OUTLINE

- BACKGROUND
- TRAINING OF AVIATION & HEALTH OFFICIALS
- ICAO ANNEXES & OTHER GUIDELINES
- APPROACH TO IMPLEMENTATION OF THE LEGISLATION OF THE ICAO ANNEXES
- TRAINING OF AVIATION INDUSTRY
- MOU/LETTER OF AGREEMENT BETWEEN HEALTH & AVIATION
- CONSULTATION & TRAINING OF IHR
- OVERSIGHT
IHRs 2005

WHO Pandemic Preparedness Guidelines

ICAO Annex 9, 6, 11, 14, & 18

ACI, IATA, CDC & Other expert agencies

CAPSCA Website States/video

WHO Rapid Containment Strategy

National Pandemic

Aviation Pandemic Preparedness Plan

Preparedness Plan
States are required to comply with IHR (Core Capacity)

<table>
<thead>
<tr>
<th>8 Core Capacities</th>
<th>Potential hazards</th>
<th>Events at Points of Entry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legislation and Policy</td>
<td>Infectious</td>
<td></td>
</tr>
<tr>
<td>Coordination</td>
<td>Zoonosis</td>
<td></td>
</tr>
<tr>
<td>Surveillance</td>
<td>Food safety</td>
<td></td>
</tr>
<tr>
<td>Response</td>
<td>Chemical</td>
<td></td>
</tr>
<tr>
<td>Preparedness</td>
<td>Radio nuclear</td>
<td></td>
</tr>
<tr>
<td>Risk Communications</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human Resources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laboratory</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Annex 1

IHR 2005
BACKGROUND

• WHO-initially required States to implement the IHR 2012

• Due to lack of compliance by most States in meeting the an extension has been granted by WHO to 2014-2016

• How does this impact on the Implementation of the Aviation Pandemic Preparedness Plan

• Some States have MOU between Civil Aviation & Department of Health

• Most health departments are overwhelmed by other issues (HIV, Malaria, Chronic Disease).

• What can Civil Aviation do to assist Health to ensure that the IHR(aviation) does not impact on the Aviation Pandemic Preparedness Plan.
Pretoria University-Provided a 3 week course in the Training of IHR-Ports of Entries-Costly and limited no attendance

CAA in consultation with the following:

• National Department of Health
• University of Pretoria
• WHO
• Aviation Industry

Establishing a course that will train the both Aviation & Health Staff members on Public Health Aviation Issues-IHRs at Airports
State Regulatory Approach Implementation of the ICAO Annexes & WHO IHRS

WHO

National Department of Health IHR

NDT/CAA-Annex 9,6,11,14 & 18

CUSTOMS

Home Affairs

Defence

Police

Operators & Airports

Baggage Handlers
ANNEX 9-REVISION & IMPLEMENTATION OF AVIATION LEGISLATION –AVIATION PANDEMIC PREPAREDNESS PLAN

• Annex 9-Facilitation, National Department of Transport

• Train DOT, FOD, Airports & ATC - Approve & Sign the MOU & Aviation Preparedness Plan

• Amended the Disaster Management Act - Aviation Pandemic Preparedness Plan

• Established a Part (113) in the CAA Regulations to incorporate all the CAPSCA Legislation (Regulations related to Annex 9, 6, 11, 14 & 18)

• Ease of reference for Industry & New Staff
REVISON & IMPLEMENTATION OF AVIATION LEGISLATION ANNEX 9 - TRAINING OF CABIN CREW - FIRST AID TRAINING LEGISLATION
## APPENDIX 1. GENERAL DECLARATION

### GENERAL DECLARATION

<table>
<thead>
<tr>
<th>Operator</th>
<th>Marks of Nationality and Registration</th>
<th>Flight No</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### FLIGHT ROUTING

<table>
<thead>
<tr>
<th>PLACE</th>
<th>NAMES OF CREW</th>
<th>NUMBER OF PASSENGERS ON THIS STAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

DECLARATION OF HEALTH

Name and seat number or function of persons on board with illnesses other than amnesia or the effects of accidents, who may be suffering from a communicable disease (e.g., 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, bruising 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.

For official use only

 declares, if required, with time and date

I declare that all statements and particulars contained in this General Declaration, and in any supplementary forms, are complete, exact, and true to the best of my knowledge and that all through passengers will continue to have continued on the flight.

