## **International Health Regulations, WHO**

#### http://www.who.int/ihr/revised annex2 guidance.pdf ANNEX 2 DECISION INSTRUMENT FOR THE ASSESSMENT AND NOTIFICATION OF EVENTS THAT MAY CONSTITUTE A PUBLIC HEALTH EMERGENCY OF INTERNATIONAL CONCERN Events detected by national surveillance system (see Annex 1) A case of the tollowing Any event of potential international public An event involving the following diseases is unusual or diseases shall always lead to health concern, including those of utilization of the algorithm, because they have demonstrated unexpected and may have serious public health impact, and thus shall be notified<sup>a,b</sup>: - Smallpox - Policy politics due to unknown causes or the ability to cause serious public OB OR health impact and to spread rapidly internationally\*: sources and those involving other events or diseases than those - Cholera wiid-type policylrus - Human influenza listed in the box on the - Pneumonic plague - Yellow fever - Viral haemonthagic fevers (Ebola, Lassa Marburg) - West Nile fever right shall lead to utilization of the caused by a new algorithm. subtype Severe acute Other diseases that are of respiratory, syndrome (SARS), special national or regional concern, e.g. dengue fever, Rift Valley fever, and meningococcal disease is the public health impact of the event serious? No Yes is the event unusual or is the event unusual or unexpected? unexpected? Yes Yes No No is there a significant risk of international spread? is there a significant risk of international spread? Is there a significant risk of inter-Not notified at this Yes stage, Reassess when more information No

EVENT SHALL BE NOTIFIED TO WHO UNDER THE INTERNATIONAL HEALTH REGULATIONS

becomes available

<sup>&</sup>lt;sup>a</sup> As per WHO case definitions.
<sup>b</sup> The disease list shall be used only for the purposes of these Regulations.

#### DOES THE EVENT MEET AT LEAST TWO OF THE FOLLOWING CRITERIA?

I is the public health impact of the event serious?

- 1. Is the number of cases and/or number of deaths for this type of event large for the given place, time or population?
- 2. Has the event the potential to have a high public health impact?

THE FOLLOWING ARE EXAMPLES OF CIRCUMSTANCES THAT CONTRIBUTE TO HIGH PUBLIC HEALTH IMPACT:

- Event caused by a pathogen with high potential to cause epidemics (infectiousness of the agent, high case fatality, multiple transmission routes or healthy carrier).
- Indication of treatment failure (new or emerging antibiotic resistance, vaccine failure, antidote resistance or failure).
- Event represents a significant public health risk even if no or very few human cases have yet been identified.
- Cases reported among health staff.
- The population at risk is especially vulnerable (refugees, low level of immunization, children, elderly, low immunity, malnourished, etc.).
- Concomitant factors that may hinder or delay the public health response (natural catastrophes, armed conflicts, unfavourable weather conditions, multiple foci in the State Party).
- Event in an area with high population density.
- Spread of toxic, infectious or otherwise hazardous materials that may be occurring naturally or otherwise that has contaminated or has the potential to contaminate a population and/or a large geographical area.
- Is external assistance needed to detect, investigate, respond and control the current event, or prevent new cases?

THE FOLLOWING ARE EXAMPLES OF WHEN ASSISTANCE MAY BE REQUIRED:

- ✓ Inadequate human, financial, material or technical resources in particular:
  - Insufficient laboratory or epidemiological capacity to investigate the event (equipment, personnel, financial resources)
  - Insufficient antidotes, drugs and/or vaccine and/or protective equipment, decontamination equipment, or supportive equipment to cover estimated needs
  - Existing surveillance system is inadequate to detect new cases in a timely manner,

IS THE PUBLIC HEALTH IMPACT OF THE EVENT SERIOUS?

Answer "yes" if you have answered "yes" to questions 1, 2 or 3 above.

