

International Civil Aviation Organization: Template for a National Aviation Public Health Emergency Preparedness Plan

The following text describes how a national aviation public health 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 emergency of international concern. An important resource is the Cooperative Arrangement for the Prevention of Spread of Communicable disease through Air travel (CAPSCA) website: (www.capsca.org). The website has links to ICAO, WHO, IATA and ACI and has, on line, most of the documents referenced in this document.

National Aviation Public Health Emergency Preparedness Plan

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1. Introduction

- 1.1 A public health emergency of international concern (PHEIC) may be declared when a State's health authority is satisfied that there is an outbreak or imminent outbreak of a communicable disease that poses a substantial risk to the population of the State OR upon activation by WHO (according to Annex 2 of the IHR (2005) "Decision instrument for the assessment and notification of events that may constitute a public health emergency of international concern").
- 1.2 The roles of the aviation authority during a PHEIC are:
- a. Ensure the availability, continuity and sustainability of critical air transport services; and
 - b. 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.

2. Aim

- 2.1 This Plan describes the measures to be adopted during a PHEIC.¹ It is in compliance with the relevant articles in the IHR 2005 and the ICAO Annexes 6, 9, 11 and 14.

3. Principle Considerations

- 3.1 The processes and measures to be adopted during a PHEIC are guided by the following considerations:

- a. Coordinated and Timely Response

The implementation of health measures is a multi-agency effort and not the sole responsibility of the aviation authority. As such, the measures implemented by the respective agencies should be well coordinated to avoid confusion, inconsistencies and duplication of resources. At the initial outbreak stage measures may need to be very rapidly deployed and timely implementation is important.

¹ It is recognised that public health emergencies other than those posed by communicable disease exist e.g. food poisoning, infectious substances. Public health emergencies other than those associated with communicable disease are outside the scope of this document.

b. Effective and Sustainable Measures

Response to a public health emergency may continue over a prolonged period of time. Measures adopted should be effective, and at the same time be sustainable until the emergency situation ends.

c. Minimize Inconvenience to travellers

Processes and measures introduced during a public health emergency should primarily be targeted to mitigate the risks brought about by the outbreak of the disease. These processes and measures adopted should minimize inconvenience to all travellers.

d. Rapid return to routine operations as the emergency subsides

Criteria for determining when the emergency is diminishing should be in place. An associated process for reducing the emergency measures is required so that a return to routine operations is facilitated in line with the reducing health risk.

4. Planning Assumptions

4.1 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:

- A. The first local human case is imported from another affected State/Administration (rather than developing from within the State);
- B. There has been a local outbreak of a PHEIC within the State and measures have to be taken to contain the outbreak and minimize the spread to other States;

Note: State Health and Aviation Authorities are encouraged to refer to the WHO Western Pacific Regional Office publication “Guidance 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.

Examples of additional planning assumptions, which should be considered in the context of each of the primary scenarios follow:

- a. The warning period is usually relatively short should a novel virus emerge that is capable of efficient human transmission;
- b. It may take several days to confirm that this is a novel virus strain;
- c. The virus spreads quickly and may be associated with a high morbidity and/or mortality;
- d. The State is unable to prevent import / export of the novel virus or contain the spread of the disease in the community. However, the spread /import/export may be delayed through implementation of containment strategies including health control measures at Points of Entry, especially for air travellers;
- e. A second wave occurs within 3 to 9 months of the initial outbreak and may cause more serious illnesses and deaths than the first. A third wave may occur (in the same year or a subsequent year). The length of each wave is about 6 weeks;
- f. There is initially no vaccine available. The development of a vaccine may take up to 6 months. When vaccines are eventually developed, the initial supply is limited and priorities have to be set for those to be vaccinated.

5. Execution

- 5.1 The aviation measures adopted should be an integral part of the State's overall plan for a PHEIC. 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. Please see Annex A for examples of colour coded alert systems and the WHO Phases of a Pandemic.

5.1.1 Crisis Management Team (CMT)

As part of its preparedness for non-health related emergencies - accident, fire, terrorist activity etc. the aviation authority is likely to have already established a crisis management team. This team may be adequate to deal with a public health emergency but it is more likely that the individuals comprising the team, and perhaps its leader, need to be revised for such an emergency. The team needs specific representation from the public health authority, and the individual

to provide this expertise needs to be identified. Further, the individual leading the CMT and taking responsibility for team decisions involving public health emergencies requires advance planning. The constitution of the CMT needs to be flexible, as does its means of communication, since it may be required to deal with a PHEIC that involves only one, or a few, affected individuals, or on the other hand may affect a whole population.

5.2 **Activation / Deactivation Process**

- 5.2.1 The activation of the health measures will usually be initiated by the State health authority. The various agencies will be activated under the activation flow depicted in Annex B.
- 5.2.2 The CMT will coordinate all measures within the aviation sector. The number of officers activated to support the crisis actions is subjected to the decision of the leader of the CMT. The roles to be performed by the CMT under this scenario are listed in Annex C.
- 5.2.3 The deactivation or scaling down of measures will be initiated by the State health authority.

5.3 **Measures Adopted**

- 5.3.1 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. However, the measures are also subject to changes, attendant on the State's continuing assessment of the situation.

Note: The aviation authority in consultation with the State health authority and with the cooperation and collaboration of all the stakeholders is recommended to develop and implement a training program for airport workers that are likely to be involved in the implementation of the preparedness plan. These would include (but not be limited to) check-in staff, immigration and customs personnel. This would also include training on how to pick up (as non medical persons) travellers that may be suspect cases of a communicable disease of public health importance. Such training could be similar to that given to cabin crew and the list of signs and symptoms similar to that used in the aircraft general declaration.

