

Civil Aviation Authority of Bangladesh



Civil Aviation Procedure Document

For

Airport Operators on Aviation Public Health

Version 2.0

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Bangladesh

RECORD OF AMENDMENTS

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FOREWORD

With the increased growth in international travel and trade and the emergence and re-emergence of international disease threats and other public health risks, International Civil Aviation Organization (ICAO) published Health Related SARPs and Documents (Annexes 6, 9, 11, 14, Procedures for Air Navigation Services- Air Traffic Management (PANS-ATM, Doc 4444) as well as ACI provided Guidelines for the protection of health of passengers and crew. To keep the airports safe and prevent from spread of communicable diseases, Civil Aviation Authority of Bangladesh developed this Version 2.0 of “Civil Aviation Procedure Document for Airport Operators on Aviation Public Health” which is a guidance material for airport activities. This Document will be beneficial for the airport operators to ensure a safe environment for travellers and the airport staff using point of entry facilities, including provision of medical services, potable water supply, public washrooms, appropriate solid and liquid waste disposal services, eating establishments, and other potential risk areas.

This CPD is issued vide rule 214 of CAR 84 which is issued and amended in pursuance of the powers conferred to upon the Chairman, CAA, Bangladesh.

It shall have immediate effect.



Chy Md Zia Ul Kabir

Wing Commander

Director Flight Safety & Regulations

Civil Aviation Authority of Bangladesh

Date: 06 July 2017

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CHAPTER 1

1.1 Definitions

The following definitions are required to know when you go through the different chapters of this Aviation Public Health Manual.

Admission: The permission granted to a person to enter a State by the public authorities of that State in accordance with international laws.

Advance Passenger Information (API) System: An electronic communications system whereby required data elements are collected and transmitted to border control agencies prior to flight departure or arrival and made available on the primary line at the airport of entry.

Affected area: Means a geographical location specifically for which health measures have been recommended by WHO under IHR.

Affected: Means a person, baggage, cargo, containers, conveyances, goods, postal parcel, or human remains that are infected or contaminated, or carry sources of infection, so as to constitute a public health risk.

Aircraft equipment: Articles, including first-aid and survival equipment and commissary supplies, but not spare parts or stores, for use on board an aircraft during flight.

Aircraft operator: A person, organization or enterprise engaged in or offering to engage in an aircraft operation.

Airline: As provided in Article 96 of the Convention, any air transport enterprise offering or operating a scheduled international air service.

Authorized agent: A person who represents an aircraft operator and who is authorized by or on behalf of such operator to act on formalities connected with the entry and clearance of the operator's aircraft, crew, passengers, cargo, mail, baggage or stores and includes, where national law permits, a third party authorized to handle cargo on the aircraft.

Backflow: Flow of water or other liquids, mixtures or substances into the distribution pipes of a potable supply of water from any source or sources other than the potable water supply. Back-siphonage is one form of backflow.

Backflow preventer: Approved backflow prevention plumbing device that would typically be used on potable water distribution lines where there is a direct connection or mixtures or substances from any source other than the potable water supply. Some devices are designed for use under continuous water pressure, whereas others are non-pressure types.

Back-siphonage: Backward flow of used contaminated or polluted water from a plumbing fixture or vessel or other source into a water supply pipe as a result of negative pressure in the pipe.

Baggage: Personal property of passengers or crew carried on an aircraft by agreement with the operator.

Biohazard bag: Bag used to secure biohazard waste that requires microbiological inactivation in an approved manner for final disposal. Such bags must be disposable and impervious to moisture and have sufficient strength to preclude tearing or bursting under normal conditions of usage and handling.

Cleaning: Removal of visible dirt or particles through mechanical action, normally undertaken on a routine and frequent basis. The cleaning process and some products used for cleaning also result in disinfection.

Competent authority: Authority responsible for the implementation and application of health measures under International Health Regulations (2005).

Control measures: Those steps in the drinking-water supply that directly affect drinking-water quality and that collectively ensure that drinking-water consistently meets health-based targets. They are activities and processes applied to prevent hazard occurrence.

Cross-connection: Any unprotected actual or potential connection or structural arrangement between a potable water plumbing system and any other source or system through which it is possible to introduce into any part of the potable system any used water, industrial fluid, gas or substance other than the intended potable water with which the system is supplied. Bypass arrangements, jumper connections, removable sections, swivel or change-over devices and other temporary or permanent devices through which backflow can occur are considered to be cross-connections.

Cargo: Any property carried on an aircraft other than mail, stores and accompanied or mishandled baggage, other safety-related aspects, and security-related aspects, of air transport operations. Provision of services during flights, in particular for catering, and for the comfort of passengers.

Communicable disease: It is taken to include those diseases resulting from infections by transmissible agents such as viruses and bacteria, and that have the potential to cause a serious public health risk or emergency of international concern.

Crew member: A person assigned by an operator to duty on an aircraft during a flight duty period.

Contamination: 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.

Conveyance: An aircraft, ship, train, road vehicle or other means of transport on an international voyage.

Core capacity: Capacities listed at Annex 1 of IHR (2005).

Decontamination: 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;

Deratting: Means the procedure whereby health measures are taken to control or kill rodent vectors of human disease present in baggage, cargo, containers, conveyances, facilities, goods and postal parcels at the point of entry

Diseases: Means an illness or medical condition, irrespective of origin or source, that presents or could present significant harm to humans;

Disembarkation: The leaving of an aircraft after landing, except by crew or passengers continuing on the next stage of the same through-flight.

Disinfection: The procedure whereby health measures are taken to control or kill infectious agents on a human or animal body, in or on affected parts of aircraft, baggage, cargo, goods or containers, as required, by direct exposure to chemical or physical agents.

Disinsection; The procedure whereby health measures are taken to control or kill insects present in aircraft, baggage, cargo, containers, goods and mail.

Embarkation: The boarding of an aircraft for the purpose of commencing a flight, except by such crew or passengers as have embarked on a previous stage of the same through-flight.

Emergency preparedness: Programme of long term activities whose goal is to strengthen the overall capacity and capability of a country or a community to manage efficiently all types of emergencies and bring about an orderly transition from relief through to recovery.

Flight crew member: A licensed crew member charged with duties essential to the operation of an aircraft during a flight duty period.

Free pratique: Permission of an aircraft after landing, to embark or disembark, discharge or load cargo or stores.

Health Measure: Means procedures applied to prevent the spread of diseases of contamination; a health measure does not include law enforcement or security measure.

Ill person: Means an individual suffering from or affected with a physical ailment that may pose a public health risk;

Infection: 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;

International traffic: Means the movement of persons, baggage, cargo, containers, conveyances, goods or postal parcels across an international border, including international trade.

Inspection: The examination, by 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.

Narcotics control: Measures to control the illicit movement of narcotics and psychotropic substances by air.

Personal protective equipment: Equipment and materials used to create a protective barrier between a worker and the hazards in the workplace.

Potable water: Fresh water that is intended for drinking, washing or showering; for handling, preparing or cooking food; and for cleaning food storage and preparation areas, utensils and equipment. Potable water, as defined by the WHO Guidelines for drinking-water Quality, does not represent any significant risk to health over a lifetime of consumption, including different sensitivities that may occur between life stages.

Potable water tanks: All tanks in which potable water is stored for distribution and use as potable water.

Public health authority: Government agency or designee responsible for the protection and improvement of the health of entire populations through community-wide action.

Public health surveillance: 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.

Passenger amenities: Facilities provided for passengers which are not essential for passenger processing.

Person with disabilities: Any person whose mobility is reduced due to a physical incapacity (sensory or locomotors), an intellectual deficiency, age, illness or any other cause

of disability when using transport and whose situation needs special attention and the adaptation to the person's needs of the services made available to all passengers.

Pilot-in-command: The pilot responsible for the operation and safety of the aircraft during flight time.

Point of entry: Means a passage for international entry and exit of travelers, baggage, cargo, containers, conveyances, goods and postal parcels as well as agencies and areas providing services to them on entry or exit.

Public health emergency of international concern: An extraordinary event which is determined, as provided in the International Health Regulations (2005) of the World Health Organization: (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

Public health risk: 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.

Quarantine: 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;

Relief flights: Flights operated for humanitarian purposes which carry relief personnel and relief supplies such as food, clothing, shelter, medical and other items during or after an emergency and/or disaster and/or are used to evacuate persons from a place where their life or health is threatened by such emergency and/or disaster to a safe haven in the same State or another State willing to receive such persons.

Reservoir: Means an animal, plant or substance in which an infectious agent normally lives and whose presence may constitute a public health risk;

Rodent: Any of the relatively small placental mammals that constitute the order Rodentia, having constantly growing incisor teeth specialized for gnawing. The group includes rats, mice, squirrels, marmots, etc

Surveillance: 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;

Suspect: 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;

Sewage: Any liquid waste that contains animal or vegetable matter in suspension or solution, including liquids that contain chemicals in solution.

Transfer point: Site of intermittent connection for water transfer between the hard-plumbed airport water distribution system and the aircraft water system. Sometimes referred to as Watering point.

Traveller: Means a natural person undertaking an international voyage;

Turbidity: Light-scattering cloudiness or lack of transparency of a solution due to the presence of suspended particles. Turbidity is not necessarily visible to the eye.

Vector: Means an insect or other animal which normally transports an infectious agent that constitutes a public health risk;

Visitor: Any person who disembarks and enters the territory of a Contracting State other than that in which that person normally resides; remains there lawfully as prescribed by that Contracting State for legitimate non-immigrant purposes, such as touring, recreation, sports, health, family reasons, religious pilgrimages, or business; and does not take up any gainful occupation.

Water supply surveillance: Continuous and vigilant public health assessment and review of the safety and acceptability of drinking-water supplies. There are two types of approaches: audit-based approaches and approaches relying on direct assessment. In the audit approach, assessment activities, including verification testing, are undertaken largely by the supplier, with third-party auditing to verify compliance. In direct assessment, the drinking-water supply surveillance agency carries out independent testing of water supplies.

WHO IHR Contact Point: The unit within WHO that is accessible at all times for communication with the national IHR Focal Points.

1.2 Abbreviation

AFTN -Aeronautical Fixed Telecommunication Network
ACI -Airports Council International
ANO -Air Navigation Order
AOG - Airport Operator's Guidance
ATM -Air Transport Management
ATS -Air Traffic Services
CAAB -Civil Aviation Authority, Bangladesh
CARs -Civil Aviation Rules
CAPSCA-Collaborative Arrangement for the Prevention and Management of Public Health Events in Civil Aviation
CMT -Crisis Management Team
ECR -Environmental Conservation Rules
HERT -Health Emergency Response Team
HSIA -Hazrat Shahjalal International Airport
ICAO -International Civil Aviation Organization
IHR -International Health Regulations
IATA -International Air Transport Association
IEDCR-Institute of Epidemiology, Disease control and Research
PANS -Procedures of Air Navigation Services
PHEIC-Public Health Emergency of International Concern
PIC -Pilot- in- Command
PoE -Point of Entry
PPE -Personal Protective Equipment
Ref - Reference
SoP -Standard Operating Procedures
SARPS-Standards and Recommended Practices
WHO -World Health Organization

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CHAPTER 2

In the event of a communicable disease outbreak

2.1 Introduction

- 2.1.1 In the event of an outbreak of communicable disease on an international level, air travel will be the focus of much attention due to the potential for aviation to increase the rate at which a disease spreads, thereby decreasing the time available for preparing interventions. Advance preparation should make it possible to reduce the consequences.
- 2.1.2 The Airport Operators are to protect the health and look into the welfare of travellers, staff and the public and to take necessary steps to reduce the opportunities for dissemination of communicable diseases by air.

2.2 Responsibility of airport operator

The following measures are to be taken by airport operators and health authorities against communicable diseases that might pose a serious risk to public health:

- 2.2.1 The responsibility for management of the risk of communicable diseases at airports rests with the public health authority and the relevant airport operator.
- 2.2.2 The airport authority is to make available adequate supplies of appropriate personal protective equipment (including hand-washing facilities or sanitizing gels) for airport staff.
- 2.2.3 Travellers and health professionals should have access to consistent information about postponing travel and screening measures that may be in place at an airport, should a potential traveller have an illness prior to commencing air travel. Such information will usually be taken from a public health information site or developed in close collaboration with the public health authority.
- 2.2.4 Before arrival at the airport terminal building, information can be provided to travellers by means of an airport/ airline web site or by electronic link to a public health web site by recorded telephone message or by printed media. A telephone message may give health information directly and possibly refer the listener to further sources of information.
- 2.2.5 The media can play a useful role in informing travellers of the situation at an airport and links with the media should be established so that journalists can obtain information at short notice. Notices on radio and television stations and public

information delivered through other forms of mass media e.g. internet, can be very effective.

- 2.2.6 Travellers who have medical conditions that may affect their fitness for travelling should have their attending physician complete the International Air Transport Association Medical Information Form (“MEDIF”, or the equivalent form in use by the airline) or discuss the situation with the airline ticketing/reservations staff who will forward the enquiry to appropriate medical staff.
- 2.2.7 The information shall be given by signage, stands, posters or electronic displays in the airport. The text would be adjusted according to the information to be conveyed. The WHO or national public health authority will provide the information on symptoms
- 2.2.8 Public announcements, and other forms of communication, should be provided in the languages used by persons most frequently travelling through the airport, including English, as well as the State’s own language(s).
- 2.2.9 To ensure public confidence, airport operators should explain to passengers, as fully as possible, the reasons for any necessary health-related measures.

2.3 Screening during outbreak

- 2.3.1 According to WHO, screening for communicable diseases can potentially reduce opportunities for transmission and forestall or delay international spread. Depending on the epidemiology, extent of transmission and severity of the disease (attack and mortality rates), screening of arriving and departing travellers at international airports may be considered.
- 2.3.2 Screening measures that match the behaviour of the communicable disease in question have the greatest chance of reducing the number of cases and limiting or preventing international spread.
- 2.3.3 Screening methods include visual inspection, questionnaire and temperature measurement using thermal scanners, infra-red-thermometer etc or any other method recommended by WHO.
- 2.3.4 If the National public health authority determines that screening is to be employed, it should discuss the issues with the airport operator in order to develop acceptable plans. Costs associated with providing screening equipment shall normally be met by the national public health authority
- 2.3.5 Travellers determined at screening to be at increased risk of having a communicable disease posing a potentially serious public health risk should undergo secondary

screening by a medical practitioner. If the assessment is positive i.e. the traveller is thought to be suffering from a communicable disease which poses a serious public health risk, consideration should be given to prevent his/her departure. Such a decision should not be taken lightly and has legal implications that need to be adequately considered in preparedness planning. (IHR (2005) Articles 23.3, 23.5, 31 and 32 cover health measures for arriving and departing travellers, including requirements for minimizing discomfort and distress for passengers that are at risk of a communicable disease, appropriate diagnosis, and management, in accordance with the IHR (2005) with a view to protecting the public from potential infection i.e. by isolation or quarantine. Appropriate isolation or quarantine facilities should be identified by the public health authority and to be sited away from the airport site. Travellers arriving or departing from an 'at risk' area should be provided with the available information about risks, risk avoidance, symptoms associated with the disease and when and where to report should these symptoms develop.

2.4 Inbound aircraft carrying a suspected case of a communicable disease which may pose a serious public health risk

- 2.4.1 A number of considerations should be taken into account when an aircraft arrives carrying a suspected case of a communicable disease which may pose a serious public health risk. The considerations are as follows:
- 2.4.2 The pilot in command (PIC) needs to be advised of 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 a passenger boarding bridge attached. Such aircraft should be parked at stands which have all the relevant facilities, enable continued ventilation of the aircraft and allow easy accessibility to public health personnel to assess any suspected case(s) and permit efficient clearance of passengers.
- 2.4.3 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.
- 2.4.4 Personal protective equipment (PPE) appropriate to the suspected communicable disease, the mode of transmission and the nature of duties being performed by aviation personnel, should be worn. For many communicable diseases, disposable gloves and good hand hygiene (at times in combination with surgical masks) are

sufficient. The national public health authority may provide detailed recommendations.

