# COMMUNICABLE DISEASE PLAN

North Clackamas Christian School

Communicable disease control and prevention is of significant importance in creating a safe and healthy environment for students and staff.

A communicable disease is an infectious disease that is transmissible by contact with infected individuals or their bodily discharges or fluids, by contact with contaminated surfaces or objects, by ingestion of



contaminated food or water, or by direct or indirect contact with disease vectors. Although the terms *communicable disease* and *contagious disease* are often used interchangeably, it is important to note that not all communicable diseases that are spread by contact with disease vectors are considered to be "contagious" diseases since they cannot be spread from direct contact with another person (ACPHD, 2013).

In the school setting there is a prevention oriented approach for communicable disease which is grounded in education, role modeling and standard precautions and hygiene. However, the nature of a population based setting lends to the need to establish practices for measures and interventions associated with exposures or potential exposure. This section focuses on a population based set of practices for communicable disease prevention.

# **Communicable Disease Prevention**

There are a multitude of methods that can be applied to control communicable diseases at a variety of levels. Some of the most common include vector control, hygiene, sanitation and immunization. Fully endorsing the control and prevention of communicable diseases requires a level of understanding of how communicable diseases can be spread.

How these communicable diseases are spread depends on the specific infectious agent. Common ways in which communicable diseases spread include:

- Physical contact with an infected person, such as through touch (staphylococcus), sexual intercourse (gonorrhea, HIV), fecal/oral transmission (hepatitis A), or droplets (influenza, TB, Covid-19)
- Contact with a contaminated surface or object (Norovirus, Covid-19), food (salmonella, E. coli), blood (HIV, hepatitis B, hepatitis C), or water (cholera, listeria);

Bites from insects or animals capable of transmitting the disease (mosquito: malaria and yellow fever; flea: plague); and



Hygiene

Hand

Cough Etiquette

Immunizations

Blood Borne Pathogen Training

Environmental Sanitation

Standard Precautions



Food Safety • Travel through the air, such as measles and Covid-19.

In the school setting the most frequent risks are associated with direct contact with ill individuals or contamination of surfaces or through airborne transmission. Primary sources of prevention include hand and surface hygiene, isolation, exclusion and standard precautions. This section of the plan will provide a brief overview

- Common Childhood Infectious Disease
- Vaccines
- Respiratory/Cough Etiquette

This section will provide procedures on addressing the following communicable disease issues in the school setting.

### Common Childhood Infectious Disease

There are a variety of <u>Common Childhood Infectious Diseases</u> that are regularly encountered in the school setting. Routine childhood respiratory illnesses such as the common cold (adenoviruses, coronaviruses, rhinoviruses) or conditions such as bronchitis, sinusitis, and tonsillitis

caused by a variety of bacteria and viruses occur throughout the year. Other conditions such as gastroenteritis (norovirus most frequently) and croup (most commonly parainfluenza) and influenza (A & B) most often occur seasonally. Other common conditions include strep throat, hand foot and mouth disease, fifths disease and staph skin infections. Other, more severe infectious diseases occur sporadically throughout the district throughout the school year (BCDC, 2009).

### Vaccines

In the school setting vaccines are an important piece of communicable disease control. Vaccines are a requirement for attending school in Oregon. However, it is important to remark that certain populations may not be vaccinated because of medical contraindications or because of religious or philosophical decisions. Each school has record of which students are and are not vaccinated with routine childhood immunizations as a primary control measure for outbreaks of vaccine preventable diseases. Under direction of the district nurse:

- When a vaccine preventable disease (varicella, pertussis) is identified in the school setting
  designated staff should run immunization reports to identify unvaccinated students in the school
  setting.
- When the circulation of a vaccine preventable disease (measles) is increasing in incident in the community identification of students and staff who are not fully immunized is an important measure

### Hygiene

Prevention oriented measures are grounded in education of how diseases are transmitted and practice application related to appropriate sanitizing measures and precautions. Hygiene and sanitation are some of the most important methods of disease prevention. Handwashing is one of the single most important methods of keeping germs at bay, specifically in the school setting. Appropriate handwashing practices should be taught, role modeled and practiced.

Age appropriate hand hygiene curriculum can be found from a variety of resources and should be provided annually in the fall and as needed during peak illness season or specific increases of disease in the school setting.



