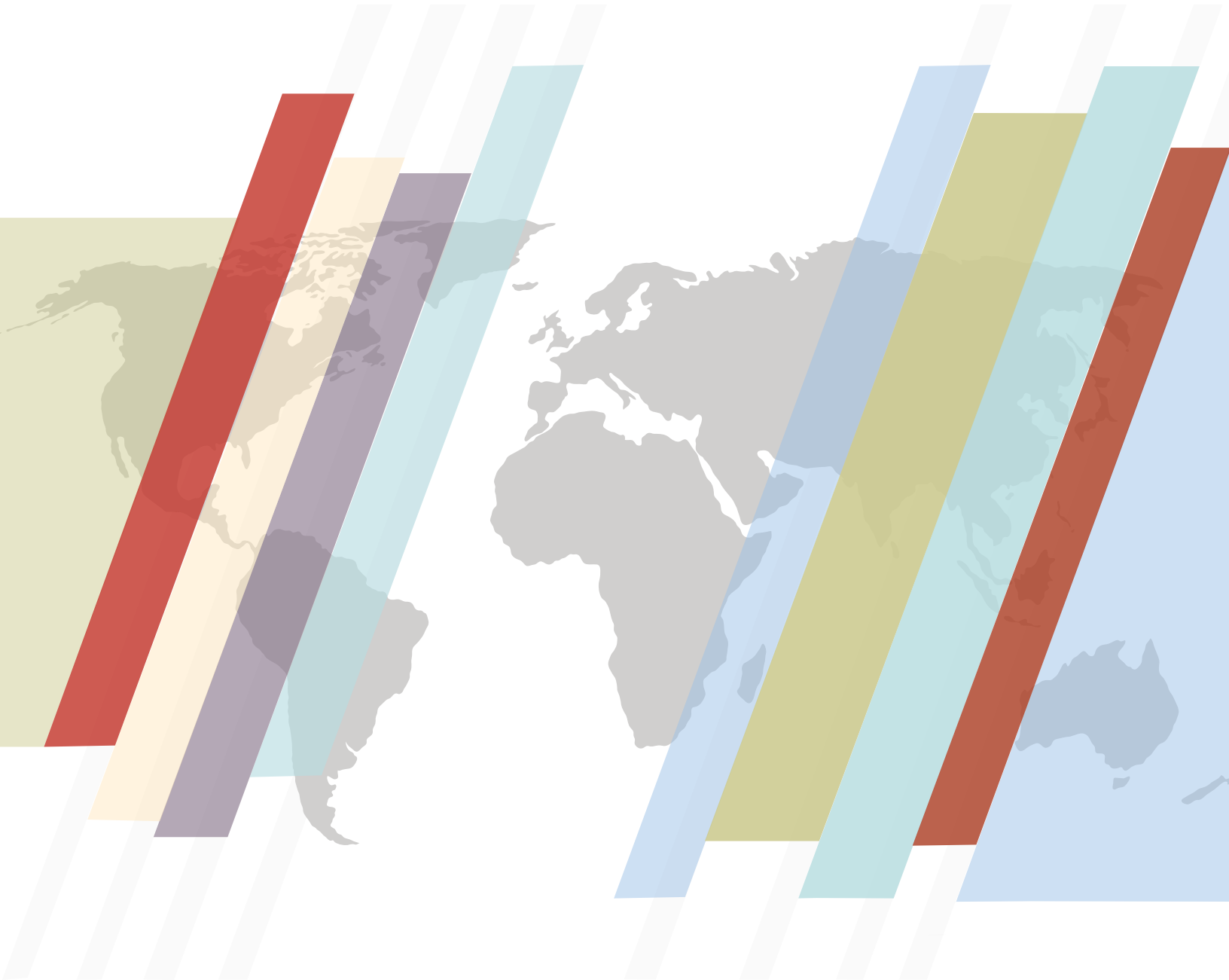
TOOL TO PRIORITIZE POINTS OF ENTRY AND POINTS OF CONTROL (TOP POE/C)

Considerations for Prioritizing Points of Entry and Control for Public Health Capacity Building



U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

Global Border Health Team, Division of Global Migration and Quarantine

Tool to Prioritize Points of Entry and Points of Control (ToP POE/C)

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Purpose

To present a framework for prioritizing points of entry or points of control (POE, international; POC, domestic; "POE/C") for enhanced public health capacity building to limit the international spread of communicable diseases.