# II. Is the event unusual or unexpected? 4. Is the event unusual? the event unusual or unexpected? THE FOLLOWING ARE EXAMPLES OF UNUSUAL EVENTS: The event is caused by an unknown agent or the source, vehicle, route of transmission

- Evolution of cases more severe than expected (including morbidity or case-fatality) or
- with unusual symptoms.
- Occurrence of the event itself unusual for the area, season or population.
- is the event unexpected from a public health perspective?

THE FOLLOWING ARE EXAMPLES OF UNEXPECTED EVENTS:

Event caused by a disease/agent that had already been eliminated or eradicated from the State Party or not previously reported.

IS THE EVENT UNUSUAL OR UNEXPECTED?

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there a significant risk of international spread?

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Answer "yes" if you have answered "yes" to questions 4 or 5 above.

## III. Is there a significant risk of international spread?

#### 6. Is there evidence of an epidemiological link to similar events in other States?

7. Is there any factor that should alert us to the potential for cross border movement of the agent, vehicle or host?

THE FOLLOWING ARE EXAMPLES OF CIRCUMSTANCES THAT MAY PREDISPOSE TO INTERNATIONAL

- Where there is evidence of local spread, an index case (or other linked cases) with a history within the previous month of:
  - international travel (or time equivalent to the incubation period if the pathogen is
  - participation in an international gathering (pilgrimage, sports event, conference,
  - close contact with an international traveller or a highly mobile population.
- Event caused by an environmental contamination that has the potential to spread across international borders.
- Event in an area of intense international traffic with limited capacity for sanitary control or environmental detection or decontamination.

IS THERE A SIGNIFICANT RISK OF INTERNATIONAL SPREAD?

ANSWER "YES" IF YOU HAVE ANSWERED "YES" TO QUESTIONS 6 OR 7 ABOVE.

#### IV. Is there a significant risk of international travel or trade restrictions? of international travel Have similar events in the past resulted in international restriction on trade and/or travel? is the source suspected or known to be a food product, water or any other goods that might be contaminated that has been exported/imported to/from other States? 10. Has the event occurred in association with an international gathering or in an area of intense international tourism? 11. Has the event caused requests for more information by foreign officials or international media? Risk IS THERE A SIGNIFICANT RISK OF INTERNATIONAL TRADE OR TRAVEL RESTRICTIONS? ANSWER "YES" IF YOU HAVE ANSWERED "YES" TO QUESTIONS 8, 9, 10 OR 11 ABOVE.

States Parties that answer "yes" to the question whether the event meets any two of the four criteria (I-IV) above, shall notify WHO under Article 6 of the International Health Regulations.

# Case one: E. coli 0157:H7 in Spinach (This case study occurred in 2006 and is summarized in an INFOSAN Note19).

In September 2006, the United States of America experienced an E. coli O157:H7 outbreak involving fresh, bagged spinach with reported 205 cases of illness including 104 hospitalizations, 31 cases of kidney failure and 3 deaths.

Under the IHR(2005) Decision Instrument (see appendix one), the presence of at least two of the four criteria means that the event needs to be to notified:

#### 1. Is the public health impact of the event serious?

• Yes. The event is caused by a pathogen which causes serious disease and death.

### 2. Is the event unusual or unexpected?

- No. Event is caused by a known agent from a likely common source outbreak.
- Evolution of cases is not more serious than expected.
- Presence of Enterohaemorrhagic E. coli in produce is a known problem.

### 3. Is there a significant risk of international spread?

- Yes. The national authority responsible for food safety confirmed that export of the affected product occurred.
- National authority responsible for food safety confirmed that many people cross the border daily from two neighbouring countries and may have been exposed to the contaminated food.

#### 4. Is there significant risk of international travel or trade restrictions?

• Yes. Similar events have resulted in National Authorities in importing countries putting in place international trade restrictions.

Three of the four criteria have been meet. Therefore based on the above information, this event would have required notification under the IHR(2005).