# **Oregon City Christian Academy**

**Communicable Disease Plan** 

2020

# **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 respiratory droplets (influenza, TB)

• Contact with a contaminated surface or object (Norovirus), 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

• Airborne; dispersed through or suspended in the air, in diseases such as measles.

In the school setting the most frequent risks are associated with direct contact with ill individuals or contaminated surfaces, or through respiratory spread via droplets in the air. Primary sources of illness prevention include hand and surface hygiene, teaching and encouraging cough and sneeze etiquette, isolation and exclusion of symptomatic individuals, and standard precautions. This section of the plan will provide a brief overview of, and procedures on addressing the following communicable disease issues in the school setting:

- Common Childhood Infectious Diseases
- Respiratory/Cough Etiquette
- Vaccines
- Environmental Surface Cleaning
- Hand Hygiene

## **Common Childhood Infectious Diseases**

There are a variety of common childhood infectious diseases 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), croup (most commonly parainfluenza), and influenza (A & B) most often occur seasonally. Other common conditions include strep throat, hand foot and mouth disease, fifth disease, and staph skin infections. Other, more severe infectious diseases also occur sporadically throughout the school year (BCDC, 2009).

#### Vaccines

In the school setting, vaccines are an important step toward 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 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. You can find more information on Oregon Vaccine requirements here:

https://www.oregon.gov/oha/PH/PreventionWellness/ VaccinesImmunization/Pages/index.aspx

## 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. Hand washing is one of the single most important methods of keeping germs at bay, specifically in the school setting. Appropriate hand washing practices should be taught, modeled by staff, and practiced by all.

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. Hand sanitizer, while not effective against a large number of pathogens, should be made available for times that hand washing 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. Supervised stocks of hand sanitizer should be available 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 can be 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 objects or shaking hands, and then touching one's eyes, nose, or mouth. Droplets can live for a short time on a variety of objects such as high-contact areas like door knobs or desks. Because some individuals cough without having respiratory infections (e.g., persons with chronic obstructive lung disease), and because some individuals can carry and spread diseases without ever showing any symptoms of illness, 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 modeled to prevent the spread of disease.

## Communicable Disease Exclusion

In the school environment, communicable diseases are easily transmitted from one individual to another by various routes, and can even be transmitted while an individual is not showing symptoms of illness. 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. 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).

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 provider visit and specific testing, and schools must often make decisions regarding exclusion based on non-diagnostic but readily identifiable signs or symptoms. As a matter of routine practice, individuals with the following symptoms of illness should be excluded from school: Parents, students, and staff should be taught to not come to school if experiencing any of the following:

Exclusion Criteria	Exclusion Action
Fever: a measured oral temperature above 100.4 degrees F, with or without symptoms below	Stay home until temperature is below 100.4°F for 72 hours WITHOUT the use of fever-reducing medication such as ibuprofen (Advil), acetaminophen (Tylenol), aspirin
Skin rash or sores: ANY new rash if not previously diagnosed by a health care provider OR if rash is increasing in size OR if new sores or wounds are developing day-to-day OR if rash, sores or wounds are draining and cannot be completely covered with a bandage	Stay home until rash is resolved OR until sores and wounds are dry or can be completed covered with a bandage OR until diagnosis and clearance are provided by a licensed healthcare provider
Difficulty breathing or shortness of breath not explained by situations such as exercise: feeling unable to catch their breath, gasping for air, breathing too fast or too shallowly, breathing with extra effort such as using muscles of the stomach, chest, or neck.	Seek medical attention; return to school when advised by a licensed healthcare provider
Concerning cough: persistent cough that is not yet diagnosed and cleared by a licensed healthcare provider OR any acute (non-chronic) cough illness OR cough that is frequent or severe enough to interfere with active participation in usual school activities.	Stay home until 72 hours after cough resolves. If pertussis ("whooping cough") is diagnosed by a licensed healthcare provider, student must be excluded from school until completion of a 5-day course of prescribed antibiotics or until cleared for return by the local public health authority. If COVID-19 is diagnosed, exclude until cleared for return by the local public health authority.
Diarrhea: three or more watery or loose stools in 24 hours OR sudden onset of loose stools OR	Stay home until 48 hours after diarrhea resolves

