Pandemic Flu Preparedness Plan
2019-2020
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An influenza (flu) pandemic is a global outbreak of disease that occurs when a new flu virus appears that can spread easily from person to person. Because people have not been exposed to this new virus before, they have little or no immunity to the virus; therefore, serious illness or death is more likely to result than during seasonal flu.

It is difficult to predict when the next influenza pandemic will occur or how severe it will be. In addition, a pandemic may come and go in waves, each of which can last months at a time. The effects of a pandemic can be lessened if preparations are made ahead of time.

The illness rates for both seasonal and pandemic influenza are high among children, and schools are likely to be an important contributor to the spread of influenza in a community. Scientific models support school closure as an effective means of reducing overall illness rates within communities and suggest that the value of this intervention is greatest if school closure occurs early in the course of a community outbreak.

Human influenza virus is mainly transmitted from person to person when an infected person coughs or sneezes. A lesser mode of transmission occurs when a person touches something that has the flu viruses on it and then touches his or her mouth or nose. Some individuals who are infected may never show symptoms or have mild symptoms, but could still spread the virus to others.

Englewood Schools has developed a plan, which outlines strategy in preparing for, responding to, and recovering from a highly infectious disease outbreak such as Pandemic Flu. The purpose of this plan is to increase the communication to stakeholders in the event of an outbreak. The plan serves as a resource guide for planning and responding to a sudden pandemic within our organization.

Plan Goals:
- Maximize the protection of lives while minimizing educational and social disruption and reducing morbidity and mortality.
- Enable Englewood Schools 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 and economic losses.
- Establish and maintain a coordinated command system with the Superintendent, the Director of School Safety & Security, the Executive Director of Student Services, the Communications Coordinator, and Health Services.
Initiate response with the direction and guidance from the Tri-County Health Department.

Develop a communications plan to ensure that students, parents, and staff receive timely and accurate information regarding disease prevention strategies and infection control strategies.

Coordinate with other close districts for safety measures related to the outbreak.

Prepare and provide staff, students, and families with mental health/crisis service, as needed.

**Scope:**

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

**Pandemic Flu – Influenza –**

Influenza (flu) viruses can cause a severe illness, 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 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 from 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 has called an “antigenic shift.” The antigenic shift represents an abrupt, major change in an influenza A virus.

This results in a direct non-human → 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.

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.

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

**MERS** – also known as the “camel flu.” A new respiratory virus for humans. Symptoms include fever, cough, diarrhea, 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 low. No diagnosed cases in the US 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 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 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 – 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 form 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 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.

**COVID-19 (Coronavirus)** - Symptoms of COVID-19 have reportedly had 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 China or those in close contact to positively diagnosed individuals.

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

### Authorities/Roles & Responsibilities:

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

**US 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. **Tri-County Health Department (TCHD)** 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, **Englewood Schools** 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 TCHD and assist Englewood Schools 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 response agencies in the State Emergency Operations Center to coordinate response activities.
- Prioritize and continue the provision of health-care 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 health-care facilities. Provide guidance, resources, and technical assistance to local health departments and aid in the need/use of vaccines, anti-virals, 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 health-care 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.
Englewood Schools – Roles & Responsibilities

- The Superintendent, Director of Safety & Security, Executive Director of Student Services, Communications Coordinator, and Health Services will develop coordinate communication to district employees, students and families, and community members.
- Maintain school staying in session until notified by local authorities for the need to close.
- District RNs continue to educate school communities on prevention of illness: vaccinations, proper hand washing techniques, community mitigation, and social mitigation for prevention of transmission. Prepare the school communities to minimize health risks. Train all staff and students on these measures.
- District RNs and school administration will develop plans with families in the event their child must be sent home due to illness or if schools are closed.
- School administration, along with the Director of Safety & Security, will document a response plan along with the identification of a school Incident Commander (IC), the Principal or an appointed administrator.
- School administration will follow the communication plan in collaboration with the Superintendent, Director of Safety & Security, Executive Director of Student Services, Communications Coordinator, and Health Services.
- Health Services will provide the Superintendent, Director of Safety & Security, Executive Director of Student Services, and Communications Coordinator with data and health surveillance reporting and information.
- Update schools with potential changes that may take place and information on the extent of the spread of the illness.