Students and staff should wash hands when:

- Before, during, and after preparing food
- Before eating food
- · Before and after caring for someone at home who is sick with vomiting or diarrhea
- · Before and after treating a cut or wound
- After using the toilet
- After changing diapers or cleaning up a child who has used the toilet
- After blowing your nose, coughing, or sneezing
- · After touching an animal, animal feed, or animal waste
- · After handling pet food or pet treats
- After touching garbage
   (CDC 2020)
  - (CDC, 2020)

When immunocompromised students and staff are present increase in hand hygiene frequency is a necessary prevention intervention.

Hand sanitizer, while not effective against a large number of pathogens, should be made available for times that handwashing is not immediately accessible. Hand sanitizer should be easily accessible throughout the building, specifically in high contact areas and at entrances and exits as feasible. Hand sanitizer should be accessible in each classroom.



### Respiratory Hygiene/Cough Etiquette

Respiratory hygiene and cough etiquette are terms used to describe infection prevention measures to decrease the transmission of respiratory illness (e.g., influenza and cold viruses). A respiratory infection is spread when a person who is infected with a virus coughs or sneezes. The droplets released from an ill person's cough or sneeze can travel for several feet reaching the nose or mouth of others and causing illness. Viruses can spread easily from person to person through direct contact via touching or shaking hands. Droplets can also live for a short time on a variety of objects such as high touch areas like door knobs or desks. Because some individuals cough without having respiratory infections (e.g., persons with chronic obstructive lung disease), we do not always

know who is infectious and who is not. Therefore, respiratory hygiene and cough etiquette are very important components to protecting yourself from illness and preventing others from becoming ill. Like hand hygiene, respiratory hygiene is part of the standard precautions that should be taught, practiced and role modeled to prevent the spread of disease.

### **Environmental Surface Cleaning**

Clean schools contribute to healthy environments and minimize the risk of communicable disease transmission. Some of the important concepts associated with reduction in illness include scheduling routine cleaning of each classroom and common areas, ensuring appropriate stock of appropriate sanitizers and disinfectants, ensuring garbage is emptied regularly and ensuring any classrooms with pets have a cleaning plan in place to minimize odors or contamination. While environmental cleaning is largely governed by facilities management and custodial services, there are certain classroom measures that can be practiced to improve cleanliness and reduce the risk of illness transmission during peak illness such as increasing access to sanitizing wipes, tissue and hand sanitizer.

## **Communicable Disease Exclusion**

Communicable diseases are transmitted from person to person by various routes. While some conditions are restrictable based on diagnosis, more often early identification of signs and symptoms of communicable disease is of paramount importance to increase the health of the school population and decrease school absenteeism. In the school environment, many

communicable diseases are easily transmitted from one individual to another. Effective control measures include education, avoidance of risk factors, sanitation, vaccination, early recognition of symptoms, health assessment, prompt diagnosis and adequate isolation or treatment (ODE, 2020). Restriction of some communicable diseases may be imposed by the local public health authority, for reportable conditions (Oregon Administrative Rule 333-019-0010) which is addressed in a subsequent section.

Oregon public health law mandates that persons who work in or attend school who are diagnosed with certain diseases or conditions be excluded from school until no longer contagious. However, diagnosis often presumes a physician visit and specific testing, and schools must often make decisions regarding exclusion based on non-diagnostic but readily identifiable signs or symptoms. Please use this <u>Communicable Diseases Letter</u> for quick reference.

As a matter of routine practice students with the following symptoms should be excluded from school as per OAR 333-019-0010 and Local Health Department (LHD) guidelines and ODE guidelines:

- Fever greater than 100.5;
- Vomiting;
- Stiff neck or headache with fever;
- Any rash with or without fever;
- · Unusual behavior change, such as irritability, lethargy, or somnolence;
- Jaundice (yellow color or skin or eyes);
- Diarrhea (3 watery or loose stools in one day with or without fever);
- Skin lesions that are "weepy" (fluid or pus-filled);
- Colored drainage from eyes;
- Brown/green drainage from nose with fever of greater than 100.5 F;
- Difficulty breathing or shortness of breath; serious, sustained cough;
- Symptoms or complaints that prevent the student from participating in his/her usual school activities, such as persistent cough, with or without presence of fever, or Student requires more care than school staff can safely provide

