



# Introduction to the AVIATION PANDEMIC PREPAREDNESS PLAN

# CONTENTS

1.	RECORDS AMENDMENTS .....	iv
2.	INTRODUCTION TO AVIATION PANDEMIC PREPAREDNESS PLAN .....	iv
3.	REFERENCES.....	v
4.	DEFINITIONS.....	v
5.	BACKGROUND.....	1
6.	OBJECTIVE OF THE NATIONAL AVIATION PANDEMIC PREPAREDNESS PLAN .....	2
7.	MODE OF DISEASE TRANSMISSION.....	3
8.	IMPACT OF PUBLIC HEALTH ON MENTAL HEALTH ISSUES IN AVIATION.....	5
9.	LEGISLATIVE AND RELATED ASPECTS .....	7
10.	ARTICLE 14 OF THE CONVENTION ON INTERNATIONAL CIVIL AVIATION .....	8
11.	ICAO ANNEX 9: FACILITATION .....	8
12.	ICAO ANNEX 6: OPERATION OF AIRCRAFT (RECOMMENDATION).....	9
13.	ICAO ANNEX 11: AIR TRAFFIC SERVICES AND PLANS - ATM .....	9
14.	ANNEX 18:“SAFE TRANSPORT OF DANGEROUS GOODS BY AIR”.....	9
15.	CLASSIFICATION OF INFECTIOUS DISEASE AND CLASSIFICATION OF INFECTIOUS SUBSTANCES .....	10
16.	ICAO COVID-19 GUIDELINES AND BULLETINS .....	11
17.	WORLD HEALTH ORGANISATION AND THE INTERNATIONAL HEALTH REGULATIONS (2005) .....	11
18.	NATIONAL LEGAL INSTRUMENTS: AVIATION PUBLIC HEALTH PLAN.....	13
19.	THE CIVIL AVIATION REGULATIONS (CARS), AND ASSOCIATED TECHNICAL STANDARDS .....	13
20.	OTHER APPLICABLE NATIONAL LEGISLATION .....	22
21.	RISK MANAGEMENT MODEL FOR DOCUMENT .....	22
22.	GENERAL RISK MANAGEMENT PRINCIPLES APPLIED TO AIR TRANSPORT .....	23
23.	BUSINESS CONTINUITY PLANS FOR PUBLIC HEALTH EMERGENCIES IN AVIATION.....	25
24.	VARIOUS STAKEHOLDERS IN THE MANAGEMENT OF PUBLIC HEALTH EVENTS...	26
25.	ROLE OF THE NATIONAL DEPARTMENT OF TRANSPORT .....	27
26.	NATIONAL AIR TRANSPORT FACILITATION COMMITTEE.....	27
27.	ROLE AND RESPONSIBILITY OF THE DIRECTOR: <b>NATIONAL DEPARTMENT OF GENERAL HEALTH AND TRANSPORT</b> .....	28
28.	FUNCTIONS OF A PORT HEALTH OFFICER (COMPETENT AUTHORITY) IN AVIATION ( <b>check with DOH</b> ) .....	29
29.	THE ROLE OF THE CIVIL AVIATION AUTHORITY.....	30
30.	THE ROLE AND RESPONSIBILITY OF A DESIGNATED AIRPORT.....	31
31.	THE ROLE OF THE EMERGENCY OPERATION CENTRE .....	33
32.	ROLES AND RESPONSIBILITIES OF BAGGAGE AND CARGO HANDLERS DURING PUBLIC HEALTH EMERGENCIES.....	33

<b>33.</b>	<b>ROLES AND RESPONSIBILITIES OF THE SECURITY SCREENERS DURING PUBLIC HEALTH EVENTS .....</b>	<b>34</b>
<b>34.</b>	<b>ROLES AND RESPONSIBILITIES OF CATERERS DURING PUBLIC HEALTH EMERGENCIES.....</b>	<b>40</b>
<b>35.</b>	<b>ROLES AND RESPONSIBILITIES OF THOSE IN AIR TRAFFIC AND NAVIGATION SERVICES (ATNS) .....</b>	<b>41</b>
<b>36.</b>	<b>ROLES AND RESPONSIBILITIES OF IMMIGRATION OFFICERS DURING PUBLIC HEALTH EMERGENCIES.....</b>	<b>43</b>
<b>37.</b>	<b>ROLES AND RESPONSIBILITIES IN THE MANAGEMENT OF MEDICAL WASTE AND DISPOSAL BY AIRLINES AND AIRPORTS .....</b>	<b>44</b>
<b>38.</b>	<b>MANAGEMENT OF MEDIA AND PUBLIC EDUCATION DURING PUBLIC HEALTH EVENTS .....</b>	<b>45</b>
<b>39.</b>	<b>COMMUNICATION AND COLLABORATION WITH ICAO.....</b>	<b>45</b>
<b>40.</b>	<b>INTERNATIONAL COOPERATION.....</b>	<b>46</b>
<b>41.</b>	<b>RESPONSIBILITY OF MEDIA,PUBLIC HEALTH AND EDUCATION DURING PUBLIC HEALTH EMERGENCIES.....</b>	<b>47</b>
<b>42.</b>	<b>ROLES AND RESPONSIBILITIES OF THE SOUTH AFRICAN POLICE SERVICE (SAPS) .....</b>	<b>47</b>
<b>43.</b>	<b>ROLES AND RESPONSIBILITIES OF THE RESCUE AND FIRE FIGHTING (RFF) SERVICES AT AIRPORTS .....</b>	<b>48</b>
<b>44.</b>	<b>ROLES AND RESPONSIBILITIES OF THE SOUTH AFRICAN REVENUE SERVICES (SARS) .....</b>	<b>48</b>
<b>45.</b>	<b>CORPORATE GOVERNANCE AND TRADITIONAL AFFAIRS .....</b>	<b>48</b>
<b>46.</b>	<b>ROLES AND RESPONSIBILITIES OF THE SOUTH AFRICAN NATIONAL DEFENCE FORCE (SAMHS).....</b>	<b>49</b>
<b>47.</b>	<b>ROLES AND RESPONSIBILITIES OF THE DEPARTMENT OF INTERNATIONAL RELATIONS AND CO-OPERATION (DIRCO) .....</b>	<b>49</b>
<b>48.</b>	<b>ROLES AND RESPONSIBILITIES: GENERAL AVIATION CONSIDERATIONS IN PLANNING THE AVIATION INDUSTRY'S RECOVERY FROM A PUBLIC HEALTH EMERGENCY .....</b>	<b>49</b>
<b>49.</b>	<b>ROLES AND RESPONSIBILITIES OF CARGO REGULATED AGENTS .....</b>	<b>51</b>
<b>50.</b>	<b>REGIONAL COLLABORATIVE ARRANGEMENT FOR IMPLEMENTATION OF PUBLIC HEALTH CORRIDORS .....</b>	<b>51</b>
<b>51.</b>	<b>COMMUNICATION AND CO-OPERATION WITH OTHER STATES .....</b>	<b>52</b>
<b>52.</b>	<b>COMMUNICATION WITH ICAO .....</b>	<b>52</b>
<b>53.</b>	<b>FOREIGN STATE AND AIR CARRIER AUDIT: PUBLIC HEALTH PROTOCOLS .....</b>	<b>52</b>
<b>54.</b>	<b>ROLES AND RESPONSIBILITIES: GENERAL AVIATION CONSIDERATIONS IN PLANNING THE AVIATION INDUSTRY'S RECOVERY FROM A PUBLIC HEALTH EMERGENCY .....</b>	<b>54</b>
<b>55.</b>	<b>RESPONSIBILITIES OF INCIDENT AND ACCIDENT INVESTIGATORS DURING PUBLIC HEALTH EMERGENCIES.....</b>	<b>55</b>
	<b>CONCLUSION .....</b>	<b>58</b>

# 1 RECORD OF AMENDMENTS

This document will be subject to amendment from time to time. Such amendments are to be controlled through the Record of Amendments included in this document. The coordinating body for amendments is the Department of Transport and the Civil Aviation Authority.

Amendment No.	Effective Date	Date Entered	Entered by
1	07 April 2017		Dr Bogatsu
2	29 March 2022		Dr Bogatsu

## 2 INTRODUCTION TO AVIATION PANDEMIC PREPAREDNESS PLAN

With the increase in global transport of passengers and cargo, the potential transmission of communicable disease or exposure to other agents of public health significance has increased substantially. A public health emergency of international concern (PHEIC) may be declared by the World Health Organisation 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 country OR upon activation by WHO (according to Annex 2 of the IHR (2005)). The roles of the aviation authority during a PHEIC are to ensure the availability, continuity and sustainability of critical air transport services and coordinate and facilitate the implementation of health and non-health measures to protect the health and welfare of travellers, staff and the general public as well as to minimize / mitigate the spread of communicable disease through air travel.

This Aviation Pandemic Preparedness Plan describes measures that should be adopted during a PHEIC in compliance with the relevant articles in the IHR 2005 and the ICAO Annexes 6, 9, 11, 14, 18 and 19. This will ensure a coordinated and timely response by the implementation of health measures by multi-agency effort and will not be the sole responsibility of the aviation and health authority. As such, the measures implemented by the respective agencies should be well coordinated to avoid confusion, inconsistencies, and the duplication of resources.

## 3 REFERENCES

- WHO: International Health Regulations (2005)
- WHO: Chemicals of Major Public Health Concern
- WHO: Disinfection
- WHO: Sanitary Measures in Aviation
- WHO: Handbook for the Management of Public Health Events in Air Transport
- WHO: Updates on Emergency Preparedness and Response
- WHO: Vector Surveillance and Control at Ports, Airports, and Ground Crossings
- ICAO: Aviation Pandemic Preparedness Plan
- ICAO CART 3
- IATA Guidelines
- Airports Council International
- Centre for Disease Control
- Frankfurt
- EURAMI
- ICAO Council Aviation Recovery Task Force (CART 1,2,3)
- ICAO Handbook for Cabin Crew Recurrent Training during COVID-19-Doc 10148 -
- ICAO Handbook for CAAs on the Management of Aviation Safety Risks related to COVID-19 - 10144
- ICAO Manual on Testing and Cross-border Risk Management Measures - 10152
- ICAO Bulletin - Promoting, Maintaining and Supporting Mental Well-Being in Aviation during the COVID-19 pandemic
- Others, refer to ICAO and the SACAA Website

## 4 DEFINITIONS

<b>“Authority”</b>	means the South African Civil Aviation Authority;
<b>“Committee”</b>	means the Aviation Pandemic Committee;
<b>“Director”</b>	means the Director of Civil Aviation or his /her successor in title;
<b>“Affected”</b>	means persons, baggage, cargo, containers, conveyances, goods, postal parcels or human remains that are infected or contaminated, or carry sources of infection or contamination, so as to constitute a public health risk;
<b>“Affected area”</b>	means a geographical location specifically for which health measures have been recommended by WHO under these Regulations;

<b>“Agreement”</b>	means the agreement as set out in this document and all annexures hereto;
<b>“Aircraft”</b>	means an aircraft making an international voyage;
<b>“Airport”</b>	means any airport where international flights arrive or depart;
<b>“Biohazard bag”</b>	Bag used to secure biohazard waste that requires microbiological inactivation in an approved manner for final disposal and such bags must be disposable, impervious to moisture and have sufficient strength to preclude tearing or bursting under normal conditions of usage and handling;
<b>“Crisis”</b>	A sudden, unplanned calamitous event resulting in significant business disruption that adversely impacts the overall reputation, profitability, or viability of an organisation;
<b>“Competent authority”</b>	means an authority responsible for the implementation and application of health measures under these Regulations;
<b>“Contamination”</b>	means the presence of an infectious or toxic agent or matter on a human or animal body surface, in or on a product prepared for consumption or on other inanimate objects, including conveyances, that may constitute a public health risk;
<b>“Conveyance”</b>	means an aircraft, ship, train, road vehicle or other means of transport on an international voyage;
<b>“Decontamination”</b>	means a procedure whereby health measures are taken to eliminate an infectious or toxic agent or matter on a human or animal body surface, in or on a product prepared for consumption or on other inanimate objects, including conveyances, that may constitute a public health risk;
<b>“Departure”</b>	means, for persons, baggage, cargo, conveyances or goods, the act of leaving a territory;
<b>“Disease”</b>	means an illness or medical condition, irrespective of origin or source, that presents or could present significant harm to humans;
<b>“Disinfection”</b>	means the procedure whereby health measures are taken to control or kill infectious agents on a human or animal body surface or in or on baggage, cargo, containers, conveyances, goods and postal parcels by direct exposure to chemical or physical agents;
<b>“Disinfection”</b>	means the procedure whereby measures are taken to control or kill the insect vectors of human diseases present in or on baggage, cargo, containers, conveyances, goods and postal parcels by direct exposure to chemical or physical agents;
<b>“DOH”</b>	means the Department of Health;
<b>“DOT”</b>	means the Department of Transport;

<b>“Environmental control system”</b>	System that provides air supply, thermal control and pressurization for the passengers and crew travelling on an aircraft used for airline operations;
<b>“event”</b>	means a manifestation of disease or an occurrence that creates a potential for disease;
<b>“free pratique”</b>	means permission for a ship to enter a port, embark or disembark, discharge or load cargo or stores; permission for an aircraft, after landing, to embark or disembark, discharge or load cargo or stores; and permission for a ground transport vehicle, upon arrival, to embark or disembark, discharge or load cargo or stores; health measure does not include law enforcement or security measures;
<b>“ill person”</b>	means an individual suffering from or affected with a physical ailment that may pose a public health risk;
<b>“infection”</b>	means the entry and development or multiplication of an infectious agent in the body of humans and animals that may constitute a public health risk;
<b>“inspection”</b>	means the examination, by the competent authority or under its supervision, of areas, baggage, containers, conveyances, facilities, goods or postal parcels, including relevant data and documentation, to determine if a public health risk exists;
<b>“isolation”</b>	means separation of ill or contaminated persons or affected baggage, containers, conveyances, goods or postal parcels from others in such a manner as to prevent the spread of infection or contamination;
<b>“medical examination”</b>	means the preliminary assessment of a person by an authorised health worker or by a person under the direct supervision of the competent authority, to determine the person’s health status and potential public health risk to others, and may include the scrutiny of health documents and a physical examination when justified by the circumstances of the individual case;
<b>“National IHR Focal Point”</b>	means the national centre, designated by each State Party, which shall be accessible at all times for communications with WHO IHR Contact Points under these Regulations;
<b>“Personal protective equipment”</b>	Equipment and materials used to create a protective barrier between a worker and the hazards in the workplace.
<b>“point of entry”</b>	means a passage for international entry or exit of travellers, baggage, cargo, containers, conveyances, goods and postal parcels as well as agencies and areas providing services to them on entry or exit;
<b>“Pandemic”</b>	A worldwide spread of an infection or a disease;
<b>“Public health authority”</b>	Government agency or designee responsible for the protection and improvement of the health of entire populations through community-wide action;

<b>“Public health surveillance”</b>	The ongoing, systematic collection, analysis and interpretation of data about specific environmental hazards, exposure to environmental hazards and health effects potentially related to exposure to environmental hazards, for use in the planning, implementation and evaluation of public health programmes;
<b>“Public health emergency of international concern” (PHEIC)</b>	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;
<b>“public health observation”</b>	means the monitoring of the health status of travellers over time for determining the risk of disease transmission;
<b>“Event”</b>	means a manifestation of disease or an occurrence that creates a potential for disease;
<b>“ICAO”</b>	means the International Civil Aviation Organization;
<b>“Infection”</b>	means the entry and development or multiplication of an infectious agent in the body of humans and animals that may constitute a public health risk;
<b>“IHR”</b>	means the International Health Regulations, 2005;
<b>“Inspection”</b>	means the examination, by the competent authority or under its supervision, of areas, baggage, containers, conveyances, facilities, goods or postal parcels, including relevant data and documentation, to determine if a public health risk exists;
<b>“Isolation”</b>	means separation of ill or contaminated persons or affected baggage, containers, conveyances, goods or postal parcels from others in such a manner as to prevent the spread of infection or contamination;
<b>“Medical examination”</b>	means the preliminary assessment of a person by an authorised health worker or by a person under the direct supervision of the competent authority, to determine the person’s health status and potential public health risk to others, and may include the scrutiny of health documents and a physical examination when justified by the circumstances of the individual case;
<b>“National IHR Focal Point”</b>	means the national centre, designated by each State Party, which shall be accessible always for communications with WHO IHR Contact Points under these Regulations;



<b>“Point of entry”</b>	means a passage for international entry or exit of travellers, baggage, cargo, containers, conveyances, goods and postal parcels as well as agencies and areas providing services to them on entry or exit;
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<b>“Public health observation”</b>	means the monitoring of the health status of travellers over time for determining the risk of disease transmission;
<b>“Public health risk”</b>	means a likelihood of an event that may affect adversely the health of human populations, with an emphasis on one which may spread internationally or may present a serious and direct danger;
<b>“Quarantine”</b>	means the restriction of activities and/or separation of other suspected persons who are not ill or suspected baggage, containers, conveyances, or goods in such a manner as to prevent the possible spread of infection or contamination;
<b>“Scientific evidence”</b>	means information furnishing a level of proof based on the established and accepted methods of science;
<b>“Reservoir”</b>	means an animal, plant or substance in which an infectious agent normally lives and whose presence may constitute a public health risk; and
<b>“Surveillance”</b>	means the systematic ongoing collection, collation, and analysis of data for public health purposes and the timely dissemination of public health information for assessment and public health response as necessary;
<b>“Suspect”</b>	means those persons, baggage, cargo, containers, conveyances, goods or postal parcels considered by a State Party as having been exposed, or possibly exposed, to a public health risk and that could be a possible source of spread of disease;
<b>“Vector”</b>	means an insect or other animal which normally transports an infectious agent that constitutes a public health risk;
<b>“WHO”</b>	means the World Health Organisation;
<b>“WHO IHR Contact Point”</b>	means the unit within WHO which shall be accessible always for communications with the National IHR Focal Point.
<b>“Business Continuity Management”</b>	An ongoing management process to ensure continuity of core business processes in the event of a crisis to minimize interruption and adverse impact to the organisation. It has two components: an Emergency Response Plan, and Business Continuity Plan.

<b>“Business Continuity Plan”</b>	Plan or a set of plans developed to ensure continuity of business processes in the event of crisis. The identification and protection of business processes required to maintain an acceptable level of operations in the event of sudden, unexpected, or not so unexpected, interruption of these processes and their supporting resources i.e., keeping the critical business running – no matter what;
<b>“departure”</b>	means, for persons, baggage, cargo, conveyances or goods, the act of leaving a territory;
<b>“disease”</b>	means an illness or medical condition, irrespective of origin or source, that presents or could present significant harm to humans;
<b>“disinsection”</b>	means the procedure whereby health measures are taken to control or kill the insect vectors of human diseases present in baggage, cargo, containers, conveyances, goods and postal parcels;
<b>“public health risk”</b>	Means a likelihood of an event that may affect adversely the health of human populations, with an emphasis on one which may spread internationally or may present a serious and direct danger;
<b>“quarantine”</b>	means the restriction of activities and/or separation from others of suspect persons who are not ill or of suspect baggage, containers, conveyances, or goods in such a manner as to prevent the possible spread of infection or contamination;
<b>“reservoir”</b>	means an animal, plant, or substance in which an infectious agent normally lives and whose presence may constitute a public health risk;
<b>“scientific evidence”</b>	means information furnishing a level of proof based on the established and accepted methods of science;
<b>“surveillance”</b>	means the systematic ongoing collection, collation, and analysis of data for public health purposes and the timely dissemination of public health information for assessment and public health response as necessary;
<b>“suspect”</b>	means those persons, baggage, cargo, containers, conveyances, goods or postal parcels considered by a State Party as having been exposed, or possibly exposed, to a public health risk and that could be a possible source of spread of disease;
<b>“vector”</b>	means an insect or other animal which normally transports an infectious agent that constitutes a public health risk;
<b>“WHO IHR Contact Point”</b>	means the unit within WHO which shall be accessible at all times for communications with the National IHR Focal Point;
<b>“signature date”</b>	means the date on which this agreement is signed by the last party;

## 5 BACKGROUND

According to the World Health Organisation's (WHO) International Travel and Health, "more than 900 million international journeys are undertaken every year". Global travel on this scale exposes many people to a range of health risks. Itineraries, the environment at departure, conditions during flight and passenger volumes all contribute to the challenge of managing public health events during air transport. Airports are places where travellers, the public and airport workers may interact in close surroundings, particularly when embarking or disembarking.

Passengers arrive from international or domestic destinations with their baggage, and air cargo may originate from different parts of the world to be loaded or offloaded on aircraft for transport. Passengers and cargo may be in-transit to be transported from airports to other destinations, frequently connecting with other airlines or other international or domestic conveyances. All these activities provide opportunities for interactions among persons and their environment, with the potential for exposure to and/or transmission of disease. The need to prepare and maintain the capacity to respond to public health events in this complex air travel environment has been highlighted by recent public health events, including the outbreak of severe acute respiratory syndrome (SARS) (2003), the H1N1 in 2009, Ebola, Zika, Plague, Middle East Respiratory Syndrome, and the recent COVID-19 pandemic. The knowledge and experience gained during these events has resulted in best practices developed by both public health and aviation sectors to mitigate the risk to the public, staff, passengers on board an aircraft and crew.

The WHO IHR (2005) are a binding legal agreement signed by 194 WHO Member States. These regulations set out the requirements to develop core capacities for prevention, detection, and response at designated points of entry (PoE), both for routine operations and public health emergency response, aimed at enabling a rapid and harmonised response to public health events globally. With the adoption of an all-hazard approach to public health risk, management of public health in air transport requires a multidisciplinary, multi-sector approach and must be implemented in the context of IHR and other intergovernmental agreements and national/ regional rules and regulations.

