



## **Highly Infectious Disease Preparedness Plan**

### **PURPOSE**

The purpose of this highly infectious disease preparedness plan is to increase the communication to MacLaren staff, students, and families in the event of an outbreak. The plan serves as a resource guide for planning and responding to a sudden pandemic within our school community. Highly infectious illnesses may have a short incubation period, spread easily, and cause severe illness or possible death, and may have no possible existing vaccine or treatment. The purpose of this plan is to achieve the following goals:

- Maximize health and safety while minimizing educational and social disruption.
- Enable Thomas MacLaren School to continue to operate and provide services as normally and effectively as possible in the event of a highly infectious disease outbreak with minimal academic, economic, and cultural losses.
- Outline the ways in which MacLaren’s response will be guided by El Paso County Public Health (EPCPH), the Centers for Disease Control (CDC), the Colorado Department of Education (CDE), and our authorizer, the Charter School Institute (CSI).
- Continue the essential core operations of Thomas MacLaren School in the event of increased staff or student absences due to a highly infectious outbreak.
- Develop a communications plan to ensure that students, parents, and staff receive timely and accurate information regarding disease prevention strategies and infection control strategies.
- Outline Thomas MacLaren School’s strategy in preparing for, responding to, and recovering from a highly infectious disease outbreak such as Pandemic Flu in a collective, community approach.
- Prepare and provide for mental health/crisis service needs of staff, students and families.

### **SCOPE**

The scope of this preparedness plan covers the most prevalent highly infectious illnesses such as Pandemic Flu and other airborne respiratory illnesses—COVID-19 (coronavirus), MERS and SARS, Ebola, airborne viruses such as Anthrax, and all other unknown diseases.

#### *Pandemic Flu – Influenza*

Influenza (flu) viruses can cause severe illness and even death. Younger and older populations as well as populations with certain health conditions (asthma, COPD, heart disease, neurological

disorders, blood disorders, endocrine disorders, kidney disorders, and weakened immune systems) are at a high risk of serious flu complications.

Flu viruses are grouped into three types, designated A, B, and C.

Type A – can affect both humans and animals, and are associated with more severe illness. Usually the cause of global pandemics.

Type B – infect only humans and cause seasonal outbreaks and less severe disease than A in the United States (US). Does not cause pandemics

Type C – Very common, usually cause mild respiratory symptoms.

The average incubation period (time between infection and onset of symptoms) for seasonal flu is two days. Flu symptoms are only passed human to human by respiratory secretions. People infected with the flu viruses may shed the virus and transmit the infection up to one day before the onset of symptoms. Viral shedding and the risk of transmission will be greatest during the first three-four days after the onset of symptoms.

An influenza pandemic is a global outbreak of a new influenza virus that is very different than current and circulating influenza A viruses. Pandemics happen when new influenza A viruses emerge which are able to infect people easily and move quickly person to person.

Influenza viruses come from different animals including birds and pigs from the past, most recent pandemics. In a pandemic influenza, the influenza A virus in these animals may shift to what’s called an “antigenic shift.” The antigenic shift represents an abrupt, major change in an influenza A virus. This can result in a direct non-human-to-human transmission. Once this occurs in one person and is able to move to another person, this is now defined as a pandemic. Pandemics happen quickly and move fast from country to country.

Differences between seasonal influenza and pandemic influenza:

Seasonal Flu:	Pandemic Flu:
Happens annually and peaks between December and February	Rarely happens: 3 times in 20th century
Usually there is some immunity from previous exposures and influenza vaccines	Most people have little or no immunity because they have no previous exposure to the virus or similar viruses
Certain people are at risk for flu complications – elderly, infants, people with chronic health conditions	Even healthy people are at risk for serious complications
Health care providers can meet the needs of patients easily	Health care providers and hospitals are overwhelmed and it is very difficult to meet the needs of the exposed public

Vaccines are updated annually and one dose is sufficient	Although the US government maintains a stockpile of pandemic vaccines, the overwhelming need of vaccines may not be available, and may require 2 doses
Usually cause minor impact on schools and the public. Sick people should stay home	May cause major impact on the general public. May cause travel restrictions, school and business closings
Antiviral drugs are readily available and help within the first 48 hours of presenting symptoms	Antiviral drugs will still be prescribed, but will be less readily available and more difficult to come by. Symptoms will also be more severe and antivirals may not be as helpful

Treatments for pandemic flu include antiviral drugs and non-pharmaceutical interventions (NPIs). These actions do not include medications or vaccinations. NPIs will be the only early intervention tools that will most likely mitigate the quick transmission from person to person. See more about mitigation strategies in the later section, Prepare – Prevent – Protect.