Audience

The primary audience for this document is ministry of health and port health leaders ("public health leader").

Background

The increasing ease and speed of cross-border and worldwide travel and trade have escalated the international spread of communicable diseases, such as COVID-19 and hemorrhagic fevers. Communicable diseases can spread across domestic and international boundaries rapidly via air, water, or ground transportation making interventions at POE and POC ("POE/C") essential. However, it can be challenging for governments to allocate sufficient resources for building capacity and implementing traveller screening, risk communication, and other public health measures at all POE/C. Determining which POE/C to prioritize for resource allocation requires public health leaders to consider a variety of factors.

This Tool for Prioritizing Points of Entry and Points of Control (ToP POE/C) is intended to assist public health leaders with a systematic approach to prioritizing POE/C, regardless of World Health Organization (WHO) International Health Regulations (IHR) designation status, for capacity building in the short or long terms. The tool can be applied to any POE/C, including both international POE and domestic POC. It is important to note that this tool is not meant to determine IHR designation status for POE. Rather, the ToP POE/C can be used to complement the designation strategies proposed by the IHR (2005) Third Edition and the WHO Handbook for Public Health Capacity-Building-at Ground Crossing and Cross-Border Collaboration

Methodology

A public health leader or team of leaders uses Part 1 (Considerations for Prioritizing POE/C) of this two-part tool to compile information about identified POE/C. Information collected through Part 1 can then be used to prioritize POE/C for public health capacity building before or during a communicable disease outbreak using Part 2 (POE/C Prioritization Assessment Table). Additionally, prior to completing Part 2, public health leaders will prioritize (high, medium, or low) each of the six (6) factors to determine an overall score and priority level for each POE/C. Table 1 provides examples of tools, data sources, and materials that leadership can use to access data or implement to gather new data for each consideration. Annex 1 provides detailed descriptions of each factor that can be utilized to characterize the POE/C. For each identified POE/C, public health leadership review each consideration and characterize the respective POE/C based on the scoring factors in Part 2.

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Part 1. Considerations for Prioritizing POE/C

1) **Characterization of POE/C**
   a. Description: POE/C in areas with insecurity or lower resources may have a less consistent workforce than other POE/C, which may impact the ability of POE/C staff to recognize a sick (or ill) traveller and take measures to prevent the transmission of a communicable disease.
   b. Evaluation: POE/C characterization can include security, existing infrastructure, and staffing considerations at the POE/C, such as available POE/C equipment, premises, staffing, hours of operation, and general ease of access to the POE/C. Also, consider how easy and often the community accesses the POE/C to shop, find transportation options, or seek other services.

2) **Traveller Volume**
   a. Description: The number of people crossing through a POE/C (bidirectional; both entry and exit) can elevate absolute risk for the international importation or exportation of communicable diseases.
   b. Evaluation: Consider temporal trends in traveller volume through the POE/C (e.g., time of day, day of the week, and seasonal fluctuations at the POE/C) and what factors influence those trends (e.g., operating hours of the POE/C, road accessibility, security issues, market days, rainy vs. dry season).

3) **Connectivity to Priority or High-Risk Populations or Locations**
   a. Description: POE/C with low traveller volume can still be considered high risk for transmission of communicable diseases if there is strong connectivity between travellers passing through and a high-risk geographic area or population.
   b. Evaluation: Travellers passing through a POE/C who come from or have ties to areas or populations affected by a communicable disease of public health concern are a major risk factor for the international importation or exportation of communicable diseases or domestic spread of disease between administrative areas.

4) **Ability of POE/C Staff and Infrastructure to Manage Sick Travellers**
   a. Description: POE/C with capacity to identify and manage sick (or ill) travellers are more likely to mitigate the risk of importing or exporting communicable diseases through the POE/C.
   b. Evaluation: Public health capacities, including sick (or ill) traveller detection, are more effectively conducted and maintained at POE/C where there is a way to direct travellers through an area where they are visually observed for illness or undergo more formal screening processes while maintaining mitigation efforts such as physical distancing. Also, consider whether the POE/C is linked with a referral healthcare facility and if suspected sick (or ill) travellers can be safely isolated from other travellers at the POE/C while awaiting transfer to the referral healthcare facility.