This framework of regulations, agreements, plans, and protocols informs the roles and responsibilities of the involved parties, including aircraft operators, airport operators, aviation regulatory authorities, supporting industry to the aviation sector, public health authorities and other stakeholders. In the aviation sector, the Convention on International Civil Aviation is the legally binding document that underpins all civil aviation activities related to safety, security, and efficiency. Article 14 of the Convention requires countries to prevent the spread of communicable diseases, in collaboration with other agencies. The International Civil Aviation Organization (ICAO), a specialized agency of the United Nations (UN), is responsible for developing international Standards and Recommended Practices (SARPs) which countries use to form national legislation. Because of the disparate nature of the public health and aviation sectors, it is essential that efficient and effective lines of communication, collaboration and coordination be established between stakeholders to ensure a harmonised approach in the management of public health emergencies.

Pandemics are unpredictable and may recur in the near future, resulting in severe impact on human health and economic wellbeing worldwide. Environmental change, international travel, microbial evolution and the breakdown of public health facilities have all contributed to the changing spectrum of infectious diseases with which the global community is challenged. Furthermore, the current trend in international civil aviation is towards aircraft of larger passenger-carrying capacity and greater range. This means that passengers and flights are able to circumnavigate the globe in less than 24 hours and passengers can carry communicable diseases or public health events of international concern to opposite ends of the world in less than 24 hours.

It is important to note that the Aviation Public Health Preparedness Plan may not completely prevent the spread of an evolving pandemic, but, with the appropriate measures, it may be possible to delay and mitigate the effects of such an emerging pandemic. Advance planning and preparedness are critical to help mitigate the impact of a global pandemic. It is imperative that the Aviation Sector's response to the threat of a possible pandemic be timely, robust, coordinated and harmonised. The production of the relevant vaccine remains the best chance to mitigate the high morbidity and mortality usually associated with a pandemic. In 2003, the rapid spread of severe acute respiratory syndrome (SARS) caught many states by surprise. A primary casualty was the aviation sector, resulting in a major reduction in air travel. The emerging threat of Avian Influenza raised fear of a human influenza pandemic in 2005.

The aviation sector has been impacted economically by COVID-19. According to the ICAO Council Aviation Recovery Task Force (CART), preparedness and harmonised planning remain our only protection that will inspire confidence in the travelling public. The ICAO CART was established as guidance for Air Travel through the COVID-19 Public Health Crisis and to facilitate recovery.

The COVID-19 pandemic, with all its associated consequences, has had a significant impact on the mental health and well-being of both passengers and aviation personnel, which could impact operational safety. It is the responsibility of all aviation stakeholders to play a proactive role in maintaining aviation safety while preventing the transmission of communicable disease and safeguarding the health and safety of aviation personnel and passengers. In the context of providing a psycho-socially safe and supportive aviation environment for aviation personnel and passengers, "aviation personnel" refers to personnel such as pilots, cabin crew, air traffic controllers, technical operations personnel, ground service personnel, aerodrome personnel and aviation medical examiners (AMEs).

Aviation stakeholders are required to encourage the application of the principles to support aviation personnel and passengers and consider peer support guidance. Peer support plays a critical role throughout every stage of the spectrum to guide the person in need and facilitate early access to the appropriate level of support and intervention. It is also important in recovery and 'return to work' processes.

**NOTE:** A detailed guideline for the management of respiratory communicable disease is attached in Annexure A.

## 6 OBJECTIVE OF THE NATIONAL AVIATION PANDEMIC PREPAREDNESS PLAN

- a) The aim of the aviation pandemic preparedness plan is to mitigate the spread of communicable disease through air travel by preventing the spread at a population level to reduce mortality and morbidity, on board an aircraft (passengers and crew) and ensure business continuity;
- b) The Authority shall implement and maintain a national civil aviation public health plan, ensure training for all personnel involved with or responsible for the implementation of various aspects of the public health programme;
- c) This training policy shall be designed to ensure that the importance of the public aviation health measures is understood by all stakeholders involved;
- d) The Authority shall approve procedures of all aviation and other intergovernmental organisations based at the designated airports and from airlines/charter and air navigation operators to ensure compliance with the national civil aviation public health programme;

- e) The priorities and frequency of oversight activities shall be determined on the basis of risk assessments carried out by the relevant authorities, and include public aviation health audits, inspections and tests to provide for the rapid, harmonised and effective response to a public health emergency;
- f) The Authority shall conduct aviation public health audits, tests, inspections and approve risk assessments conducted by operators as a means of establishing compliance with the national requirement and evaluating the effectiveness of aviation public health measures;
- g) The Authority shall make available to a designated airport operator, air carrier, air traffic service providers, security services providers, health and other organisations contributing to the programme a written version of the appropriate part or parts of the Aviation Public Health Plan and relevant information or guidelines to enable them to meet the requirements of the Preparedness Plan;
- h) The Director may make and issue orders, circulars and directives prescribing an aviation public health measure to an operator or entity for the purpose of the implementation of regulations, including additional aviation public health measures and procedures;
- i) The Authority shall develop and implement a process to identify differences between Article 14 of ICAO Convention, Annex 6,9,11(PANS),14 and 18, Standards, The Aviation Pandemic Plan and the CAR 2011, SA-CATS Documents, and the Department shall notify ICAO of such differences.

Reference: [ICAO Template Preparedness Plan](#)

## 7 MODE OF DISEASE TRANSMISSION

When developing procedures for public health events of international concern, it is important to understand how infectious diseases are transmitted from an infected individual to an uninfected one. This understanding is needed to develop strategies to prevent transmission and manage the public health events. While infectious organisms can be spread through many routes, including via insects and sexual contact, the focus of this project is on infectious organisms that are spread by three general routes of transmission:

- 
- Aerosols that remain airborne and can be inhaled.
- 
- Large droplets that settle on surfaces.
- 
- Direct contact with secretions, bodily fluids, or contaminated surfaces.
- 

### AEROSOL AND DROPLET MODE OF TRANSMISSION

Infectious diseases spread by the aerosol route are transmitted by particles most often generated by coughing and sneezing. However, these particles may also be generated by other common activities, such as talking or breathing. These particles are very small (around 10 micrometres); can remain airborne for hours at a time; and can even be transported to other areas of a building by heating, ventilation, and air conditioning systems. Tuberculosis represents the prototypical airborne transmission disease, as the organism, *Mycobacterium tuberculosis*, is small enough to remain suspended in air for long periods of time (*Mycobacterium tuberculosis* must not only be inhaled but must reach deep into the lung to start an

infection). For other diseases, like influenza, aerosols play a role in transmission, but other routes can contribute to the spread of disease as well.

The physical acts of sneezing and coughing can generate large droplets in addition to the aerosols described herein. These large droplets cannot remain airborne for more than a minute or so and fall to surfaces and the ground within several feet of their release location. These large droplets can be transmitted directly to susceptible individuals that were near the infectious individual during the act of sneezing or coughing or can contaminate inanimate objects that can then be contacted by susceptible individuals. Many infectious diseases (e.g., influenza) that can be transmitted by aerosols can also be transmitted by large droplets. Infectious diseases transmitted by direct contact can be spread when a person comes in contact with contaminated surfaces or bodily fluids (e.g., vomit, blood, faeces). For these infectious organisms, surfaces become contaminated through the spread of contaminated large droplets, nasal secretions, faeces, vomit, or other means. These organisms, if they survive and remain infectious, may then infect susceptible individuals, through contact with these surfaces.

Following contact, the susceptible individuals typically infect themselves by touching their mouth, eyes or nose with their contaminated hands. Studies have shown that individuals whose hands are contaminated with a live virus may contaminate up to seven additional clean surfaces. Studies have shown that most commonly touched surfaces, such as faucets, ATM screens, and escalator railings are contaminated with microorganisms. Surfaces can remain contaminated and infectious for a long time if adequate disinfection is not performed, as evidenced by a norovirus outbreak on an airplane where flight crew from different shifts became ill up to five days after an infectious passenger vomited on the airplane. Transmission by direct contact can be mitigated with barrier precautions, such as gloving, thorough washing of the hands, and effective cleaning of contaminated surfaces. Examples of microorganisms that can be spread through direct contact include the common cold virus (rhinovirus) and influenza.

#### **How contact transmission occurs: Contact transmission can occur in two ways**

- 
- Direct Contact Transmission
  - Indirect Contact Transmission
- 

Contact precautions are required to protect against either direct or indirect transmission. Contact precautions are indicated for persons with gastrointestinal (diarrheal) conditions.

#### **DIRECT CONTACT TRANSMISSION**

- Involves body-surface to body-surface contact and physical transfer of microorganisms between a susceptible person (host) and an infected or colonized person.
- More often occurs between a healthcare worker and a patient than between patients.

#### **INDIRECT CONTACT TRANSMISSION**

- Involves contact of susceptible person (host) with a contaminated intermediate object such as needles, dressings, gloves or contaminated (unwashed) hands.
- Disease is more likely to develop following direct or indirect contact transmission when the pathogen is highly virulent or has a low infectious dose or the patient or healthcare worker is immunocompromised.
- Poor hand hygiene is most often cited as a cause of contact transmission.

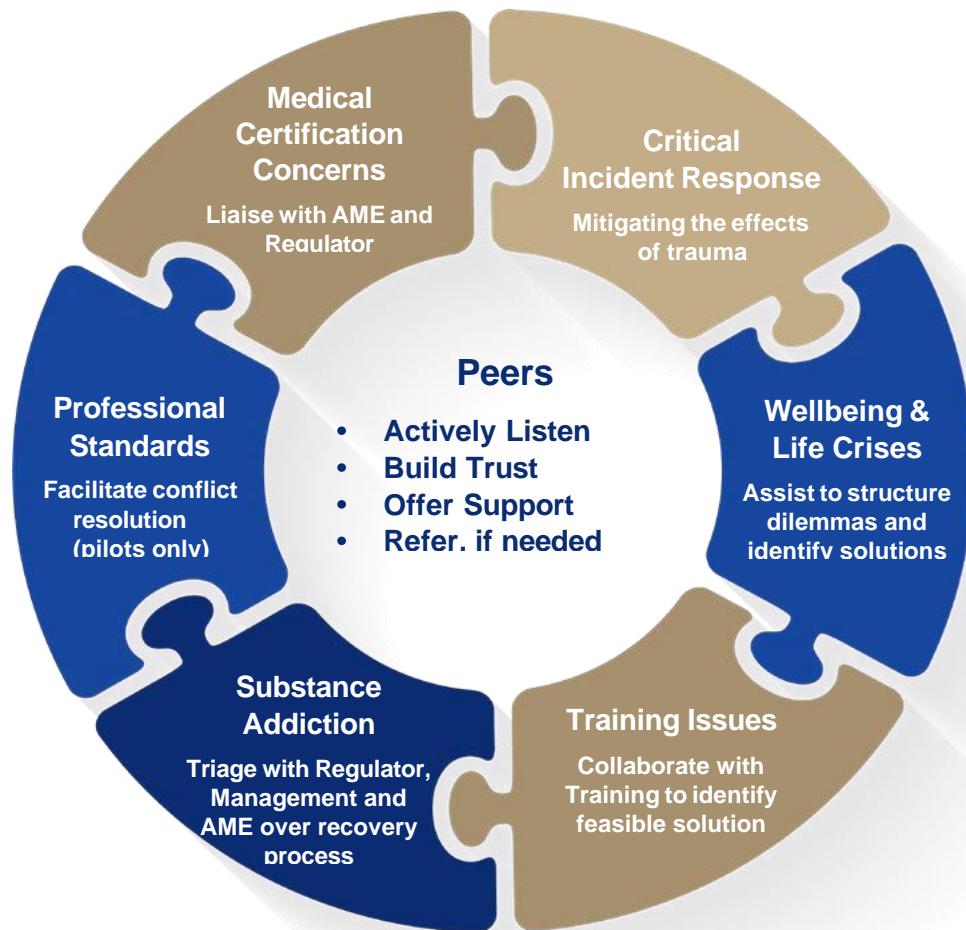
**Reference: [WHO Handbook for the Management of Public Health Events in Air Transport](#)**

# 8

## IMPACT OF PUBLIC HEALTH ON MENTAL HEALTH ISSUES IN AVIATION

Public health emergencies have had a significant impact on the mental health and well-being of both passengers and aviation personnel, which could impact operational safety. It is the responsibility of all aviation stakeholders to play a proactive role in maintaining aviation safety by preventing the transmission of communicable disease and safeguarding the health and safety of aviation personnel and passengers.

- a) In the context of providing a psycho-socially safe and supportive aviation environment for aviation personnel and passengers, “aviation personnel” refers to personnel such as pilots, cabin crew, air traffic controllers, technical operations personnel, ground service personnel and aerodrome personnel;
- b) The Authority must ensure collaboration between aviation medical examiners, aviation medical assessors, other healthcare professionals, peer support groups and aviation personnel to support the mental health and well-being for all aviation personnel;
- c) Provide appropriate guidance and support to aviation medical examiners to manage the impact of public health events on mental health and well-being in a consistent manner;
- d) Aviation stakeholders are required to encourage the application of the principles to support aviation personnel and passengers and consider the peer support guidance described in the attached enclosures;
- e) Self-care is a critical component of maintaining mental health and a sense of well-being at all points on the spectrum. Peer support can play a role in the early identification of a deterioration in mental health or well-being;
- f) Peer support plays a critical role throughout every stage of the spectrum to guide the person in need and facilitate early access to the appropriate level of support and intervention. It is also important in recovery and return to work processes;
- g) Professional and Industry Associations will provide access to appropriate services to support health and well-being and will make peer support programmes available to all aviation personnel;
- h) Industry Service Providers (e.g., aircraft operators, airports, air traffic control organisations, training organisations, etc.), awareness among leadership and management to support well-being among aviation personnel and continue to offer existing resources to support aviation personnel including peer support, employee assistance programmes (EAP) or other programme; and
- i) Provide a supportive environment for aviation personnel to address their well-being and proactively discuss work-related challenges during medical certification examination.



**Diagram 1: The different dimensions of Peer Support:** Detailed guidelines are attached

**Reference:** [ICAO Electronic Bulletin: Promoting, Maintaining and Supporting Mental Wellbeing in Aviation During the COVID-19 pandemic](#)

**PROGRAMME  
APPLICABILITY**

The Aviation Pandemic Preparedness Plan shall apply to:

- a) An operator of a designated airport;
- b) A foreign and domestic commercial air carrier operating at designated airports;
- c) Air cargo, mail and catering;
- d) An approved aviation security training organisation;
- e) An air Traffic and Navigations Services provider;
- f) Aviation Training Organisation;
- g) Customs;
- h) Immigration;
- i) Police;
- j) Baggage Handlers;
- k) Any other aviation participant determined by the Minister from time to time in the Government Gazette;
- l) Relevant government departments and security agencies;
- m) Other airport community members.



## 9 LEGISLATIVE AND RELATED ASPECTS

### International Legal and Ethical Dimensions of International Public Health Response

The increase in global travel and recent public health events has triggered a corresponding increased interest in international health law, including the development and implementation of the WHO IHR (2005). As part of public health planning and response, countries must consider both legal and ethical dimensions, and for the purposes of this plan, only the primary legal authorities based on WHO and IHR are included in the ICAO Annexes. Other governmental and non-governmental organisations must refer to national and international legal authorities not covered in this plan.

#### INTERNATIONAL LEGAL INSTRUMENTS

The International Civil Aviation Organization (ICAO) is a specialized agency of the United Nations. It was created with the signing, in Chicago, on 7 December 1944, of the Convention on International Civil Aviation. The ICAO is the permanent body charged with the administration of the principles laid out in the convention. The Convention establishes the privileges and restrictions of all Contracting States and provides for the adoption of International Standards and Recommended Practices (SARPs) regulating international air transport. The Convention on International Civil Aviation includes several articles which call for adoption of international regulations in all fields where uniformity facilitates and improves air navigation.

These regulations, known as Standards and Recommended Practices (SARPs), have been promulgated in ICAO Annexes to the Convention which are amended from time to time when necessary. Their purpose is to promote the safe and orderly development of international civil aviation throughout the world. The ICAO sets standards and regulations necessary for aviation safety, security, efficiency, and regularity, as well as aviation environmental protection. The organisation serves as the forum for cooperation in all fields of civil aviation among its 193 Member States. Its work is underpinned by the Convention on International Civil Aviation, the “Chicago Convention”, which is legally binding. Compliance by each State within the Convention with the Standards and Recommended Practices in its 19 annexes is audited by ICAO and the results posted on ICAO’s public website. Article 14 of the Convention is titled ‘Prevention of Spread of Disease’, and it encourages contracting States to take “effective measures to prevent the spread of communicable diseases” and to collaborate with other relevant agencies to this end. Following SARS in Hong Kong in 2003, ICAO and WHO established the Collaborative Arrangement for the Prevention and Management of Public Health Events in Civil Aviation (CAPSCA) to mitigate the potential spread of communicable diseases through air travel. ICAO public health Annexes form part of the USOAP audit. Relevant ICAO Annexes applicable to public health events of international concern include, but are not limited to the following:

[Annex 6 International Commercial Air Transport Aeroplanes](#)

[Annex 9 – Facilitation](#)

[Annex 11 – Air Traffic Services](#)

[Procedures for Air Navigation Services – Air Traffic Management](#)

[Annex 14 – Aerodrome Design and Operations](#)

[Annex 14 – Heliports](#)

[ACI, Airport Operational Practice Examples for Managing COVID-19](#)

[Annex 18 \(Doc 9284\) - Technical Instructions for the Safe Transport of Dangerous Goods by Air \(7\)](#)

**PLEASE NOTE:** Other, ICAO is currently amending Annexes might be applicable in the future.

# 10 ARTICLE 14 OF THE CONVENTION ON INTERNATIONAL CIVIL AVIATION

Article 14 requires each Contracting State to agree 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, 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.

Following a meeting between ICAO and WHO, ICAO strengthened its support for Article 14 of the Convention on International Civil Aviation and amended Annexes 6, 9, 11 (PANS ATM), 14, 18 and following COVID-19, a number of Annexes may be amended to incorporate public health measures such as Annex 19.

# 11 ICAO ANNEX – 9 FACILITATIONS

The ICAO Annex 9 (8.19) stipulates that each Contracting State shall establish a National Facilitation Committee and Airports Facilitation Committee as required, or similar coordinating bodies, for the purpose of coordinating facilitation between departments. The Contracting States shall ensure that the objective of the National Air Transport Facilitation Programme shall be to adopt all practicable measures to facilitate the movement of aircraft, crews, passengers, cargo, mail and stores by removing unnecessary obstacles or delays. The latest health-related changes to ICAO Annex 9, were developed and associated procedures came into force in Nov 2009. ICAO Annex 9, (paragraph 8.16, Standard) states that: ‘Contracting State shall establish a National Aviation Plan in Preparation for an Outbreak of a Communicable disease posing a public health risk or public health emergency of international concern’. ICAO Annex 9, (paragraph 8.15-Standard) stipulates that: ‘The pilot in command shall ensure that the suspected communicable disease is reported promptly to air traffic control, in order to facilitate provision for the presence of any special medical personnel and equipment necessary for the management of public health risk on arrival’. ICAO Annex 9, paragraph 8.15.1(RP) stipulates that: “the Contracting State should accept the Public Health Passenger form reproduced in appendix 13 as the sole document for this purpose. ‘The aircraft general declaration” was amended to assist the crew in identifying possible symptoms of communicable disease, such as: - Fever (38°C/100°F or greater), plus one or more of the following signs or symptoms:

- Appearing obviously unwell
- Persistent coughing
- Impaired breathing
- Persistent diarrhea
- Persistent vomiting
- Skin rash
- Bruising

Reference: [Annex 9 Facilitation Document](#)

# 12 ICAO ANNEX 6 OPERATION OF AIRCRAFT (RECOMMENDATION)

Annex 6 of ICAO stipulates that an aircraft shall be equipped with accessible and adequate medical supplies, which should comprise a Universal Precaution Kit (1 per aircraft if cabin crew is required, and 2 if >250 passengers) for airplanes required to carry cabin crew as part of the operating crew, for the use by cabin crew members in managing incidents of ill health associated with a case of suspected communicable disease, or in the case of illness involving contact with body fluids. It is important to note that, during an outbreak of a specific communicable disease, the World Health Organisation (WHO) or member states, in collaboration with IATA, may modify or add further procedures to these guidelines.

Annex 6 also makes reference to the First Aid Kits and Doctor's Bag on board an aircraft. Contents of the Universal Precaution Kits: The contents of the Universal Precaution Kids are reviewed regularly, based of the mode of transmission, and operators should keep themselves abreast of this information:

- 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.

# 13 ICAO ANNEX 11: AIR TRAFFIC SERVICES AND PLANS ATM

Air Traffic Service Authorities shall develop and promulgate a contingency plan (Public Health) regarding the assessment of risk to civil air traffic due to military conflict or acts of unlawful interference with civil aviation as well as a review of the likelihood and possible consequences of natural disasters or public health emergencies. The Notification of suspected communicable disease, or public health risk, on board the aircraft, to the ATS unit, by the pilot in command, should consist of the following:

- The designated Airport Authority of the next intended landing destination.
- The number of persons exhibiting symptoms of a communicable disease.
- Aircraft identification.
- The name of the departure aerodrome.
- Destination aerodrome.
- Estimated time of arrival and the number of persons on board.