**COVID-19 (Coronavirus)** - Symptoms of COVID-19 have reportedly been mild to severe respiratory illness accompanied with fever, cough, and shortness of breath. The 2020 outbreak originated in the Wuhan province of China. Symptoms may appear 2-14 days after exposure. The virus is spread person-to-person between people within close contact (about 6 feet), via respiratory droplets produced when an infected person sneezes or coughs, and these droplets can land in the mouths or noses of people who are nearby where the droplets are inhaled into the lungs. Transmission may also be possible through contact with contaminated surfaces, but this is not thought to be the main way of transmission. People at risk are those who have recently traveled to/from countries identified as Health Advisory Level 3 by the U.S. Department of State or those in close contact to positively diagnosed individuals.

**MERS & SARS** – Middle East Respiratory Syndrome and Severe Acute Respiratory Syndrome.

**MERS** – Also known as the “camel flu.” A fairly new respiratory virus for humans. Symptoms include fever, cough, and shortness of breath. Some experience symptoms involving the gastrointestinal tract as well causing nausea, vomiting, and diarrhea. Spread through respiratory droplets is the believed transmission, however this is still being studied. Incubation period is approximately 5-7 days. Mortality hits one-third of diagnosed cases. Spread is uncommon outside of hospitals, thus the risk to the global community is fairly low. No diagnosed cases in the U.S. since 2014. No vaccine or treatment.

**SARS** – Severe respiratory illness that started in southern China. No cases have been diagnosed since 2004. Initial symptoms are flu-like including muscle pain, high fever, sore throat, cough, severe muscle aches, and possible diarrhea. These symptoms may lead to shortness of breath

and/or pneumonia. Incubation period is 4-6 days, although it has been known to incubate for one day. Transmission is through respiratory droplets, although there is some belief that SARS may be spread through airborne transmission (meaning spread by tiny pathogens in the air that are inhaled).

**Anthrax** – A serious infectious disease that can cause death. Anthrax gets into the body through the skin, lungs, or gastrointestinal tract. All types of anthrax are bacterial and can spread throughout the body quickly if not treated with antibiotics.

- Cutaneous – Most common and least dangerous. This form enters through the skin. Possible exposure comes from workers who handle contaminated animal products and get spores in a cut or scrape on their skin. Infection develops in 1-7 days after exposure.
- Inhalation – Most deadly form of anthrax. Occurs when a person inhales spores that are aerosolized during the industrial processing of contaminated materials, such as wool, hides, or hair. Infection develops within a week after exposure, but it can take up to 2 months.
- Gastrointestinal – Rarely reported in the US. People who eat raw or undercooked meat from infected animals could get sick with this. Infection develops from 1-7 days after exposure.
- Injection – This anthrax has never been reported in the US. Seen in northern Europe in people injecting heroin.

People at risk are people who handle animal products, veterinarians, livestock producers, travelers, laboratory professionals, mail handlers, military personnel, and emergency response workers. The anthrax vaccine is currently provided only to people who are at an increased risk of coming in contact with anthrax spores, such as members of the US military, certain laboratory workers, and some people who handle animals or animal products. The vaccine is not licensed for use in children under age 18, adults over age 65, or pregnant and nursing women.

We do not know when anthrax will occur; however, federal agencies have worked for years with health departments across the country to plan and prepare for an anthrax attack. Anthrax can be used as weapon because spores are easily found in nature, can be produced easily, and can last a very long time in the environment. These spores are released quietly and without anyone knowing. The spores cannot be seen, smelled, or tasted.