5) **Strength of Public Health Surveillance Systems**
   a. Description: POE/C can serve as public health surveillance sites, contributing to public health event detection along the border or at priority locations across the country. POE/C in areas with weaker community-based communicable disease surveillance systems could be prioritized for capacity building to support communicable disease detection among travellers passing through those locations.
   b. Evaluation: Consider the ability of the staff at the POE/C to record, send, and maintain electronic data including frequency of reporting and ability to use formal or informal reporting processes. Also, consider surveillance capacities of the surrounding community including community-based surveillance systems and established communication channels between the POE/C and the local and national public health surveillance system.

6) **Cross-Border Coordination**
   a. Description: Routine communication and information sharing on potential public health events between local-level, cross-border counterparts and other public health stakeholders indicates a strong cross-border collaboration that can mitigate the spread of communicable diseases in border regions. Any POE in areas with weaker cross-border collaboration should be prioritized for capacity building to support the detection of and response to communicable diseases at those locations.
   b. Evaluation: Consider whether the POE, surrounding community, or subnational level in which the POE is located has a formal or informal mechanism in place that allows for the sharing of public health information with cross-border counterparts. Consider if the cross-border communication is routine or can be rapid and if there are points of contact that are clearly identified.

Part 2. POE/C Prioritization Assessment Table

Public health leadership should record a value for each table section to determine a score. Further descriptions of each consideration are provided in Annex 1. The leadership should use all gathered information, including from POE/C staff, to complete the table. **For each section, leadership should first apply the priority level (low, medium, or high) for that factor, which will influence how the factor average score is integrated in the total score.** Using this table, public health leadership should repeat this scoring process for each POE/C of interest. Using the results from this table for each POE/C evaluated, they should list the scored POE/C in rank order with the largest score (maximum score = 54) first. Public health leadership will then select POE/C for capacity building from the top of the list. Table 1 indicates the tools, data sources, and materials that can be utilized to address prioritization considerations.

NOTE: If this form is completed ***electronically,*** the scores will be automatically calculated for leadership as each selection is made. If the form is ***printed,*** leadership will need to manually enter values and perform all the calculations necessary to generate a score. Leadership should first apply the priority level (low = 1, medium = 2, or high = 3) for any given factor. Then, using the values provided for each selection in Annex 1, leadership should sum up the scores from the selection column and note it in the 'Score' box for each factor. Next, leadership will calculate the average score of each factor by dividing the sum by the total number of selections in that section and note it in the appropriate cell under the column "Average Score". Finally, to calculate the POE/C's overall score and priority level, leadership will multiply each factor's average score by its corresponding priority level and then sum all those factor-specific totals.

1) Date: _____

2) Evaluators (Name, organization, job title):

_____

3) What is the name of the POE/C? _____

- What type of POE/C is it? ○ Ground crossing ○ Port ○ Airport ○ POC

4) Region and district where the POE/C is located:

_____

Data Sources for Migration and Movement

1. Characterization of the POE/C **Priority Level:** _____

Characterization of the POE/C	Selection
a. Access to POE/C	
b. Area security	
c. Hours of operation	
d. Designated area for interview	
e. Staff knowledge of signs of illness	
f. Agency presence	
g. Place for a health officer to work/store data	
h. Access to internet	
i. Presence of electricity	
j. Access to telecommunications	
Score:	0
***Average* Score:**	0.00

2. Traveller Volume

Priority Level: _____

Traveller Volume	Selection
a . Volume of flow	
b. Fluctuation in travel volume	
c. Primary reason for movement*	
Score:	0
***Average* Score:**	0.00

3. Connectivity to Priority or High-Risk Populations or Locations

Priority Level: _____

Connectivity to Priority or High-Risk Populations or Locations	Selection
a. Ease of access to nearby informal border crossing	
b. Cross-border connectivity	
c. Geographic/travel connectivity	
Score:	0
***Average* Score:**	0.00

4. Ability of Staff to Handle Sick Travellers When Detected

Priority Level: _____

Ability of Staff to Handle Sick Travellers When Detected	Selection
a. Staff available to observe travellers	
b. Staff available to review travel history	
c. Staff available to record data	
d. Staff available to provide secondary screening of travellers	
e. Additional/replacement staff available	
f. Access to a laboratory	
g. Access to referral health clinic	
h. Capacity of referral health clinic	
i. Designated area for isolation	
j. Supply level for isolation area	
Score:	0
***Average* Score:**	0.00

*Please note that economic and personal movement have the same value score of 1.

