOMEGALOVIRUS (CMV) INFECTIONS

Most children and adults who are infected with this virus will exhibit no symptoms. The few who develop symptoms will usually have an illness resembling infectious mononucleosis with fever, swollen lymph nodes, and sore throat. These infections do not result in serious long-term effects. Rarely, children and adults infected with this virus will experience pneumonia or will have liver abnormalities, which may include jaundice. Serious disease can occur when a child or adult

with an impaired immune system is infected or when a developing fetus is infected.

Children and adults at increased risk for severe disease are those who have serious medical conditions that cause impairment of the immune system, such as leukemia or HIV infection or those who are receiving medical treatments that suppress the immune system, e.g., patients undergoing cancer chemotherapy or radiation therapy and organ-transplant recipients.

The most severe infections occur in developing fetuses. A pregnant woman who has never before been infected with this virus and is exposed may transmit the infection to her fetus. This is known as congenital infection. Even though the most severe congenital infections occur before birth, only 15 percent of such infections result in disease. Many of these children, affected congenitally, will have mental retardation and may have abnormalities of any of the body's systems.

Cytomegalovirus infection occurs frequently. In the United States, between 50 percent and 85 percent of persons are infected by 40 years of age. Most infections are believed to occur before age 2.

Following initial infection with this virus, children may remain infectious for months to years. Congenitally infected children are more likely to have prolonged infectious periods than are children infected after birth. Studies of preschool-aged children have shown that as many as 83 percent of toddlers in day care centers can be expected to be shedding the virus at any point in time. Asymptomatic excretion of cytomegalovirus is common in persons of all ages.

Mode of Transmission

Urine and saliva are infectious for a variable period of time following initial infection. The virus can be transmitted to a susceptible person when one of these infectious fluids makes contact with a break in the skin or a mucous membrane of the eye, nose, or mouth. For this

reason, it is recommended that pregnant teachers be counseled on the risk of caring for very young children, especially those less than 2 years of age and encouraged to practice good hygiene, particularly handwashing. The actual risk of CMV exposure is probably greater following contact with the general school population than to known CMV-infected children because if CMV-infected children happen to be identified it is likely to result in heightened awareness for the importance of routine use of hygienic measures, especially proper handwashing.

Prevention

Currently, there is no licensed vaccine to protect against CMV infections. Because CMV is ubiquitous, there is risk of transmission of this virus in all settings where there is close contact with and among infants and children, regardless of the known presence or absence of a child known to be excreting the virus. The most effective method of preventing transmission is the practice of thorough handwashing after touching objects known to be exposed to potentially infectious fluids (urine and saliva) and before eating, smoking, drinking, or any other activity that would bring hands in contact with the eyes, nose, or mouth. Prevention practices should also include avoiding children's saliva by not kissing children on the mouth and not allowing children's hands, fingers, toys, and other saliva-laden objects to be placed in the mouth of another child or the caretaker. Proper handwashing following each diaper change or contact with saliva or saliva-contaminated objects should occur routinely.

The CMV Student in the Classroom

Routine hygienic procedures as described in Chapter Three are necessary to prevent the spread of CMV. Good personal hygiene, especially proper handwashing, is of paramount importance for everyone taking care of infants, very young children, and older children to minimize risk of acquiring CMV and other infections.

Routine laboratory testing for CMV antibody in caretakers, teachers, teacher's aides, etc., is not recommended. Risk appears greatest for personnel providing care for children younger than 2 years of age. It is recommended that female teachers, aides, and caregivers of child-

bearing age be counseled on the risk of acquiring CMV when caring for young children, particularly children under 2 years of age, and on the potential risks to a developing fetus due to exposure to cytomegalovirus. It is recommended that child care providers who work with young children and who expect to become pregnant be tested for immunity to CMV. If testing shows no CMV immunity in a child care provider expecting to become pregnant, temporarily limiting contact to children age 2 years or older, among whom there is far less virus circulation, may reduce the risk.

HEPATITIS B

Hepatitis B is a viral infection of the liver caused by the hepatitis B virus (HBV), which is present in the blood and other body fluids of an infected individual. Many people infected with hepatitis B have no symptoms at all, or they may be very mild and flu-like: loss of appetite, nausea, vomiting, fatigue, muscle or joint aches, and mild fever. About 25 percent to 35 percent may notice dark urine, yellowing of the skin or eyes (jaundice), or light colored stools. A few individuals have a more severe illness and may die of fulminant (overwhelming) liver failure within a short period of time after becoming ill. Clinical signs and symptoms occur more often in adults than in infants or children, who usually have an asymptomatic infection. However, approximately 50 percent of adults who are infected with this virus will not develop symptoms. Most infected persons in the U.S. acquire hepatitis B as adolescents or adults. More than 80 percent of acute hepatitis B virus infections occur among adults. Adolescents account for approximately 8 percent of infections, and children and perinatal transmission account for approximately 4 percent each. Most adults infected with this virus recover completely, but 6 percent to 10 percent become chronic carriers. Approximately 30 percent to 50 percent of children infected at 1 year to 5 years of age become carriers. Persons with abnormalities in their immune systems and persons with Down syndrome, if exposed to the virus, are more likely to become chronic carriers than other exposed persons.

Chronic hepatitis B carriers are defined as having hepatitis B surface antigen detectable on two occasions at least six months apart. If a second hepatitis B surface antigen test is

negative, it is possible that hepatitis B surface antigen is still present, but its concentration has dropped below the level that can be detected by laboratory tests. A positive result on a different test, for antibodies to the hepatitis B surface antigen, will verify that the person is not currently infectious for the hepatitis B virus.

Mode of Transmission

Blood, saliva, vaginal secretions, and semen are the only body fluids known to be capable of transmitting hepatitis B. Saliva can be a vehicle of transmission through bites; however, other types of exposures to saliva, including kissing, are unlikely modes of transmission. One of these infectious body fluids must make contact with broken skin or a mucous membrane before transmission can occur. Among the modes of transmission for hepatitis B are any percutaneous (through the skin) exposures (ear or body piercing, tattooing, acupuncture, injections) when the instrument has not been appropriately sterilized between uses. Sharing personal care items (razors, toothbrushes, nail clippers) has also been identified as a potential source of infection. If a hepatitis B carrier has an injury with bleeding and a caregiver has broken skin that comes into contact with the blood, the caregiver may develop hepatitis B. Also, if a hepatitis B carrier breaks the skin of another person by biting, the bite victim may develop hepatitis B. Transmission of the hepatitis B virus following exposure does not always occur. An accidental prick with a needle used to treat a hepatitis B carrier is a higher-risk type of contact than those described above, yet only 5 percent to 30 percent of such needle pricks result in transmission of the hepatitis B virus. Approximately 30 percent of all persons with hepatitis B virus infection have no known risk factor for infection.

Prevention

Two types of hepatitis B vaccines have been licensed in the U.S. A plasma-derived vaccine, first licensed in the U.S. in 1981, was removed from the U.S. market in 1992. The two hepatitis B vaccines currently available in the U.S. are produced by recombinant DNA technology. The first (Recombivax™) was licensed in 1986 and the other (Engerix-B™) was licensed in 1989. These vaccines, made by different manufacturers, are interchangeable. After three doses of hepatitis B vaccine, more than 90

percent of healthy adults and over 95 percent of children up to 19 years of age develop adequate antibody response. Use of hepatitis B vaccine in combination with hepatitis B immune globulin has greatly reduced the risk of accidental transmission of hepatitis B. In accordance with bloodborne pathogens rules (29 CFR 1910.1030) enforced by the federal Occupational Safety and Health Administration and Illinois' Department of Labor, persons whose job duties require or make it likely they will have contact with human blood shall be offered hepatitis B vaccine. Teachers, custodians, and other school personnel are expected to use personal protective measures and universal precautions in all school settings. Standard hygienic procedures should also be employed to reduce the risk of transmission of this disease.

The Hepatitis B Carrier in the Classroom

Most hepatitis B carriers, except spontaneous biters and those who are physically aggressive, can be safely admitted to classrooms. Carriers with special medical problems (e.g., exudative dermatitis, open skin lesions) should be closely monitored for bleeding. Care must be taken to prevent injury that might cause bleeding of the carrier because blood is known to contain infectious virus particles. Infected students should not participate in activities that might promote accidental bleeding if there is the opportunity for others to have contact with blood. Hepatitis B carriers should not engage in rough games involving physical contact and should not work with sharp objects if these objects will be shared with other students or teachers. Sewing would not be an acceptable handicraft for a hepatitis B carrier if needles are shared with others. The carrier should not be in a classroom with a combative child. The classroom teacher should be prepared to identify situations in which there is environmental contamination with one of these infectious body fluids and to assure that the affected area is promptly decontaminated. The hepatitis B virus is relatively resilient and, in some instances, has been shown to remain infectious on environmental surfaces for at least a month at room temperature. Routine hygienic procedures as described in Chapter Three are essential to the prevention of the spread of the hepatitis B virus. Particular attention should be taken when cleaning up blood, saliva, vaginal secretions, or semen. (See Chapter Three, Section III.)

