Immunization and Communicable Disease Control

Introduction

The specialty of school nursing developed as part of public health nursing in the early 1900s. This occurred primarily as a means of identifying and treating students with serious communicable diseases, and of informing educators, parents, and children about how to control infectious diseases.

Infectious diseases are illnesses caused by specific germs: viruses, bacteria, fungi, or parasites. Infectious diseases that can be spread from one individual to another are called contagious or communicable diseases. Communicable diseases are one of the major problems contributing to both student and staff absence as well as the discomfort associated with a given affliction.

Some of the diseases children have now are the same as those seen in the early part of the 20th century, and some are new and different, such as HIV or hepatitis. While responsibility for care of the individual student rests with the family and their source of medical care, the school nurse has responsibility for identifying communicable diseases in the school and coordinating appropriate treatment. Although that responsibility is shared with students, staff, and the greater community, school nurses must be leaders in promoting infection control in schools, as well as in providing information to educate students, parents, and staff about communicable disease prevention.

This chapter focuses primarily on the practical applications of disease prevention strategies, such as immunization, which is undergirded by specific legislation mandating schedules and corresponding administrative procedures. This chapter also describes the measures schools can take to prevent the spread of communicable diseases in the school setting, including simple steps like hand washing or the temporary exclusion of individuals from the school setting.

To that end, this chapter focuses on two primary sections: immunization programs and communicable disease management. Each section provides detailed information regarding legal considerations, responsibilities, and management strategies. The following will serve as an outline of this chapter.

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Immunization

History and Responsibilities

Wisconsin passed its first immunization law, <u>Wis. Stat. sec. 252.04</u>, in 1975. Wisconsin Administrative Code HS 144, created in 1981, specifically addresses the implementation of the statute. The administrative code includes:

- definitions:
- minimum immunization requirements by age and grade level;
- explanation of waivers for health, religious, or personal conviction reasons; and
- the responsibilities of parents and adult students, schools and daycare centers, local health departments, and the Wisconsin Department of Health Services (DHS).

The Wisconsin Department of Health Services' communicable disease and immunization programs provide technical assistance and guidance to increase public health safety. Many of the responsibilities for surveillance, investigation, control, and prevention of communicable diseases are carried out by local health departments.

<u>Wisconsin Statute Chapter 252</u> outlines various departments' responsibilities related to communicable disease prevention and control, including its immunization program.

Legal Considerations

Several important state regulations related to immunizations guide and govern Wisconsin schools. State laws offer districts clear and well-defined roles and responsibilities. This structure helps school districts develop solid policies to protect their students, staff, and ultimately the larger community by requiring specific minimum immunizations.

The specific laws related to immunizations that impact schools include: statutes regarding school immunization plans, release of immunization information, public employee safety and health, and pupil records.

While the federal Public Employee Safety and Health Act and the Wisconsin immunization and communicable disease reporting laws apply to all schools, Wisconsin laws regarding pupil records do not apply to private schools.

School Immunization Plan

<u>Wisconsin Statute section 120.12(16)(a)(b)</u> requires schools to develop and implement a plan to encourage compliance with state immunization laws and requires parents to present written evidence, paper or electronic, that their child has received specified vaccinations. Parents may claim waivers based on reasons of health, personal conviction, or religious beliefs. Waivers based on health reasons must be signed by a physician.

Penalties for families and students for noncompliance with the law include possible exclusion from school for up to 10 days and a fine if the district attorney chooses to prosecute. If the proper immunization or waiver evidence has not been presented, a school may issue notices for a student exclusion hearing on health and safety grounds (Wis. Stat. sec. 252.04(5)(b)(1)).

Like other education exclusions, this would result from a failure to comply with a district's policies and/or procedures. In addition, Wisconsin statute requires school districts with less than a 99 percent overall compliance in the previous school year to exclude all students in grades kindergarten through 6^{th} grade who are not in compliance with immunization laws. Exclusion for these noncompliant students may not exceed more than 10 consecutive school days (Wis. Stat. sec. 252.04(5)(b)3,4).

Under these circumstances, school districts can choose to exclude noncompliant students in grades 7-12; however, they are not required to do so. Some school districts may choose to exclude such students in an effort to increase the school district's overall compliance rate.

Release of Immunization Information

Wisconsin Administrative Code DHS 144 requires vaccine providers to disclose a student's immunization information, including the student's name, date of birth, gender, and the day, month, and year of vaccine administered, to schools and childcare centers upon verbal and written request. Written and verbal permission from an 18-year-old or older student or parent is not required to release this information to a school or childcare center. Vaccine providers include any health care facility, physician's office, or local health department that administers vaccinations to the public. The law does not allow schools to release a student's immunization information without verbal or written permission from an 18-year-old or older student or parent.

Since most schools are not vaccine providers, they are not allowed to release immunization information to vaccine providers without a parental release of information.

School districts are required to transfer pupil records, which includes immunization records, within five working days of receipt of any written request to transfer records (<u>Wis. Stat. sec.</u> 118.125).

Public Employee Safety and Health

The intent of OSHA 29 CFR sec. 1910.1030 is to minimize or eliminate occupational exposure to all bloodborne pathogens including hepatitis B virus, hepatitis C virus, and the human immunodeficiency virus (HIV). This regulation sets standards that employers, including public school districts (Wis. Stat. sec. 101.055) and private schools, must follow in developing a plan that will protect employees from reasonably anticipated exposure. School districts must provide hepatitis B vaccinations for school personnel who are at risk for exposure to bloodborne pathogens. For more information regarding bloodborne pathogen plans, please see the Department of Public Instruction's Model Bloodborne Pathogen Exposure Plan.

Pupil Records

In Wisconsin statute, immunization records are defined as both progress records and pupil physical health care records (Wis. Stat. sec. 118.125(1)(c)). Consequently, as a progress record, immunization records must be maintained for at least five years after a student ceases to be enrolled (Wis. Stat. sec. 118.125(3)).

Student Immunization Schedules

While some people might believe our technologically advanced society somehow ensures a fully immunized citizenry, scattered outbreaks of measles, mumps, and pertussis in Wisconsin and throughout the nation have renewed an emphasis on the importance of immunization. They remind us that many children are not adequately protected and, therefore, are susceptible to communicable illnesses.

