1st CAPSCA meeting in Europe

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ICAO
A specialized agency of the United Nations
Strategic Objectives:
   Safety
   Security
   Environmental Protection
190 Contracting States to the Convention on International Civil Aviation.
‘Chicago’ Convention (1944) – 190 signatories

96 Articles

18 Annexes to the Convention – ‘Standards and Recommended Practices’ SARPs

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

190 signatories
CAPSCA Hotel, Bucharest
Plan

• Highlights of CAPSCA Europe meeting
• Fukushima accident
  – Implications for aviation
  – Implications for the UN system
  – CAPSCA and non-communicable potential public health emergencies
  – Lessons learned
• Whole of society approach
• Disease transmission by animals
SUMMARY OF DISCUSSIONS

ICAO COOPERATIVE ARRANGEMENT FOR THE PREVENTION OF SPREAD OF COMMUNICABLE DISEASE THROUGH AIR TRAVEL (CAPSCA)

FIRST EUROPEAN MEETING

(CAPSCA-EUR/1)

(Paris, France, 20 – 22 September 2011)

1. Introduction
Highlights

• Good participation from both public health and aviation sectors

• Initial CAPSCA Presentations from:
  – World Food Programme
  – Food and Agriculture Organization/World Programme for Animal Health
  – London School of Economics (communication)
  – Eurocontrol
Radiation accidents: lessons learned from Japan
Relevant points

• International Reaction to Fukushima
  – From ICAO viewpoint
• Plans in place at time of accident
• ICAO’s action during crisis
• Formal proposals by ICAO resulting from accident
• Lessons learned
What if:
• An aircraft flies through the plume?
• An aircraft is parked overnight downwind?
• An exposed individual wants to fly for treatment?
• Should Japan be screening departures?
  Cargo?
  People?
• Should other countries be screening for arrivals?
  Cargo?
  People?
• What levels are acceptable?
• What equipment/training/PPE is needed?
• Etc....
Nuclear Power Plants – where are they?
Reaction to accident - Haphazard

- Information difficult to obtain
  - IAEA and other UN agencies need invitation to intervene
- Some border controls used security scanner results (very sensitive).
  - Levels used variable and of uncertain validity
- Some States screened containers
- Throughout, IAEA did not recommend screening
- Note similarity to response to H1N1
  - WHO did not recommend screening – over 50% of countries instigated screening
Predicted atmospheric spread

Is it safe to fly through the plume? What are the deciding factors?

A forecast by the Comprehensive Nuclear Test Ban Treaty Organization shows how weather patterns this week might disperse radiation from a continuous source in Fukushima, Japan. The forecast does not show actual levels of radiation, but it does allow the organization to estimate when different monitoring stations, marked with small dots, might be able to detect extremely low levels of radiation. Health and nuclear experts emphasize that any plume will be diluted as it travels and, at worst, would have extremely minor health consequences in the United States.

Related story

RELATIVE LEVELS OF RADIATION (Arbitrary units)

0.001 0.01 0.1 1 10 100 units

SIGN IN TO E-MAIL
Concern by crew about levels in food and water

Is it safe to upload food and water from Japan? At all airports in Japan? Where do airlines obtain information?
Are crew members safe? Any precautions?
Do aircraft need to be decontaminated? How?

Measurement of Radiation Dose around the Metropolitan Airports

<table>
<thead>
<tr>
<th>Measurement points</th>
<th>Apr.19 PM</th>
<th>Apr.20 AM</th>
<th>Apr.20 PM</th>
<th>Annual exposure calculation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Narita Airport</td>
<td>0.120 µGy/h 19:00</td>
<td>0.110 µGy/h 10:00</td>
<td>0.107 µGy/h 19:00</td>
<td>≈0.000107 mSv/h</td>
</tr>
<tr>
<td>Haneda Airport</td>
<td>0.081 µGy/h 19:00</td>
<td>0.079 µGy/h 10:00</td>
<td>0.080 µGy/h 19:00</td>
<td>≈0.000080 mSv/h</td>
</tr>
</tbody>
</table>

1) According to the website of Tokyo Electric Power Company, the unit is converted as follows:
1 micro-Gray/hour (µGy/hr) = 1 micro-Sievert/hour (µSv/hr).

2) “Annual exposure calculation” is the estimation under the condition that the hourly radiation dose measurement at the measurement point is accumulated for 24 hours throughout the year.

3) 1 mSv = 1000 micro-Sievert (µSv)

According to the Ministry of Education, Culture, Sports, Science and Technology, examples of exposure level of radiation in daily life is as below.
- Chest X-ray (once) 0.05 mSv
- 1 roundtrip between Tokyo and New York by air 0.2 mSv
- Stomach X-ray (once) 0.6 mSv

According to the WHO, a person is exposed to approximately 3.6 mSv/year on average.