student unable to control bowel function when	
previously able to do so	
Vomiting: at least 1 episode that is unexplained	Stay home until 48 hours after last episode
Jaundice: yellowing of the eyes or skin (new or	Must be seen by a licensed prescriber and cleared
uncharacteristic)	before return to school
Concerning eye symptoms: colored drainage from	Students with eye symptoms who have been seen
the eyes OR unexplained redness of one or both	and cleared by a licensed prescriber may remain in
eyes OR eye irritation accompanied by vision	school after indicated therapy has been started
changes OR symptoms such as eye irritation, pain,	
redness, swelling or excessive tear production that	
prevent active participation in usual school	
activities	
Behavior change: unexplained uncharacteristic	Student should not be at school until health and
irritability, lethargy, decreased alertness, or	safety are addressed
increased confusion OR any unexplained behavior	
change accompanied by recent head injury not yet	
assessed and cleared by a licensed healthcare	
provider.	
Major health event: may include an illness lasting	Student should not be at school until health and
more than 2 weeks; a surgical procedure with	safety are addressed. School staff should follow
potential to affect vital signs or active participation	appropriate process to address reasonable
in school activities; or a new or changed health	accommodations and school health service
condition for which school staff is not adequately	provision in accordance with applicable federal
informed, trained, or licensed to provide care	and state laws
Student requiring more care than school staff can	School staff should follow appropriate process to
safely provide	address reasonable accommodations and school
	health service provision in accordance with
	applicable federal and state laws.

## **Universal & Standard Precautions**

The premise of Universal Precautions is to treat all body fluids as potentially infectious. Standard Precautions align with this and provide a set of standards for hygiene and barrier protection (or Personal Protective Equipment [PPE]) during any and all encounters with body fluids.

Standard Precautions are regarded as the minimum infection prevention practices that apply to all direct care or exposure to body fluids, regardless of suspected or confirmed infection status of the individual, in any setting where there is an expected risk of body fluid exposure. In the school setting body fluid exposures most frequently occur with physical injury but may also occur relative to a health related issue or procedure, or a developmental or behavioral issue or disability. Students and co-workers should be encouraged to care for their own bleeding injuries. If assistance is necessary, the use of disposable gloves and other barriers, followed by hand washing, is required for the designated caregiver when body fluids are present.

Standard Precautions endorse the appropriate use of personal protective equipment (PPE) and other practices such as hand hygiene and respiratory etiquette, as well as work practice controls such as sharps safety (handling needles, lancets, broken glass, etc.) and environmental disinfection.

When Standard Precautions alone cannot prevent transmission, they are supplemented with Transmission Based Precautions. This second tier of infection prevention is used when there is a specific risk related to an ill student or staff in the school setting that can spread through contact, droplet, or airborne routes (e.g., skin contact, sneezing, coughing) and are always used in addition to Standard Precautions. While Transmission-Based Precautions are typically isolated to the health room with specific conditions, the exposure risk is still possible in the school setting and should be addressed as well.

# Hand Hygiene

Hand hygiene is the most important measure to prevent the spread of infections. In the school setting hand hygiene is an important infection prevention method as a matter of habit with restroom use and food preparation. In the context of BBP and exposure control, hand hygiene should be enforced each time a staff member has an interaction with a student for standard first aid, medication administration, or direct care. Hands should be washed prior to donning gloves, and after care is completed when gloves are removed.



## **Personal Protective Equipment (PPE)**

Personal protective equipment (PPE) refers to wearable equipment that is designed to protect staff from exposure to or contact with infectious agents. PPE that is appropriate for various types of interactions and effectively covers personal clothing and skin likely to be soiled with blood, saliva, or other potentially infectious materials (OPIM) should be available to school staff, in the appropriate sizes. These include gloves, face masks, face coverings, protective eye wear, face shields, CPR masks, and protective clothing (e.g., reusable or disposable gown). Contaminated PPE must be removed and disposed of before further contact with other surfaces or individuals occurs. Examples of appropriate use of PPE for adherence to Standard Precautions include:

• Use of gloves in all situations involving possible contact with blood or body fluids, mucous membranes, non-intact skin (e.g., exposed skin that is chapped, abraded, or with dermatitis), or OPIM. Gloves must be removed and replaced as soon as practical when they are contaminated, torn, punctured, or when their ability to function as a barrier is compromised. Always wash hands after glove removal.

• Use of gowns to protect skin and clothing during procedures or activities where contact with blood or body fluids is anticipated, such as diapering, toileting, feeding, suctioning, general cleansing, or providing first aid for students with erratic movements.

• Use of mouth, nose, and eye protection (such as a face shield) during activities that are likely to generate splashes or sprays of blood or other body fluids, such as: feeding, providing care to, or assisting with a child with forceful vomiting or coughing; suctioning a child with a tracheostomy with a history of forceful coughing or copious secretions; assisting in the care of a student with a severe injury and spurting blood; assisting a student with a head or facial wound; or assisting a student who displays erratic behavior that places the employee at risk (i.e. fighting, spitting).

• Use of mask, face covering, or face shield when respiratory transmission is of concern (see pandemic plan).