Using a Colour Coded Alert System (Annex A):

5.3.2 Measures during “Alert Green” (WHO Phase 1 to 3)

5.3.2.1 No emergency measures shall be adopted under this alert level. Instead, the National Aviation Preparedness Plan shall be periodically reviewed and tested to ensure the continued relevancy of the plan. Periodic exercises / table top planning scenarios should be undertaken to ensure that all relevant personnel are familiar with the plan and its activation. All equipment identified for use during activation shall be maintained as required by the equipment manufacturer. Personnel should be adequately trained to play their identified role for a public health emergency plan. It is important to test the communication plans and channels. (Note – Individuals identified earlier may have changed: Keep the plan updated at periodic intervals)

5.3.3 Measures during “Alert Yellow” (WHO Phase 4)

5.3.3.1 Under this alert level, the following measure may be adopted at POE:

- Distribution of Health Alert Notice (HAN) to arriving / departing travellers.

5.3.3.2 The HAN (please see Annex D for a sample of the HAN) will be distributed by {specify which agency will be responsible for the distribution}..... (eg. the airlines; the Immigration and Customs Authority etc).

5.3.3.3 (Name of responsible agency) shall ensure that a sufficient supply of HANs is available for distribution.

5.3.3.4 Actions taken by Aircraft Operators

5.3.3.4.1 If aircraft operators have been designated to distribute the HANs, they will activate their respective response plans to distribute HANs either at Gate Hold Room or within X days of activation, start distributing either in-flight or at up-stations. Please see Annex E for the mode of distribution and the required quantity of HANs for each airline (This Annex should detail the distribution mode and quantity of the HANs).

5.3.3.4.2 Aircraft operators or their ground handling agents will liaise directly with the responsible agency for the initial supply and replenishment of the HANs.

5.3.3.5 Actions taken by Customs / Immigration Authorities

5.3.3.5.1 The Customs / Immigration Authorities may be designated to distribute HANs to travellers. This can be carried out at the arrival and departure immigration and customs counters.

5.3.3.6 **Actions taken by CMT**

5.3.3.6.1 As the coordinator, the CMT shall ensure that the HANs are distributed by the aircraft operators and / or Customs / Immigration officers at their respective locations.

5.3.3.6.2 The CMT shall conduct inspections on randomly selected flights to ensure distribution of the HANs, with an equal distribution of flights from the various airlines.

5.3.4 **Measures Adopted during “Alert Orange” (WHO Phase 5)**

5.3.4.1 In addition to the measure adopted in Alert Yellow, the following measures may be adopted:

- a. Distribution of Health Declaration Forms (HDFs); and
- b. Carry out other screening measure/s such as Visual Screening / Temperature Screening on arriving and departing travellers.²

5.3.4.2 **Distribution of HDFs**

5.3.4.2.1 Upon activation by the CMT, airlines will activate their own respective plans to distribute HDFs (See Annex F –A standardized HDF is currently under review by ICAO, WHO and IATA. It will be made available as Annex F to this document when approved) to travelers, prior to arrival. The HDFs may be distributed together with the Passenger Locator Form (PLF). PLFs are used for contact tracing. A standardized version of the PLF is at Annex G. Airlines shall liaise directly with the responsible agency for initial supply and replenishment of the required forms.

5.3.4.2.2 (Name of responsible agency) will be the designated stockist for the HDFs/PLFs which, on its part will need to ensure sufficient supply of HDFs for distribution to the airlines.

² Note: WHO did not recommend the adoption of any screening measures during the 2009/10 Influenza A(H1N1) pandemic as these were believed to be ineffective in preventing the spread of the virus. However, a State / Administration should be aware of the possibility that WHO may, in different circumstances, recommend specific actions at points of entry and plans need to be in place to facilitate the rapid implementation (within 48 hours) of such recommendations. For background information on screening options refer to “Suggested framework for assessment and decision making – Responding to Pandemic H1N1 2009: Options for interventions at International Points of Entry”, written by the WHO Regional Office for the Western Pacific interim option paper, 20 May 2009]. See Annex H.

5.3.4.2.3 The completed HDFs should be collected at the designated counters (eg departure/arrival immigration/customs or designated HDF collection counter).

5.3.4.2.4 If a traveller, based on his/her declaration in the HDF, is suspected of having contracted / been exposed to a communicable disease (representing a potential PHEIC), he/she shall be immediately referred to the designated health service provider or public health office. The traveller shall then be processed according to the Standard Operating Procedures (SOP) of the health service provider or public health office and if required, referred to the designated hospital using the designated ambulance/s.

5.3.4.3 Temperature Screening for Arrival and Departure Travellers (If activated)

5.3.4.3.1 The activation for instituting Screening for arriving / departing travellers shall be done by the State health authority. The aviation CMT upon activation shall activate the airport health service provider (or public health office). The airport health service provider (or public health office) shall inform the relevant agencies such as Immigration / Customs, ground handling agents and the airport police of the activation. A separate Annex detailing the contact numbers of the respective agencies should be developed and attached to the preparedness plan. It is important that this Annex containing the contact names and phone numbers be updated at frequent periodic intervals.

5.3.4.3.2 The relevant health service provider shall remove the appropriate number of thermal scanners from (indicate where these scanners are stored and maintained) and set up the screening stations at pre-designated sites in the airports. Annex I) indicates the location(s) where thermal scanners may be deployed.

5.3.4.3.3 The medical protocols used for temperature screening should be in accordance with the State health authority's policy. The service provider should comply with the State health authority's directions on the issuance of personal protective equipment (PPE) (or any other equipment as required by the health authority) to both screening staff and travellers suspected of having a communicable disease (either because of symptoms or close contact with a potentially infectious traveler) during the temperature screening and subsequent secondary checks.

