

# Operational Protocol for U.S.-Mexico Binational Communication and Coordination on Disease Notifications and Outbreaks

U.S.-Mexico Binational Technical Work Group\*

\*See Acknowledgments for participating organizations

PAGE INTENTIONALLY LEFT BLANK

---

# Operational Protocol for U.S.-Mexico Binational Communication and Coordination on Disease Notifications and Outbreaks

## *Table of Contents*

1. Introduction . . . . .	1
2. Purpose. . . . .	2
3. Events Leading to a Binational Communication . . . . .	3
4. Communication between Counterparts . . . . .	6
5. Information Included in Binational Communications . . . . .	9
6. Conducting Binational Communications . . . . .	11
7. Conducting Binational Outbreak Investigations . . . . .	12
Acknowledgments . . . . .	19
Appendix 1: IHR (2005) . . . . .	20
Appendix 2: U.S. and Mexico Case Definitions of Binationally Notifiable Conditions . . . . .	23
Appendix 3: Binational Contact Numbers . . . . .	27
Appendix 4: Template Terms of Reference for a Binational Outbreak Investigation. . . . .	29
Appendix 5: Procedures for Sharing Laboratory Resources and Specimens during Public Health Events of Mutual Interest and Binational Outbreaks. . . . .	31
Appendix 6: List of Agencies and Organizations . . . . .	32
Appendix 7: Text Descriptions of Figures . . . . .	33

## *Tables and Figures*

Figure 1: Map of States Along the United States-Mexico Border. . . . .	1
Table 1: List of Binationally Notifiable Conditions . . . . .	5
Figure 2: U.S.–Mexico Communications Pathway for Routine or Emergency Events. . . . .	6
Table 2: Major U.S.–Mexico Sister City Pairs. . . . .	7
Table 3: Variables for Binational Case Notification . . . . .	10
Figure 3: Decision Tool For Confirming a Binational Outbreak and Initiating an Investigation . . . . .	13

---

PAGE INTENTIONALLY LEFT BLANK

---

# 1. Introduction

This document intends to serve as an operational protocol (i.e., the “Protocol”) for U.S. and Mexico public health officials. It is meant to provide guidance for implementing communication and follow up of binational cases and for identifying and collaborating on binational outbreaks when mutually deemed appropriate.

The stimulus for the Protocol is a joint declaration by the U.S. and Mexico Secretaries of Health, signed in 2012 to implement the principles set forth in the “[\*Technical Guidelines for United States—Mexico Coordination on Public Health Events of Mutual Interest\*](#),” also known as the “Guidelines.” The Guidelines call for the development of clearly defined pathways between public health agencies of both countries for communication of relevant epidemiologic information and to maximize the potential for coordinated public health action based on such information. This document fulfills these recommendations.

The U.S.-Mexico Binational Technical Work Group (BTWG) is a binational cross-cutting steering group that meets monthly and consists of border health partners from state and federal agencies in both countries. The BTWG developed communications pathway in collaboration with the United States Council of State and Territorial Epidemiologists (CSTE) after conducting a pilot primarily in the U.S. states of Arizona, New Mexico, and Texas, and the Mexican state of Sonora. In July 2015, this same group worked on a binational outbreak protocol during a binational tabletop outbreak exercise in Mexico City. BTWG members decided during the exercise that integrating the communication pathway and outbreak protocols into one document would be useful and fulfill the intent of the Secretaries of Health.

*Figure 1: Map of states along the United States-Mexico Border.  
Source: CDC.*



---

## 2. Purpose

It is understood that communication and outbreak procedures already exist in local and state jurisdictions on both sides of the U.S.-Mexico border, which harmonize with the recommendations of this Protocol. The operational guidelines in this Protocol are not intended to replace, duplicate, or change, in any way, either country's state and national policies, regulations, or standard operating procedures; rather, they reflect the consensus recommendations of the BTWG for binational collaboration.

The purpose of this protocol is to:

- ◆ Facilitate and systematize communications about disease events between all public health entities in the United States and Mexico that need awareness.
- ◆ Promote effective collaboration of public health systems of the United States and Mexico on outbreaks or binational cases affecting both countries.
- ◆ Provide a recommended list of binationally notifiable conditions
- ◆ Provide clear and practical steps for preventing miscommunication and maximizing productive binational collaboration.
- ◆ Work within and complement existing communications mechanisms within each state and country to report events.

This is a living document and is intended to encourage ongoing discussion with health authorities in Mexico and the United States about future updates, including to the binationally notifiable list.

---

## 3. Events Leading to a Binational Communication

### *Public Health Emergency of International Concern (potential or actual)*

In the case of either a potential or actual (WHO-declared) public health emergency of international concern (PHEIC), priority will be given to reporting using the IHR protocol. [Appendix 1](#) provides the decision instrument for assessing whether an event is to be considered a domestic potential PHEIC that should be notified to the Pan American Health Organization (PAHO)/World Health Organization (WHO), and examples for the application of the instrument.

- ◆ PAHO is notified in the event of a suspected PHEIC through countries' respective IHR National Focal Points (NFP).
- ◆ PAHO may be notified by member countries of any disease circumstance for which PAHO assistance is being considered.

The IHR NFP of Mexico (maintained in DGE) may communicate directly with the IHR NFP of the United States (maintained in the Office of the Assistant Secretary for Preparedness and Response [ASPR])—and vice versa—on any international public health matter, including those that affect the border states. Respective federal procedures to assess and report potential PHEIC are slightly different, but will occur effectively outside of the scope of this Protocol with information provided back to the state levels through established communication pathways in CDC and DGE.

### *Binational Cases and Outbreaks*

This protocol calls for reporting of all instances of conditions included in the binationally notifiable list and which meet the binational case definition, as outlined in the [Guidelines](#).

#### *Definition of Binational Cases<sup>1</sup>*

The term “binational case” refers to a confirmed or probable case of disease or other health event in an individual:

- ◆ Who has recently traveled or lived in a neighboring country, or had recent contact with persons who lived or traveled in a neighboring country;
- ◆ Who is thought to have acquired the disease in a neighboring country or have been in the neighboring country during the incubation period of an infection and was possibly contagious during this period;
- ◆ Who is thought to have acquired the disease from a product or other exposure in the other country; or
- ◆ Whose case requires the collaboration of both countries for the purposes of disease investigation and control, regardless of the presumed site of infection or exposure

<sup>1</sup> Taken from *Guidelines for US-Mexico Coordination on Public Health Events of Mutual Interest*  
<http://www.cdc.gov/USMexicoHealth/pdf/us-mexico-guidelines.pdf>

---

The Council of State and Territorial Epidemiologists (CSTE) considers a notifiable case to be binational when it meets one or more of the following criteria:<sup>2</sup>

- ◆ Potentially exposed while in Mexico (or Canada)
- ◆ Potentially exposed by a resident of Mexico (or Canada)
- ◆ Resident of (Canada or) Mexico
- ◆ Has case contacts in or from Mexico (or Canada)
- ◆ Exposure to suspected product from (Canada or) Mexico
- ◆ Other situations that may require binational notification or coordination of response (e.g., a measles outbreak without known cross border contacts in a border community or state; exposure to an exported product from the United States to Canada [or Mexico])

(**Note**—This binational protocol applies only to binational cases with Mexico, whereas the CSTE position statement also applies to binational cases with Canada.)

### *Binationally Notifiable Conditions*

Table 1 specifies a list of notifiable conditions that should be reported binationally if they meet the definition of a binational case. This list was developed based on a subset of each country’s notifiable diseases with priority on high consequence, high virulence, highly transmissible conditions of mutual public health importance, including suspected bioterrorism and those conditions which will lead to public health action following a binational report.

Both countries must realize that their respective surveillance case definitions may not be identical. [Appendix 2](#) provides URLs to the respective case definitions of binationally notifiable conditions.

Certain notifiable diseases of international public health importance, such as measles and unusual outbreaks of interest are to be reported regardless of whether specific binational cases (e.g., with travel history) are identified. This information will be shared in as timely a fashion as possible to enhance binational situational awareness.

The conditions included in this list may be altered in the future, based on future discussions between health authorities of Mexico and the United States, as part of periodic reviews of this Protocol.

2 *Council of State and Territorial Epidemiologists (CSTE) Position Statement 13-SI-02: Binational Case Variable Definition*  
<http://c.ymcdn.com/sites/www.cste.org/resource/resmgr/PS/13-SI-02.pdf>

Table 1: List of Binationally Notifiable Conditions<sup>3</sup>

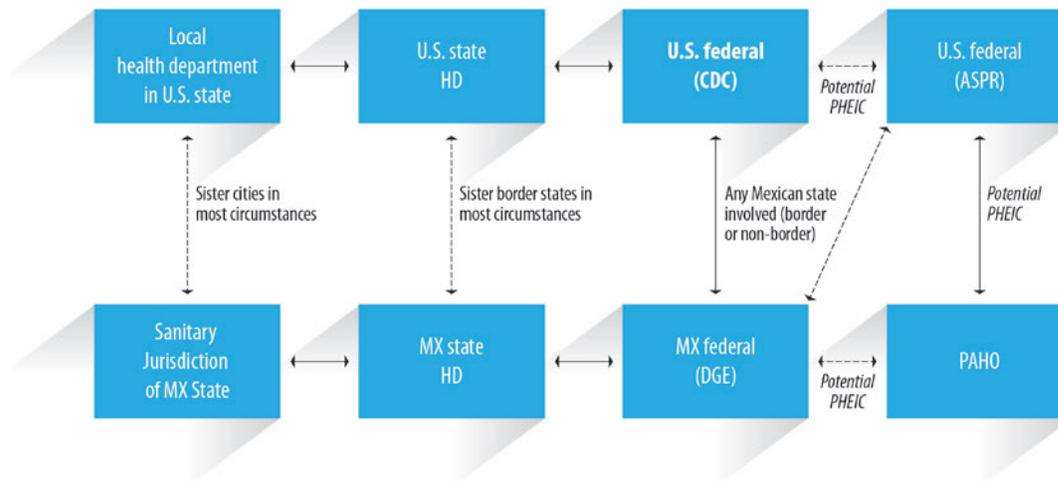
<b>All binational outbreaks</b>
<b>Unusual conditions of special public health concern</b>
<p><b>IHR reportable (within 24 hours):</b></p> <p>Always:</p> <ul style="list-style-type: none"> <li>◆ Smallpox</li> <li>◆ Polio</li> <li>◆ Human influenza, new subtype</li> <li>◆ SARS</li> <li>◆ Ebola</li> </ul> <p>Potentially:</p> <ul style="list-style-type: none"> <li>◆ Cholera</li> <li>◆ Plague</li> <li>◆ Yellow Fever</li> <li>◆ Biological, radiological, or chemical events</li> <li>◆ Any other event being considered for notification to WHO under the IHR</li> </ul>
<p><b>Others:</b></p> <ul style="list-style-type: none"> <li>◆ Brucellosis</li> <li>◆ Campylobacteriosis</li> <li>◆ Legionellosis</li> <li>◆ Listeriosis</li> <li>◆ Meningococcal Disease</li> <li>◆ Rabies, human</li> <li>◆ Salmonellosis</li> <li>◆ Shigellosis</li> <li>◆ Syphilis</li> <li>◆ Tuberculosis<sup>4</sup></li> <li>◆ Vaccine preventable diseases <ul style="list-style-type: none"> <li>▪ viral hepatitis</li> <li>▪ measles</li> <li>▪ pertussis</li> <li>▪ rubella</li> <li>▪ tetanus</li> <li>▪ varicella</li> </ul> </li> <li>◆ Vectorborne Diseases <ul style="list-style-type: none"> <li>▪ Chikungunya</li> <li>▪ Rickettsial diseases</li> <li>▪ Severe dengue</li> <li>▪ West Nile Virus</li> <li>▪ Zika</li> </ul> </li> </ul>

