Hidalgo County

Appendix 9: Epidemiology and Laboratory

April 2023

– This Page Left Intentionally Blank –

Table of Contents

Record of Change

When changes are made to Public Health & Medical Services Plan, Appendix 9: Epidemiology and Laboratory, Hidalgo County Health & Human Services Department will record the changes to this document using the record of changes table below.

Date of Change	Location of Change	Description of Change	Changed by:
3/31/2023	All	Updated plan format.	Brandy Martinez
4/3/2023	All	Revised plan details and information.	Diana Cortes

– This Page Left Intentionally Blank –

Approval and Implementation

Appendix 9: Epidemiology and Laboratory

This appendix is hereby approved for implementation and supersedes all previous editions.

_____ _____

Eduardo Olivarez — Date

Director, Health & Human Services

_____ _____

Ricardo Saldaña — Date

Emergency Management Coordinator

– This Page Left Intentionally Blank –

Authority

The Hidalgo County Commissioner's Court has the authority to approve and implement the Public Health & Medical Services Plan. The Public Health & Medical Services Plan includes 12 appendices. The County Commissioner's Court approved the Public Health & Medical Services Plan on _____, 2023. This plan aligns with the County's Emergency Basic Plan, ESF-8: Public Health that was approved by the County Commissioner's Court on September 7, 2021.

Purpose

The purpose of the Public Health & Medical Services Plan, Appendix 9: Epidemiology and Laboratory is to provide standardized guidance in the response to the onset and spread of an infectious/communicable disease (intentional or natural) within Hidalgo County. 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 infectious disease investigations and outbreaks that may arise. 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.

Explanation of Terms

Acronyms

CCDS	Clinical Care Director of Services
CDC	Centers for Disease Control
DOT	Department of Transportation
DSHS	Department of State Health Services
EAIDB	Emerging and Acute Infectious Disease Branch
EAIDG	Emerging and Acute Infectious Disease Guidelines
EOC	Emergency Operations Center
HAZMAT	Hazardous Materials
HCHHSD	Hidalgo County Health and Human Services Department

ICE	Immigration and Customs Enforcement
MSDS	Material Safety Data Sheet
NEDSS	National Electronic Disease Surveillance System
LRN	Laboratory Response Network
PHEP	Public Health Emergency Preparedness Division
STEC	Shiga-Toxin Producing E. coli
SDOs	Standing Delegation Orders
STAR	State of Texas Assistance Request
UN	United Nations
USPS	United States Postal Service
VAERS	Vaccine Adverse Event Reporting System

Definitions

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

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 (i.e., a university). Localized epidemic.

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.

Situation & Assumptions

Situation

1. An emergency can result when there is enough morbidity and mortality to disrupt the essential operations of a community and when the communicable disease:
    a. is highly virulent (harmful),
    b. is readily transmissible from person-to-person, and
    c. has high clinical severity (causing sudden, serious, illness and death in a large number of people).
2. 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.

Assumptions

1. Emerging and re-emerging human infectious diseases can occur at any time.
2. Some infectious diseases cause significant morbidity and mortality and require an immediate response to prevent further spread of disease.
3. A communicable disease incident might exhaust local health jurisdiction (LHJ) medical resources.
4. Healthcare facilities might become overwhelmed with ill patients and the “worried well”.
5. Assistance in maintaining the continuity of health and medical services will be required.
6. Disruption in communications and transportation might adversely affect availability of pharmaceutical and medical equipment supplies.
7. Sheltering of affected persons because of disruptions in public services might increase risk for communicable disease transmissibility.

Concept of Operations

Relationships and Reporting Procedures

All physicians, laboratories, and hospitals are required by Texas law to report over 70 communicable diseases and environmental conditions. Physicians are also required by law to report suspected outbreaks. By virtue of the Medical Examiner’s role, if an unusual death or an unusual cluster of deaths occur, they will notify the appropriate authorities at the HCHHSD, and assist in the investigation to determine whether an event of public health significance has occurred.

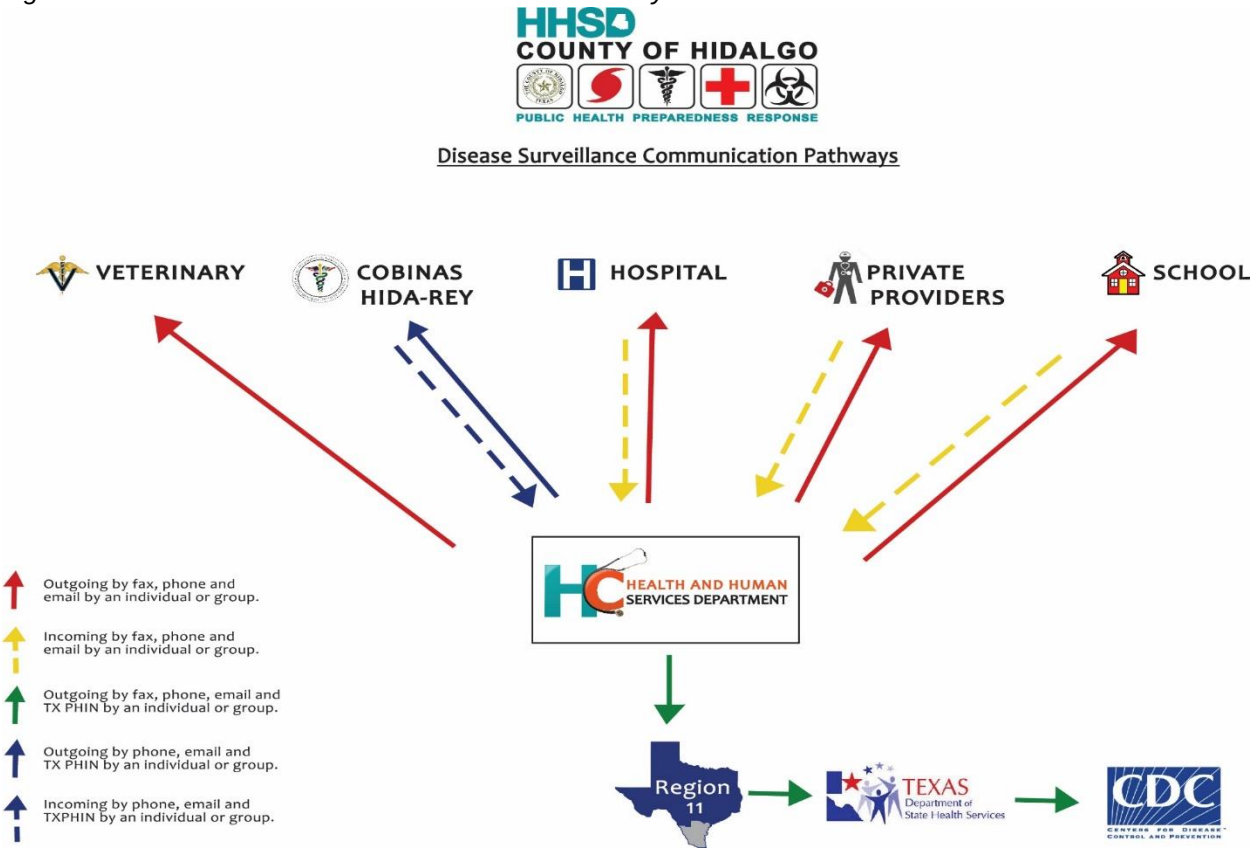
The HCHHSD staff documents and/or investigates each reported case. Data are tracked to recognize unusual clusters or increases in the number of illnesses. Included on this list of reportable conditions are many bio-terrorist agents such as anthrax and smallpox. HCHHSD receives information regarding confirmed cases through active surveillance or directly from providers – physicians, hospitals, schools, laboratories, CDC, local detention/prison facilities and systems, Immigration and Customs Enforcement (ICE)/Border Patrol, and local institutions for higher learning. Providers may be reporting suspected or probable cases as well as confirmed cases. Checking criteria on the case definitions for surveillance is required when entering a case of reportable disease to keep cases out of the system that do not meet the case definition.

Providers may be reporting suspected, probable, and confirmed cases. Cases must meet the case definition by the Texas DSHS Epidemiology Case Criteria Guide when entering cases into the state National Electronic Disease Surveillance System (NEDSS). This electronic system is used to track and monitor known cases for follow-up. Therefore, public health staff members will enter this demographic and disease data

into NEDSS to enable short or long term tracking and monitoring of patients' medical history.

Please see Figure 1: Disease Surveillance Communication Pathways below for a visual representation of the communication between CDC, DSHS, HCHHSD, and reporting providers (i.e., private providers, hospitals, school nurses.

Figure 1: Disease Surveillance Communication Pathways



Administration of Disease/Notifiable Condition Reporting

Hidalgo County's Medical Health Authority or designee has supervisory authority and control over the administration of communicable disease reporting in the health authority's jurisdiction unless specifically preempted by DSHS. This includes the legal exp to enact investigation and intervention of such identified communicable and notifiable conditions.

Designated staff will have these responsibilities, as related to ESF 8: Public Health and Medical Services, to investigate, interview, educate, recommend, assess situations, provide prophylaxis, or any other appropriate intervention measure. The function of HCHHSD Epidemiology and Surveillance Division can be divided into three major components: Passive Component, Sentinel Component, and an Outbreaks Component.

Passive Component

In this section, reports are received from healthcare providers, schools, and other relevant public health partners and investigated by the Epidemiology and Surveillance

Division. The process for investigation involves the division and assignment of cases following planning guidelines and protocols as outlined in the figures below.

There are three (3) main components of Passive Surveillance:

a. Planning
b. Investigation of cases
c. Trend analysis

Epidemiologists refer to the Electronic Surveillance Planning Guide available on the HCHHSD Share drive. Investigation of cases is done following protocols from the Emerging and Acute Infectious Disease Guidelines provided by Texas DSHS. The trend analysis is conducted by Epidemiologists on a bi-weekly and monthly basis using software such as Epi-Info, Excel, NEDSS, and SPSS. Please see Figure 2: Steps to Surveillance Planning and Figure 3: Electronic Surveillance Planning Checklist below for more information.

Figure 2. Steps to Surveillance Planning

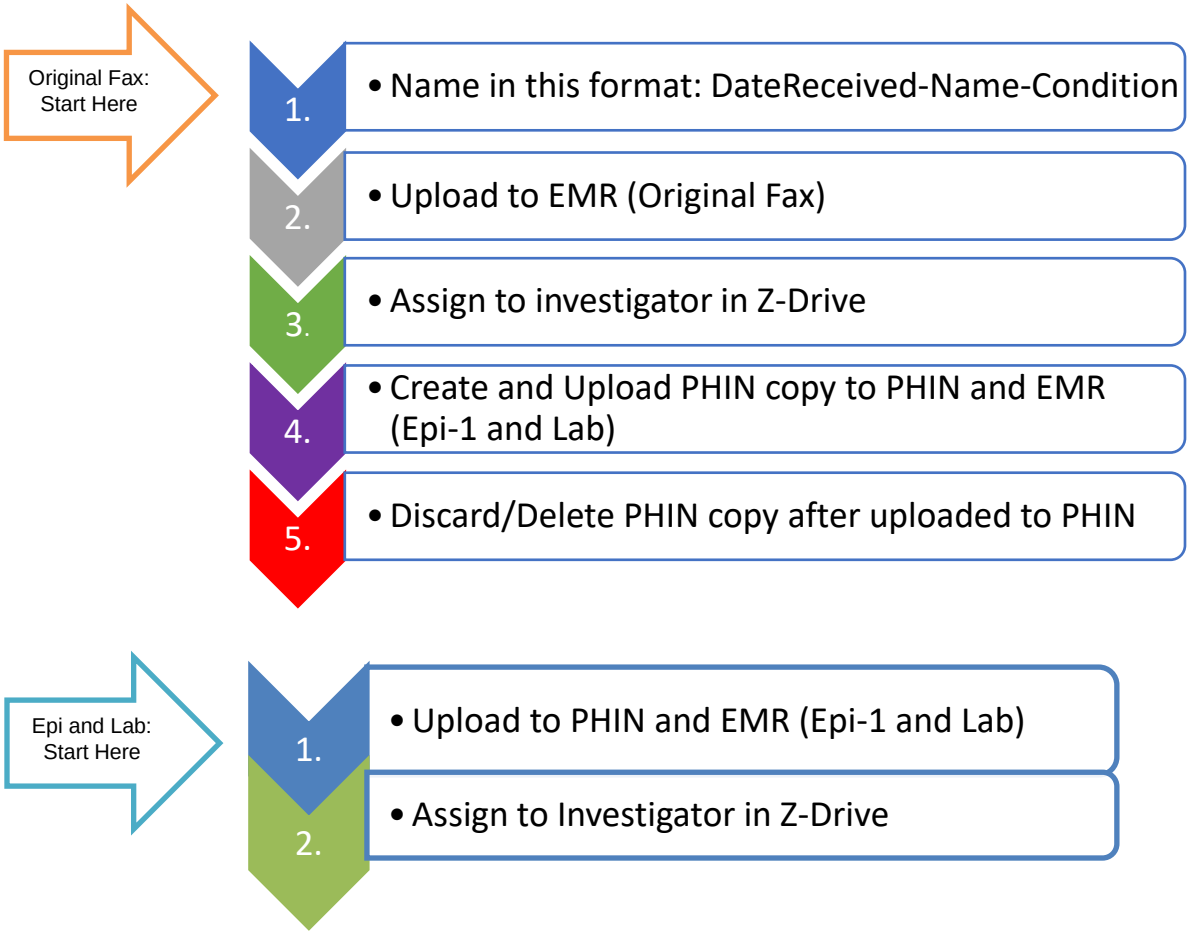
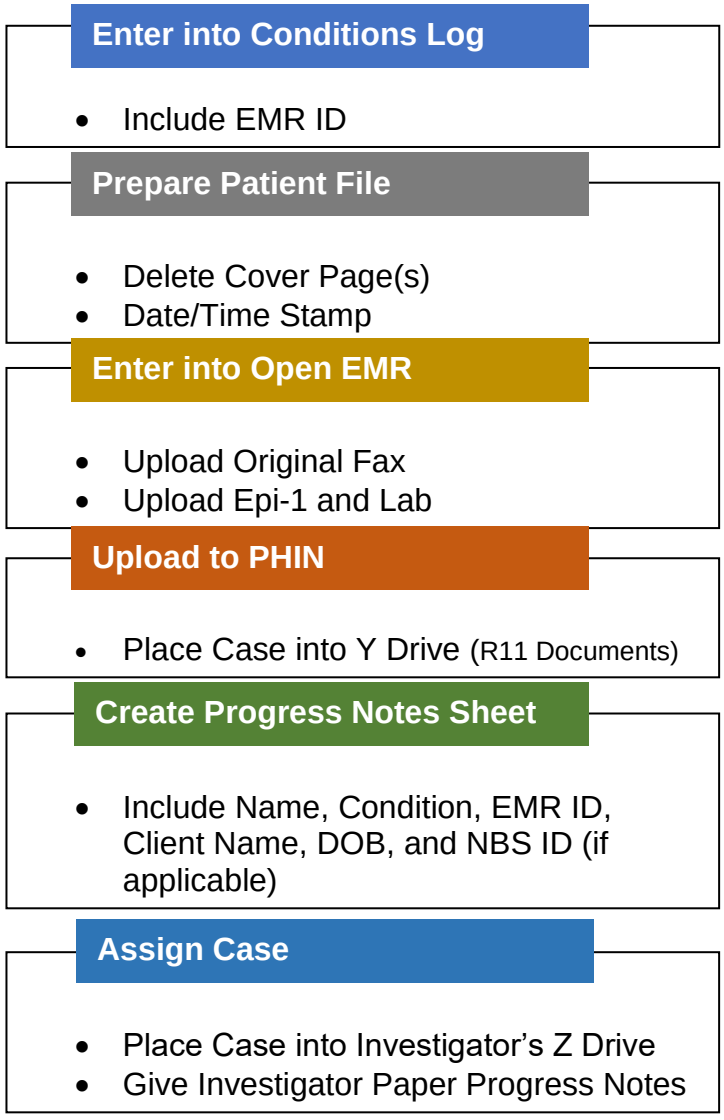


Figure 3. Electronic Surveillance Planning Checklist



Sentinel Component

The Sentinel Component involves surveillance and case investigations. If an etiology is known and is a reportable condition, the case should be investigated according to the etiology. Epidemiologists use the Texas Notifiable Conditions List and the Emergency and Acute Infectious Disease Guidelines for protocols and procedures regarding special situations and reporting.

Outbreaks Component

When an outbreak is suspected, HCHHSD Epidemiologists notify the DSHS Emerging and Acute Infectious Disease Branch (EAIDB).

HCHHSD will:

a. Interview all cases suspected of being part of the outbreak or cluster.

b. Request medical records for any case in your jurisdiction that died, was too ill to be interviewed, or for whom there are no appropriate surrogates to interview.
c. Prepare a line list of cases in the jurisdiction. Minimal information needed for the line list might include patient name or other identifier, DSHS or laboratory specimen identification number, specimen source, date of specimen collection, date of birth, country of residence, date of onset (if known), symptoms, underlying conditions, treatments and outcome of case, and risky foods eaten, foods eaten leading up to illness, or other risky exposures, such as animal contact and travel, reported by the case or surrogate.
d. If the outbreak was reported in association with an apparent common local event (i.e., party, conference, rodeo), a restaurant/caterer/home, or other possible local exposure (i.e., pet store, camp), contact hospitals in the jurisdiction to alert them to the possibility of additional cases.
e. Work with any implicated facilities to ensure staff and students/residents/volunteers get hand hygiene education and review hygiene and sanitary practices currently in place including:
    a. Policies on, and adherence to, hand hygiene.
    b. Storage and preparation of food.
    c. Procedures for changing diapers and toilet training.
    d. Procedures for environmental cleaning.
f. Recommend that anyone displaying symptoms seeks medical attention from a healthcare provider.
g. Restrict individuals from handling food, engaging in child-care, healthcare work, or attending child-care, if they are symptomatic.
h. Enter outbreak into NORS at the conclusion of the outbreak investigation.

HCHHSD works with a variety of healthcare providers including laboratories, hospitals, school nurses, and private physician offices to obtain case reports on infectious and non-infectious diseases and conditions. A master contact list has been created and contains provider contact information of Hidalgo County clinics, hospitals, laboratories, school districts, and other reporting providers. The master contact list is reviewed and updated quarterly to ensure up-to-date information. Case report forms vary by condition, as disease control efforts are driven by modes of transmission and other factors.

The Lead Epidemiologist in coordination with the Medical Health Authority will determine if emergency response actions are required. In a disaster, the response actions of surveillance is to identify potential threats to the public that require immediate disease control actions, the dissemination of information to prevent or control disease or injury, the provision of situational awareness data to assist in planning for future response, and the dissemination of findings to the preparedness community to advance disaster science.

Response actions will be documented by the PHEP Planner and other support staff. This includes the development of an IAP and other supporting documents. Outbreak and case information are entered into the National Electronic Data Surveillance System (NEDSS); Epidemiologists also use the Texas Syndromic Surveillance system.

The statewide syndromic surveillance system (Texas Syndromic Surveillance or TxS2) helps identify emerging health threats and informs local decision-making while protecting

individuals' privacy. Hospital partners are able to share data electronically with HCHHSD, who will use the data to better understand and respond to a the community's health issues. Hospitals will be able to use an advanced set of analytic tools to better understand their population.

Administration of Control Measures

Hidalgo County's Health Authority or the health authority's designee has supervisory authority and control over the administration of communicable disease control measures in the health authority's jurisdiction unless specifically preempted by DSHS. This includes the legal authority collecting and testing for pathogen identification. Laboratory response actions will be under the authority of the Medical Health Authority. Lab orders will be made under the Medical Health Authority.

When a patient requires isolation, an issue for Control Measures is issued to the patient with instructions for compliance. If a patient does not comply, the Medical Health Authority is advised and procedures for initiating Court-Ordered Management of Persons with Communicable Diseases are implemented.

These response actions will occur under two types of operations: daily operations and emergency response. During daily operations, specimen collection will occur within the most optimal time frame based on the laboratory testing method. This includes closer symptom onset specimen collection for DNA/RNA/PCR testing methods and delayed specimen collection for antibody development and presence when testing for IgM/IgG Serology.

Examples of response actions include specimen collection, and package-shipping - transport. Coordination between the appropriate divisions will take place based on pathogen type. For example, food and water-borne specimen collection will be coordinated with the Environmental Health Division, blood-borne serology and other phlebotomy-associated specimens with clinical staff, vaccine-preventable diseases with Immunizations staff. All appropriate forms (i.e., G2-A, G2-B, G2-V, F-40B, Supplemental) will be filled out completely to ensure clear communication with receiving laboratory staff. Throughout the testing process, communication will continue with appropriate parties.

Staff will have roles and responsibilities, based on their response position. These roles and responsibilities will be related to those identified in ESF 8: Public Health and Medical Services. Only those under the Medical Health Authority's standing delegation orders (SDOs) will be allowed to collect specimens (i.e., clinical staff if phlebotomy is occurring). Only those certified under Texas DSHS to package/ship/transport will be allowed to do such activities. These actions will occur as determined as needed. Examples of the staff roles and responsibilities are as follows:

1. Clinical and Nursing staff can perform under the Medical Health Authority's SDOs phlebotomy collection activities. PHEP and Epi/Surveillance staff, if certified, can package, ship, and transport biological agents. These practices will be followed

through appropriate biological agent (i.e., A, B, C) protocols. Other types of specimens (i.e., urine and stool) can be collected by either of the staff identified above, pending a physician's lab order.

2. Response actions will be documented by the PHEP Planner and other support staff. This includes the development of an IAP and other supporting documents (i.e., G2-A, G2-B, G2-V, F-40B, Supplemental).

Surveillance and Epidemiological Investigation Procedures

The core functions in surveillance and epidemiological outbreak investigation procedures include Case Detection and the regular monitoring of electronic surveillance systems such as NEDSS and TxS2.

Case Detection

When an unusual event occurs, determine if the cases or syndromes are actually related and if so, determine if the cases exceed the number historically seen for that time of year. In addition, cases are to be reported by medical providers.

a. Cases are to be reported as per the
    i. Texas Notifiable Conditions List
b. Determine if cases are related
    i. As per Epidemiological Case Criteria Guide
c. Obtain additional information
    i. Using Hidalgo County Reporting Form
d. Case reports are to be faxed to HCHHSD at (956) 318-2431

Chemical or Radiological Hazards

In the event of a chemical or radiological hazard, the Lead Epidemiologist in coordination with the HCHHSD Director and the Medical Health Authority will commence disaster or emergency response actions. If an event exceeds the ordinary operating capacity of Hidalgo County, local, regional, and/or state agencies or resources may be required to provide appropriate response actions. Many of the chemicals of concern for terrorism preparedness can be arranged under the following categories:

a. Military agents
b. Pulmonary (lung damaging) agents
c. Irritants
d. Vomiting agents
e. Incapacitating agents

Due to the number of chemicals of possible concern, it is impossible to provide a comprehensive list in a document of this size.

The main differences between industrial chemical accidents and chemical terrorism may be intent and magnitude. Efforts to enhance hazardous materials (HAZMAT) preparedness and response activities for chemical spills will better prepare to respond to

terrorism events. Likewise, chemical terrorism preparedness activities should collaterally benefit HCHHSD's ability to effectively respond to HAZMAT emergencies.

A chemical terrorism event is likely to be discovered in one of two ways: the local discovery of the environmental release or exposure incident or the diagnosis of the resultant patient cases. Emergency responders may provide critical on-scene assessments and patient examinations that constitute an informal passive surveillance system and allow for rapid intervention.

In a chemical event, surveillance is most useful for tracking exposed individuals for long-term physiologic difficulties, chronic illnesses, cancers, etc. Effective post-event surveillance will require the establishment of a registry or database that includes the names and contact information for exposed people. To be most effective, this registry includes at least the following information:

a. Name
b. Address and telephone number
c. Age
d. Where registrant was located during the events
e. Where registrant can be contacted (if other than home)
f. Symptoms (if any) and time of onset
g. Medical treatment received (if information is available)

HCHHSD in coordination with DSHS is responsible for the provision and coordination of routine and emergency public health laboratory services. Laboratory capabilities allow the state to maintain awareness of ongoing disease outbreaks, in addition to the identification of the onset, progression and end of public health emergencies that involve disease organisms or chemical agents.

Public health laboratory capabilities in Texas are enhanced by the inclusion of ten Texas laboratories in the national Laboratory Response Network (LRN). The LRN is an integrated network of state and local public health, federal, military and international laboratories that can respond to bioterrorism, chemical terrorism and other public health emergencies.

Through the LRN, rapid laboratory testing capacity can be quickly increased during a public health emergency. This helps to ensure that timely notification and secure messaging is possible.

HCHHSD Surveillance Division has several response activities and procedures depending upon the specific outbreak, such as those conditions under the immunizations, infectious disease, and zoonosis program areas. These response activities include stakeholder agency coordination (i.e., state partners, school districts, hospitals, detention facilities, and nursing homes), following response timelines, conducting information sharing, enacting prevention and control measures, and other response triggers as recommended in the Emerging and Acute Infectious Disease Guidelines (EAIDG).

Additionally, HCHHSD follows its Epidemiology and Surveillance Coordination Plan to determine triggers for deploying response activities during outbreaks and exposure investigations. These control activities are based on pathogen types and outbreak magnitude.

Reporting

Reporting (alerting health care providers about identification and reporting suspected cases) is done by telephone (956) 318-2426, by fax (956) 318-2431, or in person.

Reporting Non-Communicable Health Threats

All other non-communicable health threats (i.e., radiological, chemical, or nuclear) are to be reported via telephone, at (956) 318-2426. If a public health threat is an after-hours emergency, call the 24/7/365 line at (956) 318-2432. The Epidemiology Response Team and Public Health Emergency Preparedness staff will respond, as deemed appropriate to these events, and coordinate medical response outcomes.

After-Hours Reporting

In the event of an immediate public health threat, providers and stakeholders can report incidents to the health department by calling the 27/7/365 line at (956) 318-2432. This system will record the voicemail and notify the public health staff members on call. The public health staff members on call will report the call to the HCHHSD Director. An epidemiologist, along with the HCHHSD Director and PHEP Coordinator, will determine whether additional steps need to be taken. HCHHSD staff may be required so that immediate response may occur according to established protocols.

Expansion of Public Health Surveillance

HCHHSD Surveillance system includes the capacity for collecting and analyzing data, as well as the means to disseminate the data to individuals involved in the prevention and control activities. The manner in which various public health agencies will communicate among themselves during an actual event should be determined before a biological threat or attack actually occurs.

This surveillance system is to detect a rise in the incidence of a disease to provide sufficient time for the health care system to limit the impact of the disease on the public by initiating early treatment and prevention to decrease disease and mortality, such as in the Hidalgo County Syndromic Surveillance System RODS/ESSENCE. Furthermore, daily operations of surveillance activities encompass running NEDSS data reports. This is accomplished by accessing NEDSS, going to ‘Reports,’ selecting the appropriate report for the variables warranted and applying necessary query variable selection. Once the report is generated, the epidemiologist can then assess case trends and areas of concern. These reports are to be named as *Type of Report – Date.* All reports generated will be saved to the Y: Network Drive under the folder ‘NEDSS Reports.’ For additional information on patient and data management, refer to Attachment 1: Electronic Investigation Guide 2022.

Some health indicators found in surveillance systems may include the following:

a. The number of upper respiratory disease cases seen in emergency departments.
b. The number of ambulances runs within an allotted period.
c. The number of antibiotics or over-the-counter drugs sold at pharmacies (i.e., cough/cold, flu, sinus, antihistamines, decongestions).
d. Acute increase of respiratory or neurological disorders resulting from non-communicable threats (i.e., radiological, chemical, nuclear exposures).

The first confirmed case of an epidemic is referred to as the "index case." Once the case is identified, there is a great need to identify new cases, unreported cases, and contacts. The search will include interviewing family members, associates, co-workers, and other possible contacts of the index case. The significance of interviewing co-workers and associates of the index case is to find potential sources of infection. For example, if interviewers of co-workers of the index case prove to be negative (no one else at work affected), then investigators may be able to eliminate the workplace as the source of the disease. If interviewers of the associates of the index case shared an experience such as eating at the same place or attending the same organized event, and the associates have signs of the disease as well, the focus of the investigation may be placed on the common event.

Hospitals, ambulatory clinics, and private health practitioners in the area affected should be contacted in order to determine if anyone with similar illness is currently, or was recently, in the hospital or received medical treatment for a similar illness. This step is critical since early recognition of patterns of illness by health practitioners is the most effective step in identifying and limiting an outbreak.

A listing of surveillance partners (i.e., hospitals, clinics, private practices, medical examiners, laboratories, county/local health departments, and pharmacists) should be maintained and updated regularly.

Investigation and Confirmation of the Diagnosis

Public health staff will use the Texas DSHS Epidemiology Case Criteria Guide to determine a case's status (i.e., Confirmed, Probable, Suspect, Not a Case). Epidemiology and Surveillance staff will be tasked with the control and prevention of cases. This includes investigating case reports and providing education to patients and contacts for public health intervention.

HCHHSD Epidemiologists do not diagnose cases, but use the Criteria Guide to determine the case definition and outbreak case hypothesis. The Medical Health Authority would make a diagnosis only in a special situation regarding their own case. Until the public health staff obtains the results from the confirmatory diagnostic test, the diagnosis would be considered unconfirmed or suspected.

HCHHSD Epidemiologists coordinate with DSHS Region 11 to take samples received from patients and ship them to the DSHS Lab or the Harlingen LRN Lab. Once the results are received, clients and partners are updated in a timely fashion. In support of DSHS case definitions for epidemiological investigations, HCHHSD will follow DSHS recommendations on epi-linked clusters and outbreaks, by program area. This includes identifying respiratory and vaccine-preventable disease outbreaks in groups of three or more, zoonotic outbreaks of common geographical origin and food/water-borne diseases of comparable sources. The surveillance planners and/or epidemiologists will be tasked with preparing daily and final written reports of outbreaks, such as case trend analysis, report counts, and current cluster/outbreak statuses.

The HCHHSD Electronic Surveillance Guide will be used for the gathering, collection, and management of data during daily operations and outbreaks events. This document outlines the mechanisms for receiving data, records, and supporting epidemiological information. In this document it is described how to process these records for patient investigation. This includes the utilization of network drives, the fax server, Open EMR, the Public Health Information Network (PHIN), and the National Electronic Disease Surveillance System (NEDSS).

The definitive diagnostic test of a disease agent in a bioterrorism incident is often referred to as a “gold standard” test and is performed by a designated, certified laboratory. The term “gold standard” has varying interpretations and acceptance because of reliability issues and accuracy due to an implication of it being 100% definitive. Most senior health officials will wait for the definitive results prior to confirming the diagnosis if biological terrorism is suspected. The lack of reliability and accuracy of some lab vendors’ field assay tests make the use of an approved laboratory test critical. A field assay test combined with the clinical symptoms might suggest a particular biological agent is present, but the field assay alone cannot determine with absolute certainty that a particular agent is or is not present.

The time necessary for a confirmatory diagnosis can range from hours to days depending upon the suspected organism and the types of tests necessary. All states require some reporting of specific diseases, but there is not a standard for all states. Reporting is required by the health care provider, the supporting infectious disease laboratory, hospitals, or public health departments.

Diagnosing the potential disease agent begins with medical personnel obtaining medical histories and physical examinations of the affected individuals. Medical history is the notation of medical conditions during a physical examination and can include information on recent events, symptoms, travel, or any unusual circumstances that may have contributed to the illness. Based on this information, the physician or public health official may request clinically appropriate laboratory tests to aid in the diagnosis. Health care providers are likely to make an initial diagnosis and initiate treatment before test results are available since early treatment increases the probability that the patient will recover from the illness.

It is at this stage in an epidemiologic investigation that a case definition is refined, sources for cases scoured, additional cases identified, and the initial descriptive epidemiology is worked out. These interviews require extensive time and personnel. Interviewees may be contacted multiple times as investigators collect additional information. Information collected by public health investigators can include the following:

a. Demographic data
b. Clinical data (i.e., signs/symptoms, duration, onset)
c. Exposure history (i.e., travel, meals, and significant events; all based on the type of illness suspected)
d. Case contacts and knowledge of other cases

In addition to interviewing personal contacts of the index case and other cases, public health staff will attempt to identify all cases of the disease by using a set of medical criteria. For example, public health staff may solicit media assistance to notify everyone with a certain type of skin rash and fever to report to their health practitioner for an examination.

Laboratory Facilities

Hidalgo County coordinates with Texas DSHS for the testing of specimens. Hidalgo County packages and transports specimens for further testing and for pathogen identification.

Collection of Specimen

Diseases are often initially diagnosed by clinical evidence. This process can be imprecise based on the nature of the illness and definitive diagnosis usually requires laboratory analysis of medically relevant samples. The materials that typically are collected to support an epidemiological investigation include food, water, and biological samples (i.e., tissue, blood, sputum). The collection of biological samples can be complicated, requiring specialized training and equipment. Some tests require living intact materials, necessitating transport of materials on ice and/or extremely rapid delivery. Additionally, not all laboratories can conduct the necessary analyses. Therefore, transport out of state may be required.

Database Management

For laboratory specimens packaged and transported through HCHHSD, database management protocols are as follows:

1. Enter the following variables into the Hidalgo County Epi/Surveillance Specimen Log at time of processing:
    a. Date specimen collected, specimen type, shipping temperature, patient initials, receiving facility, transportation method, person receiving package, and other documentation required.
2. Scan all associated documents into the Y: Epi Drive in the ‘Lab Documents’ folder. File will be named in the following format: Date-Patient Initials-Condition.

Specimen Packaging, Shipping, and Transport

Hidalgo County follows Texas DSHS guidance and protocols for specimen packaging, shipping and transport, as identified below. All transportation of specimens and samples to a confirmatory reference lab 24/7/365 will be communicated directly with the receiving laboratory. In addition, specific collection, packaging, and transportation considerations will be communicated and protocols followed (i.e., temperature, packaging material, container type, specimen quantity/amount, handling instructions). Transportation will take place with either a contacted courier or by HCHHSD staff, along with appropriate documentation.

Public Health Laboratory Testing

The following labs have been identified as confirmatory reference labs to receive specimens from Hidalgo County 24/7/365, as a part of the Laboratory Response Network (LRN). These labs will be contacted by phone prior to specimen collection for approval and will be called and emailed once specimen has been shipped to their facility. This includes any special directions, such as priority status or need to be forwarded to CDC.

State and Regional Laboratories

DSHS/South Texas Laboratory

1301 S. Rangerville Road

Harlingen, TX 78552

(956) 364-8748

(956) 412-8794

Aurora Martinez, M.T. (ASCP), B.S.

Laboratory Branch Manager

Services include Clinical Laboratory, Mycobacteriology, TB, Serology, Microbiology, and Emergency Preparedness Pathogens.

Texas DSHS Laboratory Services

MC 1947

PO Box 149347 Austin, TX 78714-9347

1100 W. 49th Street

Austin, TX 78756-3199

Phone: (512) 776-7318

Fax: (512) 776-7294

Services include Clinical Laboratory, Mycobacteriology, TB, Arboviral Surveillance, Serology, Microbiology, Viral Isolation and Emergency Preparedness Pathogens.

Shipping Overview

Submitters are responsible for shipping specimens in conformity with all safety and labeling regulations. Be aware that many commercial carriers no longer accept specimens. When using any carrier, including the bus service or the U.S. Postal Service, package specimens to avoid leakage or breakage. All specimen mailing containers supplied by the Laboratory meet current Department of Transportation (DOT) and United States Postal Service (USPS) requirements for the shipment of Biological Substance, Category B. Specimens must be packed in triple containment with sufficient absorbent material enclosed to absorb the entire volume of liquid. The container used *must* meet current DOT and USPS regulations. Local fire/EMS HazMat team will transport any chemical or radiological agents and will assist in ensuring that protocols for the transport of these agents (i.e., MSDS Sheet inclusion and agent shielding) are followed; HCHHSD will serve in a supportive capacity.

Shipment of infectious agents requires specialized training and United Nations (UN)-approved packaging that the Laboratory does not provide.

NOTE: Always exert the maximum protection for the sake of those who handle the parcels and to avoid jeopardizing the system for shipping specimens.

NOTE: The Laboratory policy is: ALL blood specimens in a container will be considered broken if one tube in that container is broken during shipment.

Mailing Containers and Completion of Forms

The Laboratory provides specimen mailing containers and labels to physicians and public health laboratories and water sample containers to any citizen upon request. The containers are the property of the State of Texas and must not be used for any purpose other than the shipment of specimens to the TDSHS laboratory. The mailing containers and labels meet current Department of Transportation (DOT) and United States Postal Service (USPS) regulations for shipping Biological Substance, Category B.

Shipping infectious specimens requires special mailing containers that the Lab does not supply. TDSHS request form must be included with every specimen in the same container.

Forms should be completed as follows:

a. Use **BOLD CAPITAL BLOCK LETTERS** to complete all the information that is requested on the form.
b. If the patient is Medicaid eligible, you **must** provide the Medicaid number.

c. For THSteps (EPSDT) specimens, you **must** provide the Medicaid number.
d. Date of Birth, Date of Collection and test request are required.
e. Unidentified or improperly identified specimens are unsatisfactory and they will not be tested.

The laboratory will test specimens identified by number only; however, the laboratory will not report the results until a patient's name is provided. Good laboratory practice recommends, and our federal license requires, the patient's name on the specimen vial.

The patient's name on the specimen requisition form and the specimen must be the same. If they are not the same, the specimen will **NOT** be tested.

Submitting Specimens through the U.S. Postal System

The requirements for the submission of Biological Substance, Category B through the U.S. Postal Services system are:

a. Definition: “Biological Substance, Category B means any human or animal material, including excreta, secreta, blood and its components, tissue, and tissue fluids being transported for diagnostic or investigational purposes.”
b. Quantity: 50 ml or less per mail piece. Two or more primary receptacles may be included per mail piece.
c. Secondary container (liner): must contain sufficient absorbent materials to absorb the entire contents of primary containers in case of breakage or leakage.
d. Outer mailer: must be properly labeled.
e. Mailing unit must pass current shipping regulations for Biological Substance, Category B.

The Texas Department of State Health Services Laboratory, effective immediately, will only supply mailing containers for Biological Substance; Category B. Use of TDSHS containers will ensure compliance with U.S. Postal and DOT requirements.

The definition of an acceptable triple container is:

a. Primary receptacle: a bottle or tube in which the specimen is collected or held, such as a feces bottle, test tube, or tube (vacutainer) of blood or serum; leak proof and securely sealed; surrounded by absorbent material capable of taking up the entire contents of the primary receptacle(s); held within the secondary container.
b. Secondary container: leak proof, securely sealed; placed within the strong outer mailer; Biohazard sticker affixed.
c. Outer mailer or container constructed of fiberboard or other equivalent material, clearly and durably marked “Biological Substance, Category B.”

Packaging and Labeling Biological Substance, Category B

a. Patient information should not be on outer or secondary containers or lids.
b. Biohazard Label should be on Secondary Container. Biohazard Label SHOULD NOT be on Outer Container.

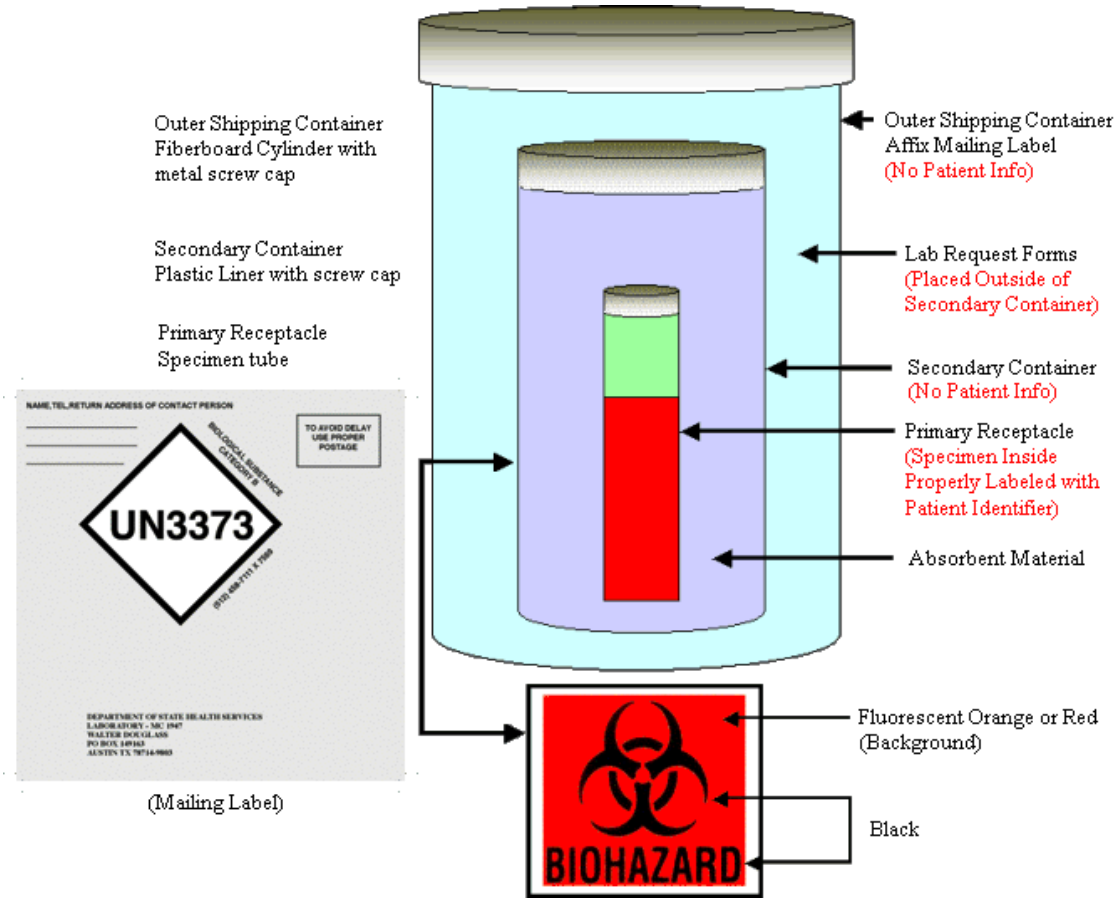
Packaging and Shipping Blood Tubes

Containers are available in three sizes for blood specimens. You may order for: 1 specimen, 4 specimens, and 7 specimens. To ensure the satisfactory receipt and proper testing of your specimens in the DSHS Laboratory, it is necessary to:

a. Label each tube of blood or serum with the name of the patient exactly the way it is written on the laboratory request form.
b. Put absorbent material, such as paper towels, around each tube, sufficient to absorb the entire contents of the tubes, prior to placing the tubes in the secondary plastic liner.
c. Wrap the properly completed laboratory request form(s) [must have the name of patient and a correct return address] around the secondary plastic liner. Place the secondary container in the fiberboard cylinder.
d. Attach the proper mailing label to the outside container before the specimens are mailed.

Please see Figure 4: Specimen Packaging and Shipping below for additional information.

Figure 4: Specimen Packaging and Shipping

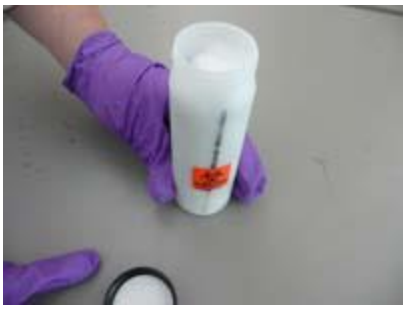


Instructions for Packing Blood Tubes for Shipment

The number of blood tubes broken in transit can be greatly reduced or eliminated by using appropriate packaging and following these simple instructions.

1. Assemble components.
2. Place absorbent into bottom of liner.

3. Wrap tubes in paper towels.
4. Place tubes in liner.



5. Place absorbent on top of tubes and screw on plastic liner cap.
6. Place lab form around the outside of the liner. Place liner in cardboard mailer. (If applicable, insert DSHS Snap-apart Card for Hemoglobin Electrophoresis Testing between the cardboard mailer and liner.)
7. Screw on appropriate, well-fitting metal cap.

Note: Only use mailers approved for shipping Biological Substance; Category B.

Questions on proper packaging and shipment of blood tubes should be directed to the Specimen Acquisition Branch at (512) 776-7598.

Cholesterol, Lipid Profile, and Glucose Packing Instructions

a. Collect blood in a red top tube and allow it to clot completely.
b. Centrifuge the specimen to separate the serum from the clot within 2 hours of collection.
c. Transfer the serum from the red top tube into the transport tube.
d. Label the transport tube with the patient's first and last name, and a secondary identifier, such as Date of Birth, Date of Collection, medical record number, or Medicaid number.
e. Store the labeled transport tube in the freezer (-20 degrees Celsius or lower) until ready to ship.
f. Specimens collected in a gold top or serum separator tube **must** have the serum removed and transferred to the transport tube. Tubes with gel separators are **not** intended to be frozen.

Required Specimen Type for Glucose

a. Collect blood in a red top tube and allow it to clot completely.

b. Centrifuge the specimen to separate the serum from the clot within 2 hours of collection.
c. Transfer the serum from the red top tube into the transport tube.
d. Label the transport tube with the patient's first and last name, and a secondary identifier, such as Date of Birth, Date of Collection, medical record number, or Medicaid number.
e. Store the labeled transport tube in the freezer (-20 degrees Celsius or lower) until ready to ship.
f. Specimens collected in a gold top or serum separator tube **must** have the serum removed and transferred to the transport tube. Tubes with gel separators are **not** intended to be frozen.

General Instructions Cholesterol, Lipid Profile, and Glucose Packing

a. Clearly label each specimen with the patient's first and last name as written on the submission form. Pre-printed patient labels used for specimen identification **must** match the patient's name on the submission form.
b. Submit a submission form for each patient with corresponding specimen tube.
c. Retain a copy of the submission form for your records.
d. Specimens must be triple contained.
e. Batching of specimens for shipment is recommended. Batch specimens for shipping once or twice per week.
f. Specimens **must** be kept frozen until shipped. Ship specimens overnight on dry ice OR with adequate ice packs so that specimens arrive at the DSHS Laboratory cold. Specimens received at room temperature will be unsatisfactory for testing.
g. Do **not** ship cholesterol, lipid profile or glucose specimens on Fridays or prior to a federally observed holiday.
h. For questions about shipment of cholesterol, lipid profile, and glucose specimens, please call 512-776-6236 or toll free 1-888-963-7111, extension 6236.
i. For cholesterol, lipid profile or glucose specimens, prepaid air bills are provided for THSteps specimens only. For all other cholesterol, lipid profile and glucose specimens the provider must pay the shipping costs, using a carrier of their choice.

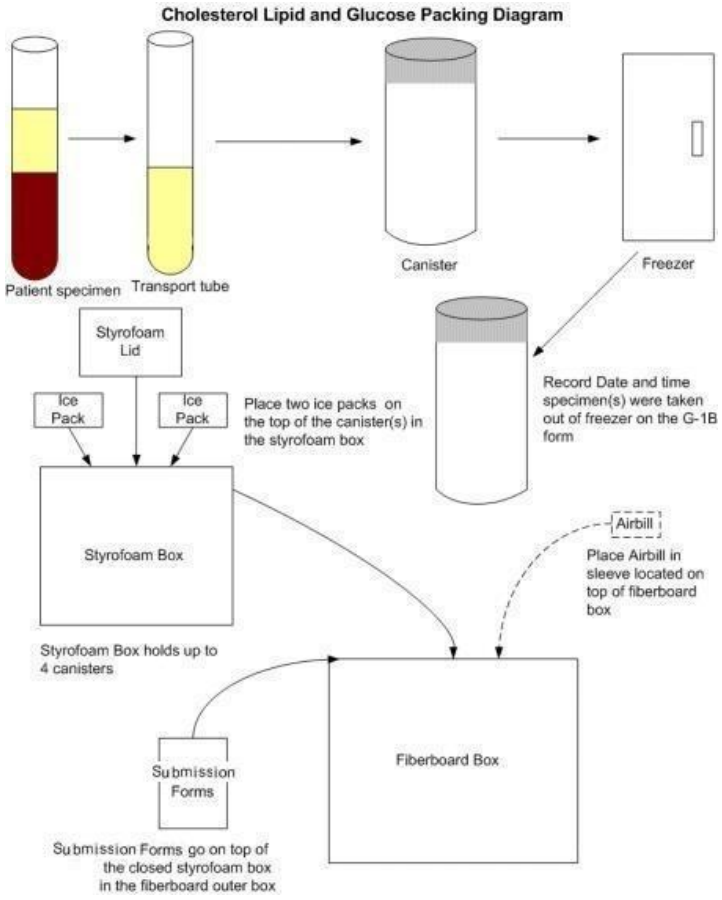
Flow for Collection and Shipping of Cholesterol, Lipid Profile and Glucose

a. Collect specimens for cholesterol, lipid profile, and glucose testing in red top tubes. Allow it to clot completely.
b. Centrifuge specimen and separate serum from clot within 2 hours of collection.
c. Transfer serum into a transport container.
d. Place specimen(s) in canisters. Multiple specimens may be contained inside the canisters. Freeze canister(s) containing specimens immediately.

e. Place up to 4 canisters with frozen specimens in the bottom of the Styrofoam box.
f. Place ice packs or dry ice on top of canisters. If using dry ice, ensure that the Styrofoam box is not airtight!
g. Close the Styrofoam box.
h. Place the Styrofoam box inside the fiberboard box.
i. Before sealing the fiberboard box, record on each submission form for each specimen the date and time removed from the freezer. Circle "freezer" to indicate specimens were removed from the freezer.
j. Place submission forms on top of the Styrofoam box, but inside fiberboard box. Seal fiberboard box.
k. Place an air bill inside the shipping sleeve and attach it to the top of the sealed fiberboard box. Ship specimens overnight.
l. For cholesterol, lipid profile, or glucose specimens, prepaid air bills are provided for THSteps specimens only. For all other cholesterol, lipid profile, and glucose specimens, the provider must pay the shipping costs, using a carrier of their choice.