Ideally, by the time they are two years of age, children will complete the basic series of immunizations, including those against diphtheria, pertussis, tetanus, polio, measles, mumps, rubella, pneumococcal disease, Haemophilus influenzae Type B, hepatitis B, and varicella. No one currently monitors all preschool children for compliance with immunization schedules. It is not until children enter a public school or child care center that they come under the jurisdiction of state laws requiring immunizations.

While requirements vary from state to state, all states have immunization requirements for school attendance, usually based on recommendations of such national groups as the Centers for Disease Control and Prevention (CDC) Advisory Committee on Immunization Practices (ACIP), the American Academy of Pediatrics, and/or the American Academy of Family Physicians.

While most Wisconsin children receive the required immunizations, non-immunized children continue to be at risk of disease. Many health care professionals and educators believe that complete immunization for children is an achievable goal. The state health plan aims to increase the proportion of the population fully immunized according to ACIP recommendations among children aged 0-12 years, teens aged 13-17 years, and adults aged 18 years and older.

Scheduling Guidelines

It is important to note that Wisconsin statutes outline minimum requirements, and that primary health care providers may recommend additional immunizations based on the health status of a particular child. Educators and parents should be aware of a number of benchmarks:

- State law requires parents to provide written evidence to the school of their child's vaccination against specific illnesses within 30 days of the child's admission to school.
- Students not fully immunized upon admittance to school must receive at least the first dose of each age-appropriate vaccine within 30 days. (Note: Students entering from another school district in Wisconsin are not allowed this 30-day grace period because they were subject to the same immunization law in their previous school.)
- Children must receive the second dose of each vaccine within 90 days of admission. By the 30th day of the following year, students must have received their third (and fourth, if required) dose of diphtheria, pertussis, tetanus (DPT/DTaP/DT/Td), polio, and hepatitis B vaccines.¹

Changes in the Wisconsin immunization law occur in response to immunization research and recommendations from ACIP. Recent changes in the Wisconsin immunization law include:

- Hepatitis B three-dose requirement for all grades was effective in 2002-2003.
- Varicella two-dose requirement will be completely phased in by 2013-2014.
- Tetanus, diphtheria, and acelluar pertussis (TdaP) requirements for grades 6-12 are now fully implemented.

Written evidence of immunization of student vaccination includes the use of electronic databases for immunization documentation.

The Student Immunization Record and Age/Grade requirement sheet are located on the Wisconsin Department of Health Services, Immunization Program <u>website</u>. This is updated annually.

Childcare and School Immunization Requirements

Children enrolled in early education programs within the school should be reported as part of the school report. If a licensed childcare center is located within the school it will be assessed separately from the school via a direct mailing and must also count students in its program.

Immunization Compliance Procedures

The state of Wisconsin requires school districts with less than a 99 percent overall compliance rate in the previous school year to exclude all elementary students who are not in compliance with immunization law (Wis. Stat. sec. 252.04(5)(b)3). School districts can expand this exclusion to include noncompliant middle and high school students. To avoid the potential problems associated with such exclusions, school districts, working in cooperation with parents, local health departments, and local health care providers/agencies, must acquire and maintain complete student immunization information. This may be particularly challenging in urban areas, where a high degree of mobility may mean that students were immunized at a variety of locations and that families have incomplete immunization information. The Wisconsin Immunization Registry (WIR) improves school access to immunization records. Schools no longer need to contact public health departments or participating local clinics to retrieve immunization records.

If the school nurse or other school personnel successfully locate immunization dates, it is important to share that information with the child's parents.

The Wisconsin Department of Public Instruction recommends that school districts cooperate with local health departments in areas where large numbers of students are behind schedule for immunizations. Depending on the community, districts may function as a source of information and as an active coordinator of immunization clinics in a school and/or community setting. Districts and health departments may improve immunization rates by co-sponsoring such clinics, ideally at the beginning of the school year and again in the spring, and by promoting Immunization Awareness Month every August. Such efforts can be significantly enhanced by creating public awareness via local radio, TV, and other media, through which parents can be

informed of the medical value of and legal requirements for immunization. In addition, districts should provide to parents, either at kindergarten registration or upon transferring their child from an out-of-state school, printed information explaining Wisconsin immunization laws.

Parents should compile, sign, and provide their child's school with a complete immunization history for each child. This should include the month, day, and year of each vaccination. The DHS' Immunization Program form, DOH 4020L is available for this purpose. With the expansion of the definition of "written evidence of immunization" to include electronic records, schools may rely less on parent-provided immunization records and more on retrieval of records from WIR. The school nurse or an individual who is knowledgeable about state laws and recommended immunization practices should review this history, which may contain erroneous or implausible dates easily corrected in consultation with parents. Throughout the immunization audit process, the school nurse should provide parents with information about the immunizations that their child is lacking and the locations where they can obtain needed immunizations. They should also encourage parents to discuss immunization needs with their family health care provider. Since some families may not be able to afford a medical health care provider, school nurses should be familiar with alternative service providers such as local public health departments, which provide basic immunizations at little or no cost.

Compliance Categories

Upon reviewing parent-provided immunization information, the school will place each student in one of five compliance categories: meets minimum requirements, in process, behind schedule, no record, and waiver. DHS' <u>Wisconsin School Immunization Requirements</u> booklet defines these categories:

- 1. *Meets Minimum Requirements* is where a student has a record containing the dates of immunizations (day, month, and year) for every dose of vaccine required for his/her grade level. For students in ungraded programs, use the requirement for the traditional age-appropriate grade.
- 2. *In Process* applies to a student enrolling for the first time in a Wisconsin school (i.e., pre-kindergarten or kindergarten, out-of-state transfers, and home-schooled children) and to continuing students for whom a new vaccine is first required or a new dose is first required. To be considered "In Process," the student must provide the immunization dates demonstrating receipt of the first doses of required vaccines within 30 days of admission. Prior to the 30th school day, the legal notice should be sent as needed. "In Process" also applies to the second doses within 90 school days of admission and the third (and fourth doses, if required) within 30 school days of admission the following school year. Any student who fails to meet the deadlines is then "Behind Schedule."
- 3. *Behind Schedule* applies to students who do not have a complete record of dates for the first, second, or final deadlines. Because the Wisconsin immunization law applies to all public and private schools, a transfer student from any school within the state who is "Behind Schedule" enters the new school as "Behind Schedule" and is not "In Process."