<sup>3</sup> Confirmed and probable cases meeting binational case definition. Suspect cases also reported if situational awareness warrants such a report (e.g., high probability suspect measles). This list includes consensus conditions for which binational notification is strongly suggested; however, other conditions may be reported as necessary.

<sup>4</sup> Note: Tuberculosis notification between the United States and Mexico is frequently managed by binational referral programs, such as CureTB, in coordination with local, state, and federal authorities.

## 4. Communication between Counterparts

Figure 2: U.S.–Mexico Communications Pathway for Routine or Emergency Events



- ← Solid arrows refer to communications within each country simultaneously inform all other levels of government
- ←..... Dotted arrows refer to communication pathways contingent on events occurring in border settings or public health emergencies of international concern (PHEIC), as defined by the International Health Regulations
- ASPR = Assistant Secretary for Preparedness and Response
- DGE = Mexican Directorate General of Epidemiology
- HD = Health Department
- PAHO = Pan American Health Organization
- PHEIC = Public Health Event of International Concern
- MX = Mexico

It is recommended that information be shared as soon as possible after the time of the event being reported. Initial reports of binational cases or events are most likely to originate from local or state jurisdictions in states along the U.S. and Mexico border. First communications of binational cases and outbreaks originating from local or state jurisdictions (both in border and non-border states) will be made with federal health authorities in the country where identified, as described below.

Table 2: Major U.S.–Mexico Sister City Pairs

San Diego, California—Tijuana, Baja California Calexico, California—Mexicali, Baja California
Yuma, Arizona—San Luis Río Colorado, Sonora Nogales, Arizona—Nogales, Sonora Douglas, Arizona—Agua Prieta, Sonora
El Paso, Texas—Ciudad Juárez, Chihuahua Presidio, Texas—Ojinaga, Chihuahua
Del Rio, Texas—Ciudad Acuña, Coahuila Eagle Pass, Texas—Piedras Negras, Coahuila
Laredo, Texas—Nuevo Laredo, Tamaulipas McAllen, Texas—Reynosa, Tamaulipas Brownsville, Texas—Matamoros, Tamaulipas

## United States

- A. For urgent notifications, the CDC Emergency Operations Center (EOC) should be called at **770-488-7100 or 1-866-638-9753**.
  - ◆ The EOC can connect callers directly with CDC Division of Global Migration and Quarantine (DGMQ) U.S.-Mexico Unit on-call duty officer and any additional CDC program that may need to be informed.
  - ◆ If working with a CDC Division other than CDC/DGMQ, arrangements may be made with that CDC Division for notification of CDC/DGMQ U.S.-Mexico Unit
  - ◆ For all cases, an email should also be sent to CDC DGMQ U.S.-Mexico Unit, [usmunotify@cdc.gov](mailto:usmunotify@cdc.gov)
- B. For binational communications, for each level of government (local, state, and federal), this protocol identifies focal points of contact. For the federal level, and counterpart to the Mexican DGE, the focal point is the CDC.
- C. Immediate communication should take place between border sister cities and border states, when the epidemiologic situation requires it. This should always include an immediate notification to the next jurisdictional level (state) about the situation in its respective area and information on the actions that are being taken between the sister cities or border states of both countries.
- D. For routine notifications, an email is to be sent to the CDC DGMQ U.S.-Mexico Unit, [usmunotify@cdc.gov](mailto:usmunotify@cdc.gov). Immediate notification to the federal level regarding communications between neighboring states, as well as communications between sister cities, should also occur.
- E. For all notifications, confidential information:
  - ◆ May be shared by telephone;
  - ◆ May be sent via *Epi-X* Notification Forum; or
  - ◆ May be sent via email attachment using a password-protected PDF, with password included in a separate email.

---

When appropriate, CDC DGMQ U.S.-Mexico Unit will notify the DGE using established channels of communication and copy the respective CDC program(s) involved, the United States IHR NFP, and PAHO.

## Mexico

- A. For urgent notifications, the Unidad de Inteligencia Epidemiológica y Sanitaria (UIES) of the DGE should be called at 01-800-0044800.
  - ◆ The UIES can connect callers directly with DGE, Dirección General Adjunta de Epidemiología (DGAE), Instituto de Diagnóstico y Referencia Epidemiológicos (DGA-IndRE), Centro Nacional de Programas Preventivos y Control de Enfermedades (CENAPRECE), and any additional Mexican Secretaria de Salud program that may need to be informed.
  - ◆ For all cases, an email should also be sent to DGE-UIES, [uies@salud.gob.mx](mailto:uies@salud.gob.mx).
- B. For binational communications, for each level of government (local, state, and federal), this protocol identifies focal points of contact. For the federal level, and counterpart to CDC, the focal point is DGE.
- C. Immediate communication should take place between border sister cities and border states, when the epidemiologic situation requires it. This should always include an immediate notification to the next jurisdictional level (state) about the situation in its respective area and information on the actions that are being taken between the sister cities or border states of both countries.
- D. For routine notifications, an email is to be sent to the [uies@salud.gob.mx](mailto:uies@salud.gob.mx). Immediate notification to the federal level regarding communications between neighboring states, as well as communications between sister cities, should also occur.
- E. For all notifications, confidential information:
  - ◆ May be shared by telephone;
  - ◆ May be sent via Epi-X Notification Forum; or
  - ◆ May be sent via email attachment using a password-protected PDF, with password included in a separate email.

---

## 5. Information Included in Binational Communications

A recommended variable list specifying key epidemiologic information to be used for reporting binational outbreaks is provided in Table 3. Information may be provided for confirmed and probable cases meeting binational case definition. Suspect cases could be reported if situational awareness warrants such a report (e.g., high probability suspect measles). Additional variables can be added by states to their respective binational case report/outbreak report forms as needed. Information to be provided is subject to availability; if additional information is critical to an investigation, specific requests can be made to the respective agencies (local and state governments).

It is best if personal identifiers are removed for these health communications, unless agencies from either country receiving the communications are already directly involved in public health actions with an individual.

The amount of detail included in the reports will be determined by the local agency, varying in scope from a “for your information (FYI)” notice to a full case report with identifying information for cases requiring public health action. Providing binational reports in both English and Spanish are recommended wherever possible.

Feedback on follow-up activities and actions taken after the initial communication is made (e.g., contact investigations) is to be shared between countries within the time period requested, ideally no longer than 2 weeks. It is understood that local health departments may have delays in completing epidemiologic investigations and obtaining laboratory confirmation to report to state health authorities. For suspect cases, laboratory information would be shared once available.

Table 3: Variables for Binational Case Notification

<b>Disease</b>	<input type="checkbox"/> Disease/illness <input type="checkbox"/> Subcategory as applicable (e.g., serovariant)
<b>Patient Demographics</b>	<input type="checkbox"/> Age <input type="checkbox"/> Sex <input type="checkbox"/> Country of Residence
<b>Travel History</b>	<input type="checkbox"/> Date(s) of Departure <input type="checkbox"/> Date(s) of Return <input type="checkbox"/> Location(s) of Travel—as specific as possible <input type="checkbox"/> Exposure information—as specific as possible
<b>Laboratory<sup>5</sup></b>	<input type="checkbox"/> Date of onset of symptoms <input type="checkbox"/> Symptom list <input type="checkbox"/> Date of vaccination (if applicable) <input type="checkbox"/> Date of specimen(s) collected <input type="checkbox"/> Type of specimen(s) <input type="checkbox"/> Laboratory test(s) performed <input type="checkbox"/> Result(s)
<b>Case Definition Criteria</b>	<input type="checkbox"/> How the illness meets the CSTE/CDC or Mexico case definition (epidemiologic, clinical and laboratory criteria)
<b>Nature of Binational Designation (select all that apply)</b>	<input type="checkbox"/> Traveled to or lived in another country during the incubation period for the disease <input type="checkbox"/> Had contact with an infected person from another country during the incubation period for the disease <input type="checkbox"/> Had exposure to a suspected product (such as food, herb, or cosmetic) from another country (include product information) <input type="checkbox"/> Is a resident of Mexico <input type="checkbox"/> Is a resident of the United States
<b>Missing Data</b>	<input type="checkbox"/> Patient was unable or unwilling to provide relevant demographic, clinical and epidemiologic information (please select if applicable, rather than leaving fields blank)
<b>POC Information</b>	[name/contact information of local/state/federal official notifying case]
<b>Date of notification</b>	[DD/MM/YYYY]
<b>Date by when follow-up on public health actions taken will be shared (no more than two weeks)</b>	[DD/MM/YYYY]

<sup>5</sup> Procedures for sharing laboratory resources and specimens at the federal level during public health events of mutual interest are outlined in Appendix 5.