Please see Figure 5: Cholesterol, Lipid Profile, and Glucose Packing Diagram below for more information.

Figure 5: Cholesterol, Lipid Profile, and Glucose Packing Diagram



Instructions for Shipping Temperature-Sensitive Biological Substance Cat. B

To ensure proper packaging, please follow these instructions:

a. Obtain enough dry ice to keep the specimens frozen **or** enough ice packs to keep specimens cold for the duration of the shipment.
b. Place the frozen specimen(s) in mailing canister and seal. Place up to 4 canisters in the bottom of the Styrofoam box.
c. Fill the Styrofoam box with dry ice **or** ice packs. Ensure canisters are completely covered with dry ice or ice packs and secured.
d. Place the lid on the Styrofoam box. *Make sure the date and time is documented on each G-1B form when specimens are removed from the freezer*. *Please circle freezer to indicate specimens were removed from the freezer not the "fridge".*
e. Place the completed G-1B form(s) in a plastic “zip lock” bag. Then place the plastic “zip lock” bag on top of the closed Styrofoam box and seal the fiberboard box.
f. Secure the outer fiberboard box with packing tape.
g. Ensure that a diamond-shaped UN 3373 label is on exterior of the fiberboard box, when shipping Biological Substance, Category B.
h. Dry ice is considered a “dangerous good”. If using dry ice:
i. **Use less than 5 lbs. of dry ice**.
j. Mark the blank box and write **“dry ice”** in the Special Instructions section of the air bill.
k. Attach a diamond-shaped dry ice label on the package with the number **“9”** and **“UN1845”** on it. *This label must include the amount of dry ice used.* Ensure that this is legible and does not overlap with any other label on the fiberboard box.
l. Fill out the air bill and place it inside the sleeve and attach it to the top of the sealed fiberboard box.

Note: If the overnight carrier does not make regular pick-ups at your facility, call the carrier, and let them know you need a pick-up.

Evidence Management/Chain of Custody

HCHHSD uses the Hidalgo County All-Hazards Specimen Collection, Packing and Shipment Protocols for Biological or Chemical Agents for evidence management purposes.

All environmental samples that are collected for biological testing in response to a real or perceived threat must be coordinated through law enforcement. The FBI must be notified and will coordinate the activities involved with the testing of the specimen(s). The Federal Bureau of Investigation is the lead federal agency tasked with directing the interagency response to acts of terrorism. All information pertaining to the analysis of potential evidence samples is not to be released to the public and should only be conveyed to the appropriate law enforcement officials. A receipt of property/chain of custody form must be completed.

If a clinical specimen or isolate is known or suspected to be associated with a biological or chemical attack, or if suspicious circumstances are involved regarding the patient from whom the sample was collected, all persons who have contact with the specimen must document their involvement with that specimen. This documentation is maintained on a chain of custody form and the sentinel/level 3 laboratories would retain the original and submit a copy of the chain of custody with the specimen.

Specimens that are involved in a legal investigation or could result in legal investigation should be secured with evidence tape. All specimens submitted for chemical threat analysis must be secured with evidence tape. In response to a real or perceived threat, the sentinel laboratory should preserve the original specimens, plates, cultures, and subcultures pursuant to a potential criminal investigation and notify an LRN laboratory. The LRN laboratory will coordinate with the FBI or law enforcement and secure the transport of the specimens to the LRN laboratory. The sentinel/level 3 laboratories will need to complete a receipt of property/chain of custody form.

Sentinel/Level 3 laboratories are responsible for maintaining their own chain of custody documentation. If a carrier/courier is used for transfer of the samples, the name of the carrier/courier and the shipping/reference number should be recorded on this documentation. When instructed to ship samples directly to CDC in response to a chemical terrorism event, the local LRN reference laboratory must be contacted to receive the required shipping manifest documentation and other instructions.

Data Analyses and Outbreak Detection

Data Analyses and Outbreak Detection

Public health staff members and/or epidemiologists will conduct data analyses to identify potential outbreaks within the community. The staff member(s) will run data query reports using internal data systems (i.e., Microsoft Access), or by using the Texas DSHS National Electronic Disease Surveillance System (NEDSS). During data analysis, the staff members will compare current case trends to baselines. Baselines are defined as quarterly, seasonal, or annual case count representations. This decision will be based on the magnitude and the time length of the potential outbreak. Case trends above three standard deviations above baselines should be notified to the Lead Epidemiologist or other identified supervisor for response and intervention.

Epidemiologists are tasked with conducting routine disease trend analysis to ensure that the most updated baseline comparison data is available. HCHHSD is participating in Syndromic Surveillance following the lead of DSHS.

Develop and Implement Intervention Plans

The aim of the above procedures is to identify the disease agent and its origin and to develop and implement a plan to control the epidemic and protect the public's health. However, implementation of the intervention plan usually cannot wait for confirmation of

the disease if the intervention plan is to be successful. Many illnesses, such as anthrax, can be treated successfully if antibiotics are provided early in the course of the illness.

Also, steps involving quarantine or isolation, if required to prevent spread of disease, must be implemented early in an outbreak to be effective. This is to ensure that the population at risk is identified and that control measures are recommended and established. These additional core functions describe such outbreak and exposure investigation tasks for staff and volunteers who would be called upon during an emergency response.

HCHHSD uses inter-local agreements with technical and vocational schools or volunteer nurses or other medical personnel to aid in the surveillance investigation process and would comprise the Investigation Team. Any volunteers participating in an emergency response capacity are required to meet basic training criteria as per the Workforce Development Plan (See Annex 12). Community partners are responsible for maintaining the required training for their staff. If credentialing is required, supporting information is sent to DSHS for verification. The Investigation Team would be responsible for general information-gathering tasks to include obtaining medical histories from patients and obtaining provider reports during an emergency response event.

Additional Core Functions:

a. Receive Just-in-Time Trainings (i.e., HIPAA and Blood borne Pathogens).
b. Contact case patients.
c. Document recent travel information and contact information from confirmed, probable, and suspected cases.

If an emergency response exceeds the ordinary operational capacity of HCHHSD, a State of Texas Assistance Request (STAR) for additional staff or resources will be submitted as per ICS protocol.

Contact Identification and Tracing

Once a case has been identified, public health investigators and staff members will attempt to make contact with the patient(s) to conduct an investigation and to provide education on prevention. During normal capacity, the investigator will attempt making contact through three phone calls. If unsuccessful in making contact, the investigator will conduct a home-visit or send a letter home. During times of exceeded capacity, additional internal HCHHSD staff members will assist in investigation. This includes utilizing staff from other public health program areas (i.e., immunizations, clinical care). If caseloads exceed available staffing, mutual aid will be requested to neighboring counties for assistance. If unavailable, a STAR request will be sent to DSHS, R-11, to be fulfilled. This will then be processed through DSHS Central Office and then CDC if no available resources are identified. Once requested by DSHS Central Office, the CDC will deploy either a CERT or Epi-Aid team to public health response.

Planning

Pre-event planning should include the development of enhanced surveillance and epidemiological protocols to respond to a terrorist or emergency incident. This includes

the generation of possible associations of transmission and exposure, as well as source identification. These protocols include the following**:**

a. Establishing multiple (redundant) mechanisms for reporting confirmed, probable, and suspected cases to public health surveillance personnel (potential redundant mechanisms include secured fax, secured web-based reporting, telephone reporting, email).
b. Establishing points of contact with potential reporting sources and redundant means for communicating information back to these sources in an emergency.
c. Develop procedures to maintain surveillance of potentially exposed persons.
d. Identifying case definitions, as those defined in the Texas DSHS Epidemiology Case Criteria Guide.
e. Identifying transmission and exposure risks.
f. Enacting source reduction.
g. Reviewing and preparing for the use of the CDC surveillance report forms in an emergency.
h. Developing and establishing the laboratory capability for handling specimens, for confirmation of cases, and for secure shipment of specimens to CDC through the State Lab and the FBI.
i. Establishing methods for retrieving laboratory diagnosis for probable and suspected cases.
j. Analyzing case trends to identify specific populations at risk and develop population-specific education and prevention efforts.
k. Review CDC procedures and forms for case investigation and conduct practice sessions of various exposure scenarios.
l. Review CDC forms for collection of travel and contact information from confirmed, probable, and suspected cases.
m. Review CDC procedures for collection of specimens from suspected patients.

Outcome Evaluation

As interventions are being applied, therapeutic outcomes are to be evaluated. Local Clinic nurses will contact the HCHHSD Clinical Care Director of Services (CCDS) to report any abnormal findings that occur because of the medical countermeasures provided and send a copy of a completed Vaccine Adverse Event Reporting System (VAERS) entry to the HCHHSD CCDS, the Program Manager of Immunizations, and the CDC.

The Vaccine Adverse Event Reporting System is a national early warning system to detect possible safety problems in U.S.-licensed vaccines and provides a national safety monitoring system that extends to the entire general population for response to public health emergencies, such as a large-scale pandemic influenza vaccination program.

The CDC may contact the Program Manager of Immunization regarding any questions related to submitted VAERS entries. Copies of these records are kept by the reporting clinic nurse, the HCHHSD Program Manager of Immunizations, and the CDC.

Environmental Conditions and Collaboration

Environmental and Zoonotic conditions include those identified under the Texas NEDSS Zoonotic, Foodborne, and Waterborne Program Areas. If needed, these investigations will be conducted in conjunction with an environmental response team. These environmental teams will serve as subject matter experts and intervention specialists. Examples of conditions include Mosquito-Borne Illnesses, Typhus, Foodborne Disease (i.e. Shiga-Toxin producing *E. coli* (STEC), Listeria, and Salmonellosis), and Waterborne Conditions (i.e. Cholera, Vibrio, Shigellosis, and Campylobacteriosis). Response efforts include food inspections, vector control activities, and water collection and testing, and environmental health assessments.

Plan Development & Maintenance

1. The Hidalgo County Health and Human Services Department Director is responsible for maintaining and reviewing the Public Health & Medical Services Plan, Appendix 9: Epidemiology and Laboratory annually. Recommended changes to this plan should be forwarded as needs become apparent and may reflect any changes within our jurisdictional risks and/or community capabilities.
2. The Public Health & Medical Services Plan, Appendix 9: Epidemiology and Laboratory and its attachments are living documents and require revision to account for changes in roles/responsibilities and resources within Hidalgo County such as the acquisition of new equipment, training of staff, and increased partnerships from the private sector.
3. Once the Public Health & Medical Services Plan, Appendix 9: Epidemiology and Laboratory has been updated, the Hidalgo County Health and Human Services Department Director will present to Commissioner's Court for final adoption and ratification. The Public Health & Medical Services Plan Appendix 9: Epidemiology and Laboratory is updated and presented to Commissioner's Court every five years with input from Emergency Management and various stakeholders. Departments and agencies assigned responsibilities in the Public Health & Medical Services Plan are responsible for developing and maintaining SOPs. Copies of the Public Health & Medical Services Plan, Appendix 9: Epidemiology and Laboratory are kept at HCHHSD's main offices at **1304 S. 25th Avenue, Edinburg, TX 78542** in the following locations:

    Office of Administration

    Public Health Emergency Preparedness Division (PHEP)

    Clinical Health Services

    Information Technology Services

    Safety Officer

    Hidalgo County Emergency Operations Center (EOC)

Hidalgo County Emergency Management Coordinator

Each HCHHSD division manager is responsible for informing and instructing public health personnel about the location of the plan copies, as well as each employee's emergency response role and responsibilities. The supervisors/managers are also responsible for ensuring that employees attend appropriate training, according to their assigned response tier.

Attachments

Attachment I – Electronic Investigation Guide 2022

Attachment II – DSHS Notifiable Conditions 2023

Attachment III – HCHHSD Report Form

Attachment VI – DSHS Epi Case Criteria Guide 2022

Attachment V – Isolation and Quarantine Plan

HIDALGO COUNTY HEALTH AND HUMAN SERVICES

ELECTRONIC INVESTIGATION GUIDE

02/2022

Public health is an adventure between health for all and all for health.

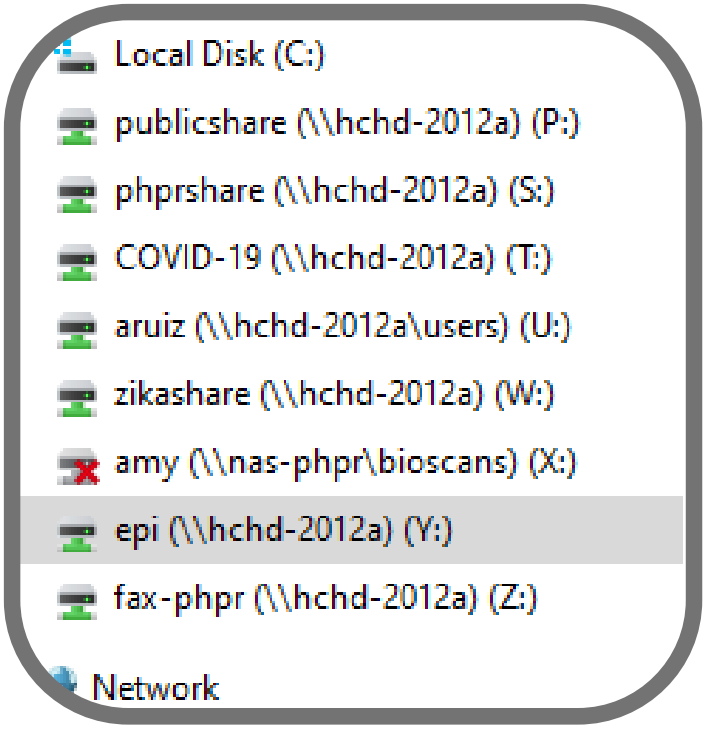
Summary

This guide is to provide step-by-step instructions on how to perform electronic disease investigations.

Tale of Contents

It is important to be aware of the network and server you will be working with. Make sure you have access to the following drives, and that you are allowed to access these drives so that electronic investigations can be performed.

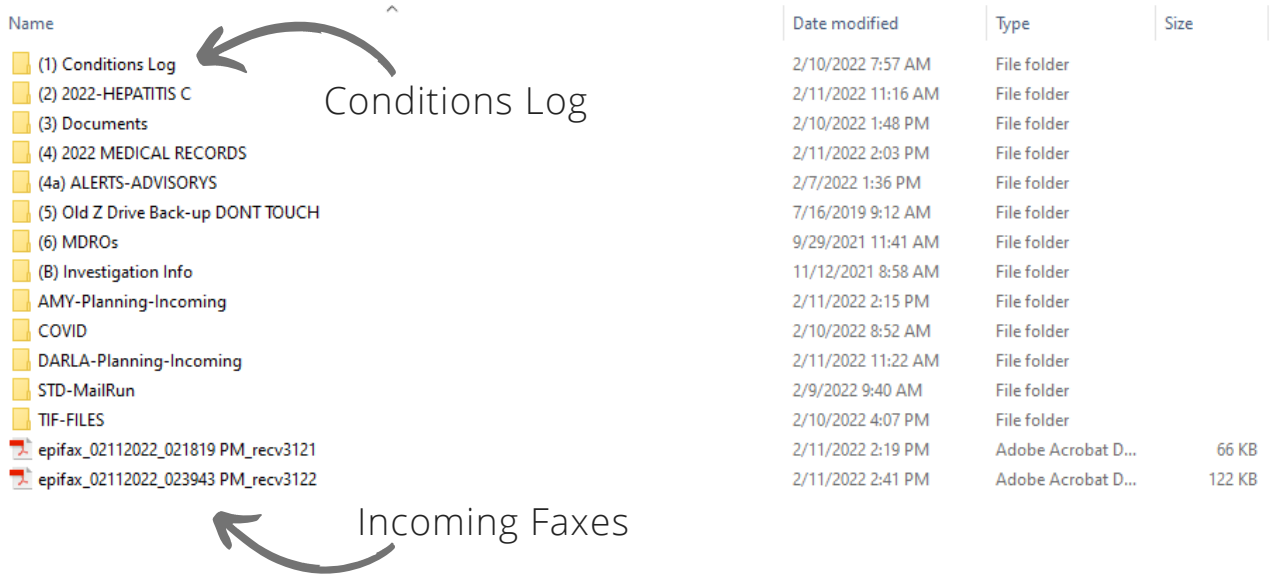
The image on right is an example of drives on your computer. Yours may look slightly different.
You will be using the Y (epi) drive, the Z (fax) drive, and the X (bioscans) drive.



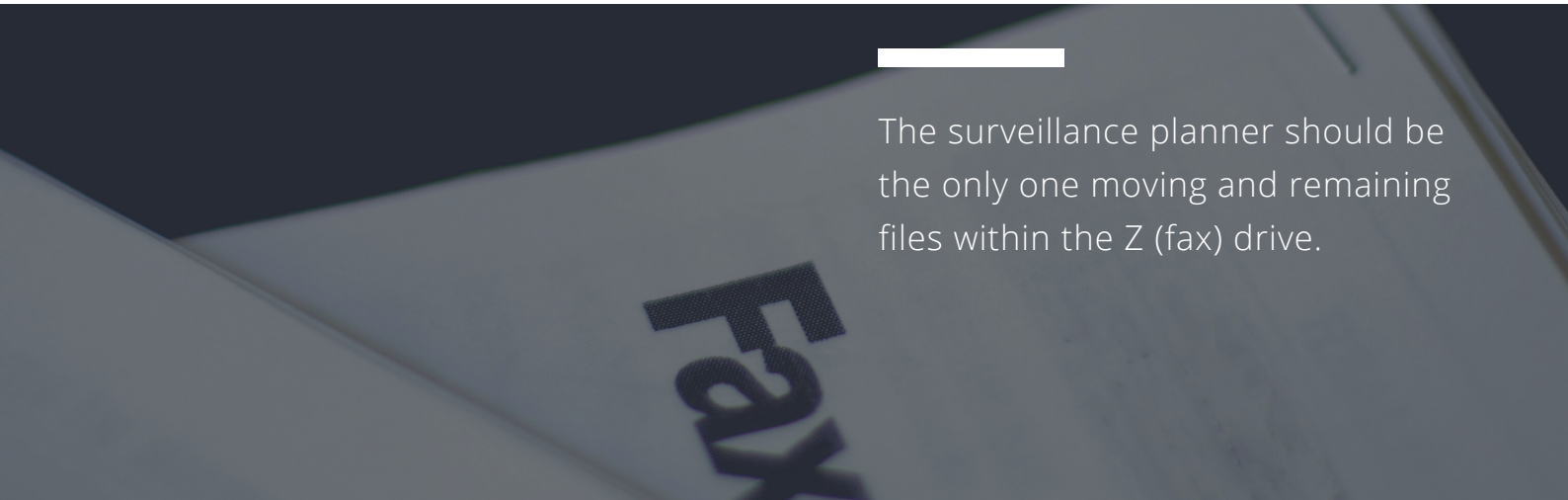
Y (epi) drive: This drive will have a folder with each Surveillance Investigator's name. Within this folder, the Surveillance Planner will drop off any assigned cases and incoming faxes addressed to you.
Z (fax) drive: Electronic faxes (faxed to 956-318-2431) are programmed to come into this drive. The Surveillance Planner is responsible for reviewing and distributing these faxes appropriately.
X (bioscans) drive: You can scan documents using the physical printer/scanner in Bio and they will appear in this drive.
T (COVID-19) drive: This drive is where all COVID-19 related activities are conducted. Access to this drive is only given to those working on COVID-19.
U drive: This is your personal computer drive. Documents kept here can not be viewed by anyone else.

NOTE: These drives need to be mapped one time onto your assigned computer by IT. If you login into a different computer, you will not be able to access these drives and would need IT to map them for you on that different computer.

In the Z (fax) drive, electronic faxes will appear. These are faxes sent to 956-318-2431. The PDF faxes are the incoming faxes that have not been processed yet. These files are automatically named: epifax_date_time_fax#. Please note the date and time of receipt when processing these faxes. Additional faxes (additional labs, medical records, vaccine records, etc.) can be named and placed in the investigators folder within the Y (epi) drive.



The conditions log is where all reported notifiable conditions are cataloged. Non-reportable reports and other faxes that are not given to investigators are stored in their appropriate folder.



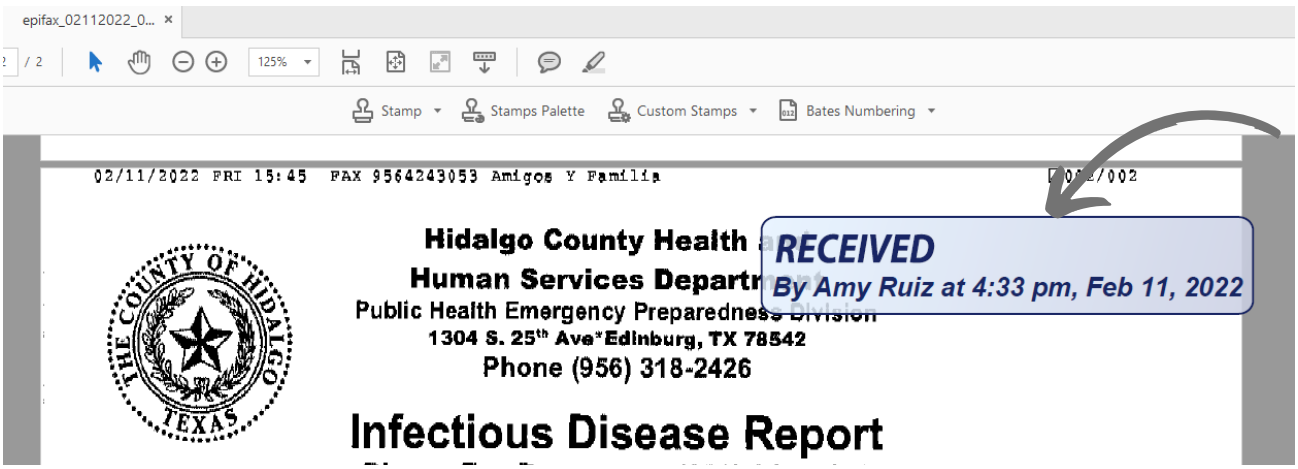
The surveillance planner should be the only one moving and remaining files within the Z (fax) drive.

All faxes need to be renamed and stamped. The fax will be named as the following format: **DateRecieved-PatientName-Condition**

ex: 2-11-22-PebblesFlintstone-Campy

Do not include any leading zeros when naming any files. A received stamp with the Surveillance Planner's name should be placed on the right hand side of the Reporting Form or lab. The steps to add a stamp can vary depending on the program you are using. Below are the steps using Adobe Acrobat. On the right hand side of the program, you will see the Adobe Acrobat tools. Select "Stamp" and this tool will open up at the top of your PDF file

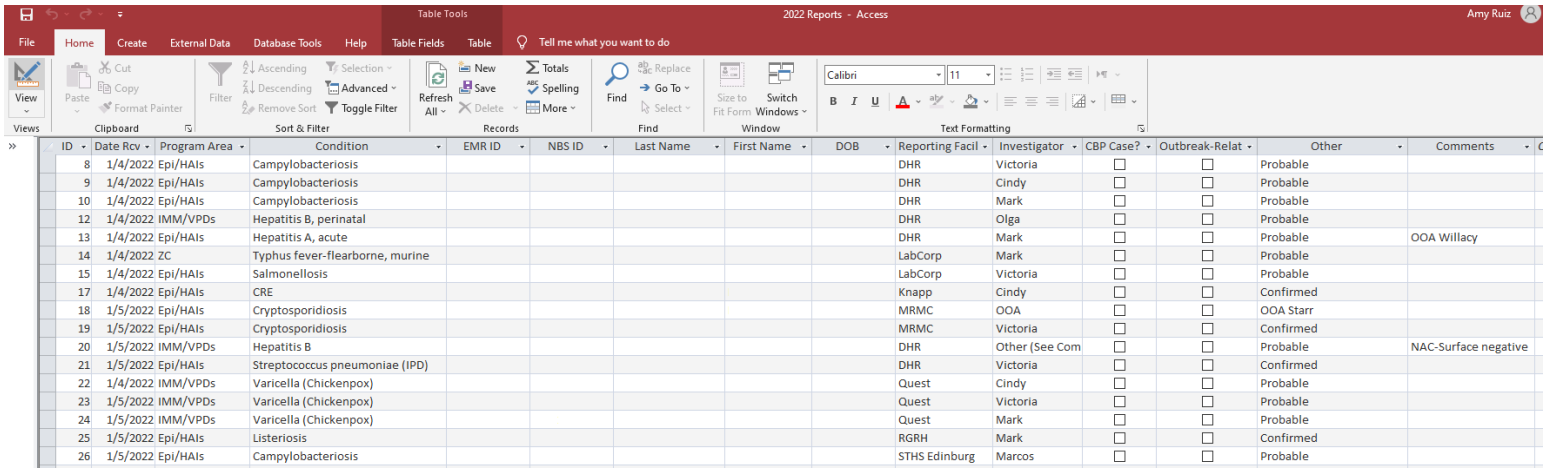
Select the stamp button and a drop down menu will appear. Select "received" and place the stamp on the right hand corner of your document. This will automatically include the date and time the stamp was made.



Once completed, save and close the file.

CONDITIONS LOG

The Surveillance Planner enters the reports into the conditions log. This is used to catalog incoming infectious disease reports and who they were assigned to. This is an Access document that allows multiple people to edit at the same time.

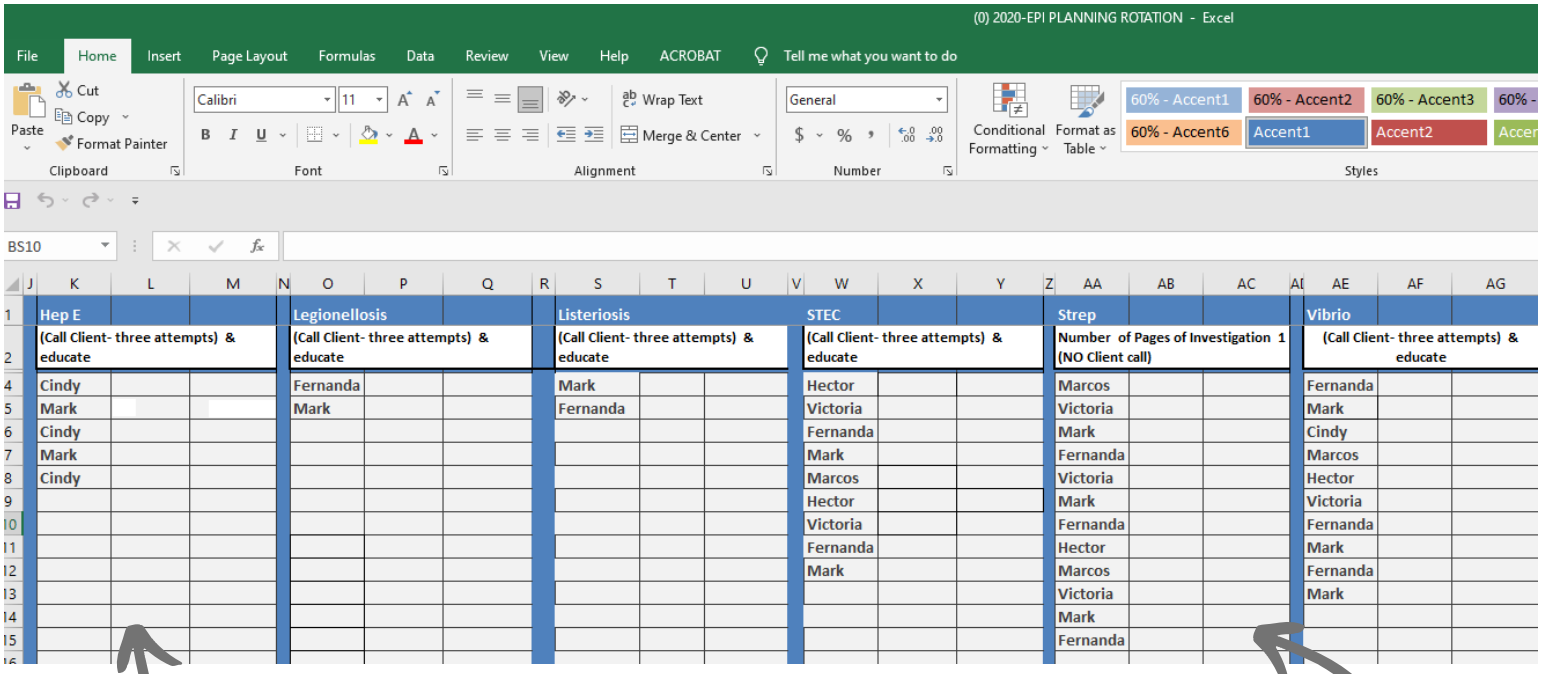


ID	Date Rcv	Program Area	Condition	EMR ID	NBS ID	Last Name	First Name	DOB	Reporting Facil	Investigator	CBP Case?	Outbreak-Relat	Other	Comments
8	1/4/2022	Epi/HAIs	Campylobacteriosis						DHR	Victoria	☐	☐	Probable	
9	1/4/2022	Epi/HAIs	Campylobacteriosis						DHR	Cindy	☐	☐	Probable	
10	1/4/2022	Epi/HAIs	Campylobacteriosis						DHR	Mark	☐	☐	Probable	
12	1/4/2022	IMM/VPDs	Hepatitis B, perinatal						DHR	Olga	☐	☐	Probable	
13	1/4/2022	Epi/HAIs	Hepatitis A, acute						DHR	Mark	☐	☐	Probable	OOA Willacy
14	1/4/2022	ZC	Typhus fever-flearborne, murine						LabCorp	Mark	☐	☐	Probable	
15	1/4/2022	Epi/HAIs	Salmonellosis						LabCorp	Victoria	☐	☐	Probable	
17	1/4/2022	Epi/HAIs	CRE						Knapp	Cindy	☐	☐	Confirmed	
18	1/5/2022	Epi/HAIs	Cryptosporidiosis						MRMC	OOA	☐	☐	OOA Starr	
19	1/5/2022	Epi/HAIs	Cryptosporidiosis						MRMC	Victoria	☐	☐	Confirmed	
20	1/5/2022	IMM/VPDs	Hepatitis B						DHR	Other (See Com	☐	☐	Probable	NAC-Surface negative
21	1/5/2022	Epi/HAIs	Streptococcus pneumoniae (IPD)						DHR	Victoria	☐	☐	Confirmed	
22	1/4/2022	IMM/VPDs	Varicella (Chickenpox)						Quest	Cindy	☐	☐	Probable	
23	1/5/2022	IMM/VPDs	Varicella (Chickenpox)						Quest	Victoria	☐	☐	Probable	
24	1/5/2022	IMM/VPDs	Varicella (Chickenpox)						Quest	Mark	☐	☐	Probable	
25	1/5/2022	Epi/HAIs	Listeriosis						RGRH	Mark	☐	☐	Confirmed	
26	1/5/2022	Epi/HAIs	Campylobacteriosis						STHS Edinburg	Marcos	☐	☐	Probable	

ID: Automatically given to each new entry. This is only for used for count purposes
Date: This is automatically given according to the date the entry is made
Condition: There is a drop down menu to choose the appropriate condition
ERM ID: Internal EMR number should be added here
NBS ID: Should be entered if report was an ELR. Investigator can go back and include this for all other reports
Reporting Facility: Enter reporting hospital, clinic or lab name
Investigator: Enter the name of the investigator the case has been assigned to via the drop down menu
CBP Case: Should be selected if the patient is not an Hidalgo County resident but is being investigated and is under border patrol custody.
Outbreak Indicator: Should be selected for all patients included in an outbreak. This is for our IDCU grant monthly outbreak report.
Other: Preliminary case status is entered here by Surveillance Planner. This needs to be edited by investigator if the case status changes.
Comments: Any additional comments can be made here

The conditions log is used daily by the Surveillance Planner to ensure all cases have been assigned, to note if there is a re-infection, co-infection, or outbreak, and to reference if a patient's notifiable condition has been reported.

All Surveillance Investigators are put on a rotation for case assignment. There are some instances where specific conditions are only assigned to certain investigators due to their grant requirement. This process helps assign cases equally amongst Surveillance Investigators. In the instance that an investigator has notified their supervisor that they will be out for more than 1.5 days, that investigator will be skipped until their return to ensure case investigations are started and completed in a timely manner.

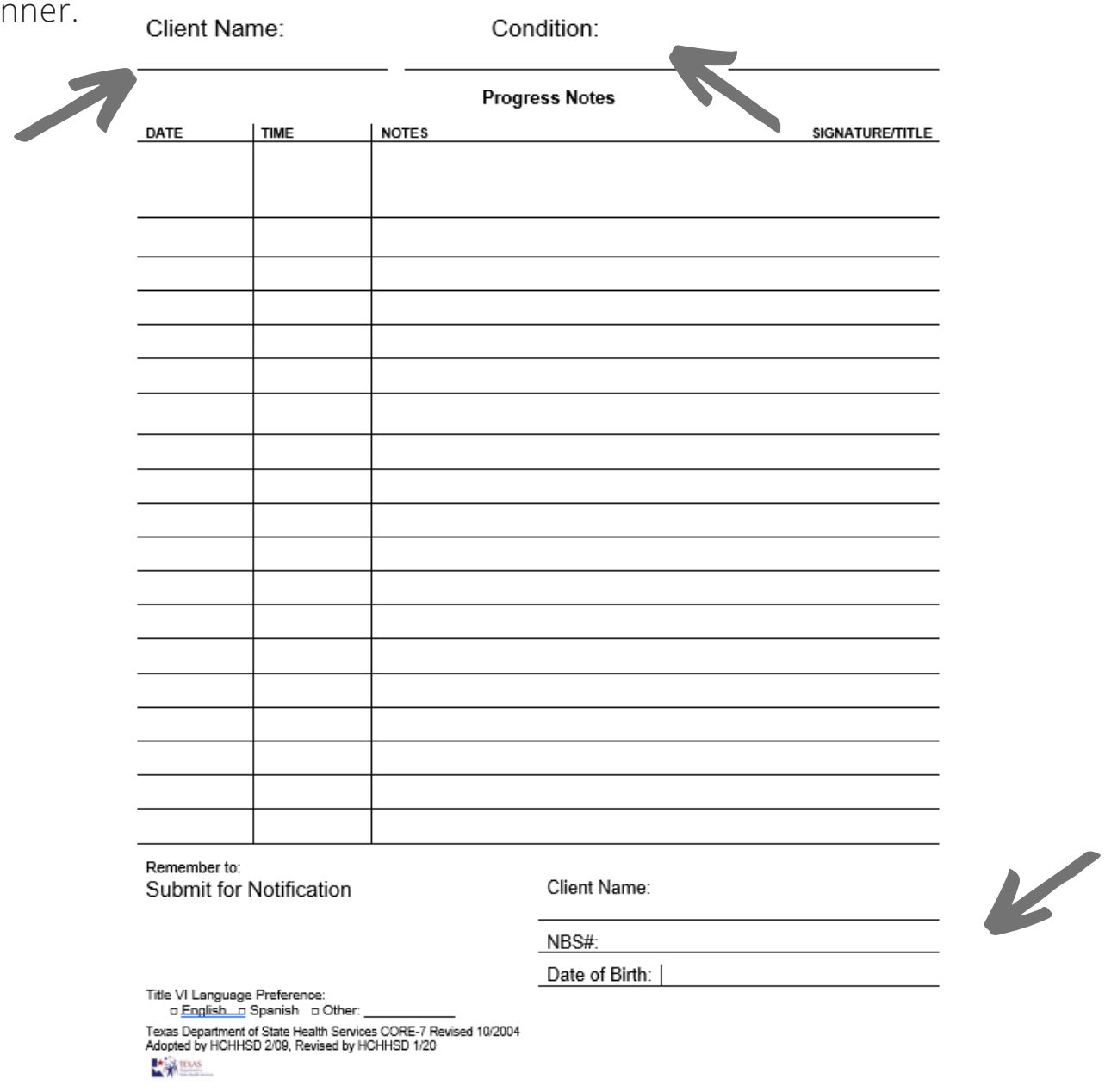


	Hep E	Legionellosis	Listeriosis	STEC	Strep	Vibrio
2	(Call Client- three attempts) & educate	(Call Client- three attempts) & educate	(Call Client- three attempts) & educate	(Call Client- three attempts) & educate	Number of Pages of Investigation 1 (NO Client call)	(Call Client- three attempts) & educate
4	Cindy	Fernanda	Mark	Hector	Marcos	Fernanda
5	Mark	Mark	Fernanda	Victoria	Victoria	Mark
6	Cindy			Fernanda	Mark	Cindy
7	Mark			Mark	Fernanda	Marcos
8	Cindy			Marcos	Victoria	Hector
9				Hector	Mark	Victoria
10				Victoria	Fernanda	Fernanda
11				Fernanda	Hector	Mark
12				Mark	Marcos	Fernanda
13					Victoria	Mark
14					Mark	
15					Fernanda	

The second column will have the initials of the patient/case assigned

The third column will have the date the case was assigned

Progress notes will be used via Word Document while the investigation is being worked on. All relevant information regarding the patient's investigation such as contacts with doctors to request forms, any problems in receiving information, new information receiving, phone calls made to the patient, etc. are documented. The Progress Notes should demonstrate a natural progression towards the completion of the case, and should demonstrate that an earnest effort has been made by the Surveillance Investigator. Notes should be written in first-person point of view with each entry signed vis electronic/image signature. Primary information is entered by the surveillance planner.



Client Name: Condition:

Progress Notes

DATE	TIME	NOTES	SIGNATURE/TITLE

Remember to:
Submit for Notification

Client Name:

NBS#:

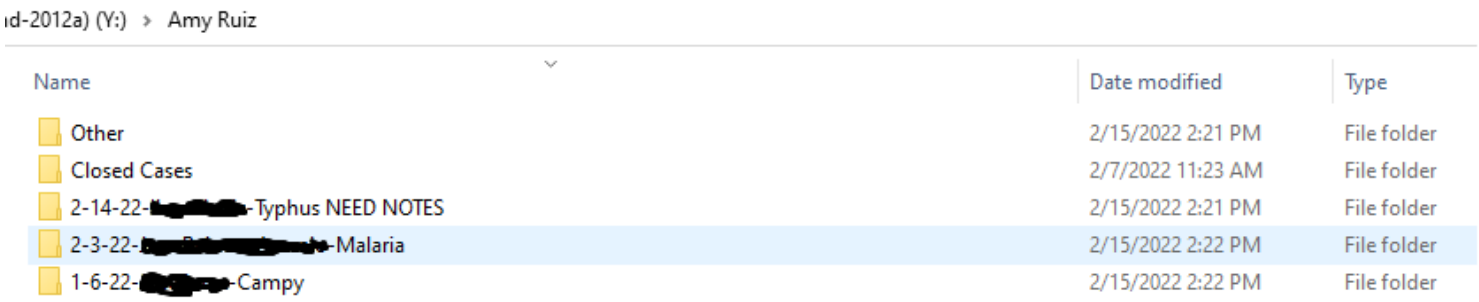
Date of Birth:

Title VI Language Preference:
□ English □ Spanish □ Other: _____

Texas Department of State Health Services CORE-7 Revised 10/2004
Adopted by HCHHSD 2/09, Revised by HCHHSD 1/20

Completed Progress Notes need to be converted/saved as a PDF and the Word version needs to be deleted to avoid compromised.

Assigned cases will be dropped off in the Investigator's folder within the Y (epi) drive by the Surveillance Planner. Immediately reportable conditions and those with grant closeout requirements should be prioritized. It is important to keep your individual folders in order so files do not get lost or mixed up. Keep patient records/files within the corresponding folder. Once a case is completed, you should move this case into your "Closed Cases" folder for reference at a later date.



If the Surveillance Planner receives additional records via fax for one of your patients, they will be dropped into your folder *not* into the patient's folder.

You should only be accessing your own folder within the Y-drive. No one should be snooping on one another's work or altering/removing documents that are not within your own folder.

Release of information request form is a Word Document you will need to edit and convert to PDF before faxing over to another facility. You will need to fill out the text in red. The date will automatically populate. To add or remove a check box, right click on the box, click properties and under default value, select Checked or Not checked. Medical record requests should be faxed using *FaxFinder* or a manual fax machine.

HIDALGO COUNTY HEALTH & HUMAN SERVICES DEPARTMENT

Epidemiology and Surveillance
1304 S. 25th AVE ▫ Edinburg, Texas 78542
Phone: (956) 318-2426 ▫ Fax: (956) 318-2431

Date: Tuesday, February 15, 2022

Attention: **Name of Reporting Facility: Medical Records,**
Pursuant to the statutes of the Texas Health and Safety Code dealing with the investigation and control of communicable disease, the Hidalgo County Health and Human Services (HCHHS), Epidemiology and Surveillance, is formally requesting copies of medical records pertinent to an on-going public health investigation.

Records needed for review are those of whose **Patent's Full Name** date of birth is **DOB.** Please provide copies of the following records:

- ☒ **Demographics (address, home phone number, work phone)**
- ☒ **History & Physical for Visit(s): Date of Service/Admission Date**
- ☐ Discharge Summary
- ☐ History & Progress notes
- ☐ Immunizations Record
- ☐ Lab report(s):
- ☐ Other:

Fax requested information to **(956)318-2431**.

If unable to fax, notify the HCHHS Staff Member listed below and an authorized team member will pick up the requested information from your office.
This request for medical records by HCHHS, in conjunction with the Department of State Health Services, is for your permanent records.

We appreciate your cooperation in controlling communicable diseases in our community.

Sincerely,

Ivan Melendez, M.D.
Medical Director
Hidalgo County Health Department

For additional information, please contact:

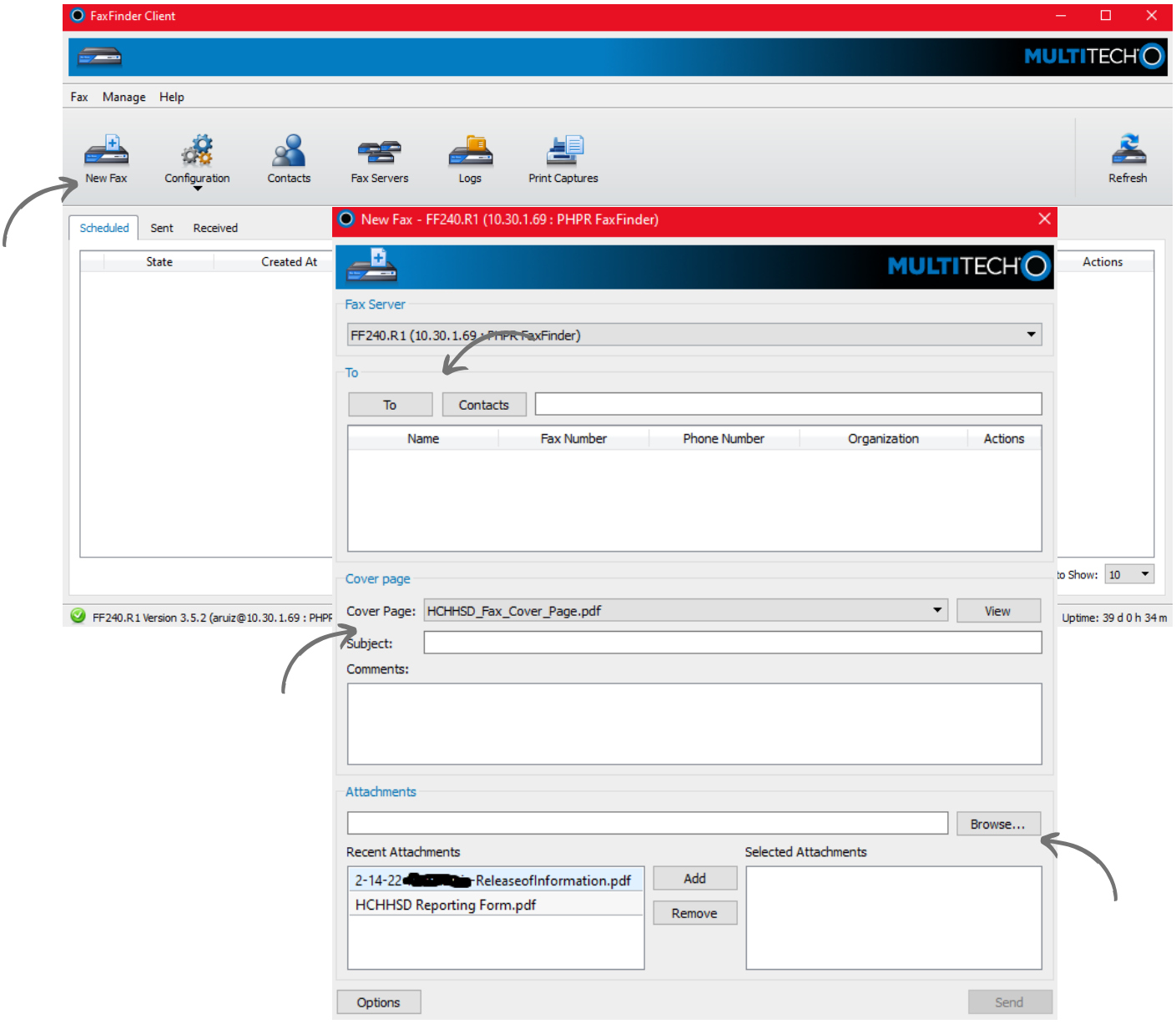
YOUR NAME
HCHHS Staff

(956)318-2426 Ext.####
Contact Number

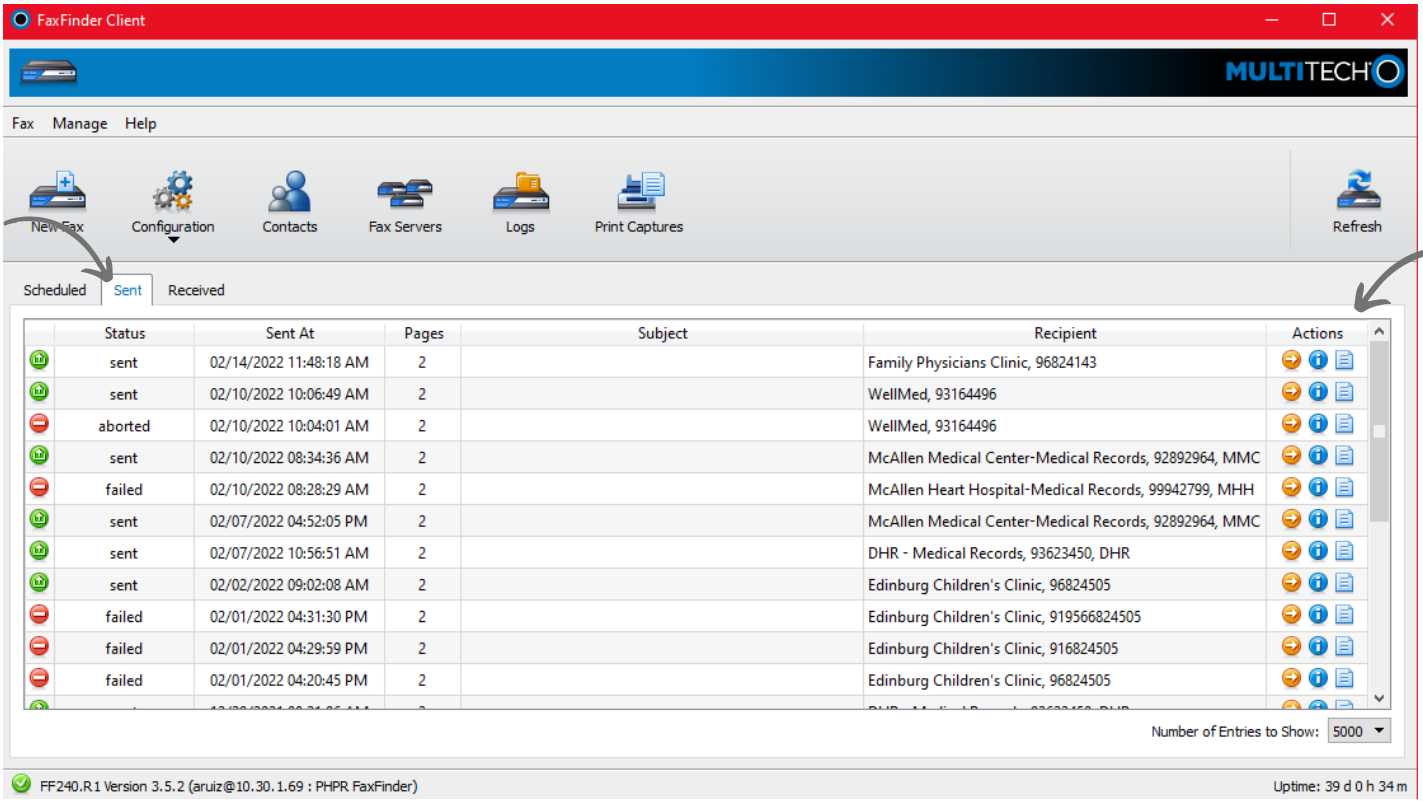
Report suspected outbreaks or unusual expressions of illness to: (956) 318-2432 (24/7/365) Emergency Only
For more information visit our website http://www.hchd.org

Faxing is completed through the *FaxFinder Client* Fax Server. To create a new fax:

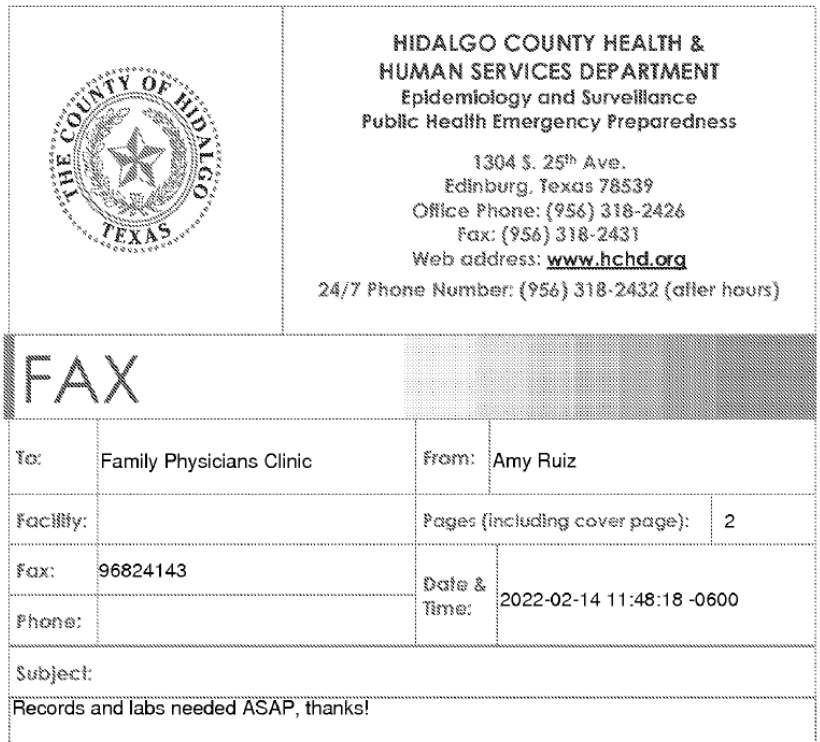
1. Open up *FaxFinder* software and click New Fax
2. Click Contacts for existing contacts or To for a new entry. Under Address Book in Contact, select Global Contacts from the drop-down menu to access contacts.
3. Make sure the HCHHSD_Fax_CoverPage.pdf cover page is selected
4. Complete the Subject and Comments fields as deemed appropriate. It is helpful to include "records needed ASAP" within the comments section.
5. Click Browse and/or Add to include any necessary attachments
6. Click Send
7. Toggle to the Sent tab to see the status of your fax. If the fax failed, attempt to re-send.



