Role of Staff at Point of Entry for Observation of Important Diseases and Health Hazards: USA and Thailand

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Disease Is Just a Flight Away

Daily world passenger air traffic. Credit: Diio

Disease Is Just a Voyage Away
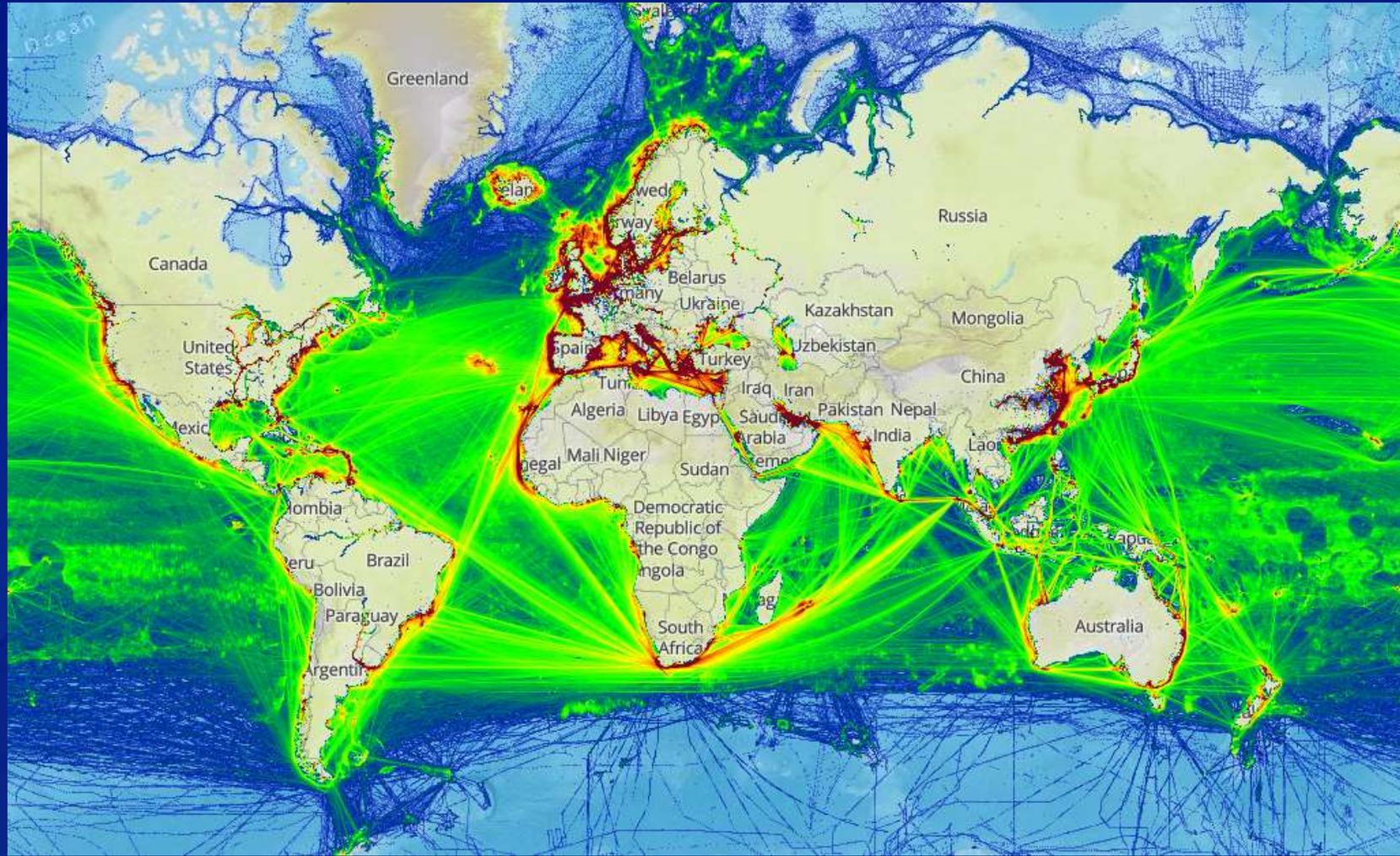
World maritime traffic. Credit: marinetraffic.com