**Signature**

Authorized Agent of Airline/Company
# PUBLIC HEALTH PASSENGER LOCATOR CARD

Public Health Passenger Locator Card to be completed when recommended by the World Health Organization or when public health authorities suspect the presence of a communicable disease. The information you provide will assist the public health authorities to manage the public health event by enabling them to trace passengers who may have been exposed to communicable disease. The information collected will be held by the public health authorities in accordance with applicable law and will be used only for public health purposes.

## Flight Information

<table>
<thead>
<tr>
<th>1. Airline and Flight Number</th>
<th>2. Date of arrival</th>
<th>3. Seat Number where you actually sat on the aircraft</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airline</td>
<td>Flight Number</td>
<td>D D M M Y Y Y Y</td>
</tr>
</tbody>
</table>

## Personal Information

<table>
<thead>
<tr>
<th>4. Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Name</td>
</tr>
<tr>
<td>Your Current Home Address (including country)</td>
</tr>
<tr>
<td>Street Name and Number</td>
</tr>
<tr>
<td>Country</td>
</tr>
<tr>
<td>Your Contact Phone Number (Residential or Business or Mobile)</td>
</tr>
<tr>
<td>Country code</td>
</tr>
<tr>
<td>Passport or Travel Document Number</td>
</tr>
</tbody>
</table>

## Contact Information

5. Address and phone number where you can be contacted during your stay or, if visiting many places, your cell phone and initial address

<table>
<thead>
<tr>
<th>Street Name and Number</th>
<th>City</th>
<th>State/Province</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country</td>
<td>ZIP/Postal Code</td>
<td>Telephone Number (including country code) or mobile phone number</td>
</tr>
</tbody>
</table>

6. Contact information for the person who will best know where you are for the next 31 days, in case of emergency or to provide critical health information to you.

<table>
<thead>
<tr>
<th>a. Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Name</td>
</tr>
<tr>
<td>Telephone Number</td>
</tr>
<tr>
<td>Country code</td>
</tr>
<tr>
<td>Address</td>
</tr>
<tr>
<td>Street Name and Number</td>
</tr>
<tr>
<td>Country</td>
</tr>
</tbody>
</table>

7. Are you traveling with anyone else? YES/NO Circle appropriate response: If so, who? (name of individual(s) or group)
TRAINING OF CABIN CREW INSTRUCTORS WORKSHOPS

MANAGEMENT OF SUSP.CASES ,USE OF MASKS ,CLEANING TOILET,ECT

BIOHAZARD BAG-IATA GUIDELINES
REVISION & IMPLEMENTATION OF AVIATION LEGISLATION ANNEX 9-PILOT

COMMUNICATION WITH ATC

ICAO Aircraft General Declaration

- Aircraft Callsign (ID)
- Dep. Aerodrome
- Dest. Aerodrome
- Est. Time Arrival
- Number of persons on board
- Number of suspect cases
- Nature of public health risk

Air Traffic Controller

Destination Aerodrome Air Traffic Services

Voice or data link e.g. AFTN*

Via local procedure (Aerodrome Emergency Plan)

Aircraft Operator (or handling agency) at destination aerodrome incl. ground-based medical services provider (if available)

- Airport Operator
- Public Health Authority
- Other agency(ies)

Via local procedure (Aerodrome Emergency Plan)

Voice or data link

• Airport Operator
• Public Health Authority
• Other agency(ies)

Departure Aerodrome Air Traffic Services

- • Aircraft Callsign (ID)
- • Dep. Aerodrome
- • Dest. Aerodrome
- • Est. Time Arrival
- • Number of persons on board
- • Number of suspect cases
- • Nature of public health risk

* AFTN = Aeronautical Fixed Telecommunication Network

• Airport Operator
• Public Health Authority
• Other agency(ies)
REVISION & IMPLEMENTATION OF AVIATION LEGISLATION
ANNEX 9-PILOT COMMUNICATION WITH ATC
Amend Regulation 121 & 91

- 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)

- Non-Mercury Thermometer

- First Aid Kids & Drs Bag - Legislation & Oversight
HEPA Filters Role & Changing-
Maintenance Team

3 Layers of Revolutionary Filtration
1. PermaFilt Large Dust Filter.
2. 15 lb. of Superblend Adsorbent to Remove VOC’s, formaldehyde, ammonia, etc.
3. HEPA Filter Media to remove sub-micron particles and allergens

Maintenance Bird Strike

The manager of Hooter's racing team meets an untimely demise.
Begin the cleaning at the top (light and air controls) and proceed downward progressively working from clean to dirty areas.
Surfaces to be cleaned include:

- Affected seat, adjacent seats same row, back of the seats in the row in front).
- Light and air controls
- Adjacent walls and windows
- Seatbacks (the plastic and/or metal part)
- Individual video monitor
- Tray tables
- Armrests
In the lavatory used by the ill traveler:

- Door handle,
- Locking device,
- Faucet
- Wash basin,
- Adjacent walls
- Counter and toilet seat.

