CDC: Partnering for Health at US Ports of Entry

Nina Marano DVM MPH
Federal Inspection Service Area
Working Environment

- Fast-paced
- Numerous travelers
- Many regulations
What We Do Each Day

- Respond to illnesses or deaths (1,182 reports*)
- Perform passenger notification and contact tracing (132 flight investigations*)
- Inspect imported animals, animal products, human remains, and etiologic agents (4,084 inspections*)
- Screen cargo and hand-carried items
- Develop strategies to prevent, detect and respond to infectious diseases in travelers
- Plan for emergency response at all 327 ports of entry

* 2011 Data from Quarantine Activity Reporting System
What We Do Each Day, cont.

- Distribute (antimalarial) investigational drugs and (botulism and diphtheria) antitoxins (153 vials released*)
- Monitor the health of and review medical documents of immigrants, asylees and parolees (151,057 packets reviewed*)
- Notify health departments of conditions of public health interest
- Public health Do Not Boards (DNBs) and Lookouts (48 DNB/LO additions/45 removals*)
- Respond to mass migration emergencies

*2011 Data from Quarantine Activity Reporting System
Quarantinable and Other Communicable Diseases of Public Health Concern

Quarantinable*
Smallpox, Cholera, Plague, Viral Hemorrhagic Fevers, Infectious Tuberculosis, Yellow Fever, Diphtheria, SARS, Novel Influenza Virus (pandemic potential)

Public Health Concern (examples)
Rabies, malaria, dengue, measles, mumps, rubella, varicella, meningococcal, zoonotic poxvirus, polio, legionellosis, pertussis

Under 42 Code of Federal Regulations parts 70 and 71 and by Executive Order 13375: Revised List Of Quarantinable Communicable Diseases, President George W. Bush, April 1, 2005
Q - Station Emergency Response

- **Illness notification and response**
  - Do Not Board order
  - Contact Investigation
  - Isolation order
  - Travel Health Alert Notice
Illness Notification for Measles

Location: Detroit, New York, and Chicago

- Detroit Quarantine Station notified by Kentucky State Epidemiologist
- Refugee with laboratory-confirmed measles flew from Qatar to New York to Chicago to Evansville, Indiana, then drove to KY
- Three flight manifests ordered
- 67 passenger contacts identified (8 infants; one received immunoglobulin)
- 15 State health departments notified within 3 days
“Do Not Board” for Tuberculosis

Location: Newark, New Jersey and San Francisco International Airport

- New Jersey Department of Health notifies Newark Quarantine Station
- Individual with highly infectious multidrug-resistant tuberculosis (MDR-TB) intends to travel internationally by air
- Placed on DNB list
- Despite DNB posting in Transportation Security Administration (TSA) system, individual flies from Philadelphia to San Francisco
- At SFO, obtains boarding pass for an international departure
Do Not Board, cont.

Location: Newark, New Jersey and San Francisco International Airport

- Department of Homeland Security notifies CDC Emergency Operations Center which notifies SFO Quarantine Station
- U.S. Customs and Border Protection and TSA intercept traveler at the gate
- Federal isolation order issued
- CDC transports and escorts traveler back to NJ
- Traveler hospitalized
- County Health Department isolation order issued
In-Flight Illness Event Notification

- Federal Aviation Administration & CDC Agreement
- Interstate or international flights
- Parallel communication chain through HHS and DHS
H1N1 Pandemic Influenza Response

- Partner coordination and education
- Enhanced surveillance
- Traveler information
Haiti Response

- Repatriation
- Adoptees
- Traveler info about Cholera
Japan Radiation Response

- Occupational safety
- Repatriation
- Screening plan

CDC Algorithm for CBP Radiological Screening Program for Travelers Returning to the U.S. from Japan

3/23/2011
Assessment and assurance of core capacities for response to public health emergencies of international concern
Rapid Distribution of Drugs to Treat Malaria, Botulism & Diphtheria
Migrant Health

Panel Physician exam

Port of Entry Immigration processing (500,000*)

Condition of public health concern (24,000*)

Quarantine Station review

Electronic Disease Notification

Health Department

*Annually, newly arriving immigrants
Regulations to Prevent the Introduction of Zoonotic Diseases

42 Code of Federal Regulations (CFR) 71 – Foreign Quarantine

Subpart F – Importations

71.51 – Dogs and cats
71.52 – Turtles, tortoises, and terrapins
71.53 – Nonhuman Primates
71.54 – Etiologic agents, hosts, and vectors
71.56 – African rodents

Subpart D – Health Measures at U.S. Ports:

Communicable Diseases

71.32(b) – Persons, carriers, things
How do we Multiply our Workforce at Ports of Entry?