# 14 ANNEX 18: "SAFE TRANSPORT OF DANGEROUS GOODS BY AIR"

Annex 18 sets down broad principles but one of the Standards requires that dangerous goods are carried in accordance with the Technical Instructions for the Safe Transport of Dangerous Goods by Air (the "Technical Instructions"). States are required by Annex 18 to have inspection and enforcement procedures to ensure that dangerous goods are being carried in compliance with the requirements.

Dangerous goods are carried regularly and routinely by air all over the world. To ensure that they do not put an aircraft and its occupants at risk there are international standards which each State, under the provisions of the Chicago Convention, is required to introduce into national legislation. This system ensures governmental control over the carriage of dangerous goods by air and gives world-wide harmonisation of safety standards, which include the following:

## 15 CLASSIFICATION OF INFECTIOUS DISEASE AND CLASSIFICATION OF INFECTIOUS SUBSTANCES

Infectious substances are classified in division 6.2 and assigned to UN 2814, UN 2900 or UN 3373. Cultures are the result of a process by which pathogens are intentionally propagated. This definition does not include human or animal patient specimens. Patient specimens are human or animal materials, collected directly from humans or animals, including, but not limited to, excreta, secreta, blood and its components, tissue and tissue fluid swabs, and body parts being transported for purposes of research, diagnosis, investigational activities, disease treatment and prevention.

Category A Infectious Substance: These are Infectious Substances in a form that, when exposure to them occurs, are capable of causing permanent disability and life-threatening or fatal disease in otherwise healthy humans or animals. They are assigned the following proper shipping name and UN number:

- 
- 'Infectious Substance affecting humans', UN 2814 or
  - 'Infectious Substances affecting animals only', UN 2900.
- 

Assignments to UN 2814 or UN 2900 are to be based on the known medical history and symptoms of the source human or animal, endemic local conditions, or professional judgment concerning individual circumstances of the source - human or animal. If there is any doubt as to whether or not a pathogen falls within this category, it must be transported as a Category A Infectious Substance. Category B Infectious Substances: These are Infectious Substances that don't meet the criteria for inclusion in Category A. They are assigned the following proper shipping names and UN number UN 3373:

- 
- Diagnostic Specimen\*,
  - Clinical Specimen\*, or
  - Biological Substance, Category B.
- 

To assist in the assignment of an Infectious Substance into Category A see the Indicative List provided in Table 2-10 in the 2005/2006 ICAO TI's. That list is not exhaustive. Infectious substances, including new or emerging pathogens, which do not appear in the Table but which meet the same criteria shall be assigned to Category A. In addition, if there is doubt as to whether or not a substance meets the criteria it shall be included in Category A.

### **Exemptions** (check Bra Bheki)

- Substances that do not contain infectious substances, or substances which are unlikely to cause disease in humans or animals, are not subject to these Instructions unless they meet the criteria for inclusion in another class.
- Dried blood spots, collected by applying a drop of blood onto absorbent material, or faecal occult blood screening tests and blood or blood components that have been collected for the purposes of transfusion or for the preparation of blood products to be used for transfusion or transplantation and any tissues or organs intended for use in transplantation are not subject to these Instructions.

- Substances for which there is a low probability that infectious substances are present, or where the concentration is at a level naturally encountered, are not subject to these Instructions. Examples are; foodstuffs, water samples, living persons, and substances that have been treated so that the pathogens have been neutralised or deactivated so that they no longer pose a health risk.

Reference: [IATA Technical Instruction & ICAO Bulletin Human Remains](#)

## 16 ICAO COVID-19 GUIDELINES AND BULLETINS

ICAO Council Aviation Recovery Task Force (CART 1,2,3)

ICAO Handbook for Cabin Crew Recurrent Training during COVID-19-Doc 10148

ICAO Handbook for CAAs on the Management of Aviation Safety Risks related to COVID-19 - 10144

ICAO Manual on Testing and Cross-border Risk Management Measures - 10152

ICAO Bulletin - Promoting, Maintaining and Supporting Mental Well-Being in Aviation during the COVID-19 pandemic

Others, refer to ICAO and the SACAA Website

## 17 WORLD HEALTH ORGANISATION AND THE INTERNATIONAL HEALTH REGULATIONS (2005)

WHO is the directing and coordinating authority for health within the UN system and it is responsible for providing leadership on global health matters, shaping the health research agenda, setting norms and standards, articulating evidence-based policy options, providing technical support to countries and monitoring and assessing health trends. WHO Member States led the IHR revision, recognizing that health is a shared responsibility, involving equitable access to essential care and collective defence against transnational threats. The goal of the IHR is to provide a legal framework for the prevention, detection and containment of public health risks at the source, before they spread across borders, through the collaborative actions of States, Parties, WHO and all relevant stakeholders.

The IHR were adopted in 2005 and came into effect in 2007. All State Parties who accepted the IHR without reservations are legally bound to implement them accordingly. The IHR includes protection for the human rights of persons and travellers, setting out as a principle that “the implementation of these Regulations shall be with full respect for the dignity, human rights and fundamental freedoms of persons” (Article 3). This is in acknowledgement that public health measures which impose limits on movement or require other interventions at a personal or community level may at times be warranted for the ‘public good’ but must be balanced by ethical considerations.

### **International communication link with competent authorities at other Points of Entry**

Competent authority (ports health) at each point of entry has current contact details of officers in charge of international communication with other points of entry abroad and means of communication and procedures are available to inform relevant public health measures taken pursuant to the International Health Regulations, such as:

- Communication with competent authorities at other points of entry, internationally, to provide relevant information regarding evidence found and control measures still needed on arrival of affected conveyance.

- Local, intermediate and national levels (including National IHR Focal Point) have current contact details of competent authorities at points of entry, and which are current and regularly updated, documented and tested procedures.

The competent authority at each point of entry has current contact details of officers at local, intermediate and national levels, including contact details of National IHR Focal Point and means of communication and procedures are available to inform relevant public health measures taken pursuant to the International Health Regulations, such as to communicate with NFP in order to inform WHO within 24 hours of receipt of evidence, as manifested by exported or imported:

- human cases
- vectors which may carry infection or contamination or
- goods that are contaminated, that may cause international disease spread or additional health measures and their health rationale within 48 hours of implementation.

Report all available essential information on event occurring and point of entry by competent authority to health authority at local, intermediate or national level for public health assessment, care and response and communication with competent authorities at other points of entry, nationally, to provide relevant information regarding evidence found and control measures needed on the arrival of affected conveyance. The International Health Regulations are implemented through the National Department of Health in South Africa and based on this plan, practised at international airports.

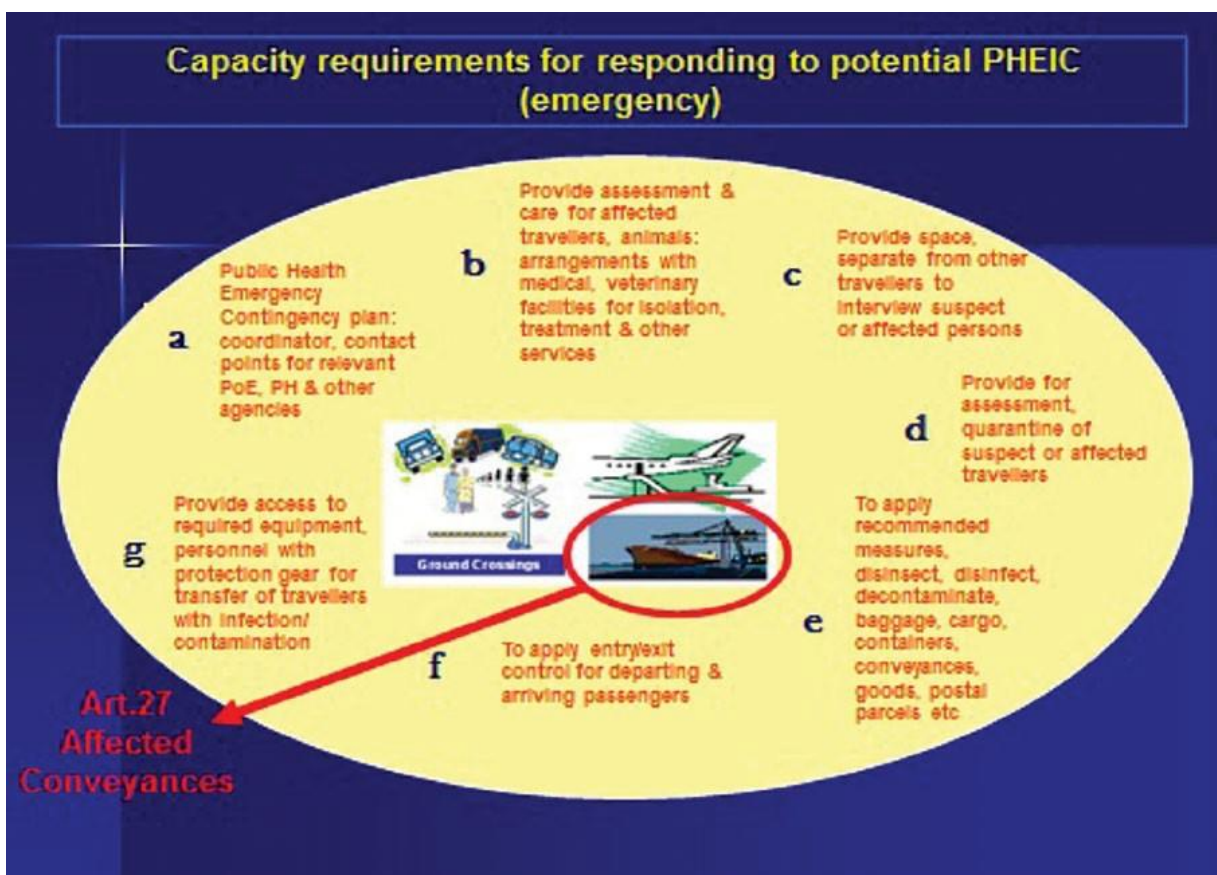


Diagram 2: WHO International Health Regulation depicting Core Capacities at the Ports of Entry - Example Airport

Reference: [WHO - INTERNATIONAL HEALTH REGULATIONS \(2005\)](#)

# 18 NATIONAL LEGAL INSTRUMENTS: AVIATION PUBLIC HEALTH PLAN

In line with Annex 9 of ICAO, the Civil Aviation Act, 2009 (Act 155 Disaster Management Act) was amended to make provision for the establishment of the Aviation Public Health Plan under Part 113.01.2 of the Civil Aviation Regulations 2011. The regulations stipulate that the Director shall establish a National Aviation Pandemic Preparedness plan in preparation for an outbreak of a communicable disease posing a public health risk or public health emergency of international concern. Part 113 of the Civil Aviation Regulations is applicable to the approval and operations of organisations conducting -

- Commercial Air Transport Operations;
- Aerodrome Operations; and
- Air Traffic Service Operations

# 19 THE CIVIL AVIATION REGULATIONS (CARs), AND ASSOCIATED TECHNICAL STANDARDS

## PART 64.02.2 OF THE CIVIL AVIATION REGULATIONS AND TECHNICAL STANDARDS

In line with Annex 9 Facilitation, Part 64 of the Civil Aviation Regulations and Technical Standards were amended to ensure that cabin crew is trained to identify symptoms and signs of communicable disease and to ensure that they protect themselves and others while managing suspected cases of communicable disease. Cabin crew will be the first point of contact and will be responsible for managing the cabin and continuous communication with the Pilot-in-Command on the progress of the suspected case of communicable disease.

### IDENTIFICATION AND MANAGEMENT OF SUSPECTED CASES OF COMMUNICABLE DISEASE

- a) Identify symptoms and signs of communicable diseases as contained in the Aircraft Declaration Document contained in Annex 9;
- b) Describe the steps followed when using universal precaution kits by the crew managing a suspected case of communicable disease;
- c) State the management of communicable disease when there is availability of space on board an aircraft;
- d) State the management of a suspected case of communicable disease when there is limited space on board an aircraft;
- e) Describe the areas to be disinfected by cabin crew in the lavatory where there is limited space on board an aircraft;
- f) Describe the management of a suspected case of communicable disease, where the passenger is tolerating or not tolerating the mask;
- g) Describe the process to be followed when handling body fluids, management of a damp and humid mask;
- h) Describe the use of a biohazard bag; and

- 
- i) Describe which passengers are issued with a passenger locator form and the reason why these documents have to be handed over to public health authorities;
  - j) When a public health threat has been identified, cabin crew will issue passenger locator forms on board an aircraft which will be collected by the public health authorities to ensure accessibility of passengers' and/or crews' travel itineraries or contact information for the purposes of tracing persons who may have been exposed to a public health event of international concern such as communicable disease. Airline and Charter Operators are required to make available adequate stocks of the Passenger Locator Forms, for use at their international airports and for distribution to aircraft operators, for completion by passengers and crew.
- 

**Reference:** [Guidelines and Cardio Pulmonary Resuscitation on Board](#) and [ICAO Training Manual Cabin Crew and ICAO Annexure 6](#)

#### **PART REGULATION 91.07.21 OF THE CIVIL AVIATION REGULATIONS: PASSENGER HEALTH AND SAFETY**

In line with Annex 9 Facilitation, Part 91 of the Civil Aviation Regulations and Technical Standards was amended to ensure that aircraft operators have a procedure in place to manage suspected case of communicable disease on board an aircraft, cabin crew notifies the Pilot, who in turn informs the air traffic controller to ensure that appropriate public health measures are in place to manage the suspected case when the aircraft lands.

- 
- a) The PIC of an aircraft shall notify air traffic control where it appears that any person displays the symptoms and signs of communicable disease as provided in Document SA-CATS 91;
  - b) The owner or operator of an aircraft shall establish procedures for—
    - i. evaluation by flight crew member or cabin crew member of a person who displays the symptoms referred to
    - ii. in sub-regulation (1); and
    - iii. notification of the air traffic control by the PIC of a suspected case as prescribed in Technical Standard.
- 

The report required by CAR 91.07.21 to the air traffic control shall contain, in addition to the person suspected of being infected, the following details –

- 
- a) aircraft identification;
  - b) departure aerodrome including all technical or other stops;
  - c) destination aerodrome;
  - d) estimated time of arrival;
  - e) number of persons on board;
  - f) number of suspected cases on board; and
  - g) nature of the public health risk, if known.
- 

#### **TECHNICAL STANDARD 91.07.21 PASSENGER HEALTH AND SAFETY**

A communicable disease could be suspected and require further evaluation if a person has a fever (temperature 38°C/100°F or greater) that is associated with certain signs or symptoms such as appearing obviously unwell, persistent coughing, impaired breathing, persistent diarrhea, persistent vomiting, skin rash, bruising or bleeding without previous injury, or irrational behaviour.



### **PART 91.07.36 DISINFECTION OF AIRCRAFT CIVIL AVIATION REGULATIONS**

In line with Annex 9 Facilitation, Part 91 of the Civil Aviation Regulations and Technical Standards was amended to ensure that aircraft operators have a procedure and training on the disinfection of an aircraft of a suspected case of communicable disease.

- a) An owner or operator of aircraft shall, as and when required by the Department of Health, ensure that an aircraft is disinfected according to the guidelines prescribed by the Department of Health;
- b) An owner or operator of an aircraft shall apply the following procedures when disinfecting the aircraft;
- c) disinfection shall be limited solely to the container or to the compartment of the aircraft in which the passengers or cargo were carried;
- d) disinfection shall be carried out where there is contamination or suspected contamination of surfaces or equipment of the aircraft by any bodily fluids including excreta;
- e) disinfection shall be undertaken in accordance with procedures provided by the aircraft manufacturer and subject to any requirements or conditions issued by the World Health Organisation;
- f) the contaminated areas shall be disinfected with compounds possessing suitable germicidal properties appropriate to the suspected infectious agent;
- g) disinfection shall be carried out expeditiously by cleaners wearing suitable personal protective equipment;
- h) flammable chemical compounds, solutions or their residues likely to damage aircraft structure, or its systems, or chemicals likely to damage the health of passengers or crew, shall not be used for disinfection of aircraft;
- i) when aircraft disinfection is required for animal health reasons, only those methods and disinfectants prescribed by the International Office of Epizootics shall be used.

**Reference:** [Disinfection on board IATA](#) and [ICAO CART 3](#)

### **TECHNICAL STANDARD FOR DISINFECTION MISSING**

#### **PART 91 .07.37 TECHNICAL STANDARD - DISINSECTION OF THE AIRCRAFT**

In line with Annex 9 Facilitation, Part 91 of the Civil Aviation Regulations and Technical Standards was amended to ensure that aircraft operators have a procedure and training on the Disinsection of an aircraft of a suspected case of communicable disease.

#### **PART 91 .07.37 TECHNICAL STANDARD - DISINSECTION OF THE AIRCRAFT**

91.07.37: An owner or operator of aircraft shall ensure that aircraft departing from the States listed in Document SA-CATS 91 is disinsected according to the guidelines prescribed in Document SA-CATS 91. An owner or operator of aircraft shall –

- a) limit routine disinsection of aircraft cabin, flight deck, cargo and baggage compartment with an aerosol while passengers and crew are on board, to same aircraft operations originating in, or operating via, territories that are considered to pose a threat to public health, agriculture or environment;

- 
- b) ensure a period review of the requirements of dis-insection of aircraft and modify them, as appropriate, in the light of all available evidence relating to the transmission of insects in the aircraft;
    - i. authorize or accept only those methods whether chemical or non-chemical or insecticides, which are recommended by the World Health Organisation and which are considered efficacious;
    - ii. ensure that the procedures for dis-insection are not injurious to the health of passengers and crew and that they result in minimum of discomfort to the passengers and crew.
  - c) The Director shall provide to aircraft operators appropriate information, in plain language, for crew and passengers, explaining the provisions of this regulation, the reasons for and the safety of dis-insection;
- 

**Reference:** [WHO Vector Control](#)

#### **DEPARTURE FROM LIST OF COUNTRIES DECLARED AS YELLOW FEVER RISK COUNTRIES**

91.07.37: An owner or operator of aircraft shall ensure that an aircraft departing from the list countries declared by the World Health Organisation as yellow fever risk countries must be disinfected prior to departure;

- 
- a) The list of countries declared by World Health Organisation yellow fever risk countries shall be published in the SACAA's website by the Director;
  - b) The following methods and guidelines for aircraft disinfection shall be used by the owner or operator of an aircraft:
    - i. When disinsection has been performed in accordance with procedures prescribed by the World Health Organisation, the Director shall accept a certification on the General Declaration or, in the case of residual disinsection, the Certificate of Residual Disinfection;
    - ii. An owner or operator of aircraft shall keep records of the disinsection in the form of a Certificate of Residual Disinfection or certification on the General Declaration and such certificate shall be presented or made available to the appropriate authorities in the country of destination;
    - iii. An owner or operator of aircraft shall ensure that –  
any insecticide or any other substance used for disinsection does not have a deleterious effect on the structure of the aircraft or its operating equipment;
    - iv. flammable chemical compounds or solutions likely to damage aircraft structure shall not be used to disinsect the aircraft.”
- 

**NOTE: Detailed Guidelines WHO Yellow Fever Countries List(??)**

#### **PART 92.00.10 OF THE CIVIL AVIATION REGULATIONS (PACKING AND PACKAGING)**

- 
- a) 92.00.10: A shipper shall ensure that all dangerous goods which the shipper prepares or offers for conveyance by air, are packed in accordance with the provisions of this part and the requirements and standards as prescribed in Document SA-CATS 92.
-

- 
- b) A shipper shall ensure that any packaging used for the conveyance of dangerous goods by air shall –
- i. comply with the material and construction specifications of, and be tested initially in accordance with the requirements and standards as prescribed in Document SA-CATS 92; and
  - ii. be of good quality and constructed and securely closed so as to prevent leakage caused by changes in temperature, humidity, pressure or vibration under normal conditions of conveyance by air.
- 
- c) A shipper shall ensure that inner packaging is packed, secured or cushioned to prevent its breakage or leakage and to control its movement within the outer packaging during normal conditions of conveyance by air;
- 
- d) A shipper shall ensure that packaging in direct contact with dangerous goods is resistant to any chemical or other action of such goods and cushioning, and that absorbent materials do not react dangerously with the contents of the receptacles;
- 
- e) A shipper shall ensure that packaging for which retention of a liquid is a basic function, is capable of withstanding, without leaking, the pressure as prescribed in Document SA-CATS 92;
- 
- f) No receptacle used for the conveyance of dangerous goods by air shall be re-used by the shipper until such receptacle has been inspected by such shipper and found free from corrosion or other damage;
- 
- g) If a receptacle, used for the conveyance of dangerous goods by air, is re-used by the shipper, all necessary measures shall be taken by the shipper to prevent contamination of subsequent dangerous goods conveyed therein;
- 
- h) If, because of the nature of their former contents, uncleaned empty receptacles may present a hazard, the shipper shall ensure that such receptacles are tightly closed and treated according to the hazard that they constitute; and
- 
- i) A shipper shall ensure that no harmful quantity of any dangerous substance adhere to the outside of a package.
- 

#### **PART 92.00.12 LABELLING AND MARKING OF THE CIVIL AVIATION REGULATIONS ( PACKING AND PACKAGING)**

- 
- a) Any person who offers any package containing dangerous goods for conveyance by air, shall ensure that such package thus offered is labelled with the appropriate label or labels in accordance with the requirements and standards as prescribed in Document SA-CATS 92;
- 
- b) Any person who offers any package containing dangerous goods for conveyance by air, shall ensure that such package thus offered is marked with the proper shipping name, UN number, class of hazard, and subsidiary risk, and that any authorisation reference of the contents of the package is in accordance with the requirements and standards as prescribed in Document SA- CATS 92;
- 
- c) Any person who offers any package containing dangerous goods for conveyance by air, shall ensure that each packaging which is manufactured in accordance with a packaging specification as prescribed in Document SA-CATS 92, is marked with the appropriate packaging specification marking as prescribed in Document SA-CATS 92;
- 
- d) No packaging shall be marked with a packaging specification marking unless such packaging complies with the appropriate packaging specification as prescribed in Document SA-CATS 92.
-

## **PART 92 (CHECK) INSPECTION FOR DAMAGE OR LEAKAGE BY OPERATOR**

The operator shall remove an aircraft from service immediately when such aircraft is contaminated by radioactive materials and shall not return such aircraft to service until the radiation level resulting from the fixed contamination at any accessible surface and the non-fixed contamination, is below the values as prescribed in Document SA-CATS 92.