---

## 6. Conducting Binational Communications

The BTWG recommends that information be shared as close to simultaneous as possible. It is understood that different state, local, and national health authorities may use different software to record, store, and share case information and also have differing information security requirements. It might, therefore, be necessary to adapt communication mechanisms so partner agencies can access the information

In general, preliminary communications should be made through secure communication channels.

- ◆ Communications involving necessary identifying information are to use a secure mechanism, such as telephone, Epi-X Binational Notification Forum (which automatically makes simultaneous notifications) or email with password-protected PDF files. Other mechanisms for sharing confidential information may be identified in consultation with agencies involved, taking into account the most feasible means for a given partner.

Routine informational notifications without identifying or sensitive information may be sent via email or fax.

### *Urgent binational communications*

- ◆ Urgent notifications for which rapid public health action is recommended should be timely and contain detailed case and exposure information to facilitate an effective follow-up response.
- ◆ Telephone notification is strongly recommended through the respective 24-hour binational contact numbers ([Appendix 3](#)). Each level of government identifies their preferred primary and secondary points of contact (e.g., emergency phone numbers and organizational entities within the agency), who should receive binational reports.
- ◆ Follow-up informational notifications for situational awareness are beneficial and should be used together with official reporting. See IHR Annex 2 ([Appendix 1](#)) for more information on reporting

---

## 7. Conducting Binational Outbreak Investigations

This section provides guidance for mutual determination of a binational outbreak and operational suggestions for conducting a binational outbreak investigation based on epidemiologic and laboratory best practices, as well as experiences from binational outbreak investigations based on input from key participants. Coordination for binational outbreak investigations and responses benefits from ongoing, transparent, and clear communication following the above recommendations.

This guide recognizes that each outbreak situation is unique and that the approach to the investigation will vary by situation. The steps outlined here clarify best practices and recommendations for initiating and conducting a binational investigation that addresses the general epidemiologic situation of an outbreak and meets the needs of both countries.

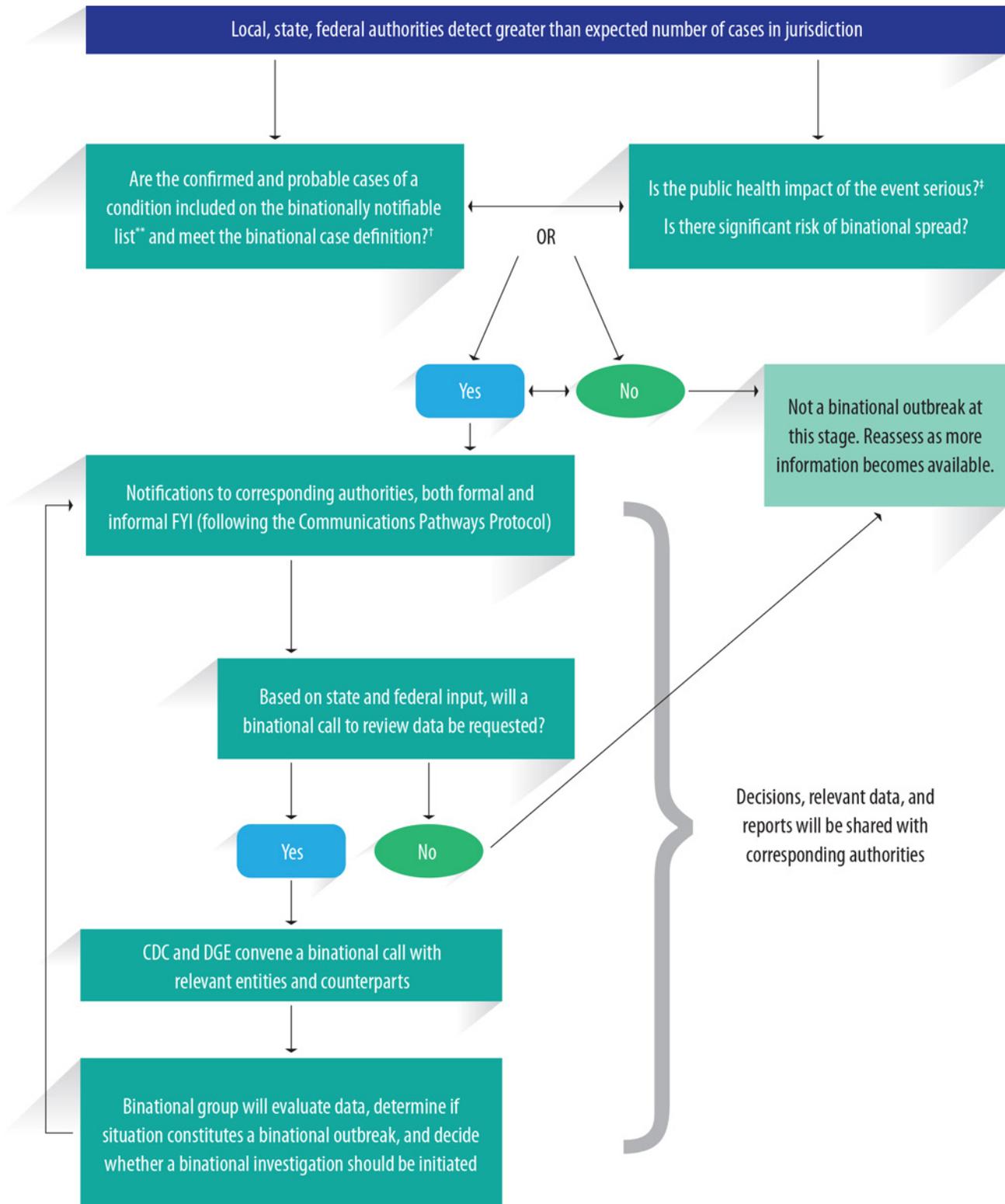
This implementation guide does not replace local, state, or national public health agency standard operating procedures. If outbreak investigation guidelines and instruments exist at the local level, those take precedence, and will be consulted first and adapted to the binational needs as appropriate.

### *A. Recommended process for determining a binational outbreak*

*Trigger:* A local, state, or federal entity in either country detects a greater-than-expected occurrence of a condition in their jurisdiction.

- i. Local and state outbreak investigation/outbreak protocols are activated.
- ii. Health officials at the local level evaluate cases to see if any cases associated with the outbreak meet the binational case definition ([Appendix 2](#)).
- iii. If cases are binational, they will be reported to the corresponding authorities in both countries, in accordance with the U.S.-Mexico Binational Communication Pathways Protocol.
- iv. Updated case and/or outbreak information should be promptly shared by the respective jurisdictions, with corresponding authorities based on the ongoing investigation for the duration of the outbreak.
- v. Depending on the level of priority, a decision may be made to request a binational call to discuss current epidemiologic and laboratory data with counterparts from the other country.
- vi. The binational authorities may evaluate and discuss the data and decide whether a binational outbreak investigation will be initiated.

Figure 3: Decision Tool For Confirming A Binational Outbreak And Initiating An Investigation\*



\* Following IHR Annex 2, see [Appendix 1](#)

\*\* See [Table 1](#)

† See [Appendix 2](#)

‡ See [Appendix 1](#) for a definition of a “serious case”

---

Once it is decided to conduct a binational outbreak investigation, the following steps are recommended:

### *B. Establishing a Terms of Reference (TOR) for a Binational Outbreak Investigation*

When deemed appropriate by binational authorities, establishing TORs at the beginning of a binational outbreak investigation will help ensure the scope and aspects of the investigation are similarly understood and agreed upon at all government levels in both countries.

Typical components of a TOR document include:

- I. Background
  - i. Epidemiologic case definition
  - ii. Epidemiologic information: case counts, suspected diagnoses, location, time period, lab confirmation, background epidemiologic information
  - iii. Collaborating institutions
- II. Collaborative investigation steps
  - i. Forming a binational investigation team (see below)
  - ii. Drafting an investigation protocol (see below)
  - iii. Identification of necessary resources and supplies, including laboratory testing. Explicitly indicate who will provide what resources, and how they will be shared
- III. Signatures of representative health officials
  - i. Inclusion of space for the signatures of representatives of the collaborating agencies at the end of the document.
  - ii. Signatures ratify the TOR and signal the initiation of the binational investigation.

[Appendix 4](#) provides an example TOR document

### *C. Determining Binational Investigation Team Roles and Responsibilities*

During a binational outbreak investigation, the local/state public health authorities in whose jurisdiction the outbreak is occurring will lead outbreak investigation activities. Depending on their local capacity, they can request assistance from partners (federal, binational) to meet resource needs, including subject matter expertise.

**Formation of Binational Investigation Team**—Both countries can work together to form a binational team with members from both countries, ideally including local, state, and federal counterparts. Formation of a binational investigation team to confirm the diagnosis, determine the scale of the outbreak, identify significant risk factors, and implement appropriate control measures may greatly facilitate the investigation and inform public health control measures.

Once assembled, it is important for team members to meet and establish an onsite lead.

Clear delineation of roles, responsibilities, and expectations of team members will be beneficial, including establishment of an organizational chart, which could be posted in a visible location for the outbreak team. The team can schedule regular meetings with binational investigation team for planning investigation, either by phone or in person.

**Data Sharing**—When deemed appropriate and proper approvals are obtained by both countries, case information with non-identifiable data may be shared by appropriate measures on a pre-determined and mutually agreeable frequency. In some cases, creation of a binational database may be warranted, the creation of which must be approved by appropriate authorities in both countries.

---

#### D. Binational Investigation Protocol

When deemed appropriate, the binational investigation team might draft a supplemental investigation protocol based on these guidelines, including the aims of the investigation that are unique to epidemiologic situation, case definitions, survey instruments with supplemental investigation questions, and data-sharing procedures. Depending on the circumstances, Institutional Review Board (IRB) consideration might be necessary. Check with federal, state, and local agencies to determine the appropriate approval process(es) early on and plan for potential delays that need to be worked into the investigation timeline.