Many US Points of Entry, Few CDC Quarantine Stations

Every State Has at Least 1 Port of Entry
314 ports of entry categorized by the 19 Field Operations offices to which they report

CDC Quarantine Stations and Their Jurisdictions
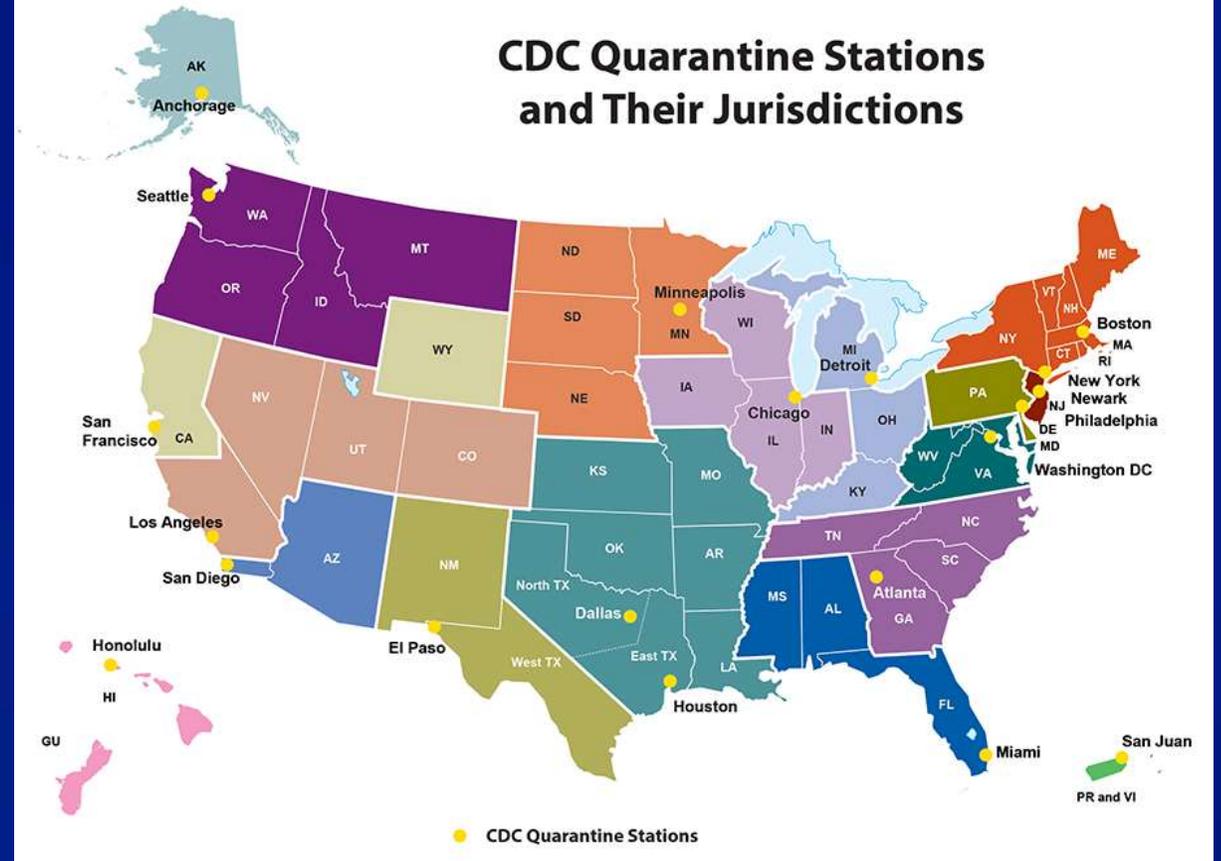
Management of Ill Travelers

Ill travelers arriving at a US point of entry are referred to CDC if they have symptoms that could be a communicable disease of public health concern.

CDC staff assess ill travelers to determine public health risk.

If reasonably believed to have a disease of public health concern, ill travelers can be referred for medical evaluation and care.