- a) Any person responsible for the conveyance and opening of packages containing infectious substances who becomes aware of damage to or leaking from such packages, shall –
- b) avoid handling such infectious substances, where possible;
- c) inspect adjacent packages for contamination;
- d) inform the appropriate public health authority or veterinary authority of such damage or leakage;
- e) provide the appropriate authority of the country of transit with information regarding any possible contamination; and
- f) notify the shipper or the consignee accordingly.

## **PART 92 SA CATS 92.00.10 - PACKING AND PACKAGING**

- a) The requirements and standards for the packing of dangerous goods are contained in Part 3 of the Instructions;
- b) Material and construction specifications and testing;
- c) The material and construction specifications of packaging and the requirements and standards for the testing of packaging are contained in Parts 3 and 7 of the Instructions and such packaging must, if required by the Instructions, be tested by an approved testing facility.

### **PACKAGING FOR RETENTION OF LIQUID**

Packaging for which retention of liquid is a basic function, must withstand the pressure prescribed in Part 3; 1.1.6.1 of the Instructions or must comply with Part 3; 1.1.6.2 of the Instructions.

## **92.00.12 LABELLING AND MARKING**

- a) Labelling of packages;
- b) The requirements and standards for the labelling of packages that contain dangerous goods are contained in Part 4, Chapter 3 of the Instructions;
- c) Marking of packages.

The requirements and standards for the marking of packages that contain dangerous goods are contained in Part 4, Chapter 2 of the Instructions;

- a) Marking of specification packaging.

Each outer or single packaging used for dangerous goods, for which specification packaging is required in Part 3 of the Instructions, must bear the markings appropriate to the contents as prescribed in Part 7, Chapter 2 of the Instructions.

## 92.00.12 INSPECTION FOR DAMAGE OR LEAKAGE BY OPERATOR

The radiation level resulting from the fixed contamination at any accessible surface and non-fixed contamination must be below the values prescribed in Part 5; 3.2.4 and Table 5-6 of the Instructions.

**NOTE: Detailed Guidelines on Annex E for Packaging of GD & Human Remains on board IATA**

**Reference: [ICAO Bulletin for Human Remains](#)**

## PART 138 AIR AMBULANCE REGULATIONS AND TECHNICAL STANDARDS

Emergency Medical Services (EMS) play a vital role in responding to requests for assistance, triaging patients, and providing emergency medical treatment and transport for ill persons. However, unlike patient care in the controlled environment of a healthcare facility, care, and transports by EMS present unique challenges because of the nature of the setting, enclosed space during transport, frequent need for rapid medical decision-making, interventions with limited information, and a varying range of patient acuity and jurisdictional healthcare resources.

To further refine personal prevention and protection requirements for crew members, maintenance personnel and cleaning staff, air ambulance personnel and patients, it is crucial to improve requirements on environment hygiene, disinfection, and maintenance for aircraft, and introduce prevention and control measures for air ambulance operators. Although ICAO does not have the SARPS for Air Ambulance Operations, the Authority has regulations under Part 138 to ensure oversight of air ambulance operators. Part 138.01.1: This part applies to –

- i. Aircraft registered in the Republic and engaged in commercial air ambulance operations;
- ii. Foreign-registered aircraft operated by an air service operator licensed in terms of the Air Services Licensing Act, 1990 or the International Air Services Act, 1993 and engaged in commercial air ambulance operations;
- iii. Foreign-registered aircraft utilized in commercial air ambulance operations to transport one or more patients within or out of the Republic; and
- iv. Persons acting as flight crew members, operations personnel and medical personnel in respect of any air ambulance operation carried out in terms of this part.

The provisions of part 91, part 121, part 127 and part 135 shall apply with the necessary changes to any aircraft operated in terms of this part.

### MEDICAL QUALIFICATION TECHNICAL STANDARDS REQUIREMENTS

138.02.2 Medical personnel and medical service providers involved in air ambulance operations shall comply with the relevant legislation and regulations administered by the Department of Health, the Health Professions Council of South Africa and the South African Nursing Council, as the case may be.

### TRAINING OF CREW TECHNICAL STANDARDS REQUIREMENTS

Training of flight crew: Flight crew members engaged in air ambulance operations must successfully complete a course of instruction prior to undertaking flying duties, and the course must include the following subjects –

- a) An overview of the way in which air ambulance operations function, their purpose and limitations;
- b) Orientation to infection control.

## **PART 138.07.01 INFECTION CONTROL AND FLUID CONTAMINATION**

- a) The owner or operator of an aircraft engaged in an air ambulance operation shall ensure that –
- b) every employee, before performing duty on, or cleaning an aircraft;
- c) is familiar with any infection control procedure which may apply in respect of the aircraft; and
- d) has taken appropriate precautions before performing duty on or cleaning such aircraft, as prescribed by the Occupational Safety and Health Act of 1993 (Act No. 85 of 1993) and other relevant legislation, and set out in the manual of procedure referred to in regulation 138.04.2;
- e) Such aircraft shall not be operated unless it is equipped with measures to protect the aircraft against body fluid contamination;
- f) The protection measures referred to in paragraph (b) above are set out in the manual of procedures and are compliant with the minimum standards as prescribed in the regulations issued by the Department of Health; and
- g) the cleaning agents used for cleaning are non-corrosive or non-abrasive to the aircraft.

**Reference:** [Guidelines Air Ambulance Infection Control Measures](#)

## **PART CAR 139.02.6 THE ESTABLISHMENT OF THE AERODROME EMERGENCY MANAGEMENT SYSTEM**

In line with Annex 14 of ICAO, Part 139 of the Civil Aviation Regulations and Technical Standards was amended to ensure that airport operators have a procedure and training in place to manage suspected cases of communicable disease. The layered defence measures against communicable diseases include steps being taken individually, at airports and on board. Appropriate measures should be applicable to all passengers, as well as aviation personnel, including duties such as training or certification activities, flight and cabin crew, maintenance engineers/technicians, air traffic management (ATM) workforce, staff that have contact with the travelling public and ground service agents.

Mitigation measures can be categorized into personal and shared responsibilities and may include some or all the measures such as: engineering factors, environmental control systems, such as the optimization of heating, ventilation and air-conditioning (HVAC systems) enhanced cleaning and disinfection; contactless boarding/baggage processing; use of physical barriers and disinfection, physical distancing and other applicable public health measures.

The aerodrome operator shall establish an aerodrome emergency management system (AEMS) as contemplated in CAR 139.02.6 which shall include the following, but is not limited to:

- Aircraft emergencies.
- Sabotage including bomb threats.
- Unlawful seizure of aircraft.
- Dangerous goods occurrences.
- Building fires.
- Natural disasters, such as floods, veldt fires, tsunamis etc.
- Public Health Emergencies.

**Refer to CART**

## PUBLIC HEALTH EMERGENCIES INCLUDING COMMUNICABLE DISEASES

(Check if there is a local reg)

The Part 7 of ICAO Doc 9137-AN/89 is herewith incorporated in terms of section 163(2) of the Civil Aviation Act 2009 (Act 13 of 2009) list as the minimum standard for an AEMS. The medical equipment and medical supplies depicted in Appendix 3 table 3-1 of ICAO Doc 9137-AN/8989 Part 7 shall be made available on the aerodrome. If not self-proficient, the aerodrome operator shall enter into an agreement with a service provider capable of providing such service to make the necessary medical equipment and required medication available in the event of an emergency. The aerodrome operator shall ensure that the agreement is kept current and that the service provider is at all times capable of meeting its obligations.

**NOTE: Detailed Guidelines CART**

### TECHNICAL STANDARD 172.03.12 DUTIES OF HOLDER OF APPROVAL ANS

The standards and procedures for the provision of services are contained in the manual of standards and procedures for Air Traffic Services.

#### PART 172.03.12 (1) THE HOLDER OF AN APPROVAL MUST –

- develop and implement contingency plans for implementation in the event of disruption or potential disruption including but not limited to Public Health Emergencies, of air traffic services and related supporting services in the airspace for which they are responsible for the provision of such services;
- ensure that the plans referred to in paragraph (m) are closely coordinated with the air traffic services authorities responsible for the provision of services in adjacent portions of airspace and submitted for approval to the ICAO Council.

### STANDARDS AND PROCEDURES MANUAL SECTION 9 EMERGENCY PROCEDURES: CHAPTER 7 COMMUNICABLE DISEASES

Introduction: Article 14 ICAO – Each contracting State agrees to take effective measures to prevent the spread by means of air navigation of cholera, typhus, smallpox, yellow fever, plague and any other such communicable disease as the contracting States shall from time to time decide to designate. **ICAO PANS ATM**

#### Procedures (check)

- a) The pilot-in-command shall notify ATC as soon as he/she becomes aware of a suspected case of a communicable disease on board his/her aircraft;
- b) The pilot-in-command shall notify ATC as soon as he/she becomes aware of a suspected case of a communicable disease on board his/her aircraft. The ATSU receiving notification of a suspected case of a communicable disease onboard an aircraft in flight shall advise, as soon as practicable, on the following:
  - The designated Airport Authority of the next intended landing destination
  - The name of the departure aerodrome
  - Estimated time of arrival
  - Number of persons on board
  - Number of suspected cases, and their nature
  - The aircraft operator or its designated representative.
- c) Where the destination aerodrome is outside of an ATSU's jurisdiction clear coordination shall be maintained between the ATSUs involved, stating the nature of the suspected case of the communicable disease on board the flight and such notification actions conducted by the ATSUs;

- 
- d) Each ATSU shall maintain a list of contact numbers of the relevant Airport Authorities within their jurisdiction.
- 

**NOTE: It is accepted that the designated Airport Authority and/or the operator will in turn notify other relevant parties concerned in accordance with pre-established procedures as laid down by that Airport Authority.**

Reference: [ICAO Annex 11 – Air Traffic Services and Procedures for Air Navigation Services – Air Traffic Management](#)

## 20 OTHER APPLICABLE NATIONAL LEGISLATION

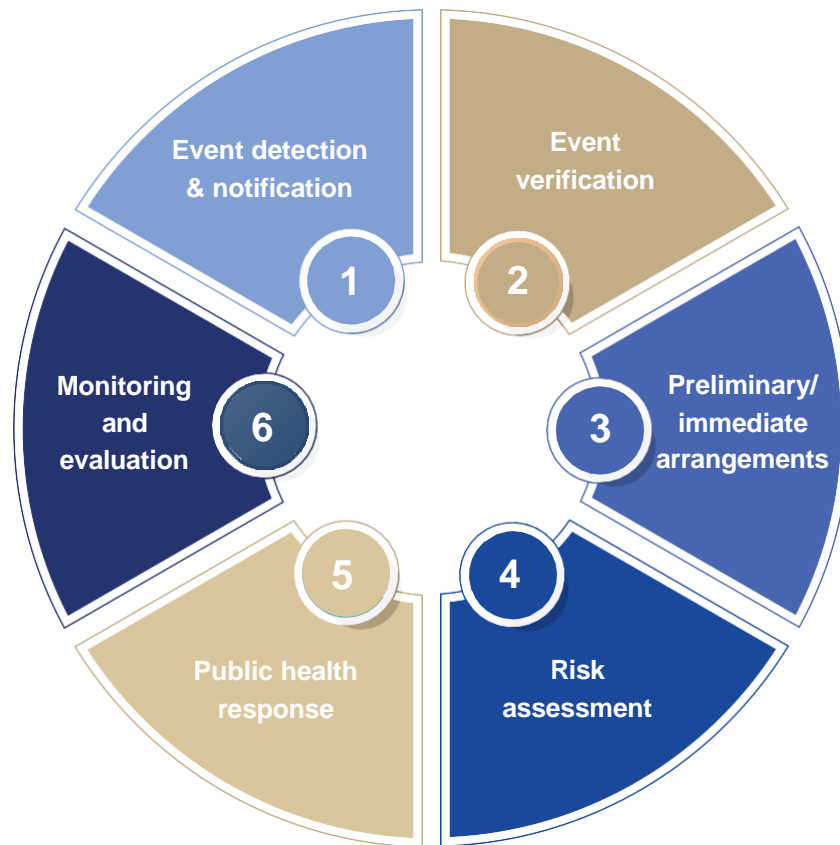
The Minister of Transport has under section 155(1) of the Civil Aviation Act, 2009, (Act No. 13 of 2009) made these Regulations. Other relevant national laws (as amended) related to the implementation and enforcement of the Aviation Pandemic Preparedness Plan include:

- 
- a) Airports Company Act, 1993 (Act No. 44 of 1993);
- 
- b) Air Traffic and Navigation Services Company Act, 1993 (Act No. 45 of 1993);
- 
- c) Air Services Licensing Act, 1990 (Act No. 115 of 1990);
- 
- d) International Air Service Act, 1993 (Act No. 60 of 1993);
- 
- e) Criminal Procedure Act, 1977 (Act No. 51 of 1977);
- 
- f) South African Police Service Act, 1995 (Act No. 68 of 1995);
- 
- g) Immigration Act, 2000 (Act No. 13 of 2000);
- 
- h) Customs Control Act, 2014 (Act No. 31 of 2014);
- 
- i) Diplomatic Immunities and Privileges Act, 2008 (Act No. 35 of 2008);
- 
- j) Private Security Industry Regulations Act, 2001 (Act No. 56 of 2001); and
- 
- k) Security Officers Act, 1987 (Act No. 92 of 1987);
- 
- l) Other applicable legislation.
- 

## 21 RISK MANAGEMENT MODEL

The risk assessment approach set out by the IHR was incorporated as a general principle, including the use of IHR Annex 2 “Decision Instrument for the Assessment and Notification of Events that may Constitute a Public Health Emergency of International Concern”, which sets out the basic framework for public health risk management that has been adopted for this document. The Rapid Risk Assessment of Acute





**Diagram: Public Health Events is a useful reference in the risk assessment process for infectious diseases transmitted in air travel.**

## 22 GENERAL RISK MANAGEMENT PRINCIPLES APPLIED TO AIR TRANSPORT

The multi-layered risk management process is considered essential in the context of a public health risk. It is a management framework and aligned with the intent of the WHO “Considerations for implementing a risk-based approach to international travel in the context of COVID-19.” The objective of this process is to identify the residual risk, considering various risk mitigation measures in place for unknowingly transporting an infectious passenger or translocating the SARS-CoV-2 virus. This approach is scalable in complexity and considered the baseline for more sophisticated processes in end-to-end risk assessment models.

The proposed risk assessment process relies on a continuous process that considers risk holistically by defining a risk scenario instead of focusing on a single hazard or threat. The determination of an inherent risk results from evaluating the likelihood of the risk scenario, as well as defining the resulting impact. It is essential to consider risk mitigation measures that are already in place when conducting the initial assessment of the inherent risk. This step does not consider future or potential management measures, as it intends to provide the “as is” situational assessment. The result provides States with information relevant to determining if the risk scenario lies within its public health management capacity.

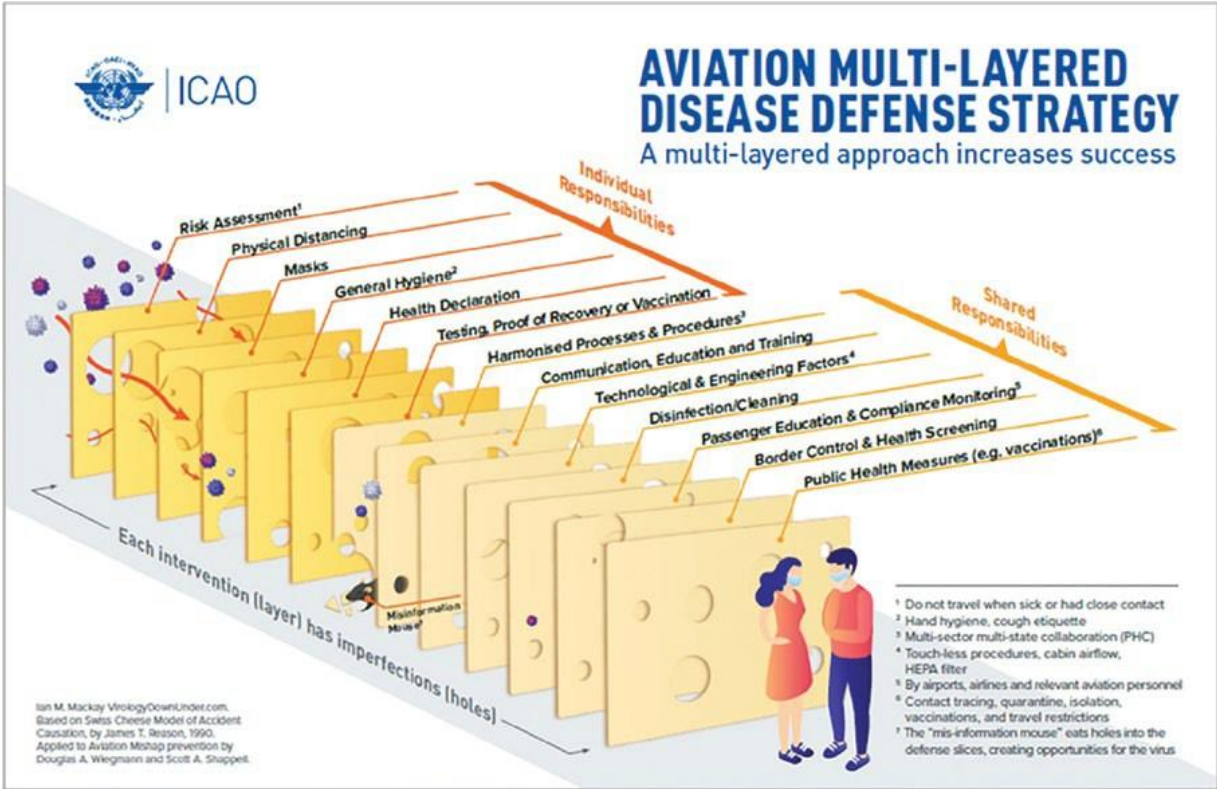
The modelling of a risk scenario is the starting point in the process, based upon the existing situational assessment, but considering multi-agency collaboration within the context of the State. A generic baseline example of such a scenario could be “the risk to be assessed is of an infectious person being on board an international flight” or “the risk of translocation of the virus through air transport”. The risk scenario will need to address a state’s view on the most critical aspect of public health management.

The process then progresses through different available mitigation measures that affect the overall risk. It is designed in a way that the efficacy of each mitigation measure can be assessed either qualitatively or quantitatively.

This technique is often advisable only when the risk is small but may need to be considered in complex risk scenarios. Risk mitigation is the most appropriate strategy in the context of pandemic risk management in air transport. In the further implementation of the risk assessment process, it might be necessary to employ most of the available mitigation measures such as requiring masks, completion of passenger locator forms, testing, physical distancing, quarantine, etc., at airports and during flights.

With regard to COVID-19, vaccination is probably the strongest risk mitigation tool that is effective, with increasing use globally, but factors such as access to vaccines and vaccine hesitancy is a concern and it delays the overall response to contain the pandemic. In multi-layered defence models, the various mitigation measures are depicted as layers (e.g., based on the James Reason Swiss Cheese Model – see Figure 2-1). Risk-free travel is not possible, but the risk can be reduced through the combined application of these mitigation measures. Currently, there may be limited scientific peer-reviewed, evidence-based evidence of efficacy for these mitigation measures, and the scope of their impact on transforming the inherent risk is based on expert consensus and available evidence. However, the availability of peer-reviewed scientific evidence is increasing. As a result, much of the risk assessment is qualitative and, as such, provides the flexibility to be adopted and integrated into national public health and aviation plans. The risk assessment process will consider the chosen mitigation measures, and regularly evaluate how they affect the likelihood and impact of the inherent risk.

Although this risk assessment model was used for COVID-19, the model must be evaluated based on the mode of transmissions of future disease, prevention, management and other considerations that have to be taken into consideration.



**AVIATION MULTILAYERED STRATEGY BASED ON THE JAMES REASON SWISS CHEESE MODEL**  
Health risks (as related to air transport) can be approached in a similar way to aircraft safety and must be addressed together. To this end, aeroplane manufacturers, for example, have created end-to-end risk assessment models which calculate the risk of virus transmission and virus translocation by

modelling steps and parameters in the door-to-door, air travel journey. One example leverages an open data platform, considering a variety of airport, aircraft, personal health and safety considerations, and different testing and quarantine scenarios. The model covers the complete air travel journey, from entering the departure airport to leaving the arrival airport and relying on internal expertise and safety experience. The model's objective is to support agencies involved in the management of making performance-based, data-substantiated decisions when applying and evaluating risk management principles and strategies to secure air travel for the flying public.

There are currently different models that compare approaches such as screening. These should be considered in the future, as they provide an avenue to compare the relative performance of different screening and quarantine strategies and to determine which approaches may be appropriate for country-pair-specific travel journeys. It is built as a web-based tool that will provide users a flexible interface to compare multiple screening options for travel between any two selected countries with the available prevalence data of communicable disease. The inclusion of prevalence data allows for computation of a "post-screening prevalence" for screened travellers (calculated using the negative predictive value) in order to compare the starting prevalence of the origin country, the post-screening prevalence for a variety of screening options, and the prevalence of the destination country. This allows for comparison of the prevalence among screened travellers to the existing prevalence in the destination country.