- 4. *No Record* applies to students who are enrolled and do not have a record of immunizations. This term also applies to students who transfer to another school and their immunization record has not yet transferred. "No Record" also applies to a student record that states "Up-to-Date" or "Fully Immunized" without providing specific dates.
- 5. Waivers apply to a student who has a personal or religious conviction against immunizations or a medical waiver. Children with waivers are considered compliant. However, if there is an outbreak of a disease for which the student is not immunized, they may be ordered to be excluded by the health department. A history of chickenpox is not considered a waiver. All required vaccinations received prior to the waiver should be recorded in the student's immunization record.¹

Students are **compliant** when their immunization records are found to meet the following categories:

- minimum requirements
- in process
- waivers

Students are **noncompliant** when their immunization records show the student is behind schedule or has no records.

Immunization Law and Specific Populations

The state immunization law contains guidance for how the law applies to specific populations in the educational community.

1. Off-Campus Students and Immunization Requirements

The immunization assessment reports should include students who are officially enrolled in a school, but may spend time away from the school. This would include students in group education settings, virtual schools, alternative schools, and homebound students.

2. Pre-Kindergarten Students

Pre-kindergarten students, ages two to four years, including 4K, are not subject to mandatory exclusion under Wis. Stat. ch. 252.

3. Homeless Students

Trying to obtain immunization information for students who are homeless can be challenging. Specific challenges may also arise for unaccompanied youth who are homeless.* The National Center for Homeless Education, the technical assistance center for the McKinney-Vento Homeless Education Assistance Act, suggests that school district homeless liaisons assess each student's situation on a case-by-case basis. All resources should be utilized by the homeless liaison to remove barriers for a youth to obtain immunizations before a student who is homeless is excluded for lack of required immunizations.

^{*}An unaccompanied youth is defined as a child or youth "not in the physical custody of a parent or guardian."

Some examples of assistance to parents, guardians, and unaccompanied youth could include:

- obtaining prior medical records through contact with in-state and out-of-state medical providers,
- school-based immunization clinics,
- providing a list of community agencies where immunizations can be obtained,
- assisting with scheduling an appointment to help the child/youth obtain the required immunizations.
- providing translation services,
- explaining to parents/guardians from a different culture Wisconsin's laws regarding required immunizations,
- providing a gas card to allow the parents/guardians/unaccompanied youth to travel to the clinic,
- assisting unaccompanied youth in obtaining needed medical services if the parents/guardians are not available to authorize treatment, and
- helping with other issues that create obstacles in obtaining immunizations.

If the district has a homeless contact in each school building who has been unsuccessful in helping the youth obtain the necessary immunizations, notification of lack of obtaining immunization should be sent to the district homeless liaison before the student is excluded. The district homeless liaison has ultimate responsibility to ensure barriers do not exist to allow the student to participate fully in school.

As soon as the student has evidence of becoming compliant or being in process of compliance with the Wisconsin immunization law, they may return to school.

4. Home-Schooled Students

The Wisconsin immunization law does not require home-schooled children to comply with the immunization requirements. However, if a home-schooled child is attending select classes in a private or public school, then he or she must comply with the immunization requirements. Upon entrance into a private or public school, previously home-schooled students should be allowed to be "In Process" if all of the vaccinations have not been received. To be considered "In Process," the student must provide the immunization dates demonstrating receipt of the first doses of all required vaccines within 30 days of admission.

5. Charter Schools and Private Schools

The Wisconsin immunization law applies equally to all public schools, charter schools and private schools.

6. Virtual Schools

The Wisconsin immunization law applies to all students in virtual schools. It includes both full-time students taking all classes online at home as well as part-time students taking selected online classes and also attending traditional classes in a school where they reside. The virtual school is responsible for obtaining the Student Immunization Record (or electronic record), informing the parents if the student is behind schedule and reporting the

names of noncompliant students (those with no record or behind schedule) to the district attorney's office in the county in which the student resides. The names and addresses of county district attorney's offices can be obtained by doing an internet search of "(name of county) county district attorney." Since part-time students attend both virtual schools and traditional schools they will be counted by each school. The school report to the local health department must be mailed to the health department jurisdiction in which the virtual school is located.

Immunization Law and Specific Situations

The Wisconsin immunization law provides guidance for how it applies to specific situations. School officials should understand these exceptions to properly implement the immunization law.

1. Four-Day Grace Period

Wisconsin immunization law allows for a four-day grace period on certain age-dependent vaccinations. The age-dependent vaccines include:

- first dose of the measles, mumps, and rubella vaccine;
- the dose of DTaP/Dt vaccine after the fourth birthday for kindergarten enterers; and
- the third dose of polio after the fourth birthday.

The grace period allows a student to be in compliance with the immunization law if the dose is given within four days of the date required.²

2. New Vaccines and Waivers

Waivers apply to the vaccine(s) required at the time the student enrolls in a Wisconsin school for the first time. Parents of students with existing waivers must be notified whenever a new vaccine is added to the requirements or an additional dose of an existing vaccine is required. Parents who wish to continue with a waiver must again sign a waiver at that time.

The DHS immunization program <u>website</u> has complete information for parents and school officials. Each year DHS prepares the school immunization requirements and produces the necessary compliance report forms.

Recordkeeping

Immunization information is part of each student's progress record (along with grades, courses taken, attendance, and extracurricular activities) as well as part of each student's physical health records. Other than directory data, progress records are the least-restricted type of student record. If school districts use a computerized transcript, including the immunization record, school districts must facilitate the transfer of this information, especially when students move from one district to another.

