ICAO and public health emergencies – training for technical advisors

QUIZ!

Dr Anthony Evans
International Civil Aviation Organization
Montreal

Ulaanbaatar, April, 2012
CAPSCA is so successful in Europe it has established a hotel chain

- True
- False
The next CAPSCA-AP meeting is scheduled for April 2013 in the Philippines

- True
- False
ICAO is:

1. Government organization like US Federal Aviation Administration & Mongolia CAA
2. Public Health Agency like Centers for Disease Control and Prevention
3. Independent management consultancy
4. UN specialized agency like the WHO
ICAO – UN specialized agency

• Like:
  – World Health Organization
  – Food and Agriculture Organization
  – International Maritime Organization
    + others

• Sets safety (security, sustainability) Standards for civil aviation

• Harmonizes global approach to strategic objectives

• Compliance with ICAO Standards gives aircraft right of entry into another State’s airspace
ICAO’s headquarters is in Montreal:

1. It has 5 regional offices
2. It has 6 regional offices
3. It has 7 regional offices
4. It has 8 regional offices
ICAO HQ and Regional Offices
ICAO’s aviation medicine section:

1. Should get its act together
2. Should be cut back as it is too bureaucratic
3. Should be privatised
4. All the above
ICAO – Medical Section

• Small section - one person!
  – Sets and develops international medical Standards for pilots and air traffic controllers
  – Develops public health emergency planning guidance for aviation
  – Develops training requirements for designated (authorized) medical examiners
The Convention on International Civil Aviation

1. Was first signed in Chicago in 1944
2. Currently has 191 Contracting States
3. Consists of 96 Articles
4. Has 18 Annexes
5. All the above
18 Annexes to the Convention - ‘Standards and Recommended Practices’ (SARPs)

- Governments
  - Regulatory Aviation Authorities
  - e.g.
  - Federal Aviation Administration (US)
  - Transport Canada
  - UK CAA
Basis for Action - health

Article 14, International Convention on Civil Aviation:

‘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….’
The ICAO Annexes that deal with public health issues are:

1. Annex 6 - Operation of Aircraft
2. Annex 9 - Facilitation
3. Annex 11 - Air Traffic Services
   + PANS-ATM
4. Annex 14 – Aerodromes
5. Annex 18 – Dangerous Goods
6. All the above
18 ICAO Annexes contains ‘SARPs’

- Annex 1 Personnel Licensing
- Annex 2 Rules of the Air
- Annex 3 Meteorological Service for International Air Navigation
- Annex 4 Aeronautical Charts
- Annex 5 Units of Measurement to be Used in Air and Ground Operations
- **Annex 6 Operation of Aircraft**
- Annex 7 Aircraft Nationality and Registration Marks
- Annex 8 Airworthiness of Aircraft
- **Annex 9 Facilitation**
- Annex 10 Aeronautical Telecommunications
- **Annex 11 Air Traffic Services (+ PANS-ATM)**
- Annex 12 Search and Rescue
- Annex 13 Aircraft Accident and Incident Investigation
- **Annex 14 Aerodromes**
- Annex 15 Aeronautical Information Services
- Annex 16 Environmental Protection
- Annex 17 Security: Safeguarding International Civil Aviation Against Acts of Unlawful Interference
- **Annex 18 The Safe Transport of Dangerous Goods by Air**
ICAO Annexes

- **Standard - Necessary**
- *Recommended Practice* – Desirable
- *Note* – Explanatory
  - Guidance Material

- Compliance with ICAO *Standards* gives right of entry of aircraft into another State’s airspace
  - Harmonizes work of States
- Signatory States to the Chicago Convention agree to comply with ICAO Standards
- ICAO audits Safety and Security Standards
Recent health related changes to ICAO Annexes….
Annex 6 – Operation of Aircraft

Commercial aircraft have been recommended by ICAO to carry first aid kits and medical kits for many years. Since November 2009 they are now also recommended to carry:

1. Better selection of vintage wines
2. Seats with minimum pitch of 36 inches
3. Universal prevention kit (if cabin crew carried)
4. Universal precaution kit (if cabin crew carried)
Annex 6 – *Operation of Aircraft*

• **Universal Precaution Kit**
  – **Recommendation** if cabin crew required, aircraft should carry one UPK:
    • Two if > 250 passengers

• **Contents (Annex 6 Attachment B):**
  – Dry powder that can convert small liquid spill into a sterile granulated gel
  – Germicidal disinfectant for surface cleaning
  – Skin wipes
  – Face/eye mask (separate or combined)
  – Gloves (disposable)
Annex 9 – Facilitation

- Annex 9 – *Facilitation* includes the Standard that requires States to have a national aviation plan in preparation for an outbreak of a communicable disease

- Yes
- No
8.16 A Contracting State shall establish a national aviation plan in preparation for an outbreak of a communicable disease posing a public health risk or public health emergency of international concern.
Annex 9 includes the Standard that:

1. Requires the cabin crew to notify the captain of a suspected case of communicable disease
2. Requires the pilot-in-command to notify ATC of a suspected case of communicable disease
3. Requires an ill passenger to use a mask
4. Requires the universal precaution kit to be used for an ill passenger
8.15 The pilot-in-command of an aircraft shall ensure that a suspected communicable disease is reported promptly to air traffic control, in order to facilitate provision for the presence of any special medical personnel and equipment necessary for the management of public health risks on arrival.

Note 1.— A communicable disease could be suspected and require further evaluation if a person has a fever (temperature 38°C/100°F or greater) that is associated with certain signs or symptoms: e.g. appearing obviously unwell; persistent coughing; impaired breathing; persistent diarrhoea; persistent vomiting; skin rash; bruising or bleeding without previous injury; or, confusion of recent onset.
Annex 9 – Facilitation

The Public Health Passenger Locator Card is an Appendix to:

1. Annex 6
2. Annex 9
3. Annex 11
4. Annex 14
5. Annex 18
Public Health Passenger Locator Card

ICAO Annex 9 – Facilitation
Appendix 13
Also: WHO website, IATA website
8.15.1 **Recommended Practice.**— When a public health threat has been identified, and when the public health authorities of a Contracting State require information concerning passengers’ and/or crews’ travel itineraries or contact information for the purposes of tracing persons who may have been exposed to a communicable disease, that Contracting State should accept the “**Public Health Passenger Locator Card**” reproduced in Appendix 13 as the sole document for this purpose.
Annex 9 - Facilitation

• The list of signs and symptoms written on the Aircraft General Declaration include:

1. Temperature above 39°C and appearing obviously unwell
2. Temperature above 38°C and intoxicated by alcohol
3. Temperature above 38.5°C with a skin rash
4. Temperature above 38°C with persistent coughing
Annex 9 - Facilitation

• General Declaration

Declaration of Health
Name and seat number or function of persons on board with illnesses other than airsickness or the effects of accidents, who may be suffering from a communicable disease:
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
ANNEX 9

THIS DOCUMENT IS PART OF THE AIRCRAFT GENERAL DECLARATION, PROMULGATED BY THE INTERNATIONAL CIVIL AVIATION ORGANIZATION

HEALTH PART OF THE AIRCRAFT GENERAL DECLARATION

Declaration of Health

Name and seat number or function of persons on board with illnesses other than airsickness or the effects of accidents, who may be suffering from a communicable disease (a fever - temperature 38°C/100 °F or greater - associated with one or more of the following signs or symptoms, e.g., appearing obviously unwell; persistent coughing; impaired breathing; persistent diarrhoea; persistent vomiting; skin rash; bruises or bleeding without previous injury; or confusion of recent onset, increases the likelihood that the person is suffering a communicable disease) as well as such cases of illness disembarked during a previous stop ..........................................................

Details of each disinfecting or sanitary treatment (place, date, time, method) during the flight. If no disinfecting has been carried out during the flight, give details of most recent disinfecting

............................................................................................................................