US Reporting Requirements for Airlines

Notify CDC of all deaths and any illnesses in travelers with_____

❑ Fever (measured temperature of ≥100.4°F [38°C]) and one or more of these conditions:

- Skin rash
- Persistent diarrhea
- Persistent cough
- Persistent vomiting
- Difficulty breathing

- Headache with stiff neck
- Decreased consciousness
- Confusion of recent onset
- Unexplained bleeding
- Appears obviously unwell

- *OR* fever that has persisted for more than 48 hours

US Diseases of Public Health Concern During Travel

- Cholera
- Diphtheria
- Infectious tuberculosis
- Plague
- Smallpox
- Yellow fever
- Viral hemorrhagic fevers
- Severe acute respiratory syndromes
- Influenza that can cause a pandemic

- Measles
- Mumps
- Rubella
- Varicella (chickenpox)
- Pertussis (whooping cough)
- Meningococcal disease

Federal isolation and quarantine are authorized for these communicable diseases.

The president can revise this list by issuing an executive order.

CDC Quarantine Station Response to Reported Ill Traveler

CDC staff assess if illness is a public health threat and initiate appropriate public health action.

Three possible actions from CDC's assessment:

1	Recommend seeking medical care or delaying travel until noninfectious
2	Require ill traveler to be medically evaluated if suspected of having a quarantinable disease
3	Allow travel to resume if illness is not believed to be a public health threat

Typical US Process for Notification and Response

Notification

- Ill travelers enter the United States via airports, land borders, and seaports.
- CDC learns of the illnesses from CBP or other partners.

Response

- *On site:* CDC quarantine staff board the conveyance with emergency medical services (EMS) and conduct a public health assessment.
- *If NOT on site:* CDC quarantine staff obtain EMS's assessment and communicate CDC's recommendations by phone.

What is your role in protecting the health of people at [POE]?

- Notify Port Health* of potential public health events
- Collect and share information
- Distribute health information
- Provide security
- Others?

It is everyone's responsibility to *RECOGNIZE* and *ISOLATE* an ill traveler, and *NOTIFY* and *GIVE SUPPORT* to Port Health!

RECOGNIZE ILL TRAVELER
- See back of card

ISOLATE
- Separate ill person ≥2 meters from others

NOTIFY
- If situation is a life or death emergency, call emergency medical responders
- Alert supervisor
- Notify health authority

GIVE SUPPORT
- Follow instructions of supervisor and health authority

[POE Port Health Phone Number]

RECOGNIZE ILL TRAVELER
Look, listen, or ask for signs and symptoms of illness
Alert supervisor for any traveler who:
☑ Says he or she may have a **FEVER**
AND
☑ Reports having, or is observed with, **ONE or more** of the following conditions:

- Continuous cough
- Difficulty breathing
- Continuous diarrhea
- Continuous vomiting
- Skin rash
- New unusual bruising or bleeding (not from injury)
- Confused mental state
- Looking obviously unwell

Wash hands for 15-20 seconds after every incident

The *RING* Card: a step-by-step tool to facilitate detection and response to public health events

RING steps

- ❑ *R*ECOGNIZE
  - ▪ Potential public health events (signs and symptoms) at [POE]
- ❑ *I*SOLATE
  - ▪ People who may represent a public health event
- ❑ *N*OTIFY
  - ▪ Port Health
  - ▪ Immediate supervisor
  - ▪ Emergency medical services, if life-threatening
- ❑ *G*IVE SUPPORT
  - ▪ Follow instructions of immediate supervisor and Port Health

*R*ECOGNIZE:
Look for, listen for, ask about

✓ **FEVER***

                                         AND

✓ **ONE or more** of the following conditions:

- **Persistent coughing**
- **Difficulty breathing**
- **Continuous diarrhea**
- **Continuous vomiting**
- **Skin rash**

- **New unusual bruising or bleeding (not from injury)**
- **Confused mental state**
- **Looking obviously unwell**

When in doubt, contact Port Health

*Consider fever if the ill person tells you he/she feels feverish, has an actual measured temperature of ≥38°C, or has a flushed face or chills.

Confused mental state

Fever

Continuous coughing

_R_ECOGNIZE:
Signs and symptoms

Continuous vomiting

Continuous diarrhea

New unusual bruising or bleeding (not from injury)

Skin rash

*R*ECOGNIZE:
Fever

- ❑ Shivering
- ❑ Sweating a lot
- ❑ Wearing abnormally warm clothing
- ❑ History of feeling hot and having taken medication to prevent fever

Fever is a common symptom for many infectious diseases (Ebola and other hemorrhagic fevers, influenza, measles, meningitis, etc.)