5. Strength of Public Health Surveillance System

Priority Level: _____

Strength of Public Health Surveillance System	Selection
a. Type of surveillance system	
b. Consistency of system availability	
c. Data maintenance system at POE/C	
d. Ability of timely reporting to subnational level	
e. Ability of timely reporting to central level	
f. Strength of community-based surveillance near the POE/C	
g. Information shared with POE/C	
Score:	0
***Average* Score:**	0.00

6. Cross-Border Collaboration

Priority Level: _____

Cross-Border Collaboration	Selection
a. Public health cross-border Memorandum of Understanding (MOU) in place	
b. Known cross-border public health counterpart in neighboring country	
c. Formal cross-border information sharing for public health	
d. Informal cross-border information sharing for public health	
e. Ability of timely sharing information across border	
Score:	0
***Average* Score:**	0.00

OVERALL SCORE:	0.00

Tools and References

1. CDC Border Health Capacity Discussion Guide, please email gbht@cdc.gov
2. CDC Rapid Assessment of Point of Entry Capacity (RAPC)
3. CDC Population Connectivity Across Borders (PopCAB) Toolkit
4. Population Movement Patterns Among the Democratic Republic of the Congo, Rwanda, and Uganda During an Outbreak of Ebola Virus Disease: Results from Community Engagement in Two Districts – Uganda, March 2019
5. CDC Considerations for Health Screening for COVID-19 at Points of Entry
6. International Health Regulations (2005) Third Edition
7. WHO Assessment tool for core capacity requirements at designated airports, ports, and ground crossings
8. WHO Coordination of public health surveillance between points of entry and the national health surveillance system: advising principles; 2nd edition
9. WHO Handbook for public health capacity-building at ground crossing and cross-border collaboration, 2020
10. WHO Controlling the spread of COVID-19 at ground crossing, interim guidance, 20 May 2020

Table 1: Tools, Data Sources, and Materials for Characterizing POE by Prioritization Considerations

Discussions

Tools, Data Sources and Materials	Characterization of POE/C	Traveller Volume	Connectivity to Priority or High-Risk Populations or Locations	Ability of POE/C Staff and Infrastructure to Manage Sick Travellers	Strength of Public Health Surveillance Systems	Cross-Border Coordination
Site visit	✓				✓	
POE/C leadership	✓					✓
Community			✓			
POE/C stakeholders and partners						✓

Reports and Documents

Tools, Data Sources and Materials	Characterization of POE/C	Traveller Volume	Connectivity to Priority or High-Risk Populations or Locations	Ability of POE/C Staff and Infrastructure to Manage Sick Travellers	Strength of Public Health Surveillance Systems	Cross-Border Coordination
Public Health Emergency Response Plan (PHERP)				✓		
Simulation exercise reports				✓		
Surveillance reports					✓	
Memorandum of Understanding (MOU)						✓
POE/C assessments[1,2]	✓	✓		✓	✓	✓
Standard Operating Procedures (SOPs)				✓		✓
Road maps				✓		

Recorded Data

Tools, Data Sources and Materials	Characterization of POE/C	Traveller Volume	Connectivity to Priority or High-Risk Populations or Locations	Ability of POE/C Staff and Infrastructure to Manage Sick Travellers	Strength of Public Health Surveillance Systems	Cross-Border Coordination
Traveller logs from POE/C		✓				
Data on Population Mobility[3]		✓	✓			

