International Health Regulations (2005)

A global legal framework for public health security

*IHR (2005) came into force on 15 June 2007*

Legally binding for the world’s countries that have agreed to follow the same rules to secure international health.
Purpose of the IHR (2005)

“To prevent, protect against, control and provide a public health response to the international spread of disease in ways that are commensurate with and restricted to public health risks, and which avoid unnecessary interference with international traffic and trade” – Article 2
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….'
Basis for Action - health

Article 14, International Convention on Civil Aviation:

....and to that end contracting States will keep in close consultation with the agencies concerned with international regulations relating to sanitary measures applicable to aircraft.’
Changes to SARPs 2007 & 2009

- Annex 9 – Facilitation
- Annex 6 – Operation of Aircraft
- Annex 11 – Air Traffic Services
- PANS – ATM
- Annex 14 - Aerodromes
- Annex 18 – Dangerous Goods
How do you convert all these requirements (IHR and ICAO SARPs and Guidance material) into:

1. Local State legislation
2. Into a comprehensive plan
3. Engagement of stakeholders

Need for a template to guide States to achieve these goals: CAPSCA took on the task
Why the need for an Aviation Preparedness Plan for a Public Health Emergency

Public Health Emergency is a public health issue: How is the Aviation Sector involved?

Air Travel: Primary mode of spread internationally
Aviation: A Pivotal Sector

About 6 million passengers daily

With Long Range Flights

Able to be at the opposite end of the world in less than 24 hours

Passenger/s with communicable disease can carry it to the opposite end of the world in less than 24 hours

Aviation Sector’s response to the threat of a possible pandemic has to be timely, robust, coordinated and harmonized.
State Plan for PHE

National Plan for all POEs

National Aviation Plan for PHE

Specific PHE Plan for Aerodrome
State Plan for PHE

National Plan for all POEs
  • Ports
  • Airports
  • Ground Crossings

National Aviation Plan for PHE
Specific PHE Plan for Aerodrome
Template of an Aviation Public Health Event / Emergency Plan

- Compliance to ICAO SARPs – Annexes 6, 9, 11, 14 & PANS -ATM
- Compliance to relevant articles of IHR (2005)
- References to documents developed cooperatively by WHO / ICAO / IATA / ACI etc
- 2 Scenarios: a) In country outbreak
  b) Imported cases
- Progressive build up --- Colour coding / WHO phases
- Deactivation plan
Introduction:

• The template describes how a national aviation public health event / emergency plan may be laid out.

• The document is not intended to address all aspects and of necessity therefore some specific items are not included.

• However, the main aspects that require consideration are addressed.

• Utilising this information together with other guidance material that is referenced in the text, the aviation authority should be able to adjust this template to develop specific preparedness plans for a public health event or emergency of international concern.
When will a public health emergency (PHE) be declared

A public health emergency (PHE) in a State may be declared:

• when a State’s health authority is satisfied that there is an outbreak or imminent outbreak of a public health emergency that poses a substantial risk to the population of the State OR
Public Health Emergency of International Concern

PHEIC - “Public health emergency of international concern” means an extraordinary event which is determined, as provided in these Regulations:

(i) to constitute a public health risk to other States through the international spread of disease

AND

(ii) to potentially require a coordinated international response
Roles of Aviation Authority:

The roles of the aviation authority during a PHE are:

• Coordinate and facilitate the implementation of health and non-health measures to protect the health and welfare of travelers, staff and the general public as well as to minimize / mitigate the spread of communicable disease through air travel and

• Ensure the availability, continuity and sustainability of critical air transport services;
**Principle Considerations**

- Coordinated and Timely Response
- Effective and Sustainable Measures
- Minimize Inconvenience to travellers
- Rapid return to routine operations as the emergency subsides
Planning Assumptions:

The State health authority may issue planning assumptions based on its own assessment or information provided by neighbouring States or the WHO.