5.3.4.3.4 If individuals are recommended for further medical screening at a hospital, then a dedicated ambulance service will ferry these potentially-affected cases to the designated hospital for follow-up.

5.3.4.3.5 Ground handling agents shall retrieve the baggage of the passenger (and that of any accompanying person/s), ensure customs clearance and ferry the baggage to the ambulance pick up point. There is no evidence to support the cleaning and/or disinfecting of baggage including items arriving from areas where a communicable disease has been reported. This would include the checked bags of a suspect case of communicable disease on board a flight.

5.3.4.3.6 Immigration shall ensure clearance of all immigration formalities for an arriving traveller and any accompanying person/s.

5.3.4.3.7 The relevant airport health service provider shall keep the CMT and the State health authority updated on a pre determined date and time basis, the status and details of the travellers sent to the designated hospital, the total number of travellers screened and details of travellers detected by the thermal scanners and sent for secondary checks.

5.3.4.3.8 This Plan shall have as attachments, all the detailed SOPs of the following processes:

- a. Screening procedure for travellers including a separate procedure for flight and cabin crew, if required
- b. Immigration / Customs procedures
- c. Ground handling agent procedures
- d. Entry-exit of designated ambulance at the Airport.
- e. Designated hospital and the route to be taken by the designated ambulance to the designated hospital.

6. Actions subsequent to a suspected case being identified in flight

6.1 Pilot in command actions

The pilot in command of an aircraft may take emergency measures in flight as may be necessary for the health and safety of travellers on board. The event needs also to be recorded on the Health Part of the Aircraft General Declaration (IHR Annex 9 - http://whqlibdoc.who.int/publications/2008/9789241580410_eng.pdf).

He/she shall inform air traffic control, as early as possible before arrival, of any cases of illness indicative of a disease of an infectious nature or evidence of a public health risk on board. This information must be relayed immediately/as soon as possible by air traffic control to the competent authority for the destination airport, according to procedures established in IHR (2005), Article 28.4 and ICAO Procedures for Air Navigation Services – Air Traffic Management (PANS-ATM, Document 4444) as follows:

6.2 PANS-ATM, paragraph 16.6 states:

“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 Air Traffic Service (ATS) unit with which the pilot is communicating, the information listed below:

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

The ATS unit, upon receipt of information from a pilot regarding suspected case(s) of communicable disease, or other public health risk on board the aircraft, shall forward a message as soon as possible to the ATS unit serving the destination/departure, unless procedures exist to notify the appropriate authority designated by the State, and the aircraft operator or its designated representative.

When a report of a suspected case(s) of communicable disease, or other public health risk, on board an aircraft is received by an ATS unit serving the destination/departure, from another ATS unit or from an aircraft or an aircraft operator, the unit concerned shall forward a message as soon as possible to the public health authority (PHA) or the appropriate authority designated by the State as well as the aircraft operator or its designated representative, and the aerodrome authority.

Note 1.— See Annex 9, Chapter 1 (Definitions), Chapter 8, 8.12 and 8.15, and Appendix 1, for relevant additional information related to the subject of communicable disease and public health risk on board an aircraft.

Note 2. — The PHA is expected to contact the airline representative or operating agency and aerodrome authority, if applicable, for subsequent coordination with the aircraft concerning clinical details and aerodrome preparation. Depending on the communications facilities available to the airline representative or operating agency, it may not be possible to communicate with the aircraft until it is closer to its destination. Apart from the initial notification to the ATS unit whilst en-route, air traffic control communications channels are to be avoided.

Note 3.— The information to be provided to the departure aerodrome will prevent the potential spread of communicable disease, or other public health risk, through other aircraft departing from the same aerodrome.

Note 4. — Aeronautical Fixed Telecommunications Network (AFTN) i.e. ground-based telecommunications network (urgency message), telephone, facsimile or other means of communication may be used.”

In summary:

1. Pilot reports to Air Traffic Services (ATS)
2. ATS reports to destination (and departure) ATS unit
3. Destination ATS unit reports to airport health service provider /public health authority/ any other designated authority for the airport (SOP should reflect which agency will be contacted by ATS)
4. Airport health service provider /public health authority/ any other designated authority for the airport, contacts airline operating agency to obtain further details of illness

The specific mechanisms for implementing communications between the competent authority, airline operating agency and airport/aerodrome authority (items 3 and 4 above) should be determined by the State / Administration. An SOP detailing these specific mechanisms should be attached to the emergency preparedness plan.

