# **ANNEX J**

# INFECTIOUS/ COMMUNICABLE DISEASE

Petrolia CISD

# Infectious/Communicable Disease Annex

# Purpose and Scope

## A. Purpose

The purpose of the Infectious/Communicable Disease Annex is to provide standardized guidance in the response to the onset and spread of an infectious/communicable disease within the Petrolia CISD and/or in the surrounding area.

This Plan is to promote the safety and well-being of Petrolia CISD students, faculty, staff, and visitors by:

- Preventing the spread of disease
- Protecting PCISD workers who will need to keep the operations and educational programs functional
- Providing support for the essential services that must be maintained

There are several aspects of an infectious/communicable disease emergency that differentiate it from other emergencies and that require variation in widespread planning, response, and recovery. The intention of this document is to provide guidance throughout an outbreak situation, but nothing in this document precludes the primary parties (Petrolia CISD stakeholders) from modifying their actions to meet the unique conditions presented. These unique actions and responses may be based on one or more of the following:

- The current threat of disease in the world, region, state, and local area
- The unique nature of the disease including the incidence, morbidity, and mortality of the disease
- The novel nature of the disease pathogen, particularly whether it mutates rapidly, has high virulence, and spreads easily from person-to-person
- Mandates and/or orders by federal, state, or local public health or public safety authorities

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#### B. Scope

This annex incorporates, by reference, a similar emergency planning and response structure of the Petrolia CISD Core Emergency Operations Plan

(EOP). However, the special circumstances of an infectious/communicable disease outbreak may require some variance from the EOP.

This Infectious/Communicable Disease Annex applies to all Petrolia CISD Campuses. While the general concepts and considerations remain constant for all district campuses, each campus will assign critical tasks and responsibilities differently based on their respective structure and governance. Each campus is responsible for developing response plans that are more targeted and appropriate for their locations while ensuring alignment and with this overall plan (such as off-campus leased locations, field stations, and faculty, staff, and students travelling outside of the district under campus auspices). Staff, students, and faculty who have been in travel status internationally and who are at risk of carrying a novel infection may be required to practice social distancing measures for a designated amount of time to minimize the likelihood of disease transmission.

This annex provides a general framework for prevention, preparedness planning, response, and recovery for a large-scale outbreak of an infectious/communicable disease. It outlines the roles and responsibilities of PCISD personnel and units and the functions that public partners can be expected to provide to the District.

#### **General Information on Pandemic Communicable Disease Events**

A pandemic is a "geographically widespread outbreak" of communicable disease. An emergency can result when there is enough morbidity and mortality to disrupt the essential operations of a community and when the communicable disease:

- is highly virulent (harmful),
- is readily transmissible from person-to-person, and
- has high clinical severity (causing sudden, serious, illness and death in a large number of people).

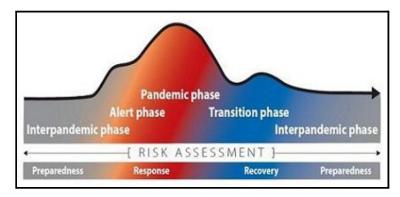
The communicable diseases with the highest risk for a pandemic event are those that are new to the population, either a mutated strain of a known pathogen or a newly emerging pathogen to which the general population has little or no immunity (resistance). Therefore, it spreads easily and is sufficiently virulent enough to cause social disruption. In the remainder of this document, "novel

pathogen" will be used to refer to the latter agents. Animal viruses infecting humans are considered novel pathogens, thus the avian influenza concern in 2006 and the H1N1 influenza (aka "swine" influenza) in 2009 both had the pandemic potential to significantly interrupt usual operations.

The pandemic flu will be used as a primary example for the Infectious/Communicable Disease Annex because this communicable disease provides the information and structure for almost any outbreak. Other infectious disease outbreaks that the Petrolia CISD recognizes as most likely to occur on campuses include norovirus, measles, mumps, and meningitis.