The U.S. Centers for Disease Control and Prevention (CDC) recommends that all children not previously vaccinated with hepatitis B vaccine be vaccinated at 11 to 12 years of age. The immunization rules and regulations of the Illinois Department of Public Health require all children entering pre-kindergarten programs and fifth grade after July 1997 to provide evidence of having received three doses of hepatitis B vaccine.

HEPATITIS C

The hepatitis C virus (HCV), identified for the first time in 1989, is found primarily in blood of infected persons. Symptoms are seldom present during the acute infection. A majority (75 percent – 85 percent) of those infected will remain infected for life. Of the 15 percent – 25 percent who recover on their own, some are infectious for up to two years before the infection subsides. Symptoms of liver disease are likely to develop only after many years (≥ 20 years in several studies), although the onset and severity of such symptoms cannot be predicted with any certainty. Infection with HCV is now the leading cause of liver transplants in the United States and is expected to remain so for the next 10-20 years, unless unexpected breakthroughs in treatment occur.

Mode of Transmission

HCV is not transmitted by coughing, sneezing, shaking hands, or by “casual contact,” e.g., sharing a telephone, pens, or pencils, sharing an office or a bathroom, using drinking fountains, spending time with an infected person. HCV is transmitted primarily by blood to blood contact or it can be transmitted by sexual contact but the efficiency of sexual transmission is low. Household contacts and long-term monogamous sex partners of HCV-infected persons seldom become infected in the absence of other risk factors. The most important and most frequent mode of HCV transmission is by contaminated blood entering the bloodstream of an uninfected person. Saliva, nasal secretions, urine, and feces are potentially infectious only when visible blood is present in them (dental care providers treat saliva as a potentially infectious fluid because of their frequent contact with it and the increased likelihood saliva contains blood as a result of the procedures they perform); tears and sweat are not infectious body fluids for HCV.

Blood transfusion was the primary method for HCV infection prior to the development of screening tests in the early 1990s. Since then, HCV screening of all donated blood has reduced this source to about one case per 100,000 units transfused. Currently, the greatest risk of infection with HCV is among persons who share needles while using intravenous drugs, approximately 80 percent of whom are estimated to be infected with HCV.

Prevention

Those likely to provide care when persons experience bleeding, or who may be likely to handle blood-contaminated materials, should receive training in universal precautions (or the equivalent) to minimize their risk of exposure to HCV and other bloodborne viruses. Universal precautions are a personal protection approach that presumes the blood and blood-derived fluids of all persons are potentially infectious. Universal precautions (see definition Appendix C) include use of protective barriers, handwashing, and other methods to minimize the possibility of exposure to bloodborne pathogens (see Chapter Three). Persons who may reasonably expect to care for a person who is bleeding should have access to good-quality, disposable, latex or vinyl gloves to prevent blood contact. These gloves do not need to be sterile. Preventing contact with another person’s blood, non-intact skin, or mucous membranes, e.g., eyes or mouth, effectively eliminates the risk of transmitting HCV or other bloodborne viruses. Guidance on proper disposal of potentially infectious waste, restocking disposable gloves, etc., may be obtained from the school’s bloodborne pathogens training materials or from the school district’s bloodborne pathogens coordinator.

The HCV-Infected Student in the Classroom

No special precautions apply when a student with HCV infection is present in the classroom. There is no need for students or teachers to know the identity of HCV-infected persons since HCV is transmitted primarily by blood contact. Universal precautions are applied to all persons and all surfaces or objects contaminated with blood from any person; therefore these precautions would protect against HCV transmission as well as other bloodborne pathogens. Any blood-spill incident involving any student (or any other person) should be

handled as if the blood involved is potentially infectious. Keep others away from the bleeding student, put on gloves and apply pressure (if the injury is not severe, have the student apply pressure to his/her own cut, scrape, or wound), and cover the site of bleeding with an absorbent bandage or covering. If first aid is required, follow existing protocols for handling injuries or bleeding episodes at your institution until qualified first aid personnel arrive or the bleeding stops. After caregiving is finished, remove the latex or vinyl gloves and perform proper disposal of gloves and other contaminated materials. Wash the hands immediately and thoroughly with soap and warm running water.

Clean up of blood on environmental surfaces such as desks, floors, chairs, etc., should be done as soon as is practical. This procedure is explained in more detail in Chapter Three of this guide. Briefly, it would consist of removing as much visible blood as is possible with disposable towels or other absorbent materials, washing surfaces or objects with soap and water, then disinfecting with a product approved for that purpose. If chore-type, reusable utility gloves are used during blood cleanup, they should be thoroughly washed with soap and water while wearing and before removal, and decontaminated before reuse. If utility gloves are peeling, cracked, discolored, or have punctures, tears, or other evidence of deterioration, they should be discarded.

Currently, there is no FDA-approved post-exposure treatment available to prevent HCV infection if a person is exposed. Persons exposed to another person's blood can have a hepatitis C antibody test done immediately for use as a baseline reference. It is repeated in four to six months to determine if infection has occurred. If this subsequent test is positive, further testing may be performed to confirm infection and determine if there is a need for medical management.

HERPES SIMPLEX

Herpes infections are caused by two subtypes, herpes simplex virus type 1 (HSV-1) and herpes simplex virus type 2 (HSV-2). Although HSV-1 is most often associated with cold sores and fever blisters and HSV-2 is most often the cause of genital herpes, either virus can cause infection in either anatomical site. Although

much public attention has been drawn to type 2 genital herpes infections, there is little distinction between the symptoms produced by these viruses, and their methods of control are the same.

Infections with these viruses are common, with approximately one in five adults in the U.S. showing evidence of past infection. Many people are infected early in life, particularly with HSV-1. Primary infections are asymptomatic in 50 percent or more of infected persons. Among exposed persons who do develop symptoms, there may be an illness with fever and malaise lasting for approximately one week and vesicular lesion or lesions (raised sore) on the lip, mouth, throat, eye, external genitalia, or vagina two to 20 days following exposure. Secretions from these lesions are infectious and may last for two to three weeks. Lesions may be infectious until they are covered with a scab and dry.

Initial infection with these viruses is sometimes followed by recurrent episodes in subsequent months or years. Recurrent episodes are similar, but milder, than the original infections. Many recurrent infections are limited to appearance of the fever-blister-type sore. These lesions last for about five to 10 days.

Regardless of the recurrence of symptoms, some people who have been infected with either of these viruses are periodically infectious, approximately 5 percent – 20 percent of the time. The saliva is periodically infectious in some people who have oral infections and genital secretions are periodically infectious in some persons whose infections are at that anatomical site.

Mode of Transmission

Direct contact with secretions from herpes sores, saliva, and genital secretions can transmit herpes infections. Intact skin is believed to be an effective barrier, but broken skin and mucous membranes can allow the virus to enter a susceptible person's body.

The virus can be transmitted to the newborn during birth from a mother with active genital infection, resulting in disseminated infection, encephalitis, and death in the newborn. Newborns infected at birth have an approximately 25 percent – 80 percent chance of dying, depending upon whether the infant is

treated. Of the survivors, 45 percent will suffer permanent damage such as mental retardation.

Prevention

Currently, there is no vaccine available to protect against herpes infection. Routine hygienic procedures as described in Chapter Three are essential for the prevention of herpes infections. Hands should be washed thoroughly after handling a child with active lesions and before using the toilet. Obviously, hands should always be washed after using the toilet. When a child has active lesions, close physical contact with other children should be limited. Towels, clothing, and eating utensils used by a child with active lesions should be kept separate to prevent contact by others. Toys and other items exposed to the saliva of a child with active sores should be washed before another child has contact with them.

The Herpes Simplex Student in the Classroom

The student with herpes simplex should be excluded from school attendance when large areas of active lesions, which cannot be covered with a protective dressing, are present, or if exposure to infected secretions by other children cannot be avoided. The student should remain out of school until the lesions are dry and scabbed. Students who have minor lesions and students who have lesions that can be covered may remain in school. Students should be excluded from contact sports (e.g., wrestling) if active skin lesions are present outside of the genital area until the lesions are dried and scabbed.