##### I. Aims

To determine the aims of the investigation, it is recommended that the binational investigation team:

- 1) Use data from both countries to characterize the outbreak of the apparent syndrome and possible risk factors.
- 2) Identify the possible source of the outbreak and implement control measures.
- 3) Confirm the diagnosis (see [Appendix 2](#) for U.S. and Mexico case definitions).
- 4) Determine the scale of the outbreak by reviewing the region's past epidemiological data and compare current rates to those expected.
- 5) Identify significant risk factors. During the investigation, it will be important to review existing literature and talk with local health authorities to compile a picture of possible risk factors as more information is obtained from hypothesis generating and other interviews or data sources.
- 6) Serve as support mechanism for local, state, and federal authorities to assist in establishing or improving control measures as identified.

##### II. Case definitions

The various institutions participating in a binational investigation might use differing case definitions — both within each country and across countries. The BTWG suggests that the binational investigation team review each country's existing definitions and determine if they are appropriate for the outbreak at hand or if they need to be revised.

##### III. Supplemental Binational Outbreak Survey Questions and Instruments

During an outbreak, the binational team will use the existing survey instruments from the respective local jurisdiction(s), as appropriate. However, given the unique conditions of a binational outbreak, it may be necessary for the team to develop additional questions to address the binational component of the outbreak—possibly to create a new instrument, a supplemental outbreak survey instrument, or a revised instrument.

A discussion of the basis for inclusion of questions each institution considers important allows the team to learn from each other. During the evaluation of what questions to include in the instrument, the team might consider the evidence to-date and the angle the investigation might take; this helps shorten the instrument and make it specific to the outbreak. Consensus may be difficult, and some additional questions may be needed to proceed with binational agreement on the instrument.

Once the supplemental survey questions or instrument are drafted, the BTWG recommends piloting the document and updating the content based on feedback with a focus on readability, clarity, and the time it takes to administer. All survey instruments and aides that will be shown to participants can be included as appendices to the protocol.

##### IV. Hypothesis Generation

The binational investigation team may conduct hypothesis-generating interviews with cases using a survey

---

that explores various hypotheses to learn more about the cases, their illness, and potential exposures, for subsequent formulation of the investigation hypotheses. A sample of the cases may be interviewed with a longer survey for further analysis.

## V. Database

The binational field team may agree on a method for sharing a pre-existing database or creating a new binational outbreak investigation database accessible by all collaborating agencies' participating field team members. This can be challenging, as each institution may have firewalls and limit access to pre-identified users. Another option is to consider using Epi-Info to create the database and use for data entry, if both countries have access to the same version.

Epi-X can be used as a forum to securely store surveys and database files. CDC Epi-X helpdesk ([epixhelp@cdc.gov](mailto:epixhelp@cdc.gov)) can provide support.

Establishment of a database management team within the binational field team, that has experience creating, saving, and backing up databases is instrumental. The database usually needs to be translated, but other options include:

- ◆ Use both the Spanish and English names for each variable in the database.
- ◆ Use only one language and then translate the report.
- ◆ Use bilingual data entry staff so the data are entered in one language regardless of the language of the survey instrument.

For ease of use and clarity, it is recommended that the database is up-to-date and has a data dictionary. It is also helpful if information is captured in a complete and standardized manner.

If there are distinct facets of the investigation, distinct databases (i.e., a database for a case-control study, another for hypothesis-generating interviews, and one for environmental sampling) may be useful.

## VI. Logistics

### 1) *Binational travel*

Consider modes of transportation and documents needed (i.e., passport). In the event of an emergency, it may be possible to request assistance from the State Department (for entry into the United States). However, it is preferable to select team members with required documentation.

### 2) *Hotel accommodations*

In selecting a hotel, the team might consider proximity to daily activities, as well as restaurants open early in the morning and late at night. An available private meeting room is beneficial for team meetings. A buddy system will allow team members to fill in for each other in the event that someone is unwell or rotates back to their normal duties.

### 3) *Daily travel*

Rental car or official agency vehicles can be used for transportation. Certain agencies prohibit travel to Mexico, and it is recommended to seek appropriate approvals. Due to border wait times and customs procedures, it is typically easiest to leave a vehicle at the border and cross by foot, then contract an official taxi or organize a ride with local field team members.

### 4) *Resources and supplies*

It is recommended that the field team identifies the resources needed to carry out the binational outbreak investigation early on, takes stock of available resources, and discusses how they will be shared, along with the process for requesting and procuring additional items. Resource-sharing among participating agencies is encouraged, along with an effort to place minimal burden on the local

---

institution to avoid depleting their resources. [Appendix 5](#) provides guidance for sharing of laboratory resources and specimens.

Common needs might include:

- ◆ Office supplies: paper, pens, clipboards, maps.
- ◆ Equipment: computer, internet access, photocopier.
- ◆ Laboratory supplies: testing supplies to confirm cases, as well as items needed to prepare, preserve, and ship samples, including centrifuges and refrigeration equipment.
- ◆ Approvals: security clearance and immigration requirements.

## **E. Reporting**

The BTWG recommends that the outbreak team agree on a shared plan for reporting results of the investigation that is mutually acceptable to both countries.

### **I. Press releases**

During an outbreak, each jurisdiction follows its existing protocols for press releases and information disseminated to the public. The binational investigation team can serve as a support mechanism if a joint binational press release is warranted. International entities, such as PAHO, have been instrumental in past outbreaks by issuing a binational IHR alert, developed jointly on behalf of both countries.

It is recommended that information, case counts, data summaries, key talking points, and other information are consistent in press releases issued by different agencies to reduce confusion. It can be beneficial for authorities to let their binational counterparts know when planning a press release for situational awareness. This is particularly important in a binational region where residents of both countries obtain information from media sources on both sides of the border.

### **II. Travel health alerts**

As with press releases, the binational team can provide input to federal agencies regarding the decision to issue a travel health alert; however, the ultimate prerogative lies with each government. It is recommended to consider all options for accomplishing the goal of protecting the health of travelers, given the potential economic impact associated with a health alert.

### **III. Progress reports to binational field team**

Binational field team leads will organize regular progress reports for field team members during the course of the investigation. While the field team decides the frequency of the updates, daily updates are recommended in the early stages of investigation. The binational field team might consider agreeing upon a standard time and reliable mode for communication to ensure all team members can participate. Updates might include case counts, changes in definitions, information on the environmental, epidemiologic, or laboratory aspects of the investigation, problems, successes, and needs.

### **IV. Final report**

Once the investigation has been completed, it is recommended that the binational investigation team takes the lead in writing a final report summarizing all investigation activities, main findings, and recommendations. The report might need to be translated, cleared by both countries' clearance mechanisms, and completed within 3 months of the conclusion of the investigation. The binational investigation team might discuss the possibility of writing a manuscript and publishing the findings.

---

#### *F. Wrap-up and follow-up*

After completing the final report and circulating to relevant partner agencies, the BTWG recommends that the binational field team continue sharing information about any follow-up activities and monitor case counts.

Follow-up studies may be helpful in further describing the development and resolution of the cases. These might warrant a second binational investigation at a later date, and members of the binational field team can be consulted or included to ensure continuity of data collection and transfer of knowledge.

The outbreak team can also conduct an after-action debrief of the investigation to discuss and document what went well and items for improvement in future binational investigations.

---

## Acknowledgements

The development of this protocol was a collaboration of the U.S.-Mexico Binational Technical Work Group and additional partners, including:

### *United States:*

#### **California Department of Public Health**

California Office of Binational Border Health

#### **Arizona Department of Health Services**

Arizona Office of Border Health

#### **New Mexico Department of Health**

New Mexico Office of Border Health

#### **Texas Department of State Health Services**

Texas Office of Border Health

#### **Centers for Disease Control and Prevention**

U.S.-Mexico Unit, Division of Global Migration and Quarantine

Centers for Global Health

#### **Office of the Associate Secretary for Preparedness and Response**

Office of Policy and Planning, Division of International Health Security,

IHR Branch

### *Mexico:*

#### **Secretaría de Salud del Estado de Baja California**

#### **Secretaría de Salud de Sonora**

#### **Secretaría de Salud de Chihuahua**

#### **Secretaría de Salud Coahuila**

#### **Secretaría de Salud de Nuevo León**

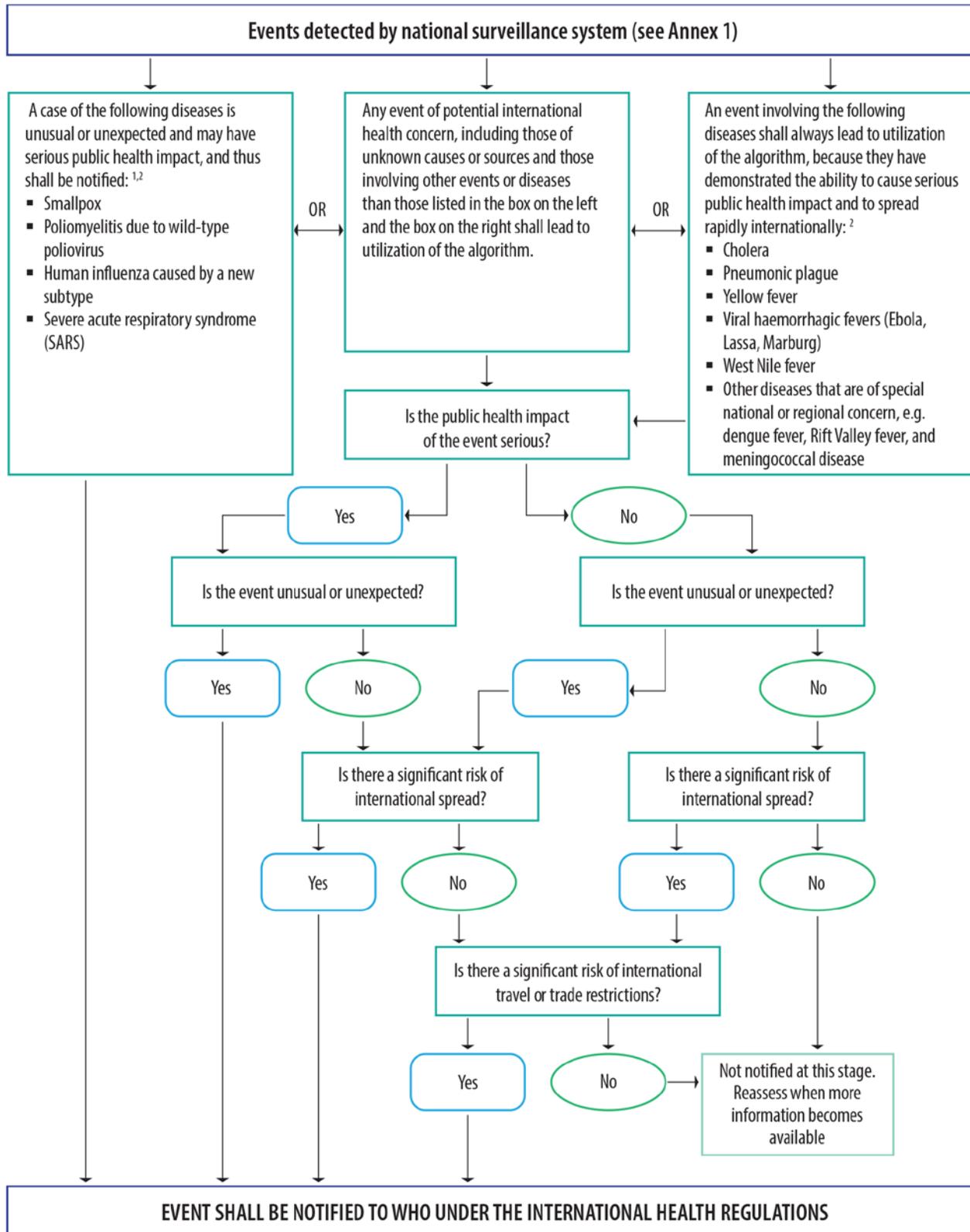
#### **Secretaría de Salud de Tamaulipas**