#### A. Phased Pandemic Framework

To assist communities in planning for a potential pandemic, the World Health Organization (WHO) developed a phased pandemic alert system framework:



- 1. <u>Inter-Pandemic Phase</u> (the period between pandemics)
  - i. A new virus appears in animals but there is no or low risk of human cases
- 2. <u>Pandemic Alert Phase</u> (influenza caused by a new subtype has been identified in humans)
  - i. New virus in animals with higher risk of human cases
  - ii. Increased H2H transmission
  - iii. Significant H2H transmission
  - iv. Efficient and sustained H2H transmission

#### 3. Pandemic Phase

i. Global spread of communicable disease caused by new subtype

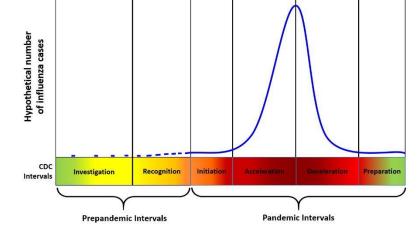
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#### 4. Transition Phase

- i. Reduction in global risk
- ii. Reduction in response activities
- iii. Progression towards recovery actions

Further, the Centers for Disease Control and Prevention (CDC) has developed an interval system framework which can be applied to federal, state, or local indicators:

- Investigation (of a novel pathogen in humans or animals)
- 2. Recognition (of increased potential for ongoing transmission of the novel pathogen)
- 3. <u>Initiation</u> (of a pandemic wave)
- 4. <u>Acceleration</u> (of a pandemic wave)



- 5. <u>Deceleration</u> (of a pandemic wave)
- 6. <u>Preparation</u> (for future pandemic waves)

The WHO and CDC frameworks complement one another, giving governments, institutions, and individuals information and timeframes to plan their response to a communicable disease outbreak. Relying on both frameworks, this Communicable Disease Outbreak Management Plan has developed a five-level action plan to follow throughout the course of a communicable disease outbreak:

- 1. Plan
- 2. Prepare
- 3. Mobilize
- 4. Sustain
- 5. **Recovery**

Additionally, the CDC has released the Influenza Risk Assessment Tool (IRAT) which evaluates potential pandemic risk based on emergence and public health

impact and the Pandemic Severity Assessment Framework (PSAF) which predicts the severity of a pandemic by considering clinical severity and transmissibility during an initial assessment and then again during the refined assessment provided that more information becomes available. Clinical severity asks about the strength of the illnesses' association with the infection and transmissibility considers the ability of the pandemic virus to spread person-to-person.

Federal, state, and local public health agencies such as the Centers for Disease Control and Prevention (CDC), the Texas Department of State Health Services (TDSHS), and the local health authority also provide communicable disease planning and response guidance and support. The ISD planning and response levels described in this document are informed by the WHO pandemic alert system and are consistent with the TDSHS planning levels wherever appropriate. Petrolia CISD and campus actions may deviate from WHO and/or CDC recommendations when necessary in order to follow guidance or directives from local public health authorities that more closely reflect the current situation in the surrounding communities in Texas.

# **Concept of Operations**

This section contains general information about the tasks that will most likely need to be completed to ensure an effective **Infectious/Communicable Disease** response. The following tasks represent a logical flow of response from the time an impending or actual Infectious/Communicable Disease Incident is perceived through recovery.

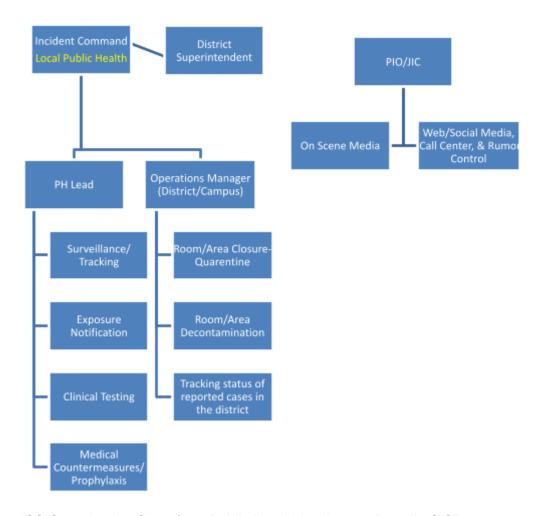
The Infectious/Communicable Disease Annex is based upon the concept that the incident management functions that must be performed by PCISD and its partners generally parallel some of their routine day-to-day functions. To the extent possible, the same personnel and material resources used for day-to-day activities will be employed during incidents. Because personnel and equipment resources are limited, some routine functions that do not contribute directly to the incident may be suspended. The personnel, equipment, and supplies that would typically be required for those routine functions will be redirected to accomplish assigned incident management tasks.