There can be multiple reasons for a failed fax attempt. For local facilities, include the number 9 followed the 7-digit fax number. For out of area facilities, sometimes including Weslaco and Mercedes, include the number 9 followed by the 10-digit fax number. There are times a fax will not go through electronically and a manual fax machine would need to be used. Fax cover page is automatically filled with the information entered; you can view the fax you sent under actions.



Fax Cover:



HIDALGO COUNTY HEALTH &
HUMAN SERVICES DEPARTMENT
Epidemiology and Surveillance
Public Health Emergency Preparedness

1304 S. 25th Ave.
Edinburg, Texas 78539
Office Phone: (956) 318-2426
Fax: (956) 318-2431
Web address: www.hchd.org
24/7 Phone Number: (956) 318-2432 (after hours)

FAX

To:	Family Physicians Clinic	From:	Amy Ruiz
Facility:		Pages (including cover page):	2
Fax:	96824143	Date & Time:	2022-02-14 11:48:18 -0600
Phone:			

Subject:

Records and labs needed ASAP, thanks!

Patient notification letters can be sent out to patients if the phone number is missing from patient's demographics, if the phone line is disconnected or after three failed phone call attempts. You should NEVER include any information about the positive lab result or condition you are investigating in the letter. If your case is under 18yrs, address the letter to "the parents of (your patient's name)". Select the hospital you received the lab from or under other, write the reporting doctor's office name. Make sure you include your name and extension at the bottom of the letter. Print out the letter to be mailed off and save a PDF version for your records within the patient's folder. Remember to mark the envelope with a confidential stamp and include your extension in the back side of your envelope in the event the letter is undeliverable and returned.

Hidalgo County Health & Human Services Department
Epidemiology & Surveillance
1304 S. 25th Ave. Edinburg, TX 78542 * Phone (956) 318-2426 * Fax (956) 318-2431

To/*Para*: _____

From/*De Parte*: Public Health Surveillance Division/ *División de Salud Publica y Vigilancia*

Date/*Fecha*: _____

This is NOT a bill. / ***Esto NO es un cobro.***

We have received a laboratory report from: / *Recibimos un reporte de laboratorio de*:

McAllen Medical Center	☐	**Knapp Medical Center**	☐
Mission Regional Medical Center	☐	**Rio Grande Regional Hospital**	☐
Edinburg Regional Medical Center	☐	**Doctors Hospital at Renaissance**	☐
Edinburg Children's Hospital	☐	**Other/*Otro* :**	

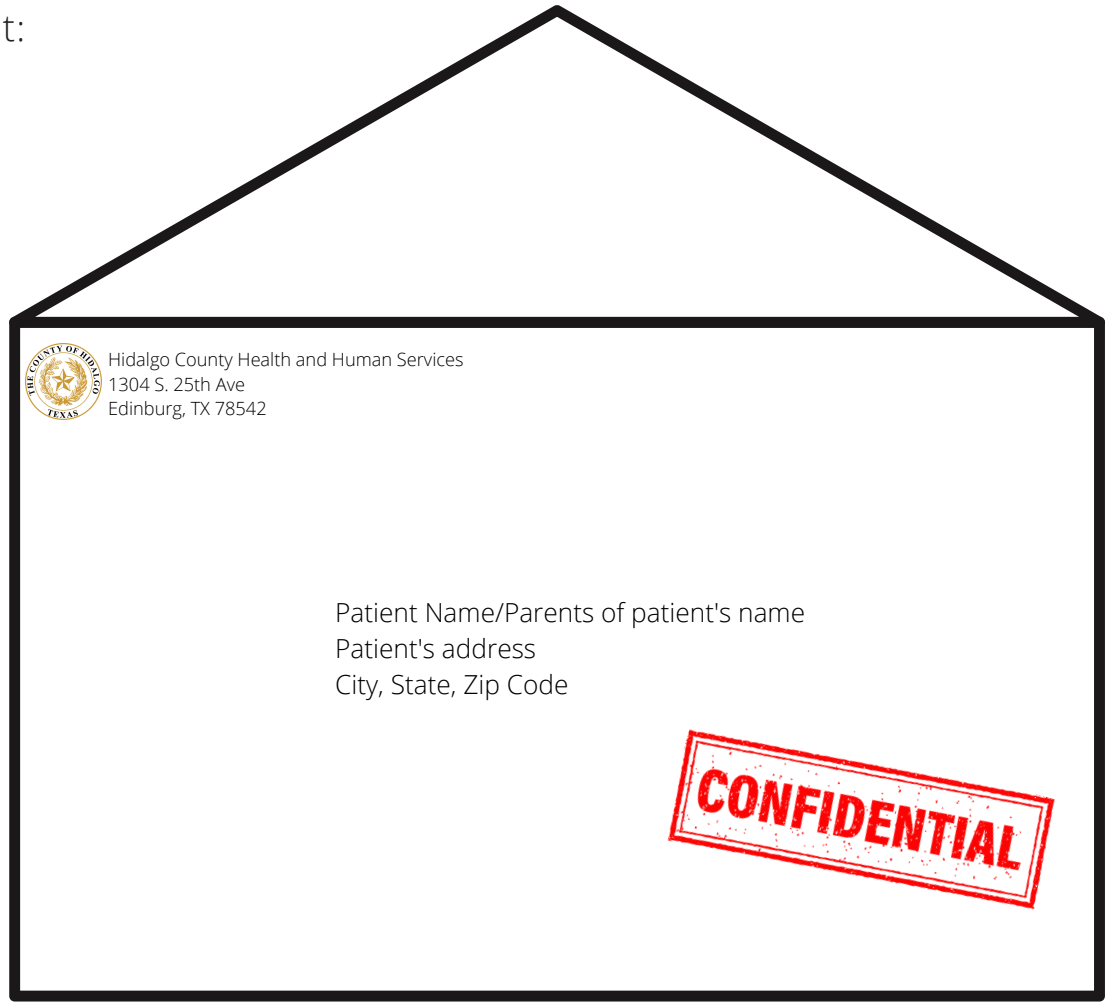
The Hidalgo County Health & Human Services Department along with the Department of State Health Services is required by law to follow-up on your laboratory report. Please help us obtain more information by calling **(956) 318-2426, between the hours of 8:00 AM – 5:00 PM Monday thru Friday.**

Es requerido por ley que el Departamento de Salud y Servicios Humanos del Condado de Hidalgo en asociación con el Departamento Estatal de Servicios de Salud de Texas hacer un seguimiento a su reporte de laboratorio. Por favor ayúdenos a obtener la información necesaria comunicándose con nosotros ***al (956) 318-2426 entre el horario de 8:00 AM – 5:00 PM lunes a viernes.***

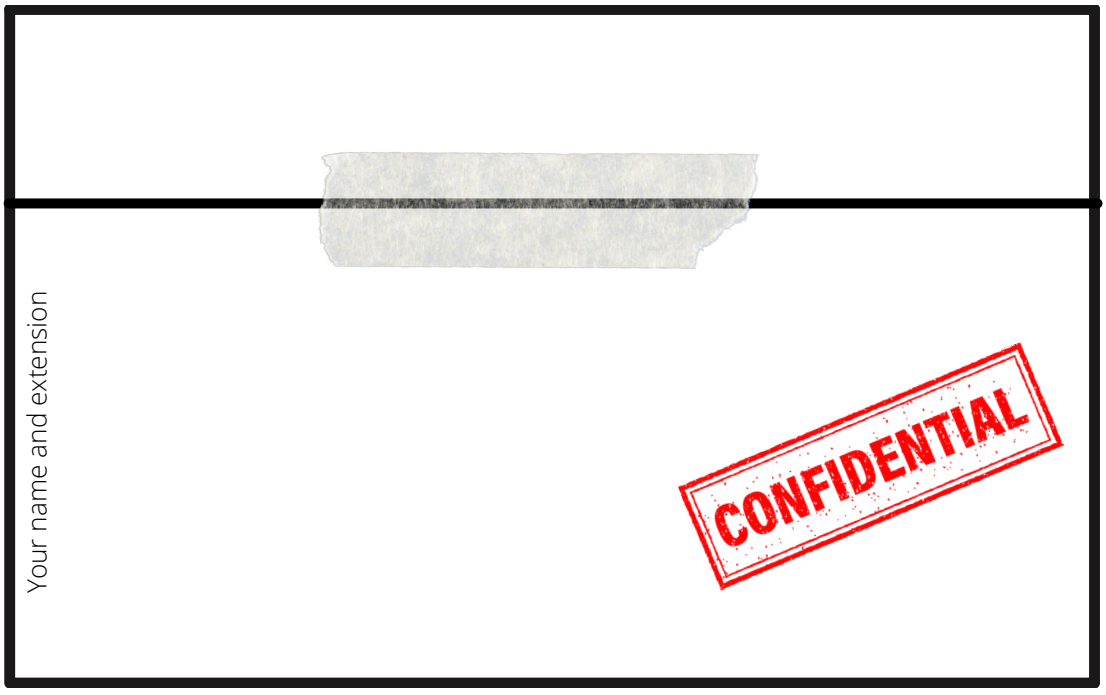
Thank You/*Gracias*,

Amy Ruiz Ext. 7332
HCHHS Staff Member

Front:

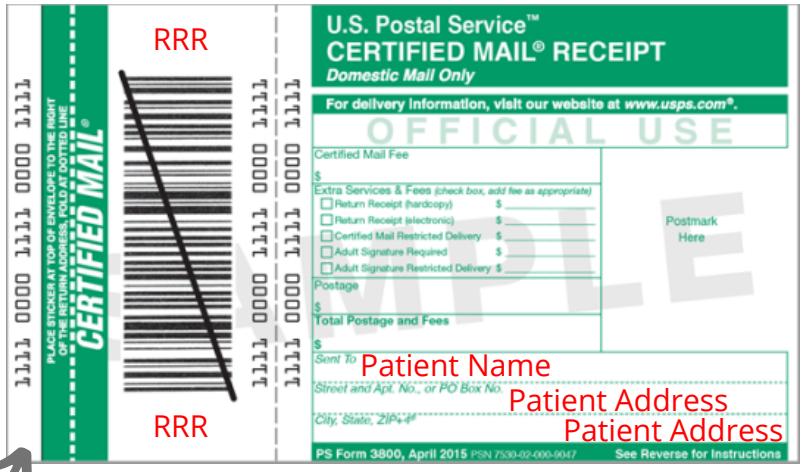

Hidalgo County Health and Human Services
1304 S. 25th Ave
Edinburg, TX 78542
Patient Name/Parents of patient's name
Patient's address
City, State, Zip Code
CONFIDENTIAL

Back:


Your name and extension
CONFIDENTIAL

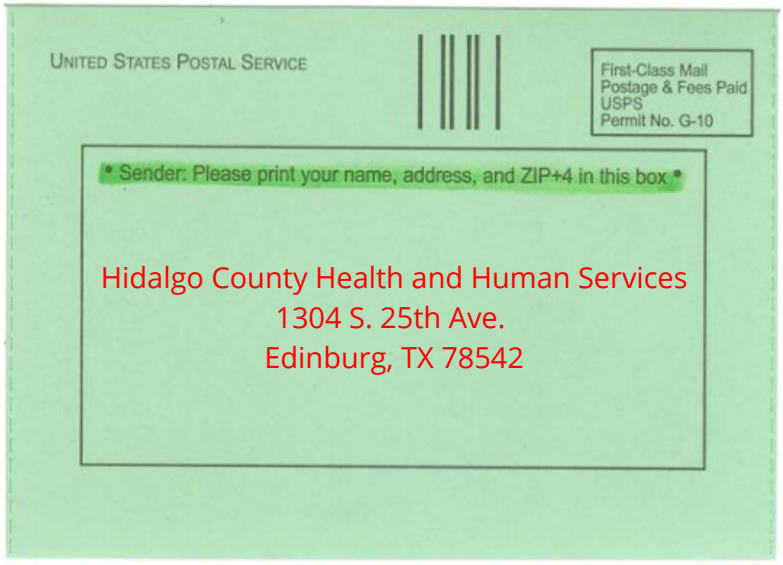
Certified letters should be reserved to patient who have a grant requirement condition (STEC, Vibriosis, etc.). Everything in **red** needs to be written on the following documents to correctly send a certified letter.

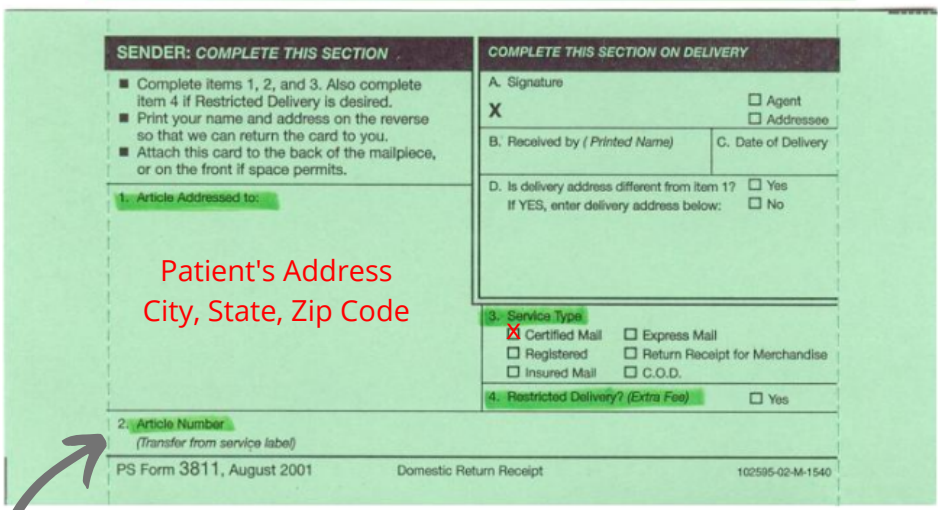
Certified Mail Form 3800:
The perforated edge will be kept as your receipt. The backing sticker will be removed and you will place it onto the top edge of the envelope.



Label needed for the next form

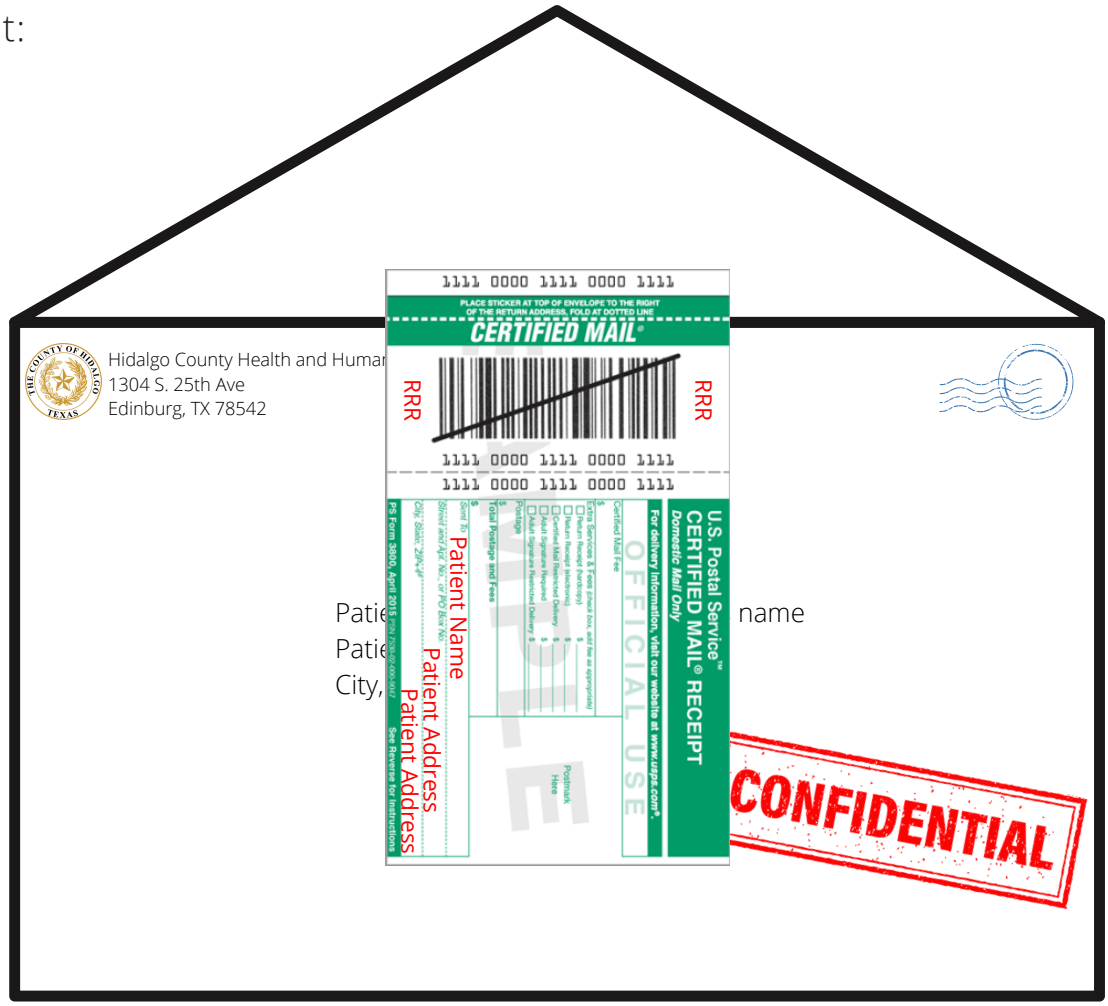
Return Receipt Form 3811:
This is a two sided document that needs to get get filled out and is attached to the back side of the envelope.



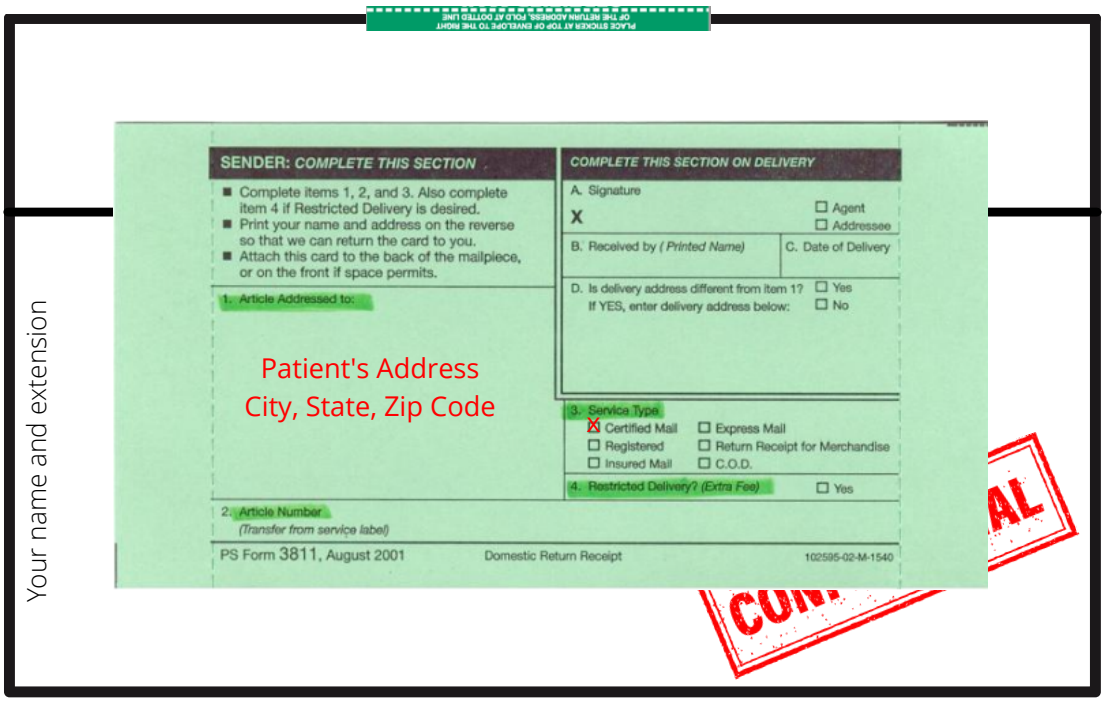


You will attach the the label from the 3800 form here

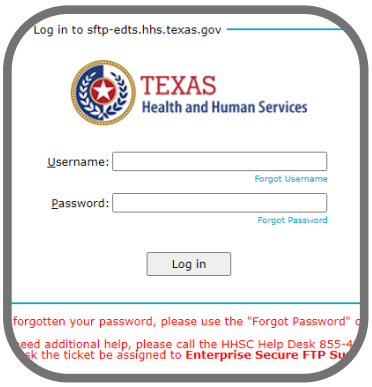
Front:

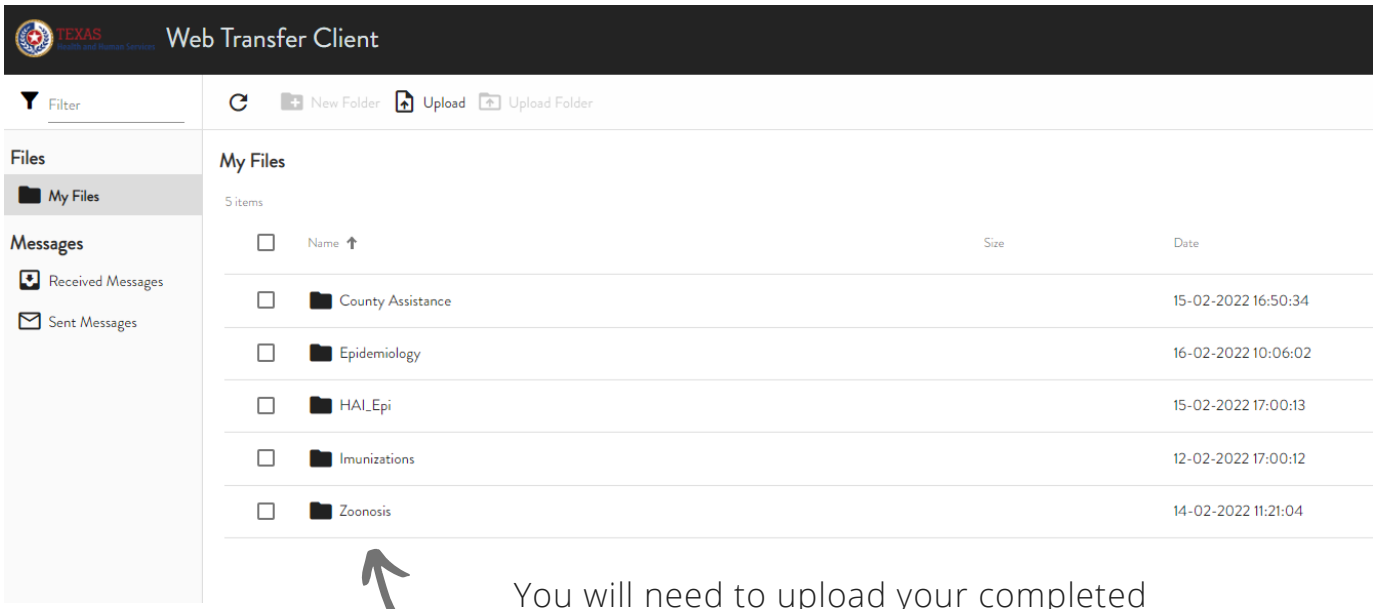

Hidalgo County Health and Human
1304 S. 25th Ave
Edinburg, TX 78542
CERTIFIED MAIL
RRR
RRR
U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only
For delivery information, visit our website at www.usps.com®
OFFICIAL USE
Patient Name
Patient Address
Patient Address
name
CONFIDENTIAL

Back:


Your name and extension
SENDER: COMPLETE THIS SECTION
Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
Print your name and address on the reverse so that we can return the card to you.
Attach this card to the back of the mailpiece, or on the front if space permits.
1. Article Addressed to:
Patient's Address
City, State, Zip Code
COMPLETE THIS SECTION ON DELIVERY
A. Signature
X
Agent
Addressee
B. Received by (Printed Name)
C. Date of Delivery
D. Is delivery address different from item 1? Yes
If YES, enter delivery address below: No
3. Service Type
Certified Mail
Express Mail
Registered
Return Receipt for Merchandise
Insured Mail
C.O.D.
4. Restricted Delivery? (Extra Fee) Yes
2. Article Number
(Transfer from service label)
PS Form 3811, August 2001
Domestic Return Receipt
102595-02-M-1540

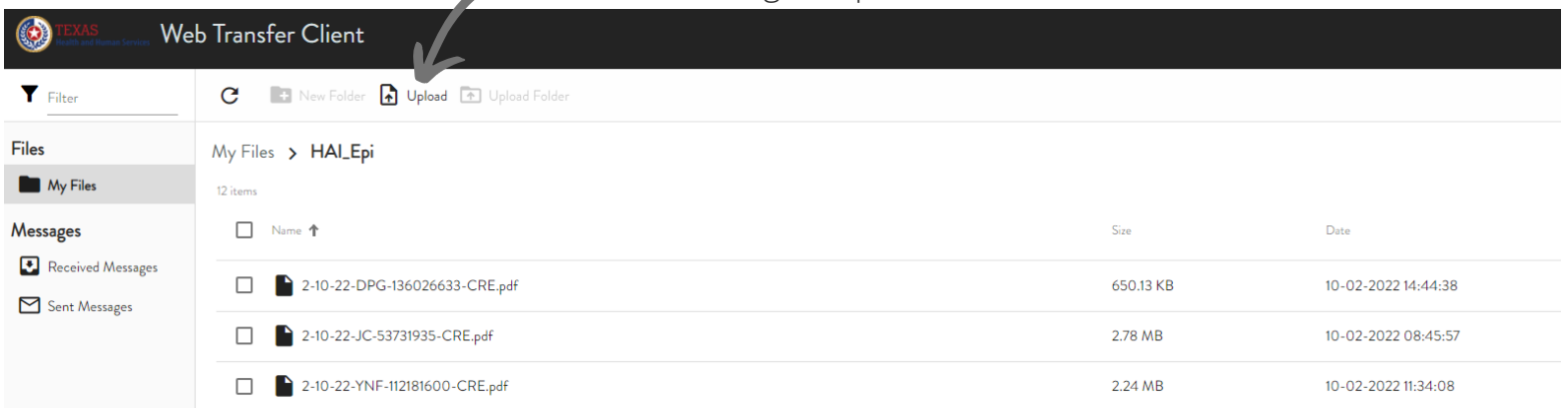
The HHS GlobalScape Web Transfer Client (WTC) is a website used to transfer data to and from the HHS SFTP Server. We utilize GlobalScape to upload/transfer completed investigations to DSHS Region 11. There is a GlobalScape shortcut button on the HCHD Intranet page. This will automatically open and take you to the login page.





You will need to upload your completed investigation into the corresponding program area folder

Click the upload button and choose the file you are wanting to upload.



Files should be named: DateUploaded-PatientInitials-NBSNumber-ProgramAreaAcronym

Program Area Acronyms: EPI, CRE, IMM, ZC

All electronic and paper medical records are to be kept for at least 10 years or when the patient turns 21 years old, if a pediatric case, whichever is the latter. All record destruction requests must be approved by the Lead Epidemiologist, Local Responsible Party, and other assigned designees. Once approved, records must be in marked boxes of date ranges and coded categories. Please refer to the Texas Destruction of Medical Records Policy and Procedures Manual for additional steps and requirements.

TEXAS Health and Human Services | Texas Department of State Health Services

Access List Online

Texas Notifiable Conditions - 2023

Report all Confirmed and Suspected cases

24/7 Number for Immediately Reportable – 1-800-705-8868

Unless noted by*, report to your local or regional health department using number above or find contact information at *http://www.dshs.texas.gov/idcu/investigation/conditions/contacts/*

Contact Information

A – L	When to Report	L – Y	When to Report
*Acquired immune deficiency syndrome (AIDS) [1]	Within 1 week	Legionellosis [2]	Within 1 week
Amebic meningitis and encephalitis [2]	Within 1 week	Leishmaniasis [2]	Within 1 week
Anaplasmosis [2]	Within 1 week	Listeriosis [2, 3]	Within 1 week
Anthrax [2, 3, 25]	**Call Immediately**	Lyme disease [2]	Within 1 week
Arboviral infections [2, 4, 5]	Within 1 week	Malaria [2]	Within 1 week
*Asbestosis [6]	Within 1 week	**Measles (rubeola)** [2]	**Call Immediately**
Ascariasis [2]	Within 1 week	**Meningococcal infection, invasive (*Neisseria meningitidis*)** [2, 3]	**Call Immediately**
Babesiosis [2,5]	Within 1 week	**Mumps** [2]	**Within 1 work day**
Botulism (adult and infant) [2, 3, 7, 25]	**Call Immediately**[7]	Paragonimiasis [2]	Within 1 week
Brucellosis [2, 3, 25]	**Within 1 work day**	**Pertussis** [2]	**Within 1 work day**
Campylobacteriosis [2]	Within 1 week	*Pesticide poisoning, acute occupational [8]	Within 1 week
*Cancer [9]	See rules[9]	**Plague (*Yersinia pestis*)** [2, 3, 25]	**Call Immediately**
Candida auris [2, 3, 10]	**Within 1 work day**	**Poliomyelitis, acute paralytic** [2]	**Call Immediately**
Carbapenem-resistant *Enterobacteriaceae* (CRE) [2, 11]	**Within 1 work day**	**Poliovirus infection, non-paralytic** [2]	**Within 1 work day**
Chagas disease [2, 5]	Within 1 week	Prion disease such as Creutzfeldt-Jakob disease (CJD) [2, 12]	Within 1 week
*Chancroid [1]	Within 1 week	**Q fever** [2]	**Within 1 work day**
*Chickenpox (varicella) [13]	Within 1 week	**Rabies, human** [2]	**Call Immediately**
**Chlamydia trachomatis* infection [1]	Within 1 week	**Rubella (including congenital)** [2]	**Within 1 work day**
*Contaminated sharps injury [14]	Within 1 month	Salmonellosis, including typhoid fever [2, 3]	Within 1 week
***Controlled substance overdose** [15]	**Report Immediately**	Shiga toxin-producing *Escherichia coli* [2, 3]	Within 1 week
Coronavirus, novel [2, 16]	**Call Immediately**	Shigellosis [2]	Within 1 week
Coronavirus Disease 2019 (COVID-19) [2]	Within 1 week	*Silicosis [17]	Within 1 week
Cryptosporidiosis [2]	Within 1 week	**Smallpox** [2, 25]	**Call Immediately**
Cyclosporiasis [2]	Within 1 week	*Spinal cord injury [18]	Within 10 work days
Cysticercosis [2]	Within 1 week	Spotted fever rickettsiosis [2]	Within 1 week
Diphtheria [2, 3]	**Call Immediately**	Streptococcal disease (*S. pneumo.* [2, 3]), invasive	Within 1 week
*Drowning/near drowning [18]	Within 10 work days	***Syphilis – primary and secondary stages** [1, 19]	**Within 1 work day**
Echinococcosis [2]	Within 1 week	*Syphilis – all other stages including congenital syphilis [1,19]	Within 1 week
Ehrlichiosis [2]	Within 1 week	*Taenia solium* and undifferentiated *Taenia* infection [2]	Within 1 week
Fascioliasis [2]	Within 1 week	Tetanus [2]	Within 1 week
*Gonorrhea [1]	Within 1 week	Tick-borne relapsing fever (TBRF) [2]	Within 1 week
Haemophilus influenzae, invasive [2, 3]	Within 1 week	*Traumatic brain injury [18]	Within 10 work days
Hansen's disease (leprosy) [20]	Within 1 week	Trichinosis [2]	Within 1 week
Hantavirus infection [2]	Within 1 week	Trichuriasis [2]	Within 1 week
Hemolytic uremic syndrome (HUS) [2]	Within 1 week	**Tuberculosis (*Mycobacterium tuberculosis* complex)** [3, 21]	**Within 1 work day**
Hepatitis A [2]	**Within 1 work day**	Tuberculosis infection [22]	Within 1 week
Hepatitis B, C, and E (acute) [2]	Within 1 week	**Tularemia** [2, 3, 25]	**Call Immediately**
Hepatitis B infection identified prenatally or at delivery (mother) [2]	Within 1 week	Typhus [2]	Within 1 week
Hepatitis B, perinatal (HBsAg+ < 24 months old) (child) [2]	**Within 1 work day**	**Vancomycin-intermediate *Staph aureus* (VISA)** [2, 3]	**Call Immediately**
Hookworm (ancylostomiasis) [2]	Within 1 week	**Vancomycin-resistant *Staph aureus* (VRSA)** [2, 3]	**Call Immediately**
***Human immunodeficiency virus (HIV), acute infection** [1, 23]	**Within 1 work day**	***Vibrio* infection, including cholera** [2, 3]	**Within 1 work day**
*Human immunodeficiency virus (HIV), non-acute infection [1, 23]	Within 1 week	**Viral hemorrhagic fever (including Ebola)** [2, 25]	**Call Immediately**
Influenza-associated pediatric mortality [2]	**Within 1 work day**	**Yellow fever** [2]	**Call Immediately**
Influenza, novel [2]	**Call Immediately**	Yersiniosis [2]	Within 1 week
***Lead, child blood, any level & adult blood, any level** [24]	**Call/Fax Immediately**		

In addition to specified reportable conditions, **any outbreak, exotic disease, or unusual group expression of disease that may be of public health concern should be reported by the most expeditious means available. This includes any case of a select agent** [25]
See select agent list at *https://www.selectagents.gov/selectagentsandtoxinslist.html*

***See condition-specific footnotes for reporting contact information**

E59-11364 (Rev. 1/08/23) Expires 12/31/23 -- Go to http://www.dshs.texas.gov/idcu/investigation/conditions/ or call your local or regional health department for updates.

Texas Notifiable Conditions Footnotes - 2023

[1] Please refer to specific rules and regulations for HIV/STD reporting and who to report to at: *http://www.dshs.texas.gov/hivstd/healthcare/reporting.shtm*.

[2] Reporting forms are available at *http://www.dshs.texas.gov/idcu/investigation/forms/* and investigation forms at *http://www.dshs.texas.gov/idcu/investigation/*. Call as indicated for immediately reportable conditions.

[3] Lab samples of the following must be sent to the Department of State Health Services, Laboratory Services Section, 1100 West 49th Street, Austin, Texas 78756-3199 or other public health laboratory as designated by the Department of State Health Services: *Bacillus anthracis* isolates (also requested- *Bacillus cereus* isolates that may contain anthrax toxin genes from patients with severe disease or death), *Clostridium botulinum* isolates, *Brucella* species isolates, *Candida auris* isolates, *Corynebacterium diphtheriae* isolates, *Haemophilus influenzae* isolates from normally sterile sites in children under five years old, *Listeria monocytogenes* isolates, *Neisseria meningitidis* isolates from normally sterile sites or purpuric lesions, *Yersinia pestis* isolates, *Salmonella* species isolates (also requested - specimens positive for *Salmonella* by culture-independent diagnostic testing (CIDT) methods), Shiga toxin-producing *Escherichia coli* (all *E.coli* O157:H7 isolates and any *E.coli* isolates or specimens in which Shiga toxin activity has been demonstrated), isolates of all members of the *Mycobacterium tuberculosis* complex, *Staphylococcus aureus* with a vancomycin MIC greater than 2 µg/mL (VISA and VRSA), *Streptococcus pneumoniae* isolates from normally sterile sites in children under five years old, *Francisella tularensis* isolates, and *Vibrio* species isolates (also requested - specimens positive for *Vibrio* by culture-independent diagnostic testing (CIDT) methods). Pure cultures (or specimens) should be submitted as they become available accompanied by a current department Specimen Submission Form. See the *Texas Administrative Code (TAC) Chapter 97*: §97.3(a)(4), §97.4(a)(6), and §97.5(a)(2)(C). Call 512-776-7598 for specimen submission information.

[4] Arboviral infections including, but not limited to, those caused by California serogroup viruses, chikungunya virus, dengue virus, Eastern equine encephalitis (EEE) virus, St. Louis encephalitis (SLE) virus, Western equine encephalitis (WEE) virus, West Nile (WN) virus, and Zika virus.

[5] All blood collection centers should report all donors with reactive tests for West Nile virus, Zika virus, *Babesia* species, and *Trypanosoma cruzi* (Chagas disease) to the DSHS Zoonosis Control Branch. If your center uses a screening assay under an IND protocol, please include results of follow-up testing as well. To report, send a secure email to WNV@dshs.texas.gov or fax the report to 512-776-7454. Providing the following: Collection Agency; Unique BUI #; Test Name, Collection Date; Last Name, First Name, Donor Phone Number, Donor Address, Date of Birth, Age, Sex, Race, and Hispanic Ethnicity (Y/N). If your location has a city or county health department, DSHS recommends that you also share this same information with them.

[6] For asbestos reporting information see *http://www.dshs.texas.gov/epitox/Asbestosis-and-Silicosis-Surveillance/*.

[7] Report suspected botulism immediately by phone to 888-963-7111.

[8] For pesticide reporting information see https://www.dshs.texas.gov/sites/default/files/epitox/pestrptfrm.pdf

[9] For more information on cancer reporting rules and requirements go to *http://www.dshs.texas.gov/tcr/reporting.shtm*.

[10] See additional *Candida auris* reporting information at *https://www.dshs.texas.gov/IDCU/health/antibiotic_resistance/Cauris-Home.aspx*.

[11] See additional CRE reporting information at *http://www.dshs.texas.gov/IDCU/health/antibiotic_resistance/Reporting-CRE.doc*.

[12] For purposes of surveillance and notification, Prion disease such as Creutzfeldt-Jakob disease (CJD) also includes Kuru, Gerstmann-Sträussler-Scheinker (GSS) disease, fatal familial insomnia (FFI), sporadic fatal insomnia (sFI), Variably Protease-Sensitive Prionopathy (VPSPr), familial CJD (fCJD) or genetic CJD (gCJD), variant CJD (vCJD), iatrogenic CJD (iCJD) and any novel prion disease affecting humans.

[13] Call your *local health department* for a copy of the Varicella Reporting Form with their fax number. The *Varicella (Chickenpox) Reporting Form* should be used instead of an Epi-1 or Epi-2 morbidity report.

[14] Applicable for governmental entities. Not applicable to private facilities. (*TAC §96.201*) Initial reporting forms for Contaminated Sharps at *http://www.dshs.texas.gov/idcu/health/infection_control/bloodborne_pathogens/reporting/*.

[15] To report a Controlled Substance Overdose, go to https://odreport.dshs.texas.gov/.

[16] Novel coronavirus causing severe acute respiratory disease includes Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS). Call immediately for SARS, MERS, or any other novel coronavirus cases.

[17] For silicosis reporting information see *http://www.dshs.texas.gov/epitox/Asbestosis-and-Silicosis-Surveillance/*.

[18] Please refer to specific rules and regulations for injury reporting and who to report to at *http://www.dshs.texas.gov/injury/rules.shtm*.

[19] Laboratories should report syphilis test results within 3 work days of the testing outcome.

[20] Reporting forms are available at *https://www.dshs.texas.gov/idcu/disease/hansens/forms.shtm*.

[21] Reportable tuberculosis disease includes the following: suspected tuberculosis disease pending final laboratory results; positive nucleic acid amplification tests; clinically or laboratory-confirmed tuberculosis disease; and all *Mycobacterium tuberculosis (M. tb)* complex including *M. tuberculosis, M. bovis, M. africanum, M. canettii, M. microti, M. caprae, and M. pinnipedii. S*ee rules and reporting information at *http://www.dshs.texas.gov/idcu/disease/tb/reporting/*.

[22] TB infection is determined by a positive result from an FDA-approved Interferon-Gamma Release Assay (IGRA) test such as T-Spot TB or QuantiFERON® - TB GOLD In-Tube Test or a tuberculin skin test, and a normal chest radiograph with no presenting symptoms of TB disease. *S*ee rules and reporting information at *http://www.dshs.texas.gov/idcu/disease/tb/reporting/*. Please report skin test results in millimeters.

[23] Any person suspected of having HIV should be reported, including HIV exposed infants.

[24] For lead reporting information see *http://www.dshs.texas.gov/lead/Reporting-Laws-Administrative-Code.aspx*.

[25] Please secure select agent isolates and specimens in accordance with the guidance in the *Select Agent Regulation*, and immediately initiate a consultation with public health regarding need for further testing or sequencing. Notify any transfer facilities of any test results of high consequence/interest.

Hidalgo County Health and Human Services Department
Public Health Emergency Preparedness Division
1304 S. 25th Ave*Edinburg, TX 78542
Phone (956) 318-2426

Infectious Disease Report

Please Fax Reports to: (956) 318-2431

This form may be used to ***report suspected or confirmed cases of Texas notifiable conditions*** to Hidalgo County Health and Human Services Department. ***Outbreaks, exotic diseases, or unusual group expressions of disease that may be of public health concern should also be reported*** by the most expeditious means available. A health department public health investigator may contact you for additional information.

Date of Report:	**Name of Reporting Facility:**
Full Name of Person Reporting, and Title:	**Phone Number:** **ext.**
Address:	**Fax Number:**

Reportable Disease/Condition:
(provide supportive lab reports if available)

Date (check type):

_____/_____/_____

☐ Onset
☐ Office visit
☐ Specimen collection

Chickenpox (varicella) Reporting Only:

History of disease? ☐ Yes ☐ No
Vaccinated against varicella? ☐ Yes ☐ No
Number of doses received: ☐ 1 ☐ 2

Vaccine/Dosage Dates:
1: _____ **2:** _____

Patient Name (Last) (Suffix) (First) (MI)

Telephone
(_____) _____ – _____

Physical Address (Street) **City** **State** **Zip Code** **County**

Date of Birth (mm/dd/yyyy)	**Age**	**Sex**	**Ethnicity**	**Race**
_____/_____/_____		☐ Male ☐ Female	☐ Hispanic ☐ Not Hispanic	☐ White ☐ Black ☐ Asian ☐ Other _____

Recent Travel:
☐ Yes ☐ No If yes, where: _____

Hospital use
Admit Date: ___/___/____ **Discharge Date:** ___/___/____

Full Physician Name **Physician Address** (if different from reporter) **Physician Phone** (if different from reporter)
(_____) _____ – _____

Additional information such as pregnancy status, occupation, school name/grade:

Call *Immediately Reportable Conditions* to 24/7 Phone Number: (956) 318-2432
Above information is CONFIDENTIAL. Please notify sender if received in error, and destroy!

TEXAS DEPARTMENT OF STATE HEALTH SERVICES

Infectious Disease Control Unit

Epi Case Criteria Guide

2022

Epi Case Criteria Guide, 2022

Editors

Katherine Bourne
Gabrielle Franco

Contributors

Amira Bashadi, MPH
Kelly Broussard, MPH
Christa Cook, MPH, CIC
Kenneth Davis, MPH
Melissa Freeland, MPH
Elise Huebner, MS, CPH, CIC
Johnathan Ledbetter, MPH
Arif Mahmud, MD, MPH, DrPH
Atisha Morrison, MPH, REHS
Briana O'Sullivan, MPH
Inger-Marie Vilcins, PhD, MPH
Susan Rollo, MS, DVM, PhD, DACVPM
Rachael Straver, DVM, MPH
Ryan Wallace
Richard Watkins, MPH

Infectious Disease Control Unit
Emerging and Acute Infectious Disease Branch//Zoonosis Control Branch
Mail Code 1960
PO Box 149347
Austin, TX 78714-9347
Phone 512.776.7676 • Fax 512.776.7616
Revised: November 2021
Publication No. E59-11842

REVISIONS MADE FROM THE 2021 TO THE 2022 EPI CASE CRITERIA GUIDE

Revisions of case criteria for Clinical Description and/or criteria (CD); Confirmed, Probable, Possible, or Suspect cases (CC, PC, PsC, SC); Laboratory Confirmation tests (LC); and Note(s) (N)

- Acute Flaccid Myelits (CD), (CC), (PC), (SC), (LC)
- Anthrax (N)
- Arbovirus (N)
- Chagas disease, acute (PC), (N)
- Chagas disease, chronic indeterminate (PC), (LC), (N)
- Chagas disease, chronic symptomatic (PC), (LC), (N)
- CRE/CP-CRE
- Cyclosporiasis (CC), (LC)
- Malaria (N)
- Norovirus (CD), (PC), (LC)
- Novel Coronavirus 2019 (CD) effective 11/1/21
- Prion diseases such as Creutzfeldt-Jakob disease (CJD) (CD), (PsC), (LC)
- Rabies, animal (LC)
- Rabies, human (LC)
- Relapsing fever, tickborne (CD)
- Rickettsiosis, unspecified (CD), (PC)
- Shiga Toxin Producing E. Coli / STEC (PC), (LC), (N)
- Spotted fever rickettsiosis (CD), (LC)
- Typhus fever, flea-borne (CD), (LC)

Added Notifiable Conditions

- CP-CRE, subcondition of CRE

Removed Notifiable Conditions

- Multidrug Resistant Acinetobacter (MDR-A)

TABLE OF CONTENTS

This document provides infectious disease information for surveillance and data entry staff. It contains a table with condition codes, condition names, and case criteria to aid in the classification and coding of conditions. It is organized alphabetically by condition name**.** Conditions specified as reportable in ***Title 25, Texas Administrative Code, Chapter 97, Subchapter A, Control of Communicable Diseases*** are in **bold type.** Click on a condition in the table of contents to go to the text and on the condition code to move back.