- 2.4.5 A traveller having a communicable respiratory disease should wear a surgical mask unless the traveller is unable to tolerate it.
- 2.4.6 All surfaces that may have been in contact with a sick traveller need to be appropriately treated. Removable materials should be handled with biohazard precautions.
- 2.4.7 A sick traveller should be appropriately escorted from the aircraft to an area for further assessment/treatment. Appropriate infection control measures should be applied. The IHR (2005), Annex 1B outlines the core capacity requirements regarding transport facilities needed to manage public health emergencies, including the designation of ambulances for the transport of cases of infectious disease from a flight.
- 2.4.8 Before disembarkation, sick travellers and crew on the same aircraft should be 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 precautionary measures.
- 2.4.9 Procedures need to be in place for obtaining baggage, customs and security clearance of a sick traveller, and other travellers. There is currently no evidence to support the cleaning and/or disinfection of baggage belonging to a suspected case or his/her contacts.
- 2.4.10 Consideration should be given to the comfort of all passengers, particularly if placed in isolation, or detained on board the aircraft. Provision should be made for food, water and other essentials.
- 2.4.11 A procedure for transporting a sick traveller to hospital needs to be in place.

2.5 Exercises:

Airport operators should establish a method of testing their preparedness by means of drills/exercises involving all relevant stakeholders, especially public health authorities, airport operators and airlines.

(Ref: Airport preparedness guidelines for outbreaks of communicable disease issued by ACI and ICAO, April 2009).

CHAPTER 3

Water supply in the Airport

3.1 Background

Travellers can facilitate the transfer of communicable diseases due to the volume and rapidity of air travel globally. This is particularly true for airport and that to aircraft water supply, as the global span of the aviation industry requires the loading and rapid transport of people and supplies from many locations all over the world.

One risk is posed by the potential for microbial contamination of airport water by animal or human excreta. This contamination may originate from source waters or may occur in the transfer chain of water supply. Waterborne disease burdens in many parts of the world include cholera, enteric fevers (*Salmonella*), bacillary and amoebic dysentery and other enteric infections. However, any location is at risk if proper procedures and sanitation practices are not continuously followed to ensure the safety of water that is used for drinking and food processing and preparation.

3.2 Water supply and transfer chain

The water supplied at the airport may be contaminated in the transfer chain if proper care is not taken enroute. Authority must ensure that the water supplied for drinking and food preparation in the airport are safe and hygienic. The water supply and transfer chain consists of four major Components:

- 3.2.1 **The source of water coming into the airport;**
- 3.2.2 **The airport water system**, which includes the on-site distribution system. It may also include treatment facilities if the airport produces its own potable water;
- 3.2.3 **The transfer point** (sometimes referred to as the watering point), including the water transfer and delivery system. It is typically a temporary interconnection between the hard plumbed distribution system of the airport (e.g. at a hydrant) and the aircraft water system, by means of potable water vehicles and carts, refillable containers or hoses. This water transfer process provides multiple opportunities for the introduction of Contaminants into the drinking-water;
- 3.2.4 **The aircraft water system**, which includes the water service panel, the filler neck of the aircraft finished water storage tank and all finished water storage tanks, including refillable containers, piping, treatment equipment and plumbing fixtures within the aircraft that supply water to passengers or crew.

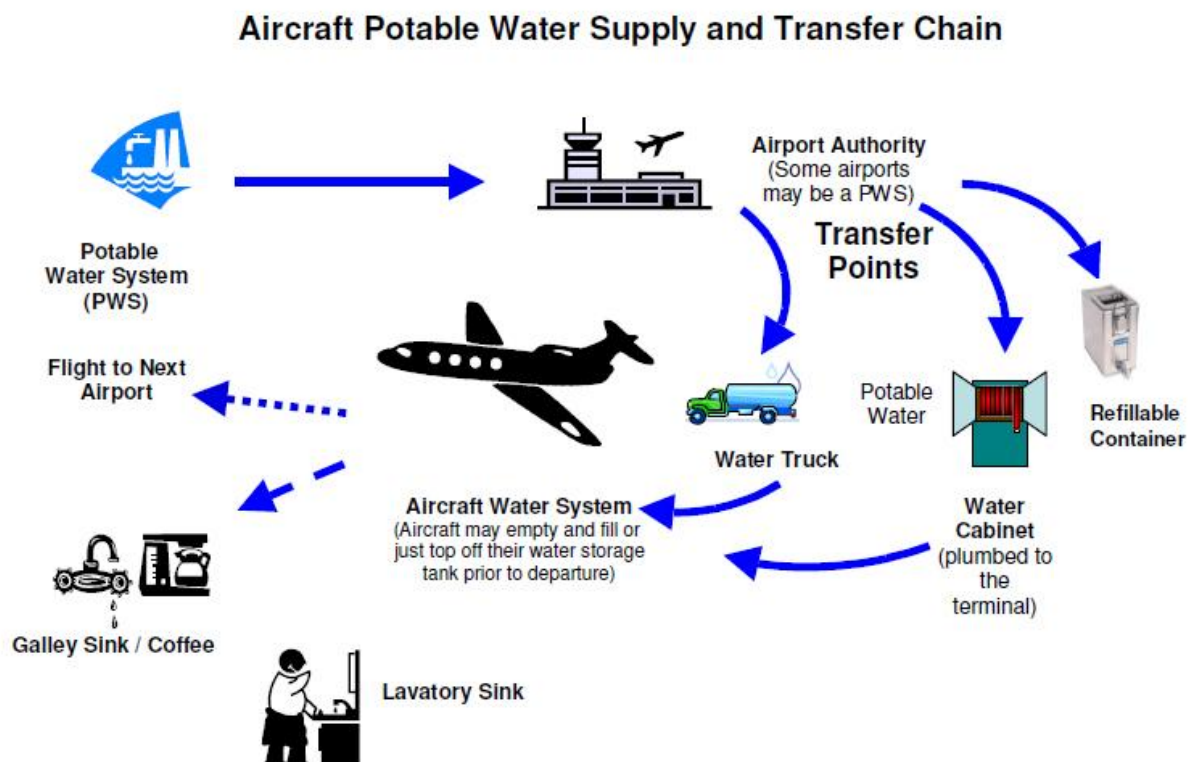


Figure 3.1 is a flow diagram of a typical aircraft potable water supply and transfer chain.

3.3 Complying with International Health Regulations (2005)

- 3.3.1 Annex 1 B 1 (d) of the IHR (2005) requires every airport specifically designated by a State to have or develop within a limited period the capacity to provide safe potable water supplies for travellers using airport facilities.
- 3.3.2 In accordance with Article 24 (c) of the IHR (2005), Medical authority in cognizance to Chairman CAAB is required to take all practicable measures to ensure that international conveyance operators keep their conveyances free of sources of contamination and infection, which should include drinking water.
- 3.3.3 However, it is the responsibility of each aircraft operator to ensure that no sources of infection and contamination are found on board, including in the water system. For this purpose, it is important that these standards are being upheld on the aircraft, in terms of both the quality of the water taken on board from the source of supply on the ground and maintenance of water quality on board.
- 3.3.4 Regulatory authorities are required to ensure, as far as practicable, that the facilities at international airports are in sanitary condition and are kept free of sources of infection and contamination, including vectors and reservoirs; (Ref: IHR, Article 22 b).

3.4 Hazards in the water supply chain

- 3.4.1 The water transfer points between the airport source and the aircraft onboard storage and distribution system present significant opportunities for contamination. Common equipment used to transfer water includes piping, hoses, potable water cabinets, bowsers, tanks, filling stations, refillable containers, and hydrants (including taps/faucets). Equipment should be constructed of appropriate materials (e.g. corrosion-resistant materials) certified for this application, properly designed, operated, labelled and maintained, and used for no other purpose that might adversely affect the quality of the water. Assumptions and manufacturer specifications for each piece of equipment need to be validated to ensure that the equipment is effective.
- 3.4.2 Potable water should be obtained from those transfer points approved by the competent authority. The lines' capacity should be such as to maintain positive pressure at all times to reduce the risk of backflow. There should be no connections between the potable water system and other piping systems. Backflow of contaminated water into the potable water system needs to be prevented by proper installation of piping, backflow prevention devices and plumbing. Water for drinking and culinary use on aircraft should not be taken from water closets, washrooms or other places where danger of contamination exists or may develop.
- 3.4.3 The water tanks should be so designed that they can be disinfected and flushed and should be provided with a drain that permits complete drainage of the tank. They should be labelled "DRINKING WATER ONLY". The inlet and outlet to the tank should terminate in a downward direction or gooseneck and should be provided with caps or closures with keeper chains for protection against contamination. The inlet and outlet should be equipped with couplings of a type that permits quick, easy attachment and removal of the hose. When hoses are transported on the water cart, storage facilities should be provided on the cart to protect the hoses from contamination.

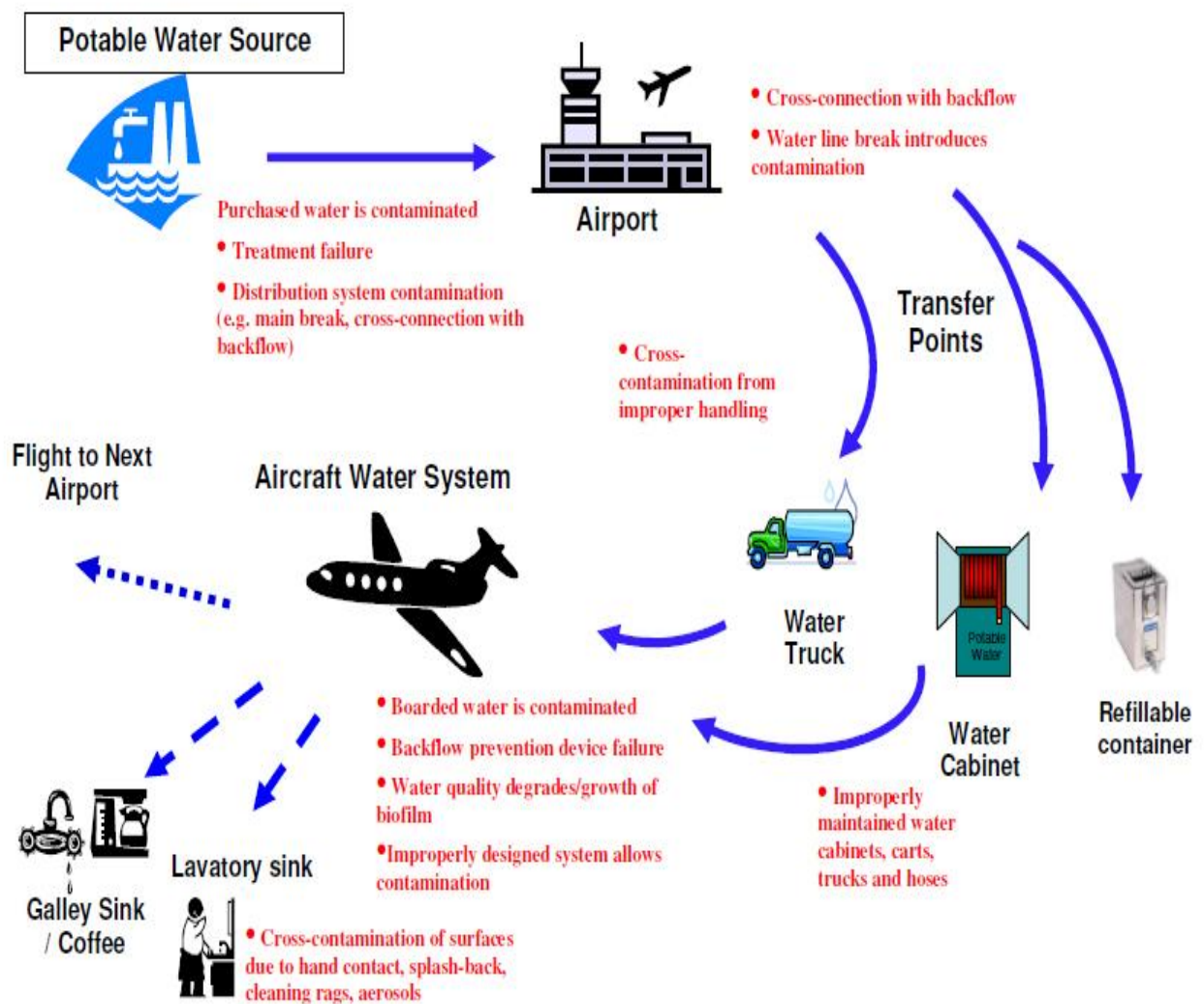


Figure 3.2: Sources of water contamination in the transfer chain

3.5 Monitoring of potable water supply

All water on the airport intended for drinking, food preparation or human contact should be potable and meet the GDWQ (WHO Guideline for drinking water quality) or specifications of national standards (ECR 97), whichever are more stringent. If the water provided at the airport, at the transfer point or on the aircraft does not meet the GDWQ or national standard, the appropriate responsible entity must take measures to ensure that water for use will be safe.

Specific requirements applicable to airport water supply are provided in the following guideline:

Sl no	Parameters	Bangladesh Standard (ECR- 97)	WHO Standard
1.	pH	6.5-8.5	6.5-8.5
2.	Turbidity (NTU)	10	05
3.	Total hardness(mg/L)	10	-
4.	Chloride (mg/L)	600	200
5.	TDS (mg/L)	1000	1000
6.	Iron Fe (mg/L)	0.3-1.0	0.3
7.	Arsenic As (mg/L)	0.05	0.01
8.	Nitrate-N (mg/L)	10	50
9.	Total coliform (N/100 ml)	0	0

3.5.1 Remarks

- E.coli or thermo tolerant (faecal) coli forms: No E. Coli (Fecal) coliforms should be detected in any 100 ml sample of water. A positive test may be an indication of potential pathogenic (primarily bacterial) microorganisms associated with human excreta.
- Turbidity: Turbidity that increases in the airport water indicates that dirt has entered the system during the transfer.
- Detection of odour/colour/taste may indicate cross-connection with the liquid waste system.
- Chemicals contamination of water with nitrate/nitrite at the airport indicates cross connections with the liquid waste system and copper leaching.
- Metal such as iron can be leached from some materials into the water and contribute adverse taste or in some cases, health concerns.

3.6 Indicators of monitoring water

3.6.1 Monitoring at airport water taps is carried out at locations to ensure that persons served at the airport are provided safe water. Recommended parameters that should be monitored at the entrance to the transfer point are E. coli or thermotolerant (faecal)

coliforms, disinfectant residual, chemicals of acute significance, corrosion-related contaminants, and turbidity and aesthetic parameters.

- 3.6.2 Monitoring at the transfer point takes place to ensure that water supplied at the airport and aircraft is safe. Recommended parameters that should be monitored at the transfer point are E. coli or thermotolerant (faecal) coliforms, disinfectant residual and, if required, turbidity.
- 3.6.3 Monitoring on airport is carried out at locations to ensure that the passengers and airport staff are provided safe water. It is recommended that E. coli or thermotolerant (faecal) coliforms be monitored at representative taps. The monitoring should take place at each major servicing, in addition to regular E. coli spot checks while in service. Complaints about aesthetic parameters (odour/colour/taste) will trigger further investigations into the water quality and may indicate the need to monitor for turbidity. Additional parameters to be monitored include chemicals of acute significance and corrosion-related contaminants.
- 3.6.4 All critical parameters are monitored at a sufficient frequency to ensure safe water.