#### General

 Petrolia CISD public safety and response staff will act according to their Standard Operating Procedures/Guidelines (SOP/SOG) when alerted to an Infectious/Communicable Disease Incident affecting PCISD.

- 2. When a potential Infectious/Communicable Disease Incident in PCISD is reported, the person receiving the initial report will immediately notify the district superintendent's office.
  - a. The district superintendent's office should work with the local health authority to confirm the report.
- The local health authority will be the primary entity for coordinating the
  incident within the school district and liaising with TDSHS. In cases where a
  local, county, or health district jurisdiction is not present, the TDSHS will work
  directly with the district.
- 4. If appropriate, the district superintendent shall assign a position to manage and track operational duties on campus(s) related to the possible infectious/communicable disease exposure. This operations manager will:
  - a. coordinate with environmental services for any decontamination services needed in the district
  - b. coordinate with the district support services for any classroom closure or area quarantine needed in the district
  - c. provide district-wide communication notification support as necessary to the incident requirements
- The Infectious/Communicable Disease Annex assumes mutual aid agreements, memorandum of understandings, and intergovernmental agreements between district authorities, local/state/federal public health agencies, hospital/healthcare facilities, and other public health stakeholder agencies.

6. The Incident Command System (ICS) will be used to manage all incidents and major planned events on the Petrolia CISD.



ICS Organization Chart for a Public Health Incident on Petrolia CISD

#### **Public Health Incident Operations**

#### Confirming a Public Health Incident

Determining if there is an outbreak hinges on if the number of cases is unusually high for the given population for that time of year. Factors included in determining if an outbreak exists are:

- Etiologic agent
- Size and composition of the population
- Previous occurrence of the specific disease in the community
- Season

If a disease is common, such as seasonal influenza, the number of cases before an outbreak is declared likely needs to be incredibly high; however, if the disease is rare, like smallpox, a single case may be considered an outbreak.

During Fall and Spring Semesters, the PCISD population composition is approximately 431 students and 73 employees.

Disease tracking in the district is based on incidental reporting from the student population. The local health authority may identify one case of a rare or uncommon disease, or notice an increase in cases of a common disease during a given period. When this occurs, the local health authority shall commence with notification procedures to the district.

Should PCISD be made aware of a potential outbreak (or a confirmed case of a rare disease) by the local health authority, the TDSHS, or any other health agency, the district superintendent's office shall alert the Principal(s) of the affected campus(s), and subsequently, the district board of trustees. Following actions and notifications should be at the direction of the local, county, health district, and/or TDSHS.

#### General Procedures

Procedures for responding to an infectious/communicable disease follow the same general pattern including monitoring, detection, implementation of pharmaceutical and non-pharmaceutical interventions, and coordinating with local and state health authorities. Specific application of interventions depends on the specific disease.

This plan may be activated for situations including but not limited to:

- Unusual cluster of disease in the ISD population
- Disease with unusual geographic or seasonal distribution
- Single case of an unusual disease
- Endemic disease with unexplained increase in incidence
- Significant media inquiries or public calls concerning a health-related issue
- Local public health emergency in one or more of the surrounding jurisdictions

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Statewide disease outbreak

#### A. Infectious/Communicable Disease Response Protocol

When faced with an actual outbreak, local authorities may be required to use absolute limits to determine when to institute isolation, quarantine, vaccination, and other methods of infection control to protect the public health and safety. A balance must be struck between the implementation of such limits with an awareness of the public's rights to liberty.

This protocol recommends employing the most conservative authoritative medical and epidemiological evidence when faced with a range of possible actions. This statement is based upon the principle that lack of scientific certainty or consensus must not be used to postpone preventive action in the face of a threat to public health or safety. Preventative actions may include vaccination, medical prophylaxis, or social distancing.

The protocols outlined below shall serve as a guide in the event of an infectious disease outbreak in the Petrolia CISD. Depending on the disease and the spread of the disease, some or all of these steps may be expanded, modified, or eliminated. The district superintendent, or their delegated representative, will work directly with the local health authority and TDSHS to implement appropriate actions based on the public health hazard.

## Social Distancing

Social distancing measures that reduce opportunities for person-to-person virus transmission can help delay the spread and slow the exponential growth of a pandemic. Social distancing measures can reduce virus transmission by decreasing the frequency and duration of social contact among persons of all ages. These measures are common-sense approaches to limiting face-to-face contact, which reduces person-to-person transmission.