The school nurse or a designated school staff member knowledgeable about Wisconsin immunization laws and practices should enter immunization information into a student's permanent file in ink or into a computer database. The original immunization information form provided by the student's parents/guardians should also be filed in the student's record. Schools that track and record immunizations throughout the year find they have better compliance rates than focused efforts occurring only in the fall of the year.

It is important that districts review their waivered students annually; some students may have received immunization updates at visits to their local health care provider and may no longer need to be waivered.

Electronic Recordkeeping

Auditing immunization records, mailing required letters to parents, and completing required reports are tasks which are often time-consuming and sometimes confusing. Changing enrollment and mobility in a district adds to the complexity. To improve accuracy and decrease the time spent on the immunization audit, many districts have purchased or developed computer software to organize and track immunization data. This approach can reduce assessment errors when the computer program is used to determine compliance, streamline report production, identify students needing immunization, and generate letters and labels for required mailings to parents. However, as with any database, the lists and reports are only as accurate as the data entered. For this reason, it is essential to have the school nurse involved from the outset in any discussion about creating and maintaining an immunization database which will require frequent updates and quality control checks.

The Wisconsin Department of Health Services' online database application, the <u>Wisconsin Immunization Registry (WIR)</u> tracks and records immunization dates for Wisconsin children and adults. The immunization registry is a valuable tool in assuring that students receive the appropriate recommended and required immunizations, and can prevent over-immunization as a result of lost immunization dates. WIR can be accessed by public and private vaccine providers, schools, and parents.

Conclusion

State immunization laws require public and private schools to monitor compliance of children with a variety of immunizations. Annual immunization audits can be time-consuming and require a commitment of resources by the school district to help families reach compliance. To

effectively meet the challenge, school districts and private schools must dedicate staff time to help ensure students are adequately immunized.

Communicable Disease Control

Introduction

The suspicion or presence of a communicable disease can often cause strong parental and teacher reaction, especially if it is believed, whether correctly or incorrectly, that one or one's child is at risk of contracting the illness.

In many cases, the intensity of the reaction is inconsistent with the severity of the illness or the degree of threat it poses in the school setting. Concerned responses can be greatly reduced by proactive and, where necessary, timely and responsive education of parents, students, and school staff members. As the person with the knowledge to provide such clinical information as well as the training to interpret and apply it to specific circumstances, the school nurse is the logical person to spearhead any such health education effort in the school setting. Using resources from a variety of providers, the nurse can provide all concerned parties with accurate, up-to-date information about diseases, the ways in which they are spread, ways people can reduce the likelihood of infecting themselves or others, and actions to take should exposure occur.

Legal Considerations

Specific state and federal laws address communicable disease management in the school setting. These include laws related to: communicable disease, confidentiality of HIV status, handling food, health examination for school district employees, school closure due to health and safety, and public employee safety and health statutes. The following explanations describe the laws and schools' responsibilities.

Communicable Disease

Any school nurse, teacher, or principal of any public or private school who knows or suspects that certain communicable diseases are present must immediately notify the local health officer. Please see the Department of Health Services' communicable disease listing in <u>Wis. Admin.</u> <u>Code ch. DHS 145</u>. The law permits teachers, school nurses and principals to send students home who are suspected of having a communicable disease with immediate parent notification for the reason of the exclusion (Wis. Stat. sec. 252.21(1),(6)).

Confidentiality of HIV Status

School personnel must follow the law regarding confidentiality and people infected with Human Immunodeficiency Virus (HIV). <u>Wisconsin Statute sec. 252.15(3m)</u> states that the results of an HIV test are confidential and may only be disclosed to the individual who received the test or to other persons with the informed consent of the tested individual. In the case of a student under the age of 18, parents or guardians may authorize release of their child's HIV status.

Handling Food

No school district or private school may knowingly employ any person who has a disease that could be transmitted by food handling to produce, prepare, distribute, or serve food. The local health officer may require a food handler suspected of being infected with a disease to receive an examination by a health officer or medical provider at the individual's expense (Wis. Stat. sec. 252.18). These requirements were designed to prevent foodborne illnesses and assist school districts and private schools in responding to known threats to health and safety.

Health Examinations for School District Employees

Section 118.25 of the Wisconsin Statutes states as a condition of employment, school boards, except Milwaukee, shall require a physical examination, including a chest X-ray, or tuberculin test, of every school employee of the school district. The employing school district or agency shall pay the cost of such examinations. Freedom from tuberculosis in a communicable form is a condition of employment. In the case of a new school employee, the school board may permit the school employee to submit proof of an examination, chest X-ray, or tuberculin test complying with this section, which was taken within the past 90 days in lieu of requiring such examination, X-ray, or test. If the reaction to the tuberculin test is positive, a chest X-ray shall be required. Additional physical examinations shall be required thereafter at intervals determined by the school board. The school employee shall be examined by a physician in the employ of or under contract with the school district, but if a physician is not employed or under contract, the examination shall be made by a physician selected by the school employee. If a physical exam, tuberculin test, or chest X-ray is contrary to the religious and/or spiritual beliefs of the employee, the employee may sign an affidavit stating to the best of their knowledge and belief they are in good health.

As a condition of employment, special teachers, school psychologists, school social workers, cooperative educational service agency personnel, and other personnel working in public schools must have physical examinations.

School Closure Due to Health and Safety

School district administrators and local and state health officers can close school due to a threat to the health and safety concerns of students or school personnel (Wis. Stat. sec. 115.01(10)). On these days, no instructional hours are accrued. The minimum hours of instruction must still be met(PI 8.0.1(2)(f)).

Public Employee Safety and Health Regarding Bloodborne Pathogens
The regulations of the Occupational Safety and Health Administration (OSHA) (29 C.F.R.
Part 1910.1030(c)(1)) of the U.S. Department of Labor relate to the prevention of occupational exposure to bloodborne pathogens, and require the development and implementation of a bloodborne pathogen exposure control plan by public and private schools. The following section describes the requirements and related information.

Bloodborne Pathogen Exposure Control

Schools are required (29 C.F.R. Part 1910.1030(c)(1)) to have a written bloodborne pathogen exposure control plan including detailed instructions on:

- exposure determination,
- methods for implementing universal precautions,
- engineering and work place controls,
- personal protective equipment, and
- hepatitis B vaccination.