Another model is a multi-disciplinary, adaptive, software-based risk management tool designed to support risk-based decision-making that restores safety, confidence and convenience in commercial aviation. The model employs a semi-quantitative, deterministic modular approach with group-structured mixing to demonstrate the relative effectiveness of layered disease control measures that protect against airborne and surface borne disease transmission throughout the end-to-end travel journey in global transportation systems.

Faced with a fast-evolving communicable disease, the risk assessment process must be regularly reviewed so that mitigation measures are keeping the risks within the capacity of its public health system. WHO has developed a suite of health service capacity assessments in the context of the COVID-19 pandemic to support the rapid and accurate assessment of current, surge and future capacities of health facilities.

**Reference:** [Manual on COVID-19 Cross-border Risk Management 2011](#)

## **23 BUSINESS CONTINUITY PLANS FOR PUBLIC HEALTH EMERGENCIES IN AVIATION**

The objective of developing business continuity plans for public health emergencies in aviation is to provide guidelines for airlines, airports and air traffic services on how to address the specific issues relating to a public health emergency of international concern, such as a pandemic and radiation accident, in a BCP. Most Airport, Airline and ATC operators already have a BCP, however; the available guidelines from IATA and ACI aim at assisting States to review the accepted different steps in a BCP and will suggest where special input may be required when dealing with a public health emergency of international concern.

The focus and objectives of the BCM framework should be:

- 
- defining alternatives for continuing critical services;

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  - defining organisational priorities and timeframes;

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  - reducing adverse impact during crisis; and

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  - recovering as many critical processes as possible during the crisis.

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**PROCESS**

As can be seen in the diagram below, the accepted process is identical for any type of crisis, including public health emergencies.



Airports, Charter, Airline, ANS and other operators must review their guidelines on business continuity plans, based on risk assessment.

**NOTE: Detailed Guidelines on Annex IATA, CANSO, ACI, WHO and others.**

# 24 VARIOUS STAKEHOLDERS IN THE MANAGEMENT OF PUBLIC HEALTH EVENTS

1. National Department of Transport
2. National Department of Health
3. Civil Aviation Authority
4. Facilitation Committee (DoT)
5. MNORT (DOH)
6. DIRCO
7. HOME AFFAIRS
8. Customs
9. Airport Representatives
10. Airline Representatives
10. Travel Agencies
12. Handling Agents
12. Tourism
14. Academic Institutions
15. Laboratories
16. SAHPRA
17. SANAS
18. Others

# 25

## ROLES AND RESPONSIBILITIES OF THE NATIONAL DEPARTMENT OF TRANSPORT

The responsibility of the DoT includes the establishment of the NATFP, the aim of which is to adopt all practicable measures to facilitate the movement of aircraft, crews, passengers, cargo, mail, and stores, by removing unnecessary obstacles and delays. The challenge of the NATFP is to address and harmonise the interests of all entities involved in facilitation, to promote the growth of a safe, reliable, and viable air transport industry, without interfering with legal requirements (e.g., security and safety provisions).

The NATFP is designed to meet the international Standards and Recommended Practices (SARPs) contained in Annex 9 to the Convention on International Civil Aviation Organization (ICAO), 1944 (Chicago Convention), as well as related aviation facilitation provisions found in other annexes. The purpose of the NATFP is to implement the mandate imposed on Contracting States by the Chicago Convention to provide for and facilitate the border-crossing formalities that must be accomplished with respect to aircraft engaged in international operations and their passengers, crews, and cargo.

The Programme also aims to provide a framework to guide the improvement and optimisation of aircraft, crew, passenger, and cargo flows through airports and to improve customer service, while maintaining appropriate security requirements. The NATFP ensures that the national requirements, policies, and procedures covering all relevant provisions of Annex 9 are consistently outlined as specified within the relevant Regulations in various Departments. The NATFP also ensures that, while committed to facilitating efficient clearance for arriving and departing aircraft, South Africa shall maintain high-quality security, effective law enforcement and proficient customer service.

The benefits of the NATFP are:

- a) to maintain or increase the quality of aircraft, crew, passenger and cargo flow;
- b) to maintain or increase the level of passenger service and the cost-effectiveness and efficiency of processes and procedures;
- c) to facilitate, accommodate and encourage the growth of air transport;
- d) to contribute to a positive experience meeting the needs of the travelling public;
- e) Strengthening of the role and responsibility of the Facilitation Programme during Public Health Emergencies is required.

Reference: [National Transport Facilitation Document](#)

# 26

## ROLES AND RESPONSIBILITIES OF THE NATIONAL AIR TRANSPORT FACILITATION COMMITTEE

The establishment of a National Air Transport Facilitation Committee (NATFC) is mandated by Annex 9 to the Chicago Convention. Its purpose is to coordinate facilitation policy issues and activities between departments, agencies, and other organisations of the State concerned with, or responsible for, various aspects of international civil aviation as well as with aircraft and airport operators. The Department of Transport is the custodian of ICAO Annex 9 (Facilitation). The Committee provides a forum for consultation and information sharing about facilitation matters amongst Government stakeholders, Government representatives of other air transport-related communities and the private sector.

**NOTE: Detailed Guidelines on Annex NAFT Doc**

## **MEMORUNDUM OF UNDERSTANDING BETWEEN NATIONAL DEPARTMENT OF TRANSPORT AND HEALTH**

The South African Civil Aviation Authority is currently the focal point to ensure the drafting and continuous revision of the Aviation Pandemic Preparedness Plan Policy on behalf of the National Department of Transport through the Facilitation Committee. Policy formulation continuously takes place through consultation with the office of the World Health Organisation, the National Department of Health (Centre for Disease Control and Ports Health Directorates) and the aviation industry. Consultation with industry and the National Department of Health has taken place and a signed Memorandum of Understanding is in place to ensure that a framework for liaison between National Departments of Transport and Health is signed by the Director Generals to ensure that the Transport Department comply with the ICAO Annexes and the Department of Health complies with the WHO International Health Regulations (2005). The purpose is to ensure effective coordination of policy investigation within their respective responsibilities, to ensure aviation safety and to minimize the spread of communicable disease by means of air travel.

Under the Memorandum of Understanding, both the DOT and DOH are committed to close co-operation to minimize duplication of regulatory efforts and to avoid any conflict between regulatory requirements where both authorities have an interest. This Memorandum of understanding describes the scope of the SACAA responsibilities, for safety of crew and passengers, and seeks to differentiate the overlapping safety and health responsibilities of the SACAA Medical Department and the Department of Health. Interface between the SACAA and DOH may arise in many ways, for example, in the regulation of safety of aerodromes, training of crew, communication (media) and health and safety of aircrew and passengers. This will be addressed by discussions at the working level to agree on how the statutory, and the standards issued under them, should be interpreted in particular circumstances and to determine ways of reconciling any differences that may arise. Reference to high level of management may be necessary in some cases.

## **27 ROLES AND RESPONSIBILITIES OF THE NATIONAL DEPARTMENT OF HEALTH AND TRANSPORT DIRECTOR-GENERALS**

During Disaster Management the Director Generals, Ministers and other senior government officials plays a role in the development of public health emergencies of international concern. It is encouraged to engage political leadership structures at national and sub-national levels, towards improving collaboration and public health practices at the Point of Entry and in the Aviation, sector including consultations and alignment of statements among different partners at regional and national level to reinforce collaboration and cooperation to achieve the same goal;

As part of the lessons learned from the COVID-19 pandemic ,the outcome of the Africa ICAO -WHO and Member States concluded that to address the deficiencies noted in several States during the COVID-19 pandemic such as political, business and government authorities' interference, neglect and lack of coordination including relegated esteem to ensure effective CAPSCA program implementation and relevance should be addressed ,as part of the implementation of this plan, these issues should be addressed in details to minimize recurrences;

Senior Government Officials both health and aviation are encouraged to document and share best practices/lessons learned to create institutional memory and guide future interventions and research. Close working relationship within the CAPSCA framework should be promoted in the use of available scientific evidence, and harmonization on the implementation of travel measures.

### **The Director-General Health must;**

- a) Identify a competent authority in line with the WHO International Health Regulations (2005), who shall be responsible for the implementation of health measures in points of entry under these Regulations;
- b) the competent authority referred to above shall be an employee of the National Department of Health or any other person authorised by the Director-General;
- c) assess and develop core public health capacities in points of entry as required by the International Health Regulations (IHR) 2005;
- d) ensure points of entry are compliant with the requirements of the IHR (2005);
- e) designate and ensure the functioning of the National IHR Focal Point;
- f) send to the World Health Organisation a list of ports authorised to offer:
  - i. the issuance of Ship Sanitation Control Certificates,
  - ii. the issuance of Ship Sanitation Control Exemption Certificates only,
  - iii. extension of the Ship Sanitation Control Exemption Certificates for a period of one month until the arrival of the ship in the port at which the Certificate may be received;
- g) communicate changes to the status of ports referred to in the above sub-regulation to the WHO.

### **The Director-General Transport must;**

- a) Identify together with the SACAA appoint a Focal Person for the ICAO -WHO Collaborative Arrangement for the Prevention and Management of Public Health Events in Civil Aviation in line with ICAO Annex 9;
- b) The DG in consultation with the SACAA must ensure that there is valid MOU between the National Department of Health and Department of Transport to meet the ICAO Annexes and WHO International Health Regulations;
- c) The DG of Transport in consultation with the Facilitation Committee and the SACAA must ensure that the Aviation Pandemic Preparedness Plan is in place and accommodate all the stakeholders involved in public health mitigation measures;
- d) The DG and the SACAA must ensure that there are current regulations to meet ICAO Annexes.

**NOTE: Detailed Guidelines on Annex International Health Regulations (2005)**

## **28 FUNCTIONS OF A PORT HEALTH OFFICER (COMPETENT AUTHORITY) IN AVIATION**

A Port Health Official is responsible for, but not limited to, the following:

- a) Monitoring baggage, cargo, containers, conveyances, goods, postal parcels and human remains departing and arriving from affected areas, so that they are maintained in such a condition that they are free of sources of infection or contamination, including vectors and reservoirs;
- b) Ensuring, as far as practicable, that facilities used by travellers at points of entry are maintained in a sanitary condition and are kept free of sources of infection or contamination, including vectors and reservoirs;

- 
- c) The supervision of any derating, disinfection or decontamination of baggage, cargo, containers, conveyances, goods, postal parcels and human remains or sanitary measures for persons, as appropriate under these Regulations;

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  - d) Advising conveyance operators, as far in advance as possible, of their intent to apply control measures to a conveyance, and shall provide, where available, written information concerning the methods to be employed;

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  - e) The supervision of the removal and safe disposal of any contaminated water or food, human or animal ejecta, wastewater and any other contaminated matter from a conveyance;

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  - f) Taking all practicable measures consistent with these Regulations to monitor and control the discharge by ships of sewage, refuse, ballast water and any other potentially disease-causing matter which might contaminate the waters of a port, river, canal, lake, or other international waterway;

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  - g) Supervision of service providers for services concerning travellers, baggage, cargo, containers, conveyances, goods, postal parcels, and human remains at points of entry, including the conduct of inspections and medical examinations as necessary;

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  - h) Effective contingency arrangements to deal with an unexpected public health event and contact tracing; and

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  - i) Communication with the National IHR Focal Point on the relevant public health measures taken pursuant to these Regulations and the IHR (2005).
- 

Reference: [WHO International Health Regulations \(2005\)](#)

## **29 ROLES AND RESPONSIBILITIES OF THE SOUTH AFRICAN CIVIL AVIATION AUTHORITY**

- 
- a) Consultation and drafting of regulations in compliance with ICAO Annexes 6,9,11 (PANS ATM),14 18,19 and others) and guidelines;

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  - b) Coordinate training of the aviation and health sector to ensure compliance to WHO-IHR (2005) and ICAO Annexes and Article 14;

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  - c) Provide Aviation Public Health Technical Support to the DOT Facilitation Committee, ICAO Regional office and SADC where State Assistance is required;

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  - d) Develop and review the Aviation Pandemic Preparedness Plan in consultation with the aviation, health and other sectors;

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  - e) Approve public health procedures applicable to the aviation operators;

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  - f) Conduct audits and monitor compliance to public health measures;

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  - g) Ensure collaboration between the aviation authority, aviation medical examiners, aviation medical assessors, other healthcare professionals, peer support groups and aviation personnel to support the mental health and well-being for all aviation personnel;

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  - h) Provide appropriate guidance and support to aviation medical examiners to manage the impact of communicable diseases of internal concern on mental health and well-being in a consistent manner;

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  - i) Encourage stakeholders to make available appropriate resources and tools to minimize the mental health impact of communicable diseases of internal concern, including peer support programmes, by referring to ICAO guidance and other relevant support material;
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- 
- j) Communicate on a regular basis to all stakeholders the means to maintain licensing and proficiency to enable safe performance of duties;
  - k) Conduct training on public health issues to aviation and health sector;
  - l) Provide Public Education through media of regulations and public health measures to passengers; and
  - m) Other public health measures in aviation.
- 

## 30 ROLES AND RESPONSIBILITIES OF A DESIGNATED AIRPORT

In terms of the CAR, 2011 a designated airport operator of an aerodrome intended for public use with scheduled commercial operations shall be in possession of a valid aerodrome licence issued subject to compliance with safety and public health regulatory requirements.

Responsibilities of a designated airport operator:

- 
- a) A designated airport operator shall be responsible for developing an airports public health plan that will include among others conducting risk health assessment, prevention, managing in consultation with airport stakeholders. This responsibility may be delegated to an airport stakeholder or a person with equivalent status. A designated airport operator shall ensure designation of an aviation public health person responsible for development and implementation of the airport public health programme;
  - b) The airport operator shall establish, implement, and maintain a written Airport Aviation Pandemic Preparedness Plan to meet the requirement of the National Aviation Pandemic Preparedness Plan and CAR, 2011;
  - c) A written plan for enhanced cleaning and disinfection should be agreed upon by the airport health authority, airport operators and service providers, according to the standard operating procedures outlined in the WHO Guide to Hygiene and Sanitation in Aviation;
  - d) All cleaning and disinfection staff should be made aware of the cleaning and disinfection plan. It is necessary to ensure staff are using products effectively, including the concentration, method and contact time of disinfectants, and addressing areas that are frequently touched and most likely to be contaminated, such as:
    - i. Airport information desks, passengers with reduced mobility (PRM) desks, check-in areas, immigration/customs areas, security screening areas, boarding areas, etc.
    - ii. Escalators, elevators and lifts, handrails.
    - iii. Washrooms, toilets, and baby changing areas.
    - iv. Luggage trolleys and collection points: cleaned with dispensable wet wipes or disinfectants, ensuring that disposal bins are made available.
    - v. Seats prior to security screening and in boarding/check-in areas.
    - vi. Parking shuttle buses and airside buses.
  - e) Employees should be equipped with PPE based on the risk of exposure (e.g., type of activity) and the transmission dynamics (e.g., droplet spread). PPE could include disposable gloves, masks, goggles or face shields, and gowns or aprons. For staff and teams working shifts, handovers should be conducted in a contact-free manner, i.e., via telephone, videoconference, electronic logs, or at least through physical distancing;
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- f) Maintenance and repair work in public areas should be prioritized and their schedule adjusted or postponed if it is non-essential. Staff training should maximize the use of online training and virtual classrooms. The use of physical separators between selected staff and passengers is recommended in areas of repeated exchanges and transactions;
- 
- g) A designated airport operator shall arrange supporting resources and facilities required for aviation public health services and ensure that the public health plans are tested through at regular intervals using desk, partial and full-scale simulation exercises;
- 
- h) Risk assessment should be conducted for airport terminal access by passengers which may be restricted to workers, passengers and persons accompanying passengers with disabilities, reduced mobility or unaccompanied minors in an initial phase, as long as it does not create crowds and queues, which would enhance risks of transmission as well as create a potential security vulnerability;
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- i) Airport measures to control access to the security screening checkpoint may need to be considered, as well as possible modifications to standard screening, in order to comply with new public health sanitary guidelines;
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- j) Depending on the public health requirements, airport authorities may have to provide hand sanitizers and disinfection products prior to the expected time of their use by passengers and staff at screening access points. Screeners and passengers should maintain physical distancing to the extent possible or wear the appropriate PPE to mitigate the risk of exposure. Rearranging of security checkpoint accesses and layouts should be considered with the objective of reducing crowds and queues, to the extent possible, and maintaining physical distance while maintaining desirable throughput;
- 
- k) Where social distancing is required, floor-markings, tensile barriers, or other suitable means should be established within the queueing area to help secure the proper distancing recommended by the appropriate authorities. Procedures involving passengers presenting boarding passes and other travel documents to security personnel should be performed, to the extent possible, while avoiding physical contact and in a way that minimizes face-to-face interaction;
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- l) Directing passengers to use automatic boarding pass scanners at access points while maintaining appropriate physical distance, using mobile boarding pass scanners operated by the security staff. Conducting a visual inspection of the boarding pass and relevant identification documentation, as needed by standard operating procedures;
- 
- m) Following a major outbreak, at the early stages of the restart phase, carry-on baggage that would need to use the overhead bins should be limited to facilitate a smooth boarding process;
- 
- n) Electromechanical equipment such as boarding bridges, escalators and elevators must be inspected and periodically tested or started up. Inspections of such decommissioned equipment are essential before returning them to service for passenger use, based on manufacturers' recommendations and national building codes. Maintenance protocols need to be defined and deployed and where conditioned air is needed, power should be maintained in all outdoor-based equipment such as jetways and pre-conditioned air units;
- 
- o) Where external pre-conditioned air (PCA) and fixed electrical ground power are available at the stand, an aircraft can switch off its auxiliary power unit (APU) after arrival. A PCA system takes in ambient air through an intake filter and provides conditioned air to the cabin. External air sources are not processed through the aircraft's high-efficiency particulate air (HEPA) filter. The aircraft APU should be permitted to be used at the gate to enable the aircraft's air conditioning system to be operated if equivalent air quality from PCA is not available;
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- p) Protocols and precautions need to be in place for arriving passengers who are exiting the landside area. Consideration should be given to the greeter's area as well as the terminal's exit area;
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- q) Airport operators must ensure increased use of air conditioning and effective filtration systems to keep air clean, reduce re-circulation and increase the fresh-air ratio. Horizontal airflows should be limited, and regular maintenance procedure of the ventilation system must be part of the airport's procedure submitted to the Authority;

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  - r) Self-sanitizing technology may also be considered for integration within kiosks with touch screens, to allow for the disinfection of the screens between each use. Whenever possible, airport and other stakeholders should use contactless processes and technology, including contactless biometrics such as facial or iris recognition. Such digital identification processes can be applied to self-service bag drops, various queue accesses, boarding gates and retail and duty-free outlets;

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  - s) Automated gates and mobile scanners' reader surfaces should be disinfected with the same frequency as for any other high-touch surface;

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  - t) An orderly boarding process will be necessary to reduce physical contact between passengers, especially once load-factors start increasing and close cooperation between the airline, airport and government is vital during public health emergencies to mitigate public health risk.
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The airport operator must ensure that the following measures are implemented to minimize risk of the spread of communicable disease:

- Automated door systems and automatic toilet flushing system;
- Taps and soap/hand sanitizer dispensers; and
- Automated hand- towel dispensers.
- Other measures

Governments should ensure that the customs clearance process is as speedy as possible and that appropriate measures are taken in case of physical baggage inspections;

Cleaning schedules should be aligned based on flight schedules to ensure a more frequent, in-depth disinfection of luggage carts, washrooms, elevator buttons, rails, etc.

**Reference:** [Preventing Spread of Corona Virus Disease \(COVID-19\), Guidelines for local and International Airports and ICAO CART 3](#)

## **31** ROLES AND RESPONSIBILITIES OF THE EMERGENCY OPERATION CENTRE

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- a) The Emergency Operation Centre (EOC) has ensured that there is a flow chart to initiate the aviation emergency response plan process;

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  - b) The command-and-control system has to be established for management of a public health event on the day, and Public Health Authority Personnel have to participate in development of the aviation preparedness plan together with other airport stakeholders;

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  - c) The EOC plan has to form part of the procedures submitted to the Authority for approval.
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## **32** ROLES AND RESPONSIBILITIES OF BAGGAGE AND CARGO HANDLERS DURING PUBLIC HEALTH EMERGENCIES

Responsibilities of the Ground Handling Service Providers. The ground handling service provider shall develop a ground handling operation manual, which shall meet the national requirements. The developed manual shall be submitted to the Authority for approval.

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- a) All efforts need to be made to provide a speedy baggage claim process and ensure that passengers are not made to wait for excessive amounts of time in the baggage claim area;

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  - b) Maximize use of available arrival baggage carousels to limit the gathering of passengers, and, where possible, use of dedicated baggage carousels for flights from high risk areas;

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  - c) Cleaning schedules should be aligned based on flight schedules to ensure a more frequent, in-depth disinfection of luggage carts, washrooms, elevator buttons, rails, etc;

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  - d) Self-service kiosks or online options for passengers needing to report lost or damaged luggage should be made available;

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  - e) The use of baggage delivery services, where the passenger's baggage can be delivered directly to their hotel or home, should be encouraged.
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### **PARKING POSITION OF AIRCRAFT CARRYING SUSPECTED CASE OF COMMUNICABLE DISEASE**

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, but is close also to an isolation medical room, public health facility, and a parking accessible to ambulances. The airport plans 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.

