Committee: Cross Cutting

Title: Communicable Diseases of Public Health Concern among International or Interstate Travelers on Commercial Conveyances: A Framework for Mutual Notification between CDC and State and Territorial Health Departments

I. Statement of the Problem:
Disease transmission during travel is a relatively rare occurrence; however, instances of probable or confirmed transmission have been documented. (1-9) The Centers for Disease Control and Prevention’s (CDC) Division of Global Migration and Quarantine (DGMQ) relies on notifications from partner agencies, including state and territorial health departments, of suspected or confirmed communicable diseases to contain the introduction and spread of communicable diseases into and within the United States.† While CDC/DGMQ has provided syndrome definitions to US Customs and Border Protection, emergency medical service personnel and the airline or and shipping industries to guide reporting for illnesses identified during travel, to date no detailed guidance has been provided to health departments regarding the communicable diseases for which CDC/DGMQ requests notification.

This position statement outlines a standard bidirectional notification framework (Attachment) for state health and territorial health departments and CDC/DGMQ regarding communicable diseases associated with international or interstate travel on commercial conveyances that could pose a public health threat. To the extent possible, the framework has been designed to be consistent with position statement 09-SI-04. Tables 1 and 2 describe specific situations and diseases for which mutual notification will be conducted, as well as guidance on time frames and parameters for such notifications. The list of diseases for which notification to CDC/DGMQ is requested has been limited to those for which a specific response by CDC/DGMQ would be indicated. The appendix describes notification procedures for CDC/DGMQ and state and territorial health departments.

This notification framework is not intended to supplant existing disease notification processes or surveillance systems such as the National Notifiable Disease Surveillance System (NNDSS), but to facilitate the timely investigation of and response to specific cases or situations that might have resulted in the exposure of travelers or communities to a communicable disease of concern in order to reduce the risk of disease spread. Reliance on NNDSS would likely result in unacceptable delays in public health response due to intermittent reporting to NNDSS and lack of identifying information needed to obtain travel manifests.

CDC/DGMQ actions in response to communicable diseases threats may include providing health information to exposed travelers; initiating contact investigations of exposed travelers to facilitate case finding and provision of post-exposure interventions (immunization or antimicrobial prophylaxis) if available, or earlier recognition and intervention for secondary cases; issuing federal isolation or quarantine orders in the event of an incident involving a federally quarantinable disease.§

† Title 42, Code of Federal Regulations, Parts 70, 71– Public Health, Chapter I – Public Health Service, Department of Health and Human Services,
Part 70 - Interstate Quarantine: http://www.access.gpo.gov/nara/cfr/waisidx_08/42cfr70_08.html
Part 71 - Foreign Quarantine: http://www.access.gpo.gov/nara/cfr/waisidx_08/42cfr71_08.html

§ Under section 361 of the Public Health Service Act (42 USC § 264), the CDC Director may apprehend, detain, examine, or conditionally release persons believed to be carrying certain communicable diseases that are specified in an executive order of the president. This list of diseases
currently includes cholera, diphtheria, infectious tuberculosis, plague, smallpox, yellow fever, viral hemorrhagic fevers (Lassa, Marburg, Ebola, Crimean-Congo, South American, and others not yet isolated or named), severe acute respiratory syndrome, and influenza caused by novel or reemergent influenza viruses that are causing, or have the potential to cause, a pandemic (Executive Orders 13295, April 4, 2003, and 13375, April 1, 2005).
II. Statement of the desired action(s) to be taken:

1. CSTE and CDC will agree on adopting the proposed framework for bidirectional notification between CDC and state and territorial health departments for communicable diseases on commercial conveyances, ensuring that DGMQ is notified.

2. CSTE and CDC will agree on collecting travel histories for people with suspected cases of the communicable diseases listed in the framework including dates, places and modes of travel.

3. CSTE and CDC/DGMQ will agree to evaluate the proposed notification framework to estimate the public health impact in terms of reducing communicable disease risks to travelers and communities, and the impact to health departments in terms of time and resources required.

III. Public Health Impact:
Adoption of these recommendations will

1. Facilitate bidirectional notification between CDC and state health departments regarding communicable diseases risks related to international or interstate travel on commercial conveyances

2. Clarify for health departments the situations and diseases for which CDC/DGMQ requests notification in order to facilitate rapid response to communicable disease risks on commercial conveyances

3. Outline situations for which CDC/DGMQ will notify state health departments

IV. References


V. Coordination

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Attachment

Framework for Standard Bidirectional Notifications between CDC and State and Territorial Health Departments regarding Travel-related Communicable Disease Threats

When conducting notifications in accordance with procedures approved in position statement 09-SI-04, CDC and state health departments will ensure notification of CDC/DGMQ in the event of situations posing a communicable disease risk to either the traveling public or destination communities within the United States or internationally. Such situations may include but are not limited to the following:

- Communicable diseases in passengers or crew members on commercial conveyances with the potential for transmission to others onboard
- Clusters of infectious or toxin-related disease in recent travelers where it is suspected that the exposure occurred on board a commercial conveyance or at a U.S. port of entry or transit point including suspected bioterrorism events
- Cases or clusters of communicable disease in passenger(s) or crew member(s) on a commercial conveyance, that are unusual or unexpected or that might have serious public health impact or the potential for widespread international and domestic spread, including diseases that might require CDC’s notification of the World Health Organization as a public health emergency of international concern in accordance with the International Health Regulations (IHR) 2005. These diseases would include but are not limited to the following:
  - Diphtheria (Corynebacterium diphtheriae)
  - Influenza – an identified novel or zoonotic strain considered to be a public health risk
  - Plague (Yersinia pestis)
  - Rabies
  - Severe Acute Respiratory Syndrome (SARS coronavirus)
  - Smallpox (Variola)
  - Viral Hemorrhagic Fevers (filoviruses [e.g., Ebola, Marburg] and arenaviruses [e.g., Lassa, Machupo])
  - Zoonotic poxviruses
- An individual reasonably suspected of being infectious with a communicable disease that poses a serious public health threat, and unaware of or likely to disregard public health recommendations against travel on commercial airlines and for whom federal travel restrictions may be warranted
- Cases or clusters of communicable or toxin-related disease among recently arrived refugees that may represent an outbreak in a refugee camp or overseas transit site

Specific infectious diseases for which notification to CDC/DGMQ is requested are listed in Table 1. Situations for which CDC/DGMQ will notify health departments are listed in Table 2.

Procedures for contacting CDC/DGMQ for the purpose of disease notification and procedures for CDC/DGMQ to notify state health departments are described in the Appendix.
<table>
<thead>
<tr>
<th>Disease</th>
<th>Parameters</th>
<th>Conveyance Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foodborne diseases with fecal-oral spread</td>
<td>Any confirmed case of foodborne infection transmitted by the fecal-oral route in a crew member with food- or beverage-handling responsibilities</td>
<td>Aircraft</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cargo ships²</td>
</tr>
<tr>
<td>Legionellosis <em>(Legionella pneumophila)</em></td>
<td>Any confirmed case of legionellosis in an individual who traveled by <em>ship</em> (cruise or cargo) within 10 days prior to the onset of symptoms and for whom no other source of exposure is known. Note: The primary notification mechanism for legionellosis cases is by emailing <a href="mailto:travellegionella@cdc.gov">travellegionella@cdc.gov</a>. If this has been done, additional notification to the CDC Quarantine Station is not necessary.</td>
<td>All</td>
</tr>
<tr>
<td>Measles (Rubeola)</td>
<td>Any confirmed, probable or suspected case of measles in an individual with a history of international or commercial interstate travel during the period of infectivity: 4 days before to 4 days after onset of rash.</td>
<td>All</td>
</tr>
<tr>
<td>Meningococcal disease <em>(Neisseria meningitidis), invasive</em></td>
<td>Any confirmed, probable or suspected case of invasive meningococcal disease (meningitis or meningococcemia) in an individual with a history of international or commercial interstate travel during the period of infectivity: one week prior to the onset of symptoms until 24 hours after initiation of effective antimicrobial therapy. <strong>For air travel:</strong> time on aircraft (flight plus time spent on tarmac) ≥ 8 hours</td>
<td>All</td>
</tr>
<tr>
<td>Mumps</td>
<td>Any confirmed or probable case of mumps in an individual with a history of international or commercial interstate travel on a <em>cruise or cargo ship</em> during the period of infectivity: 2 days before to 5 days after onset of parotitis.</td>
<td>All</td>
</tr>
<tr>
<td>Pertussis <em>(Bordetella pertussis)</em></td>
<td>Any confirmed or probable case of pertussis in an individual with a history of international or commercial interstate travel during period of infectivity: the first three weeks after cough onset until 5 days after initiation of effective antimicrobial therapy.</td>
<td>All</td>
</tr>
<tr>
<td>Rubella</td>
<td>Any confirmed or probable case of rubella in an individual with a history of international or commercial interstate travel during the period of infectivity: 7 days before to 7 days after the onset of rash.</td>
<td>All</td>
</tr>
<tr>
<td>Tuberculosis, infectious <em>(Mycobacterium tuberculosis complex)</em></td>
<td>A confirmed case of infectious pulmonary or laryngeal tuberculosis meeting clinical/laboratory criteria below in an individual with a history of international or commercial interstate travel during the period of infectivity: from 3 months prior to diagnosis (or initiation of the work-up that led to the diagnosis) until</td>
<td>All</td>
</tr>
</tbody>
</table>
there is evidence of presumptive non-infectiousness based on appropriate treatment and laboratory testing.