Assumptions:

Colorado Governor may declare a State of Emergency, resulting from a public health emergency – highly infectious illness – i.e. pandemic flu. Response to this outbreak – pandemic 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.
- TCHD will work with healthcare providers to coordinate the distribution of vaccines, antivirals, and other medications and/or medical supplies.
- 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 that 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.
- It may be necessary to expand mortuary service capacity including Disaster Mortuary Operational Response Teams (DMORT) through CDPHE.
- 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 form one person to the next through coughing or sneezing. Some people may become infected by touching something with the flu virus on it and the 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.

The **CDC** plays a prevalent role in making sure states and local health departments are prepared for public health emergencies. **CDPHE** and **TCHD** prepares Englewood Schools 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 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:

**Seasonal Flu**
- Promote hand washing and cough hygiene via school-wide campaigns and modeling by school staff.
- Encourage vaccination of staff and students for whom the flu vaccine is recommended.
- Persons developing symptoms at school should be sent home as soon as possible and instructed by appropriate officials not to return until they are well.
- Maintain a clean environment.

**Mild to Moderate Pandemic**
All of the seasonal flu methods plus the following:
- Encourage the use of social distancing at the work place, at school and in the community.
- Possible school closure for a short amount of time (possibly days to a couple of weeks).
- Work with community flu-planning team to assess whether any additional measures should be taken.

**Severe Pandemic**
- Possible extended school closure, which could range from weeks to up to 3 months. Presently, the Department of Health and Human Services, the Centers for Disease Control and Prevention, the Department of Education, and other agencies are conducting a comprehensive review of school closure and its feasibility and effects in mitigating a severe pandemic. The results of this study will be shared in the coming months.
- Promote social distancing of children and teens outside the school setting by reducing their social circulation and contacts to the greatest extent possible. This could include canceling extracurricular activities.

Additional preparedness measures for Englewood Schools include:
- District Incident Command Team delegates necessary tasks and duties to all employees according to TCHD and CDPHE’s guidance and direction.
- Be prepared and informed, take active participation 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.
- Ongoing surveillance/monitoring of the outbreak or pandemic.
- Educate the community on when to stay home when you are sick.
- Teachers prepare lesson plans ahead of time in case they are out due to illness and/or students are out due to illness.
- 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.
- Review leave procedures and negotiations to consider the possibilities of large amounts of employees are gone.
Respond:

During an outbreak/pandemic, Englewood Schools focuses on the school district’s response to and management of a confirmed case.

Identify:
The confirmed case from TCHD 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 from CDPHE → TCHD→ Englewood Schools.

Activate:
As this process of an infectious illness plan develops, Englewood Schools will activate its District Incident Command Structure to execute the proper emergency response. Health Services will get direct communication and notification of a confirmed case of an infectious illness student or staff and then will work directly with the district Incident Commander and the Director of Safety & Security to activate proper operations.

Personal Protective Equipment (PPE) – if needed, will be provided by TCHD or Englewood Schools. The district RNs will provide guidance of proper use and maintenance.

Quarantine and Isolation – TCHD will coordinate proper authorities to address community mitigation 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, Englewood Schools will communicate with staff, students, parents, and community members as a need to help mitigate the highly infectious illness.

Depending on severity of event, Englewood Schools will take direction from government officials including law enforcement, CDPHE, and TCHD for next steps.

Conduct:
- The District ICS will be implemented.
- Englewood Schools will provide TCHD with student and staff absenteeism.
- Schools will manage all internal resources and document/track all expenses in real time.

Recover:

Englewood Schools will provide resources and guidance for all staff, students, parents, and community members to focus on recovery. Stress the importance of returning to normal practice and procedures for the health and safety of everyone. Return as quickly as possible to normally scheduled school days including all scheduled events. Englewood Schools will assess the need of additional mental health support resources and provide as much as possible to staff, students, parents, and the community. The Department of Student Services will help identify mental health resources for the community.

Englewood Schools will communicate to staff, students, and families as to 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 Department will help support this practice.

Englewood Schools will continue to monitor the illness and provide data as needed to continue the transparency of communication to the community.

Debriefing between CDPHE, TCHD, and Englewood Schools will occur to ensure adequate data collection was successful and to begin proper preparation for the next highly infectious disease outbreak/pandemic.