**Ebola** – A rare viral hemorrhagic fever in humans and non-human primates. The virus starts between 2 days and 3 weeks after contracting the virus. Symptoms show up as a fever, sore throat, muscular pain, and headaches. Vomiting, diarrhea, and a rash may follow along with decreased function of the liver and kidneys. An infected person may bleed both internally and externally and has a very high risk of death, killing between 25-90% of those infected. Death often occurs from low blood pressure due to loss of blood. The virus spreads through direct contact with body fluids, such as blood, urine, feces, semen, breast milk, sweat, and vomit. An Ebola vaccine is currently being studied in Africa with promising factors, nothing current in the US thus far. No specific treatment is singled out for Ebola, however, supporting treatments will have to take place such as intravenous fluids, pain management, anti-nausea, and fever control. If infected, recovery depends

on the person's immune response. Ebola survivors may carry the illness in their blood for up to 10 years post recovery.

Personal Protective Equipment (PPE) would be issued for all public health planners in working with the potential of the Ebola virus.

### **AUTHORITIES/ROLES & RESPONSIBILITIES:**

WHO, U.S. Dept of HHS, CDC, CDPHE, EPCPH, CDE, CSI, and Thomas MacLaren School are the Authorities.

During an outbreak of a highly infectious illness, the U.S. Government – U.S. Department of Health and Human Services (HHS) along with the Centers for Disease Control (CDC) – is the national leader for overall communication and coordination efforts. If it is universal, they work with the World Health Organization (WHO).

U.S. Department of Health and Human Services along with the CDC's role is:

- Identify, appoint, and lead the highly infectious disease response; enact or modify legislation and policies required to sustain and optimize pandemic preparedness, capacity development, and response efforts across all sectors.
- Lead national and domestic efforts in surveillance and detection of outbreaks. Prioritize and guide the allocation and targeting of resources to achieve the goals as outlined in a country's response.
- Provide additional resources for national pandemic preparedness, capacity development, and response measures. Support rapid containment of outbreaks, provide guidance to state level authorities on the use and timing of community infection control measures.
- Support biomedical research and development of new vaccines and medical countermeasures.
- Consider providing resources and technical assistance to countries experiencing outbreaks of the highly infectious illness.

The Colorado Department of Public Health and Environment (CDPHE) takes lead from the CDC. El Paso County Public Health Department (EPCPH) takes lead from the CDPHE. Both together in collaboration have natural leadership and advocacy in highly infectious illness preparedness and response efforts.

In cooperation with these public health sectors, Thomas MacLaren School cooperates in efforts to raise awareness and actions that are necessary in response to the severity of the phase of reported illness. The risks and potential health consequences are taken into consideration by CDPHE and EPCPH and assist Thomas MacLaren School in the following:

- Provide reliable information on the risk, severity, and progression of the outbreak and the effectiveness of interventions used during the outbreak.

- Activate the CDPHE Department Operations Center (DOC), and notify the Governor, the Governor’s Expert Emergency Epidemic Response Committee (GEERC), and the Colorado Division of Homeland Security and Emergency Management. CDPHE will collaborate with response agencies in the State Emergency Operations Center to coordinate response activities.
- Prioritize and continue the provision of healthcare during a highly infectious outbreak. Maintain situational awareness by monitoring the highly infectious illness surveillance data and assessing the public health/medical needs of Colorado.
- Enact steps to reduce the spread of the infection in the community and in healthcare facilities. Provide guidance, resources, and technical assistance to local health departments and aid in the need/use of vaccines, antivirals, and antibiotics.
- Coordinate with public and private healthcare systems to ensure a cohesive healthcare response statewide to handle inpatient and outpatient care.
- Protect and support healthcare workers during the infectious outbreak. Provide PPE if needed along with other protective supplies to protect healthcare workers from transmission and infection control procedures.
- Notify the local health departments if social distancing and community mitigation is needed, such as closing schools, travel restrictions, cancellation of local, public events, isolation and/or quarantine may be required to slow the spread of the illness.

**Thomas MacLaren School’s response to an infectious illness is as follows:**

- The Leadership Team—including the key health personnel, members of the Safety Team, and the Director of Communications—works closely with EPCPH to determine what action is needed, and oversees communication to school employees, students and families, and community members.
- The School remains in session until notified by local authorities for the need to close.
- The school nurse and school administration continue to educate the community on prevention of illness: vaccinations, proper hand washing techniques, community mitigation, and social mitigation for prevention of transmission. They prepare the school communities to minimize health risks and train all staff and students on these measures.
- The school nurse and school administration develop plans with families in the event their child must be sent home due to illness or if school is closed.