During outbreaks of highly infectious diseases or rare viral strains with high rates of mortality, the following social distancing procedures should be considered in PCISD:

- Postponement or cancelation of classes during an infectious outbreak (at least until pharmaceutical preventative measures can be enacted). This will reduce exposure of person-to-person contact for students, faculty, and staff.
- Postponement or cancelation of mass gatherings: Group events such as concerts, festivals, and sporting events bring people into close contact for extended periods. Even when a circulating virus has a relatively low basic

reproductive rate, intensely crowded settings might lead to high secondary attack rates.

Multiple social distancing measures can be implemented simultaneously.

#### Isolation Protocols

If isolation/quarantine is recommended for exposed/infected persons, in most cases voluntary isolation is encouraged based on guidance and directed education from the local health authority and TDSHS. In cases of highly infectious diseases or rare viral strains with high rates of mortality, the local health authority has the authority to "...order the individual, or the individual's parent, legal guardian, or managing conservator if the individual is a minor, to implement control measures that are reasonable and necessary to prevent the introduction, transmission, and spread of the disease in this state."

- 1. The local health authority shall recommend isolation, if necessary. A list of isolated students, faculty, and staff shall be prepared and updated daily by each affected campus and sent to the district superintendent's office.
- 2. The affected patient(s) should remain isolated for the duration of time specified by the local health authority.

#### Cleaning Protocols

These procedures are for cleaning, disinfecting, and/or sanitizing for communicable diseases in non-healthcare settings. Increased cleaning shall be activated by the district and its campus stakeholders upon recommendation from the local health authority.

- The local health authority shall consult with the district superintendent's office about campus locations that need enhanced sanitation efforts. This information will be shared with the appropriate PCISD campuses and the campus custodial service provider (based on areas to be sanitized).
  - a. These locations may be based on where confirmed ill students and/or employees were on campus.
  - b. Viruses generally survive on surfaces for about 48 hours.
- 2. If necessary, the local health authority shall supply guidance to the district's housekeeping staff, and any other necessary departments to ensure all those

- who may be conducting sanitation operations are properly trained and fitted with PPE appropriate for the infectious disease at hand.
- Housekeeping and the appropriate campus environmental services shall conduct sanitation operations in all designated locations using appropriate cleaners/disinfectants

# **Direction, Control, and Coordination**

#### A. Responders Standard Operating Procedures/Guidelines (SOP/SOGs)

Responders' department policy manuals provide said departments' members with best practice guidelines and procedures to conduct emergency operations. The policies provide department members with guidance that is both legal and practical. The department SOP/SOGs establish consistent procedures and provide members with a common understanding and focus. This common understanding and focus should translate into more effective operations during emergency incidents.

#### **B.** Emergency Operations Plan

Petrolia CISD maintains an Emergency Operations Plan (EOP) to address threats/hazards and incidents. The EOP has been developed to fit into the larger City/County and State EOPs in the case of a large-scale incident. PCISD maintains the plan, and conducts regular training and exercises to validate operational efficiency and readiness of the EOP. The EOP and other Petrolia CISD emergency plans may also make critical PCISD personnel available beyond their regular job description in an incident or crisis event taking place within PCISD.

# C. Coordination with Responders

An important component of emergency operations is interagency agreements with various neighboring agencies to aid timely response to, and recovery from, emergencies on campus. Agreements with these agencies and services (including such local governmental agencies as law enforcement, EMS, and public health) help coordinate services between the agencies and Petrolia CISD. The agreements specify the type of communication and services provided by one agency to another.

If the campuses or City/County resources are insufficient or inappropriate to respond to the emergency situation, a request may be made for assistance from other jurisdictions, the state, or federal government. All response agencies are

expected to fulfill mission assignments directed by the Incident Commander/Unified Command.

#### **Communications**

#### A. General Communication

In coordination with the local health authority, Petrolia CISD shall coordinate and disseminate all communications related to the specific infectious disease.