There are two primary scenarios:

• The first local human case is imported from another affected State/Administration (rather than developing from within the State);

• There has been a local outbreak of a PHE within the State and measures have to be taken to contain the outbreak and minimize the spread to other States.
State Health and Aviation Authorities are encouraged to refer to the WHO Western Pacific Regional Office publication

“A Guide for Public Health Emergency Contingency Planning at Designated Points of Entry; Requirement under the International Health Regulations (2005)”

This guide provides a recommended approach, structure and a logical but simple set of considerations and steps for National Public Health Authorities (NPHA) to guide public health and emergency planners responsible for Points of Entry to develop Public Health Contingency Plans.
**Execution**

• The aviation measures adopted should be an integral part of the State’s overall plan for a PHE.

• The aviation authority will usually have a Crisis Management Team (CMT) to develop and execute the public health emergency plan.

• These planned measures may be contingent on the State health authority’s alert levels or according to the WHO phases of an evolving Pandemic.

• A risk management concept should be adopted to ensure a phased and gradual step up of control measures, in accordance with the changing circumstances.
Decision for option: Key considerations

• International border health measures should be implemented under the framework of the new International Health Regulations
• Decision on public health measures based on assessed risks
• Public health measures should be evidence-based whenever possible
• Countries should balance the benefits against the costs and potential consequences
• Desirability of harmonization of interventions at international POE
• Planning, coordination and communication is essential
Matching cost and consequences of interventions with risk level (example)

Costs and Consequences

- **More acceptable interventions**
  - 1918 pandemic virus or worse
  - SARS
  - New H1N1
  - Seasonal Influenza

- **Less acceptable interventions**
  - E.g. Health alert or advice
  - E.g. Temperature
  - E.g. Border closure

Levels of Risk:
- A
- B
- C
- D
- E
- F
Activation / Deactivation Process

The activation of the health measures will usually be initiated by the State health authority.

The aviation crisis management team will coordinate all measures within the aviation sector.

The deactivation or scaling down of measures will be initiated by the State health authority.
Measures to be adopted

• The measures adopted at Points of Entry (POE) especially at airports are crucial to the containment and mitigation efforts of the State.

• The import/export of the communicable disease may be mitigated through the implementation of a specific set of measures corresponding to the defined alert levels.

• The measures are subject to changes, attendant on the State’s continuing assessment of the situation.

Gives example of a Colour Coded Alert System:
1. Alert Green  = WHO Phase 1 to 3
2. Alert Yellow  = WHO Phase 4
3. Alert Orange  = WHO Phase 5
4. Alert Red    = WHO Phase 6 (Pandemic)
<table>
<thead>
<tr>
<th>Alert Level (WHO Phase)</th>
<th>Travellers</th>
<th>Airport workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green (WHO Phase 1 to 3)</td>
<td>No additional measures. Ensure plan is updated and exercised. Ensure that all relevant personnel are familiar with the plan and its activation.</td>
<td>No additional measures. Ensure plan is updated and exercised. Ensure that all relevant personnel are familiar with the plan and its activation. Emphasize hygiene measures</td>
</tr>
<tr>
<td>Yellow (WHO Phase 4)</td>
<td>The following measure may be adopted at POE: Distribution of Health Alert Notice (HAN) to arriving / departing travellers.</td>
<td>Any airport worker with symptoms (indicate list of symptoms) and/or fever will not report for work but will proceed to his/her doctor. If diagnosed with the prevailing PHEIC, he/she will be treated and will not report for work until full recovery and/or the requisite time recommended by the State health authority.</td>
</tr>
<tr>
<td>Alert Level (WHO Phase)</td>
<td>Travellers</td>
<td>Airport workers</td>
</tr>
<tr>
<td>------------------------</td>
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</tr>
<tr>
<td>Orange (WHO Phase 5)</td>
<td>In addition to the measure adopted in Alert Yellow, the following measures may be adopted: Distribution of Health Declaration Forms (HDFs); and Carry out other screening measure/s such as Visual Screening / Temperature Screening on arriving and departing travellers</td>
<td>All airport workers must take their temperature before leaving home for work. Those with fever (temperature of 37.5 degrees centigrade and above, (or as specified by the State health Authority) and specified symptoms will not report for work but will proceed to see their doctor. If diagnosed with the prevailing PHEIC, he/she will be treated and will not report for work until full recovery and/or the requisite time recommended by the State health authority has elapsed</td>
</tr>
<tr>
<td>Alert Level (WHO Phase)</td>
<td>Travellers</td>
<td>Airport workers</td>
</tr>
<tr>
<td>------------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td>Red (WHO Phase 6)</td>
<td>It is likely that the measures at the airport will progressively be</td>
<td>As in Alert Orange</td>
</tr>
<tr>
<td></td>
<td>deactivated except for the possible continuing distribution of HANs to</td>
<td></td>
</tr>
<tr>
<td></td>
<td>travellers. The deactivation will be from the State health authority</td>
<td></td>
</tr>
</tbody>
</table>
Annexes to Template:

