# Highly Infectious Disease Preparedness Plan

Including Pandemic Flu

**Emergency Operations Plan** 

Department of Health Services and Department of Safety and Security 2/26/2020



# TABLE OF CONTENTS

INTRODUCTION	
Purpose	
Scope	
Authorities	
Responsibilities and Roles	
Assumptions	
PREPARE, PREVENT, & PROTECT	8-9
Prepare	
Education & Prevent	
Protect	8-9
RESPOND	10-11
Identify	10-11
Activate	
Conduct	
RECOVER	11
Community Assessment	
Debrief	
Appendixes	12
Incident Command Chart	

# Introduction:

Jeffco Public Schools recognizes that our schools are a critical community institution serving approximately 100,000 people, staff and children. The threat of a highly infectious outbreak in our schools could be detrimental to the community. By following this highly infectious disease preparedness plan, we are dedicated to reducing the miscommunications that may encompass the chaotic nature of an outbreak of any highly infectious illness.

This plan outlines Jeffco Public Schools' strategy in preparing for, responding to, and recovering from a highly infectious disease outbreak such as Pandemic Flu in a collective, community approach.

This document provides supplemental information to Jefferson County Public Health (JCPH) Department's Pandemic Flu Emergency Operations Plan, JCPH Ebola-EPR Response Plan, JCPH PHEOP Annex-Epidemiological Investigation Plan, and JCPH Emergency Operations Plan including JCPH Quick Reference Guide (QRG).

If you are looking for JCPH's plans, please contact them directly at https://www.jeffco.us/public-health

Please reference the Department of School Safety's <u>SRT Procedures Guide</u> for additional school guidance and direction for school's response to emergencies.

## Purpose:

The purpose of this highly infectious disease preparedness plan is to increase the communication to our Jeffco staff and students in the event of an outbreak. The plan would serve as a resource guide for planning and responding to a sudden pandemic within our organization. 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 the protection of lives while minimizing educational and social disruption while reducing morbidity and mortality.
- Enable Jeffco Public 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.
- Jeffco Public School's response will be directed by Jefferson County Public Health (JCPH)
  Department's direction and guidance. This plan coordinates federal, state, and local agencies.
- Continue the essential core operations of Jeffco Public Schools in the event of increased staff/student absences due to a highly infectious outbreak.
- Establish and maintain a coordinated command system with the Department of School Safety, the Department of Health Services, the Department of Student Services, and the Communications Department. Effective, timely, and sensitive decision making regarding continuity of student learning needs to remain the core value and focal point.
- 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 the use of Jeffco Public School facilities for the use of vaccination sites, temporary clinics/health areas, or other needs when appropriate.



- Coordinate with JCPH and Department of School Safety the Points of Dispensing (PODs) for any antibiotics or other treatments for staff, families, and other Jeffco community members.
  - o 7 PODS:
    - Arvada West
    - Alameda MS/HS
    - Columbine HS
    - Chatfield HS
    - Evergreen HS
    - West Jeff MS
    - Dakota Ridge HS
- Coordinate with other close districts for safety measures related to the outbreak. These districts include Gilpin, Denver, Douglas, Cherry Creek, Adams 12, Clear Creek, Littleton, and Broomfield.
- Prepare and provide for mental health/crisis service needs of staff, students and families.
   Department of Student Services will coordinate their efforts with the Department of School Safety, the Department of Health Services, and the Communications Department.

# 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 sever 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  $\rightarrow$  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 20 <sup>th</sup> 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 govt 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** (**Coronoavirus**) - 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 mouthes 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.

**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, 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 fairly 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.

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, US Dept of HHS, CDC, CDPHE, JCPH, MFHCC and Jeffco Public Schools are the Authorities.

Please see JCPH PHEOP for authority in operational planning. If you are looking for this JCPH plan, please contact them directly at <a href="https://www.jeffco.us/public-health">https://www.jeffco.us/public-health</a>

During an outbreak of a highly 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. Jefferson County Public Health Department (JCPH) 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, Jeffco Public 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 JCPH and assist Jeffco Public 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. JCPH will then coordinate with Jeffco Public Schools the distribution of these medications/supplies through the PODs.
- 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 Metro Foothills Health Care Coalition Chapter (MFHCC) (Director of Health Services is a member of this group). This is a critical coalition group formulated by JCPH to assure effective response and quality health care during an increased demand for services.
- 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.