Communications should include:

- General communications to the school district
  - o information about the disease in general
  - o information about the disease impacts on PCISD
  - o what PCISD is doing
  - o what PCISD should/should not do
- Targeted communications to affected or vulnerable populations within PCISD, as needed

- Specific information on preventing the spread of the disease
- Any combination of the above to the media and neighboring communities

# **Disease Descriptions**

Name	Vaccine Preventable	Description of Symptoms
Measles (Rubeola)	Yes	Symptoms: high fever; cough; runny nose; red/watery eyes; tiny white spots (Koplik spots) in mouth; rash  Transmission: coughing and sneezing; virus can live up to two hours in contaminated air or on a surface
Meningitis	Yes	Symptoms: fever; headache; stiff neck; nausea; vomiting; sensitivity to light; confusion  Transmission: germs spread person-to-person (depends on type of bacteria)  Viral  Symptoms: fever; headache; stiff neck; sensitivity to bright light; sleepiness or trouble waking up from sleep; nausea; irritability; vomiting; lack of appetite; lethargy  Transmission: caused by other viruses like mumps, measles, influenza, etc.
Mumps	Yes	Symptoms: fever; headache; muscle aches; tiredness; loss of appetite; swollen/tender salivary glands approximately 16-18 days after infection  Transmission: coughing, sneezing, or talking; sharing items; touching contaminated objects
Norovirus	No	Symptoms: diarrhea; vomiting; nausea; stomach pain  Transmission: contaminated food or drink; touching contaminated surfaces and then putting fingers in mouth; having direct contact with someone who is infected
Hepatitis A	Yes	Symptoms: Fatigue; Sudden nausea and vomiting; Abdominal pain or discomfort (especially on the upper right side beneath your lower ribs by your liver); Clay-colored bowel movements; Loss of appetite; Low-grade fever; Dark urine; Joint pain  Transmission: fecal-oral route; that is when an uninfected person ingests food or water that has been contaminated with the feces of an infected person
Influenza	Yes	Symptoms: fever; cough; sore throat; runny or stuffy nose; muscle/body aches; headaches; fatigue; sometimes vomiting and diarrhea  Transmission: person-to-person via droplets
Tuberculosis		Symptoms: A bad cough that lasts 3 weeks or longer; Pain in the chest; Coughing up blood or sputum (mucus from deep inside the lungs)  Transmission: person-to-person via droplets
Varicella(chicken pox)	Yes	Symptoms: fever; tiredness; loss of appetite; headache; itchy, fluid-filled blisters  Transmission: touching or breathing in the virus particles that come from the blisters

#### **Definitions**

**Case** – Describes the disease under investigation. Also describes a person in a population who is identified as having the disease.

**Confirmed Case** – Typical clinical features of the illness and either a lab test confirming the presence or an epidemiological link to a lab-confirmed case.

**Coronavirus (COVID-19)** – A novel virus of the family Coronaviridae that is composed of single-stranded RNA viruses that have a lipid envelope studded with club-shaped projections, infect birds and many mammals including humans, and was first identified during an investigation into an outbreak in Wuhan, China in 2019.

**Direct Transmission** – Infectious disease is transferred from a reservoir to a susceptible host by direct contact or droplet spread (kissing, skin-to-skin contact, sneezing). Droplet spread is the primary mode of transmission for influenza.

**Endemic –** Constant presence and/or usual prevalence of a disease or infectious agent in a population within a geographic area.

**Epidemic –** Increase, often sudden, in the number of cases of a disease above what is normally expected in that population in that area for a given period of time and may result from:

- Recent increase in amount of virulence of the agent
- Recent introduction of the agent into a setting where it has not been before
- Enhanced mode of transmission so that more susceptible persons are exposed
- Change in the susceptibility of the host response to the agent
- Factors that increase host exposure or involve introduction through new portals of entry

**Incubation Period –** The time from the moment of exposure to an infectious agent until signs and symptoms appear (varies by each disease). To determine the most likely period of exposure for an outbreak knowing the average incubation period for the disease and the range of incubation periods is important (E. coli average incubation is 3-4 days with a range of 2-10 days).

**Indirect Transmission –** Suspended air particles, vectors, or vehicles carry the infectious disease from a reservoir to a susceptible host through airborne transmission (Legionnaires' disease, TB, measles).

**Infectious Period –** The time during which an infectious agent may be transferred directly or indirectly from an infected person to another person, from an infected animal to people, or from an infected person to animals. Also called "period of communicability."

**Isolation –** The physical separation of a person suffering from an infectious or contagious disease from others in a community.

**Mode of Transmission –** Method by which the disease transfers from the reservoir (originating source) to the host (susceptible person). Classified as direct or indirect.