Three important points must be considered when developing policies and a plan to comply with the bloodborne pathogen laws:

- The policy and plan applies to employees.
- Not all sections of the statute are applicable to the school setting.
- Staff members who are eligible for no-cost hepatitis B vaccinations must receive information regarding its safety, efficacy, method of administration, and benefits. The vaccine must be offered free of charge after the training and within 10 working days of initial assignment. Employees declining the vaccination must complete a written declination statement. At any time, staff members who initially decline the vaccination may request to receive it at the district's expense. The district may choose to contract this service with a local public health department, purchase the vaccine for administration by the school nurse, or refer the staff member to their physician for a vaccination which will be paid for by the district. If the district provides the vaccination, it must keep a record of vaccination, including the date administered, specific vaccine, manufacturer, lot number, dosage, and site of administration (29 C.F.R. Part 1910.1030(f)(2)).

Exposure Control Plan

An exposure control plan is a written program developed and implemented by the employer which identifies procedures, engineering controls, personal protective equipment, work practices, and other strategies that are capable of protecting employees from exposure to bloodborne pathogens.

Annually, the plan must be reviewed with the following areas addressed:

- a list of tasks that affect occupational exposure,
- modification of tasks and procedures,
- evaluation of control measures including safer needle devices,
- list of new employee positions with potential for occupational exposure, and
- school personnel who are most at risk of occupational exposure must be solicited for input into control practices. Documentation of the consultation is required.

The exposure control plan must be available and understandable to all school district personnel (29 C.F.R. Part 1910.1030(c)(1)).

Bloodborne Pathogen In-Service Requirements

Employers must ensure that all employees with occupational exposure to potentially infectious material participate in a training program which must be provided at no cost to the employee and during working hours. The training must be provided at the time of initial assignment to tasks where occupational exposure may take place and at least annually thereafter (29 C.F.R. Part 1910.1030 (g)(2)). The training program must contain at a minimum the following elements:

- an accessible copy of regulatory text of this standard and explanation of content;
- a general explanation of epidemiology and symptoms of disease;
- an explanation of the modes of transmission of bloodborne pathogens;
- an explanation of the employer's exposure control plan and the means by which the employee can obtain a copy of the written plan;
- an explanation of the appropriate methods for recognizing activities that may involve exposure to blood and other potentially infectious materials;
- explanation of the use and limitations of methods or universal precautions that will prevent or reduce exposure;
- information on the types, proper use, location, removal, handling, decontamination, and disposal of personal protective equipment;
- information on the hepatitis B vaccine;
- information on the appropriate actions to take and persons to contact in an emergency involving blood or other potentially infectious materials; and
- an explanation of the procedures to follow if an exposure incident occurs. This should include information on the post-exposure medical evaluation and follow-up that the employer is required to provide for the employee following an exposure incident (29 C.F.R. Part 1910.1030(f)(3)).

A qualified trainer of bloodborne pathogens is considered to be a person knowledgeable in the subject matter covered in the training program as it relates to the schools (29 C.F.R. Part 1910.1030(g)(2)(viii)). The in-service must have an opportunity for interactive questions and answers with the person conducting the training sessions (29 C.F.R. Part 1910.1030(g)(2)(vii)(N)). The use of an electronic mail system to answer employee questions is not considered direct access to a qualified trainer, unless the trainer is available to answer emailed questions at the time the questions arise, during the training sessions.³

Exposure to Body Fluids

Employees should report all significant exposures to potentially infectious material to the designated school district and private school administrative employees as soon as possible. A significant exposure incident means eye, mouth, other mucous membrane, or break in skin, contact with blood or other potentially infectious body fluids that results from the performance of an employee's duties. Following a report of an exposure incident, school districts and private schools should make a confidential medical evaluation and follow-up immediately available for the exposed employee (29 C.F.R. Part 1090.1030(f)(3)). It is recommended that school administrators consult with a licensed medical provider to determine if an individual's exposure incident has resulted in a significant exposure requiring testing and follow-up actions.

If a school employee experiences a significant exposure while performing employment duties, the school must request the source person to be medically tested for the presence of HIV and related tests. When the results of the testing are available, the exposed employee may receive disclosure of the results (Wis. Stat. sec. 252.15(5g)). The school district is responsible for completing and maintaining records of all exposures (29 C.F.R. Part 1090.1030(h), Wis. Stat. sec. 101.055(7)).

If a student receives a significant exposure from another student, the school district may assist in obtaining permission from the source student's parents to be tested and results to be released to the exposed student and parents. If the source student's parents refuse the exposed student's request for testing, the exposed student's parent should be immediately notified and prompt follow-up with a medical provider is recommended.

A model template for a bloodborne pathogen plan can be found on the <u>DPI website</u>. The plan may be adapted by schools to help meet the requirements described above.

Required Reporting of Suspected or Actual Communicable Diseases

The Wisconsin Department of Health Services groups reportable communicable diseases into three categories. Specific diseases under the categories may be found here.

In accordance with <u>Wis. Stat. sec. 252.21</u> and <u>Wis. Admin. code ch. DHS 145.04</u>, if a school nurse, teacher, or principal knows or suspects that a certain communicable disease is present they must report it to the local health department. The Wisconsin Department of Health Services has a Childhood Communicable Disease Chart for use in schools and child care settings, and has a communicable disease <u>report form</u>.

School nurses and other school personnel may also exclude students with certain communicable diseases. Parents must be promptly notified of the exclusion for communicable disease and actions that should be taken for readmittance into school. If a teacher excludes a child, he or she must promptly notify the principal of the exclusion and reasons for the action (Wis. Stat. sec. 252.21(1)(6)). Common diseases which may require exclusion include: bacterial meningitis, chickenpox, bacterial conjunctivitis, fifth disease with fever, hepatitis A, hepatitis B, influenza, measles, mumps, pertussis, roseola, rubella, scabies, impetigo, ringworm, staphylococcal infections that cannot be adequately covered, strep throat, and scarlet fever.

Printable communicable disease fact sheets are available from the Department of Health Services Communicable Disease Program.