Annex 1: Detailed Description of Factors for Characterizing the POE/C

1) Characterization of POE/C:

a. Access to POE/C refers to whether the POE/C is easily accessed via standard transportation methods for the country or if the POE/C is harder to access via standard transportation: low accessibility (1), medium accessibility (2), or high accessibility (3)

b. Area security refers to how secure the POE/C is: secure (1), some insecurity (2), insecure (3)

c. Hours of operation refer to the normal operating hours of the POE/C: POE/C only operates on weekdays (1); POE/C operates every day for specific hours (2); POE/C operates 24 hours per day/7 days per week (always) (3)

d. Designated area for interview refers to whether the POE/C has a designated area for interviewing travellers: the POE/C has a private area for interview (1); the POE/C has a semi-private area for interview (2); there is no private designated area for interview (3)

e. Staff knowledge of signs of illness refers to the staff's knowledge and ability to recognize signs of illness in persons at the POE/C: the POE/C staff are well trained to recognize signs of illness (1); the POE/C staff have some formal training to recognize signs of illness (2); the POE/C staff have no formal training to recognize signs of illness (3)

f. Agency presence refers to the presence of non-health agencies (e.g., Customs, Airport Authority, etc.) at the POE/C: always present at POE/C (1), frequently present at POE/C (2), rarely or never present at POE/C (3)

g. Place for a health officer to work/store data refers to the capability to house and store healthcare data: health officer has a private or shared office where they can securely store healthcare data (1); health officer has a shared office with a less secure healthcare data storage area (2); health officer has no identified place to work or store data (3)

h. Access to internet refers to the availability of internet at the POE/C: internet is good and reliable (1); internet works sometimes (2); internet is nonexistent or unreliable (3)

i. Presence of electricity refers to the availability of electricity at the POE/C: electricity is good and reliable (1); electricity works sometimes (2); electricity is nonexistent or unreliable (3)

j. Access to telecommunications refers to the availability of telecommunications at the POE/C: telecommunications are good and reliable (1); telecommunications work sometimes (2); telecommunications are nonexistent or unreliable (3)

2) Traveller Volume:

a. Volume of flow refers to the volume of travellers at the POE/C (both entry and exit): low (1), medium (2), or high (3)

b. Fluctuation in travel volume refers to frequency of fluctuations in the volume of travellers (both entry and exit) and whether there are no fluctuations or whether those fluctuations occur on a seasonal (ex: rainy vs dry season); weekly (e.g. local market occurs every Wednesday); or daily (e.g. commuter traffic based on daily work schedule) basis: no fluctuations (1), seasonal fluctuations (1.5), weekly fluctuations (2), daily fluctuations (3)

c. Primary reason for movement refers to the primary reason for movement through the POE/C (both entry and exit): economic (1), personal (1), or both economic and personal (3)

3) Connectivity to Priority or High-Risk Populations or Location:

a. Ease of nearby informal border crossing refers to the ability of travellers to cross the border easily through nearby informal crossing points: difficult (1), some difficulty (2), easy (3)

b. Cross-border connectivity refers to the connectivity of populations across borders due to economic or sociocultural reasons: low connectivity (1), medium connectivity (2), high connectivity (3)

c. Geographic/travel connectivity refers to how easily people can move across the border and through a POE/C to priority areas using roads or conveyances: difficult (1), some difficulty (2), easy (3)

4) Ability of POE/C to Handle Sick Travellers When Detected:

a. Staff available to observe travellers refers to the availability of staff to observe persons using the POE/C: staff always available (1); staff sometimes available (2); there is no staff availability (3)

b. Staff available to review travel history refers to the availability of staff to review and inspect travel documents of persons using the POE/C: staff always available (1); staff sometimes available (2); there is no staff availability (3)

c. Staff available to record data refers to the availability of staff to record digital or handwritten public health data at POE/C: staff always available (1); staff sometimes available (2); there is no staff availability (3)

d. Staff available to provide secondary screening of travellers refers to the availability of staff to conduct secondary screening of persons at the POE/C: staff always available (1); staff sometimes available (2); there is no staff availability (3

e. Additional/replacement staff available refers to the ability to deploy additional or replacement staff at the POE/C: replacements are available and trained (1); replacements are available but may not be fully trained (2); replacements are not available or are untrained (3)

f. Access to a laboratory refers to the accessibility of a referral laboratory that can process the samples from the POE/C: laboratory is close or easily accessible (1); laboratory is far or sometimes inaccessible (due to roads, distance, etc.) (2); laboratory is inaccessible (3); not applicable, there is no laboratory (3).