3.7 Frequency of monitoring

- 3.7.1 Regular monitoring of each parameter is necessary to ensure that safe water quality is maintained, as each step in the water transfer chain provides an opportunity for contamination. Documentation (recordkeeping) of monitoring should be kept for assurance and analysis in the event of an incident.
- 3.7.2 In certain situations, the frequency of monitoring should be increased for a period necessary to determine appropriate corrective action and/or assurance that measured parameters have returned to safe levels. Examples of situations warranting increased monitoring are positive E. coli or thermotolerant (faecal) coliform results, excessively humid conditions, during or after natural disasters affecting source water quality and immediately after maintenance activities that have the potential to affect water quality.
- 3.7.3 Aesthetic parameters such as odour, colour or taste are typically “measured” through customer complaints, although the crew may also wish to do an independent periodic check. This is a subjective parameter, as individuals have different sensitivities.

3.8 Surveillance (Inspection Procedures of the Establishment)

- 3.8.1 In most cases, surveillance consists primarily of sanitary inspections of airports, transfer points. Sanitary inspection is a tool for determining the state of the water supply, infrastructure and the identification of actual or potential faults and should be carried out on a regular basis. Any deficiency identified during inspection must be corrected within a reasonable time period specified by the regulatory authority.
- 3.8.2 Surveillance should be accomplished by authorized and trained officers from public health authorities, or the services of qualified independent inspectors may be utilized.
- 3.8.3 Specifications for qualifications of the inspectors should be established, and inspectors should undergo adequate training, including periodic updates and recertification. Independent inspectors should meet the same requirements as those from the public health authorities.

(Ref: *WHO Guide to hygiene and sanitation in aviation 2009 Chapter 2 & ECR 97-Schedule 3.B*).

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CHAPTER 4

Facilitations of Medical Importance

4.1 International certificates of vaccination or prophylaxis

- 4.1.1 In cases where proof of vaccination or prophylaxis is required by national authorities under the International Health Regulations (2005), State shall accept the International Certificate of Vaccination or Prophylaxis prescribed by the World Health Organization in the IHR (2005) (*As Annex 6- Model International certificate of vaccination and prophylaxis*)
- 4.1.2 In emergency situations resulting from force majeure, aircraft operators and airport operators should give priority assistance to those passengers with medical needs, unaccompanied minors and persons with disabilities who have already commenced their journey
(*Ref: ICAO Annex 9 Chapter 3.75*)

4.2 Importation of radioactive material

- 4.2.1 The concerned authority shall facilitate the prompt release of radioactive material being imported by air, particularly material used in medical applications, provided that applicable laws and regulations governing the importation of such material are complied with.

Note- The advance notification, either in paper form or electronically, of the transport of radioactive materials would likely facilitate the entry of such materials

4.3 Facilities required for implementation of public health, emergency medical relief, and animal and plant quarantine measures (Annex 9 chapter 6 C)

- 4.3.1 The concerned authorities in cognizance to Chairman, CAA, Bangladesh shall ensure the maintenance of public health, including human, animal and plant quarantine at state designated international airport (HSIA).
- Medical authorities should ensure that all the international airports are having facilities and services for vaccination or revaccination, and for the delivery of the corresponding certificates.

- International airports should have available access to appropriate facilities for administration of public health and animal and plant quarantine measures applicable to aircraft, crew, passengers, baggage cargo, mail and stores.
- Airports authority should ensure that passengers and crew in transit can remain in premises free from any danger of infection and insect vectors of diseases and, when necessary, facilities should be provided for the transfer of passengers and crew to another terminal or airport nearby without exposure to any health hazard. Similar arrangements and facilities should also be made available in respect of animals.

4.3.2 Civil aviation authority and respective airline shall ensure that handling and distribution procedures for consumable products (i.e. food, drink and water supplies) on board aircraft or in the airport are in compliance with the International Health Regulations (2005) and relevant guidelines of the World Health Organization, the Food and Agriculture Organization and national airport regulations.

4.3.3 The airport and the aircraft operators, shall ensure that a safe, sanitary and efficient system is instituted, at international airports, for the removal and disposal of all waste, waste water and other matters dangerous to the health of persons, animals or plants, in compliance with the International Health Regulations (2005) and relevant guidelines of the World Health Organization, the Food and Agriculture Organization and national airport regulations.

4.3.4 Director General of Health Services in coordination to Chairman shall ensure that international airports maintain facilities and services for first-aid attendance on site, and that appropriate arrangements are available for expeditious referral of the occasional more serious case to prearranged competent medical attention.

4.4 Passenger amenities in the airport

4.4.1 Airport operators should provide suitable childcare facilities in passenger terminals, and that they are clearly indicated by signage and are easily accessible.

(Ref: ICAO Annex 9, Chapter 6.46)

4.5 Relief flights following natural and man-made disasters which seriously endanger human health or the environment, and similar emergency situations where United Nations (UN) assistance is required

4.5.1 Bangladesh shall facilitate the entry into, departure from and transit through their territories of aircraft engaged in relief flights performed by or on behalf of international organizations recognized by the UN or by or on behalf of States and shall take all possible measures to ensure their safe operation. Such relief flights are those undertaken in response to natural and man-made disasters which seriously endanger human health or the environment, as well as similar emergency situations where UN assistance is required. Such flights shall be commenced as quickly as possible after obtaining agreement with the recipient country.

Note 1-According to its Internationally Agreed Glossary of Basic Terms, the United Nations Department of Humanitarian Affairs considers an emergency to be “a sudden and usually unforeseen event that calls for immediate measures to minimize its adverse consequences”, and a disaster to be “a serious disruption of the functioning of society ,causing widespread human, material or environmental losses which exceed the ability of the affected society to cope using only its own resources”.

Note 2-With respect to the application of measures to ensure the safe operation of relief flights, attention is drawn to Annex 11 — Air Traffic Services, the Manual Concerning Safety Measures Relating to Military Activities Potentially Hazardous to Civil Aircraft Operations (Doc 9554) and the Manual concerning Interception of Civil Aircraft (Doc 9433).

4.5.2 Civil Aviation Authority, Bangladesh shall ensure that personnel and articles arriving on relief flights are cleared without delay.

(Ref: ICAO Annex 9.Chapter 8.C)

4.6 Implementation of International Health Regulations and Related Provisions

4.6.1 Bangladesh shall comply with the pertinent provisions of the International Health Regulations (2005) of the World Health Organization.

(Ref: ICAO Annex 9, Chapter 8.12)

4.7 Communicable Disease Outbreak National Aviation Plan

- 4.7.1 Public Health Authority of Director General of Health Services, Ministry of Health and Family Welfare in cognizance to Chairman shall establish a national aviation plan for an outbreak of a communicable disease posing a public health risk or public health emergency of international concern.

(Ref: ICAO Annex 9, Chapter 8.16)

4.8 Facilitation of the Transport of Persons with disabilities

- 4.8.1 When travelling, persons with disabilities should be provided with special assistance in order to ensure that they receive services customarily available to the general public.
- 4.8.2 Authority should take the necessary measures to make accessible to persons with disabilities all the elements of the chain of the person's journey, from arrival at the airport of departure to leaving the airport of destination.
- 4.8.3 Air operators, airports and ground handling operators are to provide necessary transportation services for persons with disabilities, from arrival at the airport of departure to leaving the airport of destination.

(Ref: Annex 9 Chapter 8.22-8.26)

4.9 Access to airports of disabled persons

- 4.9.1 Airport Authority shall take the necessary steps to ensure that airport facilities and services are adapted to the needs of persons with disabilities.
- 4.9.2 The Authority should ensure that lifting systems or any other appropriate devices are made available in order to facilitate the movement of elderly and disabled passengers between the aircraft and the terminal on both arrival and departure as required where telescopic passageways are not used.
- 4.9.3 Measures should be taken to ensure that the hearing- and vision-impaired are able to obtain flight information.

- 4.9.4 For elderly and disabled persons being set down or picked up at a terminal building, reserved points should be located as close as possible to main entrances. To facilitate movement to the various areas of the airport, access routes should be free of obstacles.
- 4.9.5 Where access to public services is limited, every effort should be made to provide accessible and reasonably priced ground transportation services by adapting current and planned public transit systems or by providing special transport services for people with mobility needs.
- 4.9.6 Adequate parking facilities should be provided for people with mobility needs and appropriate measures taken to facilitate their movement between parking areas and the terminal buildings.
- 4.9.7 Direct transfer from one aircraft to another of passengers, particularly elderly and disabled passengers, should be authorized, where necessary and possible, whenever this is warranted by deadlines in making connecting flights or by other circumstances.

(Ref: Annex 9 Chapter 8.27-8.33)

4.10 Access to air services of disabled persons

- 4.10.1 Air operator shall take the necessary steps to ensure that persons with disabilities have adequate access to air services.

Air operator should introduce provisions by which aircraft coming newly into service or after major refurbishment should conform to minimum uniform standards of accessibility with respect to equipment on board aircraft which would include movable armrests, on-board wheelchairs, lavatories and suitable lighting and signs.

- 4.10.2 Wheelchairs, special apparatus and equipment required by persons with disabilities should be carried free of charge in the cabin where, in the view of the aircraft operator, space and safety requirements permit or should be designated as priority baggage.
- 4.10.3 Service animals accompanying passengers with disabilities should also be carried free of charge in the cabin, subject to the application of any relevant national or aircraft operator regulations.
- 4.10.4 In principle, persons with disabilities should be permitted to determine whether or not they need an escort and to travel without the requirement for a medical clearance. However, advance notice should be mandatory where assistance or lifting is required.

Aircraft operators should only be permitted to require passengers with disabilities to obtain a medical clearance in cases of medical condition where it is clear that their safety or well-being or that of other passengers cannot be guaranteed. Furthermore, aircraft operators should only be permitted to require an escort when it is clear that a person with disabilities is not self-reliant and, as such, the safety or well-being of that person or that of another passenger cannot be guaranteed.

4.10.5 If the presence of an escort is required, air operators are to offer discounts for the carriage that accompanying person.

(Ref: Annex 9 Chapter 8.34-8.40)

CHAPTER 5

Cleaning and disinfection of airport facilities

5.1 Background

Cleaning refers primarily to the removal of visible dirt or particles. It is to be kept in mind that the cleaning process and some products used for cleaning purpose also need disinfection, which is undertaken on a routine and frequent basis.

Disinfection refers to specific measures taken to control, deactivate or kill infectious agents, such as viruses and bacteria. Disinfection is normally undertaken during periodic maintenance checks or after a public health event, such as the suspected carriage of an infectious passenger. The commercial air transportation is an efficient means for spreading communicable disease widely by surface contact and proximity to infected persons.

Competent authorities have responsibilities to ensure that international airports and aircraft are kept free of sources of infection and contamination (Article 22.1(a, b, c, d, e, g)) of IHR 2005. The competent authority needs to exercise oversight over cleaning and disinfection programmes so that its obligations under the IHR (2005) are fulfilled. Under the IHR, the competent authorities are responsible for supervising service providers relating to travellers, baggage, cargo, containers, conveyances and goods at points of entry, including with inspections and medical examinations, as necessary. They are also responsible for supervision of disinfection, disinsection and decontamination of conveyances, as well as baggage, cargo, containers and goods under the IHR (2005). Finally, they are responsible for the supervision of the removal and safe disposal of any contaminated water or food, human or animal deject, wastewater and any other contaminated matter from a conveyance (Article 22.1(c, e–f)). In the context of conveyances (as well as baggage, cargo and goods) arriving from affected areas, the competent authorities are responsible for monitoring them so that they are free of sources of infection or contamination (Article 22.1(a)).

5.2 Requirements for Sanitary condition of airports

To keep airports in a sanitary condition following requirements are to be fulfilled:

- 5.2.1 That a documented, tested and updated routine cleaning programme exists, and ensure that premises are regularly and hygienically cleaned. An appropriate number of trained personnel are available, in relation to the volume and complexity of the airport facilities and cleaning procedures.

- 5.2.3 Personal protective techniques and equipment are used by personnel: related equipment and information (operational procedures for its use) are available.
- 5.2.4 Cleaning equipment and supplies are available in relation to the volume and complexity of the airport facilities and cleaning procedures.
- 5.2.5 Cleaning equipment is properly identified and satisfactorily maintained and stored in a designated storage area.

5.3 Design and construction of airports

Airports are to be designed and constructed in a manner that facilitates proper cleaning and disinfection.

- 5.3.1 Facilities are designed and constructed of suitable materials (e.g. impervious, smooth and without seams) to facilitate cleaning and to reduce the risk of harbouring insects, rodents and other vectors.
- 5.3.2 Proper design will minimize the amount of accumulated debris and waste and reduce opportunities for survival of vectors and reservoirs of disease, such as rodents and insects.
- 5.3.3 Washrooms to be designed without doors and with automatic faucets (taps) using “electronic eyes” (which automatically control the flow of the water to the faucet) are preferable, as they will reduce contact with hands/fingers.
- 5.3.4 Providing paper wipes for hand drying will reduce the risk of cross-contamination, especially when dispensed using “electronic eyes” (hand dryers can promote spread of pathogens).

(Ref: WHO guide to hygiene and sanitation in aviation 2009, Chapter 3.1, 3.2, 3.2.1.2)

5.4 Airport toilet sanitation

Passengers, ground staff and members of the public visiting airports may be carriers of intestinal disease. Meticulous cleanliness of toilets at airports together with the sanitary treatment, handling and disposal of toilet wastes, is therefore of the utmost importance. Toilet facilities provided at airports should therefore be of the highest standard and maintained at the maximum level of cleanliness.

The following minimum requirements are suggested for passenger toilet blocks at airports.

5.4.1 General features

Screening-When the entrance door is open the interior of the toilet block should not be visible.

Floors -These should be of ceramic tiles with coved skirting to walls

Drainage -Floor drainage should discharge into the drainage system through a properly trapped gully. Floor gully grids should be flush with the floor surface, of suitable design to allow easy access, and capable of preventing blockage of the gully by waste material. All fittings should be individually trapped.

Walls-These should be covered from floor to ceiling with tiles or other approved materials and finishes."Hygiene notices" ("You are invited in the interest of hygiene to wash your hands after using this toilet"), inscribed in glazed tile or on a hard plastic material, should be fitted in toilet compartments and above urinals.

Ceilings-Ceilings should be finished with washable material and should not be perforated.

Lighting-Toilets, cleaner's compartment and urinals should be adequately lighted, Supplementary lighting for mirrors and above wash-hand washings should be provided.

Windows-Where there are windows in toilet accommodation they should be fitted with translucent laminated glazing frames.

Ventilation-Where natural ventilation is not available, an adequate and efficient mechanical means of ventilation must be provided.

5.4.2 Toilets related facilities

5.4.2.1 Compartments:

- In general, compartment walls should not reach the ceiling, and there should be a space of 15 cm (6 in) between the lower edge and the floor. The end of the compartment wall should abut tightly against the main wall to eliminate the possibility of a dirt trap. Compartment wall surfaces should be nonabsorbent, scratch-proof and easy to clean.
- Toilet doors should be of durable material with a smooth surface and easy to clean. They should not reach the ceiling, and there should be a space of 15 cm (6 in) between the lower edge and the floor. The inner side should be fitted with a combined doorstep and with rubber buffer.

