ICAO and management of communicable disease

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Plan

• Pandemic planning in aviation
  – Chicago Convention
• Central role of WHO
• Communication
  – UN
  – Pilot/Air Traffic
• ICAO provisions
• Airport screening
• (ICAO declaration)
Article 14, Convention on International Civil Aviation (Chicago Convention – 1944)

• ‘Each contracting State agrees to take effective measures to prevent the spread by means of air navigation of cholera, typhus (epidemic), smallpox, yellow fever, plague, and such other communicable diseases as the contracting States shall from time to time decide to designate....’
2003: SARS
2005 – Avian influenza
2009

Influenza A(H1N1)
Central role of WHO
Wednesday 24 June

- 55,867 laboratory confirmed cases, 238 deaths
- 6-9 months for virus to spread
- Only 2 months into the initial phase
- May become more severe
27 April 2009: 4 countries, reporting 73 cases

Canada 6 cases
USA 40 cases
Mexico 26 cases 7 deaths
Spain 1 case

Total: 73 cases 7 deaths
Pandemic alert phase 5

(phase - signifies spread of disease, not severity)

• Phase 5
  – The same identified virus has caused sustained community level outbreaks in at least two countries in one WHO region

• Phase 6
  ....community level outbreaks in at least one other country in another region
World Health Organization

- No travel restrictions advised
  - Disease has already spread
  - Screening unlikely to have any significant effect
- At present, illness is mild in most cases
  - but about half of deaths occur in otherwise healthy young individuals
- Can be treated by oseltamivir (Tamiflu)
• Simple, practical measures:
  – Frequent handwashing (sanitizer if handwashing not possible)
  – Social distancing/illness distancing
    • Do not travel/go to work with flu-like symptoms
    • Returning travellers who fall ill – seek medical care
  – Cough etiquette (use a tissue, dispose of tissue, wash hands)
Communication
Main role of ICAO

• Implementation of appropriate, harmonized preparedness plans by stakeholders in the aviation sector
• Support WHO in implementation of health measures in aviation
Aviation related actions

- Guide to hygiene and Sanitation in aviation
- Case management of Influenza A(H1N1) in air transport

WHO global Preparedness

ICAO State Guidelines
- preparedness planning

- Airports Council International airport guidelines
- International Air Transport Association airline guidelines

IHR 2005
Changes to ICAO provisions

2007

- States to have a pandemic preparedness plan for aviation - integrated into national plan
- Cabin crew advice on how to identify a suspected case (changes to aircraft general declaration)
- Passenger locator card for contact tracing agreed by WHO (collaboration with IATA)

2009

- ‘Universal precaution kit’ for managing on board communicable disease (Annex 6)
- Pilot in command to notify air traffic control of a suspected case (PANS-ATM)
- Public health emergencies included in air traffic (Annex 11) and aerodrome (Annex 14) contingency plans
Identification of case of communicable disease by cabin crew

Fever (38°C/100°F or greater) plus one or more of the following signs or symptoms:

- Appearing obviously unwell
- Persistent coughing
- Impaired breathing
- Persistent diarrhoea
- Persistent vomiting
- Skin rash
- Bruising or bleeding without previous injury
- Confusion of recent onset
On board medical supplies

– Inclusion of a ‘universal precaution kit’
  • Managing on board communicable disease event
  • Personal protective equipment
  • Absorbent powder
  • Germicidal disinfectant
  • Biohazard disposal bag etc.