HUMAN IMMUNODEFICIENCY VIRUS (HIV) AND ACQUIRED IMMUNE DEFICIENCY SYNDROME (AIDS)

Acquired immune deficiency syndrome (AIDS) is a progressive disease caused by infection with the human immunodeficiency virus (HIV). Persons with HIV infection develop impaired immune systems. This makes them susceptible to certain types of opportunistic infections and rare forms of cancer. No cure or preventive vaccine is available currently; however, new treatments have been shown to slow the progressions of the disease in many people,

improving the quality and duration of their lives. Treatment regimens may be difficult to manage in schoolchildren, since medications may have to be given several times throughout the day and some are taken with food while others are taken on an empty stomach.

A person with HIV infection may be asymptomatic or exhibit only minor signs of a weakened immune system for many years, remaining active and relatively healthy. During HIV infection, CD4+ T-lymphocytes (white blood cells that defend the body against disease-producing organisms) are destroyed through the process of viral replication. Severe HIV disease is known as AIDS, characterized by the occurrence of serious infections or cancers. No one can say when a person infected with HIV will develop AIDS. It is most important to know that all persons infected with HIV are capable of transmitting the virus to others, so appropriate preventive measures must be applied universally.

Behaviors that place persons at risk are unprotected sexual intercourse (anal, vaginal, or oral) with an infected person and sharing hypodermic needles with an infected person. Parenteral or mucous membrane exposure to a significant amount of infectious blood or body fluid also puts one at risk. Most cases of HIV are reported among men who have sex with men; persons who share needles to inject illegal drugs, including steroids; and sexual partners of HIV-positive persons or those whose behavior puts them at increased risk. Gay, bisexual, and transgendered youth are at increased risk. Infants born to HIV-infected women may acquire the virus before or during birth or through breast milk. Since 1995, the CDC has recommended antiretroviral therapy for mothers and newborns, which reduces the risk of perinatal transmission from 25 percent to 8 percent or less. Before 1985, when universal blood screening for HIV began, blood transfusion recipients and hemophiliacs also were at increased risk.

Mode of Transmission

HIV can be transmitted from one person to another in several ways, but each way involves direct exposure to an infectious body fluid from an infected person. Transmission can occur through unprotected sexual intercourse (anal, vaginal, oral), sharing of syringes or other injection equipment, contact between

contaminated blood and mucous membranes or intact skin, or mother-to-infant transmission, as described above. While HIV has been found in blood, semen, vaginal secretions, saliva, sweat, and tears of infected persons, it is not transmitted through saliva, sweat, or tears. Neither is HIV transmitted via airborne particles or insect bites. Studies have been conducted on day-to-day household contacts of persons with AIDS. Casual person-to-person contact is shown to pose no risk for transmitting HIV.

Prevention

Transmission of HIV can be prevented by avoiding sexual intercourse, refraining from injecting illicit drugs and substance abuse, and avoiding contact between blood and eyes, other mucous membranes, and non-intact skin. Correct and consistent use of condoms significantly reduces the risk of sexual transmission; use of clean, unused needles reduces the risk associated with injection drug use. Universal precautions should be practiced whenever exposure to blood or potentially infectious body fluids occurs.

The HIV-Infected Student in the Classroom

Decisions regarding the appropriate educational setting for the HIV-infected student, including those diagnosed with AIDS, should be based on the physical condition and behavior of the student. The CDC recommends that decisions about educating children infected with HIV be based on the behavior, neurological development, and physical condition of each child and on the expected interactions with others. (See Centers for Disease Control and Prevention, Education and Foster Care of Children Infected with Human T-Lymphotropic Virus Type ILL/Lymphadeno-pathy-Associated Virus. *Journal of the American Medical Association*. 1985; 254:1430.) For most infected students, casual person-to-person contact with other students appears to pose no risk. However, any student who is neurologically impaired and lacks control of bodily functions, who is physically (e.g., biting, scratching) or sexually aggressive, or who has uncoverable bleeding or weeping lesions could potentially transmit known or undiagnosed pathogens. Therefore, it is recommended that all such students' cases be reviewed for the purpose of appropriate educational planning. HIV-infected students should be counseled about

participating in activities that may have a detrimental effect on their health. No restrictions should be imposed on uninfected students who have family or household members who are infected with HIV.

Confidentiality

In Illinois, state law requires public health officials, upon receipt of a report of a school-age child's diagnosis of HIV or AIDS, to give confidential notice of the child's identity to the principal of the school in which the child is enrolled (77 Ill. Adm. Code 697.400). In a public school, the principal shall disclose the child's identity to the district superintendent and may, *as necessary*, disclose the identity to the school nurse, classroom teacher(s) of the child, and those who are required to make educational program decisions about the child. Further disclosure of the child's identity, by the principal or any of those listed above, is prohibited by law except as permitted by Sections 9 and 10 of the AIDS Confidentiality Act (410 ILCS 305/1 et seq.) Others may be told of the enrollment of an HIV-infected child, but not the child's identity. Strict confidentiality regulations protect the right of non-disclosure of HIV test results for all people. In the case of children, an exception is made for the temporary caretaker of a child in the temporary protective custody of the Department of Children and Family Services (Section 305/9 (I)). Pertinent legal citations are contained in Appendix A.

CHAPTER THREE

PROCEDURES FOR SCHOOL MANAGEMENT OF INFECTIOUS DISEASES

Prevention of infectious diseases depends on basic principles of cleanliness and hygiene. *Frequent handwashing is essential in the prevention of disease.* The transmission of these infectious diseases may be prevented by using routine procedures to maintain both personal and classroom cleanliness and by monitoring the actions of suspected and known infected students.

Guidelines commonly used to prevent transmission of infectious diseases are called universal precautions, which can reduce the risk of exposure to blood and certain body fluids. A basic premise of universal precautions is that infectious diseases are not always apparent and all individuals must be considered potentially infectious. Measures must be taken to avoid direct contact with blood and body fluids or items contaminated with blood and body fluids. THE PROCEDURES LISTED IN THIS CHAPTER SHOULD BE EMPLOYED AT ALL TIMES WHEN PROVIDING CARE FOR ALL STUDENTS, REGARDLESS OF THEIR INFECTIOUS DISEASE STATUS.

Teaching and supervising staff who perform these preventive measures for the control of infectious diseases is a school nursing function that does not require a physician's authorization. Personnel responsible for carrying out these procedures include the infectious disease review team, teachers, teachers' assistants, care workers, custodial staff, food handlers, the institution's laundry personnel (if applicable), volunteers, and anyone who may have direct contact with the students, equipment, and supplies including eating utensils and play objects. Responsibility also extends to such areas as contaminated floors, walls, toilets, sinks, and changing surfaces, as well as contaminated clothing or cleaning equipment (such as mops).

I. Guidelines for Establishing Infectious Disease Prevention Procedures

- A. The Illinois Department of Labor (56 Ill. Adm. Code 350.280) has adopted the federal Occupational Safety and Health Administration's rules on bloodborne pathogens (29 CFR 1910.1030). These rules include but are not limited to the following requirements: a written exposure control plan, annual inservice education for all employees, hepatitis B vaccination free of charge to all employees at risk for occupational exposure, personal protective clothing such as gloves, and a medical evaluation as well as follow-up in the event of an occupational exposure to blood or certain body fluids. Questions about compliance with the bloodborne pathogens rules should be directed to the Illinois Department of Labor.
 1. All staff members must be oriented and trained at the time of hire, as changes occur, and annually. This includes not only staff who have routine contact with the students such as teachers including substitutes, volunteers, and bus drivers, but also those who may have contact with items contaminated by blood and body fluids such as custodial staff.
 2. Compliance with the school district's efforts to prevent transmission of infection and to protect the health of employees and students must be verified by documentation of the training and supervision of employees. Documentation of training must include a content outline, dates of the presentation, the name and qualifications of the individual presenting the information, and an attendance list including the job title of those in

attendance. Training records shall be maintained for three years from the date on which the training occurred.

3. Glove selection must be based on the task to be performed.

Disposable Examination Gloves:

The Center for Devices and Radiological Health (in the federal Food and Drug Administration) has responsibility for regulating the medical glove industry. Medical gloves include those marketed as sterile, surgical, or nonsterile examination gloves made of vinyl, latex, or nitrile.