Reporting Cases of Varicella or Chickenpox

Wisconsin statute requires that schools report individual cases of varicella or chickenpox to the local health department. When a varicella case is suspected at school, staff are required to make a communicable disease report. To report a varicella case, it need not be confirmed by the physician or laboratory test, but it should meet the clinical description. Varicella is described as an illness with an acute or sudden onset of a diffuse (generalized) maculo-papularvesicular (flat

to raised spots that become raised fluid-filled lesions) rash without other apparent causes. In vaccinated persons who develop varicella more than 42 days after vaccination (breakthrough disease), the disease is almost always mild with fewer than 50 skin lesions and shorter duration of illness. The rash may also be atypical in appearance (maculopapular with few or no vesicles). Other symptoms of varicella may include slight fever, mild constitutional symptoms, and a skin eruption maculopapular (flat to raised spots) for a few hours, followed by a vesicle (blister) for three-to-four days and then scab.⁴

School personnel must report a suspected or identified case of varicella infection to the local health department within 72 hours. Schools often receive parental reports of suspected cases of varicella over the absentee phone line. School nurses should call the parent and get a history of the illness with a description and number of poxes present.⁴

The form for reporting varicella will ask the reporter to estimate the number of pox covering the body:

- 50 pox or less is a mild case,
- 50-499 pox is a moderate case, and
- 500 pox or more is a severe case.

Also, the report form will ask the reporter to document if the person with varicella has had known contact with another person with the varicella infection. For more information regarding varicella, go to the Wisconsin Department of Health Services <u>varicella</u> website.

Risk and Environment

School administrators and staff members must consider the environment of the school when determining the level of risk a communicable disease poses. Such considerations should be taken into account when developing related policies.

To assist them in the development of policy and the handling of suspected or actual incidents in the school, districts should acquire and use one of the widely accepted references on communicable disease. The *Red Book: On-Line Report of the Committee on Infectious Diseases*, published by the American Academy of Pediatrics, and Heymann's *Control of Communicable Diseases Manual*, published by the American Public Health Association, provide alphabetical listings and information on all communicable diseases that districts can use in making decisions about particular cases. In addition, the DHS has compiled communicable disease information sheets and a "Communicable Disease Chart," which cite applicable state statutes and list a variety of diseases, their incubation periods, period of communicability, modes of transmission, signs and symptoms, and common control measures/public health responses.

In the event of a suspected or confirmed case of a serious communicable disease in a student or staff members, the school nurse or an administrator should determine, based on medical findings in conjunction with a physician or the district's medical advisor as appropriate, whether the case poses a risk for others. Consultation with the local health department in determining risk is also

helpful. Upon confirmation of actual risk, the application of related policies should apply equally to students and staff members.

Common Communicable Diseases

In order to increase the effectiveness, efficiency, and consistency of handling communicable disease, schools can develop written guidelines or protocols for specific communicable diseases and conditions. Protocols provide information regarding how to intervene in a particular health situation. Communicable disease protocols include a description of the disease, method of spread, time interval for the appearance of symptoms, management, and exclusion guidelines. School districts should consult with local health departments regarding the development and review of communicable disease protocols. Protocols provide a mechanism for consistency and quality of care. Some frequent diseases to be addressed in school protocols include:

- head lice
- strep throat
- impetigo
- conjunctivitis
- ringworm
- varicella (chickenpox)
- erythema infectiosum (fifth disease)
- lyme's disease

Some communicable diseases, such as methicillin resistant *Staphylococcus aureus* (MRSA), hepatitis, and HIV, cause a high degree of staff and parent concern. Education regarding these diseases and their transmission, incubation, treatment, and prevention measures, can allay fears and instill confidence the school district is doing all it can to protect students and school personnel. The Department of Health Services <u>fact sheets</u> regarding common communicable diseases provide additional information.

The procedures should specify the individual in each school who has the authority to exclude students or staff due to communicable disease (Wis. Stat. sec. 252.21(1)(6)). Given the potentially disruptive and frightening effect such decisions may have on children and parents, districts may find it helpful to create and reproduce information sheets to give to parents about the illnesses. They may also develop sample or model letters to parents regarding the presence of specific illnesses in their child's classroom and the procedures that will be followed in addressing specific situations.

Community-Acquired Methicillin-Resistant Staphylococcus Aureus

Staphylococcus aureus (S. aureus) is a bacterium that can be found on the skin and nostrils of healthy individuals. Research has shown that approximately 30 percent of the population permanently or intermittently carries the S. aureus organism. Infections can occur in many areas of the body including the skin, bone, heart, lungs, and blood.

With the wide use of antibiotics in our society, *S. aureus* or the "staph" bacterium has become resistant to many of our once effective antibiotic medications. This antibiotic resistance was first

noticed in the 1960s, when hospitals acquired *S. aureus* infections noted to be resistant to commonly used antibiotics. Beginning in the 1990's, it was noted that the staphylococcal infections acquired in the community were also becoming more frequently resistant to the commonly used antibiotics. These infections became known as community-acquired methicillin-resistant *Staphylococcus aureus* (CA-MRSA) infections. MRSA infections typically present as boils (look like spider bites), abscesses, or cellulitis. MRSA can also lead to other serious infections such as pneumonia, blood, and bone infections. MRSA is spread by direct contact with the infected person or contact with contaminated items or surfaces. Treatment of MRSA varies from lancing the site of the infection to use of specific antibiotics that have been found to be effective.

Students with MRSA infections can be in school if the infected wounds can be covered with an occlusive dressing and wound drainage can be contained in the dressing throughout the school day. Infected students should be excluded from athletic activities since wound coverings are not likely to be maintained during those activities.

