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GLOBAL DISEASE MONITORING



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Public Health Information Sharing Protocol at the Global Level

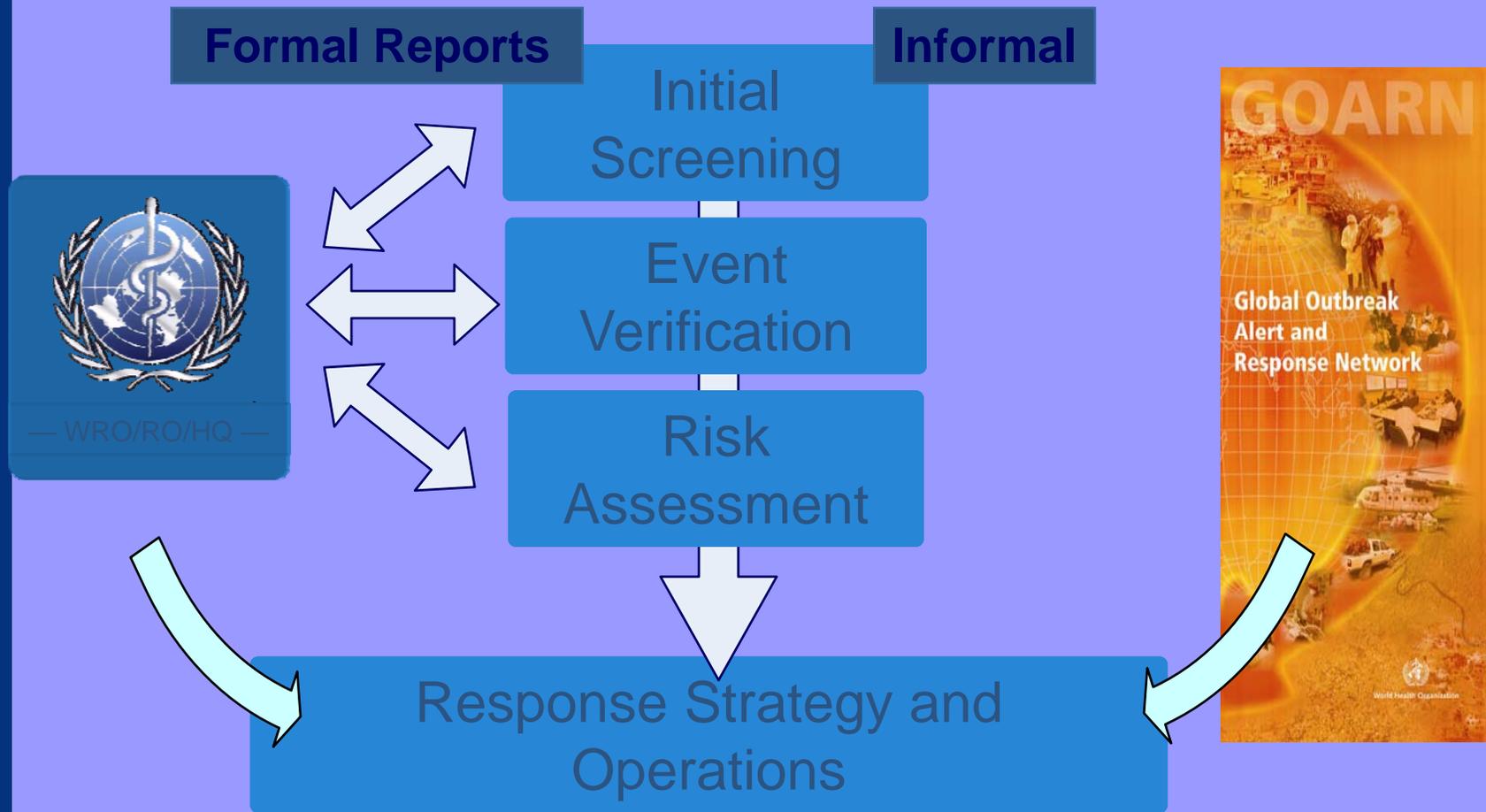
- International Health Regulations mandate that 194 countries to comply to:
 - Report any public health event that may have international impact on travel and trade to the World Health Organization
 - Countries are asked to:
 - Identify, verify the event
 - Assess the risk
 - Determine the appropriate response
 - The reports are shared with authorized national focal points who are designated to receive these reports
 - Countries are responsible to release the information, but under special circumstances, WHO may release the information



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WHO Event Management Process



WHO protocol for monitoring daily outbreak response globally. Information is taken from informal and formal sources and verified by the country of origin.