**Outbreak** – Increase, often sudden, in the number of cases of a disease above what is normally expected in that population in a limited geographic area for a given period of time (such as a university). Localized epidemic.

**Pandemic –** The global outbreak of a highly infectious disease in humans in numbers clearly in excess of normal caused by a new pathogen or emergence of an altered old pathogen capable of sustaining widespread disease in a region of the world or worldwide.

**Pandemic Flu** – A virulent human flu that causes a global outbreak, or pandemic, of serious illness. Because there is little natural immunity, the disease can spread easily from person-to-person.

**Quarantine –** The physical separation of healthy people who have been exposed to an infectious disease-for a period of time-from those who have not been exposed.

**Social Distancing –** A disease prevention strategy in which a community imposes limits on social (face-to-face) interaction to reduce exposure to and transmission of a disease. These limitations could include, but are not limited to, school and work closures, cancellation of public gatherings, and closure or limited mass transportation.

**Transmissibility** – Ability to easily spread from human-to-human.

**Travel Advisory** – When there is a recommendation against non-essential travel to a geographic area where an outbreak of a disease is occurring.

**Travel Alert –** Where an outbreak of a disease is occurring in a geographic area and there is no recommendation against non-essential travel to the area, although recommendations regarding personal health protection in such settings are available.

**Virulence –** The capacity of a microorganism to cause disease.

# Legal Authority

In order to institute and enforce non-pharmaceutical interventions, the public health agency must have legal authority. Legal authority within Texas is primarily wielded by the local public health agency. The State of Texas also has authority, but typically defers to the locals. Additionally, federal agencies have legal authority derived from a variety of statutes, regulations and executive orders.

#### <u>State</u>

HS § 81 Communicable Diseases.

Sec. 81.002 The state has a duty to protect the public health. Each person shall act responsibly to prevent and control communicable disease.

Sec. 81.083 APPLICATION OF CONTROL MEASURES TO INDIVIDUAL. (a) Any person, including a physician, who examines or treats an individual who has a communicable disease shall instruct the individual about:

- (1) measures for preventing reinfection and spread of the disease; and
- (2) the necessity for treatment until the individual is cured or free from the infection.
- (b) If the department or a health authority has reasonable cause to believe that an individual is ill with, has been exposed to, or is the carrier of a communicable disease, the department or health authority may order the individual, or the individual's parent, legal guardian, or managing conservator if the individual is a minor, to implement control measures that are reasonable and necessary to prevent the introduction, transmission, and spread of the disease in this state.

#### **Federal**

42 CFR § 71.20 Public health prevention measures to detect communicable disease.

- (a) The Director [Director, CDC, Public Health Services, Department of Health and Human Services, or their authorized representative] may conduct public health prevention measures, at U.S. ports of entry or other locations, through non-invasive procedures as defined in section 71.1 to detect the potential presence of communicable diseases.
- (b) As part of the public health prevention measures, the Director [Director, CDC, Public Health Services, Department of Health and Human Services, or their authorized representative] may require individuals to provide contact information such as U.S. and foreign addresses, telephone numbers, email addresses, and other contact information, as well as information concerning their intended destination, health status, known or possible exposure history, and travel history.

#### 42 CFR 71.21 Report of death or illness.

(b) The commander of an aircraft destined for a U.S. airport shall report immediately to the quarantine station at or nearest the airport at which the aircraft will arrive, the occurrence, on board, of any death or ill person among passengers or crew.

42 CFR § 70.11 Report of death or illness onboard aircraft operated by an airline.

(a) The pilot in command of an aircraft operated by an airline who is conducting a commercial passenger flight in interstate traffic under a regular schedule shall report as soon as practicable to the Director [Director, CDC, Public Health Services, Department of Health and Human Services, or their authorized representative] the occurrence onboard of any deaths or the presence of ill persons among passengers or crew and take such measures as the Director may direct to prevent the potential spread of the communicable disease, provided that such measures do not affect the airworthiness of the aircraft or the safety of flight operations.

#### 21 CFR § 1240.45 Report of disease.

The master of any vessel or person in charge of any conveyance engaged in interstate traffic, on which a case or suspected case of a communicable disease develops shall, as soon as practicable, notify the local health authority at the next port of call, station, or stop, and shall take such measures to prevent the spread of the disease as the local health authority directs.