#### **Dirección General de Epidemiología**

# Appendix 1: IHR (2005)

## Annex 2

### Decision Instrument for the Assessment and Notification of Events That May Constitute a Public Health Emergency of International Concern



<sup>1</sup> As per WHO case definitions.

<sup>2</sup> The disease list shall be used only for the purposes of these Regulations.

*Examples for the Application of the Decision Instrument for the Assessment and Notification of Events That May Constitute a Public Health Emergency of International Concern*

The examples appearing in this Annex are not binding and are for indicative guidance purposes to assist in the interpretation of the decision instrument criteria.

**DOES THE EVENT MEET AT LEAST TWO OF THE FOLLOWING CRITERIA?**

<b>I. Is the public health impact of the event serious?</b>
<p>1. Is the number of cases and/or number of deaths for this type of even large for the given place, time, or population?</p>
<p>2. Has the even the potential to have a high public health impact? The following are examples of circumstances that contribute to high public health impact:</p> <ul style="list-style-type: none"><li>✓ Event caused by a pathogen with high potential to cause epidemic (infectiousness of the agent, high case fatality, multiple transmission routes or healthy carrier).</li><li>✓ Indication of treatment failure (new or emerging antibiotic resistance, vaccine failure, antidote resistance or failure).</li><li>✓ Event represents a significant public health risk even if no or very few human cases have yet been identified.</li><li>✓ Cases reported among health staff.</li><li>✓ The population at risk is especially vulnerable (refugees, low level of immunization, children, elderly, low immunity, undernourished, etc.).</li><li>✓ Concomitant factors that may hinder or delay the public health response (natural catastrophes, armed conflicts, unfavorable weather conditions, multiple foci in the State Party).</li><li>✓ Event in an area with high population density.</li><li>✓ Spread of toxic, infectious or otherwise hazardous materials that may be occurring naturally or otherwise that has contaminated or has the potential to contaminate a population and/or a large geographical area.</li></ul>
<p>3. Is external assistance needed to detect, investigate, respond and control the current event, or prevent new cases? The following are examples of when assistance may be required:</p> <ul style="list-style-type: none"><li>✓ Inadequate human, financial, material or technical resources—in particular:<ul style="list-style-type: none"><li>▪ insufficient laboratory or epidemiological capacity to investigate the event (equipment, personnel, financial resources);</li><li>▪ insufficient antidotes, drugs, and/or vaccine and/or protective equipment, decontamination equipment, or supportive equipment to cover estimated needs;</li><li>▪ existing surveillance system is inadequate to detect new cases in a timely manner.</li></ul></li></ul>
<p><b>IS THE PUBLIC HEALTH IMPACT OF THE EVENT SERIOUS?</b> <b>Answer “yes” if you have answered “yes” to questions 1, 2, or 3 above.</b></p>

## II. Is the event unusual or unexpected?

4. Is the event unusual?

The following are examples of unusual events:

- ✓ The event is caused by an unknown agent or the source, vehicle, route of transmission is unusual or unknown.
- ✓ Evolution of cases more severe than expected (including morbidity or case-fatality) or unusual symptoms.
- ✓ Occurrence of the event itself is unusual for the area, season, or population.

5. Is the event unexpected from a public health perspective?

The following are examples of unexpected events:

- ✓ Event caused by a disease/agent that had already been eliminated or eradicated from the State Party or not previously reported.

### IS THE EVENT UNUSUAL OR UNEXPECTED?

Answer “yes” if you have answered “yes” to questions 4 or 5 above.

## III. Is there a significant risk of international spread?

6. Is there evidence of an epidemiological link to similar events in other States?

7. Is there any factor that should alert us to the potential for cross border movement of the agent, vehicle, or host?

The following are examples of circumstances that may predispose to international spread:

- ✓ Where there is evidence of local spread, an index case (or other linked cases) with a history within the previous month of:
  - international travel (or time equivalent to the incubation period if the pathogen is known);
  - participation in an international gathering (pilgrimage, sports event, conference, etc.);
  - close contact with an international traveler or highly mobile population.
- ✓ Event caused by an environmental contamination that has the potential to spread across international borders.
- ✓ Even in an area of intense international traffic with limited capacity for sanitary control or environmental detection or decontamination.

### IS THERE A SIGNIFICANT RISK OF INTERNATIONAL SPREAD?

Answer “yes” if you have answered “yes” to questions 6 or 7 above.

## IV. Is there a significant risk of international travel or trade restrictions?

8. Have similar events in the past resulted in international restriction on trade and/or travel?

9. Is the source suspected or known to be a food product, water, or any other goods that might be contaminated that has been exported/imported to/from other States?

10. Has the event occurred in association with an international gathering or in an area of intense international tourism?

11. Has the event caused requests for more information by foreign officials or international media?

### IS THERE A SIGNIFICANT RISK OF INTERNATIONAL TRADE OR TRAVEL RESTRICTIONS?

Answer “yes” if you have answered “yes” to questions 8, 9, 10, or 11 above.

**States Parties that answer “yes” to the question whether the event meets any two of the four criteria (I-IV) above, shall notify WHO under Article 6 of the International Health Regulations.**

## Appendix 2: U.S. and Mexico Case Definitions of Binationally Notifiable Conditions

NOTIFIABLE CONDITION	DEFINITIONS	
	UNITED STATES	MEXICO
<b>IHR REPORTABLE CONDITIONS</b>		
<i>ALWAYS</i>		
<b>Smallpox</b>	<a href="http://wwwn.cdc.gov/nndss/conditions/smallpox/case-definition/2004/">http://wwwn.cdc.gov/nndss/conditions/smallpox/case-definition/2004/</a>	Page 23–24 <a href="http://187.191.75.115/gobmx/salud/documentos/manuales/13_Manual_Vig_Epid_Internacional.pdf">http://187.191.75.115/gobmx/salud/documentos/manuales/13_Manual_Vig_Epid_Internacional.pdf</a>  Page 20 <a href="http://www.salud.gob.mx/unidades/cdi/documentos/ManualAntrax.pdf">http://www.salud.gob.mx/unidades/cdi/documentos/ManualAntrax.pdf</a>
<b>Poliomyelitis</b>	<a href="http://wwwn.cdc.gov/nndss/conditions/poliomyelitis-paralytic/case-definition/2010/">http://wwwn.cdc.gov/nndss/conditions/poliomyelitis-paralytic/case-definition/2010/</a>	Page 22 <a href="http://187.191.75.115/gobmx/salud/documentos/manuales/13_Manual_Vig_Epid_Internacional.pdf">http://187.191.75.115/gobmx/salud/documentos/manuales/13_Manual_Vig_Epid_Internacional.pdf</a>  Page 78 <a href="http://187.191.75.115/gobmx/salud/documentos/manuales/35_Manual_EPV.pdf">http://187.191.75.115/gobmx/salud/documentos/manuales/35_Manual_EPV.pdf</a>
<b>Influenza, new subtype</b>	<a href="http://wwwn.cdc.gov/nndss/conditions/novel-influenza-a-virus-infections/case-definition/2014/">http://wwwn.cdc.gov/nndss/conditions/novel-influenza-a-virus-infections/case-definition/2014/</a>	Page 21 <a href="http://187.191.75.115/gobmx/salud/documentos/manuales/12_Manual_VE_Influenza.pdf">http://187.191.75.115/gobmx/salud/documentos/manuales/12_Manual_VE_Influenza.pdf</a>
<b>SARS</b>	<a href="http://wwwn.cdc.gov/nndss/conditions/severe-acute-respiratory-syndrome-associated-coronavirus-disease/case-definition/2003/07/">http://wwwn.cdc.gov/nndss/conditions/severe-acute-respiratory-syndrome-associated-coronavirus-disease/case-definition/2003/07/</a>	Page 22 <a href="http://187.191.75.115/gobmx/salud/documentos/manuales/13_Manual_Vig_Epid_Internacional.pdf">http://187.191.75.115/gobmx/salud/documentos/manuales/13_Manual_Vig_Epid_Internacional.pdf</a>  Page 9 (2003) <a href="http://www.salud.gob.mx/unidades/cdi/documentos/manualSARS.pdf">http://www.salud.gob.mx/unidades/cdi/documentos/manualSARS.pdf</a>
<b>Ebola</b>	<a href="http://wwwn.cdc.gov/nndss/conditions/viral-hemorrhagic-fever/case-definition/2011/">http://wwwn.cdc.gov/nndss/conditions/viral-hemorrhagic-fever/case-definition/2011/</a>	<a href="https://www.gob.mx/salud/acciones-y-programas/normas-y-lineamientos-sobre-el-virus-del-ebola">https://www.gob.mx/salud/acciones-y-programas/normas-y-lineamientos-sobre-el-virus-del-ebola</a>
<b>Other</b>	Any disease/condition/event that meets at least 2 of the 4 criteria in the IHR Annex 2.	Any disease/condition/event that meets at least 2 of the 4 criteria in the IHR Annex 2.
<i>POTENTIALLY</i>		
<b>Cholera</b>	<a href="http://wwwn.cdc.gov/nndss/conditions/cholera/case-definition/1996/">http://wwwn.cdc.gov/nndss/conditions/cholera/case-definition/1996/</a>	Page 30 <a href="http://187.191.75.115/gobmx/salud/documentos/manuales/06_Manual_Colera.pdf">http://187.191.75.115/gobmx/salud/documentos/manuales/06_Manual_Colera.pdf</a>  Page 20 (Diarrheal diseases) <a href="http://www.epidemiologia.salud.gob.mx/doctos/infoepid/vig_epid_manuales/18_2012_Manual_NuTraVe_vFinal_6nov12.pdf">http://www.epidemiologia.salud.gob.mx/doctos/infoepid/vig_epid_manuales/18_2012_Manual_NuTraVe_vFinal_6nov12.pdf</a>
<b>Plague</b>	<a href="http://wwwn.cdc.gov/nndss/conditions/plague/case-definition/1996/">http://wwwn.cdc.gov/nndss/conditions/plague/case-definition/1996/</a>	Page 19 <a href="http://www.salud.gob.mx/unidades/cdi/documentos/ManualAntrax.pdf">http://www.salud.gob.mx/unidades/cdi/documentos/ManualAntrax.pdf</a>