There are no reported differences in barrier effectiveness between intact latex and intact vinyl used to manufacture gloves.

Disposable gloves must be used one time only and discarded after use. Do not wash or disinfect disposable gloves for reuse. Disinfecting agents may cause deterioration.

Utility Gloves: General purpose utility gloves (reusable rubber household gloves) are not regulated by the FDA. The utility gloves should be used for cleaning, disinfecting, or sanitizing and may be decontaminated and reused. The utility gloves should be discarded if they are peeling, cracked, or discolored, or if they have punctures, tears, or other evidence of deterioration and no longer function as an effective barrier.

4. Consideration should be given to use of sharps with engineered sharps, injury protection, and needleless systems must be implemented where appropriate. Non-managerial employees who provide direct medical care to students and have contact with medical sharps must be included in an evaluation of the devices used.

B. Transmission of infectious diseases may occur more readily where close personal contact is involved in student care. Preschool and kindergarten settings, as well as facilities for students with disabilities, need special attention for the prevention of infectious diseases.

C. Preventing the transmission of infection requires that personal and environmental cleanliness techniques be practiced at all times in every school setting.

D. Prior to the enrollment or continued attendance in the regular or special classroom of a known infected student, the school nurse shall develop specific procedures appropriate to the student's age and the stage of development for the specific disease. The school nurse should carry out the following procedures:

1. Conduct a health and developmental assessment including a review of the student's medical records. Collaborate with parents and the physician to ensure that the records are complete.
2. Based on the specific disease or pathogen and mode of transition, identify students and school personnel who may be at risk such as those who are chronically ill, pregnant, capable of childbearing, or taking immunosuppressant medication. Make recommendations for restriction of employees or students as appropriate and after consultation with the physician for all involved.
3. Identify appropriate personal and environmental cleanliness techniques in accordance with student and staff needs.
4. If the regular education program cannot be modified and the student is identified as an individual with exceptional needs, write appropriate health objectives for the student's individual education program (IEP).

5. Maintain ongoing communication with parents and the primary physician regarding the student's status.

II. Guidelines for Maintaining a Safe, Healthful School Environment

THESE GUIDELINES AND PROCEDURES SHOULD BE FOLLOWED REGARDLESS OF THE PRESENCE OR ABSENCE OF A STUDENT KNOWN TO HAVE AN INFECTIOUS DISEASE.

- A. The management of all facilities should make provisions for personal and environmental cleanliness.

1. Allow sufficient time for hand-washing after using the toilet and before eating meals and snacks.
2. Provide ready access to hand-washing facilities. These should include a stream of temperate running water and soap in an operable dispenser. The ideal water temperature is 75° F to 110° F. A disposable soap dispenser is preferred. Refer to Section IV (F) if a reusable soap dispenser is used. The use of bar soap should be discouraged.
3. Provide disposable paper towels. The use of cloth towels and cloth rolls is discouraged. However, if cloth towels are used, discard them with other contaminated linens after each use. If cloth rolls are provided, they should be checked and replaced regularly to ensure the availability of a clean and dry section for each user.
4. Maintain storage areas for clean linens, utensils, equipment, and disposable items. These areas must be separate from areas used for storage of soiled items.
5. Keep soiled disposable items in covered waste receptacles lined with disposable plastic bags. At the end of each day, the plastic bags are to be sealed and discarded. DO NOT REUSE.

- B. There is no *effective substitute* for soap and running water when hands are visibly soiled. In situations when soap and water is not available and hands are not visibly soiled or contaminated by blood and body fluids, a waterless alcohol-based hand rub can be used. If hands are visibly soiled and water is not available, a detergent containing towelette should be readily available and used first, followed by the alcohol hand rub.

Frequent handwashing is the most important technique for preventing the transmission of disease. Proper handwashing requires the use of soap and water and vigorous washing under a stream of temperate running water for at least 20 seconds. (The ideal water temperature is 75° F to 110° F.) All surfaces of the fingers and hands should be covered with the hand-washing agent. Rinse under running water. Use paper towels to thoroughly dry hands. Faucets should be turned off using a paper towel to prevent re-contaminating clean hands.

Handwashing should occur:

1. Before putting on lab coat or smock (or large blouse or shirt to cover street clothes) in preparation for working with the students;
2. Before drinking, eating, smoking, applying lip balm, or manipulating contact lenses;
3. Before handling clean utensils or equipment;
4. Before and after handling food;
5. Before and after assisting or training the students in toileting and feeding;
6. After going to the bathroom;
7. After contact with body secretions such as blood (including menstrual flow), urine, feces, mucus, saliva, semen, tears, vomitus, drainage from wounds, etc.;

8. After handling soiled diapers, menstrual pads, garments, equipment, or refuse;
 9. After caring for any student, especially those with nose, mouth, eye, or ear discharge;
 10. After removing disposable gloves; and
 11. After removing lab coat or smock when leaving the work area.
- C. All staff members should practice specific principles designed to protect themselves and others from infection.
1. Maintain optimum health through effective daily health practices such as adequate nutrition, rest, exercise, and appropriate medical supervision.
 2. If a care provider has a cut or an open lesion on his/her hands, disposable gloves must always be worn when providing direct care for any student where there is contact with bodily excretion or secretions.
 3. Avoid rubbing or touching eyes.
 4. Refrain from kissing or being kissed by students.
 5. Wash hands frequently.
 6. Avoid the use of jewelry such as rings, bracelets, and earrings during working hours.
 7. Use one's own personal care items such as combs, fingernail files, nail clippers, lipsticks, and toothbrushes.
 8. Keep fingernails clean and trimmed short.
- D. Prevention of Needle-Stick and/or Sharp-Item Injuries.
1. Training and/or instruction of personnel who will be handling any sharp items or using needles for parenteral administration of medi-

cation should include discussions of methods to prevent injuries. As appropriate, safer medical devices such as protected sharps or needleless systems should be used whenever possible.

2. Used needles should not be recapped, purposely bent, or broken. If recapping is unavoidable, a mechanical device such as a hemostat or the one-handed scooping technique should be used.
3. Used needles, syringes, or any sharp items should be placed in a prominently labeled, puncture-resistant container designated specifically for their disposal. The containers should then be incinerated or disposed of as potentially infectious medical waste.
4. Locate the puncture-resistant container close to the area of use. Consideration should be given to locking the sharps container to prevent tampering or inadvertent injury to students.

III. Procedures for Cleaning Up Body Fluid Spills (blood, feces, urine, semen, vaginal secretions, vomitus)

THESE PROCEDURES SHOULD BE USED FOR ALL STUDENTS REGARDLESS OF THEIR INFECTIOUS DISEASE STATUS.

- A. Wear disposable or utility gloves. (See Section IA.3 for selection of gloves.) When gloves are not available or unanticipated contact occurs, hands and other affected areas should be washed with soap and running temperate water immediately after contact.
- B. Clean and disinfect all hard, soiled, washable surfaces immediately, removing soil before applying disinfectant.
 1. SMALL SPILLS: Use paper towels or tissues to wipe up soiled areas. After soil is removed, use clean paper towels, soap, and water to clean area. Dispose of paper towels in a plastic bag. Disinfect area.

- (See Section VI for selection of a disinfectant.)
2. LARGE SPILLS: Apply commercial sanitary absorbent agent on soiled area. After soil is absorbed, sweep all material into a plastic bag, taking care not to create any dust emissions. Disinfect area with a clean mop. (See Section VI for selection of a disinfectant.) Disinfect the broom and dust pan after use.
- C. Clean and disinfect soiled rugs and carpets immediately by one of the following methods:
1. Use hospital or industrial equipment. (Follow manufacturer's directions and check products for shampooing and disinfecting.)
 - a. Apply commercial sanitary absorbent agent on soiled area. After soil is absorbed, carefully vacuum with one of the following:
 - (1) Hospital-grade wet vacuum extractor (this is a multipurpose extractor),
 - (2) Industrial-grade vacuum cleaner provided with a 99.9% high efficiency particulate arrestor (H.E.P.A.) air filter, or
 - (3) Hospital-grade vacuum cleaner with a high efficiency filter.
 - b. Disinfect area with a compatible disinfectant.
 - c. Apply a bacteriostatic rug shampoo. Follow label directions and re-vacuum.
 2. If one of the hospital- or industrial-grade wet extractors or vacuum cleaners is unavailable:
 - a. Apply a commercial sanitary absorbent agent on soiled area. Carefully scoop or scrape into a plastic bag while still wet.
 - b. Disinfect area with a compatible disinfectant.
 - c. Apply a bacteriostatic rug shampoo. Follow label directions. Brush and allow to dry.
 - d. Vacuum area.
- D. Clean and disinfect equipment according to manufacturer's directions. Dispose of all disposable materials.
1. Flushable soiled tissues and waste may be flushed in toilet. Discard paper towels, vacuum bag, and sweepings in a covered waste receptacle lined with a plastic bag.
 2. Wash broom and dust pan in disinfectant solution. (See Section VI.)
 3. Soak mop in disinfectant solution and rinse thoroughly or wash in hot-water cycle after soaking in disinfectant.
 4. Disinfectant solution and waste from hospital-grade wet vacuum extractor should be promptly disposed of in a sanitary sewer.
- E. Clothing and other non-disposable items (e.g., sheets, towels) soiled with body fluids and/or secretions should be placed in a plastic bag to be sent home or laundered.
- F. Remove gloves. Discard disposable gloves in covered waste receptacle. If utility gloves are worn, they must be washed, disinfected, and air dried after each use.
- G. Wash hands.
- H. Plastic bags holding contaminated waste should be secured and disposed of daily.
- I. Large waste receptacles containing potentially contaminated waste (covered

dumpsters or other covered containers that are impervious to animals) should be located in a safe area away from the playground or other areas used by students.