DEFINITIONS OF TERMS

Clinically compatible case: Medical history and/or signs and symptoms generally compatible with the disease, as described in the clinical description

Confirmed case: A case that is classified as confirmed for reporting purposes

Culture-independent diagnostic testing: The detection of antigen or nucleic acid sequences of the pathogen

Epidemiologically linked case: A case in which a) the patient has had contact with one or more persons who either have/had the disease or have been exposed to a point source of infection (i.e., a single source of infection, such as an event leading to a foodborne-disease outbreak, to which all confirmed case-patients were exposed) and b) transmission of the agent by the usual modes of transmission is plausible

- A case can be considered epidemiologically linked to a laboratory-confirmed case if at least one case in the chain of transmission is laboratory confirmed.

Laboratory-confirmed case: A case that is confirmed by one or more of the laboratory methods listed in the case definition under Laboratory Confirmation Tests
While other laboratory methods can be used in clinical diagnosis, only those listed are accepted as laboratory confirmation for national and state reporting purposes.

Probable case: A case that is classified as probable for reporting purposes

Supportive or presumptive laboratory results: Specified laboratory results that are consistent with the diagnosis, yet do not meet the criteria for laboratory confirmation

Suspect case: A case that is classified as suspect for reporting purposes

Normally sterile site: Invasive diseases typically cause significant morbidity and mortality. Sterile sites include:

- Blood (excluding cord blood)
- Bone or bone marrow
- Cerebrospinal fluid (CSF)
- Pericardial fluid
- Peritoneal fluid
- Pleural fluid

The following are also considered sterile sites when certain other criteria are met:

- Internal body sites (brain, heart, liver, spleen, vitreous fluid, kidney, pancreas, lymph node or ovary) when the specimen is collected aseptically during a surgical procedure
- Joint fluid when the joint surface is intact (no abscess or significant break in the skin)

Although placentas and amniotic fluid from an intact amnion are not considered sterile sites, isolation of Group B streptococci or *Listeria* from these sites may qualify as invasive disease. Consult the Sterile Site and Invasive Disease Determination flowchart in Appendix A of the EAIDB Investigation Guidelines for more information: https://www.dshs.texas.gov/IDCU/investigation/Investigation-Guidance/

Normally sterile sites do not include:

- Anatomical areas of the body that normally harbor either resident or transient flora (bacteria) including mucous membranes (e.g., throat, vagina), sputum, and skin; abscesses; or localized soft tissue infection

Table of Contents

ABBREVIATIONS

Laboratory Test Abbreviations

CF – Complement fixation
CIDT – Culture-independent diagnostic testing
CLSI – Clinical and Laboratory Standards Institute
CSF – Cerebrospinal fluid
DFA – Direct fluorescent antibody
DNA – Deoxyribonucleic acid
EEG – Electroencephalogram
EIA – Enzyme immunoassay
ELISA – Enzyme-linked immunosorbent assay
HA – Hemagglutination
HI – Hemagglutination inhibition
ID – Immunodiffusion
IFA – Indirect fluorescent antibody test
IgG – Immunoglobulin G
IgM – Immunoglobulin M
IHA – Indirect hemagglutination
IHC – Immunohistochemistry
LA – Latex agglutination
MA –- Microagglutination
MIC – Minimum inhibitory concentration
MRI – Magnetic resonance imaging
NAT – Nucleic acid testing
PCR – Polymerase chain reaction
PRNT – Plaque reduction neutralization test
RIBA – Recombinant immunoblot assay
RIPA – Radio-immune precipitation assay
rRT-PCR – Real-time reverse transcriptase-polymerase chain reaction
RT-PCR – Reverse transcription polymerase chain reaction
WB – Western blot

Hepatitis Test Markers

Hepatitis A – HAV
  Anti-HAV – hepatitis A antibody
  Anti-HAV IgM – hepatitis A IgM antibody
Hepatitis B – HBV
  HBcAb or anti-HBc – hepatitis B core antibody
  HBc IgM or anti-HBc IgM – hepatitis B core IgM antibody
  HBeAb or anti-HBe – hepatitis B e antibody
  HBeAg – hepatitis B e antigen
  HBsAb or anti-HBs – hepatitis B surface antibody
  HBsAg – hepatitis B surface antigen
Hepatitis C – HCV
  Anti HCV – hepatitis C antibody
  HCV RNA – hepatitis C nucleic acid
  HCV NAT – hepatitis C nucleic acid testing
  HCV RIBA – hepatitis C recombinant immunoblot assay
Hepatitis D – HDV
  Anti-HDV – hepatitis D antibody
Hepatitis E – HEV
  Anti-HEV IgM – hepatitis E IgM antibody

Other Abbreviations:

ALT – Alanine transaminase
ARDS – Acute Respiratory Distress Syndrome
AST – Aspartate transaminase
CDC – Centers for Disease Control and Prevention
DSHS – Department of State Health Services
EAIDB – Emerging and Acute Infectious Disease Branch
FDA – Food and Drug Administration
HAI- Healthcare Associated Infections
ILI – Influenza-Like Illness
NDM-1 – New Delhi Metallo-beta-lactamase-1
NPDPSC – The National Prion Disease Pathology Surveillance Center
TAC – Texas Administrative Code
VHF – Viral hemorrhagic fever

Table of Contents

NOTES

Rickettsia Classification

Rickettsial diseases can be difficult to distinguish between because of overlapping symptomatology and cross-reactivity in serology, which comprises the majority of diagnostic testing for these diseases. The *Rickettsia* are divided into two antigenic groups for surveillance purposes: spotted fever group and typhus group. The condition spotted fever rickettsiosis is defined as infection with spotted fever group *Rickettsia* spread by tick vectors. Flea-borne (murine) typhus, caused primarily by *R. typhi* and spread by fleas, and epidemic typhus, caused by *R. prowazekii* and transmitted by lice, belong to the typhus group. A table classifying Rickettsial species known to cause disease in humans by antigenic group, disease, primary vector, and reservoir occurrence can be found in the CDC's Traveler's Health Yellow Book at https://wwwnc.cdc.gov/travel/yellowbook/2020/travel-related-infectious-diseases/rickettsial-including-spotted-fever-and-typhus-fever-rickettsioses-scrub-typhus-anaplasmosis-and-ehr

Streptococcus Classification

Streptococci are facultatively anaerobic, gram-positive organisms that often occur as chains or pairs. There are four different classification systems for *Streptococcus* species, clinical (pyogenic, oral, enteric), hemolysis (alpha-hemolysis, beta-hemolysis, gamma-hemolysis), serological (Lancefield: A-H and K-U), and biochemical (physiological).

Lancefield group

Streptococci are subdivided into groups by antibodies that recognize surface antigens. The serologic reactivity of "cell wall" polysaccharide "C" antigens was described by Rebecca Lancefield. Twenty group-specific antigens were established, Lancefield A-H and K-U. Clinically significant Lancefield groups include A, B, C, F, and G. Some streptococci such as *Streptococcus pneumoniae* and the viridans streptococci are Lancefield group nontypeable.

Hemolytic reaction

The type of hemolytic reaction displayed on blood agar has also been used to classify the streptococci. Beta-hemolysis is associated with complete lysis of red cells surrounding the colony, whereas alpha-hemolysis is a partial or "green" hemolysis associated with reduction of red cell hemoglobin. Nonhemolytic colonies have been termed gamma-hemolytic. The property of hemolysis is not very reliable for the absolute identification of streptococci, but it is widely used in rapid screens for identification.

Reportable *Streptococcus*

Streptococcus pneumoniae (pneumococcus) - Most strains of *S. pneumoniae* are alpha-hemolytic but can cause ß-hemolysis during anaerobic incubation. They are nontypeable by Lancefield group.

Table of Contents

CASE CRITERIA

Condition/Code	Case Definition/Case Classification	Laboratory Confirmation Tests
Acute Flaccid Myelitis 11120	An illness with onset of acute flaccid limb weakness (low muscle tone, limp, hanging loosely, not spastic or contracted) of one or more limbs. ***Confirmed:*** A case that meets the clinical symptoms AND confirmatory laboratory/imaging evidence in the absence of a clear alternative diagnosis attributable to a nationally notifiable condition. ▪ MRI showing spinal cord lesion with predominant gray matter involvement* and spanning one or more vertebral segments, AND ▪ Excluding persons with gray matter lesions in the spinal cord resulting from physician diagnosed malignancy, vascular disease, or anatomic abnormalities. ***Probable:*** A case that meets the clinical symptoms AND presumptive laboratory/imaging evidence in the absence of a clear alternative diagnosis attributable to a nationally notifiable condition. *Presumptive laboratory/imaging evidence:* ▪ MRI showing spinal cord lesion where gray matter involvement is present, but predominance cannot be determined, AND ▪ Excluding persons with gray matter lesions in the spinal cord resulting from physician diagnosed malignancy, vascular disease, or anatomic abnormalities. ***Suspect***: A case that meets the clinical symptoms with supportive laboratory/imaging evidence AND available information is insufficient to classify case as probable or confirmed. *Supportive laboratory/imaging evidence:* ▪ MRI showing spinal cord lesion in at least some gray matter and spanning one or more vertebral segments, AND ▪ Excluding persons with gray matter lesions in the spinal cord resulting from physician diagnosed malignancy, vascular disease, or anatomic abnormalities. *Other classification criteria:* Autopsy findings that include histopathologic evidence of inflammation largely involving the anterior horn of the spinal cord spanning one or more vertebral segments.	▪ A magnetic resonance image (MRI) showing spinal cord lesion with predominant gray matter* involvement and spanning one or more vertebral segments, ▪ Excluding persons with gray matter lesions in the spinal cord resulting from physician diagnosed malignancy, vascular disease, or anatomic abnormalities. * Terms in the spinal cord MRI report such as "affecting mostly gray matter," "affecting the anterior horn or anterior horn cells," "affecting the central cord," "anterior myelitis," or "poliomyelitis" would all be consistent with this terminology.

Condition/Code	Case Definition/Case Classification	Laboratory Confirmation Tests
Amebic meningitis/encephalitis, other 10096	An infection presenting as meningoencephalitis or encephalitis. Granulomatous amebic encephalitis (GAE) can include general symptoms and signs of encephalitis such as early personality and behavioral changes, depressed mental status, fever, photophobia, seizures, nonspecific cranial nerve dysfunction, and visual loss. GAE neurologic infections are generally fatal within weeks or months; however, a few patients have survived. ***Confirmed:*** A clinically compatible case that is laboratory confirmed Note: *Acanthamoeba* species and *Balamuthia mandrillaris* can also cause disseminated disease (affecting multiple organ systems) or cutaneous disease. For *B. mandrillaris* disease, painless skin lesions appearing as plaques a few millimeters thick and one to several centimeters wide have been observed in some patients, especially patients outside the U.S., preceding the onset of neurologic symptoms by 1 month to approximately 2 years. Skin lesions and sinus disease may be seen in *Acanthamoeba* disease. Disseminated disease and cutaneous disease caused by free-living amebae are only voluntarily reportable in Texas unless they progress to meningitis or encephalitis. See also Amebic meningoencephalitis, primary (PAM)	Detection of *Acanthamoeba*, *Balamuthia*, or another non-*Naegleria* free-living ameba from a clinical specimen or culture via: ▪ Detection of nucleic acid (e.g., PCR), **OR** ▪ Detection of antigen (e.g., immunohistochemistry) Contact the DSHS epidemiologist for meningitis (amebic) at 800-252-8239 if suspected. DSHS can assist in coordinating specimen and/or electronic images submission to the CDC for verification. Collection & shipping procedures can be found at: http://www.cdc.gov/parasites/acanthamoeba/ and http://www.cdc.gov/parasites/balamuthia/ Note: *Acanthamoeba* spp. and *B. mandrillaris* can cause clinically similar illnesses and might be difficult to differentiate using commonly available laboratory procedures. Definitive diagnosis by a reference laboratory might be required. A negative test on CSF does not rule out *Acanthamoeba* or *Balamuthia* infection because these organisms are not commonly present in the CSF.

Condition/Code	Case Definition/Case Classification	Laboratory Confirmation Tests
Amebic meningoencephalitis, primary (PAM) 80750	An infection presenting as meningoencephalitis or encephalitis. The clinical presentation of PAM is like that of acute meningitis caused by other pathogens and symptoms include headache, nausea, vomiting, anorexia, fever, lethargy, and stiff neck. Disorientation, mental status changes, seizure activity, loss of consciousness, and ataxia may occur within hours of initial presentation. After the onset of symptoms, the disease progresses rapidly and usually results in death within 3 to 7 days. ***Confirmed****:* A clinically compatible case that is laboratory confirmed ***Probable****:* A clinically compatible case that meets at least one of the supportive laboratory criteria (listed below) and does not meet confirmatory lab criteria ▪ Supportive laboratory evidence: o Visualization of motile amebae in a wet mount of CSF o Isolation of *N. fowleri* in culture from a clinical specimen See also Amebic meningitis/encephalitis, other	Detection of *Naegleria fowleri* from a clinical specimen via: ▪ Detection of nucleic acid (e.g., PCR), **OR** ▪ Detection of antigen (e.g., immunohistochemistry) Notes: ▪ When available, molecular characterization [e.g., genotype] should be reported. ▪ Contact the DSHS epidemiologist for amebic meningitis at 800-252-8239 if suspected. DSHS can assist in coordinating specimen and/or electronic images submission to the CDC for verification. ▪ Collection & shipping procedures can be found at: http://www.cdc.gov/parasites/naegleria/diagnosis-hcp.html *Naegleria fowleri* might cause clinically similar illness to bacterial meningitis, particularly in its early stages. Definitive diagnosis by a reference laboratory is required. Unlike *Balamuthia mandrillaris* and *Acanthamoeba* spp., *N. fowleri* is commonly found in the CSF of patients with PAM.
Anaplasmosis *(Anaplasma phagocytophilum* infection*)* 11090	Anaplasmosis is a tick-borne illness caused by the bacterium *Anaplasma phagocytophilum*, which is transmitted primarily by blacklegged ticks (*Ixodes* spp.). Initial symptoms may include fever/chills, headache, myalgia, nausea/vomiting and diarrhea. Anaplasmosis may result in severe illness or even death in older or immunocompromised individuals or if treatment is delayed. *Clinical evidence:* Fever as reported by patient or provider and one or more of the following: headache, myalgia, anemia, leukopenia, thrombocytopenia, or any hepatic transaminase elevation. ***Confirmed:*** A clinically compatible illness that is laboratory confirmed ***Probable:*** A clinically compatible illness with serological evidence of IgG or IgM antibody reactive (≥1:128) with *A. phagocytophilum* antigen by IFA, **OR** identification of morulae in the cytoplasm of neutrophils or eosinophils by microscopic examination *Suspect:* A case with laboratory evidence of past/present infection with *A. phagocytophilum* (e.g., laboratory report) but no available clinical information	▪ Demonstration of a four-fold change in IgG-specific antibody titer to *A. phagocytophilum* antigen by IFA in paired serum samples (preferably one taken in first week of illness and a second taken 2-4 weeks later), **OR** ▪ Detection of *A. phagocytophilum* DNA in a clinical specimen by PCR, **OR** ▪ Demonstration of anaplasmal antigen in a biopsy/autopsy sample by IHC, **OR** ▪ Isolation of *A. phagocytophilum* from a clinical specimen in cell culture

Condition/Code	Case Definition/Case Classification	Laboratory Confirmation Tests
Anthrax 10350	An illness or post-mortem examination characterized by several distinct clinical forms, including: ▪ *Cutaneous:* A skin lesion evolving during a period of 2-6 days from a papule, through a vesicular stage, to a depressed black eschar. Fever, malaise, and lymphadenopathy can accompany the lesion. ▪ *Inhalation:* A prodrome resembling a viral respiratory illness, followed by hypoxia and dyspnea, or acute respiratory distress syndrome (ARDS) with resulting cyanosis and shock. Radiographic evidence of mediastinal widening or pleural effusion is common. ▪ *Ingestion* presents as two sub-types: ▪ *Gastrointestinal:* Severe abdominal pain and tenderness, nausea, vomiting, hematemesis, bloody diarrhea, anorexia, fever, and septicemia. ▪ *Oropharyngeal:* Mucosal lesion in the oral cavity or oropharynx, with cervical adenopathy, edema, pharyngitis, fever, and possible septicemia. ▪ *Injection:* Severe soft tissue infection manifested as significant edema or bruising after injection. No eschar is apparent and pain is not common. Nonspecific symptoms such as fever, shortness of breath and nausea are sometimes the first indication of illness. ▪ *Systemic involvement:* May include fever, convulsions, tachycardia, tachypnea, hypotension, leukocytosis, and/or meningeal signs (anthrax meningitis). These complications may be secondary to the above syndromes. *Clinical criteria:* A clinically compatible illness with at least one specific OR two non-specific symptoms and signs that are compatible with cutaneous, ingestion, inhalation, or injection anthrax; systemic involvement; or anthrax meningitis; OR a death of unknown cause AND organ involvement consistent with anthrax. *Confirmed:* A case that meets clinical criteria AND has confirmatory laboratory test results. *Probable:* A case that meets clinical criteria AND has a Gram stain demonstrating Gram-positive rods, square-ended, in pairs or short chains; OR a positive result on a test with established performance in a CLIA-accredited laboratory; OR has epidemiologic linkage relating it to anthrax. *Suspect:* A case that meets the clinical criteria AND for whom an anthrax test was ordered, but with no epidemiologic linkage relating it to anthrax. Epidemiologic linkage is defined as one or more of the following: ▪ Exposure to environment, food, animal, materials, or objects that is suspected or confirmed to be contaminated with *B. anthracis*; OR ▪ Exposure to the same environment, food, animal, materials, or objects as another person who has lab-confirmed anthrax; OR ▪ Consumption of the same food as another person who has laboratory-confirmed anthrax.	▪ Culture and identification of *Bacillus anthracis* or *B. cereus* expressing anthrax toxins from clinical specimens by the Laboratory Response Network, OR ▪ Demonstration of *B. anthracis* antigens in tissues by IHC using both *B. anthracis* cell wall and capsule monoclonal antibodies, OR ▪ Evidence of a four-fold rise in antibodies to protective antigen between acute and convalescent sera or a fourfold change in antibodies to protective antigen in paired convalescent sera using CDC quantitative anti-PA IgG ELISA testing in an unvaccinated person, OR ▪ Detection of Lethal Factor (LF) in clinical serum specimens by LF mass spectrometry OR ▪ Detection of *B. anthracis* or anthrax toxin genes by the LRN-validated PCR and/or sequencing in clinical specimens collected from a normally sterile site or lesion of other affected tissue Note: As required by *TAC*, all *B. anthracis* isolates must be submitted to the DSHS Laboratory. *B. cereus* expressing anthrax toxin suspect isolates from patients with severe disease should be forwarded for confirmation.

Arbovirus, neuroinvasive and non-neuroinvasive **Neuroinvasive diseases:** 10058 **Cache Valley virus** 10054 **California serogroup virus** 10053 **Eastern equine encephalitis virus** 10078 **Jamestown Canyon virus** 10059 **Japanese encephalitis virus** 10081 **La Crosse virus** 10057 **Powassan virus** 10051 **St. Louis encephalitis virus** 10055 **Venezuelan equine encephalitis virus** 10056 **West Nile virus** 10052 **Western equine encephalitis virus** **Non-neuroinvasive diseases:** 10066 **Cache Valley virus** 10061 **California serogroup virus** 10062 **Eastern equine encephalitis virus** 10079 **Jamestown Canyon virus** 10068 **Japanese encephalitis virus** 10082 **La Crosse virus** 10063 **Powassan virus** 10064 **St. Louis encephalitis virus** 10067 **Venezuelan equine encephalitis virus** 10049 **West Nile virus** 10065 **Western equine encephalitis virus** **Other disease categories:** **11718 California encephalitis virus disease** 10073 **Chikungunya virus disease** 10093 **Colorado tick fever virus disease** **50237 Flavivirus disease, not otherwise specified** 11712 **Keystone virus disease** 10072**Other arboviral diseases, not otherwise specified** 11734 **Snowshoe hare virus disease** 10074 **Tick-borne Encephalitis viruses** 11724 **Trivittatus virus disease**	For the purposes of surveillance and reporting, arboviral disease cases are often categorized into two primary groups based on their clinical presentation: neuroinvasive disease and non-neuroinvasive disease. Many arboviruses cause neuroinvasive disease such as aseptic meningitis, encephalitis, or acute flaccid paralysis (AFP). These illnesses are usually characterized by the acute onset of fever with stiff neck, altered mental status, seizures, limb weakness, CSF pleocytosis, and/or abnormal neuroimaging. Less common neurological manifestations, such as cranial nerve palsies, also occur. AFP is characterized by rapid-onset extremity, facial, and/or respiratory weakness and flaccid muscle tone in the affected area; AFP may result from anterior myelitis, peripheral neuritis or post-infectious peripheral demyelinating neuropathy (Guillain-Barré Syndrome). Meningitis is infection or inflammation of the tissues surrounding the brain; symptoms can include fever, headache, photophobia, and nuchal rigidity. Encephalitis is infection or inflammation of the brain tissue itself and may present with fever, altered mental status, seizures, and focal neurologic deficits; meningitis may also be present simultaneously, known as meningoencephalitis. Most arboviruses are capable of causing an acute systemic febrile illness (e.g., West Nile fever) that may include headache, myalgias, arthralgias, rash, and/or gastrointestinal symptoms. Some viruses also can cause more characteristic clinical manifestations, such as severe polyarthralgia or arthritis due to chikungunya virus or other alphaviruses. **Clinical evidence of neuroinvasive disease:** ▪ Meningitis, encephalitis, acute flaccid paralysis, or other acute signs of central or peripheral neurologic dysfunction, as documented by a physician, **AND** ▪ Absence of a more likely clinical explanation **Clinical evidence of non-neuroinvasive disease**: ▪ Fever or chills as reported by the patient or a health-care provider, **AND** ▪ Absence of neuroinvasive disease, **AND** ▪ Absence of a more likely clinical explanation ***Neuroinvasive:*** ***Confirmed*****:** A clinically compatible case (meets neuroinvasive clinical evidence criteria) with laboratory confirmation ***Probable:*** A clinically compatible case (meets neuroinvasive clinical evidence criteria) with virus-specific IgM antibodies in CSF or serum but no other testing **OR** with lower levels of neutralizing antibodies for potentially cross-reactive* arboviruses endemic to the region where exposure occurred. ***Non-neuroinvasive:*** ***Confirmed*****:** A clinically compatible case (meets non-neuroinvasive clinical evidence criteria) with laboratory confirmation ***Probable:*** A clinically compatible case (meets non-neuroinvasive clinical evidence criteria) with virus-specific IgM antibodies in serum but no other testing **OR** with lower levels of neutralizing antibodies for potentially cross-reactive* arboviruses endemic to the region where exposure occurred Note: If lab evidence, clinical manifestations, and exposure history cannot distinguish between two arboviruses (including dengue and Zika, listed as separate conditions), the case should be reported as "Other arboviral diseases" or "Flavivirus disease" if the viruses are all flaviviruses.	**Neuroinvasive** ▪ Isolation of virus from, or demonstration of specific viral antigen or nucleic acid in, tissue, blood, CSF, or other body fluid, **OR** ▪ Four-fold or greater change in virus-specific quantitative antibody titers in paired sera, **OR** ▪ Virus-specific IgM antibodies in serum with confirmatory virus-specific neutralizing antibodies in the same or a later specimen, and negative neutralizing antibody results for potentially cross-reactive* arboviruses endemic to the region where exposure occurred, **OR** ▪ Virus-specific IgM antibodies in CSF and a negative result for other IgM antibodies in CSF for potentially cross-reactive* arboviruses endemic to the region where exposure occurred **Non-neuroinvasive** ▪ Isolation of virus from, or demonstration of specific viral antigen or nucleic acid in, tissue, blood, or other body fluid, ***excluding CSF***, **OR** ▪ Four-fold or greater change in virus-specific quantitative antibody titers in paired sera, **OR** ▪ Virus-specific IgM antibodies in serum with confirmatory virus-specific neutralizing antibodies in the same or a later specimen and negative neutralizing antibody results for potentially cross-reactive* arboviruses endemic to the region where exposure occurred *Viruses in the same genus (the majority of pathogenic arboviruses are in the flavivirus, alphavirus, or orthobunyavirus genus) are generally considered potentially cross-reactive. Consider area of exposure, clinical manifestations of each arbovirus, and level of arbovirus activity when assessing which viruses must be ruled out.

Condition/Code	Case Definition/Case Classification	Laboratory Confirmation Tests
Ascariasis 80770	A parasitic infection caused by the soil-transmitted helminths *Ascaris lumbricoides* and *Ascaris suum*. Most infections with *Ascaris* spp. are asymptomatic. Live worms, passed in stool or occasionally from the mouth, anus, or nose, are often the first recognized sign of infection. Larval migration may result in pulmonary manifestations such as wheezing, cough, fever, eosinophilia and pulmonary infiltration in some patients. Light infections may result in minor abdominal discomfort, dyspepsia, and loss of appetite. Heavy infections may result in severe abdominal pain, fatigue, vomiting, or weight loss. In children, these symptoms can result in nutrient deficiencies resulting in growth retardation and/or cognitive impairment. Serious complications are rare but can be fatal and include intestinal obstruction by a bolus of worms, or obstruction of bile duct, pancreatic duct or appendix by one or more adult worms. ***Confirmed:*** A case that is laboratory confirmed ***Probable***: A clinically compatible case with evidence of infection such as ▪ An ultrasound showing *Ascaris* spp. worms in the pancreas or liver, **OR** ▪ CT scans or MRI showing *Ascaris* spp. worms present in the ducts of the liver or pancreas.	▪ Microscopic identification of *Ascaris* spp. (*A.lumbricoides* or *A. suum*) eggs in stool specimens, **OR** ▪ Microscopic identification of ascarid larvae in sputum or gastric washings, **OR** ▪ Identification of *A. lumbricoides* or *A. suum* adult worms passed from the anus, mouth, or nose
Babesiosis 12010	Babesiosis is a parasitic disease caused by organisms in the *Babesia* genus. Infection can range from subclinical to life-threatening. Clinical manifestations can include hemolytic anemia and nonspecific influenza-like signs and symptoms (e.g., fever, chills, sweats, headache, myalgia, arthralgia, malaise, fatigue, and generalized weakness), splenomegaly, hepatomegaly, or jaundice. Laboratory findings can include thrombocytopenia, proteinuria, hemoglobinuria, and elevated levels of liver enzymes, blood urea nitrogen, and creatinine. Severe cases can be associated with marked thrombocytopenia, disseminated intravascular coagulation, hemodynamic instability, acute respiratory distress, myocardial infarction, renal failure, hepatic compromise, altered mental status, and death. Objective Clinical Criteria: fever, anemia, and/or thrombocytopenia Subjective Clinical Criteria: sweats, headache, myalgia, arthralgia, and/or chills ***Confirmed****:* A case that is laboratory confirmed **AND** meets at least one objective or subjective clinical criterion ***Probable****:* A case that: ▪ Has at least one supportive laboratory result (criteria listed below) **AND** meets at least one objective clinical criterion (subjective clinical criteria alone are not sufficient) ▪ IFA total immunoglobulin (Ig) or IgG titer: ▪ *B. microti*: ≥1:256 (≥1:64 in epidemiologically linked blood donors or recipients) ▪ *B. divergens*: ≥1:256 ▪ *B. duncani*: ≥1:512 ▪ Immunoblot IgG: *B. microti* positive result, **OR** ▪ Is a blood donor or recipient epidemiologically linked to a confirmed or probable babesiosis case, **AND** ▪ Has confirmatory laboratory evidence but does not satisfy objective or subjective clinical criterion, **OR** ▪ Satisfies the supportive laboratory criteria (same as above) *Suspect***:** A case that has confirmatory or supportive laboratory results, but insufficient clinical or epidemiological information is available for case classification	▪ Identification of intraerythrocytic *Babesia* organisms by light microscopy in a Giemsa, Wright, or Wright-Giemsa–stained blood smear, **OR** ▪ Detection of *Babesia* spp. DNA in a whole blood specimen by PCR, **OR** ▪ Detection of *Babesia* spp. genomic sequences in a whole blood specimen by nucleic acid amplification, **OR** ▪ Isolation of *Babesia* organisms from a whole blood specimen by animal inoculation

Condition/Code	Case Definition/Case Classification	Laboratory Confirmation Tests
Botulism, foodborne 10530	Ingestion of botulinum toxin results in an illness of variable severity. Common symptoms include diplopia, blurred vision slurred speech, difficulty swallowing, and bulbar weakness. Symmetric descending paralysis can progress rapidly. ***Confirmed***: A clinically compatible case that is laboratory confirmed or that occurs among persons who ate the same food as persons who have laboratory confirmed botulism ***Probable***: A clinically compatible case with a history of ingestion of a food item known to carry a risk for the botulism toxin	▪ Detection of botulinum toxin in serum, stool/enemam sastric aspirate/vomitus or patient's food, **OR** ▪ Isolation of *Clostridium botulinum* from stool/enema or gastric aspirate/vomitus Note: As required by *TAC* all *Clostridium botulinum* isolates must be submitted to the DSHS Laboratory.
Botulism, infant 10540	An illness of infants, characterized by constipation, poor feeding, altered cry, and "failure to thrive" that can be followed by progressive weakness, impaired respiration, and death. ***Confirmed***: A clinically compatible case that is laboratory confirmed, occurring in a child aged less than 1 year	▪ Detection of botulinum toxin in stool/enema or serum, **OR** ▪ Isolation of *Clostridium botulinum* from stool/enema Note: As required by *TAC* all *Clostridium botulinum* isolates must be submitted to the DSHS Laboratory.
Botulism, other unspecified 10548	Ingestion of botulinum toxin results in an illness of variable severity. Common symptoms include diplopia, blurred vision, slurred speech, difficulty swallowing, and bulbar weakness. Symmetric descending paralysis can progress rapidly. ***Confirmed***: A clinically compatible case that is laboratory confirmed in a patient aged greater than or equal to 1 year who has no history of ingestion of suspect food and has no wounds	▪ Detection of botulinum toxin in clinical specimen, **OR** ▪ Isolation of *Clostridium botulinum* from clinical specimen Note: As required by *TAC* all *Clostridium botulinum* isolates must be submitted to the DSHS Laboratory.
Botulism, wound 10549	An illness resulting from toxin produced by *Clostridium botulinum* that has infected a wound. Common symptoms include diplopia, blurred vision, slurred speech, difficulty swallowing, and bulbar weakness. Symmetric descending paralysis can progress rapidly. ***Confirmed***: A clinically compatible case that is laboratory confirmed in a patient who has no suspected exposure to contaminated food and who has a history of a fresh, contaminated wound during the 2 weeks before onset of symptoms, or a history of injection drug use within the 2 weeks before onset of symptoms ***Probable:*** A clinically compatible case in a patient who has no suspected exposure to contaminated food and who has either a history of a fresh, contaminated wound during the 2 weeks before onset of symptoms, or a history of injection drug use within the 2 weeks before onset of symptoms	▪ Detection of botulinum toxin in stool/enema or serum, **OR** ▪ Isolation of *Clostridium botulinum* from wound or stool/enema Note: As required by *TAC* all *Clostridium botulinum* isolates must be submitted to the DSHS Laboratory.

Condition/Code	Case Definition/Case Classification	Laboratory Confirmation Tests
Brucellosis 10020	An illness that can cause a range of clinical signs and symptoms. Initial signs and symptoms may include fever, sweats, malaise, anorexia, headache, myalgia, arthralgia and/or fatigue. Chronic signs and symptoms may include recurrent fevers, arthritis, epididymitis, orchitis, endocarditis, hepatomegaly, splenomegaly, neurologic symptoms, chronic fatigue, and/or depression. ***Confirmed*:** A clinically compatible illness that is laboratory confirmed ***Probable:*** A clinically compatible case with at least one of the following: ▪ Epidemiologically linked to a confirmed human or animal brucellosis case, **OR** ▪ *Brucella* total antibody titer ≥1:160 by standard tube agglutination test (SAT) or by *Brucella* microagglutination test (BMAT) in one or more serum specimens obtained after onset of symptoms, **OR** ▪ Detection of *Brucella* DNA in a clinical specimen by PCR assay	▪ Culture and identification of *Brucella* spp. from clinical specimens, **OR** ▪ Four-fold or greater rise in *Brucella* agglutination titer between acute- and convalescent-phase serum specimens obtained greater than or equal to 2 weeks apart and tested at the same laboratory Note: As required by *TAC*, all *Brucella* spp. isolates must be submitted to the DSHS Laboratory.
***Candida auris*, Clinical Case** 50263 ***Candida auris*, Colonization/Screening Cases** 50264	*Candida auris* (*C. auris*) is an emerging multidrug-resistant yeast that can cause invasive infections and is associated with high mortality. Some strains of *C. auris* are resistant to the three major classes of antifungals, severely limiting treatment options. *C. auris* can spread in healthcare settings and cause outbreaks. *C. auris* can colonize patients' skin and other body sites, perhaps indefinitely, and colonization poses a risk both for invasive infection and transmission. *C. auris* persists in the healthcare environment for weeks, and certain routinely used disinfectants in healthcare settings are not effective against the organism. Past epidemiological investigations have demonstrated that one-third to half of all patients on a given unit, especially in a long-term care setting, can become colonized with *C. auris* within weeks of an index patient entering the facility. ***Confirmed*:** A case that has confirmatory laboratory test. ***Probable*:** A case that has an isolate that is a *Candida haemulonii* or a yeast isolate that was unable to be identified that is from a person who is within same household, same healthcare facility, or in a healthcare facility that commonly shares patients with a facility, with another person with confirmatory laboratory evidence.	▪ Confirmatory laboratory evidence: Detection of *C. auris* from any body site using either culture or a culture independent diagnostic test (CIDT) (e.g., Polymerase Chain Reaction [PCR]). Note: As required by TAC, all isolates identified as *Candida auris* must be submitted to the DSHS Laboratory. Any yeast isolate identified as *C. haemulonii* or any yeast isolate that had identification attempted without successful identification can be sent to DSHS Laboratory. Please contact a DSHS HAI Epidemiologist or the DSHS Laboratory for additional information on available laboratory support

Condition/Code	Case Definition/Case Classification	Laboratory Confirmation Tests
Campylobacteriosis 11020	An illness of variable severity commonly manifested by diarrhea, abdominal pain, nausea and sometimes vomiting. The organism may also rarely cause extra-intestinal infections such as bacteremia, meningitis or other focal infections. ***Confirmed*:** A case that is laboratory confirmed ***Probable:*** ▪ A case with *Campylobacter* spp. detected. in a clinical specimen using a culture independent diagnostic test (CIDT) **OR** ▪ A clinically compatible case that is epidemiologically linked to a case that meets the probable or confirmed laboratory criteria for diagnosis Notes: ▪ A case should not be counted as a new case if laboratory results were reported within 30 days of a previously reported infection in the same individual, unless additional information is available indicating a separate infection, e.g., different species.	▪ Isolation of *Campylobacter* spp. in a clinical specimen

Condition/Code	Case Definition/Case Classification	Laboratory Confirmation Tests
Carbapenem-resistant Enterobacterales (CRE) 77924 **Carbapenemase producing CRE (CP-CRE)**	Carbapenem-resistant Enterobacterales (previously known as Enterobacteriaceae), are gram-negative bacilli that are resistant to at least one of the carbapenem antibiotics (ertapenem, meropenem, doripenem, or imipenem) or produce a carbapenemase (an enzyme that can make them resistant to carbapenem antibiotics). CRE can colonize or infect any body site. The most common types of CRE infections include bloodstream infections, ventilator-associated pneumonia, and intra-abdominal abscesses. Common causes of CRE infections in healthcare settings include *Klebsiella* species, and *Escherichia coli*. Although *Enterobacter* species can be resistant to carbapenem antibiotics, *Enterobacter* species are not included in this CRE definition. *Klebsiella aerogenes*, previously known as *Enterobacter aerogenes*, does meet the case definition. CREs are either non-carbapenemase producing (NCP-CRE) or carbapenemase producing (CP-CRE). CRE that produce carbapenemases, enzymes that break down carbapenems and related antimicrobials making them ineffective, are called carbapenemase-producing CRE (CP-CRE). Carbapenemase production by Enterobacterales can occur by many different mechanisms, such as Klebsiella pneumoniae carbapenemase (KPC), New Delhi Metallo-beta-lactamase (NDM), Verona Integron-Encoded Metallo-beta-lactamase (VIM), Imipenemase (IMP) and Oxacillinase-48 (OXA-48). NCP-CRE become resistant to carbapenems through a combination of chromosomal mutations and acquired non-carbapenemase resistance mechanisms. NPC-CRE, by antibiotic sensitivity testing, are resistant to at least one of the carbapenem antibiotics (ertapenem, meropenem, doripenem, or imipenem) in the absence of confirmatory CP-CRE test results. ***Confirmed*:** A case that is laboratory confirmed ▪ Note: Additional information on CRE can be found at http://www.cdc.gov/HAI/organisms/cre/index.html https://ndc.services.cdc.gov/case-definitions/carbapenemase-producing-carbapenem-resistant-enterobacteriaceae-2018/	**CP-CRE**: Any *Klebsiella* species, E. aerogenes or *E. coli* from any body site that is confirmed by: Laboratory evidence of carbapenemase production in an isolate: ▪ Positive phenotypic test: ▪ Carba NP ▪ Metallo-β-lactamase testing (e.g., E-test) positive ▪ Modified Carbapenem Inactivation Method (mCIM) positive or indeterminate ▪ Carbapenem Inactivation Method (CIM) positive ▪ Modified Hodge Test (MHT) positive ▪ Positive phenotypic test results (e.g., mCIM, CIM, CarbaNP) but negative molecular method test results. ▪ Molecular methods: ▪ PCR positive (for KPC, NDM, OXA-48, IMP, or VIM) ▪ Xpert Carba-R positive (for KPC, NDM, OXA-48, VIM, IMP) ▪ PCR or Xpert Carba-R positive for novel carbapenemase **NCP-CRE(CRE):** Any *Klebsiella* species, E. aerogenes or *E. coli* that that does not meet CP-CRE criteria and is: ▪ Resistant to any carbapenem, including meropenem, imipenem, doripenem, or ertapenem, Note: There is no requirement to submit isolates to the DSHS Laboratory. Please contact a DSHS HAI Epidemiologist or the DSHS lab for additional information on available lab support. If the CRE isolate is sent to the DSHS lab for additional testing, use the submitting lab's antibiotic susceptibility testing results to meet the epi case criteria.

Condition/Code	Case Definition/Case Classification	Laboratory Confirmation Tests
Chagas disease, acute 12041	Chagas disease is a parasitic infection caused by *Trypanosoma cruzi*. The acute phase is characterized by the first 8 weeks of infection, detectable parasitemia, and asymptomatic (most common) or symptomatic manifestations of disease which can include any of the following: Fever, malaise, rash, body aches, headache, loss of appetite, vomiting, diarrhea, hepatomegaly, splenomegaly, lymphadenopathy, Chagoma (nodular swelling at site of inoculation), Romaña's sign (unilateral swelling of the eyelid), acute myocarditis, and/or meningoencephalitis. ***Confirmed***: A case (asymptomatic or symptomatic) that has confirmatory laboratory testing. Asymptomatic individuals must have evidence of parasitemia based on microscopy or PCR. Notes: ▪ *T. cruzi* IgM tests are unreliable and are thus insufficient evidence of infection. ▪ Samples forwarded to CDC for confirmatory testing which test negative cannot be classified as cases. ▪ Congenital infections are considered acute up to 8 weeks of age and can be diagnosed by confirmatory tests. Infants <12 months and epidemiologically-linked need to be retested after 12 months of age. ▪ Please refer to the DSHS website for guidance on Chagas disease testing: www.dshs.texas.gov/IDCU/disease/Chagas/humans/	▪ Identification of *T. cruzi* by microscopy including: ▪ Microscopic examination of *T. cruzi* by: ▪ Wet mount – motile trypanosomes **OR** ▪ Thick & thin smears - Giemsa stain **OR** ▪ Detection of *T. cruzi* DNA by PCR **OR** ▪ Positive diagnostic serology confirmed by testing at CDC Note: No single supportive test has the sensitivity and specificity to be relied on alone, thus two different methods or antibodies specific to *T. cruzi* are used.

Condition/Code	Case Definition/Case Classification	Laboratory Confirmation Tests
Chagas disease, chronic indeterminate 12043	Following the acute phase, most infected people enter into a prolonged, asymptomatic form of disease (called "chronic indeterminate") during which few or no parasites are found in the blood. During this time, most people are unaware of their infection. Many people remain asymptomatic for life and never develop chronic Chagas-related symptoms. ***Confirmed****:* An asymptomatic case ≥12 months of age with confirmatory lab results ***Probable****:* An asymptomatic case ≥12 months of age with a single *T. cruzi* IgG positive assay* with an IV (reference interval) ≥3.5, OR positive blood donor screening and a *T. cruzi* IgG positive assay* with an IV <3.5 (or no IV provided), OR two *T. cruzi* IgG positive assays* that are different test formats or kits (e.g. Lateral Flow Assay, Wiener ELISA, Hemagen ELISA) *Suspect:* An asymptomatic case ≥12 months of age with positive (reactive) blood donor screening OR a single *T. cruzi* IgG positive assay* with an IV <3.5 (or no IV provided) *DSHS or commercial lab Notes: ▪ Samples forwarded to CDC for confirmatory testing which test negative cannot be classified as cases. ▪ Patients with positive diagnostic serology should have confirmatory testing performed at the CDC. ▪ Patients with positive blood donor screening should have *T. cruzi* IgG testing at a commercial or public health lab. ▪ Women with chronic indeterminate disease can transmit infection to their unborn babies. Infants <12 months of age with a mother from an endemic area, in absence of direct detection of the organism, cannot be classified or ruled out due to maternal antibodies; perform serology at 12 months of age and classify based on presence or absence of symptoms as chronic symptomatic or chronic indeterminate case definition. ▪ Please refer to the DSHS website for guidance on Chagas disease testing: www.dshs.texas.gov/IDCU/disease/Chagas/humans/	▪ Detection of antibody specific to *T. cruzi* by TWO distinct diagnostic tests performed at CDC Note: No single supportive test has the sensitivity and specificity to be relied on alone, thus two different methods or antibodies specific to *T. cruzi* are used.

Condition/Code	Case Definition/Case Classification	Laboratory Confirmation Tests
Chagas disease, chronic symptomatic 12042	Much like the chronic indeterminate phase, the chronic symptomatic phase of disease (more than 8 weeks post infection) is characterized by undetectable parasitemia. However, an estimated 20-30% of infected people will develop debilitating and sometimes life-threatening medical problems over the course of their lives. Complications of chronic Chagas disease may include heart rhythm abnormalities that can cause sudden death, a dilated heart that doesn't pump blood well, and/or a dilated esophagus or colon, leading to difficulties with eating or passing stool. ***Confirmed****:* A clinically compatible case of physician-diagnosed chronic Chagas disease in a patient ≥12 months of age with confirmatory laboratory results ***Probable****:* A clinically compatible case of physician-diagnosed chronic Chagas disease in a patient ≥12 months of age with a single *T. cruzi* IgG positive assay* with an IV (reference interval) ≥3.5, OR positive blood donor screening and a *T. cruzi* IgG positive assay* with an IV <3.5 (or no IV provided), OR two *T. cruzi* IgG positive assays* that are different test formats or kits (e.g. Lateral Flow Assay, Wiener ELISA, Hemagen ELISA) *Suspect:* A clinically compatible case of physician-diagnosed chronic Chagas disease in a patient ≥12 months of age with positive (reactive) blood donor screening OR a single *T. cruzi* IgG positive assay* with an IV <3.5 (or no IV provided) *DSHS or commercial lab Notes: ▪ Samples forwarded to CDC for confirmatory testing which test negative cannot be classified as cases. ▪ Patients with positive diagnostic serology should have confirmatory testing performed at the CDC. ▪ Patients with positive blood donor screening should have *T. cruzi* IgG testing at a commercial or state public health lab. ▪ Women with chronic indeterminate disease can transmit infection to their unborn babies. Infants < 12 months of age with a mother from an endemic area, in absence of direct detection of the organism, cannot be classified or ruled out due to maternal antibodies; perform serology at 12 months of age and classify based on presence or absence of symptoms as chronic symptomatic or chronic indeterminate case definition. ▪ Please refer to the DSHS website for guidance on Chagas disease testing: www.dshs.texas.gov/IDCU/disease/Chagas/humans/	▪ Detection of antibody specific to *T. cruzi* by TWO distinct diagnostic tests performed at CDC Note: No single supportive test has the sensitivity and specificity to be relied on alone, thus two different methods or antibodies specific to *T. cruzi* are used.

Condition/Code	Case Definition/Case Classification	Laboratory Confirmation Tests
Chickenpox - (see Varicella)	▪ See Varicella	
Cholera (toxigenic *Vibrio cholerae* O1 or O139) 10470	An illness characterized by profuse watery diarrhea and/or vomiting; severity is variable. ***Confirmed:*** A clinically compatible illness that is laboratory confirmed Note: Illnesses caused by strains of ***V. cholerae*** other than toxigenic ***V. cholerae*** O1 or O139 should not be reported as cases of cholera. (See *Vibrio parahaemolyticus*, *Vibrio vulnificus*, and Vibriosis, other or unspecified)	▪ Isolation of toxigenic (i.e., cholera toxin-producing) *Vibrio cholerae* O1 or O139 from stool or vomitus, **OR** ▪ Serologic evidence of recent infection Note: As required by *TAC* all *Vibrio* species isolates must be submitted to the DSHS Laboratory.

Condition/Code	Case Definition/Case Classification	Laboratory Confirmation Tests
Contaminated sharps injury Table of Contents	A contaminated sharps injury that occurs in a heath care setting that is contaminated with human blood or body fluids should be reported per the below guidelines. Contaminated sharps injuries in private facilities must be documented per OSHA guidelines. http://www.osha.gov/SLTC/etools/hospital/hazards/sharps/sharps.html Contaminated sharps injuries in Texas public facilities (government entities) are reported to DSHS Emerging and Acute Infectious Disease Branch. *The facility where the injury occurred should complete the reporting form and submit it to the local health authority where the facility is located. If no local health authority is appointed for this jurisdiction, submit to the regional director of the Texas Department of State Health Services (TDSHS) regional office in which the facility is located. Address information for regional directors can be obtained at* http://www.dshs.state.tx.us/regions/default.shtm. *The local health authority, acting as an agent for the TDSHS will receive and review the report for completeness, and submit the report to:* Texas Department of State Health Services Emerging and Acute Infectious Disease Branch PO Box 149347 (Mail Code 1960), Austin, Texas 78714-9347 Fax number: 512-776-7616 The reporting forms can be found at http://www.dshs.state.tx.us/idcu/health/infection_control/bloodborne_pathogens/reporting/ For health care worker HIV risk assessment and follow-up refer to the Updated U.S. Public Health Service guidelines for the management of occupational exposures to HIV and recommendations for post-exposure prophylaxis http://stacks.cdc.gov/view/cdc/20711 (updated 2013). For health care worker HBV and HCV risk assessment and follow-up refer to the Updated U.S. Public Health Service Guidelines for the Management of Occupational Exposures to HBV, HCV, and HIV and Recommendations for Post-exposure Prophylaxis (updated 2001).	Both source person and injured employee should be tested for HIV, HBV, and HCV due to the exposure and not as a laboratory confirmation. See referenced U.S. Public Health Service Guidelines for recommended follow-up testing.