General Principles of PPE:

IF	THEN
It's wet ( it's infectious)	Wear gloves, wash hands before and after gloves
It could splash into your face	Wear a face shield
It's spread through the air	Mask yourself and the student
It could splash on your clothes	Wear a gown
You are providing direct care or first aid	Wear gloves, wash hands before and after gloves
You are providing CPR	Use a barrier / CPR mask and gloves
There is a blood spill or body fluid spill	Summon BBP-trained staff for appropriate
	disinfection

Appropriate application and removal of PPE are crucial pieces of infection control (Image :CDC):

# PANDEMIC PLAN

A pandemic occurs when an infectious disease has spread globally. Most pandemics occur from novel viruses associated with influenza. Other viruses, such as coronaviruses are routinely surveyed due to the propensity for mutations, human to animal transmission, and potential for pandemic events.

# Seasonal Respiratory Illness and Seasonal Influenza

## **Seasonal Respiratory Illness**

There are several viruses that routinely circulate in the community to cause upper viral respiratory illnesses. These viruses include rhinoviruses, coronaviruses, adenoviruses, enteroviruses, respiratory syncytial virus, human metapneumovirus, and parainfluenza. The "common cold" is caused by rhinoviruses, adenoviruses, and coronaviruses. The symptoms of these seasonal illnesses may vary in severity but include cough, lowgrade fever, sore throat (SDDH, 2019; Weatherspoon, 2019).

#### Seasonal Influenza

Influenza (flu) is a contagious respiratory illness caused by influenza viruses. There are two main types of influenza (flu) virus: Types A and B. The influenza A and B viruses that routinely spread in people (human influenza viruses) are responsible for seasonal flu epidemics each year. Influenza can cause mild to severe illness. Serious outcomes of flu infection can result in hospitalization or death. Some people, such as older people, very young children, and people with underlying health conditions or weak immune systems, are at high risk of severe flu complications. Routine symptoms associated with flu include fever, cough, sore throat, runny nose, muscle aches, headaches, fatigue, and sometimes vomiting (CDC, 2020).

## Novel, Variant, and Pandemic Viruses

Novel viruses refer to those not previously identified. A novel virus may be a new strain or a strain that has not previously infected human hosts. When a virus that has historically infected animals begins to infect humans, this is referred to as a variant virus. Pandemic refers to the global circulation of a novel or variant strain of respiratory viruses. The most common viruses associated with novel and pandemic outbreaks are influenza A and human coronavirus. A flu pandemic occurs when a new virus that is different from seasonal viruses emerges and spreads quickly between people, causing illness worldwide. Most people will lack immunity to these viruses. Pandemic flu can be severe, causing more deaths than seasonal flu. Because it is a new virus, a vaccine may not be available right away. A pandemic could, therefore, overwhelm normal operations in educational settings (CDC, 2016b).

## Purpose

The purpose of this document is to provide a guidance process to non-pharmaceutical interventions (NPIs) and their use during a novel viral respiratory pandemic. NPIs are actions, apart from getting vaccinated and taking antiviral medications, if applicable, that people and communities can take to help slow the spread of respiratory illnesses such as pandemic flu or novel coronaviruses. NPI's, specifically in regards to pandemic planning, are control measures that are incrementally implemented based on the level of threat to a community. This document should be used as a contingency plan that is modified with a response planning team based on the current level of pandemic threat.

# **Control Measures**

While prophylactic vaccine and antiviral medication are appropriate interventions in some viral respiratory conditions, specifically seasonal influenza, these are not always accessible for novel strains. Nonpharmaceutical interventions (NPI's) are essential actions that can aid in the reduction of disease transmission. It is important to note that disease that is widely spread in the community has many options for transmission beyond the school setting, and the school district can only account for NPI's in the school setting and at school-sponsored events (CDC, 2017).

Personal NPIs	Community NPIs	Environmental NPIs
Personal NPIs are everyday	Community NPIs are strategies	Environmental NPIs are surface
preventive actions that can help	that organizations and	cleaning measures that remove
keep people from getting and/or	community leaders can use to	germs from frequently touched
spreading flu. These actions	help limit face-to-face contact.	surfaces and objects.
include staying home when you	These strategies may include	
are sick, covering your coughs	increasing space between	
and sneezes with a tissue, and	students in classrooms, making	
washing your hands often with	attendance and sick-leave	
soap and water.	policies more flexible, canceling	
	large school events, and	
	temporarily dismissing schools.	

# **Everyday Measures**

Control measures to limit the spread of communicable diseases should be an active part of the school comprehensive and preventive health services plan. Routine control measures include:

• Hand hygiene (washing your hands for 20 seconds with soap and water with appropriate friction).