*R*ECOGNIZE:
Continuous coughing

Frequent and severe enough to catch attention of employee or another person

Continuous cough may indicate pertussis (whooping cough), tuberculosis, pneumonia, or influenza

*R*ECOGNIZE:
Difficulty breathing
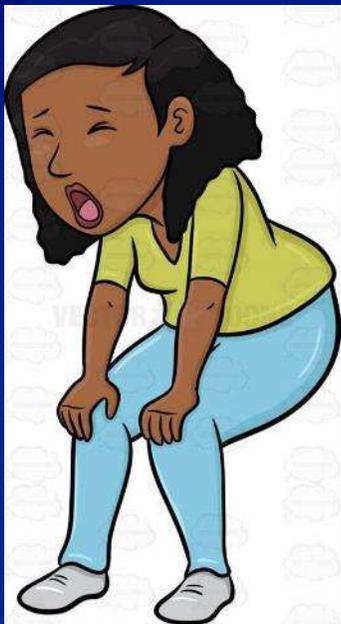
- ❑ May be gasping for air
- ❑ Unable to "catch" their breath
- ❑ Feels "short of breath"
- ❑ Breathing too fast or too slow

Difficulty breathing may indicate pneumonia, diphtheria, or influenza

*R*ECOGNIZE:
Continuous diarrhea

If diarrhea is frequent and severe enough that an employee or another person notices (for example, a person has been to the toilet numerous times)

> ❑ *Continuous diarrhea may indicate the person has a foodborne or waterborne infection such as cholera*
> ❑ *Diarrhea is also a common symptom of viral hemorrhagic fevers such as Ebola*

RECOGNIZE:
Continuous vomiting

Anyone who has vomited two or more times (not because of airsickness) or expresses concern to either an employee or others

❑ *Continuous vomiting may indicate the person has a foodborne or waterborne infection, such as cholera*
❑ *Vomiting is also a common symptom of viral hemorrhagic fevers such as Ebola*

*R*ECOGNIZE:
## Skin rash

- ❑ Abnormal areas on the skin that are often red or pink

- ❑ Rash may be flat, raised, blister-like, and/or crusted

- ❑ Rash may consist of separate spots, or it may run together; it may include one area of the body, such as the face, or more than one area

Examples of diseases that cause fever and rash include measles, rubella (German measles), and varicella (chickenpox)

*R*ECOGNIZE:
New unusual bruising or bleeding (not from injury)

Noticeable and unusual bruising or bleeding from the gums, ears, nose, or areas on the skin for which there is no obvious explanation

Bruising or bleeding, especially in the presence of fever, may indicate that the person has a hemorrhagic fever, such as Ebola or yellow fever

# *R*ECOGNIZE:
Confused mental state

- ❏ Not aware of surroundings
- ❏ Does not respond normally to questions or painful stimuli
- ❏ May appear to be sleepy or groggy or be confused about who they are, where they are going, or the time of day or week

Confusion may indicate meningitis or a serious infection in another body system
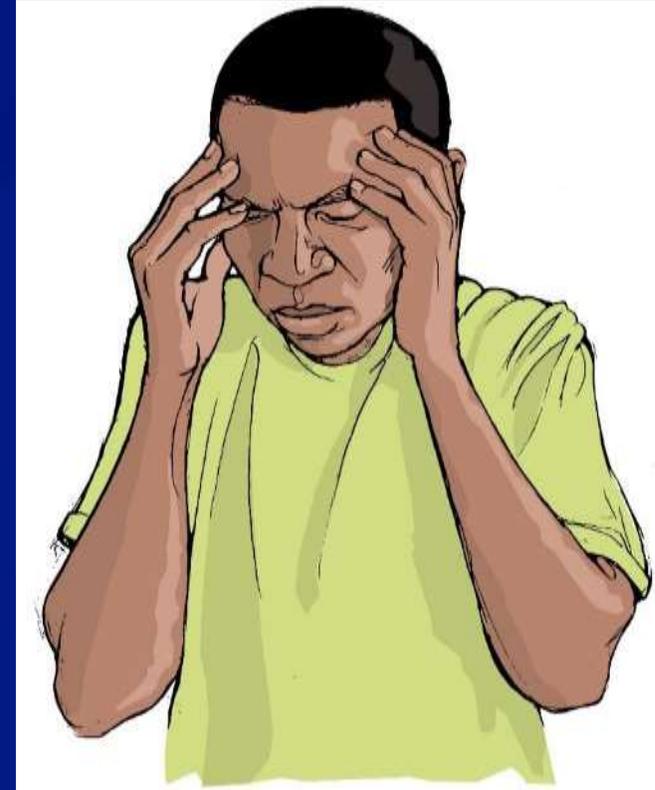
*R*ECOGNIZE:
Observations or questions to consider