## **33**

### **ROLES AND RESPONSIBILITIES OF THE SECURITY SCREENERS DURING PUBLIC HEALTH EVENTS**

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- a) Appropriate procedures should be implemented in coordination with relevant government departments in order to respond to any passengers showing signs of illness;

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  - b) Hand sanitizers and disinfection products should be provided prior to passengers and staff screening access points where possible;

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  - c) Screeners and passengers should maintain physical distancing to the extent possible or wear the appropriate PPE to mitigate the risk of exposure;

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  - d) Rearranging of security checkpoint accesses and layouts should be considered with the objective of reducing crowds and queues, to the extent possible, and maintaining physical distance while maintaining desirable throughput. This should include both divestment areas and those areas where passengers retrieve their screened cabin baggage.
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Procedures involving passengers presenting boarding passes and other travel documents to security personnel should be done, to the extent possible, while avoiding physical contact and in a way that minimizes face-to-face interaction. Should there be a need to identify a person wearing a non-medical or medical mask against a government-issued photo identification, the non-medical or medical mask could be removed temporarily if physical distancing measures are met. Appropriate signage should be deployed that clearly informs about subsequent steps of the process. Possible solutions include:

- a) Directing passengers to use automatic boarding pass scanners at access points while maintaining appropriate physical distance;
- b) Using mobile boarding pass scanners operated by the security staff;
- c) Conducting a visual inspection of the boarding pass and relevant identification documentation, as needed by standard operating procedure;
- d) Automated gates and mobile scanners' reader surfaces should be disinfected with the same frequency as for any other high-touch surface;
- e) Gate areas, VIP lounges and other services in this area also see a high passenger volume and various flow monitoring tools, physical installations, floor markings and adapted wayfinding need to be evaluated and deployed;
- f) Enhanced cleaning and hygiene measures may need to be scheduled and deployed to contribute to the limiting of the virus spread.

#### **AIRPORT TENANT RESPONSIBILITIES**

An airport tenant is responsible for:

- a) Ensuring the establishment of their own public health procedures and submitting them to the airport operator who will ensure approval by the Authority;
- b) Airport tenants must attend public health meetings and must train and participate in simulation exercises to ensure that they understand their role during an emergency.

**NOTE: Detailed Guidelines on Annex [ICAO CART](#)**

#### **RESPONSIBILITIES OF AIRLINES AND CHARTER OPERATORS**

- a) In terms of Part 121 CAR 2011, an air carrier shall not operate an aircraft unless such operator is the holder of a valid AOC and complies with the conditions of an AOC including the operations specifications attached thereto and an air services licence issued in terms of the Air Services Licensing Act, 1990 (No.115 of 1990), or the International Air Services Act, 1993 (No. 60 of 1993). Aircraft Operator's responsibilities;
- b) An air carrier registered in the Republic providing international service [commercial air transport operation] in or from the Republic and domestic commercial air transport operators, shall develop, implement, and maintain a written Aircraft Operator's Public Health SOP which meets the requirements of the Aviation Pandemic Preparedness Plan and CAR, 2011. A copy of the air carrier operator's public health plan shall be submitted to the Authority, for approval in accordance with the CAR, 2011;
- c) An AOSP shall specify the measures, procedures, and practices to be followed by the operator to protect passengers, crew, ground personnel, aircraft, and facilities from suspected cases of communicable diseases These will include but are not limited to identification of suspected cases prior to boarding, management on board an aircraft and those in transit;

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- d)** In the case of a passenger suspected of having a communicable illness, a crew member is to be designated to care for the passenger. That crew member must don the Personal Protective Equipment provided in the UPK before engaging in close contact with the ill passenger. The ill passenger should be fitted with a medical mask and provided with appropriate assistance. Separate the ill person from the other passengers by a minimum of 1 metre. Where possible, this should be done by moving other passengers away. Depending on cabin design, 1 metre is usually two seats left empty in all directions. If possible, assign one toilet for use only by the ill passenger. The designated crew member(s) should comply with decontamination procedures established by the operator before resuming other duties;
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- e)** A passenger who develops symptoms in-flight should be assessed by the local public health authorities after landing and prior to disembarking the aircraft, following national protocols;
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- f)** Safety demonstration equipment should not be shared to the extent feasible to reduce the likelihood of virus transmission. If it must be shared, alternate means of demonstration without the equipment should be considered, or the equipment should be thoroughly sanitised between use. Each operator must develop a procedure for cardiac arrest based on risk assessment and mode of transmission. An air carrier shall make an application to the Authority for the designation of an official responsible for the implementation of the public health plan;
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- g)** Public Health requirements for scheduled foreign air operations;
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- h)** A foreign air operator providing a scheduled international commercial air transport operation in the Republic shall establish, implement and maintain a written supplementary station procedure that meets the national public health requirement. The developed procedure shall be submitted to the Authority for approval;
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- i)** A foreign air operator providing a scheduled international commercial air transport operation in the Republic shall appoint an official responsible for the establishment, implementation, and maintenance of a written supplementary station procedure;
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- j)** The following procedures for infection control need to be in place: crew rest compartments, training devices, use of lavatories, universal precaution kits, accommodation, management of suspected cases, food and beverage service; limit interaction on board, luggage checked-in except small hand luggage, newspapers and magazines; food and beverage, seat assignment processes, and others must be in place;
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- k)** An appointed foreign air operator providing a scheduled international commercial air transport operation in the Republic shall appoint an official responsible for the establishment, implementation, and maintenance of a written supplementary station procedure and participate in public health training, simulation exercises and workshops organised by the health and aviation regulators;
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- l)** Essentially, upon arrival at the airport, in addition to having a designated parking point for the arriving aircraft and 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 public health authority;
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- m)** A traveller who is ill 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;
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- n)** A traveller who has 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;
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- o)** 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 the Annex is recommended. According to 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;

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  - p)** There should be a designated area in the airport that will allow privacy, good ambient light, ventilation, easy cleaning, access to designated toilet facilities, crew rest compartments 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;

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  - q)** Charter and Airline public health procedures and business continuity plans of the management of suspected cases of communicable diseases have to be current and submitted to the Authority for approval and have to form part of the national and airport contingency plans;

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  - r)** Air Operators involved in the repatriation of human remains must ensure that regulations from DOH and guidelines from the Authority are complied with prior to repatriation. [The repatriation of human remains is a process whereby human remains are transported from a State where death occurred to another State for burial.] Most airlines offer services for the transportation of cremated and non-cremated human remains, but they require the cooperation and coordination of various stakeholders (Department of Health and others) to ensure that the process is conducted efficiently and in compliance with relevant international regulations and national rules of the departure and destination States;

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  - s)** Operators must develop procedures for crew members who are involved in flights with a layover during public health emergencies of international concern. These procedures should consider issues such as crew medically quarantined or detained for observation while on a layover or after returning due to exposure or a known symptomatic passenger or a crew member on board or during the layover;

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  - t)** If crews need to lay over or transit at an outstation, air operators should ensure compliance with the relevant public health regulations and policies, together with measures identified by a risk assessment conducted by the operator that takes account of specific local conditions;

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  - u)** Operators must conduct a risk assessment and develop a procedure for crew arrangement when crew may need to commute (between airport and hotel, if needed): The air operator should arrange for the commute between the aircraft and the crew's individual hotel rooms, ensuring that hygiene measures are applied and that the recommended physical distancing, including within the vehicle, is observed to the greatest extent possible;

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  - v)** Cargo flight crews should apply the same health and safety considerations as passenger flight crews and are collectively included in the crew section of this document. Whilst air cargo consignments do not come into contact with the travelling public, the cargo acceptance and handover process does include interaction with non-airport employees. The cargo module addresses aviation public health, including physical distancing, personal sanitation, protective barriers for points of transfer to the ramp and the loading and unloading, and other mitigation procedures; and

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  - w)** Cleaning procedures and other public health measures must consider highly populated areas such as possible routes of infection before boarding the aircraft, including: En-route to the airport by public transport, in line at the check-in counter, waiting in the gate area, access to the aircraft via "jetways" or transport to the aircraft by bus and other crowded and confined spaces.
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Reference: [DOT - Guideline Prevention and Control Measures for Airline Transportation, Disinfection of Cargo and Disembarkation of buses](#) & t h e [ICAO CART 3 Document](#)



## AIRPORT STAFF REQUIREMENTS DURING AN OUTBREAK OF COMMUNICABLE DISEASE

Any airport worker who has been exposed to the prevailing PHEIC through a family member at home will not report for work until the defined incubation period (to be defined by the public 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 national health authority has elapsed. 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. Airport workers entering the transit area (sterile airside area) will be subject to screening prior to entry to the airside and any suspected case will be referred for secondary screening.

Detailed Guidelines on Annex [ICAO CART](#)

## GROUND HANDLING SERVICE PROVIDERS

Air carrier handling agents represent the starting point for passenger facilitation, since it is their job to process departing passengers. Public health procedures for handling agents shall include, but are not limited to, identification of suspected cases of communicable diseases at check-in counters and reporting the matter to superiors and ports health/public health professionals when there is a need.

- a) Expansion stanchions may be needed to allow for broader spacing of passengers at check-in areas, moving of portable boarding scanners for passengers to scan boarding cards, so as to avoid the need for personnel to handle boarding cards, and increased frequency to wipe down arm rests, seats, and backs of wheelchairs are other probable requirements and must be provided for;
- b) If the handling agents are employed by contractors, they shall be provided with written public health procedures for the measures for which they are responsible. Contractors shall be able to prove that their agents are adequately trained in the public health mitigation measures aspects of their duties;
- c) Procedures for the disinfection of equipment such as wheelchairs and social distancing on airport buses must be approved by the Authority. All check-in counter staff should be trained so that they are able to identify travellers who may have a communicable disease of public health concern, or alternatively a checklist can be provided to the staff to assist in identifying such travellers;
- d) 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 by public health authorities prior to completion of the check-in;
- e) Check-in staff shall have access to appropriate personal protective equipment (PPE) and;
- f) 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 public health authority. Ground handling agents will also develop a business continuity plan for their staff in case there is a shortage caused by the outbreak. 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;
- g) 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 suspected case of communicable disease on board a flight;
- h) When an aircraft arrives with a possible passenger with communicable disease or with an affected passenger and Ramp Buses are required, assess the situation beforehand: Provide and identify a limited number of buses for that service, use the same buses for the whole disembarkation service and disinfect once the process is finalised. Limit the number of passengers in the bus.

Detailed Guidelines on Annex [ICAO CART](#)

## ROLE OF OPERATORS IN DISINFECTION OF THE AIRCRAFT

- a) A procedure must be developed and approved by the Authority and the Department of Health for the disinfection of the various areas of the aircraft to mitigate the spread of communicable disease to provide a safe, sanitary operating environment for passengers, crew and ground staff;
- b) The cabin should be cleaned and then disinfected at an appropriate frequency to accommodate safe operations for the passengers and crew and the frequency should account for the operation of the aircraft and the potential exposure of the cabin to an infected person;
- c) Disinfection methods should be adopted in consultation with the aircraft manufacturer and based on an appropriate safety risk assessment. The risk assessment should be informed by recommendations from airframe manufacturers and reference instructions from appropriate health organisations on application to be effective against viruses; and advice should be obtained from WHO, ICAO, IATA and Aircraft Manufacturers;
- d) Periodic equipment inspection to detect the long-term effects or damage given the lack of data on the long-term effects of much more frequent application of disinfectants; and contact should be made with manufacturers for guidance on alternate disinfectants, should damage be observed;
- e) Following their instructions for ensuring proper application, ventilation and the use of personal protection equipment;
- f) Airlines should review their operating procedures to minimize the number of personnel who need to contact high-touch surfaces such as access panels, door handles, and switches during outbreaks to ensure that appropriate disinfection takes place;
- g) The cargo and compartment touch surfaces should be cleaned and disinfected at an appropriate frequency to accommodate safe operations for the ground staff;
- h) Care should be taken, as IPA is flammable, so precautions should be taken around potential sources of ignition and particular attention should be paid to hidden ignition sources, as many aircraft have electronic boxes mounted in the cargo compartment; and
- i) Airlines should be mindful of regular maintenance of both air systems and water systems, to ensure they continue to protect the passenger and crew from viruses.

## BAGGAGE AND CARGO HANDLING DURING PUBLIC HEALTH EMERGENCIES

Responsibilities of the Ground Handling Service Providers: The ground handling service provider shall develop a ground handling operation manual, which shall meet the national requirements. The developed manual shall be submitted to the Authority for approval.

- a) All efforts need to be made to provide a speedy baggage claim process and ensure that passengers are not made to wait for excessive amounts of time in the baggage claim area;
- b) Maximize the use of available arrival baggage carousels to limit the gathering of passengers, and, where possible, use of dedicated baggage carousels for flights from high-risk areas;
- c) Cleaning schedules should be aligned with flight schedules to ensure a more frequent, in-depth disinfection of luggage carts, washrooms, elevator buttons, rails, etc.;
- d) Self-service kiosks or online options for passengers needing to report lost or damaged luggage should be made available; and
- e) The use of baggage delivery services, where the passenger's baggage can be delivered directly to their hotel or home, should be encouraged;

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- f) Protect cargo handling staff and truckers during the handover points for physical freight (in warehouse) and documentation;
  - g) Airlines should establish maintenance procedures to be applied after disinfection procedures in order to check the Flight Deck, Passenger Cabin and Cargo Compartment for the correct positioning of the control handle, circuit breakers and control panels' switches and knobs. Access panels and doors' closure also should be checked.
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#### Detailed Guidelines on Annex ICAO CART AND IATA

### RECOMMENDATIONS FOR AIR SYSTEM OPERATIONS DURING PUBLIC HEALTH EMERGENCIES

A risk assessment should be conducted by the operator, considering a mode of transmission of the disease and other factors.

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- a) The aircraft manufacturers recommend maximizing total cabin airflow and care should be taken to avoid blocking air vents (particularly along the floor). These are general recommendations for cabin air considerations and there may be exceptions for specific aircraft models. It is strongly recommended that operators consult with the aircraft OEM for questions specific to an aircraft type;
  - b) Operations without the air conditioning packs or external pre-conditioned air (PCA) source should be avoided, and external air sources are not processed through a high-efficiency particulate air (HEPA) filter especially when the mode of transmission is respiratory (droplet or airborne);
  - c) Operators must consider using of the aircraft APU to be permitted at the gate to enable the aircraft's air conditioning system to be operated, if equivalent filtration from PCA is not available;
  - d) If the aircraft has an air recirculation system, but does not have HEPA filters installed, reference should be made to OEM published documents or the OEM should be contacted to determine the recirculation system setting;
  - e) It is recommended that fresh air and recirculation systems be operated to exchange the volume of cabin air before boarding, considering the following:
    - i. For aircraft with air conditioning, run the air conditioning packs (with bleed air provided by APU or engines) or supply air via the external PCA source at least 10 minutes prior to the boarding process, throughout boarding and during disembarkation;
    - ii. For aircraft with HEPA filters, run the recirculation system to maximize flow through the filters;
    - iii. For aircraft without an air conditioning system, keep aircraft doors open during turnaround time to facilitate cabin air exchange (passengers' door, service door and cargo door).
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#### Detailed Guidelines on Annex ICAO CART AND IATA

## 34 ROLES AND RESPONSIBILITIES OF CATERERS DURING PUBLIC HEALTH EMERGENCIES

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- a) A procedure and training are required on how the loading and offloading of catering trolleys should be done when a public health event of international concern is handled. These should include but are not limited to dealing with catering equipment used during flight. The processes for cleaning / disposal of cutlery / crockery / glassware as well as the cleaning of catering carts in case of suspected communicable disease should be defined;
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- b) The precautions that catering staff should take to avoid contamination during catering handover to cabin crew and any special procedures that should be adhered to when securing or sealing catering trolleys need to be outlined and explained. It is necessary to strictly use only disposable utensils for cutlery and dinnerware and any additional PPE for catering staff;
- c) For potable water truck tanks, Handling Agents must refer to the applicable guidelines from WHO, IATA, the Airport Handling Manual (AHM 440) and others during a public health event of international concern, and ensure the following: a. Try to rotate the potable water trucks (based on a timescale that does not require the full-scale taking-into-service procedures) or downscale operations by keeping only certain trucks in service while taking others OOU;
- d) Potable water trucks' water tanks shall be kept empty and dry as much as possible. The level indicators, if installed, shall be removed to be cleaned and dried and shall be kept dry in place;
- e) If stored-filled, the tank shall be filled with water to the maximum, leaving no space for the possibility of growth of microbes;
- f) The water shall be dosed with adequate chlorine, chlorine dioxide or hydrogen dioxide. Lavatory unit tanks should be emptied, cleaned and left to air dry with the hatch left partially open but covered to prevent the ingress of any foreign objects. A company shall not provide for catering stores or supplies unless approved and designated by the Director of the Authority. An approved public health procedure must document.

**Detailed Guidelines on Annex IATA, Airport Handling Manual (AHM 440 and WHO)**

## **35 ROLES AND RESPONSIBILITIES OF THOSE IN AIR TRAFFIC AND NAVIGATION SERVICES (ATNS)**

The Air Traffic and Navigation Services (ATNS) Company of South Africa provides for air traffic management, navigation, training, and associated services within the Republic.

Air traffic control centres are responsible for notifying the airports when there is a suspected case on board an aircraft and to direct the aircraft to a designated parking. The communication procedure and business continuity procedure of the air traffic control centre must be current and submitted to the Authority for approval. Such procedures must form part of the national and airport contingency plans. Any air traffic controller 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 has elapsed as recommended by the national health department, depending on the 'alert stage' based on the WHO.

- a) The purpose of this document is to examine human resource and operational and safety considerations for the Air Navigation Service Provider (ANSPs) to ensure that public health procedures are revised and submitted to the Authority for approval;
- b) Traffic Management never shuts down throughout public health crises, as States keep the airspace open for repatriation flights, cargo and other essential traffic, while simultaneously implementing measures to protect essential staff and ensure operational continuity;
- c) The reduction of traffic levels due to public health emergencies results in a reduction in staffing necessary to manage the operation. This brings many latent safety risks to the surface, such as monotony, boredom, and reduced vigilance;

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- d) Despite the high level of automation of the main functions for the provision of ATS, the human element continues to be the link that allows the interaction of the different systems, directing their operation. In this sense, the vulnerability of the human element to the contagion raises the need to protect the integrity of personnel both in the work environment and in the context of their interaction with daily life;

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  - e) Ensure basic risk management procedures are implemented and adequately discussed, considering basic staff requirements to support the ANS;

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  - f) Operators must establish and implement enhanced cleaning and disinfection procedures for all ANS facilities, including door handles, handrails, surfaces (e.g., desks, tables and armrests) and objects (e.g., telephones, keyboards);

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  - g) The use of personal communication adapters (headsets or microphones) can significantly increase the possibility of contagion, and therefore such items should be disinfected before and after use, and properly stored;

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  - h) The operator must ensure that combined communication measures are in line with guidance from the occupational health and safety officers and other relevant stakeholders;

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  - i) ANSPs should consider whether training, including simulation practice, is necessary, particularly with respect to the least common situations (including unusual runway configurations) and high demand, to address the following: rosters to maintain balance, refresher training to maintain awareness, online live virtual teaching or computer-based, self-study modules and personnel proficiency;

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  - j) Mental health issues of staff need to be monitored and Wellness and Peer Support strengthened;

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  - k) Operators must establish and implement enhanced cleaning and disinfection procedures for communication equipment (headset, microphones, phones, others) as well as equipment such as voice communication systems (VCCS or handset radios) and consoles;

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  - l) The Air Traffic and Navigation Services (ATNS) Company of South Africa provides for air traffic management, navigation, training, and associated services within the Republic. Air traffic control centres are responsible for notifying airports when there is a suspected case on board an aircraft and to direct the aircraft to a designated parking area;

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  - m) Communication procedures and business continuity procedures of the air traffic control centre need to be current and submitted to the Authority for approval and to form part of the national and airport contingency plans;

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  - n) Any air traffic controller with symptoms of a communicable disease/infectious disease must not report for work but will proceed to his/her doctor;

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  - o) The operator must continually conduct risk assessment and amend the public health procedures and business continuity plans for submission to the Authority.
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#### **Detailed Guidelines on Annex ICAO CART**

### **ROLE OF OPERATORS FOR CREW WHO LAY OVER DURING PUBLIC HEALTH EMERGENCIES**

Operators must have a procedure for all crew that need to lay over or transit at an outstation to ensure that they are aware of the measures necessary to reduce the risk of the transmission of a disease that constitutes a public health emergencies of international concern; risks assessment must be conducted on the mode of transmission, severity in terms of mortality and morbidity and the following must be complied with:

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- a) If crews need to lay over or transit at an outstation, air operators should ensure compliance with the relevant public health regulations and policies, together with measures identified by a risk assessment conducted by the operator that takes account of specific local conditions;
  - b) The air operator should arrange for the commute between the aircraft and the crew's individual hotel rooms, ensuring that hygiene measures are applied and the recommended physical distancing, including within the vehicle, to the extent possible;
  - c) At all times, the crew must comply with the relevant public health regulations and policies and there should be one crew member per room, which is sanitised prior to occupancy, depending on the public health requirements and risk assessment; and
  - d) Crew members experiencing symptoms suggestive of infectious disease during layover or transit should report it to the aircraft operator and seek assistance from a medical doctor for assessment.
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#### **Detailed Guidelines on CART, WHO Local Health & Transport/CAA Regulations**

## **36 ROLES AND RESPONSIBILITIES OF IMMIGRATION OFFICERS DURING PUBLIC HEALTH EMERGENCIES**

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- a) Procedures for border control and customs processes may need to be temporarily revised to increase physical distancing;
  - b) Where equipment already exists, the use of automated border control (ABC) equipment, digital passenger identification (biometrics) as well as technology (thermal screening) could serve as additional health screening measures and could speed up the immigration process, with the objective of reducing queuing and minimising contact between border officials and passengers;
  - c) Furthermore, some governments are requiring passengers to complete health declarations or health attestations before departure or on arrival as an initial assessment measure, which could be used to identify passengers that might need a secondary assessment;
  - d) The identity verification process should be automated with the use of biometric technology and the use of contactless technology, automated border control or e-Gates should be encouraged in order to enhance the transaction time and to limit interaction between passengers, officers and staff;
  - e) For flights arriving from higher-risk areas where there are cluster or community transmission, a particular section of the arrivals terminal could be utilised to increase physical distancing, and/or smart thermal cameras could be placed at appropriate locations to screen arriving passengers, in consultation with the public health authorities;
  - f) The border control staff must form part of the airport emergency plan and must participate in the simulation exercise, and the procedure for a public health emergency must be submitted to the Authority with the airport public health plans.
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**Refer to ICAO, CART 3**

### **SOUTH AFRICAN REVENUE SERVICES (SARS)**

The prime responsibility of the SARS with respect to aviation security is to provide a customs and excise service at international airports where goods may be imported or exported, or where goods may be landed for transit, or where persons entering or leaving the Republic may disembark or embark. The SARS enforces the provisions of the Customs and Excise Act of 1964, and the laws promulgated thereunder and shall:

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- a) Border control and customs processes may need to be temporarily revised to increase physical distancing. Where equipment already exists, the use of automated border control (ABC) equipment, digital passenger identification (biometrics) as well as technology (thermal screening) could serve as additional health screening measures and could speed up the immigration process, with the objective of reducing queuing and minimizing contact between border officials and passengers during public health emergencies;
  - b) Coordination with various border regulatory authorities (e.g., immigration, health) should be established for measures facilitating the clearance of entry/arrival, such as enabling contactless processes (e.g., relating to the reading of passport chips, facial recognition) to minimize spread of communicable disease;
  - c) Where declarations are needed on arrival, government officials should consider electronic options (e.g., mobile applications and QR codes) to minimize human-to-human contact. Information could be sent in advance via government portals. For customs formalities, where possible, green/red lanes for self-declarations are recommended;
  - d) The identity verification process should be automated with the use of biometric technology. Use of contactless technology, automated border control or e-Gates should be encouraged in order to enhance transaction time and limit interaction between passengers, officers and staff;
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Procedures must be in place where transfer security screening is needed, it should follow appropriate sanitary requirements as previously described in the departure process.