Condition/Code	Case Definition/Case Classification	Laboratory Confirmation Tests
Cryptosporidiosis 11580	A gastrointestinal illness characterized by diarrhea and one or more of the following: diarrhea duration of 72 hours or more, abdominal cramping, vomiting, or anorexia. ***Confirmed*:** A case that is laboratory confirmed ***Probable:*** ▪ A case with *Cryptosporidium* antigen detected by a screening test method such as, the immunochromatographic card/rapid card test or a laboratory test of unknown method **OR** ▪ A clinically compatible case that is epidemiologically linked to a confirmed case by one of the following means: ▪ Household or other close contact to a lab-confirmed case with onset of symptoms within 1 month (before or after), **OR** ▪ Exposure to an outbreak at a body of water or water facility involving at least 2 lab-confirmed cases and onset of symptoms within one month (before or after) of one or more of these cases Note: A case should not be counted as a new case if laboratory results were reported within 365 days of a previously reported infection in the same individual, unless additional information is available indicating a separate infection	▪ Detection of *Cryptosporidium* organisms or DNA in stool, intestinal fluid, tissue samples, biopsy specimens, or other biological sample by certain laboratory methods with a high positive predictive value (PPV): ▪ Direct fluorescent antibody (DFA) test, **OR** ▪ Polymerase chain reaction (PCR), **OR** ▪ Enzyme immunoassay (EIA), **OR** ▪ Light microscopy of stained specimen.
Cyclosporiasis 11575	An illness of variable severity caused by the protozoan parasite *Cyclospora cayetanensis*. The most common symptom is watery diarrhea. Other symptoms include loss of appetite, weight loss, abdominal cramps/bloating, nausea, body aches, and fatigue. Vomiting and low-grade fever also may occur. *Confirmed:* A laboratory-confirmed case with clinical compatibility *Probable*: A clinically compatible case that is epidemiologically linked to a confirmed case Note: A case should not be counted as a new case if laboratory results were reported within 365 days of a previously reported infection in the same individual, unless additional information is available indicating a separate infection	▪ Detection of *Cyclospora* organisms by microscopic examination in stool, intestinal fluid/aspirate, or intestinal biopsy specimens, OR ▪ Detection of *Cyclospora* DNA (by PCR) in stool, intestinal fluid/aspirate, or intestinal biopsy specimens

Condition/Code	Case Definition/Case Classification	Laboratory Confirmation Tests
Cysticercosis 12031	Cysticercosis is a tissue infection caused by the larval form of the pork tapeworm, *Taenia solium*. Infection occurs when the tapeworm eggs are ingested, hatch into larvae, and migrate to tissues where they form cysticerci (cysts). The signs and symptoms of cysticercosis reflect the development of cysticerci in various sites. Subcutaneous cysticerci may be visible or palpable. When cysticerci are found in the brain, the condition is called neurocysticercosis, which can cause diverse manifestations including seizures, mental disturbances, focal neurologic deficits, and signs of space-occupying intracerebral lesions. Death can occur suddenly. Extracerebral cysticercosis can cause ocular, cardiac, or spinal lesions with associated signs and symptoms. Asymptomatic subcutaneous nodules and calcified intramuscular nodules can be encountered. ***Confirmed:*** Laboratory confirmation of the presence of cysticercus in tissue Notes: ▪ Documentation of biopsy or imaging results is required. ▪ Demonstration of *T. solium* eggs and proglottids in the feces are diagnostic of taeniasis (see *Taenia solium* and undifferentiated Taeniasis), not cysticercosis. Persons who are found to have eggs or proglottids in their feces should be evaluated serologically since autoinfection, resulting in cysticercosis, can occur. ▪ Blood tests are available to help diagnose an infection but are not always accurate. While suggestive, it does not necessarily prove that cysticercosis is present.	▪ Diagnosis of neurocysticercosis is usually made by MRI or CT brain scans in order to identify the presence of cysticerci. If surgery is necessary, confirmation of the diagnosis can be made by demonstrating the cysticercus in the tissue involved (biopsy). ▪ Radiographs can identify calcified cysticerci in tissues other than the brain.

Dengue–like Illness 11704 **Dengue** 10680 **Dengue, severe** 11705	Dengue is a potentially fatal febrile illness caused by infection with any of the four dengue viruses (DENV-1, -2, -3 and -4). Dengue is transmitted primarily through the bite of *Aedes aegypti* and *Ae. albopictus* mosquitoes. For the purposes of surveillance and reporting, based on their clinical presentation, dengue cases can be categorized into three primary groups: dengue-like illness, dengue, and severe dengue. **Clinical evidence of dengue-like illness:** ▪ Fever as reported by the patient or healthcare provider **Clinical evidence of dengue:** ▪ Fever as reported by the patient or healthcare provider and the presence of one or more of the following signs and symptoms: ▪ nausea/vomiting ▪ rash ▪ aches and pains (i.e. headache, retro-orbital pain, arthralgia, myalgia) ▪ tourniquet test positive ▪ leukopenia (a total white blood cell count of <5,000/mm³) ▪ abdominal pain ▪ persistent vomiting ▪ extravascular fluid accumulation ▪ mucosal bleeding ▪ liver enlargement >2 centimeters ▪ increasing hematocrit concurrent with rapid decrease in platelet count **Clinical evidence of severe dengue:** ▪ Dengue with any one or more of the following scenarios: ▪ severe plasma leakage evidenced by hypovolemic shock and/or extravascular fluid accumulation with respiratory distress ▪ severe bleeding from the gastrointestinal tract or vagina as defined by requirement for medical intervention including intravenous fluid resuscitation or blood transfusion ▪ severe organ involvement, including any of the following: ▪ elevated liver transaminases: aspartate aminotransferase (AST) or alanine aminotransferase (ALT) ≥1,000 units per liter (U/L) ▪ impaired level of consciousness and/or diagnosis of encephalitis, encephalopathy, or meningitis ▪ heart or other organ involvement including myocarditis, cholecystitis, and pancreatitis ***Confirmed:*** A clinically compatible case of dengue-like illness, dengue, or severe dengue with confirmatory laboratory results ***Probable*:** A clinically compatible case of dengue-like illness, dengue, or severe dengue **AND** one of the following: ▪ Detection of IgM anti-DENV by validated immunoassay in serum or CSF in a person living in a dengue endemic or non-endemic area of the US with evidence of other flavivirus transmission or recent vaccination against a flavivirus	▪ Detection of DENV nucleic acid in serum, plasma, CSF, other body fluid or tissue by validated RT-PCR**,** **OR** ▪ Detection of DENV antigen in tissue, by IHC, **OR** ▪ Detection in serum or plasma of DENV NS1 antigen by a validated immunoassay, **OR** ▪ Cell culture isolation of DENV from serum, plasma, or CSF specimen, **OR** ▪ Detection of IgM anti-DENV in serum or CSF in a traveler returning from a dengue endemic area without ongoing transmission of another flavivirus, clinical evidence of co-infection with a flavivirus or recent vaccination against a flavivirus**,** **OR** ▪ Detection of IgM anti-DENV in serum or CSF in a person living in a dengue endemic or non-endemic area of the US without evidence of other flavivirus transmission, **OR** ▪ IgM anti-DENV seroconversion by validated immunoassay in acute (i.e., collected <5 days of illness onset) and convalescent (i.e., collected >5 days after illness onset) serum specimens, **OR** ▪ IgG anti-DENV seroconversion or ≥4-fold rise in titer in serum specimens collected >2 weeks apart, and confirmed by a neutralization test (e.g., plaque reduction neutralization test) with a >4-fold higher end point titer as compared to other flaviviruses tested

Condition/Code	Case Definition/Case Classification	Laboratory Confirmation Tests
	▪ Detection of IgM anti-DENV by validated immunoassay in serum or CSF in a traveler returning from a dengue endemic area with ongoing transmission of another flavivirus, clinical evidence of co-infection with one of these flaviviruses, or recent vaccination against a flavivirus *Suspect:* A clinically compatible case of dengue-like illness, dengue, or severe dengue with an epidemiologic linkage, defined as: ▪ Travel to a dengue endemic country or presence at a location with an ongoing outbreak within two weeks prior to onset of an acute febrile illness or dengue, **OR** ▪ Association in time and place with a confirmed or probable dengue case	
Diphtheria 10040	An upper respiratory tract illness with an adherent membrane of the nose, pharynx, tonsils, or larynx **OR** an infection of a non-respiratory anatomical site (e.g., skin, wound, conjunctiva, ear, genital mucosa) ***Confirmed:*** A clinically compatible case that is either laboratory confirmed, **OR** epidemiologically linked to a laboratory-confirmed case **OR** An infection at a non-respiratory anatomical site (e.g., skin, wound, conjunctiva, ear, genital mucosa) with: ▪ Isolation of toxin-producing Corynebacterium diphtheriae from that site Notes: ▪ PCR and MALDI-TOF (matrix assisted laser desorption/ionization-time of flight mass spectrometry) diagnosis for *C. diphtheria*, when used alone, do not confirm toxin production. These tests, when used, should always be combined with a test that confirms toxin production, such as the Elek test. ▪ Individuals without evidence of clinical criteria as described by the diphtheria surveillance case definition but for whom toxin-producing *C. diphtheria* is confirmed via laboratory testing (isolation and toxigenicity testing by modified Elek test or other validated test capable of confirming toxin-production) should not be classified as cases. These individuals are considered carriers of the bacteria and are not reportable.	▪ Isolation of *Corynebacterium diphtheriae* from a clinical specimen, **AND** ▪ Confirmation of toxin-production by Elek test or by another validated test capable of confirming toxin-production

Condition/Code	Case Definition/Case Classification	Laboratory Confirmation Tests
Ebola (HF) 11630	An illness with an incubation period of 2-21 days (average 8-10 days) characterized by abrupt onset of fever and typically accompanied by one or more of the following symptoms: severe headache, myalgia (muscle pain), maculopapular rash that can desquamate, vomiting, diarrhea, abdominal pain, bleeding not related to injury, or low platelet count (thrombocytopenia). Other symptoms and clinical findings may include chills, malaise, fatigue, weakness, nausea, decreased appetite, arthralgia, conjunctival injection (red eyes), sore throat, hiccups, chest pain, shortness of breath, confusion, seizures, cerebral edema, spontaneous miscarriage, symptoms of impaired kidney and liver function, elevated liver enzymes, or leukopenia frequently with lymphopenia followed later by elevated neutrophils and a left shift. *Confirmed*: A person that meets laboratory criteria *Suspect*: A person that meets the clinical criteria AND one or more of the epidemiologic risk factors within 21 days of onset of symptom onset Clinical Criteria: ▪ Fever, AND ▪ One or more of the following symptoms: severe headache, myalgia (muscle pain), erythematous maculopapular rash on the trunk with fine desquamation 3–4 days after rash onset, vomiting, diarrhea, abdominal pain, bleeding not related to injury, or thrombocytopenia Epidemiologic Risk Factor Criteria: ▪ Direct contact with blood or body fluids of a person who is sick with or has died from Ebola Virus Disease (EVD), OR ▪ Direct contact with objects (such as clothes, bedding, needles and syringes) contaminated with blood or body fluids from a person who is sick with or has died from EVD, OR ▪ Work in a laboratory that handles, or direct contact with primates or bats from an Ebola virus endemic area or area with active transmission, OR ▪ Sexual exposure to semen from a confirmed acute or clinically recovered case of EVD or exposure to breast milk of an individual who had EVD, OR ▪ Work in a laboratory that handles EVD specimens, OR ▪ Residence in - or travel to - an EVD endemic area or area of active transmission	▪ Detection of Ebola virus genetic sequence by real-time RT-PCR from blood or tissues, OR ▪ Isolation of Ebola virus in cell culture for blood or tissues, OR ▪ Detection of Ebola virus antigens in blood by ELISA, OR ▪ Detection of Ebola virus antigens in tissues by immunohistochemistry (IHC)

Condition/Code	Case Definition/Case Classification	Laboratory Confirmation Tests
Echinococcosis 80670	Echinococcosis is an infection caused by the larval stage of tapeworms in the genus *Echinococcus*, including *E. granulosus* and *E. multilocularis*. Transmission occurs through the ingestion of tapeworm eggs in contaminated food, water, soil, dog feces, or on the contaminated coats of dogs and cats. Infection may also occur through the ingestion of cysts in the undercooked internal organs of infected intermediate hosts, such as sheep, goats and swine. Many infections are asymptomatic for years before the growing cysts cause clinical signs and symptoms associated with the affected organs. Liver involvement is associated with abdominal pain, hepatic masses, and biliary duct obstruction. Pulmonary involvement can produce chest pain, cough, and hemoptysis. Other organs, including the brain, bone, and heart, may also be involved with resulting clinical signs and symptoms. Ruptured cysts may cause fever, urticaria (hives), eosinophilia and anaphylactic shock. ***Confirmed:*** An asymptomatic or symptomatic case that meets one or more confirmatory laboratory criteria. ***Probable****:* An asymptomatic or symptomatic case with *Echinococcus*-specific antibodies identified by TWO different types of serological assays.	▪ Detection of cysts or organ lesions using imaging techniques, including CT, MRI, and ultrasonography **AND** detection of *Echinococcus*-specific antibodies, **OR** ▪ Detection of *Echinococcus* spp. DNA by PCR in a clinical specimen, **OR** ▪ Histopathology or parasitology results compatible with *Echinococcus spp.* (i.e., direct visualization of the protoscolex in cyst fluid)
Ehrlichiosis (*Ehrlichia chaffeensis* infection) 11088	Ehrlichiosis is a group of tick-borne diseases caused by *Ehrlichia* species, obligate intracellular bacteria that infect peripheral blood leukocytes. *Ehrlichia chaffeensis* is transmitted by the bite of infected lone star ticks. Initial symptoms may include fever/chills, headache, myalgia, nausea/vomiting, confusion, and rash. *E. chaffeensis* disease may result in severe illness or even death in older or immunocompromised individuals or if treatment is delayed. *Clinical evidence:* Fever as reported by patient or provider and one or more of the following: headache, myalgia, anemia, leukopenia, thrombocytopenia, or any hepatic transaminase elevation. ***Confirmed:*** A clinically compatible illness that is laboratory confirmed ***Probable*:** A clinically compatible illness with serological evidence of IgG or IgM antibody reactive ($\geq$1:128) with *E. chaffeensis* antigen by IFA, **OR** identification of morulae in the cytoplasm of monocytes or macrophages by microscopic examination *Suspect:* A case with laboratory evidence of past/present infection with *E. chaffeensis* (e.g., laboratory report) but no available clinical information	▪ Demonstration of a four-fold change in IgG-specific antibody titer to *E. chaffeensis* antigen by IFA in paired serum samples (preferably one taken in first week of illness and a second taken 2-4 weeks later), **OR** ▪ Detection of *E. chaffeensis* DNA in a clinical specimen by PCR, **OR** ▪ Demonstration of ehrlichial antigen in a biopsy/autopsy sample by IHC, **OR** ▪ Isolation of *E. chaffeensis* from a clinical specimen in cell culture

Condition/Code	Case Definition/Case Classification	Laboratory Confirmation Tests
Ehrlichiosis (*Ehrlichia ewingii* infection) 11089	Ehrlichiosis is a group of tick-borne diseases caused by *Ehrlichia* species, obligate intracellular bacteria that infect peripheral blood leukocytes. *Ehrlichia ewingii* is transmitted by the bite of infected lone star ticks. Symptoms are similar to that of *E. chaffeensis* disease; however gastrointestinal symptoms are less common, rash is rare, and fewer severe manifestations have been reported. *Clinical evidence:* Fever as reported by patient or provider and one or more of the following: headache, myalgia, anemia, leukopenia, thrombocytopenia, or any hepatic transaminase elevation. ***Confirmed:*** A clinically compatible illness that is laboratory confirmed *Suspect:* A case with laboratory evidence of past/present infection with *E. ewingii* (e.g., laboratory report) but no available clinical information	▪ Detection of *E. ewingii* DNA in a clinical specimen by PCR Note: Because the organism has never been cultured, antigens are not available. Thus, *E. ewingii* infections can only be diagnosed by molecular detection methods.
Ehrlichiosis/Anaplasmosis – undetermined 11091	There are at least three species of intracellular bacteria responsible for ehrlichiosis/anaplasmosis in the US (*Ehrlichia chaffeensis*, *E. ewingii*, and *Anaplasma phagocytophilum*). The clinical signs of disease that result from infection with these bacteria are similar, their geographic ranges overlap, and serologic cross-reactions may occur among tests for these agents. *Clinical evidence***:** Fever as reported by patient or provider and one or more of the following: headache, myalgia, anemia, leukopenia, thrombocytopenia, or any hepatic transaminase elevation. ***Probable*:** A clinically compatible illness with serological evidence of IgG or IgM antibody reactive (≥1:128) with *Ehrlichia/Anaplasma* spp. by IFA, **OR** identification of morulae in white cells by microscopic examination in the absence of other supportive lab results *Suspect*: A case with laboratory evidence of past/present infection with undetermined *Ehrlichia/Anaplasma* spp. but no available clinical information Note: For ehrlichiosis/anaplasmosis, an undetermined case can only be classified as probable. This occurs when a case has compatible clinical criteria with laboratory evidence to support infection, but not with sufficient clarity to identify the organism as *E. chaffeensis*, *A. phagocytophilum*, or *E. ewingii*. This can include the identification of morulae in white cells by microscopic examination in the absence of other supportive laboratory results.	Not applicable - See note
***Escherichia coli*, Shiga toxin-producing (STEC)**	*See* Shiga toxin-producing Escherichia coli (STEC)	

Condition/Code	Case Definition/Case Classification	Laboratory Confirmation Tests
Fascioliasis 80663	*Fasciola hepatica* and *Fasciola gigantica* (liver flukes) are transmitted by ingesting raw aquatic plants or water contaminated with immature larvae, usually in locations around domestic and wild ruminants (commonly sheep, cattle and goats). Infection may or may not be sympyomatic. In early infection (acute phase), the immature larval flukes migrate through the intestinal wall, the abdominal cavity, and the liver tissue, into the bile ducts, where they develop into mature adult flukes. Symptoms may include fever; gastrointestinal problems such as nausea, vomiting and diarrhea; a swollen liver (hepatomegaly); liver function abnormalities, skin rashes; shortness of breath; and abdominal pain or tenderness. The chronic phase (after the parasite settles in the bile ducts), is marked by inflammation and hyperplasia and thickening of the bile ducts and gall bladder, leading to biliary lithiasis or obstruction. Symptoms of this phase may include: biliary colic, nausea, intolerance to fatty food, right upper quadrant pain, epigastric pain, obstructive jaundice, and pruritus, are the result of a blockade in the biliary tract and inflammation in the gall bladder. Inflammation of the liver, gallbladder, and pancreas can also occur. ***Confirmed****:* A case that is laboratory confirmed ***Probable***: A clinically compatible case with ▪ Detection of *Fasciola* antibodies, **OR** ▪ History of ingestion of watercress or freshwater plants and eosinophilia	▪ Microscopic identification of *Fasciola* eggs in feces, duodenal contents, or bile, **OR** ▪ Microscopic identification of a *Fasciola* adult fluke extracted from a clinical specimen (e.g. bile ducts), **OR** ▪ Detection of *Fasciola* coproantigens (antigens found in feces) by ELISA
Granulomatous amebic encephalitis (GAE)	▪ See Amebic meningitis/encephalitis, other	

Condition/Code	Case Definition/Case Classification	Laboratory Confirmation Tests
***Haemophilus influenzae*, invasive disease** 10590	Invasive *Haemophilus influenzae* may manifest as pneumonia, bacteremia, meningitis, epiglottitis, septic arthritis, cellulitis, or purulent pericarditis; less common infections include endocarditis and osteomyelitis ***Confirmed****:* A case that is laboratory confirmed ***Probable*:** Meningitis with detection of *H. influenzae* type b antigen in cerebrospinal fluid (CSF). (Antigen test results in urine or serum are unreliable for diagnosis of *H. influenzae* disease.)	▪ Detection of *Haemophilus influenzae* type b antigen in cerebrospinal fluid [CSF] **OR** ▪ Detection of *Haemophilus influenzae*-specific nucleic acid in a specimen obtained from a normally sterile body site (e.g., blood or CSF), using a validated polymerase chain reaction (PCR) assay; **OR** ▪ Isolation of Haemophilus influenzae from a normally sterile body site (e.g., cerebrospinal fluid [CSF], blood, joint fluid, pleural fluid, pericardial fluid) See Normally Sterile Site Note: Serotyping of isolates can be performed at the DSHS laboratory. Serotyping is recommended for all *H. influenzae* cases and required by *TAC* on isolates from children under 5 years old.

Condition/Code	Case Definition/Case Classification	Laboratory Confirmation Tests
Hantavirus infection, non-HPS 11610 **Hantavirus pulmonary syndrome** 11590	Hantaviruses are rodent-borne viruses that can be transmitted to humans. Patients with hantavirus infection typically present with nonspecific signs and symptoms including fever, myalgia, headache, and chills. After the prodromal phase, symptoms of hantavirus pulmonary syndrome (HPS) may develop. Non-HPS hantavirus infection is a febrile illness with non-specific signs and symptoms including fever, chills, myalgia, headache, and gastrointestinal symptoms, but no cardio-pulmonary symptoms. Clinical laboratory findings may include hemoconcentration, left shift in white blood cell count, neutrophilic leukocytosis, thrombocytopenia, and circulating immunoblasts. HPS is an acute febrile illness characterized by non-specific viral symptoms including fever, chills, myalgia, headache, and gastrointestinal symptoms, and one or more of the following clinical features: ▪ Bilateral diffuse interstitial edema, **OR** ▪ Clinical diagnosis of acute respiratory distress syndrome (ARDS), **OR** ▪ Radiographic evidence of noncardiogenic pulmonary edema, **OR** ▪ Unexplained respiratory illness resulting in death, and includes autopsy examination demonstrating noncardiogenic pulmonary edema without an identifiable cause, **OR** ▪ Healthcare record with a diagnosis of HPS **OR** ▪ Death certificate that lists HPS as a cause of death or a significant condition contributing to death ***Confirmed:*** A clinically compatible case of HPS or non-HPS hantavirus infection with confirmatory laboratory results	▪ Detection of hantavirus-specific IgM* or rising titers of hantavirus-specific IgG, **OR** ▪ Detection of hantavirus-specific ribonucleic acid sequence in clinical specimens, **OR** ▪ Detection of hantavirus antigen by IHC in lung biopsy or autopsy tissues *Due to the high rate of false positives at commercial labs, a sample should be forwarded to DSHS for confirmatory testing
Hemolytic uremic syndrome, post-diarrheal (HUS) 11550	Hemolytic uremic syndrome (HUS) is characterized by the acute onset of microangiopathic hemolytic anemia, renal injury, and low platelet count. Thrombotic thrombocytopenic purpura (TTP) also is characterized by these features but can include central nervous system (CNS) involvement and fever and can have a more gradual onset. Most cases of HUS (but few cases of TTP) occur after an acute gastrointestinal illness (usually diarrheal). *Confirmed:* An acute illness diagnosed as HUS or TTP that both meets the laboratory criteria and began within 3 weeks after onset of an episode of acute or bloody diarrhea *Probable:* ▪ An acute illness diagnosed as HUS or TTP that meets the laboratory criteria in a patient who does not have a clear history of acute or bloody diarrhea in preceding 3 weeks, OR ▪ An acute illness diagnosed as HUS or TTP, that a) has onset within 3 weeks after onset of an acute or bloody diarrhea and b) meets the laboratory criteria except that microangiopathic changes are not confirmed Note: See Shiga toxin-producing *Escherichia coli* (STEC) as cases that meet the HUS case criteria should also be reported as a "Suspect" STEC case, unless other criteria is met for another case definition.	The following are both present at some time during the illness: ▪ Anemia (acute onset) with microangiopathic changes (i.e., schistocytes, burr cells, or helmet cells) on peripheral blood smear, AND ▪ Renal injury (acute onset) evidenced by either hematuria, proteinuria, or elevated creatinine level (i.e., greater than or equal to 1.0 mg/dL in a child aged less than 13 years or greater than or equal to 1.5 mg/dL in a person aged greater than or equal to 13 years, or greater than or equal to 50% increase over baseline) Note: A low platelet count can usually, but not always, be detected early in the illness, but it can then become normal or even high. If a platelet count obtained within 7 days after onset of the acute gastrointestinal illness is not less than 150,000/mm3, other diagnoses should be considered.

Condition/Code	Case Definition/Case Classification	Laboratory Confirmation Tests
Hepatitis A, acute 10110	An acute illness with a discrete onset of any sign or symptom consistent with acute viral hepatitis (e.g., fever, headache, malaise, anorexia, nausea, vomiting, diarrhea, abdominal pain, or dark urine), **AND** a) either jaundice or elevated total bilirubin levels ≥ 3.0 mg/dL, **OR** elevated serum alanine aminotransferase (ALT) levels >200 IU/L, **AND** b) the absence of a more likely diagnosis. ***Confirmed:*** ▪ A case that meets the clinical case criteria and is IgM anti-HAV positive, **OR** ▪ A case that has hepatitis A virus RNA detected by NAAT (such as PCR or genotyping), **OR** ▪ A case that meets the clinical criteria and occurs in a person who has an epidemiological link with a person who had contact (e.g., household or sexual) with a laboratory-confirmed hepatitis A case 15-50 days prior to the onset of symptoms. **AND** ▪ A case that is not otherwise ruled out by IgM anti-HAV or NAAT for hepatitis A virus testing performed in a public health laboratory. Note: Hepatitis A is usually self-limiting and does not result in chronic infection. However, up to 10% of persons with hepatitis A may experience a relapse during the 6 months after acute illness. Cases of relapsing hepatitis A should not be enumerated as new cases. In addition, a case should not be counted as a hepatitis A case if there is an alternate, more likely diagnosis.	▪ Immunoglobulin M antibody to hepatitis A virus (anti-HAV IgM) positive, **OR** ▪ Nucleic acid amplification test (NAAT; such as Polymerase Chain Reaction [PCR] or genotyping) for hepatitis A virus RNA positive
Hepatitis B, acute 10100	An acute illness with a discrete onset of any sign or symptom* consistent with acute viral hepatitis (e.g., fever, headache, malaise, anorexia, nausea, vomiting, diarrhea, and abdominal pain), **AND** either b) jaundice, or c) elevated serum alanine aminotransferase levels (ALT) >100 IU/L. ***Confirmed*:** A case that meets the clinical case definition, is laboratory confirmed, and is not known to have chronic hepatitis B** *A documented negative hepatitis B surface antigen (HBsAg) laboratory test result within 6 months prior to a positive test result (i.e., HBsAg, hepatitis B "e" antigen [HBeAg], or hepatitis B virus nucleic acid testing [HBV NAT] including genotype) does not require an acute clinical presentation to meet the surveillance case definition. **A person should be considered chronically infected if hepatitis B antigen tests (HBsAg, HBeAg, and/or nucleic acid tests) have been positive for 6 months or longer or if the patient has a history of chronic hepatitis B diagnosis.	▪ Hepatitis B surface antigen (HBsAg) positive, **AND** ▪ IgM antibody to hepatitis B core antigen (anti-HBc IgM) positive (if done)

Condition/Code	Case Definition/Case Classification	Laboratory Confirmation Tests
Hepatitis B virus infection, perinatal 10104	Perinatal hepatitis B (HBV) in the newborn can range from asymptomatic to fulminant hepatitis. ***Confirmed***: Child born in the US to a HBV-infected mother and positive for HBsAg at ≥ 1 month of age and ≤ 24 months of age OR positive for HBeAg or HBV DNA ≥9 months of age and ≤ 24 months of age. ***Probable***: Child born in the US and positive for HBsAg at ≥ 1 month of age and ≤ 24 months of age OR positive for HBeAg or HBV DNA ≥9 months of age and ≤ 24 months of age, but whose mother's hepatitis B status is unknown (i.e. epidemiologic linkage not present). Notes: ▪ If the mother is known to be NOT infected with HBV, refer to the case definition for acute Hepatitis B. These definitions are used for surveillance purposes only, not for perinatal hepatitis B prevention case management purposes.	▪ Hepatitis B surface antigen (HBsAg) positive, hepatitis B e antigen (HBeAg) positive, or detectable Hepatitis B virus DNA (HBV DNA) Note: HBsAg must be tested more than 4 weeks after last dose of hepatitis B vaccine to be considered confirmatory.

Condition/Code	Case Definition/Case Classification	Laboratory Confirmation Tests
Hepatitis C, acute 10101	All hepatitis C virus cases in each classification category should be > 36 months of age, unless known to have been exposed non-perinatally**.** **Clinical Criteria:** ▪ Jaundice, **OR** ▪ Peak total bilirubin levels >= 3.0 mg/DL, **OR** ▪ Elevated serum alanine aminotransferase (ALT) level >200 IU/L, **AND** ▪ The absence of a more likely diagnosis (which may include evidence of acute liver disease due to other causes or advanced liver disease due to pre-existing chronic Hepatitis C virus (HCV) infection or other causes, such as alcohol exposure, other viral hepatitis, hemochromatosis, etc.) ***Confirmed***: ▪ A case that meets the clinical criteria and is laboratory confirmed, **OR** ▪ A documented negative HCV antibody followed within 12 months by a positive HCV antibody test (anti-HCV test conversion) in the absence of a more likely diagnosis, **OR** ▪ A documented negative HCV antibody OR negative hepatitis C virus detection test (in someone without a prior diagnosis of HCV infection) followed within 12 months by a positive hepatitis C virus detection test (HCV RNA test conversion) in the absence of a more likely diagnosis. ***Probable*:** ▪ A case that meets clinical criteria and has presumptive laboratory evidence (a positive anti-HCV antibody test), **AND** ▪ Does not have a hepatitis C virus test reported, **AND** ▪ Has no documentation of anti-HCV or HCV RNA test conversion within 12 months	Hepatitis C virus detection test: ▪ Nucleic acid test (NAT) or PCR test for HCV RNA positive (including qualitative, quantitative or genotype testing) **OR** ▪ A positive test indicating presence of hepatitis C viral antigen (HCV antigen)* *When and if a test for HCV antigen(s) is approved by FDA and available

Condition/Code	Case Definition/Case Classification	Laboratory Confirmation Tests
Hepatitis E, acute 10103	Typical clinical signs and symptoms of acute hepatitis E virus (HEV) are similar to those of other types of acute viral hepatitis and include abdominal pain anorexia, dark urine, fever, hepatomegaly, jaundice, malaise, nausea, and vomiting. Other less common symptoms include arthralgia, diarrhea, pruritus, and urticarial rash. The period of infectivity following acute infection has not been determined, but viral excretion in stools has been demonstrated for up to 14 days after illness onset. In most hepatitis E outbreaks, the highest rates of clinically evident disease have been in young to middle-age adults; lower disease rates in younger age groups can be the result of anicteric and/or subclinical HEV infection. No evidence of chronic infection has been detected in long-term follow-up of patients with hepatitis E. The case fatality rate is low except in pregnant women where it can reach 20% among those infected during the third trimester of pregnancy. ***Confirmed*:** A case that meets the clinical case description and is laboratory confirmed ***Probable:*** A case that meets the clinical case description with supportive laboratory evidence (positive IgM antibody from labs other than CDC), **OR** negative tests for other acute hepatitis markers and an epidemiological link to other confirmed cases or travel history to an endemic area during exposure period	▪ IgM anti-HEV from CDC laboratory or PCR positive from reference laboratory Note: No FDA approved tests to diagnose HEV infection are available in the United States.
Hookworm (Ancylostomiasis) 80760	A parasitic infection caused by the soil-transmitted helminths *Necator americanus* and *Ancylostoma duodenale* (rarely by other *Ancylostoma* species, e.g. *A.ceylanicum*). Itching and localized rash are often the first signs of infection. Other symptoms may include cough, abdominal discomfort, diarrhea, blood in the stool, loss of appetite, nausea, fatigue, or pale skin. Light hookworm infections generally produce few or no clinical effects. In heavy infections, symptoms may include abdominal pain, nausea and anorexia. Chronic blood loss at the site of the intestinal attachment of adult worms can lead to anemia. Children with heavy long-term infection may have impaired growth and delayed mental development. ***Confirmed:*** A case that is laboratory confirmed	▪ Microscopic identification of *Ancylostoma* or *Necator* (Hookworm) eggs in feces, **OR** ▪ Microscopic identification of *Ancylostoma* or *Necator* species larvae cultured from feces, **OR** ▪ Identification of *Ancylostoma* or *Necator* species adult worms expelled after treatment treatment or removed during endoscopy

Condition/Code	Case Definition/Case Classification	Laboratory Confirmation Tests
Influenza, human isolates - **[outbreaks only]** 11060	The flu is a contagious respiratory illness caused by influenza viruses. It can cause mild to severe illness and at times can lead to death. Symptoms of flu may include fever, headache, extreme tiredness, dry cough, sore throat, runny or stuffy nose, and muscle aches. Stomach symptoms (nausea, vomiting, and diarrhea) can occur but are more common in children than adults. Complications of flu can include bacterial pneumonia, ear infections, sinus infections, dehydration, and worsening of chronic medical conditions, such as congestive heart failure, asthma, or diabetes. *Confirmed:* Case that is clinically compatible and laboratory confirmed Outbreak: See the Texas Influenza Surveillance Handbook for more information on influenza (flu)-associated outbreaks including operational influenza-like illness (ILI) and flu-associated outbreak definitions. Note: Influenza is not a reportable condition in Texas. See Influenza A, novel/variant infection for reporting of novel/variant strains. See Influenza-associated pediatric mortality for reporting of influenza-associated deaths in all persons aged <18 years.	Influenza virus isolation in tissue cell culture from respiratory specimens, **OR** Reverse-transcriptase polymerase chain reaction (RT-PCR) testing of respiratory specimens, **OR** Immunofluorescent antibody staining (direct or indirect) of respiratory specimens, **OR** Rapid influenza diagnostic testing of respiratory specimens, **OR** Immunohistochemical (IHC) staining for influenza viral antigens in respiratory tract tissue from autopsy specimens, **OR** Four-fold rise in influenza hemagglutination inhibition (HI) antibody titer in paired acute and convalescent sera

Condition/Code	Case Definition/Case Classification	Laboratory Confirmation Tests
Influenza A, novel/variant 11062	An illness compatible with influenza virus infection (fever >100 degrees Fahrenheit, with cough and/or sore throat) ***Confirmed:*** A case of human infection with a laboratory confirmed novel/variant influenza A virus ***Probable:*** A case meeting the clinical criteria and epidemiologically linked* to a confirmed case, but for which no confirmatory laboratory testing for novel/variant influenza virus infection has been performed or test results are inconclusive for a novel/variant influenza A virus infection *Epidemiologic linkage criteria:* a) the patient has had contact with one or more persons who either have or had the disease and b) transmission of the agent by the usual modes of transmission is plausible. A case can be considered epidemiologically linked to a laboratory-confirmed case if at least one case in the chain of transmission is laboratory confirmed. *Suspect:* A case meeting the clinical criteria in which influenza A has been detected but is pending laboratory confirmation. Any case of human infection with an influenza A virus that is different from currently circulating human influenza H1 and H3 viruses is classified as a suspect case until the confirmation process is complete. Note: Typically, sporadic novel/variant influenza cases will have a history of either close contact with ill animals known to transmit novel subtypes of influenza A (such as wild birds or poultry, swine, or other mammals) **OR** travel, within 14 days, to any country where a novel influenza A virus (such as highly pathogenic avian influenza A H5N1) has been recently identified in animals or people.	Identification of an influenza A virus subtype or strain that is different from currently circulating human influenza H1 and H3 strains as confirmed by CDC's influenza laboratory, by public health laboratories using CDC-approved protocols for that specific strain, or by labs using FDA-authorized tests for specific strains. ▪ Novel/variant subtypes include, but are not limited to, H2, H5, H7, and H9 subtypes. ▪ Influenza H1 and H3 subtypes originating from a non-human species or from genetic re-assortment between animal and human viruses are also novel/variant subtypes or strains. ▪ Methods available for detection of currently circulating human influenza viruses at public health laboratories (e.g., rRT-PCR) will also detect suspected novel/variant subtypes and strains. ▪ Initial confirmation that a specific influenza A virus represents a novel/variant virus will be performed by CDC's influenza laboratory. ▪ Currently, only viral isolation, RT-PCR, gene sequencing, or a 4-fold rise in strain-specific serum antibody titers are considered confirmatory for case classification purposes.

Condition/Code	Case Definition/Case Classification	Laboratory Confirmation Tests
Influenza-associated pediatric mortality 11061	An influenza-associated death is defined for surveillance purposes as a death resulting from a clinically compatible illness that was confirmed to be influenza by an appropriate laboratory or rapid diagnostic test. There should be no period of complete recovery between the illness and death. Influenza-associated deaths in all persons aged <18 years should be reported. A death should not be reported if there is no laboratory confirmation of influenza virus infection, the influenza illness is followed by full recovery to baseline health status prior to death, the death occurs in a person 18 years of age or older, or after review and consultation there is an alternative agreed upon cause of death which is unrelated to an infectious process (For example, a child with a positive influenza test whose death clearly resulted from trauma after a car accident would not qualify as a case. However, a child with a respiratory illness and a positive influenza test whose death is attributed to another infectious cause such as staphylococcal pneumonia would still qualify as a case.). ***Confirmed:*** A death meeting the clinical case definition that is laboratory confirmed	Laboratory testing for influenza virus infection can be done on pre- or post-mortem clinical specimens, and may include identification of influenza A or B virus infections by a positive result by at least one of the following: ▪ Influenza virus isolation in tissue cell culture from respiratory specimens, **OR** ▪ Reverse-transcriptase polymerase chain reaction (RT-PCR) testing of respiratory specimens, **OR** ▪ Immunofluorescent antibody staining (direct or indirect) of respiratory specimens, **OR** ▪ Rapid influenza diagnostic testing of respiratory specimens, **OR** ▪ Immunohistochemical (IHC) staining for influenza viral antigens in respiratory tract tissue from autopsy specimens, **OR** ▪ Four-fold rise in influenza hemagglutination inhibition (HI) antibody titer in paired acute and convalescent sera

Condition/Code	Case Definition/Case Classification	Laboratory Confirmation Tests
Legionellosis 10490	Legionellosis is associated with three clinically and epidemiologically distinct illnesses: Legionnaires' disease, which is characterized by fever, myalgia, cough, and clinical or radiological pneumonia; Pontiac fever, a milder illness without pneumonia; and extrapulmonary legionellosis, a rare manifestation in which *Legionella* can cause disease at sites outside the lungs (e.g., endocarditis, wound infection, joint infection, graft infection). ***Confirmed:*** A clinically compatible case that meets at least one of the confirmatory laboratory criteria ***Probable*:** A clinically compatible case with an epidemiologic linkage* during the incubation period **Epidemiologic linkage criteria:* 1) Linkage to a setting with a confirmed source of *Legionella* **OR** 2) Linkage to a setting with a suspected source of *Legionella* that is associated with at least one confirmed case	▪ Isolation (culture) of **any** *Legionella* organism from respiratory secretions, lung tissue, pleural fluid, or other normally sterile fluid, **OR** ▪ Detection of **any** *Legionella* species from lower respiratory secretions, lung tissue, or pleural fluid by a validated nucleic acid amplification test (e.g. PCR), **OR** ▪ Detection of *Legionella pneumophila* serogroup 1 antigen in urine using validated reagents, **OR** ▪ Demonstration of seroconversion by a fourfold or greater rise in specific serum antibody titer between paired acute and convalescent phase serum specimens to *Legionella pneumophila* serogroup 1 using validated reagents
Leishmaniasis 80550	Leishmaniasis is a parasitic disease that is present primarily in South and Central America, Africa, Asia, and southern Europe. The *Leishmania* parasite is transmitted via the bite of phlebotomine sand flies. There are several forms of the disease in humans: cutaneous, the most common, which causes skin lesions; visceral, which may affect multiple internal organs, including the liver, spleen, and bone marrow; and mucosal, a less common form that affects mucous membranes of the nose, mouth, or throat. Most leishmaniasis cases reported in Texas are the cutaneous form and are travel-associated, albeit autochthonous cases occur occasionally. Cutaneous leishmaniasis infection can present as one or more skin sores weeks or months after a sand fly bite. Over time, the sores may change in size and appearance—they may start out as papules or nodules and may end up as ulcers which might scab over. Lesions can heal spontaneously within weeks to months, or last for a year or more. Some *Leishmania* strains can disseminate to cause mucosal lesions (espundia) years after the primary cutaneous lesion has healed. Without treatment, this sequela can progress and lead to destruction of the naso-oropharyngeal mucosa, which can be severely disfiguring. Visceral leishmaniasis infection can be asymptomatic or result in manifestations such as fever, weight loss, hepatosplenomegaly, and pancytopenia. Severe cases of visceral leishmaniasis are often fatal without treatment. ***Confirmed:*** A clinically compatible case that is laboratory confirmed	▪ Microscopic identification of the nonmotile, intracellular form (amastigote) in stained specimens from lesions, **OR** ▪ Culture of the motile, extracellular form (promastigote) on suitable media, **OR** ▪ An intradermal (Montenegro) test with leishmanin, an antigen derived from the promastigotes, is usually positive in established disease, **OR** ▪ Positive *Leishmania* Real-Time PCR or *Leishmania* PCR and DNA sequencing at CDC

Condition/Code	Case Definition/Case Classification	Laboratory Confirmation Tests
Listeriosis 10640	In adults, invasive disease caused by *Listeria monocytogenes* manifests most commonly as meningitis or bacteremia; infection during pregnancy can result in fetal loss through miscarriage or stillbirth, or neonatal meningitis or bacteremia. Other manifestations can also be observed. ***Confirmed:*** A clinically compatible case that is laboratory confirmed ***Probable****:* The mother of a neonate with confirmed or probable listeriosis, even if the laboratory criteria are not met for the mother; a neonate born to a mother with confirmed or probable listeriosis, even if laboratory criteria are not met for the neonate; or a clinically compatible case detected through use of a culture independent laboratory testing method. ***Suspect****:* Isolation of *L. monocytogenes* from a non-invasive clinical specimen, e.g., stool, urine, wound. Notes: ▪ Pregnancy loss and intrauterine fetal demise are considered maternal outcomes and would be counted as a single case in the mother. ▪ Cases in neonates and mothers should be reported separately when each meets the case definition. A case in a neonate is counted if live-born. A case should not be counted as a new case if laboratory results were reported within 365 days of a previously reported infection in the same individual, unless additional information is available indicating a separate infection.	▪ Isolation of *L. monocytogenes* from a normally sterile site, e.g., blood, cerebrospinal fluid (CSF), or less commonly, joint, pleural, or pericardial fluid, **OR** ▪ Isolation of *L. monocytogenes* from products of conception at time of delivery and non-sterile sites of neonates obtained within 48 hours of delivery, **OR** ▪ In the setting of miscarriage or stillbirth, isolation of *L. monocytogenes* from placental or fetal tissue, **OR** ▪ In the setting of pregnancy or live birth, isolation of *L. monocytogenes* from mother's or neonate's blood or other sterile site, or from placental or amniotic fluid See Normally Sterile Site ▪ Note: As required by *TAC* all *Listeria monocytogenes* isolates must be submitted to the DSHS Laboratory.

Condition/Code	Case Definition/Case Classification	Laboratory Confirmation Tests
Lyme disease 11080	A systemic, tickborne disease with protean manifestations, including dermatologic, rheumatologic, neurologic, and cardiac abnormalities. The most common clinical marker for the disease is erythema migrans (EM), the initial skin lesion that occurs in 60-80% of patients. For purposes of surveillance, EM is defined as a skin lesion that typically begins as a red macule or papule and expands over a period of days to weeks to form a large round lesion, often with partial central clearing. Secondary lesions also may occur. Annular erythematous lesions occurring within several hours of a tick bite represent hypersensitivity reactions and do not qualify as EM. For most patients, the expanding EM lesion is accompanied by other acute symptoms, particularly fatigue, fever, headache, mildly stiff neck, arthralgia, or myalgia. These symptoms are typically intermittent. Texas is a low-incidence jurisdiction for Lyme disease (has had <10 confirmed cases/100,000 population for a period of three consecutive years) and thus follows the recommended reporting criteria for low-incidence jurisdictions. ***Clinical criteria:*** An illness characterized by one of the following early or late-stage manifestations, as reported by a healthcare provider, and in the absence of another known etiology: ▪ Erythema migrans (EM) rash ≥5 cm in diameter ▪ Recurrent, brief attacks (weeks or months) of objective joint swelling in one or a few joints ▪ Any of the following signs that cannot be explained by any other etiology, alone or in combination: lymphocytic meningitis; cranial neuritis, particularly facial palsy (unilateral or bilateral); radiculoneuropathy; or, rarely, encephalomyelitis ▪ Acute onset of high-grade (2nd-degree or 3rd-degree) atrioventricular conduction defects that resolve in days to weeks ***Confirmed****:* A clinically compatible case that has confirmatory laboratory evidence. ***Probable****:* A clinically compatible case that has presumptive laboratory evidence: ▪ Positive IgG[2] immunoblot without positive or equivocal first-tier screening assay. *Suspect:* A case of EM rash with no laboratory evidence of infection **OR** a case that meets confirmatory or presumptive laboratory criteria, but no clinical information is available **Notes:** ▪ A new case is one that has not been reported within the same calendar year ▪ While a single IgG immunoblot is adequate for surveillance purposes, a two-tier test is still recommended for patient diagnosis; a positive IgG immunoblot preceded by a negative screen is considered a false positive ▪ There is no validated Lyme disease test for CSF; positive tests on CSF are not confirmatory	▪ Isolation of *B. burgdorferi* sensu stricto or *B. mayonii* in culture, **OR** ▪ Detection of *B. burgdorferi* sensu stricto *or B. mayonii* in a clinical specimen by a *B. burgdorferi* group-specific NAAT assay, **OR** ▪ Detection of *B. burgdorferi* group-specific antigens by immunohistochemical assay (IHC) on biopsy or autopsy tissues, **OR** ▪ Standard two-tier test (STTT): positive or equivocal EIA or IFA test, followed by a positive IgM[1] or IgG[2] immunoblot **OR** ▪ Modified two-tier test (MTTT): positive or equivocal EIA or IFA test, followed by a different, sequential positive or equivocal EIA [1]IgM WB is considered positive when at least two of the following three bands are present: 24 kilodalton (kDa) outer surface protein C (OspC)*, 39 kDa basic membrane protein A (BmpA), and 41 kDa (Fla). Disregard IgM results for specimens collected >30 days after symptom onset. [2]IgG WB is considered positive when at least five of the following 10 bands are present: 18 kDa, 24 kDa (OspC)*, 28 kDa, 30 kDa, 39 kDa (BmpA), 41 kDa flagellin (Fla), 45 kDa, 58 kDa (not GroEL), 66 kDa, and 93 kDa. *Depending upon the assay, OspC could be indicated by a band of 21, 22, 23, 24 or 25 kDA.

Condition/Code	Case Definition/Case Classification	Laboratory Confirmation Tests
Malaria 10130	Initial symptoms of malaria are non-specific and include fever, chills, sweats, headaches, muscle pains, nausea and vomiting. In severe cases of malaria (usually caused by *Plasmodium falciparum*), clinical findings can also include confusion, coma, neurologic focal signs, severe anemia, and respiratory difficulties. ***Confirmed:*** A case that is laboratory confirmed **in any person (symptomatic or asymptomatic) *diagnosed in the United States*, regardless of whether the person experienced previous episodes of malaria while outside the country** *Suspect:* Detection of *Plasmodium* species by rapid diagnostic antigen testing (RDT) without confirmation by microscopy or nucleic acid testing in any person (symptomatic or asymptomatic) *diagnosed in the United States*, regardless of whether the person experienced previous episodes of malaria while outside the country ▪ Note: A subsequent episode of malaria is counted as an additional case, regardless of the detected Plasmodium species, unless the case is indicated as a treatment failure within 4 weeks of initial presentation.	▪ Detection and specific identification of malaria parasite species by microscopy on blood films in a laboratory with appropriate expertise **OR** ▪ Detection of *Plasmodium* species by nucleic acid test* **OR** ▪ Detection of unspeciated malaria parasite by microscopy on blood films in a laboratory with appropriate expertise *Laboratory-developed malaria PCR tests must fulfill CLIA requirements, including validation studies.
Measles (Rubeola) 10140	An illness characterized by all of the following: a generalized maculopapular rash lasting at least 3 days; a temperature ≥ 101.0° F (>38.3 ° C); and cough, coryza, or conjunctivitis. ***Confirmed:*** An acute, febrile rash illness (temperature can be lower than 101 °F and rash < 3 days) that is: ▪ Laboratory confirmed **OR** ▪ Epidemiologically linked to a laboratory confirmed measles case	▪ IgG seroconversion or a significant rise in measles immunoglobulin G antibody level by any standard serologic assay *, **OR** ▪ Isolation of measles virus from a clinical specimen*, **OR** ▪ Detection of measles-virus-specific nucleic acid by PCR *, **OR** ▪ A positive serological test for measles immunoglobulin M antibody* not otherwise ruled out by other confirmatory testing or more specific measles testing in a public health laboratory *Not explained by MMR vaccination during the previous 6-45 days

Condition/Code	Case Definition/Case Classification	Laboratory Confirmation Tests
Meningococcal infection, invasive (*Neisseria meningitidis*) 10150	Invasive meningococcal disease manifests most commonly as meningitis and/or meningococcemia that can progress rapidly to purpura fulminans, shock, and death. However, other manifestations (e.g., pneumonia, myocarditis, endocarditis or pericarditis, arthritis, cervicitis) might be observed. ***Confirmed**:* A case that is laboratory confirmed ***Probable:*** A case that has one of the following: ▪ *N. meningitidis* antigen detection by immunohistochemistry (IHC) on formalin-fixed tissue ▪ *N. meningitidis* antigen detection by latex agglutination of CSF *Suspect:* A case that has one of the following: ▪ Clinical purpura fulminans in the absence of a positive blood culture ▪ Gram-negative diplococci, not yet identified, isolated from a normally sterile site (e.g., blood or CSF)	▪ Isolation of *Neisseria meningitidis* from a normally sterile site, **OR** ▪ Isolation of *N. meningitidis* from purpuric lesions, **OR** ▪ Detection of *N. meningitidis*-specific nucleic acid in a specimen obtained from a normally sterile site, using a validated polymerase chain reason (PCR) assay See Normally Sterile Site Note: As required by *TAC* all *Neisseria meningitidis* isolates from normally sterile sites and/or purpuric lesions must be submitted to the DSHS Laboratory for typing and molecular analysis.
	▪	
Mumps 10180	Acute parotitis or other salivary gland swelling lasting at least 2 days, or orchitis or oophoritis unexplained by another more likely diagnosis ***Confirmed**:* A case that has a positive mumps PCR result, **OR** positive mumps culture, **AND** either meets the clinical case definition, **OR** has aseptic meningitis, encephalitis, hearing loss, mastitis, or pancreatitis ***Probable:*** A case that meets the clinical case definition, **AND** ▪ Has a positive test for serum anti-mumps immunoglobulin M (IgM) antibody, **OR** ▪ Has an epidemiologic link to another probable or confirmed case or linkage to a group/community defined by public health during an outbreak of mumps *Suspect:* A case that has parotitis, acute salivary gland swelling, orchitis, or oophoritis unexplained by another more likely diagnosis, OR a has a positive lab result with no mumps clinical symptoms (with or without an epidemiologic link to a confirmed or probable case).	▪ Isolation of mumps virus from a clinical specimen, **OR** ▪ Detection of mumps-virus-specific nucleic acid by PCR Note: An elevated serum amylase is not confirmatory for mumps.