NOTIFIABLE CONDITION	DEFINITIONS	
	UNITED STATES	MEXICO
<b>Yellow Fever</b>	<a href="http://wwwn.cdc.gov/nndss/conditions/yellow-fever/case-definition/1997/">http://wwwn.cdc.gov/nndss/conditions/yellow-fever/case-definition/1997/</a>	Page 32 <a href="http://www.gob.mx/cms/uploads/attachment/file/229912/Lineamientos_de_Vig_por_Lab_Dengue_y_otros_Arb_V1_2017.pdf">http://www.gob.mx/cms/uploads/attachment/file/229912/Lineamientos_de_Vig_por_Lab_Dengue_y_otros_Arb_V1_2017.pdf</a>
<b>Other</b>	Any disease/condition/event that is being considered for notification under the IHR Annex 2.	Any disease/condition/event that is being considered for notification under the IHR
<b>OTHER</b>		
<b>Botulism</b>	<a href="http://wwwn.cdc.gov/nndss/conditions/botulism/case-definition/2011/">http://wwwn.cdc.gov/nndss/conditions/botulism/case-definition/2011/</a>	Page 18 <a href="http://www.salud.gob.mx/unidades/cdi/documentos/ManualAntrax.pdf">http://www.salud.gob.mx/unidades/cdi/documentos/ManualAntrax.pdf</a>
<b>Anthrax</b>	<a href="http://wwwn.cdc.gov/nndss/conditions/anthrax/case-definition/2010/">http://wwwn.cdc.gov/nndss/conditions/anthrax/case-definition/2010/</a>	Page 17–18 <a href="http://www.salud.gob.mx/unidades/cdi/documentos/ManualAntrax.pdf">http://www.salud.gob.mx/unidades/cdi/documentos/ManualAntrax.pdf</a>
<b>Brucellosis</b>	<a href="http://wwwn.cdc.gov/nndss/conditions/brucellosis/case-definition/2010/">http://wwwn.cdc.gov/nndss/conditions/brucellosis/case-definition/2010/</a>	Page 14 <a href="http://187.191.75.115/gobmx/salud/documentos/manuales/03_Manual_Brucelosis.pdf">http://187.191.75.115/gobmx/salud/documentos/manuales/03_Manual_Brucelosis.pdf</a>  Page 16 <a href="https://www.gob.mx/cms/uploads/attachment/file/159058/lineamientos_para_vigilancia_de_brucelosis_2_.pdf">https://www.gob.mx/cms/uploads/attachment/file/159058/lineamientos_para_vigilancia_de_brucelosis_2_.pdf</a>
<b>Campylobacteriosis</b>	<a href="http://wwwn.cdc.gov/nndss/conditions/campylobacteriosis/case-definition/2015/">http://wwwn.cdc.gov/nndss/conditions/campylobacteriosis/case-definition/2015/</a>	
<b>Legionellosis</b>	<a href="http://wwwn.cdc.gov/nndss/conditions/legionellosis/case-definition/2005/">http://wwwn.cdc.gov/nndss/conditions/legionellosis/case-definition/2005/</a>	
<b>Listeriosis</b>	<a href="http://wwwn.cdc.gov/nndss/conditions/listeriosis/case-definition/2000/">http://wwwn.cdc.gov/nndss/conditions/listeriosis/case-definition/2000/</a>	
<b>Meningococcal Disease</b>	<a href="http://wwwn.cdc.gov/nndss/conditions/meningococcal-disease/case-definition/2015/">http://wwwn.cdc.gov/nndss/conditions/meningococcal-disease/case-definition/2015/</a>	Page 21 <a href="https://www.gob.mx/cms/uploads/attachment/file/201885/Lineamientos_IRAS_bac_170317.pdf">https://www.gob.mx/cms/uploads/attachment/file/201885/Lineamientos_IRAS_bac_170317.pdf</a>
<b>Rabies, Human</b>	<a href="http://wwwn.cdc.gov/nndss/conditions/rabies-human/case-definition/2011/">http://wwwn.cdc.gov/nndss/conditions/rabies-human/case-definition/2011/</a>	Page 20 <a href="https://www.gob.mx/cms/uploads/attachment/file/209372/lineamientos_para_la_vigilancia_de_rabia.pdf">https://www.gob.mx/cms/uploads/attachment/file/209372/lineamientos_para_la_vigilancia_de_rabia.pdf</a>
<b>Salmonellosis</b>	<a href="https://wwwn.cdc.gov/nndss/conditions/salmonellosis/case-definition/2017/">https://wwwn.cdc.gov/nndss/conditions/salmonellosis/case-definition/2017/</a>	Page 20 <a href="http://187.191.75.115/gobmx/salud/documentos/manuales/21_Manual_NuTraVe.pdf">http://187.191.75.115/gobmx/salud/documentos/manuales/21_Manual_NuTraVe.pdf</a>
<b>Shigellosis</b>	<a href="https://wwwn.cdc.gov/nndss/conditions/shigellosis/case-definition/2017/">https://wwwn.cdc.gov/nndss/conditions/shigellosis/case-definition/2017/</a>	Page 20 <a href="http://187.191.75.115/gobmx/salud/documentos/manuales/21_Manual_NuTraVe.pdf">http://187.191.75.115/gobmx/salud/documentos/manuales/21_Manual_NuTraVe.pdf</a>
<b>Syphilis</b>	<a href="http://wwwn.cdc.gov/nndss/conditions/syphilis/case-definition/2014/">http://wwwn.cdc.gov/nndss/conditions/syphilis/case-definition/2014/</a>	<a href="http://187.191.75.115/gobmx/salud/documentos/manuales/31_Manual_SIFILIS.pdf">http://187.191.75.115/gobmx/salud/documentos/manuales/31_Manual_SIFILIS.pdf</a>

NOTIFIABLE CONDITION	DEFINITIONS	
	UNITED STATES	MEXICO
<b>Tuberculosis</b>	<a href="http://wwwn.cdc.gov/nndss/conditions/tuberculosis/case-definition/2009/">http://wwwn.cdc.gov/nndss/conditions/tuberculosis/case-definition/2009/</a>	Page 21 <a href="https://www.gob.mx/cms/uploads/attachment/file/159059/Lineamientos_de_vigilancia_por_laboratorio_de_tuberculosis.pdf">https://www.gob.mx/cms/uploads/attachment/file/159059/Lineamientos_de_vigilancia_por_laboratorio_de_tuberculosis.pdf</a>
<b>VACCINE PREVENTABLE DISEASES</b>		
<b>Viral Hepatitis</b>	-	Page 20 <a href="http://187.191.75.115/gobmx/salud/documentos/manuales/11_Manual_HepatitisVirales.pdf">http://187.191.75.115/gobmx/salud/documentos/manuales/11_Manual_HepatitisVirales.pdf</a>
<b>Measles</b>	<a href="http://wwwn.cdc.gov/nndss/conditions/measles/case-definition/2013/">http://wwwn.cdc.gov/nndss/conditions/measles/case-definition/2013/</a>	Page 30 <a href="http://187.191.75.115/gobmx/salud/documentos/manuales/35_Manual_EPV.pdf">http://187.191.75.115/gobmx/salud/documentos/manuales/35_Manual_EPV.pdf</a>
<b>Pertussis</b>	<a href="http://wwwn.cdc.gov/nndss/conditions/pertussis/case-definition/2014/">http://wwwn.cdc.gov/nndss/conditions/pertussis/case-definition/2014/</a>	Page 104 <a href="http://187.191.75.115/gobmx/salud/documentos/manuales/35_Manual_EPV.pdf">http://187.191.75.115/gobmx/salud/documentos/manuales/35_Manual_EPV.pdf</a>
<b>Rubella</b>	<a href="http://wwwn.cdc.gov/nndss/conditions/rubella/case-definition/2013/">http://wwwn.cdc.gov/nndss/conditions/rubella/case-definition/2013/</a>	Page 52 <a href="http://187.191.75.115/gobmx/salud/documentos/manuales/35_Manual_EPV.pdf">http://187.191.75.115/gobmx/salud/documentos/manuales/35_Manual_EPV.pdf</a>
<b>Tetanus</b>	<a href="http://wwwn.cdc.gov/nndss/conditions/tetanus/case-definition/2010/">http://wwwn.cdc.gov/nndss/conditions/tetanus/case-definition/2010/</a>	Page 169 <a href="http://187.191.75.115/gobmx/salud/documentos/manuales/35_Manual_EPV.pdf">http://187.191.75.115/gobmx/salud/documentos/manuales/35_Manual_EPV.pdf</a>
<b>Varicella</b>	<a href="http://wwwn.cdc.gov/nndss/conditions/varicella/case-definition/2010/">http://wwwn.cdc.gov/nndss/conditions/varicella/case-definition/2010/</a>	<a href="http://187.191.75.115/gobmx/salud/documentos/manuales/35_Manual_EPV.pdf">http://187.191.75.115/gobmx/salud/documentos/manuales/35_Manual_EPV.pdf</a>
<b>VECTORBORNE DISEASES</b>		
<b>Chikungunya</b> Initial case each season in border state, binational, or otherwise <i>If exposure suspected in US and diagnosed in Mexico</i>	<a href="http://wwwn.cdc.gov/nndss/conditions/arboviral-diseases-neuroinvasive-and-non-neuroinvasive/case-definition/2015/">http://wwwn.cdc.gov/nndss/conditions/arboviral-diseases-neuroinvasive-and-non-neuroinvasive/case-definition/2015/</a>	Page 29 <a href="http://www.gob.mx/cms/uploads/attachment/file/229912/Lineamientos_de_Vig_por_Lab_Dengue_y_otros_Arb_V1_2017.pdf">http://www.gob.mx/cms/uploads/attachment/file/229912/Lineamientos_de_Vig_por_Lab_Dengue_y_otros_Arb_V1_2017.pdf</a>
<b>Severe dengue</b> Initial case each season in border state, binational, or otherwise <i>If exposure suspected in US and diagnosed in Mexico</i>	<a href="http://wwwn.cdc.gov/nndss/conditions/dengue-virus-infections/case-definition/2015/">http://wwwn.cdc.gov/nndss/conditions/dengue-virus-infections/case-definition/2015/</a>	Page 28 <a href="http://www.gob.mx/cms/uploads/attachment/file/229912/Lineamientos_de_Vig_por_Lab_Dengue_y_otros_Arb_V1_2017.pdf">http://www.gob.mx/cms/uploads/attachment/file/229912/Lineamientos_de_Vig_por_Lab_Dengue_y_otros_Arb_V1_2017.pdf</a>