RECOGNIZE ILL TRAVELER
• See back of card

ISOLATE
• Separate ill person ≥6 feet from others

NOTIFY
• If situation is life-threatening, call EMS
• Alert CBP Supervisor
• CBP Supervisor contacts CDC Quarantine Station

GIVE SUPPORT
• Follow instructions of CBP Supervisor and CDC Quarantine Station staff

CDC El Paso Quarantine Station (24 hours a day)
(866) 638-9753
www.cdc.gov/quarantine

RECOGNIZE ILL TRAVELER
Look, listen, or ask for signs and symptoms of illness
Alert CBP Supervisor for any traveler who:
✔️ Says he or she may have a FEVER
AND
✔️ Reports having or is observed with at least ONE of the following conditions:
  • Skin rash
  • Difficulty breathing
  • Decreased consciousness
  • Persistent cough
  • Persistent vomiting
  • Severe diarrhea
  • Unexplained bruising or bleeding
  • Recent paroxysm

Wash hands for 15-20 seconds after every incident
SAFER • HEALTHIER • PEOPLE

Training Specialist at the Federal Law Enforcement Training Center
U.S. Ports of Entry and CDC Quarantine Stations

- CDC Quarantine Station (n=20)
- U.S. Port of Entry (n=327)
Training for CDC Quarantine Branch Personnel

- Skill-based training on basic operating procedures at ports of entry
- Utilizes distance-learning, videoconference technology
- Builds standardization for illness response
## Training for U.S. Customs and Border Protection Officers

<table>
<thead>
<tr>
<th>Federal Law Enforcement Training Center</th>
<th>On site Training at Ports of Entry</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Basic training course</td>
<td>• Refresher training sessions</td>
</tr>
<tr>
<td>– ~2000 per year over 5 years</td>
<td>• Modularized sessions</td>
</tr>
<tr>
<td>– Classroom training</td>
<td>• Conforms to constraints of port</td>
</tr>
<tr>
<td>– Computer-generated alerts</td>
<td>environment</td>
</tr>
<tr>
<td>– Luggage searches</td>
<td></td>
</tr>
<tr>
<td>– Practical skills training for</td>
<td></td>
</tr>
<tr>
<td>making health assessments</td>
<td></td>
</tr>
<tr>
<td>• Agriculture specialists training</td>
<td></td>
</tr>
<tr>
<td>– ~200 per year over 3 years</td>
<td></td>
</tr>
<tr>
<td>– Classroom training</td>
<td></td>
</tr>
<tr>
<td>– Scenario-based learning</td>
<td></td>
</tr>
</tbody>
</table>
Exercising Communicable Disease Response Plans

• Port and community involvement
  Decision makers
  Response managers

• Partners included
  Port Operations
  Customs and Border Protection
  Local and State Public Health Depts.
  Airline representatives
  Emergency Medical Services and hospitals

• Tabletop and functional exercises
Exercise Results: What’s Needed?

• More engagement by additional partners and ports
• CDC regulatory authority for screening flights departing the US
• Better understanding of isolation and quarantine requirements
Response to Monkeypox Scare at Chicago Midway Airport
CDC & Port Partners:
“The Nation’s Invisible Safety Net”
CDC Kenya
Refugee Health Program Mission

• Regulatory Mission
  Prevent the introduction, transmission, & interstate spread of communicable diseases in/into the United States & its Territories by immigrants, refugees & migrants from Africa

• Public Health Mission
  Prevent the introduction, transmission, & spread of communicable diseases among immigrants, refugees, & migrants from Africa
Measles and Air Travel

November 9, 2005

– 17-year old man arrived in Newark, New Jersey US, had symptoms consistent with measles
– Part of a group of 148 refugees from the Eastleigh community in Nairobi, Kenya, who arrived in the US from November 3 through 15.

• Measles Genotype B3 (subgroup B3.1) was identified from virus samples from this patient
  – Sequence was identical to sequences from measles viruses collected in Nairobi and Machakos, Kenya, in October 2005
• Subsequent surveillance for measles virus detected an epidemiologic link between this refugee and a Dutch tourist in New Jersey
  – Identical genotype B3 sequences from cases in the United States, Canada, and Mexico in Nov-Dec 2005 indicate that Kenya was likely to have been the common source of virus
Measles and Travel

• March 2, 2011
  – Minnesota Department of Health (MDH) confirmed measles in a Hennepin County resident aged 9 months

• Investigation of contacts and heightened surveillance
  – Total of 13 epidemiologically linked cases in Hennepin County residents
  – The index patient was a U.S.-born child of Somali descent, aged 30 months, who developed a rash February 15, 14 days after returning from a trip to Kenya
Acknowledgements

• CDC Atlanta
  – Quarantine and Border Health Services Branch
• CDC Kenya
  – Refugee Health Program for Africa
Questions?

For more information, please contact:
Centers for Disease Control and Prevention
1600 Clifton Road NE, Atlanta, GA 30333
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.