Annex A  Example of a colour coded Disease Outbreak Response System and WHO Pandemic Phases
Annex B  Public Health Emergency Plan Activation flow chart for Points of Entry
Annex C  Roles Performed by aviation authority CMT during a Public Health Emergency Response
Annex D  Sample of Health Alert Notice (HAN)
Annex E  Mode of distribution of HAN and quantity required
Annex F  Health Declaration Form
Annex G  Public Health Passenger Locator Card
Annex H  Suggested framework for assessment and decision making – Responding to Pandemic H1N1 2009: Options for interventions at International Points of Entry : WHO Regional Office for the Western Pacific interim option paper, 20 May 2009
Annex I  Traveller Screening Deployment Locations
Annex J  SOP for Screening Procedure for Travellers
Annex K  Entry-exit locations of Ambulance at Airport and Route to Designated Hospital
Template is available on [www.capsca.org](http://www.capsca.org)

In 5 languages.
CAPSCA Project Activities

- Meetings
- Seminars/Workshops/Exercises/Training
- Develop and improve guidance and tools
- Web site reference information source
- Assistance Visits to States and Airports
- Provide advice
Assistance Visit Objectives

- Promote and facilitate communication, cooperation, coordination & collaboration between the civil aviation and public health sectors

- Awareness training on ICAO and WHO Public Health Emergency (PHE) requirements for the aviation sector

- Evaluate existing PHE provisions in the aviation system – gap analysis

- Assist States by providing advice
Scope

- PHE planning & preparedness in the civil aviation system
- All stakeholders involved in a response to a PHE in the aviation system
- Not an audit, inspection nor certification
- Voluntary and confidential
References

- ICAO Annexes 6, 9, 11, 14 SARPs, PANS-ATM (Doc 4444), & Technical Instructions for the Safe Transport of Dangerous Goods by Air (Doc 9284)
- International Health Regulations (IHR) published by WHO
- ICAO, WHO, ACI & IATA guidelines
- Template for National Aviation Plan for a PHE
- www.capsca.org
Tools

- Guidelines
- Checklist
- Report template
  Assistance
Logistics

- 2 States in 1 week
- States located in same sub-region
- Team members to originate from States in same sub-region
- Travel funded by cost-recovery
- 1 airport per State
- 2 days per State
Preparation

- ICAO Schedules visit
- ICAO Coordinates loan of Technical Advisors with States
- ICAO Coordinates visit with State
- ICAO Coordinates participation with WHO
- State/Airport completion and submission of checklist to ICAO
- ICAO Mission plan and team coordination
State Requirements

Coordinator & support staff
Meeting room & equipment
Simultaneous interpretation (if required)
Transportation to/from airport, meeting venue and hotel
Airport visit coordination, e.g. security access, transportation
Refreshments
Team Members

- ICAO CAPSCA Regional Coordinator
- WHO representative (WHO Regional Office (IHR), IHR Regional Contact Point, and/or Country Office)
- State Technical Advisors Team Leader/Deputy (optional)
- Technical Advisor(s) from CAAs and PHAs trained by ICAO
- OJT for Technical Advisor (optional)
- At least one team member from each sector (CAA & PHA)

- Participants time offered by States, WHO and ICAO as contributions in kind; travel funded by team member States and/or State receiving assistance visit
Technical Advisors