Condition/Code	Case Definition/Case Classification	Laboratory Confirmation Tests
Norovirus - [**outbreaks only**] 10996	Acute onset vomiting withwatery, non-bloody diarrhea,abdominal cramps, and nausea. Low-grade fever may also occasionally occur, and vomiting is more common in children. *Confirmed:* A clinically compatible case that is laboratory confirmed ▪ *Probable:* A clinically compatible case that is epidemiologically linked to a confirmed case	▪ Detection of norovirus DNA (PCR) in stool or vomitusIdentification of norovirus can best be made from stool specimens taken within 48 to 72 hours after onset of symptoms. Virus can sometimes be found in stool samples taken as late as 2 weeks after recovery.) OR ▪ Detection of norovirus antigen in stool, Note: The etiology of gastrointestinal outbreaks should be confirmed by submitting specimens to the DSHS Laboratory. Sequencing for norovirus strains is available.

Condition/Code	Case Definition/Case Classification	Laboratory Evidence
Novel Coronavirus 2019 11065	A novel coronavirus is a newly identified coronavirus that has not been previously identified in the human population and it is assumed there is no existing immunity to the virus. The virus (SARS-CoV-2) causing coronavirus disease 2019 (COVID-19), first identified in Wuhan, China in 2019 is not the same as coronaviruses that commonly circulate among humans and cause mild illness, like the common cold. The virus is distinct from although closely related to both SARS-CoV and MERS-CoV. Epidemiologic findings indicate COVID-19 may be less severe than SARS or MERS, but evidence suggests that the virus is more contagious than its predecessors†. SARS-CoV-2 is a newly identified pathogen and it is assumed there was no pre-existing human immunity to the virus. There are risk factors that increase an individual's illness severity. Those at highest risk for severe disease and death include people aged over 60 years (especially those 85 years and older) and those with underlying conditions, including but not limited to obesity, hypertension, diabetes, cardiovascular disease, chronic respiratory or kidney disease, immunosuppression from solid organ transplant, and sickle cell disease. A complete list can be found at: https://www.cdc.gov/coronavirus/2019-ncov/need-extraprecautions/people-with-medical-conditions.html. Disease in children mostly appears to be relatively mild, and there is evidence that a significant proportion of infections across all age groups are asymptomatic, or presymptomatic at the time of testing. Symptoms of COVID-19 are non-specific and the disease presentation can range from no symptoms (asymptomatic) to severe pneumonia and death. People with COVID-19 generally develop signs and symptoms, including mild respiratory symptoms and fever ~5 days after infection (mean incubation period 5-6 days, range 1-14 days). In accordance with The Council of State and Territorial Epidemiologists (CSTE) Update to the standardized surveillance case definition and national notification for 2019 novel coronavirus disease (COVID-19) Interim-20-ID-02, DSHS has adopted the following case classification strategy effective November 1, 2021; *† The Novel Coronavirus Pneumonia Emergency Response Epidemiology Team. The Epidemiological Characteristics of an Outbreak of 2019 Novel Coronavirus Diseases (COVID-19) in China]. Zhonghua Liu Xing Bing Xue Za Zhi. 2020;41(2):145–151. DOI:10.3760/cma.j.issn.0254-6450.2020.02.003.*	*Laboratory evidence using a method approved or authorized by the FDA[1] or designated authority[2]: *Confirmatory[3] laboratory evidence*: • Detection of SARS-CoV-2 RNA in a post-mortem respiratory swab or clinical specimen using a diagnostic molecular amplification test performed by a CLIA-certified provider, **OR** • Detection of SARS-CoV-2 by genomic sequencing[4]. *Presumptive[3] laboratory evidence:* • Detection of SARS-CoV-2 specific antigen in a post-mortem obtained respiratory swab or clinical specimen using a diagnostic test performed by a CLIA-certified provider. *Supportive[3] laboratory evidence:* • Detection of antibody in serum, plasma, or whole blood specific to natural infection with SARSCoV-2 (antibody to nucleocapsid protein), **OR**

	Confirmed: A case that meets confirmatory laboratory evidence* ***Probable:*** A case that: • Meets clinical criteria AND epidemiologic linkage criteria with no confirmatory laboratory testing performed for SARS-CoV-2, **OR** • Meets presumptive laboratory evidence* **OR** • Meets vital records criteria (death certificate lists COVID-19 disease or SARS-CoV-2 as an underlying cause of death or a significant condition contributing to death) with no confirmatory laboratory testing performed for SARS-CoV-2. ***Suspect:*** A case that: • Meets supportive laboratory evidence* with no prior history of being a confirmed or probable case. ***Laboratory Criteria for Reporting*** • Detection of SARS-CoV-2 RNA in a post-mortem obtained respiratory swab or clinical specimen using a diagnostic molecular amplification test performed by a CLIA-certified provider, **OR** • Detection of SARS-CoV-2 genomic sequence, **OR** • Detection of SARS-CoV-2 specific antigen in a post-mortem obtained respiratory swab or clinical specimen using a diagnostic test performed by a CLIA-certified provider **OR** • Detection of SARS-CoV-2 nucleocapsid and spike protein receptor binding domain (RBD) specific antibodies in serum, plasma, or whole blood by a CLIA-certified provider. *NOTE: Testing performed by individuals at home using over-the-counter test kits is considered supportive laboratory evidence due to lack of CLIA oversight.*	• Detection of SARS-CoV-2 specific antigen by immunocytochemistry in an autopsy specimen **OR** • Detection of SARS-CoV-2 RNA or specific antigen using a test performed without CLIA oversight. *1.* FDA Emergency Use Authorizations https://www.fda.gov/medical-devices/emergency-situations-medicaldevices/emergency-use-authorizations and https://www.fda.gov/medical-devices/emergency-situationsmedical-devices/faqs-testing-sars-cov-2#nolonger *2. On March 13, 2020, the President issued a Memorandum on Expanding State-Approved Diagnostic Tests: "Should additional States request flexibility to authorize laboratories within the State to develop and perform tests used to detect COVID-19, the Secretary shall take appropriate action, consistent with law, to facilitate the request."* *3. The terms confirmatory, presumptive, and supportive are categorical labels used here to standardize case classifications for public health surveillance. The terms should not be used to interpret the utility or validity of any laboratory test methodology.* *4. Some genomic sequencing tests that have been authorized for emergency use by the FDA do not require an initial PCR result to be generated. Genomic sequencing results may be all the public health agency receives.*

Clinical Criteria for Reporting:

In the absence of a more likely diagnosis, any medically-attended (including symptoms ascertained telephonically by public health staff, e.g., contact tracers) person with:

- Acute onset or worsening of at least two of the following symptoms or signs: fever (measured or subjective), chills, rigors, myalgia, headache, sore throat, nausea or vomiting, diarrhea, fatigue, congestion or runny nose;

OR

- Acute onset or worsening of any one of the following symptoms or signs: cough, shortness of breath, difficulty breathing, olfactory disorder, taste disorder, confusion or change in mental status, persistent pain or pressure in the chest, pale, gray, or blue-colored skin, lips, or nail beds, depending on skin tone, inability to wake or stay awake;

OR

- Severe respiratory illness with at least one of the following: Clinical or radiographic evidence of pneumonia, Acute respiratory distress syndrome (ARDS).

Epidemiologic Linkage Criteria for Reporting:

A person meeting the clinical reporting criteria with one or more of the following exposures in the 14 days before onset of symptoms:

- Close contact** with a confirmed or probable case of COVID-19 disease;

OR

- Member of an exposed risk cohort as defined by public health authorities during an outbreak or during high community transmission.

***Close contact is generally defined as being within 6 feet for at least 15 minutes (cumulative over a 24-hour period). However, it depends on the exposure level and setting; for example, in the setting of an aerosol generating procedure in healthcare settings without proper personal protective equipment (PPE), this may be defined as any duration.*

Vital Records Criteria for Reporting:

A person whose death certificate lists COVID-19 disease or SARS-CoV-2 or an equivalent term as an underlying cause of death or a significant condition contributing to death.

Other Criteria for Reporting:

Autopsy findings consistent with pneumonia or acute respiratory distress syndrome without an identifiable cause.

Criteria to distinguish a new case of this disease or condition from reports or notifications which should not be enumerated as a new case for surveillance:

The following should be enumerated as a new case:

- SARS-CoV-2 sequencing results from the new positive specimen and a positive specimen from the most recent previous case demonstrate a different lineage,

OR

- Person was most recently enumerated as a confirmed or probable case with onset date (if available) or first positive specimen collection date for that classification >90 days prior‡,

OR

- Person was previously reported but not enumerated as a confirmed or probable case (i.e., suspect)‡‡, but now meets the criteria for a confirmed or probable case.

‡Some individuals, e.g., severely immunocompromised persons, can shed SARS-CoV-2 detected by molecular amplification tests >90 days after infection. For severely immunocompromised individuals, clinical judgment should be used to determine if a repeat positive test is likely to result from long term shedding and therefore not be enumerated as a new case. CDC defines severe immunocompromise as certain conditions, such as being on chemotherapy for cancer, untreated HIV infection with CD4 T lymphocyte count 20mg/day for more than 14 days.

‡‡Repeat suspect cases should not be enumerated.

Outbreaks, exotic diseases, and unusual expression of disease **Influenza, human isolates 11060** **Norovirus 10996** **Streptococcal toxic- shock syndrome 11700**	**In addition to specified reportable conditions,** any outbreak, exotic disease, or unusual group expression of disease that may be of public health concern should be reported **by the most expeditious means available.**	
Paragonimiasis 80664	Paragonimiasis (lung fluke trematode) is transmitted by eating inadequately cooked crustaceans (primarily crayfish in the US) that are infected with the parasite. Disease most frequently involves the lungs. Initial signs and symptoms may be diarrhea and abdominal pain followed several days later by fever, chest pain, and fatigue. The symptoms may also include a dry cough, which later becomes productive with rusty-colored or blood-tinged sputum on exertion, and pleuritic chest pain. X-ray findings may include diffuse and/or segmental infiltrates, nodules, cavities, ring cysts and/or pleural effusions. Extrapulmonary disease is not uncommon, with flukes found in such sites as the CNS, subcutaneous tissues, intestinal wall, peritoneal cavity, liver, lymph nodes and genitourinary tract. Infection usually lasts for years, and the infected person may be asymptomatic. Paragonimiasis may be mistaken for tuberculosis, clinically and on chest X-rays. ***Confirmed:*** A case that is laboratory confirmed ***Probable***: A clinically compatible case with ▪ Detection of *Paragonimus* antibodies by CF, EIA, or immunoblot, **OR** ▪ Positive skin test for *Paragonimus,* **OR** ▪ History of ingestion of inadequately cooked crustaceans and marked eosinophilia with total WBC count in the normal range or supportive x-ray findings	▪ Microscopic identification of *Paragonimus* eggs in feces, sputum, pleural fluid, CSF, or pus, **OR** ▪ Identification of worms or eggs in biopsies of pulmonary, cerebral, subcutaneous, or intra-abdominal nodules or cystic lesions

Pertussis 10190	A cough illness lasting at least 14 days AND at least one of the following additional symptoms in the absence of a more likely diagnosis: ▪ Paroxysmal coughing, **OR** ▪ Inspiratory "whoop," **OR** ▪ Post-tussive vomiting, **OR** ▪ Apnea (with or without cyanosis) ***Confirmed:*** A person with an acute cough illness of any duration who is laboratory confirmed ***Probable*:** In the absence of a more likely diagnosis, a person who is not laboratory confirmed (not tested, tests are negative, or tested by serology or DFA), and is either: ▪ A person with an acute cough illness of any duration, with • At least one of the following signs or symptoms: ▪ Paroxysms of coughing, OR ▪ Inspiratory whoop, OR ▪ Post-tussive vomiting, OR ▪ Apnea (with or without cyanosis) AND epidemiological linkage to a laboratory confirmed case **OR** ▪ A person who meets the clinical case definition.	▪ Isolation (culture) of *Bordetella pertussis* from a clinical specimen, **OR** ▪ Positive polymerase chain reaction (PCR) assay for *Bordetella pertussis* ▪ Note: Because *B. pertussis* can be difficult to culture, a negative culture result does not rule out pertussis. Negative PCR results do not require investigation unless reported as a suspected case by a healthcare provider. Direct fluorescent antibody (DFA) staining of a patient's specimen and serological laboratory results (pertussis IgA, IgG or IgM) are **NOT** considered confirmatory for pertussis, but should be investigated as soon as possible.

Plague 10440	Plague, a bacterial infection caused by *Yersinia pestis*, is transmitted to humans via flea bites or by direct exposure to infected tissues or respiratory droplets. The disease is characterized by fever, chills, headache, malaise, prostration, and leukocytosis and can manifest in one or more specific clinical presentations which typically reflect the route of exposure to the pathogen. *Clinical evidence:* Acute onset of fever as reported by the patient or healthcare provider with or without one or more of the following: regional lymphadenitis, septicemia, pneumonia, or pharyngitis with cervical lymphadenitis. ***Confirmed:*** A clinically compatible case with confirmatory laboratory evidence, **OR** a clinically compatible case with presumptive laboratory evidence **AND** epidemiologic linkage (see below) ***Probable:*** A clinically compatible case with a presumptive laboratory evidence* as listed below that lacks an alternative diagnosis and epidemiologic linkage (see below) ▪ Elevated serum antibody titer(s) to *Y. pestis* fraction 1 (F1) antigen (without documented four-fold or greater change) in a patient with no history of plague vaccination, **OR** ▪ Detection of *Y. pestis* specific DNA or antigens, including F1 antigen, in a clinical specimen by DFA, IHC, or PCR *Suspect:* A clinically compatible case without laboratory evidence that has an epidemiologic linkage **OR** an individual with confirmed or presumptive laboratory evidence without any associated clinical information Epidemiologic linkage is defined as one or more of the following: ▪ Person that is epidemiologically linked to a person or animals with confirmatory laboratory evidence within the prior two weeks; **OR** ▪ Close contact with a confirmed pneumonic plague case, including but not limited to presence within two meters of a person with active cough due to pneumonic plague; **OR** ▪ A person that lives in or has traveled within two weeks of illness onset to a geographically-localized area with confirmed plague epizootic activity in fleas or animals as determined by the relevant local authorities. **Other laboratory tests, including rapid bedside tests, are in use in some low resourced international settings but are not recommended as laboratory evidence of plague infection in the United States.*	▪ Isolation of *Y. pestis* from a clinical specimen with culture identification validated by a secondary assay (e.g. bacteriophage lysis assay, DFA assay) as performed by a CDC or LRN laboratory, **OR** ▪ Four-fold or greater change in paired serum antibody titer to *Y. pestis* F1 antigen For isolates of other species of *Yersinia*, see Yersiniosis Note: As required by *TAC*, all *Y. pestis* isolates must be submitted to an LRN laboratory.

Poliomyelitis, paralytic 10410	Acute onset of a flaccid paralysis of one or more limbs with decreased or absent tendon reflexes in the affected limbs, without other apparent cause, and without sensory or cognitive loss ***Confirmed*:*** A case that meets the clinical case definition in which the patient has a neurological deficit 60 days after onset of initial symptoms, has died, or has unknown follow-up status ***Probable*:*** A case that meets the clinical case definition *Note: All suspected cases of paralytic poliomyelitis are reviewed by a panel of expert consultants at the Centers for Disease Control and Prevention (CDC) before final case classification occurs.	▪ Isolation of poliovirus type 1, 2, or 3 from a clinical specimen (stool or CSF)
Poliovirus infection, nonparalytic 10405	Most poliovirus infections are asymptomatic or cause mild febrile disease. ***Confirmed:*** Laboratory confirmed poliovirus infection in a person without symptoms of paralytic poliomyelitis	▪ Poliovirus isolate identified in an appropriate clinical specimen, with confirmatory typing and sequencing performed by the CDC Poliovirus Laboratory
Primary amebic meningoencephalitis (PAM)	See Amebic meningoencephalitis (PAM)	

Prion diseases such as Creutzfeldt-Jakob disease (CJD) 80060 (continued on next page)	Creutzfeldt-Jakob disease (CJD) is a human prion disease described as rapidly progressive, neurodegenerative, and invariably fatal. Human prion diseases include sporadic forms of disease (sporadic CJD (sCJD), sporadic fatal insomnia (sFI), and variably protease-sensitive prionopathy (VPSPr)), familial/genetic forms of disease (familial or genetic CJD (fCJD or gCJD), fatal familial insomnia (FFI), and Gerstmann-Sträussler-Scheinker syndrome (GSS)) and acquired forms of disease (iatrogenic CJD (iCJD), Kuru (described only in the Fore population of Papua New Guinea), and variant CJD (vCJD)). Classical sporadic CJD presentation consists of rapidly progressive dementia, visual abnormalities, myoclonus, or cerebellar dysfunction (where both balance abnormalities and muscle incoordination are seen which commonly present as gait, speech, and swallowing disorders). Most patients eventually develop pyramidal and extrapyramidal dysfunction, such as abnormal reflexes (hyperreflexia), spasticity, tremors, and rigidity. Akinetic mutism appears late in the disease. Median duration of illness is 4-5 months; the duration of illness rarely exceeds 12 months. For purposes of surveillance and notification: prion diseases such as CJD also includes SFI, VPSPr, FFI, GSS syndrome, Kuru, and any novel prion disease affecting humans. Sporadic CJD (sCJD)* *Confirmed:* Satisfactory confirmatory test findings on autopsy or biopsy of brain tissue *Probable:* ▪ Neuropsychiatric disorder AND positive RT-QuIC in CSF or other tissues OR ▪ Rapidly progressive dementia AND at least two of the following four clinical features: **a)** Myoclonus **b)** Visual or cerebellar signs **c)** Pyramidal/extrapyramidal signs **d)** Akinetic mutism AND satisfying at least 1 of the supportive laboratory criteria, AND absence of routine investigations indicating an alternative diagnosis *Possible:* Progressive dementia AND at least two of the following four clinical features: **a)** Myoclonus **b)** Visual or cerebellar signs **c)** Pyramidal/extrapyramidal signs **d)** Akinetic mutism AND absence of any supportive laboratory criteria, AND duration of illness < 2 years, AND absence of routine investigations indicating an alternative diagnosis *sCJD includes sporadic fatal insomnia (sFI) and variably protease-sensitive prionopathy (VPSPr) which are typically neuropathologic diagnoses	**Confirmatory Laboratory Criteria - sporadic, familial/genetic & iatrogenic CJD** ▪ Diagnosis by standard neuropathological techniques **AND/OR** ▪ Immunohistochemistry **AND/OR** ▪ Western blot confirmed protease-resistant PrP **AND/OR** ▪ Presence of scrapie-associated fibrils **Supportive Laboratory Criteria - sporadic, familial/genetic & iatrogenic CJD** ▪ *CSF 14-3-3 protein:* Reported as elevated, above normal limits, or positive. If 14-3-3 protein is the only supportive test used in determining classification, then duration of illness must be < 2 years. ▪ *RT-QuIC:* Positive ▪ *EEG:* Reported as "typical of" or "consistent with" sporadic CJD or the report indicates the presence of generalized bi- or triphasic "periodic sharp wave complexes" (PSWC) at a frequency of 1-2 per second. No limitation on duration of illness. ▪ *Brain MRI:* High signal abnormalities in the caudate nucleus and/or putamen OR in at least two cortical regions (temporal, parietal, occipital) on diffusion-weighted imaging (DWI) or fluid attenuated inversion recovery (FLAIR). No limitation on duration of illness. (Continued on next page– see Exclusion Criteria.)

Prion diseases such as Creutzfeldt-Jakob disease (CJD) (continued on next page)	Familial/Genetic CJD (fCJD)** A classification of *Confirmed* or *Probable* requires: ▪ Confirmed or probable CJD AND confirmed or probable CJD classification in a first degree relative ▪ AND/OR ▪ Neuropsychiatric disorder AND fCJD-specific PRNP gene mutation **Fatal familial insomnia (FFI) and Gerstmann-Sträussler-Scheinker syndrome (GSS) are specific familial/genetic CJD diseases, and classification will be based on pathology results and/or a specific PRNP gene mutation for the disease and family history. Acquired CJD Iatrogenic CJD (iCJD): ▪ Progressive cerebellar syndrome in a recipient of human cadaveric-derived pituitary hormone OR ▪ Meets sCJD criteria AND a recognized exposure risk (e.g., antecedent neurosurgery with dura mater graft)	Exclusion Criterion: On neurohistopathological analysis of whole brain autopsy tissue, the absence of findings consistent with prion disease (negative results) is sufficient to "rule out" possible and probable cases and reclassify as "Not a Case". Note: Whole brain autopsy and neuropathology is the only way to confirm or rule-out prion disease. Biopsy tissue can only confirm presence of prion disease but is not sufficient to rule-out prion disease. Autopsy or postmortem biopsy (when autopsy is not possible) is strongly encouraged, while biopsy on living patients should be reserved for diagnosing treatable diseases. The National Prion Disease Pathology Surveillance Center (NPDPSC) performs analysis on CSF, blood, and brain tissue. They provide free transport, shipping, and autopsy services for suspected cases of CJD (the family must initiate contact). Physicians are strongly encouraged to confirm the diagnosis of CJD by discussing and arranging autopsy with the NPDPSC and family members. Autopsy is "highly suggested" for all cases with onset age less than 55 years or physician diagnosed CJD that does not meet the epidemiologic case criteria.

Prion diseases such as Creutzfeldt-Jakob disease (CJD)	Variant CJD (vCJD) is characterized by exposure to the causative agent of bovine spongiform encephalopathy (BSE) through consumption of contaminated meat, a prolonged incubation period of ~10 years (possibly decades), and presence of a neuropsychiatric disease that is progressive and invariably fatal. Median age at death is 28 years. Clinical presentation: early psychiatric symptoms (anxiety/depression/withdrawal), or sensory symptoms, and delayed development of neurologic signs (≥ 4 months), and duration of illness lasting over 6 months with a median duration of illness of 13-14 months. *Confirmed:* Confirmatory laboratory criteria are met *Suspect****:* The following criteria are met: a) Current age or age at death <55 years (a brain autopsy is recommended, however, for all physician-diagnosed CJD cases) b) Psychiatric symptoms at illness onset AND/OR persistent painful sensory symptoms (frank pain and/or dysesthesia) c) Dementia AND development ≥4 months after illness onset of at least two of the following five neurologic signs: poor coordination, myoclonus, chorea, hyperreflexia, or visual signs. (If persistent painful sensory symptoms exist, ≥4 months delay in the development of the neurologic signs is not required.) d) A normal or an abnormal EEG, BUT NOT the diagnostic EEG changes often seen in classic CJD e) Duration of illness of over 6 months f) Routine investigations of the patient do not suggest an alternative, non-CJD diagnosis g) No history of receipt of cadaveric human pituitary growth hormone or a dura mater graft h) No history of CJD in a first degree relative or PRNP gene mutation in the patient OR ▪ Presence of "bilateral pulvinar high signal" or "pulvinar sign" or "symmetrical, bilateral high signal in the posterior thalamic nuclei" on MRI, ▪ AND ▪ Presence of all of the following: a progressive neuropsychiatric disorder, d, e, f, & g of the above criteria AND four of the following five criteria: ▪ Early psychiatric symptoms (anxiety, apathy, delusions, depression, withdrawal) ▪ Persistent painful sensory symptoms (frank pain and/or dysesthesia) ▪ Ataxia ▪ Myoclonus or chorea or dystonia ▪ Dementia ***A history of possible exposure to bovine spongiform encephalopathy (BSE) such as residence or travel to a BSE-affected country after 1980 increases the index of suspicion for a variant CJD diagnosis.	Confirmatory Laboratory Criteria – variant CJD ▪ Numerous widespread kuru-type amyloid plaques surrounded by vacuoles in both the cerebellum and cerebrum (i.e., florid plaques) AND ▪ Spongiform change and extensive prion protein deposition shown by immunohistochemistry throughout the cerebellum and cerebrum Supportive Laboratory Criteria – variant CJD ▪ EEG with normal or abnormal findings BUT WITHOUT findings consistent with sporadic CJD (absence of "periodic sharp wave complexes" - PSWC), OR EEG not reported or performed ▪ Presence of "bilateral pulvinar high signal" OR "pulvinar sign" OR "symmetrical, bilateral high signal in the posterior thalamic nuclei" on MRI (relative to other deep gray-matter nuclei) Note: Whole brain autopsy and neuropathology is the only way to confirm or rule-out prion disease. Biopsy tissue can only confirm presence of prion disease but is not sufficient to rule-out prion disease. Autopsy or postmortem biopsy (when autopsy is not possible) is strongly encouraged, while biopsy on living patients should be reserved for diagnosing treatable diseases. The National Prion Disease Pathology Surveillance Center (NPDPSC) performs analysis on CSF, blood, and brain tissue. They provide free transport, shipping, and autopsy services for suspected cases of CJD (the family must initiate contact). Physicians are strongly encouraged to confirm the diagnosis of CJD by discussing and arranging autopsy with the NPDPSC and family members. Autopsy is "highly suggested" for all cases with onset age less than 55 years or physician diagnosed CJD that does not meet the epidemiologic case criteria.

Q Fever, acute 10257	Q fever is a zoonotic disease caused by *Coxiella burnetii*. Asymptomatic infection occurs in approximately half of those infected. Exposure to Q fever is usually via aerosol, and the source can be unknown (especially for chronic infection). Exposure can be associated with goats, sheep, or other livestock, but direct contact with animals is not required, and variable incubation periods can be dose dependent. Acute infection, if symptomatic, is characterized by acute onset of fever accompanied by rigors, myalgia, malaise, and severe retrobulbar headache, and can include fatigue, night sweats, dyspnea, confusion, nausea, diarrhea, abdominal pain, vomiting, non-productive cough, or chest pain. Acute hepatitis, atypical pneumonia, and meningoencephalitis may be present with severe disease. Pregnant women are at risk for fetal death and abortion. Clinical laboratory findings can include elevated liver enzyme levels, leukocytosis, and thrombocytopenia. *Clinical evidence:* Acute fever and one or more of the following: rigors, severe retrobulbar headache, acute hepatitis, pneumonia, or elevated liver enzyme levels. ***Confirmed:*** A clinically compatible case that is laboratory confirmed ***Probable:*** A clinically compatible case with a single supportive IgG-specific antibody titer to *C. burnetii* Phase II antigen of ≥1:128 by IFA, and the absence of a more likely clinical explanation	▪ Serological evidence of a four-fold change in IgG-specific antibody titer to *C. burnetii* Phase II antigen by IFA between paired serum samples (preferably one taken during the first week of illness and a second 3-6 weeks later; phase I titer may be elevated as well), **OR** ▪ Detection of *C. burnetii* DNA in a clinical specimen by PCR, **OR** ▪ Demonstration of *C. burnetii* antigen in a clinical specimen by IHC, **OR** ▪ Isolation of *C. burnetii* from a clinical specimen in cell culture
Q Fever, chronic 10258	Chronic Q fever is characterized by a *Coxiella burnetii* infection that persists for more than 6 months. Potentially fatal endocarditis can evolve months to years after acute infection, particularly in persons with underlying valvular disease. Infections of aneurysms and vascular prostheses have been reported. Immunocompromised individuals are particularly susceptible. Rare cases of chronic hepatitis without endocarditis, osteomyelitis, osteoarthritis, and pneumonitis have been described. *Clinical evidence:* Chronic hepatitis, osteomyelitis, osteoarthritis, or pneumonitis (in the absence of other known etiology); suspected infection of a vascular aneurysm or vascular prosthesis; or newly recognized, culture-negative endocarditis (particularly in a patient with previous valvulopathy or a compromised immune system). ***Confirmed:*** A clinically compatible (meets clinical evidence criteria) case of chronic illness that is laboratory confirmed ***Probable*:** A clinically compatible case of chronic illness with an antibody titer to *C. burnetii* Phase I IgG antigen that is ≥1:128 and <1:800 by IFA	▪ Serological evidence of IgG antibody to *C. burnetii* Phase I antigen of ≥1:800 by IFA (phase II will likely be elevated as well but will generally be lower than phase I) **OR** ▪ Detection of *C. burnetii* DNA in a clinical specimen by PCR, **OR** ▪ Demonstration of *C. burnetii* antigen in a clinical specimen by IHC, **OR** ▪ Isolation of *C. burnetii* from a clinical specimen in cell culture

Rabies, animal 10340	All warm-blooded animals, including humans, are susceptible to rabies. In Texas, skunks, bats, coyotes, and foxes are the most commonly infected animals. Domestic dogs, cats, and livestock usually acquire rabies infections from wild animals. Medical authorities distinguish between "furious" and "dumb" rabies on the basis of clinical signs. In the furious variety, the "mad dog" symptoms are pronounced. The animal is irritable and will snap and bite at real or imaginary objects. It can run for miles and attack anything in its path. The animal is extremely vicious and violent. Paralysis sets in shortly, usually affecting the hind legs first. Death follows four to seven days after the onset of clinical signs. In dumb rabies, the prominent symptoms are drowsiness and paralysis of the lower jaw. The animal can appear to have a bone lodged in its throat, sometimes causing owners to force open an animal's mouth to investigate and become unwittingly exposed to rabies. Animals with dumb rabies have no tendency to roam but will snap at movement. They are completely insensitive to pain, and usually become comatose and die from three to ten days after first symptoms appear. ***Confirmed:*** A case that is laboratory confirmed	▪ A positive DFA test (preferably performed on central nervous system tissue), **OR** ▪ Isolation of rabies virus (in cell culture or in a laboratory animal)
Rabies, human 10460	Rabies is an acute encephalomyelitis that almost always progresses to coma or death within 10 days after the first symptom. ***Confirmed:*** A clinically compatible case that is laboratory confirmed by testing at a state or federal public health laboratory Note: Laboratory confirmation by all of the methods listed under "Lab Confirmation Tests" is strongly recommended.	▪ Detection of Lyssavirus antigens in a clinical specimen (preferably the brain or the nerves surrounding hair follicles in the nape of the neck) by DFA, **OR** ▪ Isolation (in cell culture or in a laboratory animal) of Lyssavirus from saliva, or central nervous system tissue, **OR** ▪ Identification of Lyssavirus specific antibody (i.e., by IFA or complete rabies virus neutralization at 1:5 dilution) in the CSF, **OR** ▪ Identification of Lyssavirus specific antibody (i.e., by IFA or complete rabies virus neutralization at 1:5 dilution) in the serum of an unvaccinated person, **OR** ▪ Detection of Lyssavirus viral RNA using RT-PCR in saliva, CSF, or tissue

Relapsing fever, tick-borne (TBRF) 10845	Tick-borne Relapsing Fever (TBRF) is an illness caused by infection with some members of the genus *Borrelia,* including *B. hermsii, B. parkeri,* and *B. turicatae. Borrelia* spirochetes that cause TBRF are transmitted to humans through the bite of infected "soft ticks" of the genus *Ornithodoros*. Each relapsing fever group *Borrelia* species is usually associated with a specific tick species: *B. hermsii* is transmitted by *O. hermsi*, *B. parkeri* by *O. parkeri*, and *B. turicatae* by *O. turicata* ticks. Disease incubation averages one week following a tick bite. Illness is characterized by periods of fever, often exceeding 103°F, lasting 2-7 days, alternating with afebrile periods of 4-14 days. Febrile periods are often accompanied by shaking chills, sweats, headache, muscle and joint pain, and nausea/vomiting. TBRF may be fatal in 5-10% of untreated cases. TBRF contracted during pregnancy can cause spontaneous abortion, premature birth, and neonatal death. *Clinical evidence:* Measured fever ≥38.8°C (102°F) alone **OR** one or more episodes of subjective or measured fever <101°F **AND** two or more of the following: headache, myalgia, nausea/vomiting, or arthralgia. *Epidemiologic linkage criteria:* Onset of clinically compatible illness 2-18 days after sharing the same exposure site and time as a confirmed case. *Exposure criteria:* Exposure is defined as time spent in a county in which *Ornithodoros* soft ticks are present or where a confirmed autochthonous case of TBRF has been previously reported. Time spent in cabins, caves, around firewood, or other possible soft tick habitat within 2-18 days of symptom onset is considered highest risk. ***Confirmed:*** A clinically compatible illness that is laboratory confirmed, **OR** a clinically compatible illness with presumptive laboratory evidence* that meets the exposure and/or epidemiologic linkage criteria. ***Probable:*** A clinically compatible illness with presumptive laboratory evidence*, defined as: • Identification of *Borrelia* spirochetes in peripheral blood, bone marrow, or cerebral spinal fluid (CSF), **OR** • Serologic evidence of *Borrelia hermsii*, *B. parkeri*, or *B. turicatae* infection by equivocal or positive EIA and positive Western blot, **OR** • Relapsing fever *Borrelia* detection through nucleic acid testing, such as PCR, which does not differentiate soft-tick relapsing fever *Borrelia* spp. from other relapsing fever *Borrelia* spp. Note: Antibodies stimulated by other spirochetal infections (e.g. Lyme disease and syphilis) may cross react on TBRF serologic assays. Epidemiological information including exposure history is crucial to differentiate positive serology results.	▪ Isolation of *Borrelia hermsii, B. parkeri*, or *B. turicatae* from blood using a *Borrelia*-specific medium such as Barbour-Stoenner-Kelly (BSK) broth medium **OR** ▪ *Borrelia hermsii, B. parkeri,* or *B. turicatae* detection through nucleic acid testing, such as PCR, which differentiates soft-tick relapsing fever *Borrelia* spp. from other relapsing fever *Borrelia* spp.

Rickettsiosis, unspecified 65466	Flea-borne typhus and spotted fever rickettsioses (SFR) are vector-borne infections caused by some members of the genus *Rickettsia*. These infections can be difficult to differentiate clinically and serologically due to antibody cross-reactivity. *Clinical evidence:* Acute illness lasting less than 30 days with fever and two or more of the following: rash, headache, nausea/vomiting, myalgia, anemia, thrombocytopenia, or elevated liver enzymes. ***Probable**:* A case that meets clinical criteria with similar elevations* in IgG serologic titers (≥1:128 to spotted fever and/or typhus group antigens) in a sample taken within 60 days of illness onset that cannot be definitively classified as spotted fever rickettsiosis or flea-borne typhus and does not have a more likely clinical explanation. **Serologic IgG titers that are equal or within one dilution of each other* Note: For "Rickettsiosis, unspecified," an undetermined case can only be classified as probable. See *Rickettsia* Classification	▪ Not applicable – see note
Rubella 10200	An illness that has all the following characteristics: Acute onset of generalized maculopapular rash; temperature ≥99ºF (37.2ºC), if measured; and arthralgia/arthritis, lymphadenopathy, or conjunctivitis. ***Confirmed:*** A case that is clinically compatible and is laboratory confirmed or epidemiologically linked to a laboratory-confirmed case Note: Serum rubella IgM test results that are false positives have been reported in persons with other viral infections (e.g., acute infection with Epstein-Barr virus [infectious mononucleosis], recent cytomegalovirus infection, and parvovirus infection) or in the presence of rheumatoid factor. Patients who have laboratory evidence of recent measles infection are excluded.	▪ Isolation of rubella virus, **OR** ▪ Significant rise between acute- and convalescent-phase titers in serum rubella immunoglobulin G (IgG) antibody level* by any standard serologic assay, **OR** ▪ Positive serologic test for rubella-specific immunoglobulin M (IgM) antibody* not otherwise ruled out by more specific testing in a public health laboratory, **OR** ▪ Detection of rubella-virus-specific nucleic acid by PCR *Not explained by MMR vaccination during the previous 6-45 days.

Rubella, congenital syndrome 10370	An illness of newborns resulting from rubella infection *in utero* and characterized by signs or symptoms from the following categories: **a)** Cataracts/congenital glaucoma, congenital heart disease (most commonly patent ductus arteriosus or peripheral pulmonary artery stenosis), hearing loss, or pigmentary retinopathy **b)** Purpura, hepatosplenomegaly, jaundice, microcephaly, developmental delay, meningoencephalitis, or radiolucent bone disease ***Confirmed:*** A clinically consistent case that is laboratory confirmed ***Probable:*** A case that is not laboratory confirmed, that has any two complications listed in (a) of the clinical case definition or one complication from (a) and one from (b), and lacks evidence of any other etiology	▪ Isolation of rubella virus, **OR** ▪ Demonstration of rubella-specific immunoglobulin M (IgM) antibody, **OR** ▪ Infant rubella antibody level that persists at a higher level and for a longer period than expected from passive transfer of maternal antibody (i.e., rubella titer that does not drop at the expected rate of a twofold dilution per month), **OR** ▪Detection of rubella-virus-specific nucleic acid by PCR
***Salmonella* Paratyphi** 50266	An illness caused by *Salmonella* Paratyphi serotypes A, B (tartrate negative), and C that is often characterized by insidious onset of sustained fever, headache, malaise, anorexia, relative bradycardia, constipation or diarrhea, and non-productive cough. However, mild and atypical infections may occur. Carriage of *S.* Paratyphi A, B (tartrate negative), and C may be prolonged. ***Confirmed:*** A case that is laboratory confirmed ***Probable:*** ▪ A clinically compatible case with *S.* Paratyphi A, B (tartrate negative), or C detected by use of culture independent laboratory methods (non-culture based), **OR** ▪ A clinically compatible case that is epidemiologically linked to a case that meets the probable or confirmed laboratory criteria for diagnosis Notes: ▪ Both asymptomatic infections and infections at sites other than the gastrointestinal tract, if laboratory confirmed, are considered confirmed cases that should be reported. ▪ Carriage of *S.* Paratyphi A, B (tartrate negative), and C can be prolonged. A case should not be counted as a new case if laboratory results were reported within 365 days of a previously reported infection in the same individual, unless additional information is available indicating a separate infection, e.g., different serotype.	▪ Isolation of *S.* Paratyphi A, B (tartrate negative), or C from a clinical specimen Note: As required by *TAC* all *Salmonella* spp. isolates must be submitted to the DSHS Laboratory.

***Salmonella* Typhi** 50267	An illness caused by *Salmonella* Typhi that is often characterized by insidious onset of sustained fever, headache, malaise, anorexia, relative bradycardia, constipation or diarrhea, and non-productive cough. However, mild and atypical infections may occur. Carriage of *S.* Typhi may be prolonged. ***Confirmed:*** A case that is laboratory confirmed ***Probable:*** ▪ A clinically compatible case with *S.* Typhi detected by use of culture independent laboratory methods (non-culture based), **OR** • A clinically compatible case that is epidemiologically linked to a case that meets the probable or confirmed laboratory criteria for diagnosis Notes: ▪ Both asymptomatic infections and infections at sites other than the gastrointestinal tract, if laboratory confirmed, are considered confirmed cases that should be reported. ▪ Carriage of *S.* Typhi can be prolonged. A case should not be counted as a new case if laboratory results were reported within 365 days of a previously reported infection in the same individual, unless additional information is available indicating a separate infection, e.g., different serotype.	▪ Isolation of *S.* Typhi from blood, stool, or other clinical specimen Note: As required by *TAC* all *Salmonella* spp. isolates must be submitted to the DSHS Laboratory.
Salmonellosis, non-Paratyphi/non-Typhi 50265	An illness of variable severity commonly manifested by diarrhea, fever, abdominal pain, nausea, and sometimes vomiting. Asymptomatic infections can occur, and the organism can cause extraintestinal infections. ***Confirmed:*** A case that is laboratory confirmed. When available, *Salmonella* serotype characterization should be reported ***Probable*:** ▪ A case with *Salmonella sp*. (excluding *S.* Typhi and *S.* Paratyphi [A, B (tartrate negative), and C]) detected by use of culture independent laboratory methods (non-culture based), **OR** ▪ A clinically compatible case that is epidemiologically linked to a case that meets the probable or confirmed laboratory criteria for diagnosis Notes: ▪ A case with isolation of *S.* Paratyphi B (tartrate positive) from a clinical specimen should be reported as a salmonellosis, non-Paratyphi/non-Typhi case. ▪ Both asymptomatic infections and infections at sites other than the gastrointestinal tract, if laboratory confirmed, are considered confirmed cases that should be reported. ▪ A case should not be counted as a new case if laboratory results were reported within 365 days of a previously reported infection in the same individual, unless additional information is available indicating a separate infection, e.g., different serotype.	▪ Isolation of *Salmonella* (excluding *S.* Typhi and *S.* Paratyphi [A, B (tartrate negative), and C])* from a clinical specimen Notes**:** **S. Typhi* is reportable as *Salmonella* Typhi. **S. Paratyphi* is reportable as *Salmonella* Paratyphi. Note: As required by *TAC* all *Salmonella* spp. isolates must be submitted to the DSHS Laboratory.

Shiga toxin-producing *Escherichia coli* (STEC) 11563	An infection of variable severity characterized by diarrhea (often bloody) and abdominal cramps. Illness can be complicated by hemolytic uremic syndrome (HUS) or thrombotic thrombocytopenic purpura (TTP); asymptomatic infections also can occur and the organism can cause extraintestinal infections. *Confirmed:* A case that meets the laboratory criteria for diagnosis; when available, O and H antigen serotype characterization should be reported *Probable:* ▪ A case with isolation of *E. coli* O157 from a clinical specimen, without confirmation of H antigen, with detection of Shiga toxin or detection of Shiga toxin genes, OR ▪ A clinically compatible case that is epidemiologically linked to a confirmed or probable case with laboratory evidence, OR ▪ A clinically compatible illness in a person with identification of an elevated antibody titer to a known Shiga toxin-producing *E. coli* serotype, OR ▪ A clinically compatible illness in a person with detection of Shiga toxin or Shiga toxin genes in a clinical specimen using a CIDT and no known isolation of *Shigella* from a clinical specimen, OR ▪ A clinically compatible illness in a person with detection of *E. coli* O157 or Shiga toxin-producing *E. coli* in a clinical specimen using a CIDT, OR ▪ A clinically compatible illness in a person that is a member of a risk group as defined by public health authorities during an outbreak *Suspect:* ▪ Identification of an elevated antibody titer against a known Shiga toxin-producing serogroup of *E. coli* in a person with no known clinical compatibility, OR ▪ Detection of Shiga toxin or Shiga toxin genes in a clinical specimen using a CIDT and no known isolation of *Shigella* from a clinical specimen in a person with no known clinical compatibility, OR ▪ Detection of *E. coli* O157 or Shiga toxin-producing *E. coli* in a clinical specimen using a CIDT with no known clinical compatibility, OR ▪ A person with a diagnosis of post-diarrheal HUS/TTP Notes: ▪ EIA and/or PCR positive results for Shiga toxin-production, in the absence of isolation of *E.coli*, can only qualify a case as "probable." ▪ Cases meeting confirmed or probable criteria for both STEC and HUS should be reported separately under each condition. ▪ A case should not be counted as a new case if a positive laboratory result is reported within 180 days of a previously reported positive laboratory result in the same individual, OR ▪ When two or more different serogroups are identified in one or more specimens from the same individual, each serogroup/serotype should be reported as a separate case.	▪ Isolation of *Escherichia coli* from a clinical specimen with detection of Shiga toxin or Shiga toxin genes, OR ▪ Isolation of *Escherichia coli* O157:H7 from a clinical specimen, ▪ Notes: *Escherichia coli* non-O157:H7 isolates must also have Shiga toxin-production verified to qualify for the "confirmed" case status. Shiga toxin can be demonstrated by EIA or PCR testing. As required by TAC, for all cases of Shiga toxin-producing *E.coli* infections, including *E.coli* 0157:H7 and cases where Shiga-toxin activity is demonstrated, available isolates or specimens must be submitted to the DSHS Laboratory.

Shigellosis 11010	An illness of variable severity characterized by diarrhea, fever, nausea, cramps, and tenesmus. Asymptomatic infections can occur. ***Confirmed:*** A case that is laboratory confirmed. When available, *Shigella* serogroup or species and serotype characterization should be reported. ***Probable*:** ▪ A case with *Shigella* spp. or *Shigella* detected, in a clinical specimen, by use of culture independent laboratory methods (non-culture based), **OR** ▪ A clinically compatible case that is epidemiologically linked to a case that meets the probable or confirmed laboratory criteria for diagnosis Notes: ▪ Both asymptomatic infections and infections at sites other than the gastrointestinal tract, if laboratory confirmed, are considered confirmed cases that should be reported. ▪ A case should not be counted as a new case if laboratory results were reported within 90 days of a previously reported infection in the same individual, unless additional information is available indicating a separate infection, e.g., different serotype.	▪Isolation of *Shigella* from a clinical specimen
Smallpox 11800	An illness with acute onset of fever ≥101º F (≥38.3 º C) followed by a rash characterized by firm, deep seated vesicles or pustules in the same stage of development without other apparent cause. ***Confirmed:*** A case of smallpox that is laboratory confirmed, or a case that meets the clinical case definition and is epidemiologically linked to a laboratory confirmed case ***Probable:*** A case that meets the clinical case definition without laboratory confirmation or epidemiological link to a confirmed case, **OR** a case with an atypical presentation of smallpox (e.g., hemorrhagic type, flat type, and variola sine eruptione) that has an epidemiological link to a confirmed case of smallpox. (Detailed clinical description is available on the CDC web site, see https://www.cdc.gov/smallpox/clinicians/clinical-disease.html. *Suspect:* A case with a generalized, acute vesicular or pustular rash illness with fever preceding development of rash by 1-4 days Exclusion Criteria*:* A case can be excluded as a suspect or probable smallpox case if an alternative diagnosis fully explains the illness or appropriate clinical specimens are negative for laboratory criteria for smallpox. Note: The smallpox case definition above is to be used only during post-event surveillance. Pre-event surveillance relies on a highly specific clinical case definition focused on identifying a classic case (ordinary type) of smallpox., In the absence of known smallpox disease, the predictive value of a positive smallpox diagnostic test is extremely low, therefore, testing to rule out smallpox should be limited to cases that fit the clinical case definition in order to lower the risk of obtaining a false positive test result. ▪ For post-event enhanced surveillance and case reporting guidance see https://www.cdc.gov/smallpox/bioterrorism-response-planning/public-health/enhanced-surveillance-case-reporting.html.	▪ Polymerase chain reaction (PCR) identification of variola DNA in a clinical specimen, **OR** ▪ Isolation of smallpox (variola) virus from a clinical specimen (National LRN laboratory only; confirmed by variola PCR) Note: Laboratory diagnostic testing for variola virus should be conducted in a CDC Laboratory Response Network (LRN) laboratory utilizing LRN-approved PCR tests and protocols for variola virus. Initial confirmation of a smallpox outbreak requires additional testing at CDC. Generic orthopox PCR and negative stain electron microscopy (EM) identification of a pox virus in a clinical specimen are suggestive of an orthopox virus infection but not diagnostic for smallpox.

Spotted fever rickettsiosis 10250	Spotted fever rickettsioses (SFR) are tick-borne infections caused by some members of the genus *Rickettsia*. The most well-known SFR is Rocky Mountain spotted fever (RMSF), an illness caused by *Rickettsia rickettsii*. Disease onset for RMSF averages one week following a tick bite. Illness is characterized by acute onset of fever and can be accompanied by headache, malaise, myalgia, nausea/vomiting, or neurologic signs; a macular or maculopapular rash may appear 4-7 days following onset in many (~80%) patients, often present on the palms and soles. RMSF can be fatal in as many as 20% of untreated cases, and severe fulminant disease can occur. In addition to RMSF, human illness associated with other spotted fever group *Rickettsia* (SFGR) species, including infection with *R. parkeri*, has also been reported. In these patients, clinical presentation appears similar to, but can be milder than, RMSF; the presence of an eschar at the site of tick attachment has been reported for some other SFR. *Clinical evidence:* Acute illness lasting less than 30 days with fever and one or more of the following: rash, eschar, headache, myalgia, anemia, thrombocytopenia, or any hepatic transaminase elevation. ***Confirmed:*** Clinically compatible case (meets clinical evidence criteria) that is laboratory confirmed ***Probable:*** Clinically compatible case with serological evidence of elevated IgG antibody reactive with SFGR antigen* by IFA (serologic titer of ≥1:128; specimen collected within 60 days of onset) and the absence of a more likely clinical explanation Notes: ▪ Because antibodies for rickettsial diseases can be cross-reactive, specimens should be tested against a panel* of *Rickettsia* antigens, including, at a minimum, *R. rickettsii* and *R. typhi*, to differentiate between SFGR and non-SFGR species. ▪ A case should not be counted as new if the case has ever previously been reported for the same condition. ** Specimens can be forwarded to the DSHS Serology lab for rickettsial panel testing.* See *Rickettsia* Classification	▪ Serological evidence of a four-fold increase in IgG-specific antibody titer reactive with SFGR** antigen by IFA between paired acute (taken in the first two weeks after illness onset) and convalescent (taken two to ten weeks after acute specimen collection) serum specimens, **OR** ▪ Detection of SFGR** nucleic acid in a clinical specimen via amplification of a species-specific target by PCR assay, **OR** ▪ Demonstration of SFGR** antigen in a biopsy or autopsy specimen by IHC, **OR** ▪ Isolation of SFGR** from a clinical specimen in cell culture and molecular confirmation (e.g., PCR or sequence). **The spotted fever group *Rickettsia* (SFGR) are *R. aeschlimannii, R. africae, R. australis, R. conorii, R. heilongjiangensis, R. helvetica, R. honei, R. japonica, R. marmionii, R. massiliae, R. parkeri, R. rickettsii, R. sibirica, R. sibirica mongolotimonae,* and *R. slovaca*. *Rickettsia* spp. excluded from this group are *R. felis* and *R. akari*. Note: DNA-detection methods outside of PCR (e.g. cell-free DNA) does not meet lab criteria. Samples can be forwarded for additonal testing at the DSHS lab or CDC.