**Clinical/laboratory criteria**

- Isolate susceptible to isoniazid and rifampin:
  - Sputum positive for *M. tuberculosis* by culture or nucleic acid amplification test
  
  **AND**
  
  - Sputum smear positive for AFB or cavitation detected on chest x-ray

- Isolate multidrug-resistant:
  - All regardless of sputum smear or chest x-ray results

DGMQ conducts investigations until three months after travel.

**For air travel:** time on aircraft (flight plus time spent on tarmac) ≥ 8 hours.

| Varicella (Varicella-zoster virus) | Any confirmed or probable case of varicella in an individual with a history of international travel on a *cargo ship* during the period of infectivity: 2 days before onset of rash until all lesions crusted. | Cargo ships \(^4\) |

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1. Case definitions provided by the National Notifiable Diseases Surveillance System should be used. State and territorial health departments should consider the urgency of the response to determine the time frame for notification. Less urgent notifications may be made during business hours.

2. Gastrointestinal disease on *cruise ships* is managed by the CDC Vessel Sanitation Program. The purpose of notification to CDC/DGMQ is to ensure the airline or shipping company is aware of infection in a food- or beverage-handler and that interventions are conducted as indicated.

3. Mumps cases on aircraft are no longer being investigated.

4. Varicella cases on aircraft are not investigated. Guidance for the investigation and management of uncomplicated varicella cases on cruise ships has been provided to the cruise industry; CDC/DGMQ assistance is available to cruise ships on request.
Table 2: Situations for which CDC/DGMQ will notify state health departments and time frames for notification

<table>
<thead>
<tr>
<th>Situation</th>
<th>Time Frame</th>
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</thead>
<tbody>
<tr>
<td>CDC/DGMQ will provide names and contact information by jurisdiction for individuals exposed to a communicable disease on a conveyance if a contact investigation is warranted.</td>
<td>Variable¹</td>
</tr>
<tr>
<td>CDC/DGMQ will notify the health department of jurisdiction if a traveler with a communicable disease requiring isolation intends to disembark within the jurisdiction.</td>
<td>Variable¹</td>
</tr>
<tr>
<td>CDC/DGMQ believes that issuance of isolation or quarantine orders for a traveler with known or suspected to be infected with a quarantinable communicable disease is warranted.</td>
<td>Extremely urgent (&lt; 4 hours)</td>
</tr>
<tr>
<td>CDC/DGMQ activates a Memorandum of Agreement with a hospital in the health department’s jurisdiction to facilitate isolation, evaluation or treatment of a traveler with a communicable disease.</td>
<td>Extremely urgent (&lt; 4 hours)</td>
</tr>
<tr>
<td>CDC/DGMQ receives notification from a foreign health authority in accordance with the IHR 2005 of a communicable disease in a US resident, or in a foreign traveler if the exposure may have occurred in a US community.</td>
<td>Variable¹</td>
</tr>
<tr>
<td>CDC/DGMQ requests health department assistance with performing or coordinating diagnostic testing for a traveler with suspected communicable disease or provision of post-exposure prophylaxis to exposed travelers.</td>
<td>Variable¹</td>
</tr>
<tr>
<td>CDC/DGMQ learns of an unusual occurrence involving imported animals or animal products into a health department’s jurisdiction where a communicable disease risk is suspected.</td>
<td>Variable¹</td>
</tr>
</tbody>
</table>

¹Timing will depend on time-frame for conveyance arrival, disease severity and transmissibility, availability of and window period for post-exposure prophylaxis, and logistical issues related to obtaining data.
APPENDIX

Procedures for notifying CDC/DGMQ

Urgent notifications should be made by telephone via the CDC Emergency Operations Center (EOC) at 770-488-7100.

- The EOC can connect callers directly with the CDC Quarantine Station with jurisdiction over the state reporting the case or the on-call DGMQ Duty Officer
- If working with a CDC Division other than CDC/DGMQ, arrangements may be made with that CDC Division for notification of CDC/DGMQ.

Less urgent disease notifications may be made by telephone, email or fax during business hours to the CDC Quarantine Station with jurisdiction over the state of residence of the case.

A list of CDC Quarantine Stations, their jurisdictions, and 24-hour contact information is available at: http://www.cdc.gov/ncidod/dq/quarantine_stations.htm.

Procedures for notifying state health departments

Simultaneous notifications to multiple jurisdictions will be provided through CDC’s Epidemic Information Exchange (Epi-X).

Notifications to individual state health departments will be made by CDC Quarantine Station staff using established communication channels.