❑ **Observations**

  ▪ You notice a person who seems unwell

  ▪ You notice a person who appears to have a flushed face

  ▪ You notice a person who is coughing continuously

❑ **Questions**

  ▪ How are you feeling?

  ▪ How long have you felt sick?

  ▪ Do you feel feverish?

ISOLATE:

Separate

- At least 2 meters from others OR in an empty room

- Provide a surgical mask (if available), or tissue, or ask the person to cover their nose and mouth if the person looks ill and

  - Is coughing or sneezing

  - Has a rash

- Do not provide a mask if the person is vomiting or cannot tolerate one

ISOLATE:
Not the same as quarantine!

Isolation and quarantine are public health practices used to stop or limit the spread of disease.

❑ **Isolation:** Separating sick people with a contagious disease away from people who are not sick
- In your role, this may just mean asking the person to remain in a less crowded area

❑ **Quarantine:** Separating and restricting the movement of people who were exposed to contagious disease to see if they become sick
- This is beyond your role at [POE]

*N*OTIFY:

- ❑ Port Health
- ❑ Immediate supervisor
- ❑ Other relevant airport stakeholders

Provide ill person's:
- ❑ *Signs and symptoms*
- ❑ *Any information about potential contacts (other individuals in traveling party who may have been exposed)*
- ❑ *Other relevant information you received*

NOTIFY:
Which situation should be reported to Port Health?

- ❑ A drunk traveler who vomits
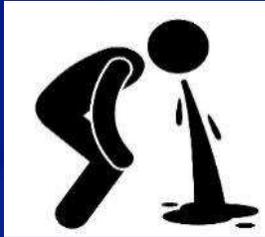
- ❑ A traveler suffering from continuous diarrhea

- ❑ An airport worker suffering from a fever and cough

- ❑ A pregnant woman who is vomiting

GIVE SUPPORT:

- ❏ There may be other tasks you can perform to help Port Health during a potential disease threat
- ❏ Port Health or other agencies may ask for your assistance
- ❏ Can you name some examples of ways your agency can provide further support?

GIVE SUPPORT:
Examples of support during a public health event

- ❑ Gather information from ill person
- ❑ Separate ill person from others
- ❑ Provide security assistance
- ❑ Distribute or collect health forms/information

Additional information may be requested from law enforcement, airline, or shipping agencies to assess whether to take steps to
- ❑ *Prevent further travel*
- ❑ *Contact those who were potentially exposed*

Personal Protective Equipment for Evaluation of Ill Passengers

❑ **Commonly used**
- ▪ Gloves
- ▪ Handwashing

❑ **Less frequent**
- ▪ Face mask
- ▪ Respirator
- ▪ Face shield or eye protection
- ▪ Gown
- ▪ Foot protection

Importance of Vaccination for POE Staff

- **Measles: multiple outbreaks where passengers & point-of-entry personnel were infected**
- **Influenza**

**Health Information for Port Partners:
MEASLES**

You might process international travelers who have measles.

Measles is highly contagious.

Measles is a virus that spreads easily from person to person by coughing or sneezing even *before* the rash appears—and can cause serious illness, even death. People in the same area may breathe in the virus and become sick.

Thank you!

For more information, please contact:
Centers for Disease Control and Prevention
1600 Clifton Road NE, Atlanta, GA 30333
Telephone: 1-800-CDC-INFO (232-4636) / TTY: 1-888-232-6348
E-mail: cdcinfo@cdc.gov   Web: www.cdc.gov

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

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