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Points of entry

Points of entry provisions in the International Health Regulations (2005) are designed to minimize public health risks caused by the spread of diseases through international traffic. The IHR (2005) define a point of entry as "a passage for international entry or exit of travellers, baggage, cargo, containers, conveyances, goods and postal parcels, as well as agencies and areas providing services to them on entry or exit".



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Guidance of IHR (2005) at points of entry

- • Management of public health risks at points of entry
- • Provision of technical assistance in developing points of entry capacities
- • Maintenance of accessible data for designated points of entry, including capacity to issue Ship Sanitation Control Exemption and Ship Sanitation Control certificates
- • Inspection and WHO certification criteria for airports and ports
- • Recommended measures for affected travellers, conveyances, containers, cargo and goods
- • Ship sanitation and hygiene and sanitation in aviation
- • Application of health measures at ground crossings



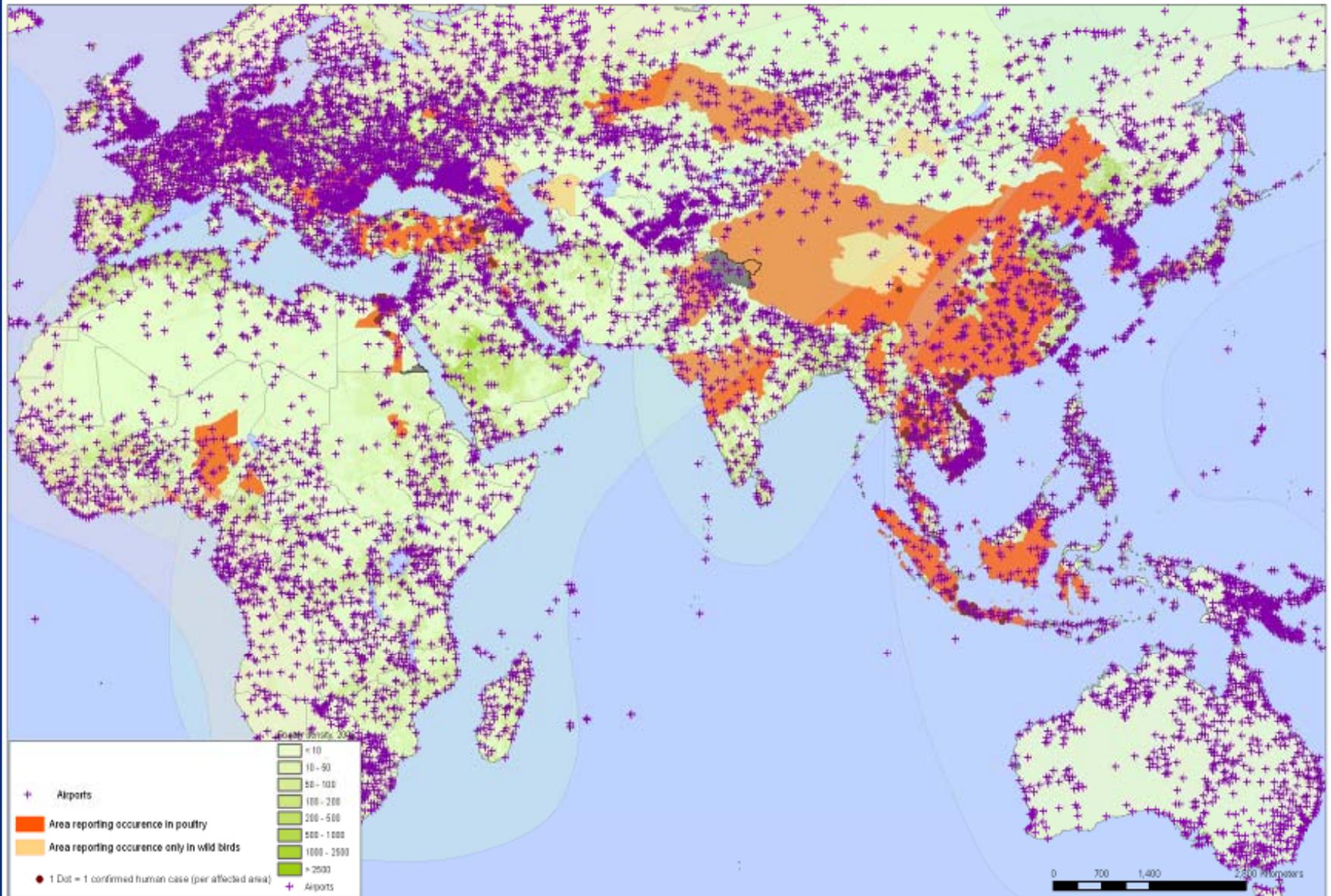
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Example of airports (purple +)