g. Access to referral health clinic refers to the capacity to secure timely transport of a sick (or ill) traveller to the referral health clinic: easy access (conveyance and necessary roads are routinely available to reach the health facility) (1); limited access (conveyance or roads are not routinely available) (2); no access (conveyance or roads are rarely available) (3)

h. Capacity of referral health clinic refers to the capacity of the local health clinic to assist at the POE/C if needed: the local health clinic has the capacity to assist at the POE/C (1); the local health clinic has limited capacity to assist at the POE/C (2); the local health clinic has no capacity to assist at the POE/C (3)

i. Designated area for isolation refers to whether the POE/C has a designated area for isolating suspected sick (or ill) persons: the POE/C has a private; designated area that is adequate for isolating suspected sick (or ill) persons (1); the POE/C has a semi-private designated area for isolation, but it is ill-equipped for isolating suspected sick (or ill) persons (2); the POE/C does not have a designated isolation area (3)

j. Supply level for isolation area refers to whether the POE/C has a supply of Personal Protective Equipment (PPE) and other equipment for managing suspected sick (or ill) travellers in the isolation area: the POE/C has a fully stocked isolation area (1); the POE/C has a semi-stocked isolation area (2); the POE/C has no supplies in the isolation area (3)

5) Strength of Public Health Surveillance Systems:

a. Type of surveillance system refers to the how the POE/C staff record data for the surveillance system: the POE/C uses an electronic system to record data (1); the POE/C uses a combination of electronic and paper system to record data (2); the POE/C only uses a paper system to record data (3)

b. Consistency of system availability refers to how consistently the system of surveillance is available (the system could be considered unavailable if there are frequent computer issues or a lack of paper forms if a paper surveillance system is in place): POE/C surveillance system is always available (1); POE/C surveillance system is sometimes unavailable (2); POE/C surveillance system has frequent issues with availability (3)

c. Data maintenance system at POE/C refers to how the POE/C staff maintain data for the surveillance system: the POE/C uses an electronic system to maintain data from the POE/C (1); the POE/C uses a combination of electronic and paper system to maintain data from the POE/C (2); the POE/C only uses a paper system to maintain data from the POE/C (3)

d. Ability of timely reporting to subnational level refers to the timeliness of POE/C staff in reporting a public health event to the subnational level, whether it occurs through electronic or verbal communications: within one day (1), between one and two days (2), more than two days (3) or inconsistent (3)

e. Ability of timely reporting to central level refers to the timeliness of a report from the POE/C reaching the central level, whether information is reported through a subnational point of contact or directly from the POE/C: within one day (1), between one and two days (2), more than two days (3) or inconsistent (3)

f. Strength of community-based surveillance near the POE/C refers to the strength of community-based surveillance in the communities near the POE/C: strong community-based surveillance near the POE/C (1), weak community-based surveillance near the POE/C (2), no community-based surveillance near the POE/C (3)

g. Information shared with POE/C refers to whether information gathered by the community-based surveillance system is shared in a timely manner with the POE/C: frequent sharing of information between community-based surveillance and POE/C (1), occasional sharing of information between community-based surveillance and POE/C (2), infrequent or non-existent sharing of information between community-based surveillance and POE/C (3)

6) Cross-Border Coordination:

a. Public health cross-border Memorandum of Understanding (MOU) in place refers to whether there is a MOU in place that establishes the sharing of public health information with cross-border counterparts relevant for the POE or administrative area in which the POE is located: there is a MOU in place and it is operational (1); there is a MOU in place, but it is not operational (2); unknown or no MOU in place (3)

b. Known cross-border public health counterpart in neighboring country refers to whether there is a known cross-border counterpart in the neighboring country: point of contact information for neighboring country POE is always available (1); point of contact information for neighboring country POE is not routinely available (2); point of contact information for neighboring country POE is never available (3)

c. Formal cross-border information sharing for public health refers to the formal sharing of public health information between cross-border counterparts: there is routine formal sharing of information between cross-border counterparts (1); there is occasional formal sharing of information between cross-border counterparts (2); there is no formal sharing of information between cross-border counterparts (3)

d. Informal cross-border information sharing for public health refers to the informal sharing of public health information between cross-border counterparts: there is routine informal sharing of information between cross-border counterparts (1); there is occasional informal sharing of information between cross-border counterparts (2); there is no informal sharing of information between cross-border counterparts (3)

e. Ability of timely sharing of information across border refers to the timeliness of information sharing with counterparts across the border: within one day (1), between one and two days (2), more than two days (3) or inconsistent (3)

www.cdc.gov/immigrantrefugeehealth/migration-border-health

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