Preventive measures can reduce transmission of MRSA in the school setting. The following guidelines should be followed:

- Wash hands thoroughly and frequently with soap and use a clean towel or air dryer.
- Cover all skin abrasions and cuts with a dry dressing or bandage.
- Wipe surfaces of all sporting equipment before and after use with a germicidal spray.
- Do not share personal items such as towels, razors, or bar soap.
- Clean shared equipment surfaces daily to remove soil and germs.
- Shower with antibacterial soap before contact sport activities.
- Wear gloves when dressing all wounds, and properly dispose of all dressings.⁷

Careful adherence to these strategies can prevent transmission. For more information regarding community-acquired methicillin-resistant *Staphylococcus aureus*, refer to the Wisconsin Department of Health Services <u>Guidelines for Clinical Management</u> and <u>Guide for Controlling Transmission Among Students and Athletes.</u>

Head Lice

Few conditions cause such widespread concern and anxiety as head lice (pediculosis capitis) infestations. While lice are parasites that live on human blood, they are not known to be carriers of other diseases. Appropriate treatment of the hair and cleaning of the environment can eradicate them.

It is important for schools to have a plan to identify and respond to head lice cases. The <u>Centers for Disease Control and Prevention</u> (CDC) does not support the efficacy and cost-effectiveness of classroom or school-wide screening for decreasing the incidence of head lice among school children. School districts may choose to screen an identified student's locker mates or close friends to control the spread of head lice in schools. The district should provide those students or staff members, who may have been exposed to head lice from another person, with written instructions explaining the communicable nature of head lice and how to prevent infestation.

If a case of head lice is confirmed in a student, school personnel should also screen siblings in the same school. When siblings attend other schools or child care centers, school personnel should encourage parents to contact those facilities. The school personnel should discreetly identify students and provide parents with information on how to care for a child with head lice and how to assess and address potential infestation in the home. Parents should be informed that treatment of the hair should include combing the "nits" (lice eggs, which attach firmly to the hair) out with a fine tooth comb, since the shampoo or rinse does not kill all eggs. The school nurse, often working with other student services providers, should also determine whether families:

- may need additional resources or information;
- can afford needed medication;
- need training on such topics as clean-up, prevention, control, and treatment; and/or
- need more specific assistance in acquiring such resources or training.

The custodian should be instructed to clean the classroom, which may include vacuuming rugs. In the case of younger students, it may also be necessary to remove contaminated items such as stuffed animals. Schools must also set policies regarding return to school and should use community input as well as evidence-based research to guide their policy and decision making. The National Association of School Nurses Pediculosis Management in the School Setting Position Statement and the American Academy of Pediatrics do not support the effectiveness of a "no-nit" policy or the screening of classrooms or entire schools for lice to reduce the incidence among students.

The 2010 American Academy of Pediatrics (AAP) treatment guidelines for head lice states: "Head lice are not a health hazard or a sign of poor hygiene and, in contrast to body lice, are not responsible for the spread of any disease. No healthy child should be excluded from or miss school because of head lice, and no-nit policies for return to school should be abandoned. Informed school nurses can help with diagnosis and suggestions about treatment." Armed with this medical expert opinion, school nurses are in a position to advocate for head lice policies, which take into consideration these recommendations. See the American Academy of Pediatrics Treatment of Head Lice Guidelines.

Exclusion from School for Communicable Diseases

In making decisions about excluding a child from school, school personnel should weigh the ease of communicability of a specific illness or condition in the school setting with the risk it poses to students or staff. For example, while colds are easily transmittable, especially in the early stages, most pose little health risk to students and staff. Thus, students or staff with colds need not be excluded, unless they feel unable to participate in their normal school activities.

However, measles, which is also easily transmittable in the school setting, poses a high degree of risk to students and staff, including possible serious long-term health problems. Consequently, the district should immediately exclude from school students or staff with measles or who are suspected of having measles. The school district should also take immediate measures to prevent the spread of measles.

School personnel should not exclude students from school when the risk of transmission in the school setting is nonexistent or when the district can control the risk of transmission through education of students and staff members and/or through the use of supplies to implement hygiene measures.

Disease Outbreaks

Generally, an outbreak can be defined as an increase in illness above the expected or normal rate of illness. ¹⁰ Nurses and school personnel should be surveillant for disease outbreaks in their community. A number of strategies can be used to monitor for outbreaks. Monitoring the school district average attendance rate and types of illness throughout the year can assist the school district in knowing when there is an increase in disease activity. The number and characteristic of student health complaints during the day can also be an indication of developing patterns of illness. Consultation with the local health department and medical providers can also serve as an indication of severity and frequency of specific infections in the community.

Foodborne illness outbreaks occur throughout the year with an increase in frequency of bacterial outbreaks during the summer months and an increase in frequency of norovirus outbreaks in winter months. Foodborne illnesses are the result of contaminated food from the growing, manufacturing, preparation, serving, or storage process. Noroviruses are the most common cause of gastroenteritis and foodborne outbreaks, because infection is spread easily by a very small amount of virus.

When school personnel suspect an outbreak may be occurring at the school among students or staff they should contact the local health department. School information which may be helpful in the investigation of an illness outbreak such as gastroenteritis includes:

- 1. Number of students and staff in school.
- 2. Number well vs. ill students in each classroom.
- 3. A list of students and staff that are ill, with the following included for each:
 - name, grade, and classroom of student and staff;
 - onset of symptoms for each ill individual;
 - symptoms of illness;
 - health care provider; and
 - laboratory results.
- 4. A list of food service staff, noting who has been ill.
- 5. A list of extracurricular activities, clubs, and special events. Include activities outside the school such as birthday parties, group outings, or gatherings for two weeks prior to the event.
- 6. School lunch menus or classroom treats that have been served during the last two weeks.
- 7. Usual absence rate from the previous year. 11

Every school district sets their own threshold for school closure due to disease outbreaks. The characteristics of the disease, pattern of absentee rates, staff availability, and school resources are factors affecting school closure decisions. Careful consultation with the local health department,

as well as other school districts in the area, can provide helpful information for making school closure decisions.

Another illness that can cause outbreaks in the school setting is influenza. Seasonal influenza is caused by viruses that circulate normally in the winter and spring months of the year. Symptoms of influenza include sudden onset of fever, headache, malaise, and diffuse myalgia (muscle aches), nonproductive cough, sore throat, nasal congestion, and runny nose. Influenza is spread from person to person by droplet or by direct contact with materials contaminated with nasal secretions. Every year, a vaccine is developed to protect against the specific strain of virus disease specialists believe will be circulating that year. Some years, the vaccine is more successful in protecting recipients against the anticipated circulating influenza virus. Influenza infection can be diagnosed based on symptoms or a laboratory test. The Department of Health Services has an influenza surveillance website that can help schools monitor influenza infection rates in their local community.