ATC NOTIFICATION OF EVENT

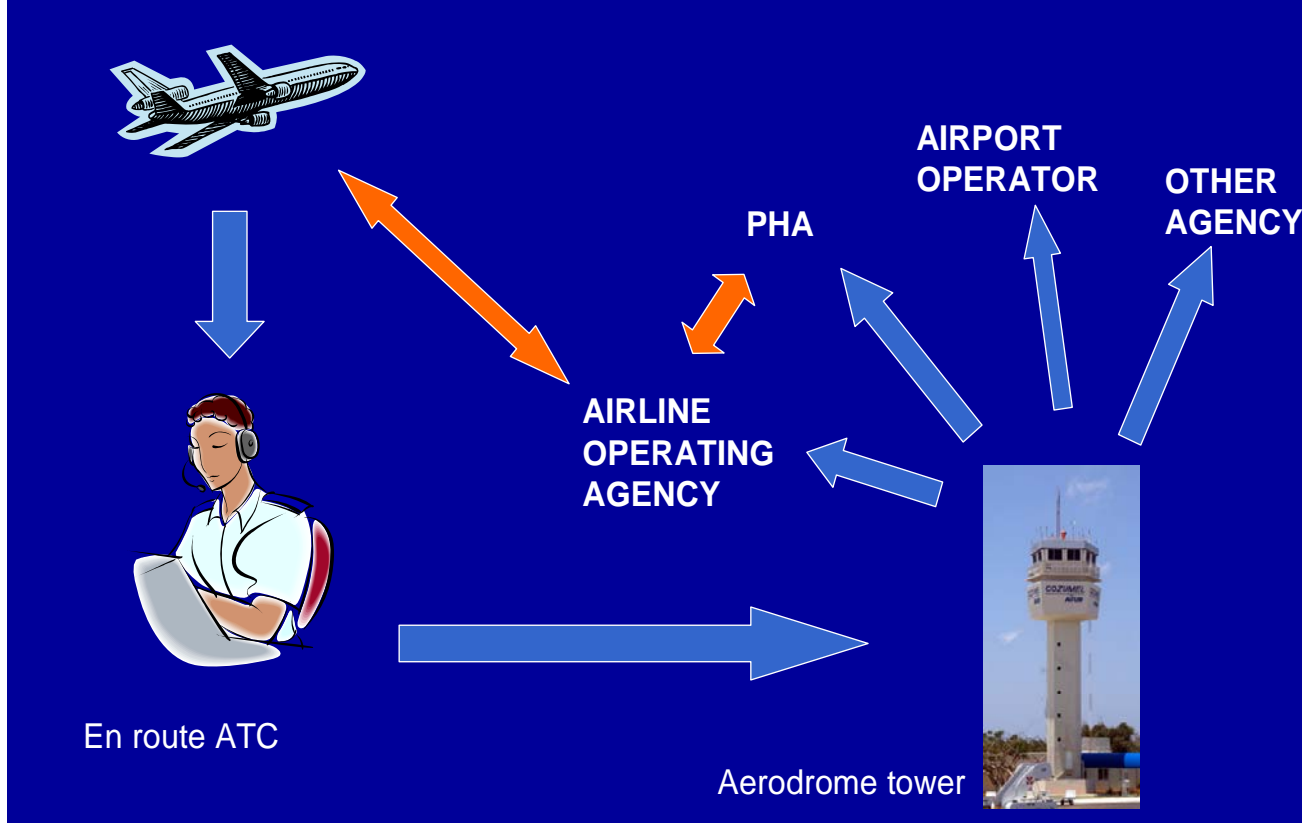


Figure 1: Diagrammatic representation of the mandatory ICAO communication procedure from the affected aircraft in flight to the public health authority at destination. The pilot-in-command notifies the air traffic controller of a public health event, who relays the message to the destination. Additional health-related information is obtained via the aircraft operator’s agency at destination.

6.3 Action by airport health service provider or other designated authority at arrival airport

The State health authority and the aviation CMT together should refer to the “WHO technical advice for case management of Influenza A (H1N1) in air transport”. This document was developed in cooperation with ICAO and IATA in 2009, shortly after the Influenza a (H1N1) outbreak in order to effectively manage a public health event on board an aircraft, and to minimize the adverse effect of such events on travellers and airport operations.

Essentially, upon arrival at the airport, in addition to having a designated parking point for the arriving aircraft (see section 6.4), the SOPs (as in paragraph 5.3.4.3.8 above) shall be actioned.

The airport health service provider / public health officers need to have quick and efficient access to the aircraft, using appropriate personal protective equipment (PPE) and hand hygiene supplies. For many communicable diseases, disposable gloves and good hand hygiene (at times in combination with surgical masks) are sufficient unless otherwise specified by the State health authority.

An ill traveller should be taken by a medical escort from the aircraft to an area suitable for further assessment/treatment. Appropriate infection control measures should be applied.

A traveller having a communicable respiratory disease should wear a mask unless the traveller is unable to tolerate it. If a mask is worn consistently by the ill traveller this precludes the need for others to wear a mask. All disposable materials in potential contact with an ill traveller need to be removed using biohazard precautions.

All surfaces potentially contaminated by the ill traveller should be cleaned and disinfected according to the WHO Guide to Hygiene and Sanitation in Aviation.³

Before the disembarkation, travellers and crew on the same aircraft as the ill traveller should remain segregated from other travellers until traveller seating details, contact details and destination have been obtained and they have been advised by public health authority staff of any necessary preventive measures. If contact tracing is deemed necessary, the Passenger Locator Form (PLF) as depicted in Annex G is recommended. In the current recommendations, contact tracing is normally done for those travellers seated in the same row and two rows in front and behind the index suspected case.

There should be a designated area in the airport that will allow privacy, good ambient light, ventilation, easy cleaning, access to designated toilet facilities and telecommunications for the assessment where necessary of small groups of suspect travellers. This designated area should cater for the assessment and management of various categories of fellow travellers (e.g. family members, others in travel group, those sitting near to the ill person, entire aircraft) should the need arise due to the suspected illness of the ill traveller, until given public health clearance.

³ WHO Guide to Hygiene and Sanitation in Aviation,
www.who.int/water_sanitation_health/gdwqrevision/aviation/en/

States should be cognizant of the fact that the quarantine of large numbers of airline passengers is unlikely to be justified, is not practical and may be difficult to implement. After the acute phase, it is also not likely to prevent, in any significant way, the spread of a pandemic by aviation.

6.4 Parking position of aircraft

The pilot in command (PIC) needs to be advised where to park the aircraft – such information will normally be communicated to the PIC by air traffic control. This may be on a remote stand, or, depending on the situation, on the apron with or without an air bridge attached. It should be noted that parking an aircraft a distance away from the terminal building is likely to delay the public health assessment of the situation, and may make passenger handling more complicated. There is no evidence to suggest that the public health risk is greater if the aircraft is parked adjacent to the terminal, with an air bridge or steps used for disembarkation. In principle, the aircraft arrival should be managed by a system that is as close to routine as possible. The airport plan should, ideally, have a pre-designated parking bay for the aircraft with a suspected case of communicable disease on board.