– Inclusion of thermometer in first aid kit
Procedures for Air Navigation Services – Air Traffic Management (PANS-ATM)

- procedure for utilising Air Traffic Control for notifying destination of communicable disease
CURRENT SITUATION:
AIRLINE NOTIFICATION OF EVENT

PHK

AIRLINE OPERATING AGENCY
ATC NOTIFICATION OF EVENT

En route ATC ➔ AIRLINE OPERATING AGENCY ➔ PHA ➔ AIRPORT OPERATOR ➔ OTHER AGENCY

Aerodrome tower
**Public Health Passenger Locator Card**

For contact tracing of travellers who have been in contact with a suspected or known cases of H1N1 – on WHO/ICAO/IATA website

Use in conjunction with health declaration card (IATA website)
Airport screening

- Health declaration card
- Temperature
  - Infra-red imaging
  - Temperature probe
- Screening not recommended by WHO for H1N1
  - But could be regarded as disease surveillance tool
  - Advice not clear: left to national decision
- Over 100 States have implemented some form of screening
- Not likely to be too disruptive
  - Significant disruption under IHR = delay of >24 hours
Health declaration card

**PUBLIC HEALTH - PASSENGER HEALTH DECLARATION CARD**

Public Health Passenger Health Declaration Card to be completed when requested by destination public health authorities. This part of the form contains the information that is not captured by the Passenger Locator Card on the reverse of this form. The information is intended to be held by the public health authorities in accordance with applicable law and to be used only for public health purposes.

**Passenger Information**

<table>
<thead>
<tr>
<th>Sex</th>
<th>Male</th>
<th>Female</th>
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<table>
<thead>
<tr>
<th>Birth Date</th>
<th>DO</th>
<th>MM</th>
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</table>

**Public Health Questions**

- a. Have you had a fever or chills in the last 24 hours?
  - Yes [ ] No [ ]
- b. Do you have a cough or difficulty breathing of recent onset?
  - Yes [ ] No [ ]
- c. Do you have a sore throat, runny nose, headache or body aches?
  - Yes [ ] No [ ]
- d. Have you vomiting or had diarrhea in the last 24 hours?
  - Yes [ ] No [ ]
- e. In the last 10 days, have you been near or spent time with someone who had a fever and cough, or was a known case of influenza?
  - Yes [ ] No [ ]
- f. Do you have a chronic disease or condition?
  - Yes [ ] No [ ]

List all the countries where you have been (including where you live) in the last 10 days:

1. 
2. 
3. 
4. 
5. 
6. 

The first part of this form “Public Health - Passenger Locator Card” has remained unchanged. This part of the form has been developed for the Influenza A (H1N1) outbreak only and will be revised afterwards.

- Developed by IATA – to assist harmonization
- Specifically for use in H1N1
Temperature screening

• Identifies travellers with fever

• Possible to be infectious without fever
• Not all H1N1 cases have a fever
•? Deterrent effect to travellers
Screening - summary

• May identify some travellers at risk
• Not likely to have any significant effect on preventing spread of H1N1
• May have a reassuring effect – the government is ‘doing something’
• May deter unwell potential travellers from travelling
• For consideration by governments - but not currently recommended by WHO
• Implemented in a non-standardised way
Key messages

• Simple preventative measures are effective – handwashing, cough etiquette, illness distancing
• Risk of developing a serious illness is low:
  – and can be treated with oseltamivir (Tamiflu)
• International communication between main players is good-
  lessons have been learned from SARS
• Communication between public health and aviation sector at
  national level is vital – could be improved
• ICAO in collaboration with its partners has developed
  guidance material for aviation preparedness-widely available
• Evolution of H1N1 cannot be predicted – likely to last 1-2
  years
Future

• Screening – research as to why States have adopted (WHO/CDC collaborative project)
  – How efficient has it been?
• CASPCA developed as a joint ICAO/WHO project
• Major ICAO/WHO conference on preparedness planning - 2010
“Plan for the worst, hope for the best”
Useful websites

• ICAO
• WHO
  http://www.who.int/ihr/travel/A(H1N1)_air_transport_guidance.pdf
• United Nations
  http://www.un-influenza.org/
• UN World Tourism Organization
  http://www.sos.travel/
• US Centers for Disease Control and Prevention
  http://www.cdc.gov/
• International Air Transport Association
  http://www.iata.org/index.htm
• Airports Council International
  http://www.airports.org/cda/aci_common/display/main/aci_content07.jsp?zn=aci&cp=1_665_2__
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