

GUIDELINES FOR STATES CONCERNING THE MANAGEMENT OF COMMUNICABLE DISEASE POSING A SERIOUS PUBLIC HEALTH RISK

Preface

These guidelines are written to assist States in developing an aviation related plan for any communicable disease posing a serious public health risk, such as an influenza virus with human pandemic potential. A preparedness plan for aviation is required since air travel may increase the rate at which a disease spreads, thereby decreasing the time available for preparing interventions. Although it is probably not feasible to halt the spread of some diseases, advance preparation should make it possible to effect a delay and provide more time to prepare. Such preparation is necessary across many different sectors, including that of aviation. Any additional time to enable the production of an effective vaccine is likely to provide the best chance of mitigating the potential effects for a number of diseases that can be prevented by such a prophylactic measure.

This information is written primarily for States and more detailed information that is specific to airports and airlines may be found on the websites of the Airports Council International (ACI) and the International Air Transport Association (IATA). These aviation preparedness guidelines will be amended over time, in accordance with the World Health Organization (WHO) International Health Regulations (IHR) (2005)¹ as the preparedness planning process evolves. They should be considered for incorporation into national preparedness plan guidelines.

¹ The International Health Regulations (2005) entered into force on 15 June 2007 for all WHO Member States that have not rejected them or made “reservations” on a timely basis.

GENERAL PREPAREDNESS

In order to respond to a communicable disease with the potential to pose a serious public health risk, States should establish a national plan, in accordance with any relevant preparedness guidance available from the World Health Organization (WHO), such as that for influenza, including:

- a) a clear contact point, with identified individual(s), at national aviation level for policy formulation and operational organization of preparedness;
- b) a contact point for aviation preparedness planning that is integrated into the general national preparedness plan;
- c) a national planning command and control system, including the identification of a competent authority at each designated airport (IHR (2005), Articles 19, 20.1). Business continuity planning models can provide a framework for such a system;
- d) a reliable system for informing the public health authority of the pending arrival of a suspected case of a communicable disease, when air traffic control has been notified of this by the pilot, in accordance with ICAO Annex 9, para 8.15;
- e) national and international level linkages (networks) to exchange expertise and share resources;
- f) an aviation preparedness plan that effectively links all relevant aviation stakeholders (including both public and private sector entities) within the national preparedness plan: in

- particular, the national civil aviation authority should collaborate with the national public health authority;
- g) guidance that is generic to all communicable diseases, which can be adapted for specific diseases;
 - h) guidance that is based on information provided by WHO, to ensure global harmonization of preparedness planning;
 - i) at the stage of trip planning and booking of tickets, methods to inform the public of any relevant personal and public health risks. Such information should be incorporated into national public health, airline, airport, travel agent and relevant medical association websites, and may also be provided through the media and telephone contact. Each stakeholder should ensure that information provided does not conflict with that from WHO or their national public health authority;
 - j) consistent advice by the national public health authority in consultation with the national aviation authority to advise travellers (passengers and crew) to postpone travel, or seek medical advice, if they have signs or symptoms of a communicable disease with the potential to pose a serious public health risk;
 - k) in the event of an outbreak, contracting States should implement, where indicated, a public education campaign to advise individuals wishing to leave the country to postpone travel and to seek medical care when ill with signs or symptoms consistent with the disease of concern;
 - l) consistent health requirements for entry, or denial of entry into a State, in accordance with WHO recommendations;
 - m) a communication system to facilitate the above; and,
 - n) if medication is being stockpiled by contracting States for treatment or preventative purposes in the event of an outbreak, airline and airport workers, including air traffic controllers, should be considered in the distribution plan. If safety critical personnel e.g. pilots, cabin crew, air traffic controllers, might be prescribed prophylactic medication, the possible adverse side effects, including cognitive and behavioural aspects, should be considered, in advance of their use. Any new medication taken by such individuals should be taken for a trial period prior to operating to determine if there are any significant side effects. Article 32 of the IHR (2005) refers to treatment that should be provided for travellers.

Note.— Routine and emergency public health measures as outlined in the IHR (2005) (Articles 22-24, 27-28, Annexes 1B, 4) are important with regard to the potential for international spread of disease. Such measures should be emphasized by the public health authority to ensure that aircraft and airport facilities are kept free from sources of infection.