5.4.2.2 Fittings:

- Toilets should be low-level, pedestals allowing easy cleaning of the floor beneath. They should be white or pastel colored. Seats should be made of an impervious material to facilitate cleaning. Toilet-roll holders should be of a thief-proof type.
- Urinals may be the "open-slab" or individual bowl type, according to requirements. Urinals should be equipped with an adequate automatic flushing mechanism.
- Wash-hand-basins should be of the cantilevered type allowing easy access beneath for floor cleaning. If cantilevered, the basin should either be recessed or be fitted to allow a space of not less than 10 cm (4 in) between the back of the basin and the wall. Wash-hand-basins may be in a continuous row, but where separated the intervening space should be not less than 15 cm (6 in). Hot and cold running water must be supplied to each basin.
- Wall mirrors should generally be provided, but should not be placed above wash-hand-basins. They should be adequately lit.
- In women's toilets handbag shelves should be sited below wall mirrors.
- Hand-drying facilities should generally consist of disposable paper towels or hot-air dispensers. Where paper towels are made available, free-standing metal receptacles should be provided for their disposal after use.
- Soap may be in either liquid or powder form, and the dispenser should usually be sited within the width of the wash-hand-basin, but towards the right-hand side of it.
- All women's toilets should have the facilities for the disposal and supply of sanitary towels:
- Drinking-water fountains should preferably be situated outside but adjacent to toilet suites.
- In or adjoining large toilet blocks provision should be made for a cleaners' locker room complete with sluice. In all other toilet blocks, a cleaners' storeroom should be provided.
- The number of toilets required will, of course, depend upon the number of persons using the airport, account being taken of increased demand at anticipated peak periods. Facilities must be provided in the arrivals, departure and transit

areas, restaurants and all other sections open to the public. Provision should be made for toilets specially equipped for handicapped and infirm passengers.

5.5 Toilet cleaning

Toilets that are in constant use should have a permanent attendant whose main function is to service the unit. He or she should replenish soap, towels, toilet paper, etc., as required, and generally keep the place tidy; cleaning any fitting that becomes soiled. A cleaning schedule should be prepared for all toilet units, whether the work is done by airport employees or by contractual labour. The person responsible for maintaining the toilets should appraise the efficiency of the cleaning materials used and make sure that they do not damage surfaces. The toilets should be kept in a good state of repair and decoration.

5.6 Toilet cleaning schedule: A cleaning schedule should include the following tasks:

- Remove all soiled towels and other rubbish to refuse store.
- Clean wash-hand-basins, taps, shelves, mirrors, pipe work, metal work and all fittings.
- Clean and disinfect all toilet pans, urinals and drain gullies.
- Wash floors, splash backs, pedestals and seats, including under-sides.
- Replenish towels, soap, toilet paper and sanitary towels.
- Wash walls, doors, windows and light fittings
- Cleaning materials should include an efficient detergent/ germicide/odour-counteragent.
- The frequency of cleaning should be flexible, and extra cleaning-i.e., over and above the requirements specified earlier should be carried out on demand if an inspection reveals the need.

(Ref: Chapter 6.1, WHO guide to hygiene and sanitation by James BAILEY, 1977)

5.7 Vector Control in Airport

Passengers and crews must be protected against diseases spread by insects. Given the speed of present day aircraft, it would be possible to fly several times round the world within the incubation period of these diseases. This emphasizes the need for the rapid detection and destruction of the responsible vectors. The control of mosquitoes, flies, other insects of health significance and rodents is of particular importance at the airports.

5.7.1 Mosquito control

- Rooms used by the passengers and crews in transit at international airports should be effectively mosquito proofed as there is prevalence of mosquitoes and flies in Bangladesh. Care should be taken to screen all openings, including doors, windows, air ducts, floor drainage holes at the base of the walls and any other apertures. Measures should be taken daily to destroy any mosquitoes that might have gained entrance.
- Residual sprays containing an insecticide to which the local mosquitoes are susceptible should be used on walls and ceilings, particularly in sleeping areas. Spraying should be done at regular intervals.
- Protection against mosquitoes is often attained more completely and satisfactorily by destroying their breeding places or killing the insects in their larval stages by Mineral oils, Paris green or synthetic insecticide etc. To accomplish this, the entire area within the mosquito flight range of buildings used by crews and passengers should be brought under control by ditching, drainage, filling, and elimination of water containers, or by the application of larvicides.
- Mosquitoes are to be controlled by fogging spray of DDT, Linden, Malathion or OMS-33 outside the terminal building. Inside terminal building ULV spray is to be carried out without causing discomfort to passengers.
- *Aedes aegypti* mosquito is the vector of Dengue and yellow fever, present either inside the airport perimeter or within a zone of 400 meters outside the perimeter. To keep the area within the perimeter of an airport free from *Aedes aegypti* and other vectors in their larval and adult stages, it is necessary to maintain active antimosquito measures within a protective area extending for a distance of at least 400m outside the perimeter.
- Malaria is transmitted by *Anopheles* mosquitoes which is also prevalent in our country, need to be cared of. From a practical standpoint, airports and transit areas should be mosquito-proofed in the interest of the comfort, convenience and safety of air crews and passengers. So the periodic spraying of buildings particularly the interior of the sleeping quarters is highly desirable.

5.7.2 Flies Control

- Flies that may carry the germs of filth borne diseases are frequently responsible for the contamination of food supplies. They often breed in filth, manure, offal and decaying organic matter and on prepared food, in which the germs may multiply greatly particularly if food stands at room temperature for several hours.
- In addition to flies, insects such as ants, cockroaches etc thrive on organic matter; they may contaminate and cause considerable damage to food supplies. The measures needed to keep these insects under control are the observation of scrupulous cleanliness and the storage of food in proper containers, supplemented by the application of chemicals.

5.7.3 Control Measures

- The best method of controlling flies is to eliminate the natural breeding places combined with a scrupulous cleanliness of the airports.
- Spraying airport buildings by pyrethrins combined with other toxic agents
- Spraying inside airport buildings with residuals sprays containing DDT, HCH or other suitable insecticide recommended by WHO.
- In case of resistant strain of flies, good control may be obtained by using suspended cords treated with organ phosphorus compounds.
- It is important to dispose of organic wastes, including liquid waste containing organic matter, in such a way as to eliminate any possibility of fly breeding.
- Other breeding places like kitchen slops, decaying fruits, open septic tanks, human and animal excrement, or even lawn clippings to be given due importance.

5.8 Rodent (Rats) Control in Airport

- 5.8.1 History shows that the rats follow the arteries of commerce, and as more and more goods are moved by air they are increasingly likely to become internal air travellers. They do much damage, particularly in food storage premises. Rats often carry fleas as a Plague vector. To keep the airport free from filthy activities of rats, following preventive measures need to be taken:

5.8.2 Preventive Measures

- Rats harbourage, the places where rats can establish nests or find concealment to be eliminated.
- Proper storage of foodstuffs to be done so that they are denied access to any sort of nourishment.
- Rat proofing structures can keep them out of buildings altogether.
- Use of poisons can reduce rat populations.
- Improvement of general cleanliness and good housekeeping can successfully control rats.
- All refuses, debris and similar wastes should be removed frequently.
- All materials-food or otherwise should be stored above ground or floor level, stacked in orderly piles or in bins.
- DDT or some other suitable insecticide powder should be used to dust all suspected areas so as to destroy all rat fleas if available.
- Night personnel on duty in airports should close doors tightly so that the rats cannot passing through.
- A strong light shining down on the threshold may discourage rats from running through an open door.
- Outdoor accumulations of refuse should be removed as promptly as possible.
- Food or garbage stored out of doors should be kept in closed containers made of rat proof materials.

(Ref: WHO guide to hygiene and sanitation in aviation 2009 Chapter 10.2)

5.9 Inspection of airport facilities

Regular inspections by health authorities at intervals not exceeding one month are advisable, but the frequency may be varied according to the conditions found on inspection.

5.10 Cleaning of Public areas in airport

5.10.1 Public areas and room

- 5.10.1.1 Post hand-washing signs to encourage good hand-washing practices among all staff and guests.
- 5.10.1.2 Use disposable paper wipes for cleaning to avoid the possibility of cross-contamination.
- 5.10.1.3 Use the proper chemical sanitizing agent, following the manufacturer's instructions concerning contact time.
- 5.10.1.4 Frequently clean and sanitize handrails, handles, telephones and any other hand contact areas, elevators and landings in all passenger corridors.
- 5.10.1.5 Frequently clean and sanitize all public rooms.
- 5.10.1.6 Clean carpets using a steam cleaner that achieve a minimum temperature of 71°C unless the floor coverings are not heat tolerant (some carpets can be steamed only to 40 °C; otherwise shrinkage and colour runs may occur).
- 5.10.1.7 Frequently clean and sanitize garbage cans.
- 5.10.1.8 Clean and sanitize soft furnishings; steam clean if the items are heat tolerant.

5.10.2 Public restrooms

- 5.10.2.1 Post hand-washing signs to encourage good hand-washing practices among all staff and guests.
- 5.10.2.2 Frequently clean and sanitize door handles, toilet flushers, faucets, dryers, counters and any other hand contact areas.
- 5.10.2.3 Provide either an air dryer or disposable paper towels for hand-drying (only single-use cotton towels should be utilized).
- 5.10.2.4 Check levels of soap and paper towels.
- 5.10.2.5 Use disposable paper wipes for cleaning to avoid the possibility of cross-contamination.
- 5.10.2.6 Use the proper chemical sanitizing agent following the manufacturer's instructions concerning contact time.

5.10.3 Restaurants and lounges

- 5.10.3.1 Post hand-washing signs at each hand sink to encourage good hand-washing practices among all staff and guests.
- 5.10.3.2 Require staff to wash hands frequently.
- 5.10.3.3 Provide hand sanitizers to staff to complement good hand-washing practices.

- 5.10.3.4 Self-serve unpackaged items (e.g. peanuts, water) should not be available to guests.
- 5.10.3.5 Provide snacks on request, in small individual containers.
- 5.10.3.6 Frequently clean condiment containers that are served by staff (recommended to clean between each customer use).
- 5.10.3.7 Use disposable paper wipes for cleaning to avoid the possibility of cross contamination.
- 5.10.3.8 Clean and sanitize all tables and chairs with a detergent solution and sanitizer (with correct contact time) after each shift and after closing.

5.10.4 Spas and salons

- 5.10.4.1 Post hand-washing signs to encourage good hand-washing practices among all staff and guests.
- 5.10.4.2 Require staff to wash hands frequently.
- 5.10.4.3 Use disposable paper wipes for cleaning to avoid the possibility of cross-contamination.
- 5.10.4.4 Use the proper chemical sanitizing agent following the manufacturer's instructions concerning contact time.
- 5.10.4.5 As per routine practices, ensure that common-use tools and materials are cleaned with detergent and sanitized after each use (e.g. combs should be kept in sanitizing solution that is regularly refreshed).

5.10.5 Fitness centre

- 5.10.5.1 Post hand-washing signs to encourage good hand-washing practices among all staff and guests.
- 5.10.5.2 Require staff to wash hands frequently.
- 5.10.5.3 Use disposable paper wipes for cleaning to avoid the possibility of cross-contamination.
- 5.10.5.4 Use the proper chemical sanitizing agent following the manufacturer's contact time.
- 5.10.5.5 Frequently clean and sanitize all surfaces.
- 5.10.5.6 Post signs to remind users to wipe down equipment with provided sanitizing spray after use.
- 5.10.5.7 Clean and sanitize equipment at least once during each shift.

5.10.6 Games rooms

- 5.10.6.1 Post hand-washing signs to encourage good hand-washing practices among all staff and guests.
- 5.10.6.2 Require staff to wash hands frequently.
- 5.10.6.3 Use disposable paper wipes for cleaning to avoid the possibility of cross-contamination.
- 5.10.6.4 Use the proper chemical sanitizing agent following the manufacturer's instructions concerning contact time.
- 5.10.6.5 Frequently clean and sanitize all surfaces.
- 5.10.6.6 Clean and sanitize equipment at least once during each shift, paying special attention to control sticks, handles, knobs and buttons.

It is the responsibility of airport authority to provide a hygienic environment for passengers. Areas where food is prepared, stored and served, any surfaces commonly touched by people and washroom facilities, among others, should be kept free from contaminants that might compromise human health, even when there is no identified outbreak of disease.

Prevention or mitigation of disease transmission is the goal. Hygienic conditions also minimize the likelihood of infestation by rodents, as vectors of disease. (*WHO guide to hygiene and sanitation in aviation 2009, Annex-E*)

5.11 Core capacity requirements for designated Airports

As WHO member state the designated Hazrat Shahjalal International Airport is to develop core capacities as per Annex 1B of international Health Regulations (2005) within the stipulated timeframe given by WHO.

5.11.1 The capacities: At all times

- 5.11.1.1 To provide access to:
 - an appropriate medical service including diagnostic facilities located so as to allow the prompt assessment and care of ill travellers, and
 - adequate staff, equipment and premises;
- 5.11.1.2 To provide access to equipment and personnel for the transport of ill travellers to an appropriate medical facility;
- 5.11.1.3 To provide trained personnel for the inspection of conveyances;
- 5.11.1.4 To ensure a safe environment for travellers using point of entry facilities, including potable water supplies, eating establishments, flight catering

facilities, public washrooms, appropriate solid and liquid waste disposal services and other potential risk areas, by conducting inspection programmes, as appropriate; and

- 5.11.1.5 To provide as far as practicable a programme and trained personnel for the control of vectors and reservoirs in and near points of entry.

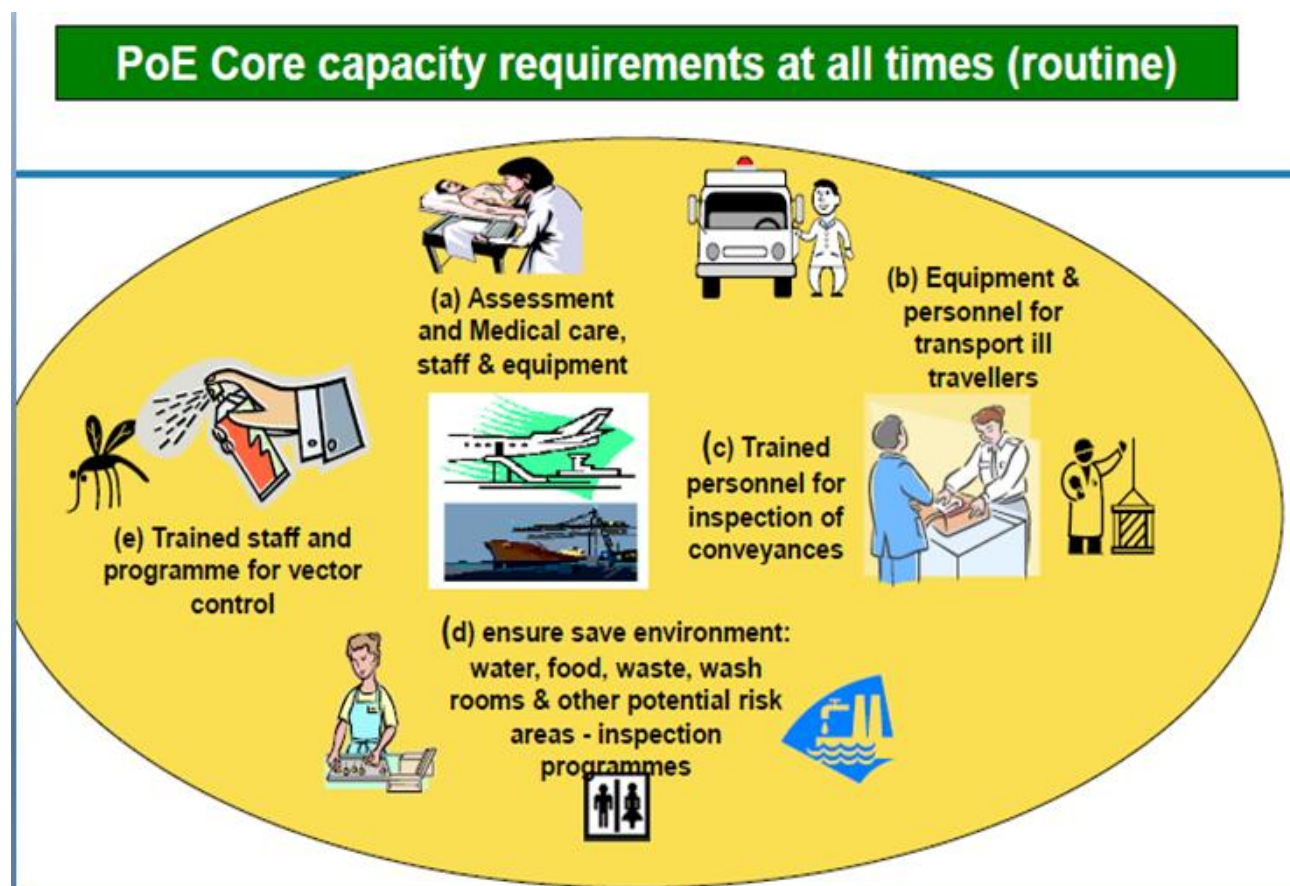


Figure: 5.1: PoE core capacity – At all times (routine)

5.11.2 : The capacities: During Public Health Emergency of International Concern (PHEIC)

The followings requirements are to be developed responding to events that may constitute a public health emergency of international concern

- to provide appropriate public health emergency response by establishing and maintaining a public health emergency contingency plan, including the nomination of a coordinator and contact points for relevant point of entry, public health and other agencies and services;

- to provide assessment of and care for affected travellers or animals by establishing arrangements with local medical and veterinary facilities for their isolation, treatment and other support services that may be required;
- to provide appropriate space, separate from other travellers, to interview suspect or affected persons;
- to provide for the assessment and, if required, quarantine of suspect travellers, preferably in facilities away from the point of entry;
- to apply recommended measures to disinsect, derat, disinfect, decontaminate or otherwise treat baggage, cargo, containers, conveyances, goods or postal parcels including, when appropriate, at locations specially designated and equipped for this purpose;
- to apply entry or exit controls for arriving and departing travellers; and
- to provide access to specially designated equipment, and to trained personnel with appropriate personal protection, for the transfer of travellers who may carry infection or contamination.