Students with the above symptoms should be excluded from school and, generally speaking should remain out of school until 24 hours following symptom resolution or with provider note. Provider note, however does not supersede public health law or restriction. Specific consideration should be made in regards to spread of illness when students are being dismissed or returning to school:

- Students meeting exclusion criteria due to illness should be separated from other students while waiting for dismissal.
- Only a licensed health care provider can determine a diagnosis and/or prescribe treatment and provide instructions regarding the student's return to school.
- The school nurse may evaluate a rash to determine exclusion.
- Students who have been excluded for fever should not return to school until 24 hours without fever and use of fever reducing medications.
- Students who have been excluded for vomiting or diarrhea should not return until 24 hours' symptom free.
- Students with draining lesions should remain out of school until 24 hours after initiation of antibiotics and the dressing can remain dry and intact.
- Students with conjunctivitis that has colored drainage should not return to school until 24 hours after initiation of antibiotics.

A variety of other conditions may not be excludable; however personal physicians may restrict as student from returning to school for a specific duration. In this case a provider's note is needed.

### **Restrictable Diseases**

Restrictable diseases are specific infectious disease diagnoses that require students or staff to remain at home for a specified amount of time to limit transmission. Restriction is typically associated with the communicability or severity of a disease. Restrictable diseases are reportable to the local health department (LHD). The local health department typically notifies school health services. Although, there are occasions when the parent will notify the school first.

Students with diagnoses of disease restrictable by the local public health authority (LPHA) under Oregon Administrative Rule (OAR) 333-019-0010 should return to school when documentation is obtained from the local health department (LHD) indicating they are no longer communicable including:

- · Diphtheria,
- Measles,
- Salmonella
- Typhi infection,
- Shigellosis,
- Shiga-toxigenic Escherichia coli (STEC) infection,
- Hepatitis A,
- Tuberculosis,
- Pertussis,

- Rubella
- Acute Hepatitis B.
- COVID-19 is also declared a restrictable condition under OAR 333-018-0900.
- If a report is made to the school office, administration or other school staff in regards to any communicable disease diagnosis in students or staff, this should immediately be referred to the school office.
- This should be regarded as an urgent referral to the school office if the disease is regarded as a restricable condition.
- The school office and administrators will identify the need for communication, surveillance or control measures. The interventions and communication are driven by multiple factors including the diagnosis, student health status, risk of exposure, number of individuals infected and risk to cohort or specific students.
- School staff receiving reports should not inform any other students, staff or parents of the report.

### **Isolation Spaces**

When students are identified with restrictable diseases or excludable symptoms, students should be isolated in an appropriate space until they can be dismissed to home.

As per OAR 581-022-2220 The school is required to maintain a prevention oriented program which includes a health care space that is appropriately supervised and adequately equipped for first aid and isolation of ill or injured child from the student body.

### Outbreaks

Outbreaks are most often defined as compatible diagnoses or syndromes in individuals from 2 or more households in the same time period. Because of the nature of the ongoing congregate setting of school, this definition is insufficient for the purposes of seasonal illness, rather an increase in morbidity or severity should be indicators to report to the school office for consideration of outbreak reports or control measure implementation. The attention to outbreaks, interventions and resources are highly dependent on the severity or communicability of the syndrome or pathogen. Outbreak investigations will be facilitated through the school office in collaboration with administration and the local health department with the use of <u>Oregon Health Authority Outbreak Toolkits for Schools</u>.

### **Respiratory Illness**

Respiratory illness or disease refers to the pathological conditions affecting the organs and tissues that make gas exchange possible, and includes conditions of the upper respiratory tract, trachea, bronchi, bronchioles, alveoli, pleura and pleural cavity, and the nerves and muscles of breathing. Respiratory diseases range from mild and self-limiting, such as the common cold, to life-threatening entities like bacterial pneumonia. Respiratory illnesses are often observed in the school setting. The following indicators should be reported to the school office in regards to respiratory illness:

- Any respiratory illness resulting in hospitalization or death of a student or staff member.
- Any uncommon incidence of illness in more than two students in a cohort.

#### Vaccine Preventable Disease

A vaccine-preventable disease (VPD) is an infectious disease for which an effective preventive vaccine exists.