IV. Guidelines for Maintaining a Clean School Environment

THESE GUIDELINES AND PROCEDURES SHOULD BE FOLLOWED REGARDLESS OF THE PRESENCE OR ABSENCE OF A STUDENT KNOWN TO HAVE AN INFECTIOUS DISEASE.

A. Clean and disinfect the following areas and items daily:

1. Sinks and faucet handles,
2. Doorknobs and push plates,
3. Toilet seats and bowls (inside and out), and
4. Desks and/or table tops used for eating.

B. Clean and disinfect the following areas and items weekly:

1. Walls above sinks and
2. Desks and table tops (or more frequently as needed).

C. Clean classroom and hallway floors daily or more frequently as needed.

D. Vacuum carpets daily.

E. Wash waste receptacles at least weekly.

F. When reusable soap dispensers are empty, rinse, disinfect, and air dry them before refilling.

G. Rugs or carpets should be cleaned and disinfected as needed. (See Section III C.)

H. If heavy utility (rubber) non-disposable gloves are worn when a disinfectant is being used, they must be washed, disinfected, and air-dried after each use. The heavy utility gloves should be discarded if they are cracked, peeling,

torn, punctured, or no longer function as a barrier.

I. Use the following basic techniques for handling food and utensils.

1. Maintain a clean area of the kitchen for serving food.

2. Maintain a separate area of the kitchen for cleaning of soiled utensils, pots, pans, etc. A three-compartment sink is required.

3. All leftover prepared or served food, dishes, and utensils should be treated as if they were contaminated.

4. Scrape food from soiled dishes and/or place disposable dishes in plastic-lined, covered waste receptacle.

5. Pour liquids into sink drain.

6. Rinse dishes and utensils with warm water before placing them in the dishwasher or washing them by hand.

7. If dishwasher is unavailable, non-disposable food contact items should be washed, rinsed, sanitized, and air dried. (See Section VI.) Automatic chemical dispensing systems are preferred to assure the correct concentration of chemical is dispensed each time. When chemicals are used for sanitizing, test kits specific for that chemical shall be available and used each time the sink is filled. This will assure the correct concentration of the chemical is used.

8. Clean sinks, counter tops, tables, chairs, trays, and any other areas where foods or liquids have been discarded or spilled with an approved sanitizer. (See Section VI.)

9. Wash hands prior to removing clean dishes from the dishwasher and storing them in a "clean" area of the

kitchen. Eating utensils should be touched only by their handles and other items should be handled without touching surfaces that contact the user's mouth.

V. Special Procedures for Early Childhood, Day Care, and Special Classroom Settings

THESE PROCEDURES SHOULD BE USED FOR ALL STUDENTS REGARDLESS OF THEIR INFECTIOUS DISEASE STATUS.

A. Guidelines for Diapering

1. Purpose: To avoid cross-contamination when diapering.
2. Equipment
 - a. Disposable gloves for use with diapers;
 - b. A changing table, which may be the student's own bed, cot, or mat or a safe, firm, nonporous surface. Single-use paper may be used along with proper cleaning and disinfecting;
 - c. Readily accessible hand-washing facility including hot and cold running water (temperate control 75 ° F - 110° F), soap in workable dispenser, and disposable paper towels;
 - d. Supplies (all within reach) for cleaning student's skin including soap, water, and cotton balls or soft tissue or disposable baby wipes;
 - e. Plastic bags for student's soiled clothing;
 - f. Covered waste receptacle with a foot pedal lined with a disposable plastic bag for disposable diapers;
 - g. The use of cloth diapers is discouraged. However, if cloth diapers are used, a disposable plastic bag should be used for

each student's soiled diapers and clothing;

- h. Plastic bag ties or masking tape for sealing disposable plastic bags at time of discard; and
 - i. Disinfectant for cleaning diaper changing surface. (See Section VI.)
3. Procedure
 - a. Wear disposable gloves;
 - b. Place student on a clean changing surface;
 - c. Remove soiled diaper, fold soiled part to center, and place in an appropriate covered receptacle;
 - d. If other clothing is soiled, remove and place it directly in a plastic bag that can be marked with student's name, secured, and sent home at the end of the day;
 - e. Cleanse the perineum and buttocks thoroughly with disposable baby wipes or paper towels with soap and water;
 - f. Change gloves if soiled;
 - g. Rinse student's skin well and dry prior to applying clean diaper;
 - h. Wash student's hands after diapering;
 - i. Have student return to class activity;
 - j. Clean and disinfect changing table, cleaning supplies, and other contaminated articles;
 - k. Remove disposable gloves; and
 - l. Wash own hands.

4. Cloth diapers, soiled clothing, and other non-disposable items should be placed in a plastic bag, tied, and sent home or laundered as indicated in C.5 of this section.
- B. Guidelines for Cleanliness in Special Classroom Settings.
1. Purpose: To prevent the transmission of infectious disease.
 2. Equipment
 - a. If a lab coat or smock is worn when caring for a student,
 - (i) Use a freshly laundered garment each day and
 - (ii) Always hang the garment right side out when leaving the work area for breaks or lunch;
 - b. Covered waste receptacles with disposable plastic bags;
 - c. Plastic bags that can be labeled and sealed for an individual's soiled laundry;
 - d. Gloves (See Section I A.3.);
 - e. Disinfectant (See Section VI.);
 - f. Handwashing facility including hot and cold running water (temperate control 75° F - 110° F), soap in operable dispenser, and disposable paper towels;
 - g. Washer and dryer if disposable linens are not available; and
 - h. Dishwasher if disposable eating utensils are not available. (If dishwasher is not available, see Section VI for selection of sanitizer.)
- C. Procedure for Storing, Cleaning, and Disposing of Classroom Equipment, Supplies, and Other Items.
1. Special cleaning procedures
 - a. Disposable gloves should be worn when handling any items contaminated with blood or body fluids. Disposable gloves should also be worn if there are open cuts or abrasions on the hands. Discard the used gloves in a covered waste receptacle lined with a plastic bag. Wash hands after disposing of the gloves.
 - b. Store and handle clean clothing and linens separately from soiled clothing and linens. Immediately place all soiled school linens in a plastic bag in a covered linen receptacle. Launder linens daily.
 2. Immediately after use, discard any soiled disposable items by placing them in a plastic bag in a covered waste receptacle. At least once a day or more often if needed, seal and discard the bag used to line the waste receptacle.
 3. Label and separately store each student's personal grooming items (comb, brushes, toothbrushes).
 4. In handling disposable diapers, seal and discard the disposable plastic bag used to line the covered receptacle at least once a day.
 5. When laundry facilities are available at school, launder cloth items soiled in the school setting daily. Soiled linens should be handled as little as possible.
 - a. Separately launder cloth diapers or other items soaked with body fluids when it is necessary to launder such items.
 - b. Presoak heavily soiled items in the washing machine on the presoak cycle. Hand rinsing of soiled linens may create spraying or splashing and contaminate the environment or expose the individual to blood or body fluids.