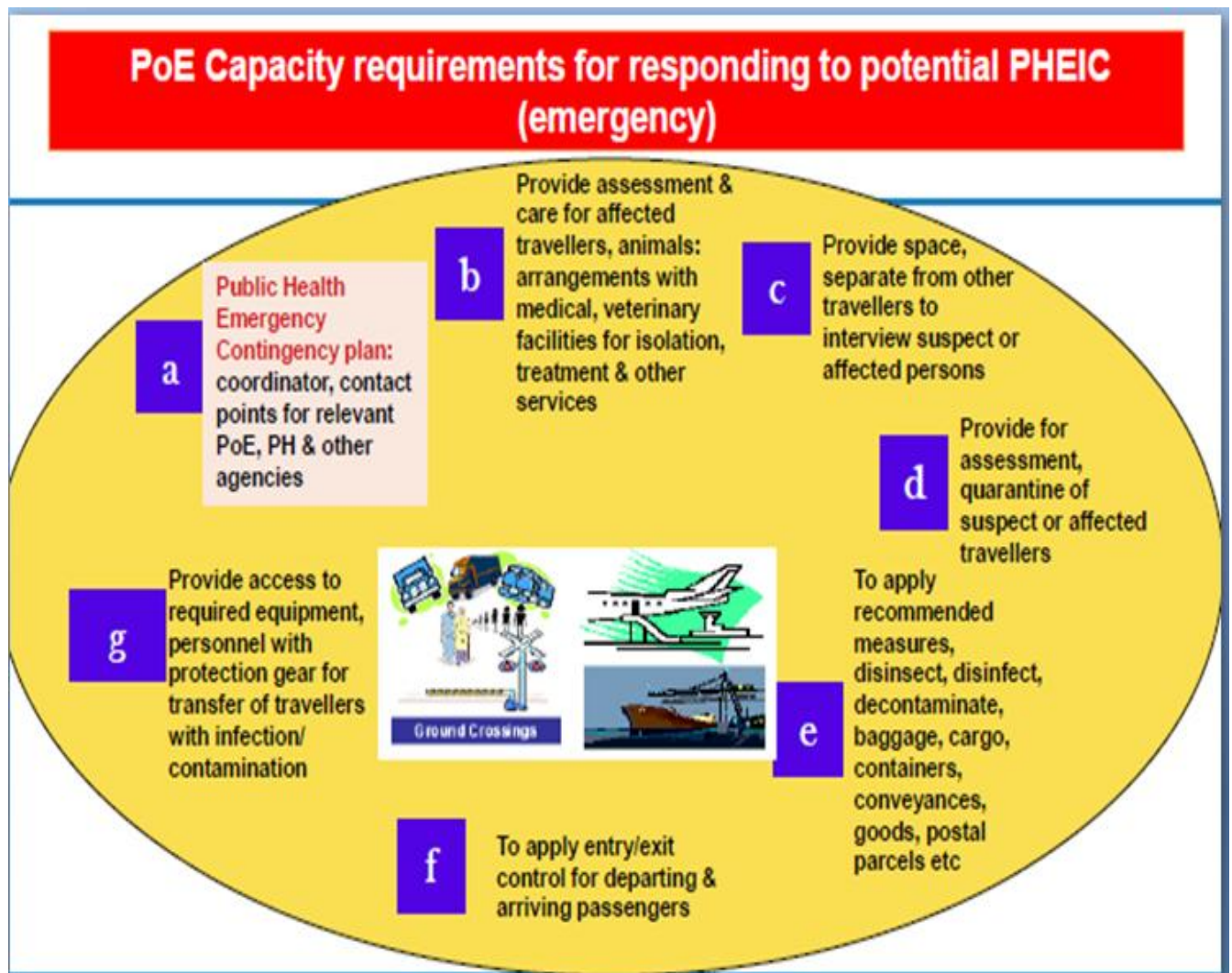


Figure 5.2: PoE core capacity during Public Health Emergency of International Concern.

(Ref: *International Health Regulations-2005, Annex 1B*)

CHAPTER 6

MEDICAL SUPPORT DURING AIRCRAFT ACCIDENT

6.1 Actions by medical services during aircraft accident on the airport

It shall be the responsibility of designated medical coordinator to supervise the medical services and to:

- 6.1.1 Verify the notification of mutual aid medical and ambulance services and their subsequent arrival at the rendezvous point or staging area;
- 6.1.2 Organize the necessary actions for triage, treatment of the casualties, and their eventual evacuation by appropriate means of transportation;
- 6.1.3 Control the flow of casualties and ensure, together with the transportation officer, the dispatch of the casualties to the designated hospitals by all available means of transportation.
- 6.1.4 Maintain an accurate list of the casualties including their names and their final disposition;
- 6.1.5 co-ordinate the transportation of the uninjured to the designated holding area with the aircraft operator concerned;
- 6.1.6 Provide medical evaluation of ambulatory and uninjured survivors;
- 6.1.7 Arrange for the replenishment of medical supplies, if necessary, and
- 6.1.8 Organize with the police, reception facilities for the dead.

6.2 Actions by designated hospitals

Each designated hospital is to appoint a coordinator responsible for the following:

- 6.2.1 Immediately provide and transport doctors and medical teams skilled in trauma care to the accident site upon notification of the emergency;
- 6.2.2 Provide medical care to the casualties when they arrive at the treatment area;
- 6.2.3 Ensure that adequate doctors and nurses, operating rooms, intensive care units, surgical teams, blood and blood volume expanders are available for emergency situations, including aircraft accidents.

(Ref: Doc 9137 Part 7, Chapter 4.1.6 & 4.1.7)

6.3 Actions by medical services during aircraft accident off the airport

- 6.3.1 Fire Service and Civil defence and Medical authorities normally will be responsible for organizing the medical response. However, the medical response from the on-airport medical service should also be applicable to mass casualty accidents occurring off the airport.

6.3.2 According to the mutual aid emergency agreement with the surrounding hospitals, the airport authority shall provide its medical equipment, supplies (i.e. first aid equipment, stretchers, body bags, mobile shelters, etc.) and assistance of first-aid personnel at the accident site.

6.4 Actions by designated hospitals

6.4.1 The designated hospitals are to ensure that adequate doctors, nurses, and operating room, intensive care, and surgical teams are available for emergency situations of aircraft accidents.

6.4.2 Provide medical care to the injured when they arrive.

(Ref: Doc 9137 Part 7, Chapter 4.2.7 & 4.2.8)

6.5 Provisions of medical services during airport emergency:

6.5.1 The purpose of medical services is to provide triage, first aid and medical care in order to:

- save as many lives as possible by locating and stabilizing the most seriously injured, whose lives may be in danger without immediate treatment;
- provide comfort to the less seriously injured and to administer first aid
- transport casualties to the proper medical care facility.

6.5.2 It is essential that provision of medical services such as triage, stabilization, first aid, medical care, and the transporting of the injured to hospital(s) be carried out in the most expeditious manner possible. To this end, well organized medical resources (personnel, equipment and medical supplies) should be available at the accident site in the shortest possible time. The medical aspects of the emergency plan should be integrated with local hospitals as agreed upon in the Memorandum of understanding (MOU).

6.5.3 The medical coordinator of the airport crisis management team should assume control of the emergency medical operations at the accident site. In some cases, it may be necessary to appoint an interim medical coordinator, to be relieved when the designated medical coordinator arrives on site. The interim medical coordinator can be designated from the airport rescue and fire fighting personnel.

6.5.4 Medical and ambulance services may be an integral part of the airport services, particularly whenever an ambulance service is a part of the airport

rescue and fire fighting service.

Whenever medical and ambulance services are not available at the airport, prearrangements with local, private, public or military medical and ambulance services should be made. The plan has to ensure the dispatch of a satisfactory assignment of personnel, equipment and medical supplies. To ensure a rapid response, the plan can include arrangements for land, sea and airborne transportation of medical services to the scene, and subsequent transportation of persons requiring immediate medical care. Prearrangements are necessary for the availability of doctors and other medical personnel for all airport emergencies. The plan should list a sufficient number of doctors to offset any absences at the time an emergency occurs.

6.5.5 The responsibilities of designated medical transportation officer would include:

- alerting hospitals and medical personnel of the emergency;
- directing transportation of casualties to appropriate hospitals suitable for treatment of the particular injury;
- accounting for casualties by recording the route of transportation, destination hospital, and casualty's name and extent of injuries.
- advising hospitals when casualties are en route; and
- maintaining contact with hospitals, medical transportation, the senior medical officer of the hospital, on-scene commander and the command post.

6.6 Hospitals Preparedness

6.6.1 Participating hospitals should have contingency emergency plans to provide for mobilization if necessary of medical teams to the accident site in the shortest possible time. Availability of qualified personnel and adequate facilities at the hospitals to deal with airport emergency situations is vital. In this respect, it is mandatory to establish in advance an accurate list of surrounding hospitals. They should be classified according to their effective receiving capacity and specialized features, such as neurosurgical ability or burn treatment. In most circumstances it is unwise to deplete the most proximate hospital to the accident site of essential medical and nursing personnel.

6.6.2 The distance from the airport and the ability to receive helicopters should be considered. Reliable two-way communication shall be provided between the

hospitals, ambulances and helicopters. The alert of an aircraft accident should be made to a single medical facility which then alerts all other facilities according to a local medical communications network.

(Ref: Doc 9137 Part 7, Chapter 3.6 & 3.7)

CHAPTER 7

TRIAGE AND MEDICAL CARE

7.1 Immediate need for care of injured in aircraft accidents

In the aftermath of an aircraft accident, many lives may be lost and many injuries aggravated if immediate medical attention is not provided by trained rescue personnel. Survivors should be triaged, given available emergency medical aid as required, and then promptly evacuated to appropriate medical facilities.

7.2 Triage principles (all emergencies)

7.2.1 Triage is the sorting and classification of casualties to determine the order of priority for treatment and transportation.

7.2.2 Casualties should be classified into four categories as follows :

Priority I: Immediate care

Priority II: Delayed care

Priority III: Minor care

Priority IV: Deceased

7.2.3 The first qualified, medically trained First aid crew and RFF persons who arrive at the site must immediately begin initial triage. This person(s) will continue performing triage until relieved by a more qualified person or the designated airport triage officer. Victims should be moved from the triage area to the appropriate care holding areas before definitive treatment is rendered. Casualties should be stabilized at the care holding areas and then transported to the hospital for further management.

7.2.4 Effort should be made to ensure that Priority I casualties are treated first and receive ambulance transportation priority when stabilized. This is the responsibility of the triage officer.

7.2.5 Triage is most efficiently accomplished in place. However, the conditions at an accident scene may demand the immediate movement of casualties before triage can be safely accomplished. In that case, the casualties should be moved the shortest distance possible, well away from fire fighting operations, and upwind and uphill from the scene.

7.2.6 Triage of casualties should include the use of casualty identification tags to aid in the sorting of the injured and their transportation to a designated hospital.

7.3 Standardized casualty identification tags and their use

7.3.1 Need for standardized tags - Casualty identification tags should be standardized through colour coding and symbols to make the tag as simple as possible. Tags help to expedite the treatment of mass casualties in a triage situation and thus permit more rapid evacuation of the injured to medical facilities.

7.3.2 Tag design - Standardized tags should be designed to require only minimal information to be entered thereon, be usable under adverse weather conditions, and be water resistant. In this tag, numerals and symbols indicate the medical priority classification of casualties as follows:

Priority I or **immediate care:** RED tag;



Roman numeral I; rabbit symbol

Priority II or **delayed care:** YELLOW tag;



Roman numeral II; turtle symbol

Priority III or **minor care:** GREEN tag;



Roman numeral III; Ambulance with X symbol

Priority IV or **deceased:** BLACK tag

7.3.3 Where tags are unavailable, casualties may be classified by using Roman numerals on adhesive tape or by placing marks directly on the forehead or on other exposed skin areas to indicate priority and/or treatment needs. Where marking pens are unavailable, lipstick can be used.