Aircrew and ground crew need to be advised concerning the opening of aircraft doors, disembarkation and the information to be given to travellers prior to the arrival of the medical team.

Action should be taken to disembark the travellers as soon as possible after the situation has been evaluated and a public health response has been instituted, if needed.

Actions during “Alert Red” (WHO Phase 6):

An Alert Red corresponds to the Phase at which WHO would declare the onset of a Pandemic. Progressively, most States/Administrations will begin to see the disease take hold in their communities and with this, it is likely that the screening measures at the airport will progressively be deactivated except for the possible continuing distribution of HANs to travellers. The deactivation will be from the State health authority.

7. Screening of departure travellers where a PHEIC is declared within the State/Administration. (Usually from Alert Orange onwards – WHO Phase 4/5)

It is likely that the measures outlined below will be activated at Alert Yellow / Orange.

Prior to arrival at airport

Potential travellers should be advised by the State health authority, through the appropriate media that departure screening will be carried out upon arrival at the airport and that travellers with symptoms (indicate list of symptoms) or those arriving from a declared infected site (identify site of outbreak of PHEIC) may not be allowed to enter the airport.

At Check-in

Training is to be provided to all check-in staff so that they are able to identify travellers who may have a communicable disease of public health concern (See Note to Para 5.3.1). Alternatively a checklist can be provided to the staff to assist in identifying such travellers. This checklist can be in the form of a list of symptoms and the site of the outbreak. Any traveller responding positively to the checklist can be sent for secondary screening prior to completion of the check-in.

Alternatively, departing passengers may be required to fill in a Health Declaration Form (HDF). The HDF could have the checklist of symptoms and also the location/s identified as outbreak or affected areas.

Check-in staff shall have access to appropriate personal protective equipment (PPE) and hand hygiene supplies. For many communicable diseases, disposable gloves and good hand hygiene (at times in combination with surgical masks) are sufficient unless otherwise specified by the State health authority.

A traveller having a communicable respiratory disease should wear a mask unless he/she is unable to tolerate it. If a mask is worn consistently by the ill traveller this precludes the need for others to wear a mask. All disposable materials in potential contact with an ill traveller need to be removed using biohazard precautions. All surfaces potentially contaminated by the ill traveller should be cleaned and disinfected according to the WHO Guide to Hygiene and Sanitation in Aviation.

If a traveller is suspected of having contracted / been exposed to a communicable disease (PHEIC), he/she shall be immediately referred to the designated airport health service provider or public health office. The traveller shall then be processed according to the Standard Operating Procedures (SOP) of the airport health service provider or public health office and if required, referred to the designated hospital using the designated ambulance/s.

After check-in

If other screening measures, such as temperature screening, have been instituted for departure travellers the measures outlined in Para 5.3.4.3 shall be activated. Additionally, appropriate measures for departing travellers identified under alert levels yellow and orange (such as the distribution of HANs) will also be activated.

- 8. Measures for airport workers including airline staff working at the airport**
(The aviation authority (together with the airport company as appropriate) in consultation with the State health authority will have to identify those airport workers that will be subject to these measures)

8.1 Measures Adopted During Alert Green (WHO Phase 1 to 3)

No measures shall be adopted for airport workers under this alert level. Instead, the Preparedness plan shall be reviewed to ensure the continued relevancy of the plan. Periodic exercises / table top planning scenarios should be planned and implemented to ensure that all relevant personnel are familiar with the plan and its activation.

8.2 Measures Adopted During Alert Yellow (WHO Phase 4)

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.

8.3 Measures Adopted During Alert Orange (WHO Phase 5)

In addition to the measure above, 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.

Any airport worker who has been exposed to the prevailing PHEIC through a family member at home will not report for work till the defined incubation period (to be defined by State health authority) is over. If during the incubation period the worker falls ill, 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.

Workers entering the transit area (sterile airside area) will be subject to temperature screening prior to entry to the airside. Those with fever (temperature of 37.5 degrees centigrade and above, or as specified by the State health Authority) will proceed to see

their doctor and treated; if required, hospitalization at the designated hospital will be instituted.

8.4 Measures During “Alert Red” (WHO Phase 6)

It is likely that the measures as in Alert Orange will continue for airport workers until such time as the State health authority deems it right to deactivate such measures.

9. Conclusion

9.1 To effectively manage and deal with an outbreak of a communicable disease, a coordinated effort from the various stake holders in the aviation community is needed to implement a public health emergency plan. This Plan indicates how the aviation authority, through its CMT, will coordinate the implementation of all measures especially at the airport, with guidance from the State. All other stake holders shall maintain their own internal SOPs that must dovetail the implementation of the aviation public health emergency plan.

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Example of a colour coded Disease Outbreak Response System

This example is from the Singapore Ministry of Health and is a generic framework which enables the Singapore Ministry of Health to respond immediately to any outbreaks and serves as the nucleus to ramp up for a higher level of response.