- c. Follow the label directions to determine the amount of detergent to be added.
 - d. If the material is bleachable, add 1 cup of household bleach to the wash cycle. (Follow label directions.)
 - e. If the material is not colorfast, use a chlorinated detergent.
 - f. Use hot cycle on washer and dryer.
6. Cleaning and disinfecting schedule
- a. Clean and disinfect protective floor pads, bolsters, wedges etc., after each student has been removed and at the end of each day, or if a blood or body fluid spill occurs during use. (All surfaces should be covered with protective nonabsorbent material.) Pads, bolsters, and wedges that are torn or not intact should be removed from use until they are repaired or discarded.
 - b. Clean all toys with soap and water, rinse thoroughly, and sanitize as needed and at least daily. It is recommended that toys be sanitized between each child's use. A dishwasher may be used for small toys. Toys that have been mouthed should be removed from use until they can be washed and sanitized. Establishing a soiled toy bin or storage area will prevent soiled toys from being used before they have been cleaned and sanitized.
 - c. Clean and disinfect all other equipment at the end of each day.
 - d. If a rug or carpet becomes soiled with blood or bodily fluids, clean it immediately. (See Section III.C.)

- e. Clean and disinfect changing surface, bathtubs, sinks, and portable potties after each use. Clean and disinfect toilet seats when visibly soiled and daily. (See Section IV for Guidelines for Maintaining a Clean School Environment.)

VI. Selecting an Appropriate Disinfectant and Sanitizer

A disinfectant should be used on all contaminated surfaces except on mouthed toys, eating utensils, and food contact items. These contact surfaces should all be sanitized. If the disinfectant/sanitizing product is removed from the original container, the secondary container must be labeled and dated.

- A. Select a hospital-grade disinfectant that will kill vegetative bacteria, fungi, and viruses. The product must be registered by the U.S. Environmental Protection Agency (EPA) for use as a hospital disinfectant.
- B. Prepare and use all products according to label directions for disinfection and/or sanitizing.
 - 1. Many disinfectants are inactivated in the presence of blood or other organic matter; therefore, the item/surface must be cleaned with a detergent to remove the organic material before the disinfectant is used. Examples of approved disinfectants are listed below:
 - a. Quaternary ammonium compound (QUAT), iodophor, and phenolic-based compounds.
 - b. Liquid household bleach (5.25% sodium hypochlorite) in a 1:10 dilution when prepared fresh on a daily basis. To achieve a 1:10 dilution, use one part bleach to nine parts of water. A 1:5 dilution can be used for 30 days. To achieve a 1:5 dilution use one part bleach to four parts water. (See Appendix B for

concentration, dilution, and stability.)

2. Chemical sanitizing agents must be used according to the manufacturer's label instructions for concentration and contact time. Test kits for concentration of the sanitizing agent are required. Examples of approved sanitizers are listed below:

- a. Quaternary ammonium compound (QUAT) 12.5 – 25.0 parts per million (ppm) and iodophor 200 ppm.
- b. Liquid household bleach (5.25% sodium hypochlorite) 50 ppm. (See Appendix B.)

C. Shelf life of bleach

1. One year – open or not – if undiluted in bleach bottle and protected from light.
2. Diluted – depends on concentration and use. (See Appendix B.)

D. Store all disinfectants and sanitizing agents in a safe area inaccessible to students and away from food production areas.

E. Use spray bottles made of high-quality polyethylene; bleach will decompose rubber in spray bottles.

F. Contact rug shampoo (soap) distributor for advice in choosing a disinfectant that is compatible with the rug shampoo in use. (Disinfectant needs to be compatible with a rug shampoo because of a possible stain or toxicity problem.)

APPENDIX A

Legal Citations

from

The Illinois School Code, The AIDS Confidentiality Act, The Communicable Disease Prevention Act, The Communicable Disease Report Act, The Illinois Administrative Code, and The Code of Federal Regulations

THE ILLINOIS SCHOOL CODE (105 ILCS 5/1 ET SEQ.)

105 ILCS 5/10-21.11. Infectious disease policies and rules

To develop policies and adopt rules relating to the appropriate manner of managing children with chronic infectious diseases, not inconsistent with guidelines published by the State Board of Education and the Illinois Department of Public Health. Such policies and rules must include evaluation of students with a chronic infectious disease on an individual case-by-case basis, and may include different provisions for different age groups, classes of instruction, types of educational institution, and other reasonable classifications, as the school board may find appropriate.

This requirement applies to all school districts and public schools of this State, including special charter districts, Department of Corrections school districts, laboratory schools operated by the governing board of a public university, and alternative schools operated by a regional superintendent of schools.

105 ILCS 5/34-18.13. Infectious disease policies and rules

The Board of Education shall develop policies and adopt rules relating to the appropriate manner of managing children with chronic infectious diseases, not inconsistent with guidelines published by the State Board of Education and the Illinois Department of Public Health. Such policies and rules must include evaluation of students with a chronic infectious disease on an individual case-by-case basis, and may include different provisions for different age groups, classes of instruction, types of educational institution, and other reasonable classifications, as the Board may find appropriate.

105 ILCS 5/10-20.5. Rules

To adopt and enforce all necessary rules for the management and government of the public schools of their district. Rules adopted by the school board shall be filed for public inspection in the administrative office of the district.

ILLINOIS COMPILED STATUTES

AIDS Confidentiality Act (410 ILCS 305 et seq.)

Section 305/9. Disclosure of identity of person tested

No person may disclose or be compelled to disclose the identity of any person upon whom a test is performed, or the results of such a test in a manner which permits identification of the subject of the test, except to the following persons:

- (a) The subject of the test or the subject's legally authorized representative. A physician may notify the spouse of the test subject, if the test result is positive and has been confirmed by a Western Blot Assay or more reliable test, provided that the physician has first sought unsuccessfully to persuade the patient to notify the spouse or that a reasonable time after the patient has agreed to

make the notification, the physician has reason to believe that the patient has not provided the notification. This paragraph shall not create a duty or obligation under which a physician must notify the spouse of the test results, nor shall such duty or obligation be implied. No civil liability or criminal sanction under this Act shall be imposed for any disclosure or nondisclosure of a test result to a spouse by a physician acting in good faith under this paragraph. For the purpose of any proceedings, civil or criminal, the good faith of any physician acting under this paragraph shall be presumed.

- (b) Any person designated in a legally effective release of the test results executed by the subject of the test or the subject's legally authorized representative.
- (c) An authorized agent or employee of a health facility or health care provider if the health facility or health care provider itself is authorized to obtain the test results, the agent or employee provides patient care or handles or processes specimens of body fluids or tissues, and the agent or employee has a need to know such information.
- (d) The Department, in accordance with rules for reporting and controlling the spread of disease, as otherwise provided by State law. Neither the Department nor its authorized representatives shall disclose information and records held by them relating to known or suspected cases of AIDS or HIV infection, publicly or in any action of any kind in any court or before any tribunal, board, or agency. AIDS and HIV infection data shall be protected from disclosure in accordance with the provisions of Sections 8-2101 through 8-2105 of the Code of Civil Procedure.
- (e) A health facility or health care provider which procures, processes, distributes or uses: (i) a human body part from a deceased person with respect to medical information regarding that person; or (ii) semen provided prior to the effective date of this Act for the purpose of artificial insemination.
- (f) Health facility staff committees for the purposes of conducting program monitoring, program evaluation or service reviews.
- (g) (Blank).
- (h) Any health care provider or employee of a health facility, and any firefighter or EMT-A, EMT-P, or EMT-I, involved in an accidental direct skin or mucous membrane contact with the blood or bodily fluids of an individual which is of a nature that may transmit HIV, as determined by a physician in his medical judgment.
- (i) Any law enforcement officer, as defined in subsection (c) of Section 7, involved in the line of duty in a direct skin or mucous membrane contact with the blood or bodily fluids of an individual which is of a nature that may transmit HIV, as determined by a physician in his medical judgment.
- (j) A temporary caretaker of a child taken into temporary protective custody by the Department of Children and Family Services pursuant to Section 5 of the Abused and Neglected Child Reporting Act, as now or hereafter amended.
- (k) In the case of a minor under 18 years of age whose test result is positive and has been confirmed by a Western Blot Assay or a more reliable test, the health care provider who ordered the test shall make a reasonable effort to notify the minor's parent or legal guardian if, in the professional judgment of the health care provider, notification would be in the best interest of the child and the health care provider has first sought unsuccessfully to persuade the minor to notify the parent or legal guardian or a reasonable time after the minor has agreed to notify the parent or legal guardian, the health care provider has reason to believe that the minor has not made the notification. This subsection shall not create a duty or obligation under which a health care provider must notify the minor's parent or legal guardian of the test results, nor shall a duty or obligation be implied. No civil liability or criminal sanction under this Act shall be imposed for any

notification or non-notification of a minor's test result by a health care provider acting in good faith under this subsection. For the purpose of any proceeding, civil or criminal, the good faith of any health care provider acting under this subsection shall be presumed.