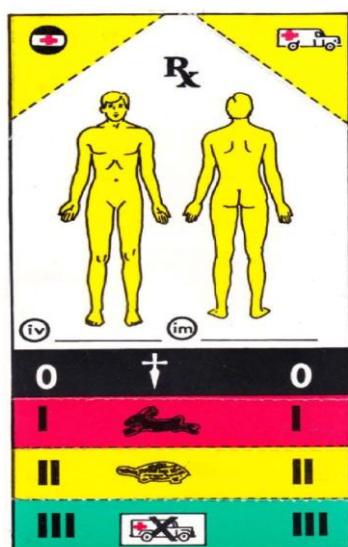
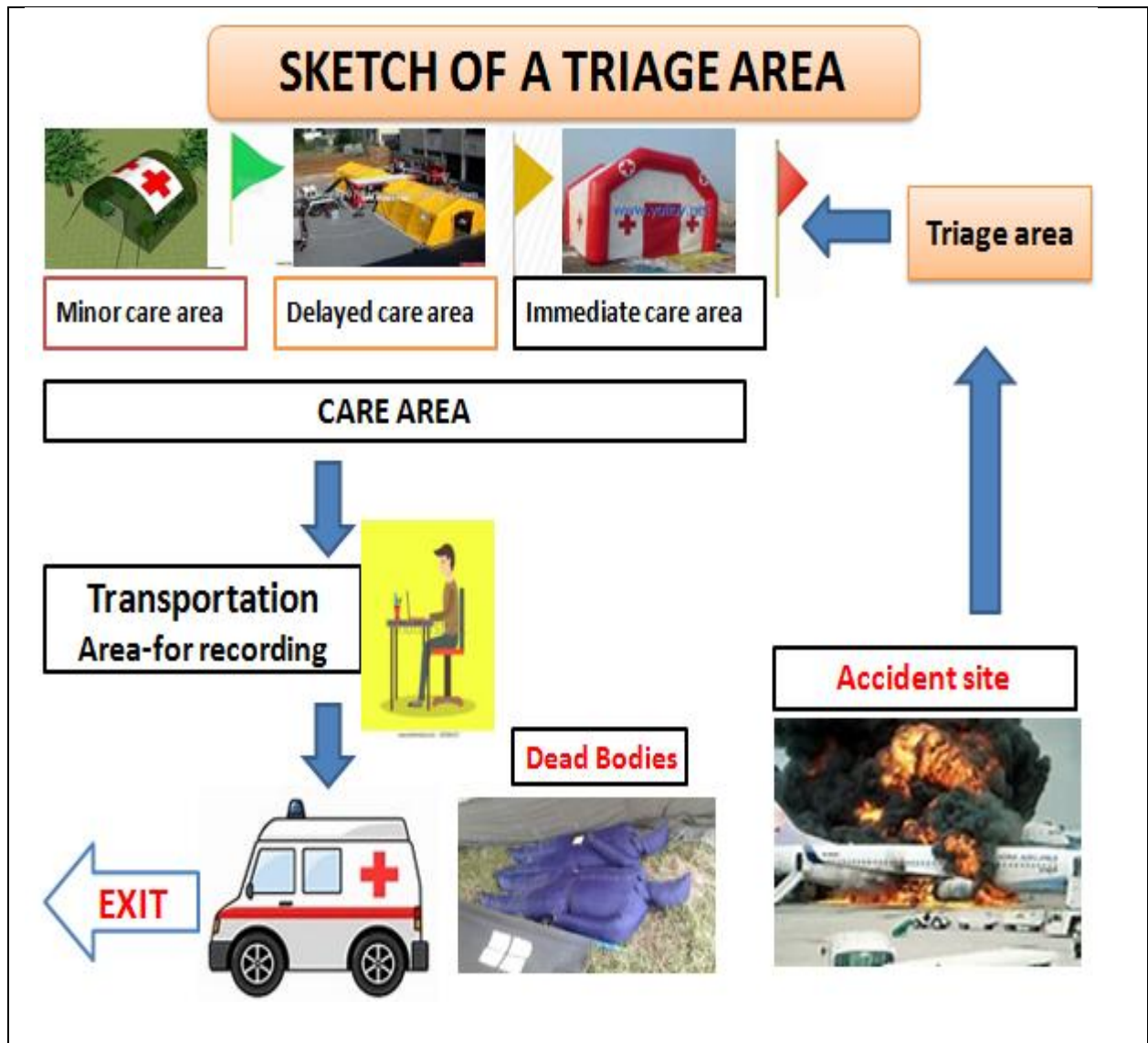


Figure: Casualty identification tags



7.4 Care principles

- 7.4.1 Stabilization of the seriously injured should be accomplished at the accident site. The immediate transportation of the seriously injured before stabilization should be avoided.
- 7.4.2 In accidents occurring on or adjacent to the airport, rescue and fire fighting personnel are generally the first emergency personnel on the scene. These personnel must be aware that it is imperative that seriously injured casualties be located and stabilized as quickly as possible. In cases where fire control or prevention does not require the efforts of all rescue and fire fighting personnel, available persons should immediately commence casualty stabilization under the direction of the most qualified trauma-trained individual on the scene. First response rescue vehicles should carry initial supplies of casualty-care equipment, including artificial airways, compresses, bandages, oxygen and other related equipment used for the stabilization of smoke inhalation casualties and severe trauma. Sufficient oxygen should be available for use on rescue and fire fighting personnel. However, oxygen should not be used in areas where fuel spills or fuel soaked clothing is present due to the explosion hazard.
- 6.4.3 Actions taken during the first few minutes of medical treatment should stabilize the casualties until more qualified medical care is available. When specialized trauma teams arrive, more sophisticated medical care (i.e. cardiopulmonary resuscitation, etc.) will be provided.
- 6.4.4 The triage procedure and subsequent medical care should be placed under the command of one authority, the designated medical coordinator, upon this officer's arrival. Prior to this, the command of triage should be assumed by the individual designated by the commanding rescue and fire fighting chief and should continue until relieved by the predesignated medical coordinator.
- 7.4.5 The medical coordinator has responsibility for all medical aspects of the incident and should report directly to the on-scene commander. The medical coordinator's primary function will be administrative, not as a participant of the medical team treating the injured.
- 7.4.6 As a means to easily identify and distinguish the medical coordinator, a white hard hat and highly visible white coat or vest should be worn, with "MEDICAL CO-ORDINATOR" displayed front and back in reflecting red letter

7.4.7 Care of Priority I (Immediate care) casualties This type of casualty includes:

- (1) major haemorrhages;
- (2) severe smoke inhalation;
- (3) asphyxiating thoracic and cervico maxillofacial injuries;
- (4) cranial traumata with coma and rapidly progressive shock;
- (5) compound fractures;
- (6) extensive burns (more than 30 per cent);
- (7) crush injuries;
- (8) any type of shock and
- (9) spinal cord injuries

The following actions are recommended:

- (1) first aid (clearing of the wind pipe, stopping of haemorrhages by means of haemostatic pads, and positioning the casualty in the recovery position;
- (2) resuscitation;
- (3) oxygen administration, except in areas of fuel or fuel soaked clothing and
- (4) placing the injured under shelter pending transportation.

7.4.8 Care of Priority II (Delayed care) casualties. This type of casualty includes:

- (1) non-asphyxiating thoracic trauma;
- (2) closed fractures of the extremities;
- (3) limited burns (less than 30 per cent);
- (4) cranial trauma without coma or shock; and
- (5) injuries to soft parts.

Note: Care of casualties sustaining injuries which do not need immediate emergency medical treatment to sustain life can be delayed until Priority I casualties have been stabilized. Transportation of Priority II casualties will be performed following minimum on-site care.

7.4.9 Care of Priority III (Minor care) casualties:

(1) This type of casualty includes minor injuries only. Certain accidents/incidents will occur where passengers have either minor or no injuries, or appear not to be injured. Because these casualties can interfere with other priorities and operations, it is important that they be transported from the accident/incident site to the designated holding area where they should be re-examined.

(2) It is important that provisions be made for the care, comfort, and identification of Priority III casualties. This should be provided through airport operations, the aircraft operator (where involved), or international relief organization (Red Cross, etc.). All such minor injured casualties will be taken for treatment to holding area designated by airport authority.

(9) The holding area is well equipped with cooling systems, electric light, water, telephones and toilet facilities. This telephone may be used to contact the Emergency Operation Centre and will be under the control of appropriate CAAB staff. Site of crash and other information and instructions may be related via this telephone. All aircraft operator personnel and airport tenants should know the location of such designated facilities.

7.5 Control of flow of the injured

7.5.1 The injured should pass through four areas which should be carefully located and easily identified.

- **Collection area** — location where initial collection of the seriously injured from the debris is accomplished. Need for the establishment of this area will be dependent upon the type of accident and the circumstances surrounding the accident site. The casualties are transferred from the rescue and fire fighting personnel to medical services personnel at this point. In most cases, however, this transfer will occur at the triage area.
- **Care area** — This area will be set at the scene of the crash. This area should be subdivided into three subareas according to the three categories of injured, i.e.
 - Immediate care area (Priority I),
 - Delayed care area (Priority II),
 - Minor care area (Priority III).
- Care areas can be colour coded for identification purposes (Red — Immediate, Yellow — Delayed, and Green — Minor). The use of coloured traffic cones, flags, etc., may be used. From here Priority III casualties are to be transferred to designated holding area for treatment.
- **Triage area** — The triage area should be located at least 90 m upwind of the accident site to avoid possible exposure to fire and smoke

- **Transportation area** — A transportation area should be located between the care area (site of accident) and the egress road. Here the first aid crew in cooperation with other medical staff will do identification, registration and labeling injured passengers, who are entered into a register. The Medical Officer will also control the flow of ambulance and ensure that the ambulance drivers are given the correct destination. For HSIA all personnel from a crashed aircraft are to be sent to the Dhaka Medical College Hospital for final checkup and insurance formalities.

7.5.2 Mobile facilities for the stabilization and treatment of Priorities I and II casualties. Airport health department should have such facilities which consist of:

- Conventional or resuscitation ambulances. A resuscitation ambulance is an ideal shelter for Priority I casualty. The casualty may be treated there and subsequently conveyed directly to a hospital;
- **Red tents** are designated to accommodate serious or extremely urgent cases (Priority I casualties). These facilities, with provisions for integrated A/C and lighting, can be transported to the scene together with all the necessary medical equipment mentioned under Airport Medical Services.
- Yellow tents are used to accommodate Priority II casualties. Transportable mobile hospitals or ambulances can be used for stabilization treatment for all casualties.

(Ref: ICAO Annex 14, Doc 9137, Part 7 Chapter 9)



Coloured flags / Traffic cones



Red Tent



Yellow Tent

CHAPTER 8

CARE OF AMBULATORY SURVIVORS

8.1 Responsibilities of airports/airlines/Other agencies:

- 8.1.1 Activate already selected holding area for the particular emergency occurring on the airport.
- 8.1.2 Arrange transportation from the accident site to the designated holding area of airport.
- 8.1.3 To have doctors and nurses at the holding area
- 8.1.4 Furnish a full passenger / crew manifest for accountability purposes;
- 8.1.5 Interview the uninjured and record their names, addresses, phone numbers, and where they can be reached for the next 72 hours;
- 8.1.6 Notify relatives or next of kin, if necessary;
- 8.1.7 Prevent interference by unauthorized persons.
- 8.2 Airport authority will arrange buses, Microbuses for immediate transportation of the “walking injured”/ambulatory passengers from the accident site to the designated holding area. This plan should be implemented automatically following notification of the emergency. A nurse or first aid crew should accompany these people to the holding area. Each and every passenger and crew member should be examined for nervous traumatism (shock) and smoke inhalation. Cold or inclement weather may require additional provisions for their protection and comfort.
- 8.3 Where the aircraft accident occurred in water or a marshy area, these people may be wet and uncomfortable. These problems should be anticipated by having supplies of clothing, footwear, and blankets readily available. It may be necessary to establish a special holding area which can supply warmth and clothing to prevent hypothermia, and be used for examination purposes, before these persons are transported to the designated ambulatory holding area.
- 8.4 International relief agencies and military establishments may be requested for many of the aforementioned requisites.

(Ref: Doc 9137 Part 7, Chapter 10)

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CHAPTER 9

CARE OF FATALITIES

9.1 Care of Fatalities:

Evidence must be preserved when caring for the fatalities at an aircraft accident site. It is important to realize that an undisturbed site will produce the most reliable evidence for determining cause and/or future corrective action that may help prevent a similar accident.

9.2 Whenever possible, the wreckage should remain undisturbed until the arrival of the appropriate accident investigation authority.

9.3 If bodies have to be removed identify the locations where they were.

9.4 The tag number to be noted on the signage left on site so that it will be possible to know what body was at any location on the accident site.

9.5 Bags to gather passengers personal effects should be available.

9.6 Areas immediately surrounding the location of the fatality should be completely secured. Areas in which a large number of fatalities or dismembered bodies are located should be left undisturbed until the arrival of the forensic doctor and the aircraft accident investigator or a designee.

9.7 An adequate supply of disposable plastic gloves and leather gloves should be available for stretcher bearers removing the remains of the fatalities. All gloves should be burned following use in gathering body parts.

9.8 If it becomes necessary to move bodies or parts of the wreckage, photographs should be taken showing the relative position of bodies and parts within the wreckage and a sketch of their respective positions should be made prior to removal.. Special precautions should be taken to avoid disturbing anything in the cockpit area.

9.9 The fatalities should be extricated and personal effects removed from the wreckage prior to the arrival of the forensic doctor or appropriate authority only to prevent their destruction by fire or for other similar compelling reasons.

9.10 Body identification and determination of cause of death is conducted with the concurrence of the authority designated for this duty. This operation is generally conducted with the cooperation of forensic teams and other specialists.

9.11 After identification has been made of the fatality, efforts to contact next of kin should commence. Agencies such as aircraft operators, public service organizations (i.e. international relief agencies and police), or clergy should be utilized.

9.12 The accident investigation team generally has the authority and the need to require autopsies and toxicological analyses of flight crew members, and in special cases, passengers. The need for these tests should be determined prior to the release of bodies.

9.13 Evidence of Photographs

9.13.1 If it becomes necessary to move bodies or parts of the wreckage, photographs should be taken showing the relative position of the bodies and parts within the wreckage and a sketch of their respective positions should be made prior to removal.

9.13.2 Special precaution should be taken to avoid disturbing anything in the cockpit area.

9.14 Body Bags

Body bags are normally available from major local suppliers of caskets, funeral directors and their equipment and supply firms, and from nearby military facilities.

Stock of body bags at each airport is desirable.



9.15 Establishment of Temporary Morgue



- 9.15.1 Accidents which result in a large number of fatalities will overload normal morgue facilities.
- 9.15.2 In areas where delay or temperature may contribute to the deterioration of tissue, refrigerated storage should be available.
- 9.15.3 It should be located in an isolated area where relatives or the general public have access

9.16 Autopsies

- 9.16.1 Accident investigation team generally has the authority and the need to require autopsies & toxicological analysis of flight crew members, and in special cases, passengers.
- 9.16.2 These tests should be done prior to the release of dead bodies.
- 9.16.3 The Forensic officer in charge shall wear a dark brown hard hat and vest or other apparels as approved by authority with “FORENSIC CHIEF” displayed front and back in distinctive lettering.

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CHAPTER 10

DUTIES AND RESPONSIBILITIES OF FIRST AID CREW AND RESCUE FIRE FIGHTERS

10.1 Role of Rescue Fire Fighters



Firefighters at the scene of a crashed aircraft.

- In accidents occurring on or adjacent to the airport, rescue fire fighter (RFF) personnel are generally the first emergency personnel available on the scene. Their responsibility is to locate and stabilize the seriously injured casualties as quickly as possible as they are trained on first aids.
- The first few minutes of medical treatment is very important to stabilize the casualties until more qualified medical care is available.
- More sophisticated cares will be provided when more qualified medical staff will arrive on the scene.
- Qualified in trauma trained individual will be required on to the scene to give the direction to RFF personnel.

10.2 Fire Trucks and First Aid Equipment

First response rescue vehicle should carry initial supplies of casualty-care equipment, including compresses, bandages, oxygen and other related equipment used for the stabilization of smoke inhalation casualties and severe trauma patients.



10.3 General Emergency Supplies and Equipment

- Triage labels / cas identification tags.....500
- Immobilizing mattresses for backbone fracture cases.....10
- Splints of various types 50
- First aid kits (each containing 10 tags, haemostatic pads, tourniquets, scissors, burn packs, respiratory tubes, dressings)50
- Manual or mechanical respirators 2 or 3
- Suction devices 2 or 3
- Plastic bags or coffins300 -500

10.4 Med Crash Equipment:

- Two Canopies with covers (1xred tent, 1xyellow tent)
- Large ground sheets
- 2 x collapsible tables, bags with towels.
- Blankets.
- Two portable basins and stands.
- Modified stretchers for mini buses and buses.
- Trailer full of medical equipment.

10.5 SATO to detail manpower:

- SATO to detail FFs for loading and off- loading of equipments on to the trucks
- Erect canopies and then Work as stretcher bearers

10.6 First aid and casualty clearance

- Care area will be set up at the site of crash (Triage Area)
- Casualties to be transported to hospital or holding area
- All medical personnel will proceed directly to the accident site for rescue casualties

10.7 Rendezvous Point

- Location – It is to be pre-designated
- Assembly – All medical and allied personnel, ambulances and other vehicles are assembled here before deployment.
- Responsibilities – Security supervisor will supervise and give directions of personnel, ambulances and other vehicles for the crash site.