For implementation of the national plan in the event of an increase in the public health risk, States should further establish, in accordance with core capacity requirements for designated airports (IHR (2005) Annex 1B):

- a) a position (or positions with adequate lines of communication) having responsibility for the operational implementation of the national aviation preparedness plan, having reasonable autonomy/flexibility for rapid policy and decision making;
- b) a national rapid communication network involving:
 - i) stakeholders in the aviation industry e.g. airport authorities, public health and airport medical service providers, ground handling agents, air traffic control, airlines and general aviation;
 - ii) other stakeholders e.g. public health agencies, security, police, ground transport, retail, immigration, customs etc; and,
 - iii) the public;
- c) in association with other States, international networks of aviation and public health experts for the benefit of aviation stakeholders in the region, and an information system for rapidly accessing such experts in times of public health emergencies; and,
- d) a method of assessing preparedness by means of table-top or live exercises involving all relevant stakeholders, especially public health authorities, airports and airlines, in order to test the plan, ensure an adequate response, and enhance the plan.

AIRPORT PREPAREDNESS

(refer to the Airports Council International website for further details)

Communication

Airports should establish:

- a) a clear contact point for policy formulation and operational organization of preparedness; and,
- b) a position with responsibility for the operational implementation of the airport preparedness plan, having reasonable autonomy/flexibility for rapid policy and decision making.

Communication links should be established, with the following entities:

- 1) Internal
 - local public health authority
 - airport medical service providers
 - airlines
 - handling agents
 - air traffic management
 - local hospital(s)
 - emergency medical services
 - police
 - customs
 - immigration
 - security
 - airport retailers
 - information/customer relations services
 - other stakeholders as necessary
- 2) External
 - travellers:
 - before reaching the airport
 - in the terminal building
 - travel agents
 - international organizations involved with migration
 - other airports in same State/region
 - other airports outside State/region
 - media

Screening

To reduce the risk of export from an affected State of a disease causing, or with potential to cause, a public health emergency of international concern, the national public health authority of an affected contracting State, in coordination with the aviation sector and as advised by the WHO, should develop a national exit screening plan at its international airports, to be applied uniformly to all individuals attempting to leave the State.

States should appoint a focal point to coordinate national exit screening responses and to initiate exit screening in appropriate circumstances.

To enable a risk assessment of the individual traveller to be made, a ‘toolbox’ of methods is available for screening, including visual inspection, questionnaire and temperature measurement (using thermal scanners or other suitable methods). Details of requirements cannot be determined in advance of an outbreak and will be advised by the WHO, based on the specificity of the event, including its epidemiology, mode of transmission and possible exposure history of individuals being screened. A combination of measures may be required.

For influenza of pandemic potential the WHO recommends exit screening from an outbreak area for WHO Phase 4 and above. It should be possible to implement this within 48 hours of a Phase 4 outbreak area being declared.

The WHO has also developed an interim protocol specifically for pandemic influenza entitled; Rapid Operations to Contain the Initial Emergence of Pandemic Influenza. This outlines a strategic approach to contain the initial appearance of pandemic influenza. Movement restrictions in and out of the containment zone as specified in the interim protocol should be implemented (WHO Interim Protocol, May 2007).

Screening should be undertaken using reliable equipment by personnel trained in its use and in the interpretation of recordings. Equipment should be calibrated and maintained in accordance with the manufacturer’s recommendations. As far as possible, screening should not prevent or unduly delay the flow of passengers and cargo through an airport.

The appropriate public health authority, in consultation with airport management, should establish:

- a) a system of implementing, at short notice, traveller screening measures as recommended by the WHO (IHR (2005) Articles 23.2, 23.3, 31 and 32);

Note 1.— To facilitate screening, travellers entering an airport should preferably do so through entry point(s) designated for that purpose. Screening should be undertaken as early as possible and preferably before the traveller proceeds to the airside.

Note 2.— While exit (departure) screening measures for all travellers from areas experiencing human infection with a pandemic influenza strain may be recommended in the WHO global influenza preparedness plan, certain entry screening may also be useful:

- for geographically isolated infection free areas (islands)
- when epidemiological data indicates the need to do so
- if departure screening at the traveller’s point of embarkation is sub-optimal
- for travellers arriving from defined outbreak areas

- b) a system, as advised by the public health authority, of assessing travellers who screen positive (or who have arrived on board an aircraft and have symptoms of a communicable disease that may pose a serious public health risk) including consideration of:

- designated medical staff and an area for inspection of suspect cases
- isolation and quarantine area (for aircraft and travellers)
- personal protective equipment for all health professionals (and others) at potential risk
- transport to an appropriate medical facility

Note 1.— States are obliged to respect a traveller’s human rights and to provide essential supplies, protection of baggage and other possessions, appropriate medical treatment and

means of communication for travellers who are subject to public health procedures such as quarantine or isolation (IHR (2005), Articles 23.1 and 45).