#### Jeffco Public Schools response to an infectious illness is as follows:

- The Department of School Safety who works closely with the district Incident Commander and the Director of Health Services and the Communications Department will develop planning through JCPH to determine if PODs will be needed, 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 will document a response plan along with the Department of School Safety along with identification of a school Incident Commander (IC), the principal or an appointed administrator.
- School administration will follow the communication plan in collaboration with the Department of School Safety, the Department of Health Services, and the Superintendent's office.
- The Department of Health Services will provide the Jeffco community 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.
- JCPH will work with healthcare providers to coordinate the distribution of vaccines, antivirals, and other medications and/or medical supplies. **Jeffco district RNs 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 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.
  - o 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 **JCPH** prepares Jeffco public 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 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
  is always best and the preferred method. If soap and water is not available, hand sanitizer will
  kill the viruses, but not wash them away.
  - Jeffco's handwashing protocol is 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 are consistent 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, take an 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.
- 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 Jeffco Public Schools include:

- Leadership team including the Incident Commander, the Department of School Safety, the Department of Health Services, and the Communication Department – crucial this leadership team delegates necessary tasks and duties to all employees according to JCPH and CDPHE's guidance and direction. Important that together, these departments communicates 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 Resource Department 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 Resource Department may consider reviewing leave procedures and negotiations to consider the possibilities of large amounts of employees are gone.

In the case that one case is confirmed, Jeffco Public Schools transitions to the **Response** phase.



# Respond:

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

#### Identify:

The confirmed case from JCPH 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 → JCPH→ Jeffco Public Schools. During this time, Jeffco Public Schools will take a more active awareness to 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 bases 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, we must look at the Incident Commander chart (also in Appendix) for Jeffco Public Schools and follow this for the proper emergency response.

Director of Department of Health Services 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 district Incident Commander and the Department of School Safety to activate proper operations. Proper operations may involve the need to utilize the 7 PODs noted above in which during that time, the Communications Department will enforce this communication district wide. Jeffco Public Schools may rely on district RNs and other staff to train additional staff or community members run the operations of vaccinations or medications at the seven PODs.

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

**Quarantine and Isolation** – JCPH will utilize the Jefferson County PHEOP Community Containment Annex 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, Jeffco Public 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, Jeffco Public Schools will take direction from government officials including law enforcement, CDPHE, and JCPH for next steps.

#### **Conduct:**

Conducting a full emergency operations at Jeffco Public School will take the guidance and expertise of the Department of School Safety and the Department of Health Services. This may involve requests of



district Campus Supervisors and district RNs. The Director of Health Services will activate the Nurse Response Team (NRT) or needed capacity.

Jeffco Public Schools will initiate data collection of absenteeism and provide JCPH with data they will be needing for report to CDPHE. Jeffco Public Schools will need the Research and Assessment team to provide support in this area and direction for operation in collecting and analyzing all data.

During any highly infectious illness outbreak/pandemic, Jeffco Public Schools will maintain surveillance data and contribute to JCPH and CDPHE in a proactive, positive manner to increase the health and safety of our community.

Jeffco Public Schools will manage all internal resources and document/track all expenses in real time. This will require the support of the Purchasing Department.

#### **Recover:**

Community Assessment post 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 Jeffco Public Schools enforces resources and guidance for all staff, students, parents, and community members to focus on "getting back on track." 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. Jeffco Public 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 Success will help identify mental health resources for the community.

Jeffco Public School's Community and Family Connection Department (CTC) will also assist in supporting Jeffco families with any resources that may be needed during or after a highly infectious illness outbreak/pandemic.

Jeffco Public Schools will communicate through the Communications Department 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.

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

Jeffco Public Schools will establish a "return to learning" program 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, JCPH, and Jeffco Public Schools 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.