- In exceptional circumstances public health authorities may require additional cleaning.

- Disinfection of upholstery, carpets, or storage compartments is only indicated when body fluids have soiled them.

- In such cases, use absorption agent first if required, clean any visible soil and disinfect before vacuuming to eliminate the risk of re-aerosolization.
TRAINING OF AIR OPERATORS

- Accelerated hydrogen peroxide (AHP)
- Contains surfactants and chelators + other ingredients
- Produced by Virox technologies (Canada)
- [Alcohol 70-75%: difficult to handle/store]
Sodium hypochlorite (bleach)

- Strong oxidising agent
- Good disinfectant
- Inexpensive

BUT

- Dissolves aluminium
- Reduces fire retardant properties
- Not suitable for use on aircraft
WHO DISINSECTANTS

COMMONLY USED

• Pyrethroids – synthetic chemicals based on natural extract of chrysanthemums
  – Permethrin (longer lasting)
  – D-phenothrin (short-lived)

• Both rapidly broken down and human effects are minimal

• Anecdotal reports of passengers feeling unwell after spraying
TRAINING OF AIR OF AIR OPERATORS

NEW DEVELOPMENTS

AIR CURTAIN
TYPES OF THERMOMETERS

- Forehead thermometer
- Digital oral thermometers
- Paper-like disposable oral thermometers

IATA USED
Management of Human Remains & Death on Board

• Wash the area with water/disinfectant after removal of the adsorbent material.

• Dispose of gloves and apron in a biohazard bag.

• Wash hands thoroughly with soap and water afterwards.
TRAINING OF AIR OPERATORS

CARGO & BAGGAGE HANDLERS

- Call your supervisor.
- Medical Opinion.
- If cleared continue

PASSENGER AGENTS
WATER SUPPLY TO THE AIRCRAFT

Guide to Hygiene and Sanitation in Aviation

• Water Supply must meet National Standards-Aircraft/Airports

• *E. coli* or thermotolerant (faecal) coliforms should not detectable

• Appropriate chemicals clean water

• Turbidity is monitored

• Temperature, pH, ionic composition and alkalinity are controlled
WATER SUPPLY TO THE AIRCRAFT/ARPORTS

Guide to Hygiene and Sanitation in Aviation

- hand-washing basins
- galley taps & water heaters
- drinking fountains-required to be cooled by passing through the automatic cooler
- Water is required to be corrosion resistant and suitable for use with hyper chlorinated water
- Colour and Taste
Water Supply to the Aircraft

Guide to Hygiene and Sanitation in Aviation

- Water supplies on aircraft/aircraft
- Operate sufficient sanitary systems on the aircraft
- Water quality at transfer points – Appropriate Pressure applied on the valves
REVISION & IMPLEMENTATION OF AVIATION LEGISLATION
ANNEX -14 AIRPORTS EMERGENCY PLAN
Training of Airports

- Emergency Plan-Public Health Issues/Activation of other stakeholders
- Parking of the Aircraft
- Management of Media-Public Health Emergency
- Allocation of space-Public Health Authorities
- Considerations for screening space
- Simulator Exercises
- Fire Fighters Trained
- Affairs Procedure is incorporated
- Customs Procedure
- MOU-Public or Private Health Providers.
IHR Training Core Capacity 1: Legislation, Policy and Finance

- National Legislation should allow Compliance with IHR
- IHR NFP Designation and Operations
- Detection, reporting, verification and control of events
- Implementation of IHR Documents
  - Ship and Sanitation certificate
  - Maritime Declaration of health,
  - International Certificate of vaccination and prophylaxis
  - Health part of aircraft general Declaration
- Definition of implementing structures, organization, roles and responsibility
Points of Entry

- Legislation and Policy
- Coordination
- Technical guidance and operational procedures for PoE
- Surveillance and Response
- General Obligations required at PoE
Core Capacities at Points of Entry: Implications of Annex 1B

- At all times
  - Access to medical service
  - Transport of ill travellers
  - Inspection of conveyances (e.g. Ship Sanitation Control Certificate)
  - Control of vectors / reservoirs

- For responding to events
  - Emergency contingency plan
  - Arrangement for isolation (human, animal)
  - Space for interview / quarantine
  - Apply specific control measures

Thank you
Core Capacity 2: Co-ordination

- Coordination:
  - All levels of the HC System
  - Within Sectors:
  - Across sectors: Chemical, Food safety, Radio nuclear...