10.8 System of Notification

- Airport Telephone Operator will notify the designated hospitals to provide sufficient doctors and nurses and remain standby to receive casualties.
- An inventory of hospitals in and around the airport to be maintained and to be notified during occurrence.
- Necessary MOU is to be done with the near by Hospitals
- Hospitals authorities in turn to be alerted by the hospital staff who receive the emergency call.

10.9 Off – Shore Aircraft Crash

- Medical arrangement will remain the same except the canopies to be erected, if situation so demands
- The medical officer in charge will request on –scene – commander if additional personnel or equipment is necessary

10.10 Debriefing

- As soon as possible after the emergency all participants in the fire fighting and rescue operation should be debriefed.
- Their observations to be recorded by the proper authorities.
- Sketches, diagrams, photographs, movie films, tape and video recording made on the accident site as well as appropriate details on the tagging of bodies parts removed from their positions are invaluable tools for the investigators.

10.11 AMBULANCE SERVICES

Airport Ambulances are to be of resuscitative type and with air condition system

10.11.1 The Ambulance equipment has two components:

- The first part is the basic list of emergency medical equipment for all ambulances.
- The second part of the list is the additional emergency equipment necessary for EMT(emergency medical technicians) and paramedic services.

10.11.2 Basic Life Support Equipment:

- Ventilation and airway equipment,
- heart monitoring and defibrillation,
- immobilization devices, bandages,
- communication devices,

- miscellaneous medical equipment such as a sphygmomanometer with pediatric, adult, and plus-sized cuffs,
- a stethoscope,
- thermometers,
- cold packs, blankets,
- transport chairs, and
- lubricant are required.
- Non-latex infection control like gloves, facemasks, gowns, and disinfectant solution for equipment are required.
- Injury prevention equipment inside an ambulance should include
 - * seatbelts,
 - * a fire extinguisher, and
 - * traffic signaling devices.

10.11.3 The Advanced Life Support Equipment:

- All the above items, including
- advanced airway and ventilation equipment,
- vascular access equipment,
- pre-loaded medications for cardiac conditions, allergies, epilepsy, and pain-killers.
- It can include other and more extensive drugs and equipment depending on individual medical authority's recommendation.

10.11.4 Optional equipment includes:

- nebulizers and glucose meters, along with certain pediatric and infant equipment, respirators, and
- automatic blood pressure devices.

The list also includes many optional items not considered medical equipment and supplies. These items include:

- hammers,
- shovels,
- cellular phones,
- floodlights,
- hard hats,
- ropes,
- chains, and
- even an electric generator.

CHAPTER 11

AIRPORT MEDICAL SERVICES

11.1 General

- 11.1.1 Adequate medical services and supplies are to be made available at the airport health department. The medical coordinator (Airport Health Officer) is responsible for the provision and checking of medical supplies.
- 11.1.2 Medical authority is to provide sufficient medical supplies to deal with routine medical emergencies which normally occur at the airport (on-the-job injuries, heart attacks, etc.) plus possible aircraft accidents.
- 11.1.3 Emergency medical training: All personnel assigned to rescue duties especially the personnel of airport health department, listed personnel from airport employees and First aid crew of Civil Aviation Authority, Bangladesh should be given first aid and CPR (cardiopulmonary resuscitation) training.
- 11.1.4 Rescue and fire fighting personnel should have the ability to stabilize seriously injured casualties. At least two full-time members per shift of the airport rescue and fire fighting service or other on-airport personnel should be trained to an emergency medical treatment level. It is recommended that as many rescue and fire fighting personnel as is practicable receive training to meet minimum standards of medical proficiency and preferably to the level of personnel highly qualified in first aid or the equivalent. Accordingly, they should have sufficient medical equipment at their immediate disposal to initiate stabilization until full medical services are available at the site or until transportation of casualties to adequate medical facilities is provided.
- 11.1.5 Airport rescue and fire fighting personnel should be trained in CPR (cardiopulmonary resuscitation) by the appropriate medical authority. Periodic exercises and drills in CPR techniques are mandatory to maintain proficiency.
- 11.1.6 Airports may enlist volunteers from airport employees other than rescue and fire fighting personnel to provide an immediate response to assist casualties resulting from emergencies. Volunteers should be trained by accredited agencies in first aid and rescue response duties. In case of an emergency, they should initially be under the supervision of the first commander at the scene, i.e. the station fire officer, until the arrival of the medical coordinator.

- 11.1.7 Emergency medical supplies and equipment: The airport health authorities should arrange to have sufficient medical supplies, available on or in the vicinity of the airport, to treat the passenger and crew.
- 11.1.8 The airport should have available stretchers, blankets, backboards and/or immobilizing mattresses, preferably stored on a suitable vehicle which can be transported to the accident site. Blankets are needed to alleviate casualties' exposure to shock and possible adverse weather conditions. Since trauma victims in an aircraft accident sometimes sustain severe spinal injuries, backboards and cervical collars should be used when removing such casualties from the aircraft in order to minimize the possibility of further spinal injury. The backboards should be of a type designed to fit through access ways and aisles of commercial and business aircraft. They should have restraining straps available so that the patient can be secured to the board.
- 11.1.9 Sufficient emergency oxygen and respiratory equipment should be available to treat smoke inhalation victims.
- 11.1.10 Since the majority of non-accident related medical emergencies at airports involve coronary difficulties, advanced life support systems should be readily available.
- 11.1.11 Mobile emergency hospitals or inflatable tents can be used for on-site treatment of immediate care (Priority I — Red) and delayed care (Priority II — Yellow) casualties. These units should be readily available for rapid response. The casualties can be treated at the scene, stabilized and be available for transportation to the appropriate hospital.
- 11.1.12 A resuscitation type ambulance can be used as an ideal shelter for an immediate care (Priority I — Red) casualty.
- 11.1.13 To cope up with an emergency involving a large aircraft, it is recommended that the general emergency medical supplies and equipment described in the following list be available at the airport. If operations for smaller aircraft are planned for the specified medical supplies and equipment should be adjusted to comply with reasonable requirements.

11.1.14 List of General emergency supplies and equipment

Quantity	Description	Remarks
500	Triage labels	
100	Stretchers, adaptable to the most commonly used ambulances	
10	Immobilizing mattresses for backbone fractures	
50	Splints, either conventional or inflatable, for the various types of fractures	
50	First-aid kits, each containing a set of 10 tags, haemostatic pads, tourniquets , scissors, dressings, sterile burn packs	
20	Arrangement of oxygen for about 20 casualties.	
2-3	Electrocardiographic apparatuses	
2-3	Suction devices	
2-3	Analgesic Injection	
10	Intravenous infusion packs with giving sets	
300-500	Plastic bags or coffins for the deceased	

11.1.15Emergency medical transportation facilities: The dispatch of casualties to hospitals from the accident site should take into consideration the hospital(s) medical personnel on staff, medical specialties and beds readily available. Ambulance available with Airport Health Department shall be utilized as on-call ambulance for routine medical emergencies. Written agreements with off-airport based ambulances should be prepared to provide for emergency transportation services.

11.1.16 Airborne transportation equipment: Helicopters and fixed wing aircraft, should be considered for emergency evacuation or for transport of medical services and equipment from hospitals to the accident site.

11.1.17 Since it may be necessary to transport many casualties to appropriate off airport medical facilities, ambulances arriving at the scene should report to the rendezvous point (In case of HSIA, area between cargo complex and hanger gate) and then to the designated transportation officer. This officer will be responsible for ascertaining the number of casualties who will need transportation to the designated medical facilities.

11.2 Airport medical care facilities / first-aid room

- There are many general factors which influence the need for an airport first-aid room or an airport medical facility.
- Generally, it may be recommended that an airport medical care facility be available when the airport employee's number 1000 or more and that a first-aid room be available at every airport. The airport medical care or first-aid room personnel and facilities should be integrated with the airport emergency plan.
- Location of airport medical care facilities: The facilities should be readily accessible to the airport terminal building, to the general public and to emergency transportation equipment (i.e. ambulances, helicopters, etc.). Site selection should avoid the problem of having to move injured persons through congested areas of the airport terminal building, while providing access to the facility by emergency vehicles by a route that as far as is feasible can bypass normal public access roadways to and from the airport. This suggests that the medical care facility be located so that access can be gained from the air side of the airport terminal building. It is justifiable to be located near the egress road for easy transportation of sick person.

11.2.1 It is recommended that during the principal hours of airport activity at least one person trained to deal with the following be on duty:

- cardiopulmonary resuscitation (CPR);
- bleeding from a traumatic source;
- Choking Patients;
- fractures and splinting;
- burns;
- shock;
- emergency childbirth and immediate care of newborn, including premature;
- common medical conditions which may influence the outcome of injury (allergies, high blood pressure, diabetes, pace-maker, etc.);
- basic measures for treatment and protection subsequent to spills or leaks of radioactive materials, toxic, or poisonous substances;
- treatment of emotionally disturbed persons;
- recognition and first aid for poisons, bites, and anaphylactic shock; and
- transportation techniques for injured persons.

11.2.2 The airport medical care facility should be adequately equipped to handle cardiac arrest and other types of injuries and illnesses.

11.2.3 Sufficient emergency oxygen and respiratory equipment should be available to treat smoke inhalation victims.

11.2.4 Since the majority of non-accident related medical emergencies at airports involve coronary problems, advance life support systems including oxygen, oxygen regulators, and other elements for cardiopulmonary care should be readily available. In addition, first-aid kits (containing drugs, a wide selection of bandages and splints, blood transfusion equipment, burn and maternity kits), should be available.

11.3 Airport without a medical care Facility

11.3.1 At airports without a medical care facility / first aid room, the airport authority should make arrangements to have available sufficient personnel trained in advanced first aid to cover all active hours of airport operation. Equipment for first aid work at these airports should consist at least an emergency medical care bag. This bag should be readily available to be carried on a designated airport emergency vehicle and should contain at least:

- one plastic sheet (1.80 m × 1.80 m);
- seven hemostats (one package of three, one package of four);
- two field dressings (one 45 cm × 56 cm, one 56 cm × 91 cm);
- ten abdominal pads (five packages of two);
- forty 10 cm × 10 cm gauze pads (four packages of ten);
- two tourniquets;
- one artificial airway;
- three disposable airways (one each No. 2, No. 4, No. 5);
- one bulb syringe with two catheters (No. 12, No. 14 FR);
- two large bandage scissors (medical scissor);
- twenty disposable syringes with No. 25 GA 1.6 cm needle;
- twelve alcohol sponge packages;
- four rolls of gauze bandage (two 7.5 cm, two 5 cm);
- two rolls of adhesive tape;
- four Vaseline gauze dressings (15 cm × 91 cm);
- box of 100 band-aids;

- one blood pressure cuff and gauge;
- two clipboards (22 cm × 28 cm);
- six pencils;
- sufficient supply of casualty identification tags;
- one set of inflatable splints;
- one resuscitate tube
- one short spine board
- one flashlight;
- two cervical collars;
- one disposable obstetric kit; and
- one immobilizing mattress.

(Ref: Doc 9137 Part 7)

APPENDIX 1

INSPECTION CHECKLIST FOR EVALUATING THE SANITATION STATUS AND IMPLEMENTATION OF INTERNATIONAL HEALTH REGULATIONS (IHR) TO AIRPORTS

- Refs: A. International Health Regulations (IHR-2005), Annex-1.B
B. ICAO Annex 9 chapter 8. E
C. ICAO Annex 14 Doc 9137
D. WHO guide to hygiene and sanitation in Aviation, 3rd edition, 2009)

Name of the Airport :	
Inspection date:	
Name of the Inspector:	
Regulatory Authority :	

SI NO	DETAILS	Yes	No	NA	Remarks
Required Core Capacities at Point of Entry (PoE) - at all times					
1	Does designated airport provide appropriate medical services including diagnostic facilities for prompt assessment \and care of ill travellers?				
2	Does it provide adequate staff, equipment and premise for care of the affected passengers?				
3	Does it provide access to equipment and personnel for the transport of ill travellers to the designated hospital / medical facilities?				
4	Does it provide trained personnel for inspection of Aircraft?				
5	Does it ensure a safe environment for travellers using PoE facilities including ? 1. potable water supplies 2. Eating establishments 3. Flight catering facilities 4. Public wash rooms 5. Appropriate solid and liquid waste disposal services				

	6. Other potential risks areas by conducting inspection programme.				
6	Does it provide a programme and trained personnel for the control of vectors and reservoirs in and around the PoE?				
7	Has the State established a public health emergency contingency plan and nominated a Focal Point for point of entry, public health and other agencies?				
8	Does it provide assessment and care for affected travelers or animals by medical and veterinary facilities (for their isolation and treatment)?				
9	Does it provide appropriate space, separate from other travelers, to interview suspect or affected persons?				
10	Does it provide for quarantine of suspect travelers, in facilities away from the point of entry?				
11	Are there measures for derating, disinsecting, disinfecting & decontaminating baggage, cargo, containers, conveyances, goods or postal parcel?				
12	Does it apply entry or exit controls for arriving and departing travellers?				
13	Does it provide access of designated equipment and trained personnel with appropriate personal protection for the transfer of infected travellers?				
Facilities at airport fire station					
14	Are the resuscitation Ambulance facilities available to face airport emergency?				
15	Is casualty care equipment including compresses, bandages, oxygen etc available for management of smoke inhalation casualties and trauma patients?				
16	Are the fire fighters trained on first aid treatment?				
Is the airport health department have following facilities?					
(1)	Canopies and their covers				

(2)	Collapsible tables, bags with towels and blankets				
(3)	Large ground sheets				
(4)	Portable basins and stands				
(5)	Stretchers having modifications for mini buses and buses				
(6)	Trailer full of medical equipment (stretchers, boxes of medical stores, cans for water etc)				
17	Did the doctors of airport health department attend any medical emergency during the reported period?				
18	Was it timely and efficiently attended? What was the response time to attend the emergency?				
19	Does it have adequate equipment to handle cases of cardiac arrest and other types of injuries and illnesses?				
20	How many patients were attended by doctors during the reported period and how they were handled?				
21	Did any death of passenger/ airport employee occur during the reported period and how it was handled?				
22	Are there sufficient oxygen and cardio resuscitation (CPR) facilities with trained personnel available?				

ICAO Annex -9 (Facilitation)					
23	Does the State (Airport health department) have International Vaccination Certificates available for the passengers?				
24	Does the State have available adequate stocks of “public health passengers locator card” for distribution to aircraft operators, for completion by passengers and crew when cases of suspected communicable diseases are on board the aircraft?				

Sanitary Condition of the Airport : As Per WHO guide to hygiene and sanitation in aviation					
Public Areas and Rooms					
25	Is the hand washing sign displayed for good hand washing practices by staff and guests?				
26	Does the staff use disposable wipes for cleaning to avoid cross contamination?				
27	Does the staff use proper chemical sanitizing agent?				
28	Are the handrails, handles, telephones, other hand contact areas, elevators and landings in all passenger corridors cleaned and sanitized frequently ?				
29	Are all the public rooms cleaned/sanitized regularly?				
30	Are the carpets cleaned by steam cleaner?				
31	Are the garbage cans cleaned regularly?				
32	Are the soft furnishings cleaned and sanitized?				
Public Washrooms					
33	Is hand washing sign displayed?				
34	Are the door handles, toilet flushes, faucets (water taps), dryers, counters and any other hand contact areas cleaned and sanitized regularly?				
35	Are the hand dryers or disposable paper towels provided for hand drying?				
36	Are disposable paper wipes provided for cleaning to avoid cross contamination?				
Bars and Lounges					
37	Is the hand washing sign displayed at each hand sink?				
38	Does the staff wash hands frequently				
39	Are hand sanitizers provided to staff for good hand washing practices?				
40	Are snacks provided in small individual containers?				
41	Are condiments (salt and pepper) containers that served by staff cleaned frequently (recommended to clean between each customer use)?				
42	Are disposable paper wipes used for cleaning?				
43	Are all tables and chairs cleaned and sanitized after each shift and after closing?				