Note 2.— Guidance on control measures required for aircraft is provided in IHR (2005), Article 27.

Note 3.— Quarantine of large numbers of travellers is not likely to be justified, and may be difficult to implement. After the acute phase, it is also not likely to significantly prevent the spread of a major disease outbreak.

- c) a system to incorporate the results of exit screening at airports with the national surveillance and reporting system for outbreaks of a specified illness. Collection of traveller's information should be in accordance with Articles 23.1 and 45 of the IHR (2005).
- d) logistics, especially baggage, security and customs formalities for travellers arriving from abroad, for suspected cases and for asymptomatic contacts.
- e) clear criteria that may result in a recommendation to deny travel, including the legal basis and actions to be taken subsequent to such a recommendation (IHR (2005) Article 31.2).
- f) a system of implementing, at short notice, screening measures for airport and airline staff. Such measures may include self assessment at home, as advised by the public health authority.

Note 1.— If a traveller suspected of having a communicable disease is identified after an aircraft departs and the aircraft has to return to the originating airport, or is diverted to another airport, the situation should be handled as for an arriving aircraft with a sick traveller on board (IHR (2005) Article 28.4-6).

Note 2.— Transit travellers do not normally need to be screened when exit (departure) screening has been appropriately carried out (IHR (2005) Article 25 (c)).

Airport closure

Closure of an airport should not be considered other than in exceptional circumstances. Contracting States may consider closing an airport to regular traffic in the event that the airport is within or close to an outbreak of communicable disease that may pose a serious public health risk.

Specific to pandemic influenza, in accordance with the WHO interim protocol (May 2007) if the containment zone encompasses major air land and sea transit points it is possible that screening procedures could be used but the preferable alternative is to close that entry point. It is critical to discourage to the extent possible all non-essential movement of persons in and out of the containment zone.

Flight restrictions

Contracting States should not restrict their airspace to any aircraft for reason of awareness that an aircraft may have a case of communicable disease on board. Article 28 of the IHR (2005), Ships and aircraft at points of entry, provides that:

“28.1. Subject to Article 43 or as provided in applicable international agreements, a ship or an aircraft shall not be prevented for public health reasons from calling at any point of entry. However, if the point of entry is not equipped for applying health measures under these Regulations, the ship or aircraft may be ordered to proceed at its own risk to the nearest suitable point of entry available to it, unless the ship or aircraft has an operational problem which would make this diversion unsafe.

28.2. Subject to Article 43, or as provided in applicable international agreements, ships or aircraft shall not be refused *free pratique* by States Parties for public health reasons; in particular they shall not be prevented from embarking or disembarking, discharging or loading cargo or stores, or taking on fuel, water, food and supplies. States Parties may subject the granting of *free pratique* to inspection and, if a source of infection or contamination is found on board, the carrying out of necessary disinfection, decontamination, disinsection or deratting, or other measures necessary to prevent the spread of the infection or contamination.”

In accordance with the IHR (2005) ‘*free pratique*’ means:

“Permission for an aircraft, after landing, to embark or disembark, discharge or load cargo or stores.”

Note 1.— If an airport does not have adequate public health facilities, its preparedness plan should include provisions for the safe diversion of an aircraft to an airport that can provide the relevant facilities. See also IHR (2005) Article 27.2.

Note 2.— ICAO Annex 9, Chapter 2, paragraph 2.4 provides that:

“**2.4 Recommended Practice.**— *In accordance with the International Health Regulations of the World Health Organization, Contracting States should not interrupt air transport for health reasons. In cases where, in exceptional circumstances, such service suspensions are under consideration, contracting States should first consult with the World Health Organization and the health authorities of the State of occurrence of the disease before taking any decision as to the suspension of air transport services.*”

Miscellaneous

Airports should establish methods to continue operating with greatly reduced staff numbers.

AIRLINE PREPAREDNESS

(refer to the International Air Transport Association website for further details)

Communication

Airlines should establish:

- a) a contact point for policy formulation and operational organization of preparedness; and
- b) a position with responsibility for the operational implementation of the airline preparedness plan, having reasonable autonomy/flexibility for rapid policy and decision making.