Alert Green	<p>Isolated external or local cases of animal-to-human transmission.</p> <p>Threat of human-to-human infection remains low. The disease, if any, is basically limited to animals.</p> <p>Strategy is to step up vigilance and make preparations to meet the potential threat.</p>
Alert Yellow	<p>All the measures taken in Alert Green will continue where operationally feasible.</p> <p>Inefficient human-to-human transmissions of flu caused by a novel virus, requiring close and sustained contact to an index case.</p> <p>Further spread can be prevented through public health measures to isolate cases and quarantine contacts.</p> <p>Risk of import is elevated. Isolated imported cases may occur but there is no sustained transmission.</p> <p>Strategy is to prevent further import of cases, and to ring fence and isolate cases to prevent spread. The focus will be to provide treatment of all cases, and antiviral prophylaxis to contacts including exposed healthcare workers.</p>
Alert Orange	<p>Virus becoming increasingly better adapted to humans but may not yet be fully transmissible, requiring close contact with an index case.</p> <p>Larger clusters appear in one or two places outside the State</p>

	<p>but a pandemic has not yet been declared. A cluster of cases may also occur within the State but human-to-human spread remains localized.</p> <p>Public health measures such as isolation and quarantine will be effective to break the chain of transmission. Strategy is to contain spread arising from any local cases and break the chain of transmission, while preserving essential services and resources.</p>
Alert Red	<p>WHO declares that an influenza pandemic has begun. Home State is eventually also affected.</p> <p>Higher risk of acquiring the disease from the community once pandemic spreads to the home State.</p> <p>Strategy is to mitigate the impact of the pandemic.</p> <p>All measures taken in Alert Orange will continue to be applied.</p> <p>Closing of school and suspension of selected events to prevent congregation of large groups of people.</p>
Alert Black	<p>High rates of severe disease and deaths. Emergency measures implemented to bring the situation under control.</p> <p>Healthcare and social support systems are overwhelmed by the pandemic. Economic activities are severely disrupted.</p> <p>Strategy is to ensure that medical & public health measures take precedence over social & economic considerations.</p> <p>Focus is to contain the “damage” and regain control of the situation. Drastic measures like stopping all social events may be implemented.</p>

WHO Pandemic Phase Descriptions

PHASE 1

No animal influenza virus circulating among animals has been reported to cause infection in humans.

PHASE 2

An animal influenza virus circulating in domesticated or wild animals is known to have caused infection in humans and is therefore considered a specific potential pandemic threat.

PHASE 3

An animal or human-animal influenza reassortant virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks.

PHASE 4

Human-to-human transmission (H2H) of an animal or human-animal influenza reassortant virus able to sustain community-level outbreaks has been verified.

PHASE 5

The same identified virus has caused sustained community level outbreaks in two or more countries in one WHO region.

PHASE 6

In addition to the criteria defined in Phase 5, the same virus has caused sustained community level outbreaks in at least one other country in another WHO region.

POST-PEAK PERIOD

Levels of pandemic influenza in most countries with adequate surveillance have dropped below peak levels.

POSSIBLE NEW WAVE

Level of pandemic influenza activity in most countries with adequate surveillance rising again.