**ASSUMPTIONS:**

The Governor of Colorado may declare a State of Emergency, resulting from a public health emergency – highly infectious illness – e.g., pandemic flu. Response to this outbreak will require swift and coordinated action by all levels of government.

- CDPHE will take the role of Lead State Agency for emergency support and will coordinate with Colorado Emergency Management, within the Division of Homeland Security and

Emergency Management and other state and local agencies, as part of a unified command structure.

- Effective prevention and therapeutic measures, including vaccine and antiviral medications, could be delayed, in short supply, or not available.
- Substantial public education regarding the need to target priority groups for vaccination and antiviral/antibiotic medication and the allocation of limited supplies, is crucial in averting public panic.
- Non-pharmaceutical interventions, travel restrictions, cancellation of public events, isolation and/or quarantine may be required to slow the spread of an outbreak.
- Secondary bacterial infections, following the outbreak, may result in shortages in antibiotic supplies.
- EPCPH will work with healthcare providers to coordinate the distribution of vaccines, antivirals, and other medications and/or medical supplies. The MacLaren school nurse may be used for this.
- There may be a need for alternate care sites as a temporary health facility.
- Healthcare workers, firefighters, and police officers may be at higher risk of exposure and illness than the general population, further straining the outbreak response.
- Widespread illness could increase the likelihood of sudden and potentially significant shortages of personnel in other sectors that provide critical public safety and necessary services.
- If Pandemic Influenza, it will occur in waves – up to 2 months with little or no flu activity and last as long as 18 months where there is risk associated to the public.
  - Pandemic influenza is known to spread rapidly from one person to the next through coughing or sneezing. Some people may become infected by touching something with the flu virus on it and then touch their nose, mouth, or eyes.
  - Influenza may shed the virus for one to two days before becoming symptomatic.

## **PREPARE – PREVENT – PROTECT:**

*Preparedness* refers to those actions and measures taken before an event in order to better handle the emergency when it arises.

CDC plays a prevalent role in making sure states and local health departments are prepared for public health emergencies. CDPHE and EPCPH prepares Thomas MacLaren School before, during, and after an exposure to a highly infectious illness.

Public health officials recommend prior to and in the early phases of a pandemic or outbreak, to practice every day good health habits and to use non-pharmaceutical interventions (NPIs) to prevent and protect the human population from the spread of a highly infectious illness. Everyday good health habits include the following:

- Avoid close contact with people who are sick. When you are sick, stay away from others to prevent passing on your illness to others.

- Stay home when you are sick so you prevent passing your illness on to others.
- Cover your mouth and nose when sneezing or coughing with a tissue and then throw away the tissue.
- Wash your hands after coughing or sneezing and often throughout the day. Washing the germs away is always best and the preferred method. If soap and water are not available, hand sanitizer will kill the viruses, but not wash them away. MacLaren’s handwashing protocol can be found [here](#).
- Avoid touching your eyes, nose, or mouth. Germs are often spread touching these body parts.
- Practice other good health strategies – clean and disinfect surfaces in your home, especially when someone is ill. Get plenty of sleep, manage your stress, and be physically active.

Other than everyday good health habits, other NPIs are thoughtful mitigation strategies to protect the community and consist of:

- Social distancing – create ways to provide distance between people in close contact areas including work and school.
- Closures – possible closures of non-urgent/mandated events – not necessary to hold extra community events during an outbreak or pandemic.
- Be prepared and informed, and cooperate in the event of an outbreak or pandemic.
- Communicate with other employees, students, and community members by using educational materials to inform on updates of the outbreak or pandemic, good hygiene methods including hand-washing protocol, hang posters, send email reminders, and face-to-face trainings/presentations.
- Continue communicating surveillance and monitoring the outbreak or pandemic.
- Maintain a clean environment.
- Educate the community on when to stay home when you are sick.

Other preparedness measures for Thomas MacLaren School include:

- Leadership delegates necessary tasks and duties to all employees according to EPCPH and CDPHE’s guidance and direction. It is important that together, these departments communicate the same message to all employees, students, parents, and community members.
- Teachers prepare lesson plans ahead of time in case they are out due to illness and/or students are out due to illness.
- The Human Resources team may want to prioritize essential staff functions and cross train staff to ensure that if a large percentage of staff is gone, other employees are able to fulfill those roles.
- The Human Resources team may consider reviewing leave procedures. In the case that one case is confirmed, Thomas MacLaren School transitions to the Response phase.