Signature, if required, with time and date .....................................................................

Crew member concerned

1 This version of the Aircraft General Declaration entered into force on 15 July 2007. The full document may be obtained from the website of the International Civil Aviation Organization at http://www.icao.int.
Annex 11 – Air Traffic Services

Annex 11 – Air Traffic Services has been amended (2009) to include a requirement for:

1. Hand sanitizers in every control tower
2. All air traffic controllers to wear a mask
3. Public health emergencies to be included in contingency plans
4. A monthly meeting between the Air Traffic Services coordinator and quarantine services
Annex 11 – Air Traffic Services

2.30 Air traffic services authorities shall develop and promulgate contingency plans.....

Attachment C, Preparatory action... should include:

4.2(b) assessment of risk to civil air traffic due to military conflict or acts of unlawful interference with civil aviation as well as a review of the likelihood and possible consequences of natural disasters or public health emergencies.
PANS - ATM

• PANS-ATM means:
  1. PANS - All Thoroughly Made
  2. Procedures for All New Services – Atmospheric
  4. Positive And Negative Symptoms – A Tricky Mixture
16.6 Notification of suspected communicable diseases, or other public health risk, on board an aircraft:

16.6.1 The flight crew of an en-route aircraft shall, upon identifying a suspected case(s) of communicable disease*, or other public health risk, on board the aircraft, promptly notify the ATS unit with which the pilot is communicating, the information listed below…

[* see aircraft gen dec for identification]
The public health agency can expect to receive the following information from the Pilot-in-Command:

1. Estimated time of arrival and number of suspect cases
2. Aircraft identification and diagnosis
3. Departure aerodrome and medical history of ill traveller
4. Number of persons on board and temperature of ill traveller
Information to be passed to Air Traffic Control:

a) aircraft identification;
b) departure aerodrome;
c) destination aerodrome;
d) estimated time of arrival;
e) number of persons on board;
f) number of suspected case(s) on board; and
g) nature of the public health risk, if known.
ATC NOTIFICATION OF EVENT

A/C ID
Dep.
Dest.
ETA
POB
No. cases
Nature of risk

En route ATC

AIRLINE OPERATING AGENCY

PHA

AIRPORT OPERATOR

OTHER AGENCY

Aerodrome tower
ATC Notification of Event

The Air Traffic Controller at destination receiving information on a communicable disease must notify:

1. Airport operator
2. Airline operating agency
3. Public Health Authority
4. Depends on local procedure
ATC NOTIFICATION OF EVENT

- A/C ID
- Dep.
- Dest.
- ETA
- POB
- No. cases
- Nature of risk

En route ATC

Aircraft

PHI

AIRPORT OPERATOR

OTHER AGENCY

AERLINE OPERATING AGENCY

Aerodrome tower
Annex 14 – Aerodromes has been amended (2009) to include a requirement for:

1. Hand sanitizers in every terminal building
2. All check-in agents to wear a mask
3. Public health emergencies to be included in aerodrome emergency plans
4. A monthly meeting between the aerodrome manager and quarantine services
Annex 14 - Aerodromes

• Chapter 9 – Aerodrome Emergency Planning

9.1.1 An aerodrome emergency plan shall be established at an aerodrome, commensurate with the aircraft operations and other activities conducted at the aerodrome.

Note 1.— Examples of emergencies are: aircraft emergencies, sabotage including bomb threats, unlawfully seized aircraft, dangerous goods occurrences, building fires, natural disaster and public health emergencies.

Note 2.— Examples of public health emergencies are increased risk of travellers or cargo spreading a serious communicable disease internationally through air transport and severe outbreak of a communicable disease potentially affecting a large proportion of aerodrome staff.
Annex 18 – *Dangerous Goods*

- Excess radiation causes water melons to grow in a square format
- All governments should quickly establish radiation monitoring procedures for goods from a country that has had a radionuclear accident
- Sets limits of radioactivity apply to passengers who have been exposed to radioactive material