Avian Influenza : confirmed human cases and occurrence in poultry and wild birds of H5N1 avian influenza, since 2003



World Health Organization

The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

Data source: World Organisation for Animal Health (OIE) and national governments/WHO/EPR
Map Production: Public Health Mapping and GIS
Communicable Diseases (CDS) World Health Organization © WHO 2006. All rights reserved



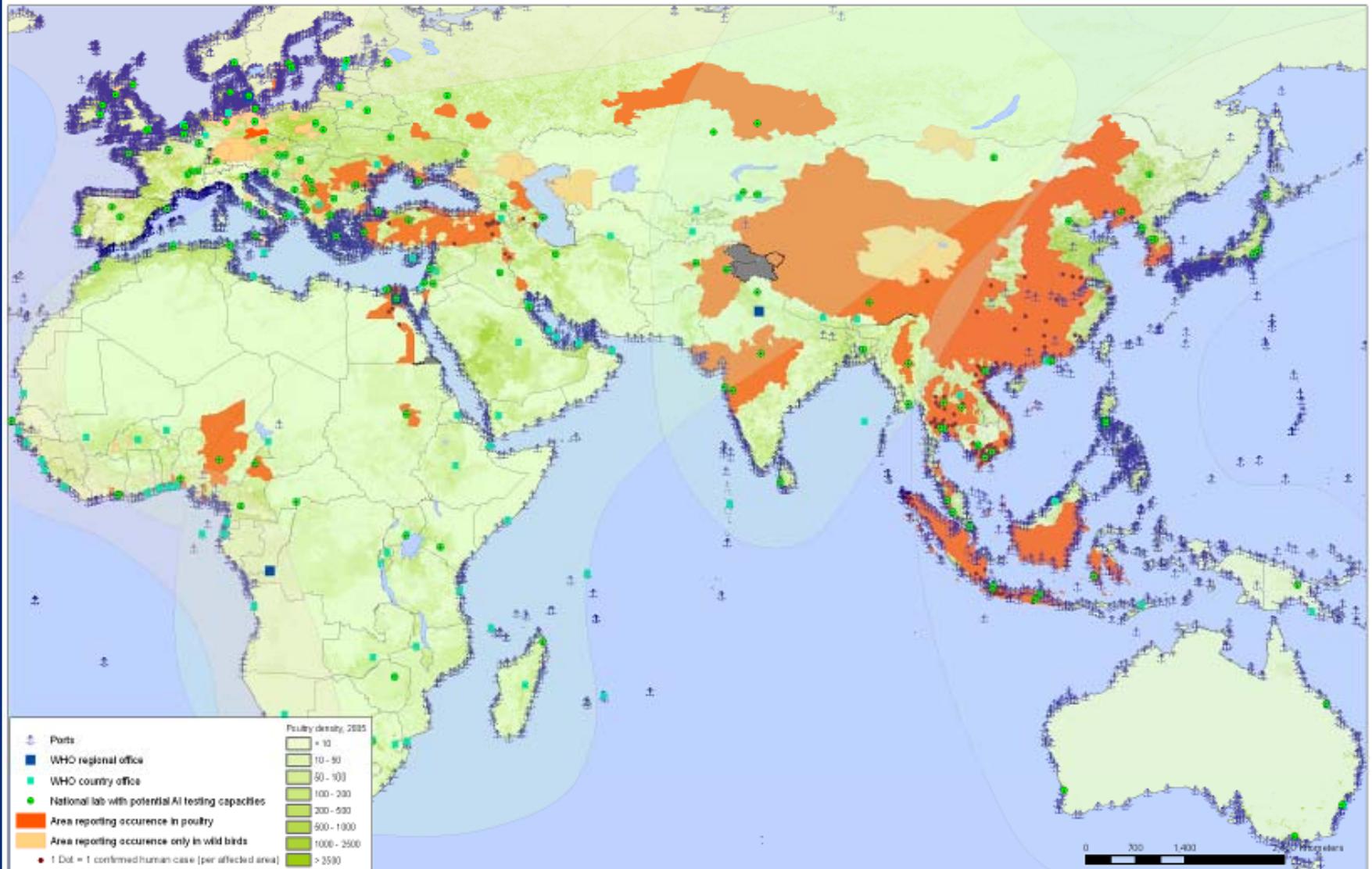
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Example of operational ports (blue dots)