## **RESPOND**



During an outbreak/pandemic, Thomas MacLaren School focuses on the school's response to and management of a confirmed case.

**Identify:**

The confirmed case from EPCPH begins practicing the mitigation of NPIs including social distancing noted above. Identification of a confirmed case starts the process of an outbreak/pandemic emergent situation. Guidance comes from CDPHE to EPCPH to Thomas MacLaren School. During this time, Thomas MacLaren School will be even more vigilant in promoting the everyday good health habits and NPIs as this is our biggest defense to a highly infectious illness preparedness plan. It is our number-one goal to keep our students, staff, parents, and all other community members as safe and healthy as possible; therefore, we will communicate and educate these stakeholders on an often, routine basis to keep the messages flowing about where we stand as a community in this highly infectious illness process.

**Activate:**

As this process of a highly infectious illness plan comes to fruition, the School will follow its Incident Commander (IC) organization and follow this for the proper emergency response.

The Health Team will get direct communication and notification of a confirmed case of a highly infectious illness student or staff and then will work directly with the School's Incident Commander and the Safety Team to activate proper operations. Thomas MacLaren School may rely on its RNs and other staff to train additional staff or community members to run the health operations.

**Personal Protective Equipment (PPE)** – if needed, will be provided and guided by EPCPH to Thomas MacLaren School. Instructions on this equipment for utilization and proper maintenance may involve the RNs and other staff to assist in training and utilization of this equipment.

**Quarantine and Isolation** – EPCPH may recommend measures specific to community containment interventions, such as isolation and quarantine during an outbreak/pandemic. Community containment interventions are implemented to help prevent or reduce the spread of an infectious agent(s) within the community.

If voluntary home quarantine measures are suggested for exposed household members, Thomas MacLaren School will communicate with staff, students, parents, and community members as needed to help mitigate the highly infectious illness.

Depending on the severity of the event, Thomas MacLaren School will take direction from government officials including law enforcement, CDPHE, and EPCPH for next steps.

**Conduct:**

Conducting a full emergency operation will involve the direction of the Incident Commander in consultation with the School's RNs.

Thomas MacLaren School will initiate data collection of absenteeism and provide EPCPH with data they will be needing for report to CDPHE. Thomas MacLaren School may need the Data

Team to provide support in this area and direction for operation in collecting and analyzing all data.

During any highly infectious illness outbreak/pandemic, Thomas MacLaren School will maintain surveillance data and contribute to EPCPH and CDPHE in a proactive, positive manner to increase the health and safety of our community. Thomas MacLaren School will manage all internal resources and document/track all expenses in real time. This will require the support of the Business Office.

### **Recover:**

A highly infectious illness outbreak/pandemic requires completed surveillance data and feedback of operations. Any damage done to the community from this highly infectious illness outbreak/pandemic will be defined and analyzed for proper future planning.

It is crucial Thomas MacLaren School enforces resources and guidance for all staff, students, parents, and community members to focus on “getting back on track.” Returning to normal practice and procedures is important for the health and safety of everyone. The School will aim to return as quickly as possible to normally scheduled school days including all scheduled events.

Thomas MacLaren School will assess the need of additional mental health support resources and provide as much as possible to staff, students, parents, and the community. The Leadership Team will help identify mental health resources for the community. MacLaren’s Parent Service Association (PSA) may also assist in supporting MacLaren families with any resources that may be needed during or after a highly infectious illness outbreak/pandemic.

Thomas MacLaren School will communicate when it is safe to return to school and what precautions, if any, will need to occur. All school grounds and property will be cleaned and equipment may need to be sterilized. The Facilities Team will help support this practice.

Thomas MacLaren School will continue to monitor the illness and provide data as needed to continue the transparency of communication to the community.

Thomas MacLaren School will establish a plan to get students who have missed several days of instruction back on track. Some assignments may need to be eliminated depending on students’ performance on content mastery.

Debriefing between CDPHE, EPCPH, and Thomas MacLaren School will occur many times post event to ensure adequate data collection was successful and to begin proper preparation for the next highly infectious disease outbreak/pandemic. Success and failures will be discussed in transparency to determine the proper planning in the future.