NOTIFIABLE CONDITION	DEFINITIONS	
	UNITED STATES	MEXICO
<b>Rickettsial Diseases (RMSF)</b>	<a href="https://wwwn.cdc.gov/nndss/conditions/rocky-mountain-spotted-fever/case-definition/2008/">https://wwwn.cdc.gov/nndss/conditions/rocky-mountain-spotted-fever/case-definition/2008/</a>	Page 18 <a href="https://www.gob.mx/cms/uploads/attachment/file/201900/Lineamientos_Rick_130317.pdf">https://www.gob.mx/cms/uploads/attachment/file/201900/Lineamientos_Rick_130317.pdf</a>
<b>West Nile virus</b> Initial case each season in border state, binational, or otherwise <i>If exposure suspected in Mexico and diagnosed in US</i>	<a href="http://wwwn.cdc.gov/nndss/conditions/arboviral-diseases-neuroinvasive-and-non-neuroinvasive/case-definition/2015/">http://wwwn.cdc.gov/nndss/conditions/arboviral-diseases-neuroinvasive-and-non-neuroinvasive/case-definition/2015/</a>	Page 31 <a href="http://www.gob.mx/cms/uploads/attachment/file/229912/Lineamientos_de_Vig_por_Lab_Dengue_y_otros_Arb_V1_2017.pdf">http://www.gob.mx/cms/uploads/attachment/file/229912/Lineamientos_de_Vig_por_Lab_Dengue_y_otros_Arb_V1_2017.pdf</a>
<b>Zika</b>	<a href="https://wwwn.cdc.gov/nndss/conditions/zika-virus-disease-and-zika-virus-congenital-infection/case-definition/2016/">https://wwwn.cdc.gov/nndss/conditions/zika-virus-disease-and-zika-virus-congenital-infection/case-definition/2016/</a>	Page 29 <a href="http://www.gob.mx/cms/uploads/attachment/file/229912/Lineamientos_de_Vig_por_Lab_Dengue_y_otros_Arb_V1_2017.pdf">http://www.gob.mx/cms/uploads/attachment/file/229912/Lineamientos_de_Vig_por_Lab_Dengue_y_otros_Arb_V1_2017.pdf</a>

---

## Appendix 3: Binational Contact Numbers

### UNITED STATES

#### U.S. Federal

##### *Urgent Notification*

1. Call CDC Emergency Operations Center: 770-488-7100 or 1-866-638-9753 (internal US only number)
2. Email: [usmunotify@cdc.gov](mailto:usmunotify@cdc.gov)

##### *Routine Notification*

1. Email: [usmunotify@cdc.gov](mailto:usmunotify@cdc.gov)

#### Arizona

##### *Dr. Mariana G Casal, BIDS Surveillance Officer*

Email: [mariana.casal@azdhs.gov](mailto:mariana.casal@azdhs.gov)  
Phone (24/7): 520-245-3233

##### *Robert Guerrero, Chief Office of Border Health*

Email: [Robert.guerrero@azdhs.gov](mailto:Robert.guerrero@azdhs.gov)  
Phone: 520-770-3113 (business hours); cell: 520-609-7344

*24/7 phone: 602-839-5040*

#### California

##### *Dr. Esmeralda Iniguez-Stevens, BIDS Surveillance Officer*

Email: [einiguez@cdph.ca.gov](mailto:einiguez@cdph.ca.gov)  
Phone: 619-688-0111 (business hours); cell: 619-672-5695

##### *Dr. Margarita Santibanez*

Email: [margarita.santibanez@cdph.ca.gov](mailto:margarita.santibanez@cdph.ca.gov)  
Phone: 619 571 3630

*24/7 phone: 619-672-5695*

#### New Mexico

##### *Katharine Perez-Lockett, BIDS Surveillance Officer*

Email: [katharine.perez@state.nm.us](mailto:katharine.perez@state.nm.us)  
Phone: 575-528-5103

##### *Sandra Melman*

Email: [Sandra.melman@state.NM.us](mailto:Sandra.melman@state.NM.us)  
Phone: 505-827-0100

*24/7 phone: 505-827-0006*

#### Texas

##### *Allison Banicki, Epidemiologist, Texas DSHS Office of Border Health*

Email: [Allison.banicki@dshs.state.tx.us](mailto:Allison.banicki@dshs.state.tx.us)  
Phone: 512-776-7675 (Office of Border Health main number, business hours)  
Cell: 512-284-3335

*24/7 phone: 512-458-7111*

---

## MÉXICO

### México DGE

*Dr. Javier Montiel Perdomo, Director of Operational Epidemiologic Investigations*

Email: [javier.montiel@salud.gob.mx](mailto:javier.montiel@salud.gob.mx)

Phone (24/7): From Mexico: 01-800-00-44-800; From U.S: +52 55-53-37-18-44

### Tamaulipas

*Dr. Santos Daniel Carmona Aguirre, State Epidemiologist, Servicios de Salud del Estado de Tamaulipas*

Email: [drdaniel@hotmail.com](mailto:drdaniel@hotmail.com); [epidem.tamps@gmail.com](mailto:epidem.tamps@gmail.com); [notifica.tamps@gmail.com](mailto:notifica.tamps@gmail.com);  
[transmisibles.tamaulipas@gmail.com](mailto:transmisibles.tamaulipas@gmail.com)

### Sonora

*Dra. Imuvira Dénica Cruz Loustaunau:* [direccion.uiees.sonora@gmail.com](mailto:direccion.uiees.sonora@gmail.com)

*Dra. Tannia Lenina Fontes Martínez:* [fontestannia@hotmail.com](mailto:fontestannia@hotmail.com)

### Chihuahua

*Dr. Gumaro Barrios Gallegos, Epidemiólogo Estatal, Secretaría de Salud del Estado de Chihuahua*

Email: [bgumaro@hotmail.com](mailto:bgumaro@hotmail.com)

Phone: (614) 439-3300; Conm. 01(614) 439-9900 x.21518, 21656, 2158;

Fax: (614) 415 2733;

Cell (for emergency contact) 011-52-1-614-176-5900

### Nuevo León

*Dr. Jessica Suhail Saucedo Garza, Epidemióloga Estatal, Servicios de Salud del Estado de Nuevo León*

Email: [jsauceda@ssnl.gob.mx](mailto:jsauceda@ssnl.gob.mx); [drasauceda@hotmail.com](mailto:drasauceda@hotmail.com)

Phone: 01 (81) 83 61 00 58 and 95 directos

### Coahuila

*Dr. Juan Edmundo Salinas Aguirre, Epidemióloga Estatal, Secretaría de Salud del Estado de Coahuila*

Email: [epidemiologiaestatal@gmail.com](mailto:epidemiologiaestatal@gmail.com); [vigilancia-epi-coahuila@hotmail.com](mailto:vigilancia-epi-coahuila@hotmail.com)

### Baja California

*Dr. Néstor Saúl Hernández Millán, Epidemiólogo Estatal, Secretaría de Salud del Estado de Baja California*

Email: [nestorher.baja@gmail.com](mailto:nestorher.baja@gmail.com)

Phone: P/F. (686) 5595 800 Ext.4252 (direct), 4251, 4253; Fax (686) 556 1059

*Updated: May 2016*

---

## Appendix 4: Template Terms of Reference for a Binational Outbreak Investigation

MEXICO-UNITED STATES BINATIONAL OUTBREAK INVESTIGATION OF [DISEASE], [LOCATION (STATE, COUNTRY)], [DATE]

### *Background*

(Provide background with known information)