References:
- NARITA INTERNATIONAL AIRPORT CORPORATION Website
- Kanagawa Environmental-radiation Monitoring-system Website (Japanese only)
  http://www.atom.pref.kanagawa.jp/cgi-bin2/telemeter_dat.cgi?Area=1&Type=W
Association of European Airlines

Radioactive Contamination
of Aircraft and Engines

3rd edition
June 2002

ALERT LEVELS

• Below Level I (< 4 Bq/cm²)  
  No action
• Level I (4 to 9 Bq/cm²)  
  Airline expert called
• Level II (10-39 Bq/cm²)  
  AEA communication system started
• Level III (>40 Bq/cm²)  
  Protection for workers must be provided
Plans already in place

• International Atomic Energy Agency *Joint Radiation Emergency Management Plan*
  – World Meteorological Organization provides information on spread of plume
  – ICAO provides air traffic routings
• Did not address the questions mentioned
• CAPSCA – Cooperative Arrangement for the Prevention of Spread of Communicable disease through Air Travel
  – Experience proved very useful
Interlinking guidelines developed through CAPSCA

- WHO global Preparedness
  - Guide to Hygiene and Sanitation in Aviation
  - IHR 2005

- ICAO SARPs & Guidelines
  - Case management of Influenza A(H1N1) in air transport

- Business Continuity
  - Electricity, ground transport, IT support, food, water, security, etc

Airports Council International airport guidelines
International Air Transport Association airline guidelines
Do limits for cargo apply to contaminated individuals?
Do limits for post treatment individuals apply to those seeking treatment?
WHO involvement

Public health emergency of international concern
– an extraordinary event that is:

• International

• Require a coordinated international response

[WHO did not declare the Japanese situation a PHEIC]

IHR does not address all aspects related to travel e.g. advice for workers or risk to aircraft
ICAO Transport Task Force

Weekly teleconference call
ICAO
IAEA
WHO
IMO
WMO
UNWTO
ILO
IATA
ACI

Output - Three press releases during the initial weeks
Proposal to IAEA ministerial conference

• Amendment of the Joint Radiation Emergency Management Plan
  – Strengthen involvement of the international transport modal authorities e.g. International Maritime Organization and ICAO

• Creation of Inter-agency Transport Committee.

• Participate in “Logistics Cluster”
Global Cluster Overview

Humanitarian reform seeks to improve the effectiveness of humanitarian response by ensuring greater predictability, accountability and partnership. It is an ambitious effort by the international humanitarian community to reach more beneficiaries with more comprehensive needs-based relief and protection, in a more effective and timely manner.

The Inter-Agency Standing Committee (IASC) has designated global sector leads in eleven areas of humanitarian activity.

What's New
- OCHA RCSS Pakistan Mission Report
- Humanitarian Coordination Pool
- Cluster Roll-Out
- Country Level Implementation
- Global Capacity Building
- Global Capacity Building Information
- Information Management
- Inter-Agency Information Management

Latest Documents
- ETC plenary meeting October 2009 - Agenda
- Agenda ETC 10 June 2010 meeting.pdf
- ETC 8 Oct 2010 plenary meeting - Agenda
- GNC Annual Mtg 20-21 Oct 09 Agenda
- GNC Annual Mtg 2010 Agenda Final
- Agenda Education Cluster Coordination Workshop September 2008
- Agenda Education Cluster Working Group Meeting September 2008

Agreement (HOU)
- Education Cluster Memorandum of Understanding
- Education Cluster Working Group Terms of Reference
Lessons learned

• Communication, communication, communication (and collaboration!)
  – Between agencies/organizations
  – Agencies to public

• Management of fear: actual risks are small
  – For passengers in H1N1: Increased anxiety = increased information needs
  – No relation between anxiety and actual risk of illness
  – Lack of information = increased anxiety (regardless of actual risk)
  – Staff require special attention
  – Public health/medical staff – authentic source of information

Dickmann et al. (2011) New influenza A/H1N1 (“Swine Flu”): information needs of airport passengers and staff. Influenza and Other Respiratory Viruses 5(1), 39-46
Lessons learned

• Planning is crucial
  – Took a week to establish Transport Task Force after Fukushima accident
  – Pre-established networks are required

• Don’t rush to monitoring – cleaning is first protection
  – Hand washing analogy
Lessons learned

• Crisis management is generic
  – Networks established for CAPSCA (www.capsca.org) were useful

• Crisis management is usually multi-sectoral
  – Public and private e.g. IATA and ACI
Lessons learned

- Crisis management requires changes in work practices (at least for ICAO)
  - Crisis management room
  - Changes in work practices (24/7 availability during crisis)
  - Resources
    - Increased (but also more available)
Lessons learned

• Improved management of politicians

(Who want to do something and be seen to be doing something)

– Buy-in for preparedness planning at high level required: all levels - UN, governmental, industry

– ICAO needs increased visibility in UN crisis management (MOU with WFP)
Summary on Fukushima accident

- Reviewed issues raised during the accident and its aftermath
- Considered plans in place at time of accident
- ICAO’s action during crisis
- Formal proposals by ICAO resulting from accident
- Lessons learned – Communication
Whole of society approach (WFP)

All disasters have cascading effects

1st Order: Impact of event:
- Destruction
- Death, injuries
- Emergence of Fear

2nd Order:
- Overload of services
- Absenteeism
- Stress on Security and Govt

3rd Order: Disruption of Critical Services
- e.g. food, transport network, energy (amongst others)
Whole-of-Society Approach

Key Components

(a) Whole-of-society approach
(b) Planning at all levels
(c) Critical interdependencies
(d) Severity-based response
(e) Respect for ethical norms

Whole-of-Society Approach

Readiness

- Governments
- Civil Society
- International Community
- Businesses

Response

- Recovery
- Accountability

Protection of minorities

Disease transmission by air transportation of animals
Questions?

(Example of poor planning.....)

Psychic Fair
Cancelled
due to unforeseen circumstances
Radiation accidents: lessons learned from Japan

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