Streptococcal toxic shock syndrome - **[outbreaks only]** 11700	Streptococcal toxic-shock syndrome (STSS) is a severe illness associated with invasive or noninvasive group A streptococcal (*Streptococcus pyogenes*) infection. STSS may occur with infection at any site but most often occurs in association with infection of a cutaneous lesion. Signs of toxicity and a rapidly progressive clinical course are characteristic, and the case fatality rate may exceed 50%. An illness with the following clinical manifestations: 1) Hypotension defined by a systolic blood pressure less than or equal to 90 mm Hg for adults or less than the fifth percentile by age for children aged less than 16 years, **AND** 2) Multi-organ involvement characterized by two or more of the following: ▪ *Renal Impairment*: Creatinine greater than or equal to 2 mg/dL (greater than or equal to 177 µmol/L) for adults or greater than or equal to twice the upper limit of normal for age. In patients with preexisting renal disease, a greater than twofold elevation over the baseline level. ▪ *Coagulopathy*: Platelets less than or equal to 100,000/mm^3 (less than or equal to 100 x 10^6/L) or disseminated intravascular coagulation, defined by prolonged clotting times, low fibrinogen level, and the presence of fibrin degradation products ▪ *Liver Involvement*: Alanine aminotransferase, aspartate aminotransferase, or total bilirubin levels greater than or equal to twice the upper limit of normal for the patient's age. In patients with preexisting liver disease, a greater than twofold increase over the baseline level. ▪ *Acute Respiratory Distress Syndrome*: Defined by acute onset of diffuse pulmonary infiltrates and hypoxemia in the absence of cardiac failure or by evidence of diffuse capillary leak manifested by acute onset of generalized edema, or pleural or peritoneal effusions with hypoalbuminemia ▪ A generalized erythematous macular rash that may desquamate ▪ Soft-tissue necrosis, including necrotizing fasciitis or myositis, or gangrene *Confirmed:* A case that meets the clinical case definition and is laboratory confirmed with isolation of group A *Streptococcus* from a normally sterile site (e.g., blood or cerebrospinal fluid or, less commonly, joint, pleural, or pericardial fluid) *Probable:* A case that meets the clinical case definition in the absence of another identified etiology for the illness and with isolation of group A *Streptococcus* from a non-sterile site Note: Enter all confirmed and probable STSS cases as confirmed group A *Streptococcus*, invasive disease, code 11710.	▪ Isolation of group A *Streptococcus (S. pyogenes)* (GAS)

***Streptococcus pneumoniae*, invasive disease (IPD)** 11723* *Note: Code 11717 was used prior to 2010 and for 2010 there are cases under both codes.	*Streptococcus pneumoniae* bacteria cause many clinical syndromes, depending on the site of infection (e.g., acute otitis media, pneumonia, bacteremia, or meningitis). Only invasive *Streptococcus pneumoniae* is reportable. ***Confirmed**:* A case that is laboratory confirmed ***Probable**:* A case with detection of *S. pneumoniae* from a normally sterile site using a culture independent diagnostic test (CIDT) (e.g., PCR, antigen-based tests) without isolation of the bacteria Note: Positive lab results from a specimen collected more than 30 days after the collection date of a prior case should be counted as a new case. If specimen collection occurred within 30 days of the collection date of a prior case, it should not be counted as a new case.	▪ Isolation of *S. pneumoniae* from a normally sterile site (e.g., blood or cerebrospinal fluid, or, less commonly, joint, pleural, or pericardial fluid) See Normally Sterile Site and *Streptococcus* Classification Note: Serotyping of isolates can be performed at the DSHS laboratory. Serotyping is required by *TAC* for invasive *Streptococcus pneumoniae* cases on all isolates from children under 5 years old.
***Taenia solium* and undifferentiated *Taenia* infection** 80680	Taeniasis is an intestinal infection with the adult stage of the pork (*T. solium*) or beef (*T. saginata*) tapeworm. Clinical manifestations of infection with the adult worm, if present, are variable and can include nervousness, insomnia, anorexia, weight loss, abdominal pain, and digestive disturbances; many infections are asymptomatic. Taeniasis is usually a nonfatal infection, but the larval stage of *T. solium* can cause fatal cysticercosis. ***Confirmed:*** Laboratory identification of the presence of *T. solium* proglottids, eggs, or antigens in a clinical specimen ***Probable:*** Laboratory identification of the presence of undifferentiated *Taenia* spp. tapeworm proglottids or eggs in a clinical specimen See Cysticercosis	▪ Infection with an adult tapeworm is diagnosed by identification of proglottids (segments), eggs, or antigens of the worm in the feces or on anal swabs Note: Eggs of *T. solium* and *T. saginata* cannot be differentiated morphologically. Specific diagnosis is based on the morphology of the scolex (head) and/or gravid proglottids.
Tetanus 10210	Acute onset of hypertonia and/or painful muscular contractions (usually of the muscles of the jaw and neck) and generalized muscle spasms without other apparent medical cause. ***Probable*:** A clinically compatible case, as reported by a health-care professional	Not applicable

Trichinellosis (Trichinosis) 10270	A disease caused by ingestion of *Trichinella* larvae. The disease has variable clinical manifestations. Common signs and symptoms include eosinophilia, fever, myalgia, and periorbital edema. ***Confirmed:*** A clinically compatible case that is laboratory confirmed in the patient ***Probable:*** A clinically compatible illness in a person who shared an epidemiologically implicated meal or ate an epidemiologically implicated meat product, **OR** a clinically compatible illness in a person who consumed a meat product in which the parasite was demonstrated *Suspect:* A person without clinically compatible illness who shared an implicated meal or ate an implicated meat product, has no known prior history of *Trichinella* infection, and has a positive serologic test for trichinellosis Notes: ▪ Epidemiologically implicated meals or meat products are defined as a meal/meat product that was consumed by a person who subsequently developed a clinically compatible illness that was laboratory confirmed. ▪ Subsequent cases of trichinellosis experienced by one individual should only be counted if there is a clinically-compatible illness **AND** a compatible exposure.	▪ Demonstration of *Trichinella* spp. larvae in tissue obtained by muscle biopsy, **OR** ▪ Positive serologic test for *Trichinella* spp.
Trichuriasis 80790	A parasitic infection caused by the soil-transmitted helminth *Trichuris trichiura* (whipworm). People with light infections are usually asymptomatic. Cases with heavy infections may experience frequent, painful passage of stool that contains a mixture of mucus, water, and blood. Rectal prolapse can also occur. Heavy infections in children can lead to severe anemia, delayed physical growth and impaired cognitive development. ***Confirmed:*** A case that is laboratory confirmed	▪ Microscopic identification of *Trichuris* eggs or worms in feces, **OR** ▪ Observation during sigmoidoscopy, proctoscopy, or colonoscopy of *Trichuris* worms characterized by a threadlike form with an attenuated, whip-like end, **OR** ▪ Identification of *Trichuris* worms on prolapsed rectal mucosa

Tularemia 10230	The signs and symptoms of tularemia vary depending on how the bacteria enter the body. Illness ranges from mild to life-threatening. All forms are accompanied by fever, which can be as high as 104°F. Clinical diagnosis is supported by evidence or history of a tick or deerfly bite, exposure to tissues of a mammalian host of *Francisella tularensis*, or exposure to potentially contaminated water. Illness is characterized by several distinct forms, including the following: ▪ Ulceroglandular: cutaneous ulcer with regional lymphadenopathy ▪ Glandular: regional lymphadenopathy with no ulcer ▪ Oculoglandular: conjunctivitis with preauricular lymphadenopathy ▪ Oropharyngeal: stomatitis or pharyngitis or tonsillitis and cervical lymphadenopathy ▪ Pneumonic: primary pleuropulmonary disease ▪ Typhoidal: febrile illness without early localizing signs and symptoms ***Confirmed:*** A clinically compatible case with confirmatory laboratory results ***Probable*:** A clinically compatible case with laboratory results indicative of presumptive infection and the absence of a more likely clinical explanation: ▪ Elevated serum antibody titer(s)* *to F. tularensis* antigen (without documented fourfold or greater change) in a patient with no history of tularemia vaccination, **OR** ▪ Detection of *F. tularensis* in a clinical or autopsy specimen by fluorescent assay **OR** ▪ Detection of *F. tularensis* in a clinical or autopsy specimen by PCR *Most ELISAs are qualitative tests and do not provide a titer. Some commercial labs perform reflex titer testing for ELISA-positive specimens; contact the commercial lab for these results. Samples that are ELISA-positive with no reflex testing should be forwarded to DSHS for tularemia serologic testing to validate results.	▪ Isolation of *F. tularensis* in a clinical or autopsy specimen, **OR** ▪ Four-fold or greater rise in serum antibody titer* to *F. tularensis* antigen between acute and convalescent specimens. Note: As required by *TAC*, all *F. tularensis* isolates must be submitted to the DSHS Laboratory.

Typhus, flea-borne (endemic, murine) 10260	Flea-borne typhus is a rickettsial disease whose course resembles that of louse-borne typhus, but is generally milder. The onset is variable, often sudden and marked by headache, chills, fatigue, fever, and general body aches. A macular rash may appear on the 5th or 6th day, initially on the upper trunk, followed by spread to the entire body, but usually not to the face, palms or soles. Absence of louse infestation, geographic and seasonal distribution, and sporadic occurrence of the disease help to differentiate it from louse-borne typhus. *Clinical evidence:* Acute illness lasting less than 30 days with fever and two or more of the following: headache, myalgia, rash, nausea/vomiting, thrombocytopenia, or any elevated liver enzyme ***Confirmed****:* Clinically compatible case that is laboratory confirmed ***Probable****:* Clinically compatible case with evidence of epidemiologic linkage*, the absence of a more likely clinical explanation, and supportive lab evidence: ▪ Serologic evidence of elevated IgG at a titer of ≥1:128 reactive with *R. typhi* antigen by IFA in a sample taken within 60 days of illness onset, **OR** ▪ Serologic evidence of elevated IgM at a titer of ≥1:256 reactive with *R. typhi* antigen by IFA in a sample taken within 60 days of illness onset. **Epidemiologic linkage criteria:* Was in same household or had same defined exposure as a confirmed case within the past 14 days before onset of symptoms, **OR** likely vector exposure in an area with suitable seasonal and ecological conditions for potential local vector-borne transmission Notes: ▪ Because antibodies for rickettsial diseases can be cross-reactive, specimens should be tested against a panel** of *Rickettsia* antigens, including, at a minimum, *R. rickettsii* and *R. typhi*, to differentiate between SFG and non-SFG *Rickettsia* spp. ▪ According to CDC, rickettsial IgM tests lack specificity (resulting in false positives); thus, IgG titers are much more reliable. ▪ A case should not be counted as new if the case has ever previously been reported for the same condition. *** Specimens can be forwarded to the DSHS Serology Laboratory for rickettsial panel testing.* See *Rickettsia* Classification	▪ Serological evidence of a four-fold increase in IgG-specific antibody titer reactive with *R. typhi* by IFA test between paired serum specimens (preferably one taken in the first two weeks of illness and a second up to ten weeks later), **OR** ▪ Detection of *R. typhi* nucleic acid via amplification of *R. typhi* target by rt-PCR assay **OR** ▪ Demonstration of typhus fever group antigen in a biopsy or autopsy specimen by IHC, **OR** ▪ Isolation of *R. typhi* from a clinical specimen in cell culture and molecular confirmation (e.g., PCR or sequence) ▪ Note: DNA-detection methods outside of PCR (e.g. cell-free DNA) does not meet lab criteria. Samples can be forwarded for additonal testing at the DSHS lab or CDC.

Typhus fever (epidemic, louse-borne) 10265	A rickettsial disease caused by *Rickettsia prowazekii* and transmitted by the human body louse. The illness may have a variable onset which is often sudden and marked by headache, chills, prostration, fever, and general body aches. A macular rash may appear on the 5th or 6th day, initially on the upper trunk, followed by spread to the entire body, but usually not to the face, palms or soles. The rash is often difficult to observe on dark skin. Toxemia is usually pronounced, and the disease terminates by rapid defervescence after about 2 weeks of fever. ***Confirmed****:* Clinically compatible case that is laboratory confirmed ***Probable****:* Clinically compatible case with supportive laboratory results and the absence of a more likely clinical explanation: ▪ IFA serologic titer of ≥1:128 Note: The IFA test is most commonly used for laboratory confirmation, but it does not discriminate between louse-borne and flea-borne typhus unless the sera are differentially absorbed with the respective rickettsial antigen prior to testing. See *Rickettsia* Classification	▪ Four-fold or greater rise in IgG-specific antibody titer to *R. prowazekii* antigen by IFA test in acute and convalescent specimens ideally taken at least 2 weeks apart, **OR** ▪ Positive PCR assay to *R. prowazekii,* **OR** ▪ Demonstration of positive *R. prowazekii* IHC of skin lesion (biopsy) or organ tissue (autopsy)
Vancomycin-intermediate *Staphylococcus aureus* (VISA) 11663	*Staphylococcus aureus* can produce a variety of syndromes with clinical manifestations including skin and soft tissue lesions, empyema, pyarthrosis, bloodstream infection, pneumonia, osteomyelitis, septic arthritis, endocarditis, sepsis, and meningitis. ***Confirmed:*** A vancomycin-intermediate *Staphylococcus aureus* from any body site that is laboratory confirmed. (MIC: 4-8 µg/ml) Note: The DSHS Laboratory uses the Etest for confirmation of resistance. Etest generates MIC values from a continuous scale and can give results in-between conventional two-fold dilutions. According to manufacturer's protocol, a value which falls between standard two-fold dilutions is rounded up to the next upper two-fold value before categorization so that a MIC of 3µg/ml is reported as intermediate resistance. Additional information on VISA can be found at: https://www.cdc.gov/hai/organisms/visa_vrsa/visa_vrsa.html	▪ Isolation of *Staphylococcus aureus* from any body site, **AND** ▪ Intermediate-level resistance (MIC: 4-8 µg/ml) of the *Staphylococcus aureus* isolate to vancomycin, detected and defined according to CLSI approved standards and recommendations. **AND** ▪ Confirmed by the DSHS Laboratory Note: As required by TAC, all *Staphylococcus aureus* isolates with a vancomycin MIC greater than 2 µg/mL must be submitted to the DSHS Laboratory. Please contact a DSHS HAI Epidemiologist or the DSHS Laboratory for additional information on available laboratory support. ▪ http://www.cdc.gov/HAI/settings/lab/visa_vrsa_lab_detection.html

Vancomycin-resistant *Staphylococcus aureus* (VRSA) 11665	*Staphylococcus aureus* can produce a variety of syndromes with clinical manifestations including skin and soft tissue lesions, empyema, pyarthrosis, bloodstream infection, pneumonia, osteomyelitis, septic arthritis, endocarditis, sepsis, and meningitis. ***Confirmed:*** A vancomycin-resistant *Staphylococcus aureus* from any body site that is laboratory confirmed. (MIC: ≥ 16 µg/ml) Additional information on VRSA can be found at: https://www.cdc.gov/hai/organisms/visa_vrsa/visa_vrsa.html	▪ Isolation of *Staphylococcus aureus* from any body site, **AND** ▪ High-level resistance of the *Staphylococcus aureus* isolate to vancomycin (MIC: ≥16 µg/ml), detected and defined according to CLSI approved standards and recommendations. **AND** ▪ Confirmed by the DSHS Laboratory Note: As required by TAC, all *Staphylococcus aureus i*solates with a vancomycin MIC greater than 2 µg/mL must be submitted to the DSHS Laboratory. Please contact a DSHS HAI Epidemiologist or the DSHS Laboratory for additional information on available laboratory support. http://www.cdc.gov/HAI/settings/lab/visa_vrsa_lab_detection.html
Varicella (chickenpox) 10030	An illness with acute onset of diffuse (generalized) maculopapulovesicular rash without other apparent cause. In vaccinated persons who develop varicella more than 42 days after vaccination (breakthrough disease), the disease is almost always mild with fewer than 50 skin lesions and shorter duration of illness. The rash can also be atypical in appearance (maculopapular with few or no vesicles). ***Confirmed:*** A case that meets the clinical case definition **AND** is either laboratory confirmed, **OR** epidemiologically linked to another probable or confirmed case ***Probable*:** A case that meets the clinical case definition **without** epidemiologic linkage or laboratory confirmation Note: Two or more patients that meet clinical case definition and are epidemiologically linked to one another meet the confirmed case definition.	▪ Isolation of varicella-zoster virus (VZV) from a clinical specimen, **OR** ▪ Varicella antigen detected by direct fluorescent antibody (DFA), **OR** ▪ Varicella-specific nucleic acid detected by polymerase chain reaction (PCR), **OR** ▪ Significant rise in serum varicella immunoglobulin G (IgG) antibody level by any standard serologic assay

Vibrio parahaemolyticus 11541	An intestinal disorder commonly involving watery diarrhea and abdominal cramps, and occasionally with nausea, vomiting, fever and headache. A quarter of cases develop a dysentery-like illness associated with bloody or mucoid stools, high fever and high WBC count. Wound infections can also occur. Typically, it is a disease of moderate severity lasting 1-7 days; systemic infection and death rarely occur. ***Confirmed:*** A case that is laboratory confirmed ***Probable*:** ▪ A case with *Vibrio parahaemolyticus* detected, in a clinical specimen, by use of culture independent laboratory methods (non-culture based), **OR** ▪ A clinically compatible case that is epidemiologically linked to a case that meets the probable or confirmed laboratory criteria for diagnosis Note: A case should not be counted as a new case if laboratory results were reported within 30 days of a previously reported infection in the same individual, unless additional information is available indicating a separate infection, e.g., different species	▪ Isolation of *Vibrio parahaemolyticus* from a clinical specimen Note: As required by *TAC* all *Vibrio* species isolates must be submitted to the DSHS Laboratory.
Vibrio vulnificus 11542	Infection with *Vibrio vulnificus* produces septicemia in persons with chronic liver disease, chronic alcoholism or hemochromatosis, or those who are immunosuppressed. The disease appears 12 hours to 3 days after eating raw or undercooked seafood, especially oysters. One third of patients are in shock when they present for care or develop hypotension within 12 hours after hospital admission. Three quarters of patients have distinctive bullous skin lesions; thrombocytopenia is common and there is often evidence of disseminated intravascular coagulation. *V. vulnificus* can also infect wounds sustained in coastal or estuarine waters; wounds range from mild, self-limited lesions to rapidly progressive cellulitis and myositis that can mimic clostridial myonecrosis in the rapidity of spread and destructiveness. ***Confirmed:*** A case that is laboratory confirmed ***Probable*:** ▪ A case with *Vibrio vulnificus* detected, in a clinical specimen, by use of culture independent laboratory methods (non-culture based), **OR** ▪ A clinically compatible case that is epidemiologically linked to a case that meets the probable or confirmed laboratory criteria for diagnosis Note: A case should not be counted as a new case if laboratory results were reported within 30 days of a previously reported infection in the same individual, unless additional information is available indicating a separate infection, e.g., different species	▪ Isolation of *Vibrio vulnificus* from a clinical specimen Note: As required by *TAC* all *Vibrio* species isolates must be submitted to the DSHS Laboratory.

Vibriosis, other or unspecified 11540	An infection of variable severity characterized by diarrhea and vomiting, primary septicemia, or wound infections. Asymptomatic infections can occur, and the organism can cause extraintestinal infections ***Confirmed:*** A case that is laboratory confirmed ***Probable*:** ▪ A case with a species of the family *Vibrionaceae* (other than *Vibrio parahaemolyticus*, *Vibrio vulnificus*, and toxigenic *Vibrio cholerae* O1 or O139) detected, in a clinical specimen, by use of culture independent laboratory methods (non-culture based), **OR** ▪ A clinically compatible case that is epidemiologically linked to a case that meets the probable or confirmed laboratory criteria for diagnosis Note: A case should not be counted as a new case if laboratory results were reported within 30 days of a previously reported infection in the same individual, unless additional information is available indicating a separate infection, e.g., different species	▪ Isolation of a species of the family *Vibrionaceae* (other than *Vibrio parahaemolyticus*, *Vibrio vulnificus*, and toxigenic *Vibrio cholerae*) from a clinical specimen. Genera in the family *Vibrionaceae* currently include *Aliivibrio, Allomonas, Catenococcus, Enterovibrio, Grimontia, Listonella, Photobacterium, Salinivibrio*, and *Vibrio.* Note: As required by *TAC* all *Vibrio* species isolates must be submitted to the DSHS Laboratory.
Viral Hemorrhagic Fever (VHF) non-Ebola * **11640 Crimean-Congo HF** **11648 Guanarito HF** **11638 Junin (Argentine) HF** **11632 Lassa fever** **11644 Lujo HF** **11637 Machupo (Bolivian) HF** **11631 Marburg fever** **11639 Sabia (Brazilian) HF** *Viral Hemorrhagic Fevers include Ebola - please see Ebola case definition for Ebola specific information	An illness with acute onset of fever, AND one or more of the following clinical findings: severe headache, muscle pain, erythematous maculopapular rash on the trunk with flaking or shedding (fine desquamation) of the skin 3–4 days after rash onset, vomiting, diarrhea, abdominal pain, bleeding or bruising not related to injury, or thrombocytopenia. For arenaviruses (Chapare, Guanarito, Junin, Lassa, Lujo, Machupo, Sabia) pharyngitis, retrosternal chest pain, or proteinuria may also occur. *Confirmed:* A person that meets laboratory criteria *Suspect:* A person that meets the clinical criteria AND meets one or more of the following exposures within 21-days before onset of symptoms: ▪ Contact with blood or other body fluids of a patient with VHF, OR ▪ Residence in—or travel to—an VHF endemic area or area with active transmission, OR ▪ Work in a laboratory that handles VHF specimens, OR ▪ Work in a laboratory that handles, or contact with primates, bats, or rodents infected with a VHF or from an endemic area or area with active transmission, OR ▪ Sexual exposure to semen of a confirmed acute or clinically recovered case of VHF \or breast milk of an individual who had VHF	▪ Detection of VHF* viral antigens in blood by enzyme-linked immunosorbent assay (ELISA) antigen detection, OR ▪ Isolation of VHF virus in cell culture for blood or tissues, OR ▪ Detection of VHF specific genetic sequence by Reverse Transcription Polymerase Chain Reaction (RT-PCR) from blood or tissues, OR ▪ Detection of VHF viral antigens in tissues by IHC *Viral hemmorhagic fever (VHF) agents include: ▪ Crimean-Congo hemorrhagic fever viruses ▪ Ebola virus (see Ebola case definition) ▪ Lassa virus ▪ Lujo virus ▪ Marburg virus ▪ New world arenaviruses (Chapare, Guanarito, Machupo, Junin, Sabia viruses)

Yellow fever 10660	Yellow fever virus is a mosquito-borne flavivirus that is closely related to dengue, Japanese encephalitis, West Nile, and Zika viruses.Yellow fever is preventable by a safe and effective vaccine. Most yellow fever virus infections are asymptomatic. Following an incubation period of 3–9 days, approximately one-third of infected people develop symptomatic illness characterized by fever and headache. Other clinical findings include chills, vomiting, myalgia, lumbosacral pain, and bradycardia relative to elevated body temperature. An estimated 5%–25% of patients progress to more severe disease, including jaundice, renal insufficiency, cardiovascular instability, or hemorrhage (e.g., epistaxis, hematemesis, melena, hematuria, petechiae, or ecchymoses). The case-fatality rate for severe yellow fever is 30%–60%. ***Clinical criteria:*** An acute illness with at least one of the following: fever, jaundice, or elevated total bilirubin ≥3 mg/dl, and the absence of a more likely clinical explanation. ***Confirmed:*** A clinically compatible case that is laboratory confirmed ***Probable*:** A clinically compatible case with supportive serology: ▪ Yellow fever virus-specific IgM antibodies in CSF or serum, **AND** negative IgM results for other arboviruses endemic to the region where exposure occurred, **AND** no history of yellow fever vaccination, **AND** ▪ Epidemiologic linkage to a confirmed yellow fever case or having visited or resided in an area with a risk of yellow fever in the 2 weeks before onset of illness.	▪ Isolation of yellow fever virus from, or demonstration of yellow fever viral antigen or nucleic acid in, tissue, blood, CSF, or other body fluid, **AND** no history of yellow fever vaccination within 30 days before onset of illness unless there is molecular evidence of infection with wild-type yellow fever virus, **OR** ▪ Four- fold or greater rise or fall in yellow fever virus-specific neutralizing antibody titers in paired sera, **AND** no history of yellow fever vaccination within 30 days before onset of illness, **OR** ▪ Yellow fever virus-specific IgM antibodies in CSF or serum with confirmatory virus-specific neutralizing antibodies in the same or a later specimen, **AND** no history of yellow fever vaccination.
Yersiniosis 11565	An illness characterized by acute diarrhea (may be bloody) with abdominal pain. Other symptoms include acute mesenteric lymphadenitis mimicking appendicitis, exudative pharyngitis, and systemic infection. Note: Extra-intestinal manifestations may also be present, such as abscess, which could be a source for testing, and reactive arthritis and erythema nodosum, which are often immunologic phenomena not directly caused by the infection. These manifestations are not required as part of the clinical criteria. ***Confirmed:*** A case that is laboratory confirmed ***Probable:*** A clinically compatible case that is epidemiologically linked to a confirmed case, or a clinically compatible case identified through use of a culture independent diagnostic test (CIDT) such as PCR. ▪ Note: A case should not be counted as a new case if laboratory results were reported within 365 days of a previously reported infection in the same individual	▪ Isolation* of *Yersinia* (except *Y. pestis***) in a clinical specimen *As required by *TAC* all *Yersinia pestis* isolates must be submitted to the DSHS Laboratory. **For *Yersinia pestis* isolates, see Plague

Zika disease, congenital 50224	*Clinical evidence:* A neonate with one or more of the following not explained by another etiology: ▪ congenital microcephaly ▪ congenital intracranial calcification ▪ other structural brain or eye abnormalities ▪ other congenital central nervous system-related abnormalities including defects such as clubfoot or multiple joint contractures ***Confirmed*:** A clinically compatible neonate with laboratory confirmation. ***Probable*:** A clinically compatible neonate whose mother has an epidemiologic link* **OR** meets laboratory criteria for recent ZIKV or flavivirus infection; **AND** the neonate has laboratory evidence of recent ZIKV or flavivirus infection by: ▪ Positive ZIKV IgM antibody test of serum or CSF within 2 days of birth**; **AND** ▪ positive neutralizing antibody titers against ZIKV and dengue or other flaviviruses endemic to the region where exposure occurred; **OR** ▪ negative dengue virus IgM antibody test and no neutralizing antibody test performed *Epidemiologic link defined as one or more of the following: ▪ Resides in or recent travel to an area with known ZIKV transmission, **OR** ▪ Sexual contact with a confirmed or probable case of ZIKV infection or person with recent travel to an area with known ZIKV transmission; **OR** ▪ Receipt of blood or blood products within 30 days of symptom onset; **OR** ▪ Organ or tissue transplant recipient within 30 days of symptom onset; **OR** ▪ Association in time or place with a confirmed or probable case; **OR** ▪ Likely vector exposure in an area with suitable seasonal and ecological conditions for potential local vector-borne transmission **The requirement that samples be collected within 2 days only applies to areas with ongoing local Zika transmission.	▪ Detection of ZIKV by culture, viral antigen or viral RNA in fetal tissue, umbilical cord blood, or amniotic fluid with a validated diagnostic test **OR** ▪ Detection of ZIKV by culture, viral antigen or viral RNA in neonatal serum, CSF, or urine collected within 2 days of birth** **OR** ▪ Positive ZIKV IgM antibody test of umbilical cord blood, neonatal serum or CSF collected within 2 days of birth** with positive ZIKV neutralizing antibody titers and negative neutralizing antibody titers against dengue or other flaviviruses endemic to the region where exposure occurred

Zika disease, non-congenital 50223	A mosquito-borne viral illness transmitted by *Aedes* mosquitoes, including *Ae. aegypti* and *Ae. albopictus*. Infection is asymptomatic in up to 80% of cases and clinical illness, when it occurs, is typically mild and lasts for several days to a week. Transmission of Zika virus (ZIKV) *in utero* has been associated with severe birth outcomes, including microcephaly and fetal loss. *Clinical evidence:* An individual with one or more of the following not explained by another etiology: ▪ Clinically compatible illness that includes: ▪▪ acute onset of fever (measured or reported), or ▪▪ rash, or ▪▪ arthralgia, or ▪▪ conjunctivitis ▪ Complication of pregnancy ▪▪ fetal loss, or ▪▪ fetus or neonate with congenital microcephaly, congenital intracranial calcification, other structural brain or eye abnormalities, or other congenital central nervous system-related abnormalities including defects such as clubfoot or multiple joint contractures (note: if detected prior to infant's birth, the relevant birth defects must be documented in at least two separate ultrasounds and/or verified at birth) ▪ Guillain-Barré syndrome or other neurologic manifestations ***Confirmed:*** A clinically compatible individual with laboratory confirmation. ***Probable****:* A clinically compatible individual with an epidemiologic link* **AND** laboratory evidence of recent ZIKV or flavivirus infection by: ▪ Positive ZIKV IgM antibody test of serum or CSF with: ▪▪ positive neutralizing antibody titers against ZIKV and dengue or other flaviviruses endemic to the region where exposure occurred; **OR** ▪▪ negative dengue virus IgM antibody test and no neutralizing antibody test performed *Epidemiologic link defined as one or more of the following: ▪ Resides in or recent travel to an area with known ZIKV transmission, **OR** ▪ Sexual contact with a confirmed or probable case of ZIKV infection or person with recent travel to an area with known ZIKV transmission; **OR** ▪ Receipt of blood or blood products within 30 days of symptom onset; **OR** ▪ Organ or tissue transplant recipient within 30 days of symptom onset; **OR** ▪ Association in time or place with a confirmed or probable case; **OR** ▪ Likely vector exposure in an area with suitable seasonal and ecological conditions for potential local vector-borne transmission	▪ Detection of ZIKV by culture, viral antigen or viral RNA in serum, CSF, tissue, or other specimen (i.e. amniotic fluid, urine, semen, saliva) with a validated diagnostic test **OR** ▪ Positive ZIKV IgM antibody test in serum or CSF with positive ZIKV neutralizing antibody titers and negative neutralizing antibody titers against dengue or other flaviviruses endemic to the region where exposure occurred

Zika infection, congenital 50222	***Confirmed*:** A neonate who does not meet clinical criteria for congenital Zika disease, BUT who meets confirmatory laboratory criteria. ***Probable*:** A neonate who does not meet clinical criteria for congenital Zika disease whose mother has an epidemiologic link* **OR** meets laboratory criteria for recent ZIKV or flavivirus infection; **AND** the neonate has laboratory evidence of recent ZIKV or flavivirus infection by: ▪ Positive ZIKV IgM antibody test of serum or CSF within 2 days of birth**; **AND** ▪ positive neutralizing antibody titers against ZIKV and dengue or other flaviviruses endemic to the region where exposure occurred; **OR** ▪ negative dengue virus IgM antibody test and no neutralizing antibody test performed *Epidemiologic link defined as one or more of the following: ▪ Resides in or recent travel to an area with known ZIKV transmission, **OR** ▪ Sexual contact with a confirmed or probable case of ZIKV infection or person with recent travel to an area with known ZIKV transmission; **OR** ▪ Receipt of blood or blood products within 30 days of symptom onset; **OR** ▪ Organ or tissue transplant recipient within 30 days of symptom onset; **OR** ▪ Association in time or place with a confirmed or probable case; **OR** ▪ Likely vector exposure in an area with suitable seasonal and ecological conditions for potential local vector-borne transmission **The requirement that samples be collected within 2 days only applies to areas with ongoing local Zika transmission. **Note**: Zika IgM may be detectable between 1-12 weeks after infection but may persist for months to years and interpretation is complicated by cross-reactivity with other flaviviruses. In the absence of clinical illness, interpretation of Zika IgM and/or PRNT results is based on epidemiological context.	▪ Detection of ZIKV by culture, viral antigen or viral RNA in fetal tissue, umbilical cord blood, or amniotic fluid with a validated diagnostic test **OR** ▪ Detection of ZIKV by culture, viral antigen or viral RNA in neonatal serum, CSF, or urine collected within 2 days of birth** **OR** ▪ Positive ZIKV IgM antibody test in umbilical cord blood, neonatal serum or CSF collected within 2 days of birth** with positive ZIKV neutralizing antibody titers and negative neutralizing antibody titers against dengue or other flaviviruses endemic to the region where exposure occurred

Zika infection, non-congenital 50221	***Confirmed*:** An individual who does not meet clinical criteria for non-congenital Zika disease, BUT who meets confirmatory laboratory criteria. ***Probable*:** An individual who does not meet clinical criteria for non-congenital Zika disease, BUT who has an epidemiologic link* **AND** laboratory evidence of recent ZIKV or flavivirus infection by: ▪ Positive ZIKV IgM antibody test of serum or CSF with: ▪ positive neutralizing antibody titers against ZIKV and dengue or other flaviviruses endemic to the region where exposure occurred; **OR** ▪ negative dengue virus IgM antibody test and no neutralizing antibody test performed *Epidemiologic link defined as one or more of the following: ▪ Resides in or recent travel to an area with known ZIKV transmission, **OR** ▪ Sexual contact with a confirmed or probable case of ZIKV infection or person with recent travel to an area with known ZIKV transmission; **OR** ▪ Receipt of blood or blood products within 120 days of diagnosis; **OR** ▪ Organ or tissue transplant recipient within 120 days of diagnosis; **OR** ▪ Association in time or place with a confirmed or probable case; **OR** Likely vector exposure in an area with suitable seasonal and ecological conditions for potential local vector-borne transmission **Note**: Zika IgM may be detectable between 1-12 weeks after infection but may persist for months to years and interpretation is complicated by cross-reactivity with other flaviviruses. In the absence of clinical illness, interpretation of Zika IgM and/or PRNT results is based on epidemiological context.	▪ Detection of ZIKV by culture, viral antigen or viral RNA in serum, CSF, tissue, or other specimen (e.g., amniotic fluid, urine, semen, saliva) with a validated diagnostic test, **OR** ▪ Positive ZIKV IgM antibody test in serum or CSF with positive ZIKV neutralizing antibody titers and negative neutralizing antibody titers against dengue or other flaviviruses endemic to the region where exposure occurred.

Hidalgo County

Appendix 9: Epidemiology and Laboratory

Attachment 5: Isolation and Quarantine Plan

April 2023

– This Page Left Intentionally Blank –

Table of Contents

– This Page Left Intentionally Blank –

Record of Change

When changes are made to the Public Health & Medical Services Plan, Appendix 9: Epidemiology and Laboratory, Attachment 5: Isolation and Quarantine Plan, Hidalgo County Health & Human Services Department will record the changes to this document using the record of changes table below.

Date of Change	Location of Change	Description of Change	Changed by:
2/16/2023	All	Updated plan format.	Anaysse Vasquez
4/3/2023	All	Revised plan details and information.	Diana Cortes

– This Page Left Intentionally Blank –

Approval and Implementation

Appendix 9: Epidemiology and Laboratory

Attachment 5: Isolation and Quarantine Plan

This attachment is hereby approved for implementation and supersedes all previous editions.

_____ _____

Eduardo Olivarez — Date

Director, Health & Human Services

_____ _____

Ricardo Saldaña — Date

Emergency Management Coordinator

– This Page Left Intentionally Blank –

Authority

The Hidalgo County Commissioner's Court has the authority to approve and implement the Public Health & Medical Services Plan. The Public Health & Medical Services Plan includes 12 appendices. The County Commissioner's Court approved the Public Health & Medical Services Plan on _____, 2023. This plan aligns with the County's Emergency Basic Plan, ESF-8: Public Health that was approved by the County Commissioner's Court on September 7, 2021.

Purpose

Explanation of Terms

Acronyms

CDC	Centers for Disease Control
DSHS	Texas Department of State Health Services
EOC	Emergency Operations Center
PHEP	Public Health Emergency Preparedness
PIO	Public Information Officer
PPE	Personal Protective Equipment

Definitions

See the Public Health and Medical Services Plan, Explanation of Terms.

Situation & Assumptions

Situation

1. Communicable disease outbreaks pose a risk to the citizens of Hidalgo County. The goal is to minimize the impact of a communicable disease on its residents by supporting Isolation and Quarantine measures when they are deemed most effective.

Assumptions

1. HCHHSD may utilize isolation and quarantine as one of several tools to reduce the spread of communicable diseases.
2. Isolation and quarantine planning efforts must incorporate and address the unique needs and circumstances of vulnerable populations that are economically disadvantaged, homeless, have limited language proficiency, have disabilities (physical, mental, sensory, or cognitive limitations), have special medical needs, experience cultural or geographic isolation, or are vulnerable due to age, as well as those of incarcerated persons.

3. The ability of HCHHSD to implement this Plan is based not only on the number of people and type of disease suspected, but on the distribution of individuals throughout the county.
4. All policies and procedures to assure the care of protected health information (PHI) apply. Policies and procedures recognize that HCHHSD may make necessary disclosures to protect public health.
5. Isolation and quarantine may be necessary for residents of other counties who are diagnosed while in Hidalgo County. HCHHSD will coordinate with neighboring counties to discuss their plans but is not responsible for planning or execution of isolation and quarantine efforts beyond county lines.
6. Large scale isolation and quarantine events will require the participation of many public health resources, including workforce resources, as well as coordination with multiple community, health care and first responder agencies.
7. Large scale isolation and quarantine events will also require the participation of the DSHS, especially with respect to identification of facilities and resources.
8. HCHHSD will prioritize gaining voluntary compliance from ill or exposed persons and implementing the least restrictive means possible to reduce the spread of infection.
9. HCHHSD will coordinate closely with healthcare providers and healthcare facilities to assist with achieving voluntary compliance of ill or exposed persons.
10. An effective public communication program is essential to achieving voluntary compliance with all disease control strategies in large-scale events.
11. Isolation and quarantine may require the involuntary detention of individuals who may pose a threat to the public's health and do not cooperate with orders from the Medical Health Authority.
12. An individual's cooperation with voluntary isolation or quarantine will be assumed in good faith unless there is evidence to the contrary; however, HCHHSD will still check in with individuals to conduct symptom checks. Depending on the event, information collected by HCHHSD during monitoring may be used as evidence of non-cooperation.
13. Persons in Hidalgo County who are isolated or placed under quarantine will be supported by partners to the extent possible through means such as provision of temporary financial assistance, food, and other necessities.
14. HCHHSD will, to the extent possible, protect against stigmatization or unwarranted disclosure of private information, and will support placement in an appropriate facility if the home environment is unsuitable to I&Q.
15. An event triggering activation of the Plan is also likely to involve mobilization of other public health emergency response capabilities. Consequently, access to resources (including workforce resources) may be limited.
16. HCHHSD commits to carry out a transparent process for the development and implementation of isolation and quarantine and seeks public engagement and involvement to improve the quality of the Plan.

Concept of Operations

General

The Communicable Disease Prevention and Control Act is a comprehensive statute – codified as Chapter 81, Texas Health and Safety Code – that provides for numerous control measures to be made available for use in protecting the public health, including detention, restriction, and quarantine of individuals, property, areas, or common carriers. Control measures are actions necessary to control and prevent communicable disease. They include, but are not limited to, immunization, detention, restriction, disinfection, decontamination, isolation, quarantine, chemoprophylaxis, preventive therapy, prevention, and education.

Administration of Control Measures

Hidalgo County's Medical Health Authority or the Medical Health Authority's designee has supervisory authority and control over the administration of communicable disease control measures in the health authority's jurisdiction unless specifically preempted by DSHS. This includes the legal authority to enact isolation, quarantine, and/or social distancing of individuals, groups, and facilities. The Local Rabies Control Authority has legal authority to enact isolation, quarantine, and/or social distancing of animals.

Response actions will be under the authority of the Medical Health Authority and/or HCHHSD Director, pending response activity and risk population. The population at risk will be identified by pathogen type and transmission mode. Populations at risk for vector-borne illnesses will be identified by the vectors' travel capacity (i.e., mosquito-borne illnesses may have a 100–250-meter radius of exposure risk, flea and tick-borne illnesses may have household-isolated exposure risks). For respiratory conditions, this includes households, institutional settings (i.e., day cares and nursing homes), and those identified as unvaccinated for the pathogen of risk. For food and water-borne diseases, common food history and source identification will connect the population at risk. For these and other populations, control measures will be established based on HCHHSD's and DSHS' epidemiology recommendations, which is to include options such as immunoglobulin/vaccine administration, quarantine and/or isolation, preventative methods (i.e., mosquito repellent, and masHidalgo), and education. For specific information on isolation and quarantining, please refer to the subsequent sections of this plan.

The Medical Health Authority will be in charge of the clinical assessment of those under isolation and/or quarantine for legal prosecution. Epidemiologists and Surveillance staff will be in charge of the tracHidalgo and monitoring of symptom onset and progression and case investigation. The identified District Court will be in charge scheduling a court hearing for those under isolation/quarantine if needed. The Constable's office will be in charge of serving the Control Order. These roles and responsibilities as related to those identified in ESF 8: Public Health and Medical Services.

Examples of response actions include enactment and enforcement of quarantine, isolation, social distancing, and providing medical and general services to those under control measures. Specifically including the development and serving of Control Orders, enforcing quarantine or isolation, providing general services (i.e., food, water, transportation), providing medical services (i.e., clinical assessments, prophylaxis treatment), providing mental health services, and conducting communication.

These actions will not occur until the Medical Health Authority identifies a public health threat that requires quarantine or isolation to protect the community. Once quarantine or isolation occurs, an assessment will be completed at least every eight (8) hours to determine current needs.

Response actions will be documented by the Public Health Emergency Preparedness Planner and other support staff. This includes the development of an Incident Action Plan and other supporting documents. In addition, other documents/records that will be kept by the HCHHSD PHEP planner and Epidemiologist include the Control Order, the Epidemiological Investigation, the Court-Ordered Management of Persons with Communicable Diseases, associated medical/laboratory records, and documentation of services provided.

General and Medical Services

General and medical services are defined as services providing food, water, transportation, stress-management, other therapy services, medical supplies, medical visits, and other medical services. Services provided are to be divided under two categories, voluntary and involuntary control measures. Public Health and Medical services will include prophylaxis or treatment, symptom control, assessment, and monitoring. In addition, an Epidemiologist or Surveillance staff member will conduct home visits to document clinical outcomes. These services will be coordinated between public health and private practices pending disease type and severity.

The coordination of general services will be based on voluntary and involuntary control measures. Voluntary quarantine or isolating individual(s) will be allowed to have a designated friend or family member provide general services such as food, water, and transportation. If the individual does not identify or does not have available a designee, the individual will be provided services such as those under involuntary quarantine or isolation. For involuntary quarantine or isolation, food and water will be provided by a local partner (i.e., the local food bank chapter). Transportation will be limited, and be provided by either the health department or a local EMS provider, pending the severity and risk of disease.

Stress-management and therapy will be offered by local partners as well (i.e., local university and/or community organizations). In coordination with the University of Texas – Rio Grande Valley, Tropical Texas Behavioral Health (Local Mental Health Authority), and Voluntary Organizations Active in Disasters (VOAD), services provided will include faith-based, mortality-based, and general counseling.

All communication of these services will be coordinated at the emergency operations center (EOC). Public information releases on these control measures will be coordinated by the Public Information Officer (PIO) at the Joint Information Center (JIC). These Public Information Releases will be strategically released to allow for proper media coverage and to provide up-to-date information to the community.

Physical contact with those under quarantine and isolation will be limited. Forms of communication will include radio, phone, text, e-mail, and webcam. Information exchanged will include current symptom status, treatment regimen, and general and medical service availability to the individual(s) in isolation or quarantine.

Direction & Control

Control Measures for the Individual

The first step is the execution and delivery of a Control Order from the Medical Health Authority or the department to an individual. This order may be issued if the health authority or the department “has reasonable cause to believe that an individual is ill with, has been exposed to, or is the carrier of a communicable disease.” The order is meant to inform and instruct the individual on the “control measures that are reasonable and necessary to prevent the introduction, transmission, and spread of disease in this state” [§81.083(b)].

The order must be in writing and delivered in person or by registered or certified mail to the individual (or his or her parents or guardian if a minor) [§81.083(c)]. The law does not require any particular form of an order; however, the order should identify the individual clearly and articulate the control measures that are being ordered. The articulated control measures may require swift compliance and, in an emergency, probably would be so required. The department has developed a form for an order and included it in this manual. Once the contents of the order are decided, they should be put “in writing and be delivered personally or by registered or certified mail to the individual or to the individual’s parent, legal guardian, or managing conservator if the individual is a minor.” See §81.083(c.) By law, the order “is effective until the individual is no longer infected with a communicable disease or, in the case of a suspected disease, expiration of the longest usual incubation period for the disease.” See §81.083(d).

The directive to deliver the order to the parents of a minor conforms with the long standing “traditional common law view that a minor cannot consent to medical or surgical treatment” [Fay A. Rozovsky, Consent to Treatment: A Practical Guide, Section 5.1 (2nd ed., 1990)] and a Texas law which proclaims that the parent of a minor has “the right to consent to … medical and surgical treatment.” See Tex. Fam. Code §151.001(a)(6). However, this law is subject to a number of exceptions.

The Family Code [§32.003(a)(3)] provides: A child may consent to medical, dental, psychological, and surgical treatment for the child by a licensed physician or dentist if the child … consents to the diagnosis and treatment of an infectious, contagious or

communicable disease that is required by law or a rule to be reported by the licensed physician or dentist to a local health officer or the Texas Department of State Health Services, including all diseases within the scope of Section 81.041, Health and Safety Code. [Other subsections of this statute give other circumstances when minors may consent to their own medical care, e.g., when they are 16 or older and managing their own affairs. See §32.003(a).]

This section of the Texas Family Code encourages minors to come forward and seek treatment on their own for medical conditions that they may not want their parents to know about, and allows health-care professionals to treat them without obtaining the consent of parents or others. Although there is discordance between the provisions of the Health and Safety Code and the Family Code, there is no contradiction. The health-care professional who relies upon the Family Code to treat the minor without the consent of the parent may still inform the parent if the professional thinks it is advisable. See Texas Family Code §32.003(d). Since the Health and Safety Code requires the order to be delivered to the parents, this would be such an occasion. However, we suggest that, if the health-care provider has until that time been dealing exclusively with the minor, a duplicate set of the orders should also be presented to the minor so that there is no misunderstanding by either the minor or the parent. Once the order is delivered, it becomes legally valid and binding on those persons to whom it is addressed. [The one exemption is for “an individual who chooses treatment by prayer or spiritual means as part of the tenets and practices of a recognized church of which the individual is an adherent or member.” This exemption is only partial if the individual is “in isolation or quarantine.” See §81.009(a).]

The health authority’s duties are important because they are a precondition to further legal proceedings. If a patient continues to be noncompliant after the health authority has issued the warning letter, it may be necessary to treat him without his consent. That will require the involvement of the court system. When infectious individuals do not comply with the orders of a health authority or when a public health disaster exists, Subchapter G of Chapter 81 provides for penalties and management of the individuals under court order.

Criminal sanctions are one means of enforcing the order. “A person commits an offense if the person knowingly refuses to perform or allow the performance of certain control measures ordered by a health authority or the department under Sections 81.083–81.086. An offense under this section is a Class B misdemeanor.” See §81.087. A Class B misdemeanor is punishable by a fine of up to $2,000, a jail term of up to 180 days, or both. See Penal Code §12.22. A jail sentence would usually be inappropriate for a person with infectious disease, but this statute might be applicable to others who attempt to prevent the performance of control measures. Other criminal statutes apply to persons who use coercion, threats, or other illegal means against public servants performing their duties. See Penal Code §§36.03, 36.06. To use these criminal statutes,

the public health authority should contact the local district or city attorney, whose cooperation is essential to filing this type of charge.