### *Collaborative Investigation Steps*

- 1) Concurrence to conduct a binational investigation and to form a binational investigation team to investigate cases, confirm the diagnosis, determine the scale of the outbreak, identify significant risk factors, provide public health recommendations, and implement appropriate control measures as feasible.
- 2) A binational oversight team of public health officials from both countries will meet by teleconference or in person to identify members of the Binational Field Investigation Team, including a lead from each country.
- 3) Team leads will
  - a. Draft an investigation protocol, including the aims of the investigation, case definitions, and survey instruments
    - i. Anticipated aims are to:
      1. Use data from both countries to characterize the outbreak of the apparent syndrome and possible risk factors
      2. Identify the possible source of an outbreak in the community
      3. Implement control measures
    - ii. Agree on a shared plan for reporting of the results of the investigation taking into consideration the mutual acceptance by both countries of the joint final report.
    - iii. Agree on establishing a unique database for the investigation, accessible to binational team members.
  - b. Guide the team to initiate hypothesis generating interviews with cases
  - c. Organize and provide assignments to binational teams, and assess response regularly to optimize investigation
- 4) Identify necessary resources and explicitly indicate source of resources and how they will be shared. Resources to consider include:
  - a. Laboratory testing
  - b. Equipment
  - c. Travel
  - d. Staff
- 5) Explicitly indicate how information and updates will be shared.
  - a. Binational team leads will provide regular progress reports to the binational field team during the course of the investigation
- 6) Identify terms for producing a timely joint report
  - a. Entities might agree upon binational publishing and clearance agreements
  - b. Establish joint authorship, including recognition of binational outbreak team participants for any publications

---

*Signature Page:*

*Federal:*

DGE \_\_\_\_\_

CDC \_\_\_\_\_

*State Health Departments:*

Mexico \_\_\_\_\_

United States \_\_\_\_\_

*Local Health Departments:*

Mexico \_\_\_\_\_

United States \_\_\_\_\_

---

## Appendix 5: Procedures for Sharing Laboratory Resources and Specimens During Public Health Events of Mutual Interest and Binational Outbreaks

### *Roles of laboratories in the United States and Mexico: Coordination, information exchange, and resource sharing.*

Following the steps outlined in this document, proper channels of communication between authorized public health officials of the two countries will be established prior to any collaborative investigations of binational outbreaks. Again, unless otherwise stated, coordination of the investigation will be the responsibility of the legal public health authority where the outbreak is to be investigated.

If the investigation is going to be carried out in Mexico, some general considerations to be discussed may include:

- ◆ An invitation letter from, or an agreement with, the Mexican Federal Public Health authorities to a CDC subject matter expert (SME) to collaborate on a binational outbreak investigation in Mexican territory.
- ◆ A list of point of contacts of designated public health officers for coordination, necessary communication, and logistical support.
- ◆ A schedule for case status follow-up calls can also be established, as needed. If laboratory specimens are to be exchanged or shipped, the contact list can also include laboratory points of contacts from both countries.
- ◆ A list of needed laboratory supplies, reagents, controls, or other resources to facilitate critical laboratory testing in Mexico. List might contain list of items, quantities, and other resources, if needed.
- ◆ A timeframe for shipment/delivery and final destination address for products.
- ◆ Availability of up-to-date required permits and estimated time required to obtain any new permits, if not available or expired.
- ◆ Written approval from the recipient to receive supplies or other resources.
- ◆ Request for specific reference testing to be performed at CDC or other laboratories in the United States, including types of tests, numbers of specimens to be tested, and anticipated turnaround time for completion of tests.
- ◆ If specimens from Mexico are to be submitted for testing at CDC laboratories:
  - Approval from the CDC laboratory is required
  - Written guidance can be obtained for the type and quantity of each specimen to be tested and specimen handling guidelines.
  - It is recommended that the sender and recipient have continuous communication to establish dates/times of shipments, as well as planning and follow up for logistics before shipment is sent, and after it is received.
- ◆ If specimens or biologicals are sent from the United States to Mexico:
  - Specific information on the items to be sent to Mexico will be provided during initial discussions, including descriptions, quantities, and shipping instructions.
  - Necessary import and export permits will be obtained prior to shipping.
  - Mutual agreements will be made on timing of shipments and anticipated delivery and results dates.

Logistical and security requirements will be established prior to any exchange or deployment of resources to the investigation. Shipping logistics should be considered in the planning for delivery and receipt of products

---

## Appendix 6: List of Agencies and Organizations

[ASPR](#) – Assistant Secretary for Preparedness and Response

[BIDS](#) – Border Binational Infectious Disease Surveillance program

[CDC](#) – U.S. Centers for Disease Control and Prevention

[CSTE](#) – Council of State and Territorial Epidemiologists

[DGE](#) – Dirección General de Epidemiología (Directorate General of Epidemiology)

[DGMQ](#) – CDC’s Division of Global Migration and Quarantine

[IHR](#) – International Health Regulations

[PAHO](#) – Pan American Health Organization

[WHO](#) – World Health Organization

---

## Appendix 7: Text Descriptions of Figures\*

\*This text is included for 508 website accessibility and not part of the Protocol content.

### *Page 13, Figure 3—Decision Tool for Confirming a Binational Outbreak And Initiating An Investigation*

Top of chart begins with “Local, state, federal authorities detect greater than expected number of cases in jurisdiction.”

After authorities detect a greater than expected number of cases in jurisdiction, the questions to ask are:

“Are the confirmed and probable cases of a condition included on the binationally notifiable list (see Appendix 2) and meet the binational case definition? (See table 1)”

OR

“Is the public health impact of the event serious? (See appendix 1 for a definition of a “serious case”)” “Is there significant risk of binational spread?”

- 1) If “No” to questions, then “Not a binational outbreak at this stage. Reassess as more information becomes available.”
- 2) If “Yes” to questions, then “Notifications to corresponding authorities, both formal and informal FYI (following the Communications Pathway Protocol).”
  - a. Then ask, “Based on state and federal input, will a binational call to review data be requested?”
    - i. If “No” “binational call will be requested to review data based on state and federal input,” then “Not a binational outbreak at this stage. Reassess as more information becomes available.”
    - ii. If “Yes” a “binational call will be requested to review data based on state and federal input,” then “CDC and DGE convene a binational call with relevant entities and counterparts.”
      - 1) Next, “Binational group will evaluate data, determine if situation constitutes a binational outbreak, and decide whether a binational investigation should be initiated.”
      - 2) Continue through process beginning with “Notifications to corresponding authorities, both formal and informal FYI (following the Communications Pathways Protocol).”

During entire process, “Decisions, relevant data, and reports will be shared with corresponding authorities.”

---

*Page 20, Appendix 1—Annex 2: Decision Instrument for the Assessment and Notification of Events That May Constitute a Public Health Emergency of International Concern*

Top of chart begins with: “Events detected by national surveillance system (see Annex 1)”

Events detected include:

1) “A case of the following diseases is unusual or unexpected and may have serious public health impact, and thus shall be notified (As per WHO case definitions, and the disease list shall be used only for the purposes of these Regulations): smallpox; poliomyelitis due to wild-type poliovirus; human influenza caused by a new subtype; severe acute respiratory syndrome (SARS).”

a. Then “Event shall be notified to WHO under the International Health Regulations.”

OR

2) “Any event of potential international health concern, including those of unknown causes or sources and those involving other events or diseases than those listed in the box on the left and the box on the right shall lead to utilization of the algorithm.”

Then ask: “Is the public health impact of the event serious?”

1) If “Yes” then, “Is the event unusual or unexpected?”

a. If “Yes”, then “Event shall be notified to WHO under the International Health Regulations.”

b. If “No”, then “Is there a significant risk of international spread?”

i. If “Yes”, then “Event shall be notified to WHO under the International Health Regulations.”

ii. If “No”, then “Is there a significant risk of international travel or trade restrictions?”

1) If “Yes”, then “Event shall be notified to WHO under the International Health Regulations.”

2) If “No”, then “Not notified at this stage. Reassess when more information becomes available.”

2) If “No”, then “Is the event unusual or unexpected?”

a. If “Yes”, then “Is there a significant risk of international spread?”

i. If “Yes”, then “Event shall be notified to WHO under the International Health Regulations.”

ii. If “No”, then “Is there a significant risk of international travel or trade restrictions?”

1) If “Yes”, then “Event shall be notified to WHO under the International Health Regulations.”

2) If “No”, then “Not notified at this stage. Reassess when more information becomes available.”

a. If “No”, then “Is there a significant risk of international spread?”

i. If “Yes”, then “Is there a significant risk of international travel or trade restrictions?”

1) If “Yes”, then “Event shall be notified to WHO under the International Health Regulations.”

2) If “No”, then “Not notified at this stage. Reassess when more information becomes available.”

ii. If “No”, then “Not notified at this stage. Reassess when more information becomes available.”

OR

3) “An event involving the following diseases shall always lead to utilization of the algorithm, because they have demonstrated the ability to cause serious public health impact and to spread rapidly internationally (the disease

---

list shall be used only for the purposes of these Regulations): cholera; pneumonic plague, yellow fever, viral haemorrhagic fevers (Ebola, Lassa, Marburg); West Nile fever; Other diseases that are of special national or regional concern, e.g. dengue fever, Rift Valley fever, and meningococcal disease.”

Then ask: “Is the public health impact of the event serious?”

- 1) If “Yes” then, “Is the event unusual or unexpected?”
  - a. If “Yes”, then “Event shall be notified to WHO under the International Health Regulations.”
  - b. If “No”, then “Is there a significant risk of international spread?”
    - i. If “Yes”, then “Event shall be notified to WHO under the International Health Regulations.”
    - ii. If “No”, then “Is there a significant risk of international travel or trade restrictions?”
      - 1) If “Yes”, then “Event shall be notified to WHO under the International Health Regulations.”
      - 2) If “No”, then “Not notified at this stage. Reassess when more information becomes available.”
- 2) If “No”, then “Is the event unusual or unexpected?”
  - a. If “Yes”, then “Is there a significant risk of international spread?”
    - i. If “Yes”, then “Event shall be notified to WHO under the International Health Regulations.”
    - ii. If “No”, then “Is there a significant risk of international travel or trade restrictions?”
      - 1) If “Yes”, then “Event shall be notified to WHO under the International Health Regulations.”
      - 2) If “No”, then “Not notified at this stage. Reassess when more information becomes available.”
  - b. If “No”, then “Is there a significant risk of international spread?”
    - i. If “Yes”, then “Is there a significant risk of international travel or trade restrictions?”
      - 1) If “Yes”, then “Event shall be notified to WHO under the International Health Regulations.”
      - 2) If “No”, then “Not notified at this stage. Reassess when more information becomes available.”
    - ii. If “No”, then “Not notified at this stage. Reassess when more information becomes available.”