Desirable Qualifications:

- State CAA and PHA, ICAO, and WHO staff;
- Availability to be trained by ICAO and undertake State & airport Assistance Visits;
- Qualification and experience in aviation medicine and/or;
- Qualification and experience in public health medicine and/or;
- Experience in contingency/emergency planning in the aviation sector (not only doctors!).
State’s Participating Organisations

- Civil Aviation Authority (aviation medicine, facilitation, aerodromes, air traffic services, flight operations/standards/safety)
- Public Health Authority including IHR National Focal Point
- Airport (immigration, customs, port health, quarantine, medical services, security, operations, public information & media relations, handling agents)
- Air Navigation Services Provider (ATC)
- Aircraft operators (airlines)
- Tourism Authority
- National emergency/disaster response agencies
Activities

- 2 days

  - Day 1
    - Meeting/Briefings

  - Day 2 - am
    - Airport visit
    - Exercise demonstration (optional)

  - Day 2 - pm
    - De-briefing meeting to discuss the visit results
Meeting/Briefings Agenda (1)

- Opening Remarks by: ICAO, WHO, CAA, PHA
- CAPSCA
- ICAO Health Related SARPs & references
- IHR related to Points of Entry (airports)
- Public Health Authority on the National Public Health Emergency Plan (Aviation part) and Airport (PoE) Public Health Emergency Contingency Plan – (PHECP)
Meeting Agenda (2)

- Civil Aviation Authority on the National Aviation Plan for a PHE and National Aviation Regulations with standards related to public health
- Airport on the PHE parts of the Aerodrome Emergency Plan & Aerodrome Manual
- Air Navigation Services Provider on its ATS procedures for notification of PHE risk on board an aircraft & ATS contingency plan for a local PHE outbreak
- Aircraft operator on its procedures for management of PHE risk on board an aircraft
- CAPSCA Assistance Visit methodology & checklist
Checklist Components
(http://www.capsca.org/CAPSCARefs.html#StateAssistance)

- Administrative
- Documentation
- EOC
- RFFS
- Immigration
- Customs
- Cargo & Baggage handlers
- ANSP
- Medical
- AVSEC
- Infrastructure
- Aircraft operators
- Media
Documents to Review

- National Public Health Emergency Plan (PHA) – Aviation part
- National Aviation Regulations with standards related to public health (CAA)
- National Aviation Plan for a Public Health Emergency (CAA)
- Airport (PoE) Public Health Emergency Contingency Plan – PHECP (PHA, CAA & Airport)
- Aerodrome Emergency Plan and Aerodrome Manual including public health emergencies – PHE part
- Air Traffic Services (ATS) contingency plan including public health emergencies
- ATS Procedures for PIC notification of suspected public health risk on board an aircraft
- Aircraft Operators Procedures for mgmt of suspected public health risk on board an aircraft
Airport Visit Methodology

- Visit shall not affect normal operations
- The visit should demonstrate preparedness in the roles, responsibilities, and procedures in a PHE
- Scenario of the arrival of an aircraft with a of suspected communicable disease, or other public health risk, on board an aircraft or a scenario of a local outbreak of a PHE in the State in the vicinity of the airport
- Walkthrough observations and interviews
- Recommendations for improvements
Airport facilities to Visit

- Airport and Emergency Operations Centre
- Suspect case and contacts interview and assessment location and facilities
- Affected ill passenger isolation and treatment location and facilities
- Port Health and Medical Services
- Immigration, Customs & Quarantine
- Air Traffic Control Tower and ACC
- Designated aircraft parking position
- Any other agency / area / facility involved in a public health emergency
Results

- Confidential Report
  1 month after visit
- Sent to CAA and PHA with recommendation to forward to airport & others
- State Action Plan
  1 month after report
- ICAO CAPSCA Regional Coordinator Follow-up Implementation
Report Content
(http://www.capsca.org/CAPSCARefs.html#StateAssistance)
Thank you

www.capsca.org
Thank you for your kind attention!

Jarnail Singh

CAAS
Civil Aviation Authority of Singapore