- IHR Advocacy

MOH

Other Sectors

Implementing in Synergy

WHO

Partners (Technical and Donor)
Core Capacity 3: Surveillance

- Types of surveillance:
  - Event Based Surveillance
  - Indicator Based Surveillance (standard/routine surveillance)

- Core Surveillance functions
  - Event detection and confirmation
  - Risk Assessment
  - Reporting/notification
  - Data Management and analysis
  - Feedback and supervision

- Surveillance Structure for risk assessment, risk monitoring, investigation and control
Core Capacity 4: Response

- Rapid Response Teams
- Case Management
- Infection control
- Decontamination
Outbreak Investigation and Control

- Rapid investigation of cases and clusters
- Trained Rapid Response teams
- Logistic, Funds, Preparedness, Stockpiles
- PPEs and other operational supplies
- Coordination with other sectors ex. investigation with animal sector
Core Capacity 5: Preparedness

- Emergency Preparedness Programme
  - Multi-sectoral
  - Overarching programme for the development of capacities to manage the risk of emergencies

- Emergency Preparedness and Response Plans
  - All Hazards
  - Test plans

- Risk and Resource mapping
Core Capacity 5: Preparedness

- **Stockpiling**
  - All hazard (country priorities)
  - Stock rotation
  - National supply and distribution plan

- **Capacity to support sub-national level**
  - Guidelines, SoPs
  - Training
  - Resources, logistics etc.
Building Preparedness Capacity

- Intersectoral collaboration Ex. Developing Functional Assessment of IHR implementation through Exercises
Core Capacity 6: Risk Communications

- Communication Coordination
- Release of public information during an emergency
- Listening to those affected and involved
- Communication evaluation
- Emergency Communication Plan
Core Capacity 7: Human Resources Capacity

- Training needs assessments
- Human resource capacity mapping:
  - Availability
  - Distribution
  - Competencies
- Training plan
- Continuous training in relevant areas
- Field epidemiology training
Core Capacity 8: Laboratory Capacity

- Laboratory Services
- Sample collection and transport
- Data Management and reporting systems
- Biosafety and Laboratory Biosecurity
- Quality Assurance Programme
Hazard: Radiological and Nuclear emergencies - Scenarios

- **Nuclear emergencies**
  - operational failures at a NPP
  - attack/sabotage at a NPP
  - improvised nuclear device
  - nuclear weapons use

- **Radiological emergencies**
  - accidental over-exposure
  - transportation accidents

- **Deliberate events**
  - RDD (dirty bomb)
  - stolen source/illicit trafficking
  - "Polonium-210" scenario
  - Contamination of food, water supplies
Summary of Key Country's Obligations

- Designate National IHR Focal Point
- Provide and update contact details of experts
- Designate at least one expert to the IHR Roster
- Assess events, share information, notify WHO of potential public health emergencies that may be of national or international concern
- Respond to requests for verification of events
- Respond to PH risks that may spread nationally and internationally
- Develop, strengthen and maintain capacity to detect, report and respond to PH events (includes development of plans)
Summary of Key Country's Obligations

- Designate Airports and Ports that shall develop capacities and for ground crossings where justified
- Identify the Competent Authority at each designated Point of Entry
- Develop, strengthen and maintain required PH capacities for surveillance and response including at PoE
- Provide routine inspection and control at points of entry
- Provide Public Health rational and scientific justification for additional measures which significantly interfere with international travel and review such measure
- Submit annual Reports to the WHA on progress made in implementing the IHR
Summary of WHO's Obligations

- Designate WHO IHR contact points
- Support States Parties
  - Includes assessment on international spread, adequacy of control measures, interference with international traffic
  - Developing core capacities, plans, other technical support
  - May include mobilizing international support
- Inform State Parties of relevant international public health risks
- Recommend adapted public health measures
- Potentially declare Public Health Emergency of International Concern
  - If emergency is declared, WHO issues Temporary Recommendations
- Disseminate necessary PH information to States Parties (and others)
CAA in consultation with the following:

- National Department of Health
- University of Pretoria
- WHO
- Aviation Industry

Establishing a course that will train the both Aviation & Health Staff members on Public Health Aviation Issues-IHRs at Airports