• Respiratory etiquette (cover your coughs and sneezes and throw the tissue in the garbage each use) • Routine disinfection of shared items and flat surfaces

• Staying home when students or staff are sick, until they have been without symptoms for the specified timeframe, without the use of symptom-reducing medication.

When public health has deemed a novel virus a pandemic threat, defer to the CDC: checklist for schools in order to establish a specific emergency response framework with key stakeholders. During this time, preparedness planning will need to be initiated on the continuity of education in the event of school closure. The response team should hold regular meetings.

# LEVEL ONE ACTIONS: VIRUS DETECTED IN THE REGION (PREVENTION FOCUSED)

Personal NPI's	Community NPI's	Environmental NPI's	Communication
<ul> <li>Increase routine hand</li> </ul>	<ul> <li>Identify baseline</li> </ul>	<ul> <li>Increase sanitizing of</li> </ul>	Provide
hygiene.	absentee rates to	flat surfaces and shared	communications to
<ul> <li>Use alcohol-based</li> </ul>	determine if rates have	objects	families based on the
hand sanitizer when	increased by 20% or	<ul> <li>Devise prevention and</li> </ul>	current situation,
hand washing is not an	more.	post-exposure sanitizing	general information,
option.	<ul> <li>Increase</li> </ul>	strategies based on	and public health
• Cover	communication and	current	guidance.
coughs/sneezes, throw	education on	recommendations.	Provide
away tissues at each	respiratory etiquette	<ul> <li>Isolate students who</li> </ul>	communication to staff
use, wash your hands.	and hand hygiene in the	become ill at school	of the current situation.
<ul> <li>Stay home when ill</li> </ul>	classroom.	with febrile respiratory	Provide
for at least 72 hours	<ul> <li>Teachers can provide</li> </ul>	illness until parents can	communication to
after fever free without	age appropriate	pick up.	immunocompromised
the use of fever	education.	<ul> <li>Discourage the use of</li> </ul>	student families to
reducing medication	<ul> <li>Communicable</li> </ul>	shared utensils in the	defer to personal
	Disease surveillance -	classroom.	providers in regard to
	monitoring and		attendance.
	reporting student		
	illness.		
	<ul> <li>Increase space</li> </ul>		
	between students in		
	the classroom.		
	<ul> <li>Instruct students in</li> </ul>		
	small, stable groups as		
	feasible.		

When cases of novel viruses are identified in the community or incidence is increasing.

When novel viruses are identified in the community, but not in a student or staff, the school will defer to local public health guidance. Increased public health guidance will likely occur if the overall incidence is increasing despite the proximity to the school. This guidance will vary by event, based on translatability, severity, and incidence. It is important to note that the school can only apply controls around the school setting and school-sponsored events and activities. The school cannot advise control measures around private clubs, organizations, or faith communities. Each of these congregate settings are responsible to follow local public health guidance as well.

When local transmission is detected, planning for cancellation of events and potential for dismissal and academic-continuity should be prioritized. As well, plans for potential prolonged staff absences should be prioritized.

Personal NPI's	Community NPI's	Environmental NPI's	Communication
<ul> <li>Public health-specific</li> </ul>	<ul> <li>Public health guidance</li> </ul>	<ul> <li>Public health-specific</li> </ul>	Work with LHD to
guidance • Be prepared	<ul> <li>Increase space</li> </ul>	guidance.	establish timely
to allow your staff and	between people at	<ul> <li>Modify, postpone, or</li> </ul>	communication with
students to stay home if	school following public	cancel large school	staff and families about
someone in their house	health guidelines, as	events as coordinated	specific exposures.
is sick.	much as possible.	with or advised by	Provide
	<ul> <li>Consider temporary</li> </ul>	public health officials.	communication to staff
	dismissal of students		about the use of sick
	attending preschool		time and a reminder to
	facilities, K-12 schools		stay home when sick.
	(Teachers report to		<ul> <li>Advise parents to</li> </ul>
	work, students do not		report actual symptoms
	report to school).		when calling students in
			sick, as part of
			communicable disease
			surveillance.

## LEVEL TWO ACTIONS: (INTERVENTION FOCUSED) [INCLUDES LEVEL 1 ACTIONS]

When cases of novel viruses are identified in the school setting

When novel viruses are identified in the school setting, and the incidence is low, the local health department will provide a direct report to the school administration on the diagnosed case. Likewise, the LHD will impose restrictions on contacts. However, it is important to note that if the incidence is high in disease trends, the LHD may not have the capacity to contact-trace and impose individual restrictions, and may create public statements that the school district should reiterate. If the school receives report of a confirmed case, they should immediately contact the LHA who will work with the school administration to gather cohort lists to allow the health department to complete their contact tracing efforts.

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