The second method of enforcing the order is by means of “court orders for management of persons with communicable diseases.” The Office of General Counsel of the Texas Department of State Health Services has sample court orders; however, the public health authority should contact the local district or city attorney, whose cooperation is essential to filing such documents.

House Bill 627 (Chapter 1022, 78th Leg., 2003) allows the commissioner or local health authority to impose an area quarantine similar to that approved for communicable disease outbreaks (§81.085) if they determine that the introduction of an environmental or toxic agent into the environment has occurred. The area quarantine must be accomplished by the least restrictive means necessary to protect the public health and has a limited period of effectiveness. The health authority or the commissioner will ensure that an appropriate person will be available to take any necessary and legal action to control communicable disease outbreaks and issue emergency orders if the actual health authority or commissioner is unavailable. Under HB 2292, in a public health disaster the commissioner or health authority may go directly to a court to ask the court to order appropriate control measures. Under HB 2292, a notice is not required to impose control measures on property in a public health disaster.

To allow the commissioner to impose an area quarantine if communicable disease is suspected, not just when there is an actual outbreak. During the time that may be necessary to determine if there is an actual outbreak, this authority allows necessary and immediate action to restrict activities in an area where disease is suspected while appropriate investigation is done to determine if there is an actual outbreak. To allow the commissioner, during a public health disaster, to require reports of communicable disease or other health conditions from physicians, laboratories, hospitals, and other providers without a rule of the board. This delegation of authority to the commissioner will allow immediate requirement of certain reports without the lengthy process of rulemaHidalgo.

Control Measures for Groups and Particular Area(s)

The involuntary isolation of a city, a county, or a portion of such a political subdivision may be necessary where there is an outbreak of communicable disease in a finite geographic area. Section 81.085 addresses control measures for an area. There is an overlap in authority between the local health authority and the department. Thus, there are some things that either the commissioner of health or a local health authority might do. The health authority and the department may agree that a commissioner’s order would be more appropriate in a specific situation. Similarly, the governor has broad authority under the Texas Disaster Act to take steps that will address an emergency. The governor has some authority to carry out actions the public health sector cannot. Therefore, there is reason for careful coordination between all persons and entities involved in addressing a communicable disease emergency.

When a group requires isolation, an issue for Control Measures is issued to the patients with instructions for compliance. If patients do not comply, the Medical Health Authority is advised and procedures for initiating Court-Ordered Management of Persons with Communicable Diseases are implemented.

An Order Declaring an Area Quarantine may be used when a local health authority determines that an outbreak of communicable disease has occurred in the state and that an area within the health authority's jurisdiction is affected by the outbreak. The law does not explain what is meant by the term "affected." The statute does not say that the outbreak must have actually occurred in the area to be quarantined; it simply requires that the area be somehow affected by the outbreak. A health authority issuing this order should be prepared to justify his or her decision that the quarantined area was affected by the outbreak. The commissioner, but not a health authority, may impose an area quarantine if the commissioner has reasonable cause to believe that individuals or property in the area may be infected or contaminated with a communicable disease, for the period necessary to determine whether an outbreak has occurred. If it is determined that an outbreak has occurred, then the health authority or commissioner may issue the order. The area to be quarantined must be within the boundaries of the city, county, or district of the local health authority. The area to be quarantined could encompass property owned by different property owners. If an area outside the health authority's jurisdiction is affected by an outbreak, that health authority should contact the local health authority in the adjacent jurisdiction or the state epidemiologist so that activities can be coordinated across different jurisdictions.

A health authority may not impose an area quarantine (i.e., execute the order) until after he or she has consulted with the department. This consultation may be oral or in writing. After execution of the order, the health authority must give written notice to, and consult with, the governing body of "each county and municipality in the health authority's jurisdiction that has territory in the affected area as soon as practicable." See §81.085(b). The requirement to consult with or notify does not require approval of the order itself. The health authority must publish, at least once each week during the area quarantine period in a newspaper of general circulation in the area, a notice of the order and any further instructions with a brief explanation of their meaning and effect. Notice by publication is sufficient to inform persons in the area of their rights, duties, and obligations under your orders or instructions.

A health authority should keep the original order. The health authority may distribute copies of the order as needed to persons in the quarantine area, law enforcement authorities, or appropriate persons. The health authority should monitor the performance of the necessary control measures and perform other duties necessary to address the communicable disease outbreak.

After execution and publication of the order, the health authority may decide that additional control measures need to be imposed. The law does not require the issuance of a second order, but instructions regarding those additional control measures should

be in writing so that appropriate notice can be given to persons affected. If it is determined that area quarantine is no longer necessary, the health authority must first obtain the consent of the commissioner of health. Approval by the city council or county commissioner's court is not required. When the area quarantine is terminated, the health authority may publish a notice in a local area newspaper or otherwise notify persons in any manner.

An area quarantine imposed by a local health authority expires on the earlier of: the 24th hour after the area quarantine is imposed, termination or superseding action taken under the governor's declaration of a state of disaster, or superseding action taken by the commissioner to declare area quarantine.

Control Measures for Common Carriers

Section 81.086 allows a carrier or conveyance to be stopped and control measures to be imposed in three distinct circumstances:

(1) where there is reasonable cause to believe the carrier or conveyance has "departed from or traveled through an infected or contaminated area" [§81.086(b)–(c)];
(2) where there is reasonable cause to believe the carrier or conveyance "is transporting cargo or an object that is or may be infected" [§81.086(h)]; or,
(3) where there is "an individual transported by carrier or conveyance who the department or health authority has reasonable cause to believe has been exposed to or is the carrier of a communicable disease …" [§81.086(i)].

Instructions that conform to each of these circumstances are provided in The Communicable Disease Control Measures in Texas Manual.

The first provision allows the department or health authority to order the owner, operator, or agent of the carrier or conveyance to stop the carrier or conveyance "at a port of entry or place of first landing or first arrival in this state" and to provide information on the condition of the passengers or cargo that includes the details of any illness suspected of being communicable that occurred during the journey. See §81.086(b). After inspection, the department or health authority may impose necessary control measures on individuals or property as discussed in Parts Three and Four of The Communicable Disease Control Measures in Texas Manual.

The second provision allows conditions such as sealed transportation, alternative unloading location, or quarantine or other control measures to be imposed on the object or cargo that is being transported. See §81.086(h).

The third provision allows a person on a carrier or conveyance to be subject to isolation, removal from the carrier or conveyance, or hospitalization under the procedures for imposing control measures on individuals. See §81.086(i).

Section 81.089 covers the actions of a person who "knowingly or intentionally transports or causes to be transported into this state," a person, animal or object that is a carrier or is suspected of being a carrier of communicable disease. Depending on the

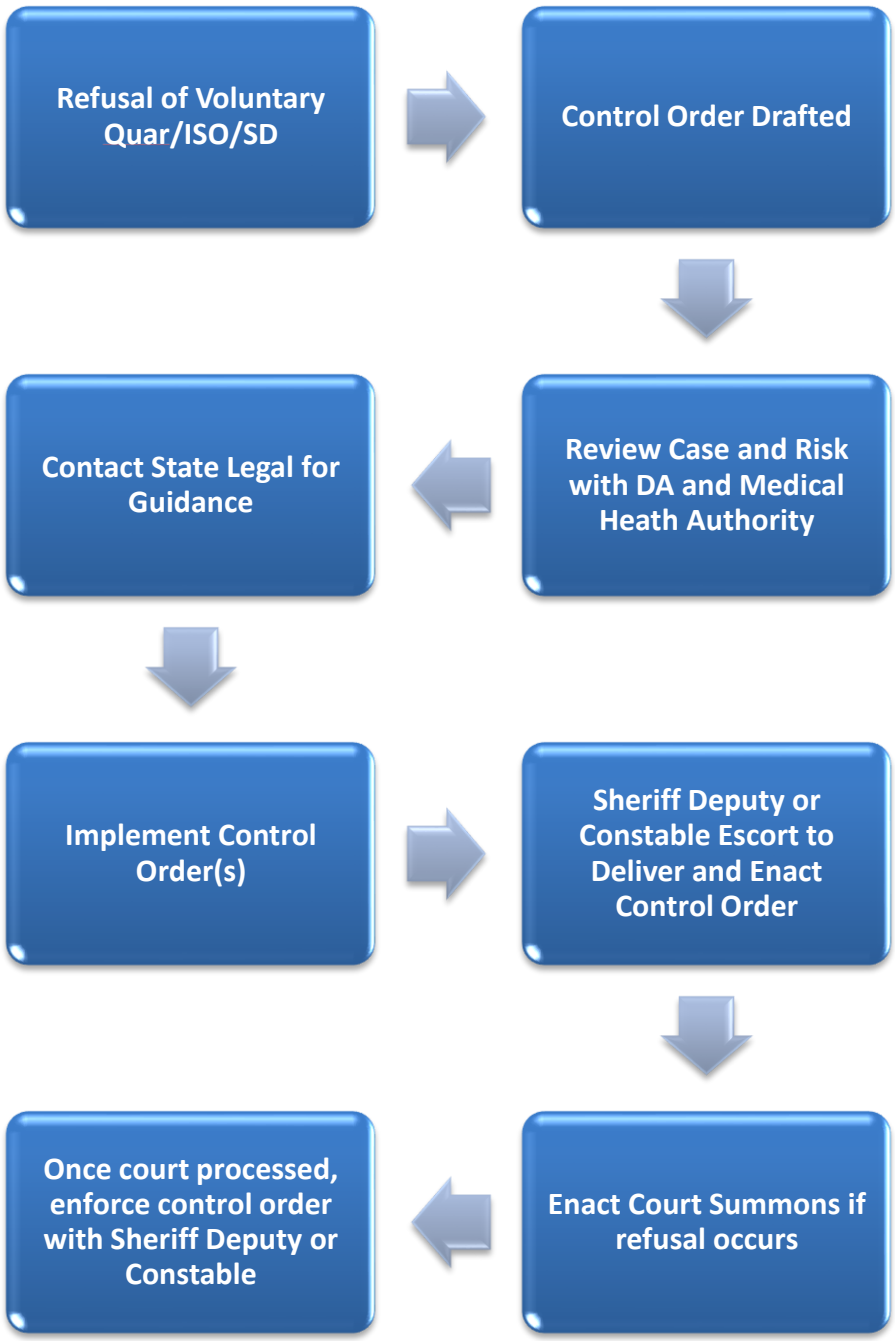
circumstances this may be a Class A misdemeanor or a third-degree felony (punishable by imprisonment for up to 10 years and/or a fine of up to $10,000). If there is suspicion that this may have occurred, local law enforcement should be contacted immediately.

Note: All statutory references are to the Health and Safety Code unless stated otherwise.

Implementing Quarantine, Isolation or Social Distancing

The following algorithm, Figure 1: Algorithm for Implementing Quarantine/Isolation/Social Distancing describes the steps that are necessary to occur, under Texas State Law and Statute, in order for quarantine, isolation, or social distancing to be legally effective.

Figure I: Algorithm for Implementing Quarantine/Isolation/Social Distancing



Site selection will be based on pathogen, severity of disease, geographical location, and population concentration. In individual cases of quarantine and social distancing, the individual may be served Control Orders to not leave the premises of their home residence. In individual cases of isolation, where the patient is symptomatic, a Control Order will be served and the location will be determined based on severity and type of disease. In High Consequence Infectious Diseases (HCIDs), two local hospitals have been designated to handle and care for these complex cases. Cases of Tuberculosis will be coordinated with the HCHHSD Tuberculosis/Pulmonary Program in conjunction with

Regional and State partners to determine local-versus-state confinement. The environment will be subject to transmission mode of the disease of concern and can include but is not limited to, negative pressure isolation rooms, contact precautions, droplet precautions, usage of Personal Protective Equipment (PPE). Time frames will be based on a double incubation period for having sites returned to normal operations. Decontamination and sanitation will follow Infection Control Protocols and will be contracted out to DSHS in the event of HCIDs.

Plan Development & Maintenance

1. The Hidalgo County Health and Human Services Department Director is responsible for maintaining and reviewing the Public Health & Medical Services Plan, Appendix 9: Epidemiology and Laboratory annually. Recommended changes to this plan should be forwarded as needs become apparent and may reflect any changes within our jurisdictional risks and/or community capabilities.
2. The Public Health & Medical Services Plan, Appendix 9: Epidemiology and Laboratory and its attachments are living documents and require revision to account for changes in roles/responsibilities and resources within Hidalgo County such as the acquisition of new equipment, training of staff, and increased partnerships from the private sector.
3. Once the Public Health & Medical Services Plan, Appendix 9: Epidemiology and Laboratory has been updated, the Hidalgo County Health and Human Services Department Director will present to Commissioner's Court for final adoption and ratification. The Public Health & Medical Services Plan, Appendix 9: Epidemiology and Laboratory is updated and presented to Commissioner's Court every five years with input from Emergency Management and various stakeholders. Departments and agencies assigned responsibilities in the Public Health & Medical Services Plan are responsible for developing and maintaining SOPs. Copies of the Public Health & Medical Services Plan, Appendix 9: Epidemiology and Laboratory are kept at HCHHSD's main offices at **1304 S. 25th Avenue, Edinburg, TX 78542** in the following locations:

    Office of Administration

    Public Health Emergency Preparedness Division (PHEP)

    Clinical Health Services

    Information Technology Services

    Safety Officer

    Hidalgo County Emergency Operations Center (EOC)

    Hidalgo County Emergency Management Coordinator

    Each HCHHSD division manager is responsible for informing and instructing public health personnel about the location of the plan copies, as well as each employee's

emergency response role and responsibilities. The supervisors/managers are also responsible for ensuring that employees attend appropriate training, according to their assigned response tier.

Attachments

Tab A – All-Hazards Specimen Collection, Packaging and Shipment Protocols for Biological or Chemical Agents Guide

Tab B – Hidalgo County Control Order, COVID-19

Tab C – Hidalgo County Control Order, TB

Tab D – Order to Implement Control Measures, TB

Tab E – Mandated Court-Order to Implement Control Measures, TB

Tab F – Sample Chain of Custody Form

Hidalgo County

Tab A: All-Hazards Specimen Collection, Packaging and Shipment Protocols for Biological or Chemical Agents Guide

April 2023

– This Page Left Intentionally Blank –

Authority

1. Texas Department of State Health Services
   a. *Specimen Collection, Packaging, and Shipment of Suspect Agents for Biological or Chemical Agents from Sentinel Laboratories to Laboratory Response Network (LRN) Laboratories*

2. Specimen Collection, Packaging, and Shipment of Suspect Agents for Biological or Chemical Agents to Laboratory Response Network (LRN) Laboratories
   a. *Standard Operating Procedure*
      i. Adapted by the Hidalgo County Health and Human Services Department, November 2006

Purpose

The LRN sentinel laboratory responsibilities include specimen collection for clinical specimens, packaging, and shipment of suspected biothreat agents to a Texas LRN reference laboratory for confirmatory testing. The LRN Level 3 Laboratory responsibilities include specimen collection of blood and urine samples, packaging, and shipment of these samples to the Texas LRN Chemical Threat Laboratory in Austin. To better assist the sentinel and Level 3 laboratories in correctly performing these tasks, this procedure has been compiled for their use. This document does not substitute for training in collection, packaging and shipment of specimens, but it can be used as a guide when collecting, packaging, and shipping specimens.

Explanation of Terms

Definitions

LRN Level 3 Laboratory: A laboratory that has the capabilities of performing phlebotomy procedures. These laboratories would be used in a chemical terrorism event for collecting blood and urine specimens on clients that had been exposed or possibly exposed to the chemical threat agent.

LRN Sentinel Laboratory: Sentinel laboratories are private, commercial, or public health laboratories that have microbiological capabilities and play a key role in the early detection of biological agents. Sentinel laboratories provide routine diagnostic services, rule-out, and referral steps in the identification process of possible biothreat agents.

LRN Reference Laboratory: A laboratory that has been accepted into the Laboratory Response Network and is capable of performing standardized confirmatory tests for biothreat agents. In Texas there are eleven LRN laboratories, geographically located, serving an assigned number of counties.

Dangerous Goods: Articles or substances, which are capable of posing a risk to health, safety, property or the environment; IATA (International Air Transport Association) and DOT (Department of Transportation) have defined nine classes of dangerous goods to be used when items are transported by air:

1. Class 1: explosives
2. Class 2: gasses
3. Class 3: flammable liquids
4. Class 4: flammable solids
5. Class 5: oxidizing substances
6. Class 6: toxic/infectious substances
    a. Division 6.1 – toxic substances
    b. Division 6.2 – infectious substances and diagnostic specimens
7. Class 7: radioactive substances
8. Class 8: corrosive substances
9. Class 9: miscellaneous substances (includes dry ice and genetically modified organisms)

Diagnostic Specimen: Human or animal material (e.g., tissue, tissue fluid, serum, urine, secreta, excreta, body fluids, blood, and blood components), which is being shipped for diagnostic or investigational purposes, but excluding live, infected animals.

Infectious Substance: Amaterial known to contain or reasonably expected to contain a pathogen, including, but not limited to, the following:

a. pathogens and cultures of pathogens
b. diagnostic specimens suspected to contain a pathogen
c. diagnostic specimens from patients with serious disease of unknown etiology

Categories of Infectious Substances

Category A - An infectious substance which is transported in a form that, when exposure to it occurs, can cause permanent disability, life-threatening or fatal disease in otherwise healthy humans or animals. These specimens will be assigned the UN 2814 designation and packaged in accordance with this designation.

Category B – An infectious substance, which does not meet the Category A criteria. These specimens will be assigned the UN 3373 designation and packaged in accordance with this designation.

Specimen/Sample Handling and Storage

Biological Threats

1. Specimen Types
    a. Environmental samples must be coordinated with the FBI or law enforcement. HAZMAT is trained in sample collection, labeling and transport as well as coordination of activities with law enforcement. Contact your local LRN to assist with notification of the appropriate authorities (Harlingen/South Texas LRN, Kristina Zamora, BT Coordinator (office) 956-430-0757, 24/7 Phone# 956-454-4387, 1301 Rangerville Rd., Harlingen, Tx. 78552)

2. Clinical Samples
    a. Sentinel laboratories are expected to follow LRN rule-out protocols. Any isolates that cannot be ruled-out of a possible biothreat agent should be submitted to an LRN laboratory for further testing. The isolates should be inoculated to an agar slant or placed into a transport medium in accordance with package insert instructions.
    b. Sentinel laboratories not capable of completing rule-out protocols should submit clinical specimens for testing (see Appendix B).
    c. All bio threat specimens must be triple contained in an approved shipping container and have biohazard labels (see Appendix D). Specimens must be accompanied by a Specimen Submission Form (See Appendix G) and submitted to the LRN designated for the area (See Appendix A).

Chemical Threats

1. Specimen Types (collect the following from each potentially exposed adult person):

    Whole Blood

    a. Adult Patients: Three 4 ml or larger purple-top (EDTA) tubes, vacuum-fill only. Please number the tubes in order of collection using permanent ink, for example, the first tube drawn will be labeled “1”, second tube “2”, etc. One 3 ml or larger green-top tube (Heparin), vacuum-fill only. If green-top tube is not available, a 3 ml gray-top tube (Heparin) may be substituted.
    b. Pediatric Patients: collect urine only unless otherwise directed.

    Urine

    a. Adult or Pediatric Patients: Collect at least 25 ml in a screw-capped plastic container (urine cup). Please do not overfill. FREEZE IMMEDIATELY (-70□C, dry ice, or –50□C gelpacks preferred)

    Controls

    a. In addition, for each lot number of tubes and urine cups used for collection, please provide two empty unopened purple-top tubes, two empty unopened green-top (or gray-top) tubes, and two empty unopened urine cups to serve as blanks for measuring background contamination.

Labeling of Chemical Threat Specimens

Label specimens with labels generated by your facility. These labels should include the following information:

a. Five-digit specimen identification number (first letter of first name & first two letters of last name and specimen number ex: Jane Doe, specimen #JDO01)
b. Collector’s initials
c. Date and time of collection

The collector's initials and date and time of collection will allow law enforcement officials to trace the specimen back to the collector should the case go to court and the collector is needed to testify that they collected the specimen.

a. All specimens should have an acceptable form of patient identification.
b. Acceptable forms of identification include the patient's first and last name **in addition** to a date of birth.
c. Patient identification on the specimen must match the patient identification information on specimen submission form. Information needs to be verified by one other staff member prior to shipping and initial departmental lab log.

Place a single, unbroken strip of waterproof, tamper-evident forensic evidence tape over each specimen top, being careful not to cover the specimen ID labels. This tape must make contact with the specimen container at two points. The individual placing the evidence tape must identify himself by writing his initials half on the container and half on the evidence tape using a permanent marker.

Maintain a list of names with corresponding specimen identification numbers at the collection site to enable results to be reported to the patients. (Departmental lab log)

All chemical threat specimens must be triple contained in an approved shipping container and packaged according to Category B infectious substances (diagnostic specimen regulations). Unless otherwise specified by CDC, these specimens must be submitted to the Texas Department of State Health Services Laboratory, 1100 West 49th Street, Austin, TX 78756 and accompanied by a Specimen Submission Form (G-2B). The G-2B form and instructions are in Appendix G.

Food Samples

No food samples will be accepted from individuals. A sanitarian or health inspector must collect food samples. A chain of custody form must accompany food samples suspected of being involved in a terrorist event. Food items should be refrigerated and maintained at 0ºC to 4.0ºC prior to arrival at the laboratory. Do not freeze refrigerated foods. If possible, submit samples to the laboratory in the original unopened containers. Dry or canned foods, that are not perishable, should be collected and shipped at ambient temperature. Frozen foods should be shipped frozen. Collect at least 100 grams of each sample unit. (Four quarters and one penny weigh approximately 25 grams.)

a. Shellfish samples should be shucked and packed in crushed ice immediately and transported to the laboratory maintaining an ambient temperature of 0oC to 10oC. Do not freeze. Samples must be shipped overnight.
b. Food samples not considered to pose a serious infection risk may be exempt from dangerous goods requirements and regulations.

Radiological Samples

If a patient or sample is suspected of being radioactively contaminated, laboratory personnel should contact DSHS Region 11 Radiation Safety Officer at (956)423-0130 or the DSHS Radiation Control Program at 512-458-7460.

Water Samples

1. Drinking Water
   Routine testing for drinking water samples includes testing for coliforms and *E. coli.* Drinking water samples do not require refrigeration but it is recommended. Samples (at least 100mls) must be collected in EPA approved containers (available at TDSHS), which contain sodium thiosulfate (a dechlorinating agent). Testing must begin within 30 hours of collection. If requesting water testing for possible biological agents or chemical agents, contact the LRN in your area for assistance with collection and shipping. Water samples not considered to pose a serious infection risk may be exempt from dangerous goods requirements and regulation.

2. Milk
   All milk and dairy products must be collected by a health inspector and shipped by Public Health Preparedness and Response (PHPR) Staff. Test requests are coordinated by PHPR Staff.

Materials and Forms

Packaging Materials

As mentioned earlier, all infectious substances and diagnostic specimens must be packaged under “triple pack” conditions. The three following packaging descriptions detail components of the “triple pack” system.

1. Primary Packaging
   a. Primary receptacle(s) must be watertight (i.e., screw cap sealed with Parafilm or adhesive tape or similar positive means to prevent the cap from loosening).
   b. Multiple primary receptacles must be wrapped individually to prevent breakage. The contents of multiple primary receptacles will be added together to determine the content maximum allowable amount.
   c. Primary receptacle(s) must not contain more than: 1.0 L or 1 kg (air transport) for diagnostic specimens; and not more than 50 ml or 50 g (passenger aircraft), 4 kg or 4 l (cargo aircraft), and 400 kg or 450 l (ground transport) for infectious substances.
   d. Primary receptacle(s) shall be capable of withstanding, without leakage, an internal pressure of 95 kPa (0.95 bars).
2. Secondary Packaging
   a. Use enough absorbent material in the secondary container to absorb the entire contents of all primary receptacles in case of leakage or damage.

b. Secondary packaging must be watertight. Follow the packaging manufacturer or other authorized party's packing instructions included with the secondary packaging.
c. Secondary packaging for infectious substances should be a ridge screw top container; secondary packaging for diagnostic specimens may be a sealed plastic bag.

3. Outer Packaging
   a. The outer package may be made of cardboard or paper fiberboard and must meet the IATA packaging requirements including the 1.2 meter (for diagnostic specimens)/9 meter (for infectious specimens) drop test procedure.
   b. Either dry ice or wet ice must be placed outside the secondary packaging for samples that must be transported cold or frozen.
   c. Dry ice: packaging must permit the release of carbon dioxide gas and not allow a build-up of pressure that could rupture the packaging. The packaging must also meet general requirements for packages under IATA and DOT regulations.
   d. Wet ice: packaging must be leak-proof. Ice packs are preferred for diagnostic specimens and infectious substances.
   e. The outer packaging must be no less than 100 mm (4 inches) in the smallest overall external dimension and must be large enough for shipping documents.

Documentation and Labeling

1. Form G-2B
   An itemized list of contents (use Form G-2B for Chemical Threat samples; see Appendix G for instructions for completing this form) must be enclosed between the secondary packaging and the outer packaging. Place the document in a sealed plastic bag to protect it from moisture.
2. Required Labeling

4G/CLASS 6.2/2001
USA/6-20 SHIPPCO

The outer packaging will have the required UN specification markings. A circle containing a "U" over an "N" indicates United Nations specifications have been met. The additional text indicates: the type of package, class of goods the package may carry, manufacturing date, authorizing agency, and the manufacturer, respectively.

For diagnostic specimens, each package and the air waybill must be marked with the following exact wording**:

UN 3373
BIOLOGICAL SUBSTANCE, CATEGORY B
PACKED IN COMPLIANCE WITH
IATA PACKING INSTRUCTION 650

A Shipper's Declaration for Dangerous Goods is **NOT** required for diagnostic specimens unless dry ice is included in the package.

For infectious substances, each package and the air waybill must be marked with the UN ID number and name of contents. For example, a package containing plague:

Infectious Substance, affecting humans ***Yersinia spp.*** **UN2814**

A Shipper's Declaration for Dangerous Goods **IS** required for infectious substances when transported via air.

3. Additional Packaging Labels
   The address label must have the name of the person, complete facility name, shipping address and telephone number of both shipper and consignee (no toll-free numbers). This information must be on the outer containers.

Shipper's Name *Shipper's Organization* *Shipper's Address* *Shipper's Telephone Number*
Recipient's Organization *Recipient's Address* *Recipient's Telephone Number*

The responsible person label (for diagnostic specimens shipped via air or infectious substances only) must have the name and telephone number of the person responsible for the shipment. This person could be the shipper, consignee, or other trained and certified person. This person must be knowledgeable of the package contents and be able to provide emergency information in case the package is damaged. The telephone number must be answered 24 hours a day, otherwise a large fine may be assessed.

Person Responsible for Shipment ***(Epidemiologist)*** ***(24/7 telephone number)***

The Cargo Aircraft Only label is used if an infectious substance package contains more than 50 ml or 50 g but less than 4 L or 4 kg and must be transported by a cargo plane.

Receipt of Property/Chain of Custody

All environmental samples that are collected for biological testing in response to a real or perceived threat must be coordinated through law enforcement. The FBI must be notified and will coordinate the activities involved with the testing of the specimen(s). The Federal Bureau of Investigation is the lead federal agency tasked with directing the interagency response to acts of terrorism. All information pertaining to the analysis of potential evidence samples is not to be released to the public and should only be conveyed to the appropriate law enforcement officials. A receipt of property/chain of custody form must be completed.

If a clinical specimen or isolate is known or suspected to be associated with a biological or chemical attack, or if suspicious circumstances are involved regarding the patient from whom the sample was collected, all persons who have contact with the specimen must document their involvement with that specimen. This documentation is maintained on a chain of custody form and the sentinel/level 3 laboratories would retain the original and submit a copy of the chain of custody with the specimen.

Specimens that are involved in a legal investigation or could result in legal investigation should be secured with evidence tape. All specimens submitted for chemical threat analysis must be secured with evidence tape.

In response to a real or perceived threat, the sentinel laboratory should preserve the original specimens, plates, cultures, and subcultures pursuant to a potential criminal investigation and notify an LRN laboratory. The LRN laboratory will coordinate with the FBI or law enforcement and secure the transport of the specimens to the LRN laboratory. The sentinel/level 3 laboratories will need to complete a receipt of property/chain of custody form.

Sentinel/Level 3 laboratories are responsible for maintaining their own chain of custody documentation. If a carrier/courier is used for transfer of the samples, the name of the carrier/courier and the shipping/reference number should be recorded on this documentation.

If a facility is instructed to ship samples directly to CDC in response to a chemical terrorism event, the local LRN reference laboratory must be contacted to receive the required shipping manifest documentation and other instructions.

Shipping Options

The DSHS laboratory and Texas LRNs will provide packaging and shipping protocols and training as well as proper shipping containers to sentinel/Level 3 laboratories (see Appendix F for training requirements). Each sentinel laboratory is responsible for the development of a plan for the submission of samples outside of routine work hours. Cost and method of shipping will depend on location, distance, and time of day the specimen/sample will have to travel. All shipping costs will be incurred by shipper

unless otherwise instructed by HCHHSD Epidemiologists or Surveillance Coordinator. Several options are available to submitter:

a. FedEx Custom Critical has three services that can handle any shipment: CharterAir Dedicated, Blended Services and Point-to-Point Airfreight offer different plans. The white gloves section at 1-800-255-2421 has dedicated charter shippers that can transport by air or ground as fast as needed. See www.customcritical/fedex.com for details.
b. DHL Express will provide ground same day delivery of dangerous, diagnostic, or infectious specimens. Call 1-800-336-3344 to arrange pickup. DHL Same Day is not the same as Express and Same Day will NOT transport dangerous, infectious, or hazardous packages because they have few HazMat drivers. See www.DHL-USA.com for more details. Submitter account needs to be set up prior to use.
c. Courier services that are available for the regional area must be capable of delivering dangerous, diagnostic, or infectious goods. It is important to remember that it is the responsibility of the shipper to ensure that the courier is approved for the type of shipment that is being transported.
d. Laboratories not able to find an appropriate shipping service may contact their local or regional health departments or regional LRN laboratories for assistance.
e. Lone Star Overnight does not transport dangerous, infectious, or hazardous packages.

COUNTY OF HIDALGO/CONDADO DE HIDALGO §
§
STATE OF TEXAS/ESTADO DE TEXAS §

COMMUNICABLE DISEASE CONTROL ORDER
ORDEN DE CONTROL DE ENFERMEDAD CONTAGIOSA

To/A:

The Texas Department of State Health Services and the Local Health Authority for Hidalgo County, Texas have reasonable cause to believe that you have been exposed to a communicable disease: COVID-19.
El Departamento Estatal de Servicios de Salud de Texas y la Autoridad Local de Salud del Condado de Hidalgo, Texas tiene causa razonable para creer que usted ha sido expuesto(a) a una enfermedad contagiosa: COVID - 19

Under the authority of Texas Health and Safety Code § 81.083 you are hereby **ordered** by this to implement the following control measures effective immediately, that are reasonable and necessary to prevent the introduction, transmission, and spread of this disease in this state:
Bajo la autoridad a mí conferida por la sección § 81.083 del Código de Salud y Seguridad del Estado de Texas por este medio le **ordeno** implementar las siguientes medidas requeridas y necesarias para prevenir la introducción, transmisión y propagación de esta enfermedad en el estado:

- Remain at . You will not be permitted to leave without the prior approval of the Department of State Health Services or Hidalgo County Health and Human Services.
- Permanecer en . No se le permitirá salir de sin aprobación previa del Departamento Estatal de Servicios de Salud de Texas o la Autoridad Local de Salud del Condado de Hidalgo.
- You are not to allow or otherwise permit any visitors at without the prior approval of the Department of State Health Services or the Hidalgo County Health and Human Services.
- No se le permite tener o permitir visitas en sin aprobación previa del Departamento Estatal de Servicios de Salud de Texas o la Autoridad Local de Salud del Condado de Hidalgo.
- Monitor yourself for symptoms such as cough, fever, shortness of breath, respiratory complications and report any of these symptoms immediately to the Hidalgo County Health and Human Services at (956) 292-7765 between 8:00 a.m. and 5:00 p.m.
- Usted se debe monitorear para detectar síntomas como toz, fiebre, falta de aliento, complicaciones respiratorias y reporte cualquiera de estos síntomas de inmediato al Departamento de Salud y Servicios Humanos del Condado de Hidalgo al (956) 292-7765 entre las horas de 8:00 a.m. a 5:00 p.m.
- Make yourself available to representatives of the Department, U. S. Centers for Disease Control and Prevention, and/or Hidalgo County Health and Human Services for diagnostic testing, providing them with blood and other samples or any other measures, monitoring or tests required by any of the entities above, to prevent the spread of a communicable disease, on request by any of the entities listed above.
- Póngase a disposición de representantes de los Centros para el Control y la Prevención de Enfermedades de los Estados Unidos (CDC) y/o del Departamento de Salud y Servicios Humanos del Condado de Hidalgo para pruebas de diagnóstico, proporcionándoles sangre y otras muestras o cualquier otra medida o prueba requerida por cualquiera de las entidades ya previamente mencionadas para la prevención de la propagación de la enfermedad contagiosa.

If you do not comply with these control measures you may be subject to criminal prosecution under Texas Health and Safety Code §81.087, or civil court proceedings under Texas Health and Safety Code Chapter

81, Subchapter G, entitled "Court Orders for Management of Persons with Communicable Diseases."

Si no sigue estas medidas de control puede ser sujeto(a) a procesamiento penal bajo el Código de Salud y Seguridad del Estado de Texas capítulo 81, subcapítulo G, titulado "Court Orders for Management of Persons with Communicable Diseases."

This Order will remain in effect until you are notified in writing that (1) the incubation period has passed and you are no longer suspected of having the above-stated communicable disease; or (2) you are otherwise notified by the Department of State Health Services. *See* Texas Health & Safety Code § 81.083(d).

Esta orden permanecerá vigente has que se le notifique por escrito que (1) el período de incubación ha pasado y ya no se sospecha que tenga la enfermedad transmisible mencionada anteriormente; o (2) el Departamento Estatal de Servicios de Salud de Texas lo(a) notifique. Vea Código de Salud y Seguridad del Estado de Texas § 81.083(d).

ISSUED PURSUANT TO OUR AUTHORITY AS COMMISSIONER OF THE DEPARTMENT OF STATE HEALTH SERVICES OF THE STATE OF TEXAS and LOCAL HEALTH AUTHORITY FOR HIDALGO COUNTY, TEXAS

EMITIDO DE ACUERDO CON NUESTRA AUTORIDAD COMO COMISIONADO DEL DEPARTAMENTO ESTATAL DE SERVICIOS DE SALUD DE TEXAS Y LA AUTORIDAD LOCAL DE SALUD PARA EL CONDADO DE HIDALGO, TEXAS

this/este _____ day of/día de _____, 2020.

_____
Ivan Melendez, M.D.

_____
Eduardo Olivarez
Chief Administrative Officer/ Director Administrativo
Hidalgo County Health and Human Services
1304 S. 25th St.
Edinburg, TX

Certificate of Service/ Certificado de Servicio

I/Yo, _____ hereby certify that the foregoing Control Order was served on/ por la presente certifico que la orden de control anterior se entregó el _____, 2021, by Hand Delivery to the following/ mediante entrega en mano a la siguiente persona:

_____
Signature/Firma

Acknowledgement of Receipt/Confirmación de recibo

I/Yo, _____ hereby acknowledge receipt of this Control Order on / por la presente confirmo recibida la orden de control el día _____, 2021:

_____
Signature/Firma

Control Order Release/Liberación de Orden de Control

If the following criteria is met, your expected release date is :
Si se cumplen los siguientes criterios, su fecha de liberación esperada es :

- At least 3 days (72 hours) have passed since recovery defined as resolution of fever without the use of fever-reducing medications and improvement in respiratory symptoms (e.g., cough, shortness of breath); and,
- At least 10 days have passed since symptoms first appeared.
- Han transcurrido al menos 3 días (72 horas) desde la recuperación definida como la resolución de la fiebre sin el uso de medicamentos para reducir la fiebre y recuperación de los síntomas respiratorios (por ejemplo, tos, falta de aliento); y
- Han transcurrido al menos 10 días desde que aparecieron los primeros síntomas.

If any other member of your household has tested positive and/or has symptoms related to COVID-19, you must continue to isolate yourself until the last household member meets release criteria. If you did not present with symptoms, your symptom onset date would be your date of testing. You must make a list of anyone that you may have come in contact with starting 2 days prior to symptom onset and call each individual to notify them of your results. They must now monitor their symptoms and quarantine for 14 days by order of the Health Department. It is also important for you to inform your employer, if applicable.

Si cualquier otro miembro de su hogar ha dado positivo y/o tiene síntomas relacionados con COVID-19, debe continuar aislándose hasta que el último miembro del hogar cumpla con los criterios de liberación. Si no presentaba síntomas, la fecha de inicio de los síntomas sería la fecha de la prueba. Debe hacer una lista de cualquier persona con la que haya estado en contacto a partir de 2 días antes del inicio de los síntomas y llame a cada individuo para notificarles sus resultados. Ahora deben monitorear sus síntomas y aislarse durante 14 días por orden del Departamento de Salud. También es importante que informe a su empleador, si corresponde.

HEALTH AND SAFETY CODE
TITLE 2. HEALTH
SUBTITTLE D. PREVENTION, CONTROL, AND REPORT OF DISEASES
SUBCHAPTER E. CONTROL

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.

(C) An order under this section must be in writing and be delivered personally or by registered or certified mail to the individual or to the individual's parent, legal guardian, or managing conservator if the individual is a minor.

(D) An order under this section is effective until the individual is no longer infected with a communicable disease or, in the case of a suspected disease, expiration of the longest usual incubation period for the disease.

(E) An individual may be subject to court orders under Subchapter G if the individual is infected or is reasonably suspected of being infected with a communicable disease that presents an immediate threat to the public health and:

1) the individual, or the individual's parent, legal guardian, or managing conservator if the individual is a minor, does not comply with the written orders of the department or a health authority under this section; or
2) a public health disaster exists, regardless of whether the department or health authority has issued a written order and the individual has indicated that the individual will not voluntarily comply with control measures.

(F) An individual who is the subject of court orders under Subchapter G shall pay the expense of the required medical care and treatment except as provided by Subsections (g)-(i).

(G) A county or hospital district shall pay the medical expenses of a resident of the county or hospital district who is:

1) indigent and without the financial means to pay for part or all of the required medical care or treatment; and
2) not eligible for benefits under an insurance contract, group policy, or prepaid health plan, or benefits provided by a federal, state, county, or municipal medical assistance program or facility.

(H) The state may pay the medical expenses of a nonresident individual who is:

1) indigent and without the financial means to pay for part or all of the required medical care and treatment; and
2) not eligible for benefits under an insurance contract, group policy, or prepaid health plan, or benefits provided by a federal, state, county, or municipal medical assistance program.

(I) The provider of the medical care and treatment under Subsection (h) shall certify the reasonable amount of the required medical care to the comptroller. The comptroller shall issue a warrant to the provider of the medical care and treatment for the certified amount.

(J) The department may:

1) return a nonresident individual involuntarily hospitalized in this state to the program agency in the state in which the individual resides; and

2) return a nonresident individual involuntarily hospitalized in this state to the program agency in the state in which the individual resides; and

(K) If the department or a health authority has reasonable cause to believe that a group of five or more individuals has been exposed to or infected with a communicable disease, the department or health authority may order the members of the group to implement control measures that are reasonable and necessary to prevent the introduction, transmission, and spread of the disease in this state. If the department or health authority adopts control measures under this subsection, each member of the group is subject to the requirements of this section.

(L) An order under Subsection (k) must be in writing and be delivered personally or by registered or certified mail to each member of the group, or the member's parent, legal guardian, or managing conservator if the member is a minor. If the name, address, and county of residence of any member of the group is unknown at the time the order is issued, the department or

health authority must publish notice in a newspaper of general circulation in the county that includes the area of the suspected exposure and any other county in which the department or health authority suspects a member of the group resides. The notice must contain the following information:

1) that the department or health authority has reasonable cause to believe that a group of individuals is ill with, has been exposed to, or is the carrier of a communicable disease;
2) the suspected time and place of exposure to the disease;
3) a copy of any orders under Subsection (k);
4) instructions to an individual to provide the individual's name, address, and county of residence to the department or health authority if the individual knows or reasonably suspects that the individual was at the place of the suspected exposure at the time of the suspected exposure;
5) that the department or health authority may request that an application for court orders under Subchapter G be filed for the group, if applicable; and
6) that a criminal penalty applies to an individual who:

(A) is a member of the group; and
(B) knowingly refuses to perform or allow the performance of the control measures in the order.

(M) A peace officer, including a sheriff or constable, may use reasonable force to:

1) secure the members of a group subject to an order issued under Subsection (k); and
2) except as directed by the department or health authority, prevent the members from leaving the group or other individuals from joining the group.

Acts 1989, 71st Leg., ch. 678, Sec. 1, eff. Sept. 1, 1989. Amended by Acts 2003, 78th Leg., ch. 198, Sec. 2.180, eff. Sept. 1, 2003. Amended by:

Acts 2007, 80th Leg., R.S., Ch. 258 (S.B. 11), Sec. 14.02, eff. September 1, 2007.

Acts 2013, 83rd Leg., R.S., Ch. 314 (H.B. 1690), Sec. 2, eff. June 14, 2013

Vernon's Texas Statutes and Codes Annotated
Health and Safety Code (Refs & Annos)
Title 2. Health
Subtitle D. Prevention, Control, and Reports of Diseases
Chapter 81. Communicable Diseases
Subchapter E. Control

V.T.C.A., Health & Safety Code § 81.087

§ 81.087. Violation of Control Measure Orders; Criminal Penalty

Currentness

(a) A person commits an offense if the person knowingly refuses to perform or allow the performance of certain control measures ordered by a health authority or the department under Sections 81.083-81.086.

(b) An offense under this section is a Class B misdemeanor.

Credits

Acts 1989, 71st Leg., ch. 678, § 1, eff. Sept. 1, 1989.

V. T. C. A., Health & Safety Code § 81.087, TX HEALTH & S § 81.087
Current through the end of the 2019 Regular Session of the 86th Legislature

End of Document

Hidalgo County Health and Human Services Department

1304 S. 25th Street • Edinburg, Texas 78539
Tel: (956) 383-6221 • Fax: (956) 383-8864

Iván Meléndez, M.D., M.B.A.
Health Authority / Chief Physician

Eduardo Olivarez
Chief Administrative Officer

Tuberculosis Control Order

To: (Name)_____
(Address)_____
_____ (Phone#) _____

I have reasonable cause to believe that your diagnosis, based on information available at this time, is (probably/definitely) TUBERCULOSIS, which is a serious communicable disease. By the authority given to me by the State of Texas, Health and Safety Code, section 81/083, I hereby order you to do the following:

1. Keep all appointments with clinical staff as instructed.
2. Follow all medical instructions from your physician or clinic staff regarding treatment for your tuberculosis.
3. Come to the Public Health Department Clinic or be at an agreed location and time for taking Directly Observed Therapy (DOT).
4. Do not return to work or school until authorized by your clinic physician.
5. Do not allow anyone other than those living with you or health department staff into your home until authorized.
6. Do not leave your home except as authorized by your clinic physician.
7. Special Orders - see reverse side.
   YOU MUST UNDERSTAND, INITIAL AND FOLLOW THE INSTRUCTIONS ON THE BACK OF THIS ORDER.

This order shall be effective until you no longer need treatment for TUBERCULOSIS.

If you fail to follow these orders, court proceedings may be initiated against you as dictated by State law. After a hearing, the Court may order you to be hospitalized at The Texas Center for Infectious Diseases in San Antonio or another facility. The court also has the option to order you to go to treatment at a health clinic. The court proceedings could also include having you placed in the custody of the County Sheriff until the hearing.

Ivan G. Melendez, M. D.
Chief of Physician
County of Hidalgo
Date Signed:_____

Please sign in the space provided below to show that you received these orders and understand them.

I, _____, have read the above information (or had it read or translated to me), and agree to follow those orders. □ hereby acknowledge that I received a copy of these orders and understand them.

Signed _____ Date _____
(client's signature)
Witness _____ Date _____

TB-410 (Rev. 08/04) Adopted by HCHHSD -Revised 4/2010

Instructions for Client

Client's Name _____ Date _____

Physician's Name _____

1. Keep all appointment given to you by clinical staff.
   Several appointments will be necessary to be sure your treatment is working. The treatment for tuberculosis is usually for six or more months. It is very important for you to keep all of the appointments made for you.

   _____
   (client's initials)

2. Be sure you take your medicine for the treatment of your tuberculosis as your doctor or other clinic staff tells you. This means you must: keep all appointments at the clinic or other locations that have been discussed with you; take your medication as advised; provide sputum, urine or blood specimen as requested; report changes in your health; report when you move from where you live now and provide information about those with whom you spend a lot of time. _____
   (client's initials)

3. Come to the Health Department Clinic or be at an agreed place and time to take Directly Observed Therapy (DOT). DOT is a way we can be sure that you take all the medication needed to cure your tuberculosis. Taking DOT means that a health care worker will meet you at a scheduled time and place and give you your medication as ordered by the doctor. Location for DOT_____.
   DOT will give you the best chance to cure your tuberculosis. _____(location) (client's initials)

4. Do not return to work or school until authorized by the clinic physician. _____
   (client's initials)

5. Do not allow anyone other than those living with you or health department staff into your home until authorized.

   _____
   (client's initials)

6. Do not leave your home unless authorized by your clinic physician. _____
   (client's initials)

☐ You are or may be capable of spreading TB to others and must remain in your home or in a place where you will not expose others to the TB germ. When you take your TB medicines, you may quickly decrease the likelihood of spreading TB to others. Your doctor will decide when this occurs at your follow-up appointments.

_____/_____
(client's initials) (physician's signature) (date)

☐ You may attend school and/or go to work _____/_____/_____
(Client's initials) (Physician's signature) (Date)

Specialorders_____

_____

_____

_____
(client's initials)

PROCEDURE FOR INITIATING COURT ORDERED MANAGEMENT OF PERSONS WITH COMMUNICABLE DISEASES
(Tuberculosis)

1. ***HEALTH AUTHORITY'S AFFIDAVIT OF MEDICAL EVALUATION***, signed by current Health Authority (Medical Director) for Hidalgo County Health Department. This document must be notarized.

2. Health Authority's Affidavit of Medical Evaluation is sent (via fax) to the Office of General Counsel, TDH. (Attachment: latest TB400B,lab confirmation,warning letter)

3. The Office of General Counsel, TDH, will obtain the ***COMMISSIONER'S CONCURRENCE***, and ***COMMISSIONER'S DESIGNATION OF HEALTH FACILITY***.

4. The Office of General Counsel, TDH, will send via fax the ***COMMISSIONER'S CONCURRENCE***, and ***COMMISSIONER'S DESIGNATION OF HEALTH FACILITY***. Process can continue with these fax, the Office of General Counsel will mail the original documents by Federal Express.

5. ***HEALTH AUTHORITY'S AFFIDAVIT OF MEDICAL EVALUATION***, ***COMMISSIONER'S CONCURRENCE***, and ***COMMISSIONER'S DESIGNATION OF HEALTH FACILITY***, are sent to Hidalgo County Courthouse District Attorney's Office. (Attachment: latest TB400B,lab confirmation,warning letter)

* Refer to DSHS Quarantine Reference Manual

Hidalgo County Health & Human Services Department
Order to Implement Control Measures

1. Control Order will be signed by client/parent/legal guardian
2. Control Order will be signed by witness
3. Copy of control order will be given to client

1 Control Order will be sent to Central Office-TB Medical Records for local Health Authority's signature (in the event of his absence, a designated person will be assigned by local Health Authority)

1. Control Order will be sent to Pulmonary Clinic for TB Consultant Physician's signature

1. Original Control Order will be kept in client's record. A copy of control order will be kept in TB Medical Records Department.

Revised 9/06

Hidalgo County Health and Human Services Department
Public Health Emergency Preparedness
1304 S. 25th St.
Edinburg, Texas 78539
Phone (956) 318-2426
Fax (956) 318-2431

CHAIN OF CUSTODY

SAMPLE INFORMATION

Sample Site Address			
Building Name/Owner:			
Street:	**City:**	**State:**	**Zip:**
Owner Contact Information:			
Sample Collected by:		**Date:**	
Agency:			
Contact Information:			

Chain of Custody Information

COC Number:		
Sample/COC Initiation Date:	**COC Initiation Time:**	
Sample Numbers:		
Released by (print name):	**Signature:**	
Agency:	**Phone:**	
Accepted by (print name):	**Signature:**	
Agency:	**Phone:**	
Date:	**Time:**	

COC Number:		
Released by (print name):	**Signature:**	
Agency:	**Phone:**	
Accepted by (print name):	**Signature:**	
Agency:	**Phone:**	
Date:	**Time:**	

COC Number:		
Released by (print name):	**Signature:**	
Agency:	**Phone:**	
Accepted by (print name):	**Signature:**	
Agency:	**Phone:**	
Date:	**Time:**	