Section 305/10. Disclosure by person to whom results have been disclosed

No person to whom the results of a test have been disclosed may disclose the test results to another person except as authorized by Section 9.

Communicable Disease Prevention Act (410 ILCS 315/0.01 et seq.)

Section 315/2a. Child of school age diagnosed as having AIDS; notice to principal

Whenever a child of school age is reported to the Illinois Department of Public Health or a local health department as having been diagnosed as having acquired immune deficiency syndrome (AIDS) or AIDS-related complex (ARCR) or as having been shown to have been exposed to human immunodeficiency virus (HIV) or any other identified causative agent of AIDS by testing positive on a Western Blot Assay or more reliable test, such department shall give prompt and confidential notice of the identity of the child to the principal of the school in which the child is enrolled. If the child is enrolled in a public school, the principal shall disclose the identity of the child to the superintendent of the school district in which the child resides.

The principal may, as necessary, disclose the identity of an infected child to:

- (1) the school nurse at that school;
- (2) the classroom teachers in whose classes the child is enrolled; and
- (3) those persons who, pursuant to federal or state law, are required to decide the placement or educational program of the child.

In addition, the principal may inform such other persons as may be necessary that an infected child is enrolled at that school, so long as the child's identity is not revealed.

Communicable Disease Report Act (745 ILCS 45/0.01 et seq.)

Section 45/1. Confidential information - Immunity from suit

Whenever any statute of this State or any ordinance or resolution of a municipal corporation or political subdivision enacted pursuant to statute or any rule of an administrative agency adopted pursuant to statute requires medical practitioners or other persons to report cases of injury, medical condition or procedure, communicable disease, venereal disease, or sexually transmitted disease to any governmental agency or officer, such reports shall be confidential, and any medical practitioner or other person making such report in good faith shall be immune from suit for slander or libel based upon any statements contained in such report.

The identity of any individual who makes a report or who is identified in a report of an injury, medical condition or procedure, communicable disease, venereal disease, sexually transmitted disease, or food-borne illness or an investigation conducted pursuant to a report of an injury, medical condition or procedure, communicable disease, venereal disease, sexually transmitted disease, or food-borne illness shall be confidential and the identity of any person making a report or named therein shall not be disclosed publicly or in any action of any kind in any court or before any tribunal, board or agency; provided that records and communications concerning a venereal disease or sexually transmitted disease in any minor under 11 years of age shall be disclosed in accordance with the provisions of the Abused and Neglected Child Reporting Act, approved June 26, 1975, as now or hereafter amended.

The confidentiality provisions of this Act do not apply to the results of tests for diseases conducted pursuant to subsections (g) and (g-5) of Section 5-5-3 and subsection (a) of Section 3-15-2 of the Unified Code of Corrections.

ILLINOIS ADMINISTRATIVE CODE

Control of Communicable Diseases Code (77 Ill. Adm. Code Part 690)

Section 690.100 Diseases and Conditions

The following are declared to be contagious, infectious, communicable and dangerous to the public health and each suspected or diagnosed case shall be reported to the local health authority who shall subsequently report each case to the Illinois Department of Public Health. This listing includes those diseases and conditions reportable because of classification as communicable or sexually transmitted. Communicable diseases and conditions are reportable under this Part (77 Ill. Adm. Code 690) and sexually transmissible diseases and conditions are reportable under the Control of Sexually Transmissible Diseases Code (77 Ill. Adm. Code 693). (See Subpart B, Section 690.200.)

Section 690.200 Reporting

(a) Reporting Entities and Manner of Reporting

1. It shall be the duty of each of the following persons or any other person having knowledge of a known or suspected case or carrier of communicable disease or communicable disease death, to report within the time frames set forth in Section 690.100 of this Part (except for sexually transmissible diseases that are reportable under the Control of Sexually Transmissible Diseases Code (77 Ill. Adm. Code 693) and tuberculosis, which is reportable under the Control of Tuberculosis Code (77 Ill. Adm. Code 696)) the case, suspected case, carrier or death:
 - A) Physicians,
 - B) Nurses,
 - C) Nurse aides,
 - D) Dentists,
 - E) Health care practitioners,
 - F) Laboratory personnel,
 - G) School personnel,
 - H) Long-term care personnel,
 - I) Day care personnel,
 - J) College/University personnel.

(d) Confidentiality

1. It is the policy of the Department to maintain the confidentiality of information that would identify individual patients.
2. Whenever any statute of this State or any ordinance or resolution of a municipal corporation or political subdivision enacted pursuant to statute or any rule of an administrative agency adopted pursuant to statute requires medical practitioners or other persons to report cases of communicable diseases, including sexually transmitted diseases to any governmental agency or officer, such reports shall be confidential, and any medical practitioner or other persons making such report in good faith shall be immune from suit for slander or libel based upon any statements contained in such report. The identity of any individual contained in a report of a communicable disease, sexually transmitted disease or foodborne illness or an investigation conducted pursuant to a report of a communicable disease, sexually transmitted disease or food-borne illness shall be

confidential and such identity shall not be disclosed publicly in any action of any kind in any court or before any tribunal, board or agency. (Communicable Disease Report Act [745 ILCS 45])

Section 690.1000 General Procedures for the Control of Communicable Diseases

(g) Schools, Day Care Centers, and Colleges/Universities

1. When a case of communicable disease occurs in a school, day care center, or college/university, this fact should not be considered a reason for the facility to be closed, except in the event of an emergency.
2. Persons suspected of being infected with a reportable infectious disease for which isolation is required shall be refused admittance to the facility while acute symptoms are present.
3. School, day care center, and college/university authorities shall handle contacts of infectious disease cases in the manner prescribed in these rules and regulations, or as recommended by the local health authority.

HIV/AIDS Confidentiality and Testing Code (77 Ill.Adm.Code Part 697)

Section 697.400 Notification of School Principals

- (a) Whenever a child of school age is reported to the Department or to a local health department as having been diagnosed as having AIDS or as having been shown to have been exposed to Human Immune Deficiency Virus (HIV) (or any other identified causative agent of AIDS) by testing positive on a Western Blot Assay or more reliable tests as specified in Section 697.100, such department shall give prompt (within three working days) and confidential notice of the identity of the child to the principal of the school in which the child is enrolled. If the child is enrolled in a public school, the principal shall disclose the identity of the child to the superintendent of the school district in which the child resides (Section 2a of the Communicable Disease Prevention Act [410 ILCS 315/2a]). School age is defined as between ages 5 and 21 by Sections 10-20.12 of the School Code [105 ILCS 5/10-20.12] and between ages 3 and 21 for handicapped children by the Education For All Handicapped Children Act (20 U.S.C. Section 1412(1)(B)). Diagnosed cases and laboratory results are reported to the Department in accordance with the provisions of the "Control of Sexually Transmissible Disease Code" (77 Ill. Adm. Code 693). If the child resides in a county or city governed by a full-time Local Health Authority, such notification shall be the responsibility of the Local Health Authority. In all other cases, such notification shall be the responsibility of the Department. The Local Health Authority or the Department shall offer assistance to the principal concerning HIV, the availability of counseling and training, and guidelines for management of the child in the classroom.
- (b) Upon receipt of such notice, the principal may, as necessary, such as when a student needs medical attention or must take medication during school attendance, or when the student's clinical condition necessitates other such services, disclose the identity of an infected child to the school nurse at that school, the classroom teachers in whose classes the child is enrolled, and those persons who, pursuant to Federal or state law, are required to decide the placement or educational program of the child. In addition, the principal may inform such other persons as may be necessary in the opinion of the principal that an infected child is enrolled at that school so long as the child's identity is not revealed. (Sections 2a of the Communicable Disease Prevention Act [410 ILCS 315/2a])
- (c) No person to whom the child's identity is disclosed may disclose such information to any other person except as permitted by law (Sections 9 and 10 of the AIDS Confidentiality Act).

Section 697.410 Guidelines for the Management of Chronic Infectious Diseases in School Children

The management of the child in the classroom should be in accordance with the following guidelines developed jointly by the Department and the State Board of Education, "Guidelines for Management of Chronic Infectious Diseases in School Children."