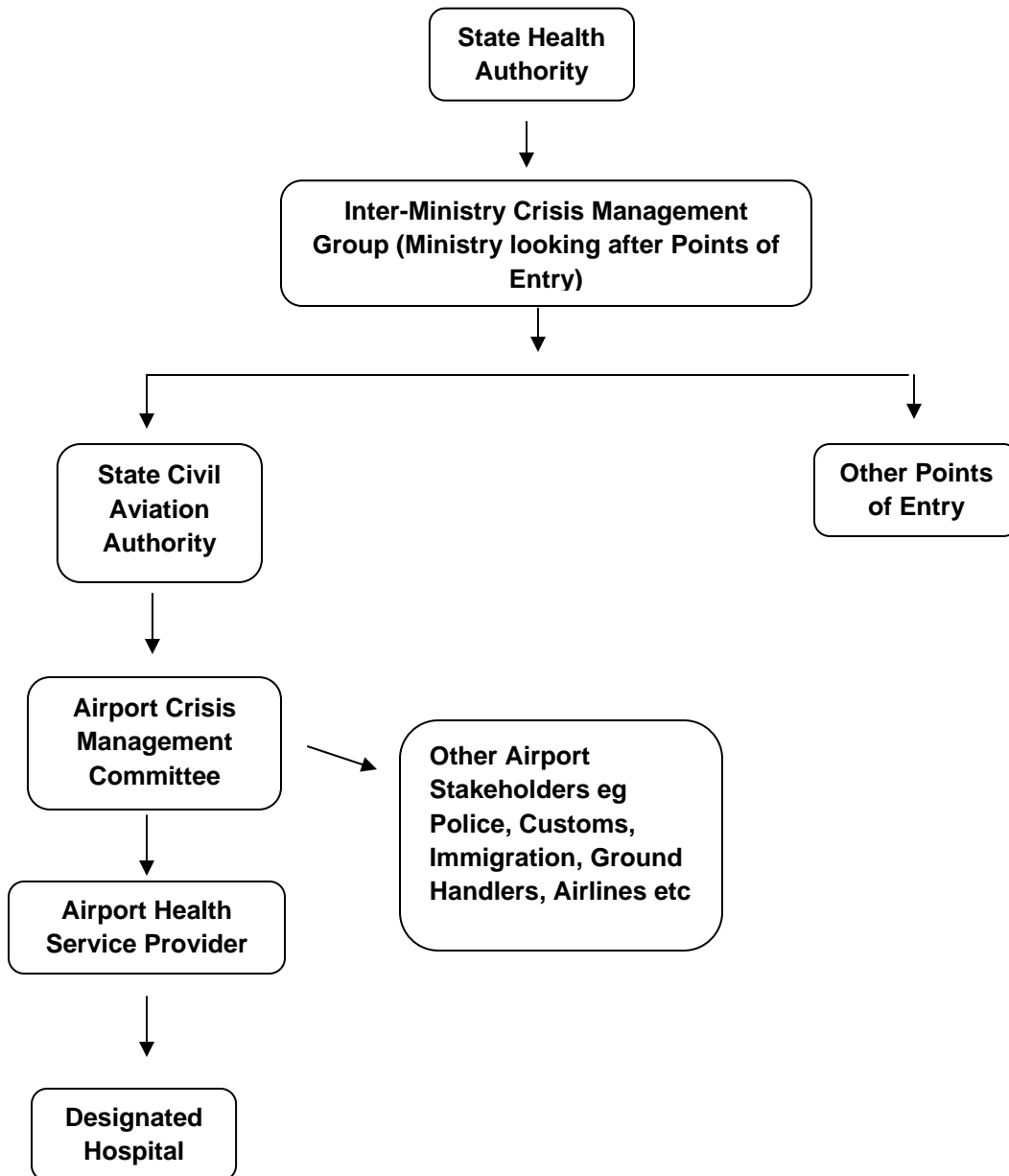
POST-PANDEMIC

Levels of influenza activity have returned to the levels seen for seasonal influenza in most countries with adequate surveillance.

Comparison of WHO Pandemic Phases to Colour Coded Alert Levels

Phase 1 to 3 = Alert Green
Phase 4 = Alert Yellow
Phase 5 = Alert Orange
Phase 6 = Alert Red

Public Health Emergency Plan Activation Flow Chart for Points of Entry



Roles of aviation CMT during a Public Health Emergency Response

- a. To oversee traveller screening and contact tracing
- b. Oversee the health service provider in implementation of public health measures prescribed by State health authority
- c. Work with the respective agencies such as Police, Public Health Agency, Immigration, Customs, Tourism Agencies, airlines and ground handlers to resolve day-to-day operational issues
- d. Review and implement new procedures when required
- e. Track and report the status of travellers sent to local medical institutions for further checks until they depart the country
- f. Track and report the impact of the outbreak on airport, airlines, ground handlers, and other stakeholders
- g. Provide daily updates to State Health Authority
- h. Monitor and report public health control measures implemented at other international airports
- i. To monitor and ensure compliance by airport, airlines and other stakeholders on implementation of public health control measures

Annex D

**Sample of a Health Alert Notice from the Ministry of Health, Singapore
It is in 4 languages – English, Malay, Chinese and Tamil**

Size 6 x 3.5"