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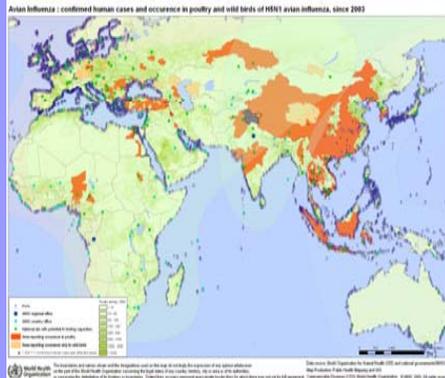
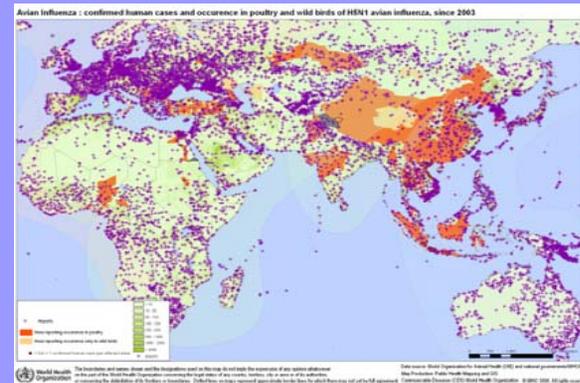
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Why Public Health Activities at a Point of Entry?

airports



ports



ground crossings



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Examples of Monitoring

- Examples of monitoring
 - Temperature (SARS)
 - Rash illness
 - Tuberculosis (X-RAYS)



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Example of Monitoring at Port of Entry:

- Public Health Action: Temperature measurement at Ports of Entry
- Benefit: Provides rapid assessment of potential risk
- Be aware:
 - Does not tell you what illness the traveller may be affected with
 - Do you have a plan for what to do should the traveller is "hot"?
 - What are the rights of the traveller being subjected to the examination? The authorities?



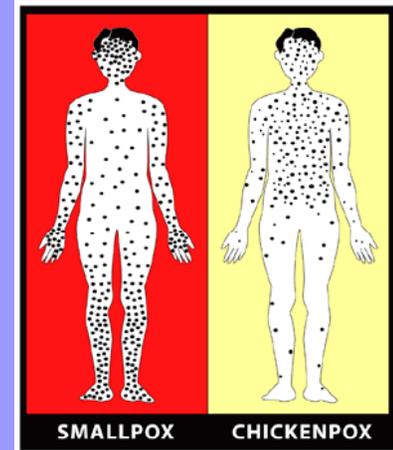
Observations at the Borders

- Recognition of biological materials and equipment
- Public Health can provide essential training
- Public Health can provide essential advice concerning specific events



Example, simple observation post can be set up to monitor travellers

Example, can you identify if a rash on a traveller is cause for alarm?
Connect with your public health officials





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Immigration/Health Screening

- Tuberculosis (X-RAYS)
 - Persons entering a country, may be required to produce x-rays and medical documents.

HOSPITAL ADMISSION
CHEST X-RAY SCREENING CARD

X-RAY IMPRESSION

Negative for tuberculosis

Suspicious of tuberculosis

Probably Active

Probably inactive - Is supervision recommended? YES NO

Private physician or other follow-up:



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Reporting Mechanisms

- Establish reporting mechanisms prior to an incident occurring.
 - Strengthen connections between personnel/agencies with border responsibilities
 - Establish guidelines for notifications to public health, law enforcement and customs
 - Share information and training



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International Health Regulations

"If a State Party has evidence of an unexpected or unusual public health event within its territory, irrespective of origin or source, which may constitute a public health emergency of international concern, it shall provide to WHO all relevant public health information" (WHA58.3, 2005).



Considerations of an Imported Biothreat (1)

- In 2006 a person traveled from Africa to Europe infected with Lassa Fever virus
- In flight, patient was sick (cough and fever) and posed a threat to infecting other passengers and contaminating the aircrafts
- Patient died and had been hospitalized (2 different hospitals). Did patient pose a risk to hospital staff?



Considerations of an Imported Disease (2)

- 232 persons at risk of exposure had to be medically followed to limit spread of disease
 - 12 persons were “high risk” (family members and health care workers), 1 doctor had evidence of exposure
 - 19 persons on aircraft sitting within 2 rows around the patient were at “low risk” of exposure, no one was ill
- Aircraft seat needed decontamination