## **37 ROLES AND RESPONSIBILITIES IN THE MANAGEMENT OF MEDICAL WASTE AND DISPOSAL BY AIRLINES AND AIRPORTS**

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- a) The airline and Airport Operator must develop operating procedures for the containment and disposal of used PPE and regulated medical waste;
  - b) Contaminated waste must be carefully placed inside a biohazard bag (or plastic bag labelled “biohazard” if unavoidable) and the bag securely tied or taped shut to avoid leaking. The bag must be kept in a secure place until it can be safely collected for disposal;
  - c) The waste material must be handed over to the competent port health authority on arrival for disposal;
  - d) All waste or other materials used by the patient should be stored separately in a sealed biohazard bin and dry solid waste (such as used gloves, dressings) must be put into leakproof biohazard bags;
  - e) Sharp items, such as used needles or scalpel blades, must be discarded immediately after use in puncture-proof sharps containers. Store suctioned fluids and secretions in sealed containers. Handling patient body fluids may create splashes and should be avoided;
  - f) All waste must be disposed in accordance with organisation protocols as well as with local and national regulations for Category A infectious substances. Additional cleaning methods may also be used, though are not required (e.g., Ultraviolet germicidal irradiation, chlorine dioxide gas, or hydrogen peroxide vapor). These should not replace the manual disinfection;
  - g) Suctioned fluids and secretions should be stored in sealed containers for disposal as regulated medical waste at the destination medical facility in accordance with local requirements and handling that might create splashes or aerosols during flight should be avoided.
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**Detailed Guidelines on Annex CANSO & ICAO Air Traffic Services Guidance Material for operation in a COVID-19 context**

# 38

## MANAGEMENT OF MEDIA AND PUBLIC EDUCATION DURING PUBLIC HEALTH EVENTS

### COMMUNICATION AND CO-OPERATION WITH OTHER STATES

It is important for the Regional States to implement the ICAO and WHO Health measures in a harmonised fashion through the implementation of Public Health Corridors by supporting Civil Aviation Authorities (CAAs) in sharing information, applying mutually accepted public health measures and concluding bilateral or multilateral agreements. This measure can be accomplished by the Republic considering entering collaborative arrangements in order to increase the sustainability of the aviation health system by avoiding the unnecessary duplication of public health controls. The arrangement may be based on verification of equivalence of the health outcome ensured by the application of effective health controls, both at the departure and destination countries.

The Republic shall cooperate with other States in the development and exchange of information concerning national aviation public programmes, training programmes and quality control programmes, as necessary.

#### Exchange of information

- a) On request, the Authority through the Department of Transport shall make a written version of the appropriate parts of the Aviation Public Health available to relevant aviation authorities of Contracting States to the Chicago Convention of 1944;
- b) If necessary, the Authority shall co-operate with relevant aviation authorities of Contracting States in order to adapt this National Public Health Plan to achieve consistent practices and procedures between States, and to enhance international aviation public health mitigation in general;
- c) Upon receipt of a request to exchange information relating to aviation security programmes and regulations, the Department of Transport shall analyse the request and shall co-operate with the requesting State provided that the request does not contravene Section 107 of the Civil Aviation Act, 2009.

# 39

## COMMUNICATION AND COLLABORATION WITH ICAO

- a) The Authority, through the Department of Transport, is responsible for providing ICAO is a Focal Point, Member and Chair and Technical Advisor of the ICAO-WHO CAPSCA Programme and will continue State Assistance Missions with ICAO and WHO to ensure a harmonised approach in implementing public health preventative and management risk measures;
- b) South Africa and SADC is encouraged to make use of online tool available on the ICAO website to facilitate the conclusion of Public Health Corridors between SADC States (bilateral/multilateral) and working together with ICAO Regional Offices to support the Public Health Corridor iPack to support the aviation industry resilience in the event of outbreak;
- c) A framework should be established at regional and continental level to enhance and strengthen collaboration, cooperation, coordination, commitment and communication between all stakeholders involved in the management of Public Health Events in aviation with clear objectives, responsibilities and activities including specific trainings;



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- d) The Republic shall consider exchanging information and participate at ICAO meetings with other Contracting States to ensure that the guidelines are representative of inputs from the region;
  - e) The National Air Transport Facilitation Committee (NATFC) and utilize CAPSCA, to enable seamless implementation of relevant health related SARPs, taking into account a multi layered risk based approach to establish their health measures must be supported by both high level department of Transport and Department of Health;
  - f) Department of Health and Department of Transport are required to nominate CAPSCA Focal Points and communicate their details to their accredited ICAO Regional Office and the focal Point should maintain close contact with the National IHR Focal Point for any inquires related to public health events involving the aviation sector in liaison with ICAO and WHO Regional Offices;
  - g) The COVID-19 pandemic highlighted the limited available scientific evidence, the lack of harmonization on the implementation of travel measure such as travel bans, and the use of the “precautionary approach” by various countries parties, imposing measures such as travel ban. The linkage of the point of entry with the public health surveillance system is highly recommended and South Africa needs to take a lead to prevent the recurrence in the future.
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## 40 INTERNATIONAL COOPERATION

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- a) International Organisations such as WHO, Africa CDC, ICAO, ACI, RSOO, RECs etc. should establish Memorandum of Understanding aiming to strengthen the collaboration and cooperation within the CAPSCA framework, SA must support the strengthening of these agreements;
  - b) South Africa was mostly impacted by COVID-19 in the continent based African Union, it is important that the CAA and Department of Transport take a lead at the AFI, African Union and Regional meeting to support the sustainability of the CAPSCA Programme;
  - c) Department of Health and Department of Transport are required to nominate CAPSCA Focal Points and communicate their details to their accredited ICAO Regional Office and the focal Point should maintain close contact with the National IHR Focal Point for any inquires related to public health events involving the aviation sector in liaison with ICAO and WHO Regional Offices;
  - d) The COVID-19 pandemic highlighted the limited available scientific evidence, the lack of harmonization on the implementation of travel measure such as travel bans, and the use of the “precautionary approach” by various countries parties, imposing measures such as travel ban. The linkage of the point of entry with the public health surveillance system is highly recommended and South Africa needs to take a lead to prevent the recurrence in the future;
  - e) The Republic shall consider entering into collaborative arrangements with other States in order to increase the sustainability of the aviation public health system and avoid unnecessary duplication of security controls;
  - f) The arrangement shall be based on verification of the equivalence of the security outcome to ensure that there are effective public health controls at point of departure;
  - g) The arrangement shall be based on bilateral agreements, memoranda of understanding, memoranda of incorporation or one-stop public health agreements;
  - h) Agreements to ensure one-stop public health is the process whereby passengers and cabin baggage and hold baggage or shipment of cargo are not re-screened at a connecting airport if they have been satisfactorily screened at their airport of origin. One-stop public health can be holistic (exempting passengers and hold baggage from re-screening) or itemised (exempting only passengers or only hold baggage from re-screening).
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# 41

## RESPONSIBILITY OF MEDIA, PUBLIC HEALTH AND EDUCATION DURING PUBLIC HEALTH EMERGENCIES

In a public health emergency, it is important for the stakeholders involved to define the communication that will be conducted by airlines, airports, ANS, the Civil Aviation Authority, the Department of Transport and the Department of Health. Government officials must ensure that the public, passengers and Education work together with aviation stakeholders to distribute accurate information quickly. Information must be as clear, simple and consistent as possible across the entire passenger travel experience.

- a) Departing travellers planning a journey by air should seek information on any potential travel hazards as part of their travel planning and this should include considering their personal health status and any contra-indications for travel at various points on their itinerary;
- b) The aviation sector provides information regarding medical clearance for travellers with health conditions that may impact their suitability for air travel;
- c) Passengers should be encouraged to make use of mobile computer program applications, so-called apps, to help departing travellers stay current with emerging situations including disease outbreaks;
- d) Passenger education to visit a travel health clinic or international vaccination centre to collect health information about the country they are going to visit and be vaccinated if needed; and travel agents may also provide information regarding possible health risks to travellers during travel planning or ticketing;
- e) In the event of a serious public health hazard or emergence of an infectious disease threat, government, airlines and airports may issue travel alerts, including providing health information at airports;
- f) Passengers who are ill or presenting with symptoms /signs of communicable disease should be advised not to travel and visit their medical practitioner for medical clearance;
- g) The National Department of Health has a responsibility to communicate potential public health risks in a timely and appropriate manner. The availability of electronic information sources has improved public health authorities' as well as the aviation sector's ability to communicate public health risks to travellers.

# 42

## ROLES AND RESPONSIBILITIES OF THE SOUTH AFRICAN POLICE SERVICE (SAPS)

The SAPS has the following responsibilities:

- a) Routine surveillance and patrol of all airports' terminal areas;
- b) Surveillance of arriving and departing passengers for persons who may pose a public health threat to civil aviation;
- c) Managing unruly passengers and staff who are non-compliant to public health measures; and
- d) Enforcement of compliance with public health measures at the airport.

## 43 ROLES AND RESPONSIBILITIES OF THE RESCUE AND FIRE-FIGHTING (RFF) SERVICES AT AIRPORTS

The procedure and responsibilities of personnel from Fire and Rescue Services who participate in the development and testing of the Airport Emergency Plan for Public Health emergencies must be clearly defined.

## 44 ROLES AND RESPONSIBILITIES OF THE SOUTH AFRICAN REVENUE SERVICES (SARS)

The prime responsibility of the SARS with respect to aviation security is to provide a customs and excise service at international airports where goods may be imported or exported, or where goods may be landed for transit, or where persons entering or leaving the Republic may disembark or embark. The SARS enforces the provisions of the Customs and Excise Act, 1964, (Act No. 91 of 1964) and the laws promulgated thereunder and the following shall be considered:

- a) Border control and customs processes may need to be temporarily revised to increase physical distancing. Where equipment already exists, the use of automated border control (ABC) equipment, digital passenger identification (biometrics) as well as technology (thermal screening) could serve as an additional health screening measure and could speed up the immigration process, with the objective of reducing queuing and minimising contact between border officials and passengers during public health emergencies;
- b) Coordination with various border regulatory authorities (e.g., immigration, health) should be established for measures facilitating the clearance of entry/arrival, such as enabling contactless processes (e.g., relating to the reading of passport chips, facial recognition) to minimise the spread of communicable disease;
- c) Where declarations are needed on arrival, government officials should consider electronic options (e.g., mobile applications and QR codes) to minimise human-to-human contact. Information could be sent in advance via government portals. For customs formalities, where possible, green/red lanes for self-declarations are recommended;
- d) The identity verification process should be automated with the use of biometric technology. The use of contactless technology, automated border control or e-Gates should be encouraged in order to enhance the transaction time and limit interaction between passengers, officers and staff;
- e) Procedures must be in place where transfer security screening is needed; it should comply with the appropriate sanitary requirements as previously described in the departure process.

## 45 CORPORATE GOVERNANCE AND TRADITIONAL AFFAIRS

The Department for Corporate Governance and Traditional Affairs is responsible for the national disaster management policy, programmes and response, which includes the responsibility for providing medical and social resources;

It is important that consultations take place between the Department of Transport and representatives of Disaster Management to ensure that the regulations issued are in line with ICAO requirements.

## **46 ROLES AND RESPONSIBILITIES OF THE SOUTH AFRICAN NATIONAL DEFENCE FORCE (SAMHS)**

The role of the SAHMS is to intervene in public health measures of international concern to assist with the following, but not limited to:

- a) Repatriation of South African Citizens;
- b) Assist the various government departments, including public health, where required;
- c) Enforcement of public health measures;
- d) Other matters.

## **47 ROLES AND RESPONSIBILITIES OF THE DEPARTMENT OF INTERNATIONAL RELATIONS AND CO-OPERATION (DIRCO)**

- a) DIRCO is responsible for providing special diplomatic formalities during the arrival or departure of VIP and high-profile visitors, while ensuring that public health measures are not compromised;
- b) It is also the task of the DIRCO to notify the relevant bodies charged with the responsibility of public health measures at airports and aircraft operators, before making these diplomatic arrangements;
- c) It is DIRCO's responsibility to make every effort to ensure that the repatriation flights of foreign citizens meet public health measures;
- d) Participate in ensuring that the public health in aviation (CAPSCA Programme) is supported by the African Union;
- e) Support the harmonisation of public health measures globally to minimise future unnecessary travel bans.

## **48 ROLES AND RESPONSIBILITIES: GENERAL AVIATION CONSIDERATIONS IN PLANNING THE AVIATION INDUSTRY'S RECOVERY FROM A PUBLIC HEALTH EMERGENCY**

In keeping with their inherent flexibility, General Aviation operations vary enormously in type and scale. The number of persons on board a GA flight can be two orders of magnitude less than the number of paying passengers carried on jet airline aircraft. This fact alone greatly reduces the public risk of contagion from GA operations, which range from recreational and some private flights, where the pilot or members of the immediate family of the same domicile are on board, through to operations supporting business activities, which at times may involve unrelated persons. The guidelines have to be developed, which will include, among others:

- a) Pilots must conduct a health self-assessment, based on the prevailing condition of their health prior to flying and can adapt to measure;

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- b) Headsets and personal equipment should not be shared and for larger operations (say, more than 100 people present at a site), an isolation room for personnel who arrive with symptoms and a protocol for their removal may be appropriate;
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- c) Non-contact electronic delivery and submission of flight briefing, and notification documentation should be preferred over in-person attendance and telephone methods;
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- d) For General Aviation, the Public Health should be envisaged as extending from
    - i. the places and activities when a person arrives at an airport for a flight, until the person leaves the airport at the end of the operation. It is critical to recognise that this may, or may not, include a person traversing a hangar, airport terminal, fixed base operator (FBO), aero club, flight training school or external public area. Instead of focusing
    - ii. on the physical locations GA participants will pass through, attention should be directed to selectable and scalable measures that may be taken to keep the participants:
    - iii. safe from infection, or from passing infection to others using appropriate risk management principles; and
    - i. It has to be taken into consideration that pilots conducting General Aviation flights do not generally use public airport terminals, and many do not utilise FBO facilities and that many flights can start and end at the operator's own hangar or tie-down facility at a private or public airport;
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- f) Public health measure for the aircraft and personnel such as, but not limited to:
    - i. disinfect aircraft with area sprays, such as Lysol, while being careful to avoid
    - ii. overspray on avionics screens and the use of disinfectant wipes on all areas
    - iii. accessed by hands: door latches, oil dipsticks, switches, levers, avionics buttons, yoke, throttles, door and ignition keys, etc.
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- g) Consider "chair-flying" a mission from pre-flight to post-flight in each aircraft and use sanitising wipes throughout; and
    - i. Training of the general aviation community and development of regulations and guidelines by the Authority, which should be approved in preparation for public Health events are required.
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**Reference: [Annexure T ICAO General Aviation Considerations in Planning the Aviation Industry's Recovery from COVID-19](#)**

## **RESPONSIBILITIES OF INCIDENT AND ACCIDENT INVESTIGATORS DURING PUBLIC HEALTH EMERGENCIES**

Although aviation activity has reduced in some sectors, new risks have emerged as a direct result of the pressures being felt across the industry. Unsurprisingly, accidents and serious incidents continue to occur during public health emergencies of international concern; States are obliged under Annex 13 to the Chicago Convention to institute investigations and complete them as swiftly as possible.

Consideration must be given by accident investigators to protecting the health of staff and their families; and secondly, to overcoming obstacles to normal ways of working (such as travel restrictions, limited scope for face-to-face meetings, reduced access to own and 3rd party facilities and resources, challenges maintaining effective communications);

Accident investigators are generally well equipped with appropriate personal protective equipment (PPE) for operations in the field in a hazardous environment, however additional stocks of consumables including decontamination products may be required;

Plans and procedures to see if they need adaptation for investigations during public health emergencies and a thorough deployment-specific risk assessment should be conducted to help inform a go/no-go decision authorised at the appropriate level;

Contingency planning beforehand may be beneficial, such as identifying the travel resources that may be available, depending on the location of the accident;

Consideration of increased reliance on the host nation (State of Occurrence) to help facilitate the deployment of Accredited Representatives and a need to use its contacts and influence across government departments to help expedite the issuing of visas and get a quarantine exemption for the investigation team should be considered, as there may be travel bans;

To avoid difficulty and friction in the travel time following an accident, an attempt should be made to get an agreement in advance from the relevant authorities within their countries that those engaged in accident investigation, including advisors and experts, will be recognised as critical safety workers exempt from travel restrictions and quarantine when arriving in or returning to the country;

Every deployment should be assessed case-by-case and if the risks are high, consider alternatives to deploying. Increased use can be made of local authorities and trusted agencies to gather and secure the physical evidence for assessment later;

Interviews may be conducted remotely via phone or video conference and increased use can be made of transmitted photos and videos, including, potentially, a live video feed, to enable accident investigators and advisors to get 'eyes on' the evidence to assess it and direct the action to be taken; and

A procedure and training should be developed, based on the prevailing situation.

**Reference:** [Annexure U ECC ACC Guidance note on conducting investigations during a pandemic.](#)

## **49** ROLES AND RESPONSIBILITIES OF CARGO REGULATED AGENTS

Regulated Agents are to consult guidelines updated from time to time to ensure the correct handling of human remains, particularly where such have died as a result of a communicable disease. This is to safeguard the staff and clients of cargo operations and contain the possible spread of the disease.

## **50** REGIONAL COLLABORATIVE ARRANGEMENT FOR IMPLEMENTATION OF PUBLIC HEALTH CORRIDORS

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- a) It is important for the Regional States to implement the ICAO and WHO Health measures in a harmonised fashion through the implementation of Public Health Corridors by supporting Civil Aviation Authorities (CAAs) in sharing information, applying mutually accepted public health measures and concluding bilateral or multilateral agreements;
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- 
- b) This measure can be accomplished by the Republic considering entering into collaborative arrangements in order to increase the sustainability of the aviation health system by avoiding the unnecessary duplication of security controls;
  - c) The arrangement may be based on the verification of equivalence of the health outcome ensured by the application of effective health controls, both at the departure and destination countries.
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## **51** COMMUNICATION AND CO-OPERATION WITH OTHER STATES

The Republic shall cooperate with other States in the development and exchange of information concerning national aviation public programmes, training programmes and quality control programmes, as necessary.