Current VPD routinely immunized for in the United States includes:

- 1. Diphtheria\*
- 2. Tetanus\*
- 3. Measles\*
- 4. Mumps\*
- 5. Rubella\*
- 6. Haemophilus influenzae type b infections (Hib)\*
- 7. Pneumococcal infections\*
- 8. Meningococcal disease\*
- 9. Pertussis (whooping cough) \*
- 10. Poliomyelitis (polio)\*
- 11. Hepatitis A\*
- 12. Hepatitis B\*
- 13. Varicella
- 14. Influenza

Most VPD's are also notifiable diseases\*, meaning they are reportable to the local health

department and are under consistent surveillance. Other diseases where a risk may arise for a particular person or group of people in specific situations are also notifiable conditions, but are not routinely immunized for in the US. These may include as: cholera, plague, rabies, bat lyssavirus, yellow fever, Japanese encephalitis, Q fever, tuberculosis and typhoid. While these conditions are uncommon locally, a diagnosed case would be of interest. Vaccine Preventable Disease reports should be deferred to the school office whether coming from a parent, provider, community member or the local health department. Indicators for VPD include:

- A single case of a vaccine preventable disease that is also a notifiable disease\* or uncommon locally.
- More than 2 cases of chickenpox from separate households in the same classroom or more than 5 cases in a school.
- More than 3 cases of diagnosed influenza from separate households in the same school setting.

### Gastroenteritis

An outbreak of gastroenteritis is defined as more cases than expected for a given population and time period. For example, two children in a 25- person classroom with vomiting or diarrhea within one week could potentially indicate an outbreak. Because the nature of norovirus (viral gastroenteritis) is common, seasonal and highly infectious, it is unlikely to result in an outbreak investigation unless the number infected, frequency or duration is unusual. Because symptoms of bacterial gastroenteritis may start with a similar presentation, it is important to evaluate the severity for the duration of illness. Indicators to report to the school office include:

- Multiple children with compatible symptoms in 48 hours within the same cohort, but separate households.
- More than 2 cases of diarrhea with bloody stool in the school setting.
- Sudden onset of vomiting in multiple persons in the same cohort.
- Any unusual combination of gastrointestinal symptoms, severity, duration or incidence.

#### **Other Circumstances**

Less commonly, outbreaks of skin infections and novel diseases occur or unusual infectious disease circumstances arise. In efforts to ensure appropriate disease control, interventions and follow up these other situations should be deferred to the school office immediately and will be handled on a case by case basis. Examples of these circumstance may include:

- More than 2 students from separate households with reported compatible skin infections in the same school setting or athletic team.
- Any student or staff member coming into contact with blood, saliva or feces from a nondomestic animal.
- Any student or staff coming into contact with blood that is not their own.
- Any combination of illness, symptoms, severity, duration or frequency that seems unusual

as compared to routine seasonal illness.

The school office may decide that additional control measures or data collection is necessary and will consult with administration and LHD as needed, in regards to determined outbreaks or novel diagnoses. The school office should always be consulted regarding any written communication that may be developed to notify parents about illness, disease outbreaks, and risks to students, families, and staff and/or control measures specific to the outbreak.

Any presentation of illness or combination of illnesses as described above should be reported to the school office and administrator.

### Food Safety

For the purpose of population based health and food preparation and consumption within the classroom, general food safety standards and disease prevention principles should be endorsed.

### **Disease Mitigation Strategies at School**

- Hand hygiene is practiced prior to and following eating.
- General principles of food safety can be taught that are age appropriate.
- Food sharing should be avoided. (during the Covid-19 pandemic it is prohibited)
- For classroom and school sponsored events, only commercially prepared products are permitted. No homemade goods from non- licensed kitchens.

#### Supporting Resources

Alameda County Public Health Department (2013) Communicable Disease. Retrieved from http://www.acphd.org/communicable-disease.aspx BC Center for Disease Control (BCDC) (2009)

#### A quick Guide to Common Childhood Diseases. Retrieved from

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### Images

- CDC.gov
- Manitoba Department of Health
- Multicare.org
- Open University

Oregon Health Authority & Oregon Department of Education

Oregon Communicable Disease Guidelines for School