Over time, viruses can alter their structure and function into a novel organism, where the public has no previous exposure or immunity. In these circumstances, disease can spread very rapidly with large portions of society falling ill or dying from the viral infection. If the infection affects a large enough portion of society, the outbreak of illness can result in an epidemic (large area) or pandemic (world-wide). It is recommended that all schools have a plan for management, continuation of services, and recovery from a pandemic event. The Department of Public Instruction has planning and management resources available to schools to develop their pandemic plan and manage pandemic events.

When outbreaks produce high absentee rates of students and/or school personnel, schools should consult with their local health department regarding school closure to interrupt the transmission of the infection to others. If a decision is made to close the school for a day or two, the health department can be instrumental in recommending disinfection procedures that may facilitate a decline in illness rates in the school setting.

Communicable Disease Control Procedures

Universal precautions refer to the consistent, universal use of necessary precautions to prevent the spread of infections when coming into contact with another person's blood or body fluids. Universal precautions are intended to prevent transmission of bloodborne infections as well as to decrease the risk of exposure for care providers and students. These measures require the use of appropriate barriers to prevent skin and mucous membrane exposure when contact with blood or body fluids of others is anticipated. Because it is not possible to identify all infected individuals, school staff members must use these precautions with every student regardless of their medical diagnosis. School nurses model the use of universal precautions in daily practice and teach their use in health education classrooms and inservice trainings. Those precautions are also contained, in part, in the DPI publication Model Bloodborne Pathogens Exposure Plan for Wisconsin Public Schools, which is significantly shaped by Occupational Safety and Health Administration (OSHA) regulations.

Together, universal precautions and an effective exposure response plan help keep schools safer for students and staff members alike.

Staff members with job descriptions that require them to provide first aid as a duty—including playground supervisors, coaches and athletic trainers, health office assistants, secretaries, and nurses—should receive specific inservice training on universal precautions relating to injuries and illnesses and be provided with such supplies as disposable gloves to use in responding to such circumstances.

Hygiene Measures

Local school district policies should address the preventive measures necessary to protect the health of all students and staff, the procedures for the immediate care of students or staff who develop a potentially communicable illness, and the special needs of children with chronic infectious illnesses that are non-contagious under normal conditions.

1. Hand Washing

Hand washing is perhaps the simplest and single most important step any person can take to protect themselves and others from infectious disease. Yet, perhaps because of that simplicity, the value of hand washing is often underestimated when considering infection control.

To remove germs and prevent transmission, students and school personnel should wash their hands for a minimum of 15 seconds using a combination of warm water, soap, and aggressive scrubbing, especially after caring for one's personal needs or those of students (including feeding, diapering, and/or grooming).



When should hand washing occur?

- before preparing or eating food;
- after going to the bathroom;
- after changing diapers or cleaning up a child who has gone to the bathroom;
- before and after tending to someone who is sick;
- after blowing your nose, coughing, or sneezing;
- after handling an animal or animal waste;
- after handling garbage;
- before and after treating a cut or wound; and
- after removing disposable gloves as part of universal precautions.

School nurses and teachers should emphasize through classroom teaching and demonstration the importance of hand washing to students starting in primary grades. Soap, warm water, and paper towels should be readily available to all students and staff so that they can wash hands as needed. Liquid soaps are preferable, as they are less likely to be contaminated by handling.

2. Alcohol-Based Hand Wipes and Gel Sanitizers

When soap and water are not available, alcohol-based disposable hand wipes or gel sanitizers may be used. If using gel, rub your hands until the gel is dry. The CDC recommends that hand sanitizers contain at least a 60 percent concentration of ethanol or isopropanol to have the greatest germ killing effect. Due to the high concentration of ethanol or isopropanol, school districts using hand sanitizers will want to monitor for misuse or ingestion. Hand washing materials can be obtained from CDC's Handwashing: Clean Hands Save Lives program.

3. Cough and Sneeze Hygiene Measures

Transmission of upper respiratory infections can be decreased by encouraging students and school personnel to cover their coughs and sneezes using their upper arm and shoulder instead of using their hands. The disposal of tissues in proper waste containers is also helpful in decreasing transmission of pathogens to other people and common surfaces.

In support of *Individuals with Disabilities Education Act (IDEA)* and Section 504 of the Americans with Disabilities Act, federal and state courts have held that children with chronic infectious diseases are entitled to a free, appropriate public education in the least restrictive environment.

Special consideration should be given to students or staff members with suppressed immune systems who may have a higher-than-normal risk of severe complications or morbidity from common communicable illnesses. It is both the role and responsibility of the school nurse to make every effort to identify these students and staff and to regularly monitor the school environment for threats to their health. Working within the context of a health advisory team, the school nurse may temporarily remove these students and staff members from school to protect them during an outbreak of a contagious disease.

Athletics

Due to the high degree of physical contact associated with nearly every athletic sport, the risk for transmission of communicable diseases in such settings increases. Virtually every athletic activity, whether it is a contact or a non-contact sport, offers opportunities for injury and bleeding.

Anytime blood is present in such events, officials must halt play and observe universal precautions in caring for the injured athlete. Student athletes should have their cuts or scrapes properly cleaned and bandaged before returning to competition, if such a return is indeed appropriate. Wrestling poses a potentially higher risk for exposure to germs and body fluids because of the close skin-to-skin contact between participants and the use of mats that can become contaminated with body fluids. Trained staff or students should clean the playing area and equipment with a disinfectant that deactivates germs and viruses, before all athletic practices and sporting events.

Conclusion

Immunization and communicable disease can be challenging issues for schools. The state immunization law provides guidance to schools on the scheduling of immunizations, compliance procedures, and timelines for adherence. This protects students and staff from many communicable diseases.

Communicable disease prevention measures should be implemented in the school setting. School personnel should know their responsibilities with communicable disease prevention management, exclusion, and reentry of students and staff to help ensure a healthy school setting.

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