Health and Safety (56 Ill. Adm. Code Part 350)

Section 350.280 Adoption of Federal Standards

- (a) Incorporations
 - 1. Pursuant to Section 4 of the Health and Safety Act, the Department hereby adopts by reference the general health and safety standards and special maritime and construction industry standards adopted by the federal Occupational Safety and Health Administrative as effective January 18, 2001 and amended at FR66:5196; FR66:5318. These standards are located at 29 CFR 1910, 1915, and 1926 and do not include any later amendments or editions.
- (c) The Department hereby adopts as a rule of the Department, through incorporation by reference, 29 CFR 1910.1030, Occupational Exposure to Blood-borne Pathogens (1991, no later amendments or editions).

CODE OF FEDERAL REGULATIONS

Occupational Safety and Health Standards (209 CFR Part 1910)

Section 1910.1030 Blood-borne Pathogens

- (a) Scope and Application. This section applies to all occupational exposure to blood or other potentially infectious materials as defined by paragraph (b) of this section.
- (b) Definitions. For purposes of this section, the following shall apply:
"Blood-borne Pathogens" means pathogenic microorganisms that are present in human blood and can cause disease in humans. These pathogens include, but are not limited to, hepatitis B virus (HBV) and human immunodeficiency virus (HIV).

APPENDIX B

Disinfectants and Chemical Sanitizing Agents Preparation, Concentration and Stability

Disinfectants

	Desired Chlorine Concentration			
	5000 ppm*	1000 ppm*	500 ppm*	100 ppm*
For use within 24 hours: Dilution of bleach (5.25% NaOCl)	1:10	1:50	1:100	1:500
For use in 1 - 30 days: Dilution of bleach (5.25% NaOCl)	1:5	1:25	1:50	1:250

To achieve a 1:10 dilution, add one part bleach (NaOCl) to nine parts water.

To achieve a 1:5 dilution, add one part bleach (NaOCl) to four parts water.

*ppm = parts per million

Source: Rutala, William A. APIC Guideline for Selection and Use of Disinfectants. *American Journal of Infection Control*. 1996;24:313-342.

Chemical Sanitizing Agents

	Bleach (5.25% NaOCL)	Quaternary Ammonium Compound (QUAT)
Concentration <ul style="list-style-type: none"> ▪ For immersion ▪ For power spray or cleaning in place (when immersion cannot be accomplished) 	50 ppm 50 ppm	220 ppm (varies, consult label) 220 ppm (varies, consult label)
Time required for sanitizing <ul style="list-style-type: none"> ▪ For immersion ▪ For power spray or cleaning in place 	1 minute Follow the manufacturer's label instructions.	Generally 1 minute. Consult manufacturer's label. Follow the manufacture's label instructions.
Indication of strength of solution used.	Bleach-specific test kit required.	QUAT-specific test kit required.

Adapted from: The Educational Foundation of the National Restaurant Association. Applied Foodservice Sanitation A Certification Coursebook Fourth Edition. Chicago: The Educational Foundation of the National Restaurant Association; 1995.

APPENDIX C

Glossary

Alcohol-based Handrub - A waterless agent containing ethanol, isopropyl alcohol, or n-propanol with the addition of emollients that can be used for hand antisepsis.

Bloodborne Pathogen - A pathogenic microorganism present in human blood that can cause disease in humans. The pathogens include, but are not limited to, hepatitis B virus (HBV), hepatitis C virus (HCV), and human immunodeficiency virus (HIV).

Carrier - A person who harbors a specific pathogenic organism in the absence of discernible symptoms or signs of the disease and who is potentially capable of spreading the organism to others.

Chronic - Long, drawn out; applied to a disease that is not acute.

Cleaning - The removal by scrubbing and washing, as with hot water, soap, or suitable detergent or by vacuum cleaning, of infectious agents and organic matter from surfaces.

Communicable Disease - 1) A disease that may be transmitted directly or indirectly from one individual to another. 2) A disease due to an infectious agent or toxic products produced by it.

Direct Care - Any service provided where direct contact is made with the student's body fluids.

Disinfection - The killing of infectious agents outside the body by direct exposure to chemical or physical agents.

Exclusion - For public health protection, action taken by school and health authorities to prohibit a student from attending school until the risk of spread of disease has diminished.

Fever - An elevation of body temperature of 1.4° above the normal; generally, 100°F or higher taken under the arm or orally.

Hand Antisepsis - A process for the removal or destruction of transient microorganisms.

Hand Hygiene - A general term that applies to either handwashing, antiseptic handwash, antiseptic handrub, or surgical hand antisepsis.

Handwashing - A process for the removal of soil and transient microorganisms from the hands.

Immunodeficient - A deficiency in immune response, mediated either by humoral antibody or by immune lymphoid cells.

Incontinence - Inability to retain urine, semen, or feces through loss of sphincter control or cerebral or spinal lesions.

Infectious Agent - Organisms such as bacteria or viruses that are capable of producing disease or infection in a susceptible individual.

Infectious Disease - Any disease caused by growth of pathogenic microorganisms, serum, or toxic materials introduced into the body.

Needleless Systems - A device that does not use needles for (A) The collection of bodily fluids or withdrawal of body fluids after initial venous or arterial access is established; (B) the administration of medication or fluids; or (C) any other procedure involving the potential for occupational exposure to bloodborne pathogens due to percutaneous injuries from contaminated sharps.

Parenteral Administration of Medication - Intravenous, subcutaneous, or intramuscular injections.

Potentially Infectious Medical Waste - Waste generated in connection with the provision of medical care and includes but

is not limited to human blood and blood products as well as used sharps.

Sanitary Absorbent Agent - A chemical used to absorb or transform liquid spills into a semisolid state.

Sanitization – The act of applying an agent that reduces the number of bacterial contaminants to safe levels, commonly used with substances applied to inanimate objects.

Sharps (with engineered sharps injury protection) - A nonneedle sharp or a needle device used for withdrawing body fluids, for accessing a vein or artery, or for administering medications or other fluids that has a built-in safety feature or mechanism that effectively reduces the risk of an exposure incident.

Sterilization – The act or process, physical or chemical, that destroys or eliminates all forms of life, especially microorganisms.

Transmission of Infectious Agents - Any mechanism for infecting a susceptible person.

- A. Direct transmission - Transfer that takes place as a result of direct personal contact with an infected or colonized individual. It involves the direct body surface to body surface contact and physical transfer of an infectious agent. Transmission may occur from direct introduction or inoculation of the infectious agent into non-intact skin or mucous membranes (including the mouth) or through percutaneous exposure.
- B. Indirect transmission - Transfer that occurs when an object carries an infectious agent to a suitable portal of entry (mucous membranes, break in skin, digestive tract). Objects may be toys, clothing, cooking or eating utensils, water, food, milk, or pencils and other school supplies.
- C. Droplet Transmission - Transmission through the droplets that are generated from an individual during sneezing,

coughing, singing, or talking. The droplets generated from an infectious person are propelled a short distance, generally less than three feet, through the air and deposited on the susceptible person's conjunctiva (mucous membranes that line the eyelids), nasal mucosa or mouth.

Universal Precautions - An approach to infection control utilizing barrier precautions (e.g., gloves), and other prescribed personal protection measures including appropriate clean up, waste disposal, and sharps injury prevention measures. Blood and certain body fluids (semen, vaginal secretions, cerebrospinal fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, and any body fluid that is visibly contaminated with blood) are treated as if known to be infectious with HIV, hepatitis B virus, hepatitis C virus, and other bloodborne pathogens. Universal precautions are intended to prevent exposure to potential bloodborne pathogens through a contaminated sharps injury, mucous membrane exposure, or non-intact skin.

APPENDIX D

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APPENDIX E

Illinois State Board of Education Video “Using Universal Precautions in a School Setting”

Length	12:52 min.
Target Audience	All school personnel
Description	<p>Blood-borne pathogens are disease-causing agents that are present in blood. People can carry blood-borne pathogens for years without knowing they are infected. Two blood-borne pathogens are the hepatitis B virus and the human immunodeficiency virus.</p> <p>Universal precautions are specific measures used to minimize the likelihood of contact with the blood and body fluids of any person. This program specifically outlines the universal precautions that are to be used on school buses and school property when exposure to blood or body fluids occurs.</p>
Distribution	<p>This video may be viewed from the Illinois State Board of Education Internet server at http://www.isbe.net/video/teachers_videos.htm#uni</p> <p>To access the file, users must have RealPlayer software installed on their computers. Individuals who do not have RealPlayer may download it free of charge at http://www.real.com/</p>

For more information, contact

*Illinois State Board of Education
Multi Media Division
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APPENDIX F

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