Communication links should be established, with the following:

- 1) Internal
 - airport authorities
 - handling agents
 - airport medical service providers
 - emergency medical services
 - maintenance service providers
 - cleaning service providers
 - baggage handling services
 - air traffic management
 - local public health authority
 - local hospital(s)
 - police
 - immigration
 - customs
 - security service providers
 - other stakeholders as necessary
- 2) External
 - travellers
 - before reaching the airport
 - when in the terminal building
 - travel agents
 - international organizations involved with migration
 - media

At the airport (pre- and post-flight)

It is not the role of airline staff or handling agents to have prime responsibility for screening and managing travellers who may have a communicable disease: this is usually a public health responsibility – see under “Airports”.

Airlines should:

- a) establish general guidelines for passenger agents who may be faced with a suspected case of communicable disease, relevant to airline operations, at the airport; and,
- b) cooperate with airport and public health authorities on logistics e.g. dealing with a sick traveller.

In-flight illness

Airlines should establish:

- a) a system enabling cabin crew to identify travellers suspected of having a communicable disease;
- b) a system of managing travellers who are suspected of having a communicable disease, including:
 - advice from medical ground support (if available)
 - sick traveller relocation, away from other travellers, if possible
 - carriage of appropriate first-aid equipment and supplies, cabin crew training in its use (in accordance with ICAO, Annex 6, 6.2) and general sanitary precautions
 - clean-up of areas occupied by the affected traveller, when necessary
 - reallocation of cabin crew duties
 - use of appropriate personal protective equipment by passenger and crew e.g. masks, gloves
 - disposal of contaminated supplies and equipment
 - personal hygiene measures to reduce risk
- c) procedures for informing air traffic control that a case of a communicable disease is on board, so that the public health authority at the destination can be advised appropriately in a timely manner (IHR (2005), Article 28.6, ICAO Annex 9, 8.16, and Appendix 1 (Health Part of Aircraft General Declaration)).

Note 1.— A State may request from an airline information relating to the traveller's destination (so that the passenger can be contacted) and information concerning the traveller's itinerary. When this information is held by the airline, it should comply with such a request in a timely manner, and cooperate fully with public health authorities in providing other relevant information it may hold (IHR (2005) Article 23.1 (a)(i), (ii)). To facilitate the timely release of such information the State should submit a written request, including a reference to the appropriate legislation under which the request is made.

Note 2.— To assist contact tracing, a "passenger locator card" (PLC) has been developed. This provides an appropriate method of rapidly collecting traveller contact information: aircraft operators should determine if the PLCs will be kept on board, or at all destination airports. Depending on the specific hazard, the number of PLCs needed may vary, from a few to one for each traveller. The PLC is available at Appendix 1 to this document.

The International Air Transport Association, assisted by relevant experts, is evaluating different electronic methods that could facilitate passenger tracing.

Aircraft maintenance

Airlines should establish for maintenance crew:

- a) a policy concerning the removal of re-circulated air filters including:
 - use of personal protective equipment
 - precautions to be implemented when removing the filter
 - precautions to be implemented when disposing of filters
 - personal hygiene measures to reduce risk
 - reference to the filter manufacturer's guidelines for frequency of filter replacement
- b) a policy concerning the venting of vacuum waste tanks; and,
- c) a policy for tasks that involve removing bird debris associated with a bird strike.

Aircraft cleaning

For crew tasked with cleaning an aircraft having transported a traveller suspected of having a communicable disease that may pose a serious public health risk, airlines should establish a policy consistent with the national public health and aviation authorities that would include:

- use of appropriate personal protective equipment
- personal hygiene measures to reduce risk
- surfaces to be cleaned
- use of cleaning agents/disinfectants
- disposal of personal protective equipment and soiled material

Cargo and baggage handling

- a) Airlines should encourage cargo and baggage handlers to frequently wash their hands and, if required, provide advice concerning any further precautions they may need.
- b) Airlines should co-operate with the public health authority with respect to baggage and cargo inspections (IHR (2005) Article 23 (b)).

Miscellaneous

Airlines should establish methods to continue operating with greatly reduced staff numbers.

**PROCEDURE FOR NOTIFICATION OF SUSPECTED COMMUNICABLE DISEASES
ON BOARD AN AIRCRAFT OR OTHER PUBLIC HEALTH RISK**

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

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

2. 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.

3. 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, ATC 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.— AFTN (urgency message), telephone, facsimile or other means of transmission may be used

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