 <p>MINISTRY OF HEALTH (SINGAPORE) Health Alert Notice (Updated 6 July 09)</p> <p>Monitor your temperature and look out for flu-like symptoms (fever >38°C, cough, runny nose or sore throat). If you are unwell, please see a doctor. Be socially responsible. Stay in and rest. If you need to go out, wear a mask and minimise contact with others.</p> <p>If your symptoms are mild, the nearest Pandemic Preparedness Clinic (PPC), polyclinic or usual GP would be able to manage you. PPC and polyclinic doctors have been especially equipped to assess your condition and treat you. (For details of PPC locations, log on to www.moh.gov.sg or www.hpb.gov.sg. You can also sms CLINIC to 70550. If you are a tourist, your hotel will be able to provide you with a list of PPCs)</p> <p>If your symptoms are severe (eg difficulty in breathing, chest pain, severe vomiting etc), please call 995 for an ambulance to bring you to the nearest hospital Emergency Department.</p>  <p>KEMENTERIAN KESIHATAN (SINGAPURA) Notis Amaran Kesihatan (Dikemaskini 6 Julai 2009)</p> <p>Pantau suhu badan anda dan awasi simptom seperti demam sesesema (demam >38°C, batuk, hidung berair atau sakit tekak). Jika anda tidak sihat, harap berjumpa doktor. Mainkan tanggungjawab sosial anda. Jangan keluar rumah dan berehatlah. Jika anda perlu keluar, gunakan pelitup muka dan kurangkan hubungan dengan orang lain.</p> <p>Jika simptom anda ringan, pergi ke Klinik Bersiap Sedia Pandemik (PPC), poliklinik atau doktor privat biasa yang boleh menguruskan anda. Doktor di PPC dan poliklinik bersedia untuk menilai keadaan dan merawat anda. (Untuk butir lanjut tentang lokasi PPC, lungsurilah laman www.moh.gov.sg atau www.hpb.gov.sg. Anda boleh juga menggunakan perkhidmatan pesanan ringkas CLINIC ke 70550. Jika anda seorang pelancong, hotel anda boleh menyediakan senarai PPC untuk anda)</p> <p>Jika simptom anda serius (contohnya, kesusahan bernafas, sakit dada, muntah berlebihan dll), harap telefon 995 untuk mendapatkan sebuah ambulans membawa anda ke Jabatan Kecemasan sebuah hospital terdekat.</p> <p>For information on Influenza Check out these websites Untuk maklumat mengenai influenza Lungsurilah laman berikut</p> <p>http://www.cdc.gov/h1n1flu/key_facts.htm http://www.flu.gov.sg/ http://www.moh.gov.sg/ http://www.who.int/csr/disease/influenza/en/</p>  <p>MOH Hotline at Hotline MOH di 1800 333 999</p>	 <p>新加坡卫生部 提高卫生警惕通告 (2009年7月6日更新)</p> <p>经常测量您的体温，密切注意任何疑似感冒症状（体温 >38°C、咳嗽、流鼻涕或喉咙痛）。若是感到身体不适，请立即前往就医。此外请负起社会责任，留在家中休息。若是需要出门，请戴上口罩并尽量减少与别人接触。</p> <p>若是症状温和，最靠近的流感戒备诊疗所（PPC）、综合诊疗所或普通医生该能为您诊断治疗。流感戒备诊疗所及综合诊疗所医生都具有特别设备，能为您评估病情及提供治疗。（欲知最靠近的流感戒备诊疗所地点，请登录www.moh.gov.sg或www.hpb.gov.sg查询。此外，您也可以发手机简讯“CLINIC”至 70550 索取资料。若您是旅客，您所下榻的酒店该能为您提供流感戒备诊疗所名单）。</p> <p>若是您出现严重症状（例如呼吸困难、胸痛、严重呕吐等），请拨电话995传召救护车把您载到最靠近的医院紧急部门。</p>  <p>சுகாதார அமைச்சு, சிங்கப்பூர் சுகாதார விழிப்புடன் அறிக்கை (ஆகக் கடைசிட் தகவல்: 6 ஜூலை 09)</p> <p>உங்கள் உடல் வெப்பநிலையைச் சோதிப்பதுடன் சளிச்சுரம் போன்ற அறிகுறிகளையும் கவனிப்பீர்கள் (தாප்ச்சல் (>38°C), இரூமல், மூக்கு துறக்கல் அல்லது தொண்டை வலி) உங்களுக்கு உடல் தளம் இல்லாவிட்டால், அன்பு கூட்டுந்து மருத்துவரைப் பாருங்கள். சமூகப் பொறுத்தபண்போடு இருங்கள். கிட்டடியோடீய தளம் வாய்வந்தால், வெளியே செல்ல வேண்டி உறுத்தல்தரல் மூகக் கவனம் அளிந்து கொள்வதுடன், மற்றவர்களுடனான தொடர்புகளைக் குறைத்துக் கொள்ளுங்கள்.</p> <p>உங்களின் அறிகுறிகள் மிதமானவையாக இருந்தால், அருகிலுள்ள பண்புடன் நோய்த் தடுப்பு துறைமுகம் மருந்தகம் (PPC), மருந்தை மருந்தகம் அல்லது வழங்குதல் உட்கல் மருத்துவமனை சென்று சந்தித்துக் கொள்ளுங்கள். PPC மருந்தகங்கள் மற்றும் மருந்தை மருந்தக மருத்துவர்கள் உங்கள் உடல் நிலையை சோதித்து சிகிச்சையளிக்கும் சிறப்பு வசதிகளைப் பெற்றுள்ளனர். PPC மருந்தகங்கள் உட்கல் இட வசதிகளை அடிக www.moh.gov.sg அல்லது www.hpb.gov.sg இணையத் தளத்தைப் பாருங்கள். நீங்கள் 70550 எண்ணுக்குக் கவனிதல் தளம் தளவழி அனுப்பலாம். நீங்கள் அற்றுப்படி பயன்பாடுக இருந்தால் நீங்கள் தவிர்ப்புக்குக் கிற்று PPC மருந்தகங்களின் பட்டியலை வழங்கும்.</p> <p>உங்களின் அறிகுறிகள் கடுமையாக இருந்தால் (உதா. மூக்கு திறைதல், நோய்த் வலி, கடுமையான வளந்து போன்றவை) அன்பு கூட்டுந்து ஆய்முறிகள் வாகனத்திற்காக 995 எண்ணை அழைத்து அருகிலுள்ள மருத்துவமனையில் அவரது சிகிச்சை பெறுங்கள்.</p> <p>欲知流感详情，请登录以下网站</p> <p>சளிச்சுரம் போன்ற பற்றி மேலும் தகவல் அறிய சிங்கப்பூர் இணையத் தளங்களுக்குச் செல்லலாம்</p> <p>http://www.cdc.gov/h1n1flu/key_facts.htm http://www.flu.gov.sg/ http://www.moh.gov.sg/ http://www.who.int/csr/disease/influenza/en/</p>  <p>卫生部热线 1800 333 9999 சமூக சுகாதார அமைச்சின் திரைத் தொலைபேசி எண்ணை 1800 333 9999 அணுகுங்கள்</p>
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Annex E

Mode of distribution of HAN and estimation of quantity required

To be developed by State Health Authority in collaboration with the Aviation CMT and consultation with all stakeholders

Annex F

Health Declaration Form (HDF)

A standardised HDF is currently under review by WHO, ICAO and IATA. It will be made available at this site when approved.

Annex G

Public Health Passenger Locator Form

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

1. Airline and Flight Number		2. Date of arrival		3. Seat Number where you actually sat on the aircraft	
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Airline	Flight Number	DD	MM	YYYY	

Personal Information

4. Name

Family Name Given Name(s)

Your Current Home Address (including country)

Street Name and Number City State/Province

Country ZIP/Postal Code

Your Contact Phone Number (Residential or Business or Mobile)

Country code Area Code Phone Number E-mail address

Passport or Travel Document Number Issuing Country/Organization

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

Street Name and Number City State/Province

Country ZIP/Postal Code Telephone Number (including country code) or mobile phone number

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. Please provide the name of a close personal contact or a work contact. This must NOT be you.

a. Name

Family Name Given Name(s)

b. Telephone Number

Country code Area Code Phone Number E-mail address

c. Address

Street Name and Number City State/Province

Country ZIP/Postal Code

7. Are you traveling with anyone else? YES/NO Circle appropriate response If so, who? (name of Individual(s) or Group)

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

Responding to Pandemic (H1N1) 2009:

*Options for Public Health Measures at
International Points of Entry (POE)*



**World Health
Organization**

Annex I

Traveller Screening Deployment Locations

To be developed by the Aviation CMT in consultation with the State health authority.

This will be unique to each airport

Annex J

SOP for Screening Procedure for Travellers

To be developed by the Aviation CMT in consultation with the State health authority.

Annex K

Entry – exit Locations of Ambulance at Airport and Route to Designated Hospital

To be developed by the Aviation CMT in consultation with the State health authority.

This will be unique to each airport