### Exchange of information

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- a) On request, the Authority, through the Department of Transport, shall make a written version of the appropriate parts of the Aviation Public Health legislation available to relevant aviation authorities of Contracting States to the Chicago Convention of 1944;
  - b) If necessary, the Authority shall co-operate with relevant aviation authorities of Contracting States in order to adapt this National Public Health Plan to achieve consistent practices and procedures between States, and to enhance international aviation public health mitigation in general;
  - c) Upon receipt of a request to exchange information relating to aviation security programmes and regulations, the Department of Transport shall analyse the request and shall co-operate with the requesting State, provided that the request does not contravene section 107 of the Civil Aviation Act, 2009 (Act No. 13 of 2009).
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## **52** COMMUNICATION WITH ICAO

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- a) The Authority, through the Department of Transport, is responsible for providing ICAO with a Focal Point, Member and Chair and Technical Advisor of the ICAO-WHO CAPSCA Programme and will continue State Assistance Missions with ICAO and WHO to ensure a harmonised approach in implementing public health preventative and management risk measures;
  - b) The Republic shall consider exchanging information and participating at ICAO meetings with other Contracting States to ensure that the guidelines are representative of inputs from the region.
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## **53** FOREIGN STATE AND AIR CARRIER AUDIT PUBLIC HEALTH PROTOCOLS

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- a) A foreign State, appropriate Authority and foreign air carrier providing commercial service in the Republic shall be required to submit an audit or oversight request with the date and scope of audit in writing, 4 weeks prior to the audit or oversight to the Authority;
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- b) The said notice must include the names, passport details of the auditors and authorised persons, the dates and scope of the audit. Failure to comply with this protocol shall result in the rejection of the request;
  - c) Ad-hoc inspections will be conducted on foreign operators to ensure compliance with public health ICAO Annexes.
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### **CONTINUING AIRWORTHINESS MANAGEMENT BY ORGANISATIONS DURING PUBLIC HEALTH EMERGENCIES**

Aviation operations will be affected heavily by the public health events of international concern and an unprecedented number of aircraft that have been parked/stored. The lack of demand in air travel often causes financial pressure on air operators, as well as on their service. Gradually, as travel restrictions are being lifted and as operators are preparing to resume passenger flights and demand increases, operators will need the aircraft that have been parked/stored and return them back to service. Due to the high number of aircraft involved and the limited supporting resources available to perform the work due to the public health crisis, organisations and personnel are expected to experience difficulties and increased risks. Organisation Management Systems play an essential role in identifying the hazards, developing control measures to mitigate the associated risks and thus ensuring a safe RTS of all aircraft.

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- a) Procedures have to be developed for the Approved Maintenance Organisations (AMOs) to support the Return to Service (RTS) of aircraft that have been parked/stored due to the extraordinary situation resulting from such public health emergencies of international concern;
  - b) Issues such as, but not limited to:
    - i. Has any environmental or accidental damage occurred to the aircraft during parking/storage?
    - ii. Does the aircraft match its damage chart?
    - iii. What is the current aircraft deferred defects status (including MEL / CDL)?
    - iv. Is there any maintenance task previously carried forward?
    - v. Is the status of the aircraft's software that of being updated to the latest version?
    - vi. Have cybersecurity checks been considered to ensure that no security breaches have occurred?
    - vii. Others.
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**Reference:** [EASA Return to service of aircraft after storage: guidelines for COVID-19](#)

### **ROLE OF AVIATION TRAINING ORGANISATIONS IN CABIN CREW TRAINING DURING PUBLIC HEALTH EMERGENCIES**

Restrictions to mitigate the spread of respiratory and other communicable diseases, physical distancing and workplace closures make it difficult for cabin crew members to complete the required annual recurrent training programme, mainly with regard to hands-on and simulated exercises such as donning of emergency equipment and participating in group drills. As the inability to complete these portions of recurrent training would result in a lapse of cabin crew qualifications (and licences, where applicable), a contingency plan should be implemented.

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- a) Operators must put alleviation measures in place such as the development of online recurrent training programmes by the operator, as this can reduce the severity of operational training disruptions and will enable a seamless transition when the normal operation of recurrent classroom (i.e. face-to-face) training programmes resumes;

**Reference:** [ICAO Handbook for Cabin Crew Recurrent Training during COVID-19](#)

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- b) Operators may consider developing procedures on Digital Learning for Cabin Crew Training and provide guidance on designing, developing and using digital learning for cabin crew safety training information on the processes and resources involved in digital learning development;
- c) Interactive platforms (e.g., webinars) can be used to cover topics that typically call for group discussions and “question and answer” (Q&A) sessions, and theoretical aspects related to equipment and procedures may also be covered in the online recurrent training programme;
- d) Procedures may be developed for the completion of modules and methods for tracking completion, and the use of progressive assessments (e.g., quizzes) may be considered by the operator, based on module content, to establish the cabin crew’s understanding and assessment methods (invigilated assessment in class with physical distancing, or online, non-invigilated assessment in lockdown circumstances).

**Reference for more details on the ICAO Handbook for Cabin Crew Recurrent Training during COVID-19**

### **ROLES AND RESPONSIBILITIES OF THE MEDIA DURING PUBLIC HEALTH EMERGENCIES**

There are particular challenges in providing clear information and advice during a pandemic. Scientific knowledge will at first be limited, the pattern of disease spread may be variable across the country, and public concern may be high. Consistent, clear public messaging, aligned at national and local level, is critical to a successful and collaborative SA-wide response to a pandemic. This will help to maintain public trust and support, as well as in increasing the uptake of recommended actions such as good respiratory and hand hygiene practices, the effective and responsible use of antiviral medicines, and the uptake of vaccination. As well as consistency of public messaging, it is vital that communications within and between national and local health and resilience organisations are also clear and consistent. Pandemics require the whole of society to respond, and this response will be improved if everyone has access to the information they need, in a form which works for them. This is not an easy task, but one which all organisations should strive towards. The following departments have to develop media policies for their communication during public health emergencies, to mitigate the risk of confusion:

- a) Department of Transport
- b) Department of Health
- c) Civil Aviation Authority
- d) Airports
- e) Airlines
- f) ANS
- g) Others.

Internal communications between public health, the civil aviation authority, air navigation systems, the airport authority and airline operators should be described clearly in airport contingency plans (i.e., a communications plan for a public health event) and tested during regular preparedness plan exercises.

## **54 ROLES AND RESPONSIBILITIES: GENERAL AVIATION CONSIDERATIONS IN PLANNING THE AVIATION INDUSTRY’S RECOVERY FROM A PUBLIC HEALTH EMERGENCY**

In keeping with their inherent flexibility, General Aviation operations vary enormously in type and scale.

The numbers of persons on board a GA flight can be two orders of magnitude less than the number of paying passengers carried on jet airline aircraft. This fact alone greatly reduces the public risk of contagion from GA operations, which range from recreational and some private flights, where the pilot or members of the immediate family of the same domicile are on board, through to operations supporting business activities, which at times may involve unrelated persons. The guidelines have to be developed which will include amongst others:

- 
- a) Pilots must conduct a health self-assessment based on the prevailing condition of their health prior to flying and can adapt to measure;
- 
- b) Headsets and personal equipment should not be shared and for larger operations (say, more than 100 people present at a site), an isolation room for personnel who arrive with symptoms and a protocol for their removal may be appropriate;
- 
- c) Non-contact electronic delivery and submission of flight briefing, and notification documentation should be preferred over in-person attendance and telephone methods;
- 
- d) For General Aviation, the Public Health should be envisaged as extending from
    - i. the places and activities when a person arrives at an airport for a flight, until the person leaves the airport at the end of the operation. It is critical to recognise that this may, or may not, include a person traversing a hangar, airport terminal, fixed base operator (FBO), aero club, flight training school or external public area. Instead of focusing
    - ii. on the physical locations GA participants will pass through, attention should be directed to selectable and scalable measures that may be taken to keep the participants:
    - iii. safe from infection, or from passing infection to others, using appropriate risk management principles; and
- 
- e) It has to be taken into consideration that pilots conducting General Aviation flights do not generally use public airport terminals, and many do not utilise FBO facilities and that many flights can start and end at the operator's own hangar or tie-down facility at a private or public
    - i. airport;
- 
- f) Public health measures for the Aircraft and personnel such as, but not limited to
    - i. disinfect aircraft with area sprays, such as Lysol, while being careful to avoid
    - ii. overspray on avionics screens and the use of disinfectant wipes on all areas
    - iii. accessed by hands: door latches, oil dipsticks, switches, levers, avionics buttons, yoke, throttles, door and ignition keys, etc.
- 
- g) Consider "chair-flying", a mission from pre-flight to post-flight in each aircraft and use sanitizing wipes throughout; and
- 
- h) Training of the general aviation community and development of regulations and guidelines by the Authority which should be approved in preparation for public
    - i. Health events are required
- 
- i) Reference Annexure .... General Aviation Considerations in Planning the Aviation Industry's Recovery from COVID-19.
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## 55

### RESPONSIBILITIES OF INCIDENT AND ACCIDENT INVESTIGATORS DURING PUBLIC HEALTH EMERGENCIES

Although aviation activity has reduced in some sectors, new risks have emerged as a direct result of the pressures being felt across the industry. Unsurprisingly, accidents and serious incidents continue to occur during public health emergencies of international concern; States are obliged under Annex 13 to the Chicago Convention to institute investigations and progress them as swiftly as possible.

Consideration must be given by accident investigators to protecting the health staff and their families; and secondly, to overcome obstacles to normal ways of working (such as travel restrictions, limited scope for face-to-face meetings, reduced access to own and 3rd party facilities and resources, and challenges maintaining effective communications);

Accident investigators are generally well equipped with appropriate personal protective equipment (PPE) for operations in the field in a hazardous environment, however additional stocks of consumables, including decontamination products may be required;

Plans and procedures to see if they need adaptation for investigations during public health emergencies and a thorough deployment-specific risk assessment should be conducted to help inform a go/no-go decision, authorised at the appropriate level. Contingency planning beforehand may be beneficial, such as identifying the travel resources that may be available, depending on the location of the accident;

Consideration should be given to increased reliance on the host nation (State of Occurrence) to help facilitate the deployment of Accredited Representatives and the need to use its contacts and influence across government departments, to help expedite the issuing of visas and get a quarantine exemption for the investigation team, as there may be travel bans;

To avoid difficulty and friction in the travel time following an accident, an attempt should be made to get an agreement in advance from the relevant authorities within their countries, that those engaged in accident investigation, including advisors and experts, will be recognised as critical safety workers exempt from travel restrictions and quarantine when arriving in or returning to the country;

Every deployment should be assessed case-by-case and if the risks are high, consider alternatives to deploying. Increased use can be made of local authorities and trusted agencies to gather and secure the physical evidence for assessment later;

Interviews may be conducted remotely via phone or video conference and increased use can be made of transmitted photos and videos, including potentially live video feeds, to enable accident investigators and advisors to get 'eyes on' the evidence to assess it and direct the action to be taken; and

A procedure and training should be developed, based on the prevailing situation.

## **Reference Material: ECAC ACC GUIDANCE NOTE ON CONDUCTING INVESTIGATIONS DURING A PANDEMIC**

### **CHALLENGES AND LESSONS LEARNT FROM THE COVID-19 PANDEMIC**

- a)** International Organisations such as WHO, Africa CDC, ICAO, ACI, RSOO, RECs etc. should establish memorandums of understanding, aiming to strengthen the collaboration and cooperation within the CAPSCA framework;
- b)** Lack of the enacting of the WHO International Health Regulations (2005), (which were required to be implemented by States in 2012) by the National Department of Health;
- c)** Lack of consideration of the ICAO Annexes and Recommendations by the Disaster Management Team when developing regulations for public health;

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- d) Need for the support of the ICAO Collaborative Arrangement for the Prevention and Management of Public Health in Civil Aviation by the high-level African Union, ICAO AFI and other Regional Offices from both ICAO and WHO;
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- e) Lack of support for the Regional Public Health Corridors, there is a need to prioritise mutual agreements to ensure the sharing of public health regulations;
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- f) Development of ICAO Standards and Recommended Practices for Air Ambulances for both fixed-wing aircraft and helicopters, considering personnel, equipment and others;
- 
- g) Development of ICAO Standards and Recommended Practices for Air Ambulances for both fixed-wing aircraft and helicopters, considering personnel, equipment and others;
- 
- h) Development of ICAO Standards and Recommended Practices for passengers who require Cardio Pulmonary Resuscitation by cabin crew during public health emergencies of international concern;
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- i) Development of ICAO Standards and Recommended Practices or Guidelines on the return to service of aircraft after a long period of storage during public health events of international concern;
- 
- j) Development of a guideline for consideration in planning the General Aviation Industry's recovery from public health;
- 
- k) A framework should be established at regional and national level to enhance and strengthen collaboration, cooperation, coordination, commitment and communication between all stakeholders involved in the management of a PHE in aviation with clear objectives, responsibilities and activities including specific training;
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- l) Support of the national coordination mechanisms such as the National Air Transport Facilitation Committee (NATFC - DoT and MNORT-Health) and utilising of CAPSCA, to enable seamless implementation of relevant health-related SARPs, taking into account a multi-layered, risk-based approach to establish their health measures;
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- m) Strengthening of multi-sectorial capacities, building activities including public health training and simulation exercises with the priority being the low income and low resource regional countries;
- 
- n) The COVID-19 pandemic highlighted the limited available scientific evidence, the lack of harmonisation regarding the implementation of travel measures, and the use of the "precautionary approach" by State parties, imposing measures such as travel bans; countries like South Africa that conducted testing and genetic sequencing, which benefited the globe were punished through restrictions - this approach will encourage the non-disclosure of new scientific discovery or lack of support for research with future outbreaks;
- 
- o) The need to engage political leadership structures at national and sub-national levels, towards improving collaboration and public health practices at the Point of Entry and in the aviation sector, including consultations and alignment of statements among different partners at regional and national level to reinforce collaboration and cooperation, to achieve the same goal;
- 
- p) Deficiencies noted in several entities during the COVID-19 pandemic, such as political and government authorities' interference, neglect and lack of coordination, including relegated esteem to ensure the effective implementation and relevance of the CAPSCA programme;
- 
- q) Promotion and advocacy for a risk-based approach, when determining additional restriction measures to be applied to international air traffic;
- 
- r) **T h e n e e d f o r** clarity on the impact of disaster management regulations on existing public health in aviation regulations and memorandums of agreement; these were not considered during the COVID-19 pandemic, which caused unnecessary delays;
- 
- s) **The** Department of Health to consider existing innovations developed by aviation regional and global partners such as Africa CDC and International Air Transport Association;
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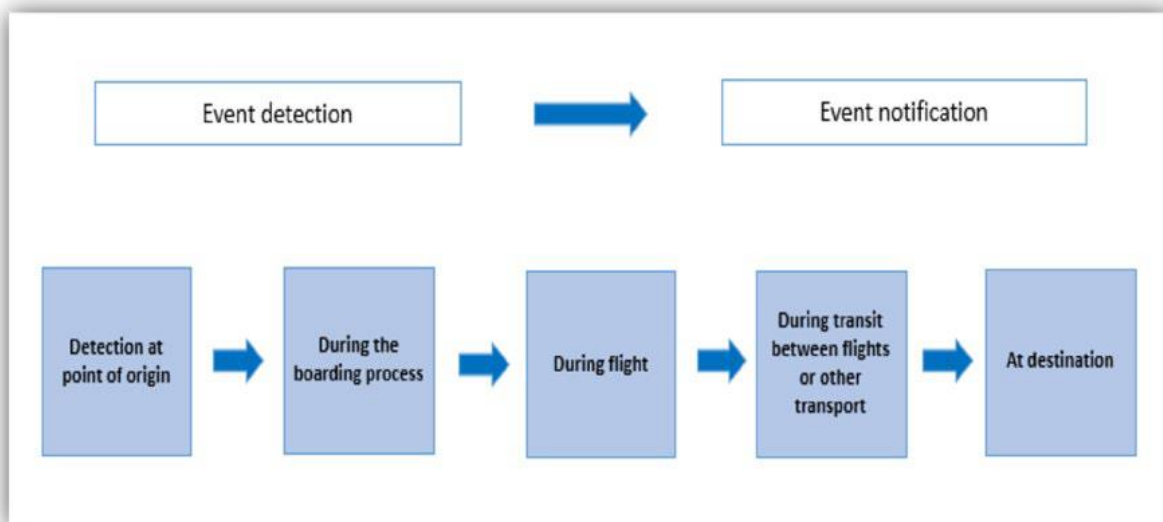
- t) Clarity in terms of the definition of where ICAO Annexes and WHO IHR (2005) are applicable and who takes possible legal litigation or insurance claims at national level, should passengers or crew take action; and
- u) There is a need for the development of guidelines for accident investigators' public health guidelines.

Reference: [Conclusions from the Eighth CAPSCA Africa Meeting, Virtual, 8 - 10 February 2022](#)

## CONCLUSION

Timely detection and notification of a potential public health risk is critical to the management of a public health event. The aviation sector is faced with increasing challenges in ensuring that travellers are healthy enough to travel prior to boarding, partly because of the increased use of advance online check-in procedures. If a communicable disease is suspected on board an aircraft in flight, flight crew are required to notify public health authorities. If a country or region is experiencing an increase in infectious disease or has been affected by a biological, chemical or radiological event, national health authorities may issue a health travel alert. Depending on the risk assessment, a health travel alert may be implemented as a national response, or on the unified advice of WHO in coordination with other international agencies (e.g. the International Atomic Energy Agency, IAEA, for radiological events). If a traveller with a potentially communicable disease is identified at the point of origin (e.g. by a physician at a health centre or travel health clinic), the traveller should be advised to delay travel until they have recovered. If the traveller has a notifiable communicable disease that may pose a health hazard to the public (examples include TB and measles), the public health authorities should be alerted for case management and contact investigation.

If an area is affected by a potentially serious outbreak of disease, WHO or other countries may implement travel advisories or notices, including recommending against travel to that area. The latter is an unusual action with potentially significant socio-economic impacts (15, 16). IHR Article 2 specifically encourages State Parties to avoid unnecessary interference with international traffic and trade.



### DURING THE BOARDING PROCESS

A competent authority (airport health authority) or other authorities may detect an illness or a potential health hazard at the time of departure in either travellers (airline passenger agents, security and passport control inspectors, cabin crew) or cargo (air freight operators). Travelers Unusual or severe illness in departing travellers may be detected by port health or other authorities. In this event, passengers may be

interviewed or subjected to a health assessment before being allowed to board. Passenger agents for some airlines and airports are given training to help identify travellers who appear to be unfit to fly, either at the counter, in the passenger lounge prior to boarding or at the time of boarding. Passenger agents should seek medical advice before allowing the ill passenger to check in or to board the aircraft. The traveller may be requested to delay travel until they are well enough or have received medical approval to travel. If a traveller refuses to delay his/her travel, the airline may exercise their right to refuse boarding. The aviation sector is faced with increasing challenges in ensuring travellers are healthy enough to travel due, in part, to the use of online booking, advance check-in and self-tagging of baggage. This reduction in passenger contact, along with some airlines using unassigned seats, may also impair an airline's ability to support public health authorities during disease investigations.

**DURING FLIGHT**

Once passengers or cargo have been boarded and the flight is in progress, event detection will rely on the awareness of the cabin crew. As noted, cabin crew are responsible for the safety of passengers during flight but have limited capacity to detect and respond to medical or potential public health events. If a medical emergency occurs, the cabin crew may be able to seek advice from a ground-based medical service provider or the assistance of a medically trained passenger on board. In serious cases, the pilot in command may consider diversion in order for the unwell passenger to receive the required treatment. In all cases, communication between the air crew and ground operations is necessary to ensure that all parties are aware of the situation. The reporting of illnesses and deaths on board to public health authorities (via ATS) is mandated in many countries (17). In all cases, the pilot should notify air traffic control, as per ICAO provisions (2- Annex 11) of any suspected cases of communicable disease or evidence of a public health risk on board. IHR Annex 9 "Health Part of the Aircraft General Declaration" is available to be used after landing to report an ill person on board. Although not all State Parties require its use, it provides a communication tool for State Parties to acquire information regarding health conditions on board during an international voyage and health measures applied to the aircraft. If required, the State Party and airport should include the procedure for its use in emergency planning documents. During the 2009 Influenza, A H1N1 pandemic, WHO, in collaboration with ICAO and IATA, developed H1N1- specific event management guidance in air travel, with recommended procedures for cabin crew. This guidance supports the IHR and may be useful for application during similar events or for developing preparedness plans.



## UPON ARRIVAL AND/OR DURING TRANSIT TO NEXT TRANSPORT

If evidence of infection or contamination is not detected during the flight, it may be detected upon arrival at an intermediary or final destination by port health or other authorities in the airport. An example of this measure is the public health 'entry screening' of flights originating from an affected country. Passengers and/or cargo may be subject to an epidemiologic investigation, conducted by port health if the itinerary information suggests there was any travel in or near an affected area or other possible contacts with infection or contamination prior to arrival. If, for instance, a flight is arriving from a region or city that is known to be affected by an infectious disease or by biological, chemical or radiological exposure, an investigation may be conducted. At the request of port health, airlines may also request some or all passengers to provide information on their itinerary and contact details. This information may be collected on a voluntary basis on public health Passenger Locator Forms (PLFs) from arriving travellers. Blank PLFs should be stored on site by port health at a designated airport or be available from regional or public health authorities for all airports. Because of the resource requirements necessary to securely store and utilise the personal information from PLFs, it is important that SOPs are developed to indicate when to request a PLF, from whom and where and how the information from these forms will be used and subsequently stored or destroyed. For further information, refer to contact tracing.

## FINAL DESTINATION

Travellers arriving from an affected region or who may have been exposed to a potential public health risk during air travel may be contacted by public health authorities at their final destination to ascertain their health status. Cargo may also need to be assessed for potential disease reservoirs on arrival. Passengers who are ill or become ill after arrival may self-refer to a local physician or health centre. The IHR requires State Parties to maintain core capacity for surveillance at all levels and at all times to ensure that public health events are detected and reported to the appropriate authorities. Public health events can be detected through the national health surveillance system and related to travel afterwards. These events may require follow-up measures at PoE and must be communicated to PoE health authorities. Risk assessment should be performed once the public health authorities are notified that a contagious patient has travelled within the previous days/weeks, and appropriate measures should be taken (e.g., contact tracing) according to national or other guidelines for that disease.

Based on the lessons learnt from the COVID-19 pandemic, regulations and guidelines will be developed and coordinated by the Authority for ICAO Annexes previously not considered by the Collaborative Arrangement and Management of Public Health in Civil Aviation and incorporating lessons learnt by the Authority in consultation with the aviation sector, to ensure better preparedness locally, regionally and internationally.



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29 March 2022