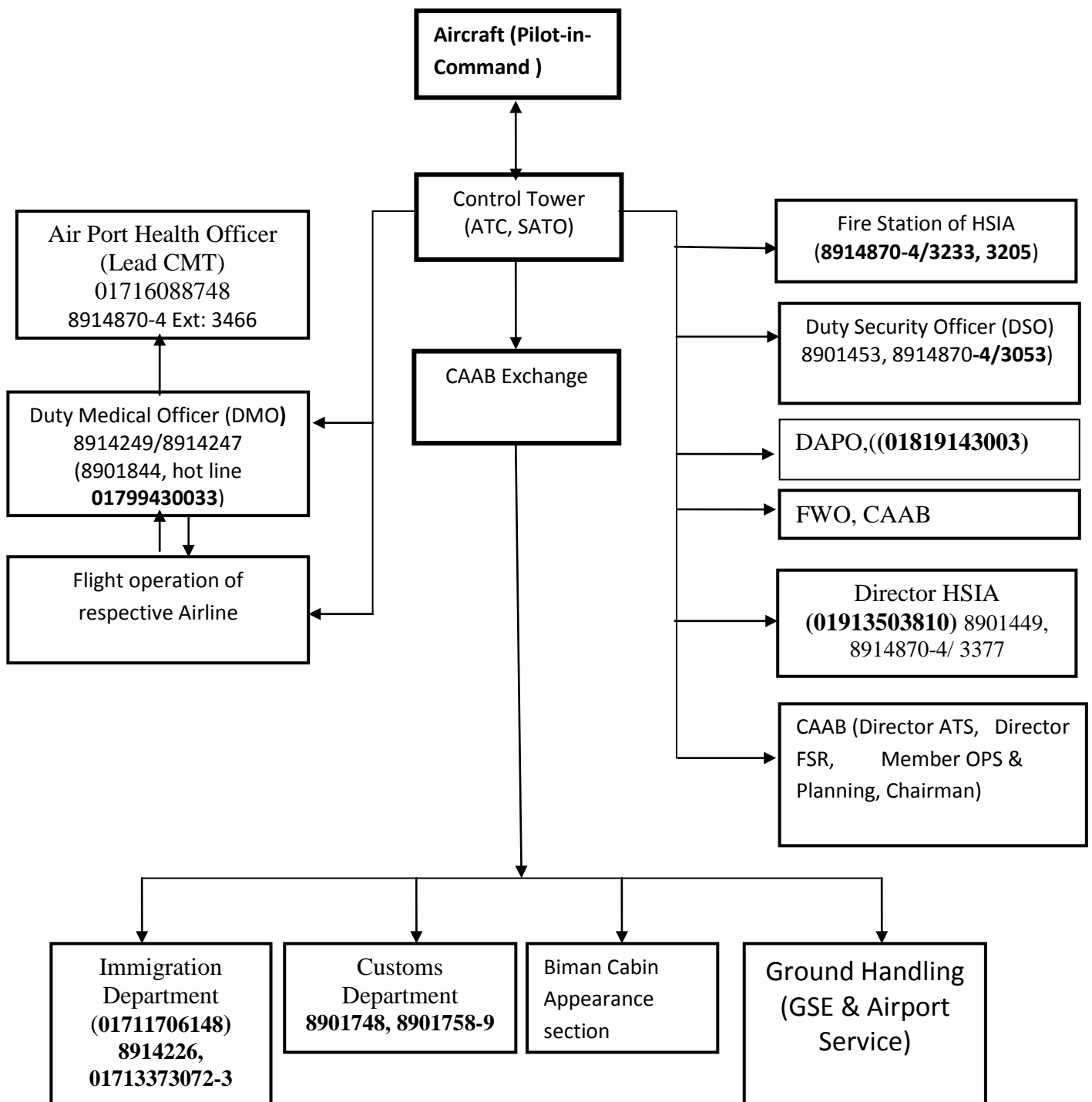
GENERAL HYGIENE AND SANITATION OF THE AIRPORT					
44	Are the exhaust supplied to the toilets area serviceable?				
45	Is the drainage system all right?				
46	Are the lighting facilities in the airport as well as washroom sufficient?				
47	Are the ceiling of toilets all right?				
48	Are the mosquitoes and flies in the airport under control/?				
49	Are the dryers serviceable?				
50	Are the hand washing soap / liquid dispensers adequate?				
51	Are the waste bins proper type and cleaned regularly?				
52	Are the toilets for use by the disabled passengers properly constructed?				
53	Are adequate chemicals and equipment available for cleaning the airport?				
54	Are Proper storage facilities for cleaning items available?				
55	Are sufficient toilet tissues available in the wash rooms?				
56	Are automatic electric Faucets (water taps) with electronic eyes provided in the washrooms?				

FINDINGS:	RECOMMENDATIONS:
Date: _____ Inspector's Signature: _____	

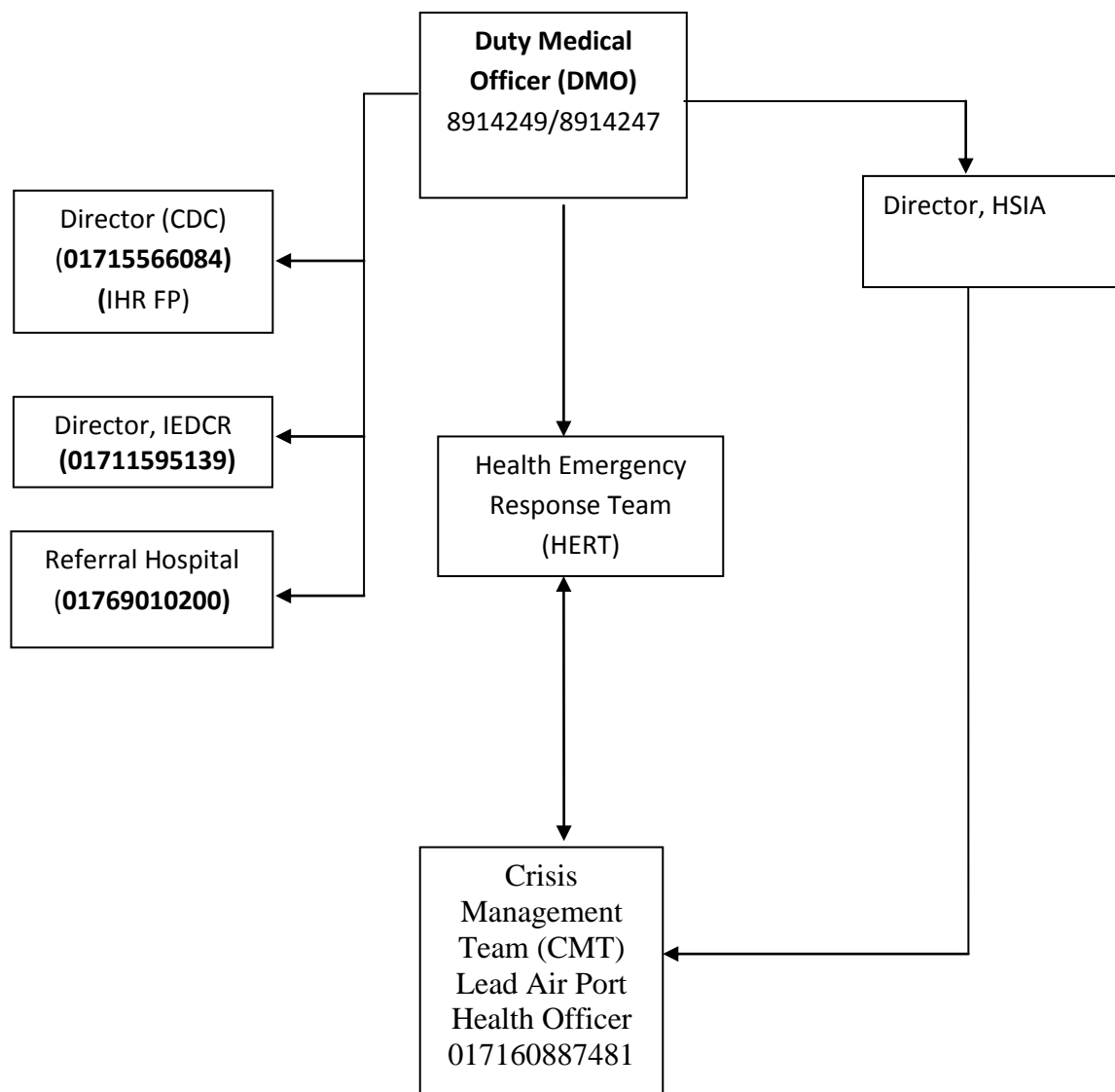
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APPENDIX 2

**STANDARD OPERATING PROCEDURE (SOP) FOR HSIA WHEN INFECTIOUS
DISEASE THREAT IS REPORTED ON ARRIVING AIRCRAFT**



INFECTIOUS DISEASE THREAT ON ARRIVING AIRCRAFT REPORTED TO DMO BY TOWER



In accordance to the International Health Regulations (IHR 2005) and the protocol for the entry point Hazrat Shah Jalal International Airport (HSIA) in public health emergency caused by biological agent, the following steps shall be taken:

1. Air Traffic Control (ATC) upon notification,
 - a. Obtain the following information from Pilot of the affected flight:
 - Aircraft Identification
 - Nature of emergency
 - Estimated time of arrival
 - Number of Passenger affected

- Number of Crew affected
 - Country of travel origin and transit of the pax
 - Special treatment/Ambulance requirement
- b. Alert Duty Medical Officer (DMO **8901844**, hot line **01799430033**), Airport Fire Station (**8914870-4/3233, 3205**), Ground handling, SATO (off – **8901870-4/3412**), Duty Security Officer (DSO **8901453,8914870-4/3053**), Director HSIA with the information
- c. Initiate information through CAAB exchange
- Airport Health Officer (**01716088748**),
 - Director HSIA (**01913503810**),
 - Duty Airport Officer (DAPO **01819143003,8914870-4/3466**)
 - Customs (**8901748, 8901758-9**) ,
 - Flight Operation of respective Airline,
 - OC Immigration {**01711706148, 8914226(O.C) 01713373072-3**}
 - Airport Fire Service (DFL)
 - Ground Handling (GSE & Airport Service)
 - CAAB (Director ATS, Director Flight Safety, Member OPS & Planning, Chairman)
- d. Activate Emergency Operation Centre (EOC) by SATO, if required
- e. Intimate affected airline operator
- f. Adjust air traffic to facilitate the priority landing
- ~~g.~~ Coordinate aircraft parking to a separate bay (Bay 14/F3).
- h. Facilitate any special requirement.
2. Director HSIA (after consultation with Director IEDCR and CDC, DGHS) will activate the Crisis Management Team (CMT).
3. DMO of HSIA
- Activates Health Emergency Response Team (HERT) after consultation with AHO .
 - Informs referral hospital to be prepared to receive ill passenger.
 - Contacts Director IEDCR and CDC, DGHS for their directives.

- Asks ambulances of airport and fire services and ambulance from other sources to be prepared with PPE and present near the aircraft after landing.
4. The HERT (comprising of two airport medical officers, two Nurse/SIs and two security personnel provided by DSO; depending upon requirement the number of members may vary) engages in mutual coordination and heads towards the special bay area of the airport with an ambulance from the airport Fire service. The team arrives in 30 minutes and prepare themselves with full personal protective equipments (PPE). The ambulance driver and support staff also wears PPE.
 5. Right upon arrival, the HERT coordinates with the Crisis Management Team (CMT), as Annex C of Multihazard Public Health Emergency Contingency Plan, HSIA) They jointly reviews the received information from the captain, decides on the activities and responsibilities of the members.
 6. The HERT is in constant communication with AHO and Director IEDCR and Disease Control of DGHS.
 7. Stair/ambulift of Ground Support Equipment (GSE) is at the special bay (Bay 14/F3) where the plane is destined to park.
 8. A trained cleaning team of three members one each from Biman cabin cleaning section (cabin appearance), Ground Support Equipment (GSE) section and Facilitation and Welfare section of CAAB is in waiting with PPE in hand.
 9. By this time several other vehicles, including ambulance from airport and fire service, van/micro bus/bus detailed from CAAB is ready at the special bay area. The aircraft lands at the HSIA. ATC send the aircraft to a separate area (Bay 14 or F3) of the airport for further action.

SEQUENCE OF EVENTS (PROCEDURES) UPON AIRCRAFT LANDING:

No.	Time		Activity
	From	To	
9.1			Upon landing, the aircraft is sent to one far away holding lounge, bay 14 or F3 which, in such situation, will be cordoned/separated by the security people to divert other flight passengers and staffs from being in contact with any of the personnel's of the affected flight. DSO in consultation

			<p>with AHO (CMT lead) will coordinate these. If a holding lounge is not available a cordoned holding area for the suspects has to be prepared.</p> <p>Pilot informs the passengers about the situation and instructs the passengers to be calm and remain in their seats).</p>
9.2			<p>Health Emergency Response Team (HERT), a six-member team (two airport medical officer, two Nurse/SI and two securities (detailed by DSO)) arrives at the parking area by one ambulance. The team including driver and support staff wears PPE.</p> <p>At the same time other ambulance (number will depend on the number of probable cases and suspects, as decided by the HERT) arrives and positions itself nearby.</p> <p>Other vans/micro bus/buses are placed at a distance.</p> <p>A trained cleaning team of three members with their logistics (one each from Biman cabin cleaning section-cabin appearances, Ground Support Equipment (GSE) section and Facilitation and Welfare section of CAAB) is in waiting with PPE in hand.</p> <p><i>The other drivers and cleaners before engagement with cases or contacts from the aircraft will wear their personal protective equipment.</i></p>
9.3			<p>The HERT boards the aircraft through the door nearest to the suspect case by ambulift/stairs. The two airport security agents in protective equipment secure the aircraft at the air stairs.</p>
9.4			<p>The team on board directly approaches the suspected passenger informed by the flight attendant. The medical officers observe the case, enquire about the symptoms, travel history and previous contacts in line with standard questionnaire (as attached) and determine status of the case and suspected close contacts. Then with consultation with Director IEDCR and AHO, they may come to the following decisions;</p> <ul style="list-style-type: none"> • The team feels that the case does not fulfill the case definition of communicable disease of national/international concern. They will ask DAPO and DSO to initiate the process for usual customs and immigration procedures immediately for all the passengers (but, in

			<p>that scenario the case and the close contact's whereabouts and contact details have to be collected in "Passenger Locator Card" and followed up).</p> <ul style="list-style-type: none"> • If the suspected case fulfills case definition, suspected close contacts (passengers/crews) are identified; • Team (HERT) will provide mask to the case and suspects, ask them to wear those and remain in their seats. • The cabin crew will be asked to evacuate other passengers through other door/s or the same door (if none other is available) for usual immigration and customs clearance. After that, • The suspected case in mask will be assisted and escorted by the one Nurse/SI's to the aircraft stairs/ambulift. The Nurse/SI will accompany the suspected case to the airport ambulance that is already waiting outside. The ambulance immediately runs for the referral hospital through a predefined route avoiding any contact with other staffs/passengers.

9.4			<p>The cleaning team in PPE will disinfect the aircraft stairs/ambulift after suspected patient is transferred as per SoP.</p> <p>9.4.6 The passengers/crews that might have been in contact with the suspected passengers (of the same row and two rows in front and two rows back)will be then taken through the same stairs/ambulift to outside the aircraft and then directly into the van/microbus that heads for the isolation/quarantine room/holding area for further evaluation. The remaining team accompanies them. If the team is convinced,</p> <ul style="list-style-type: none"> • The suspects may be quarantined for 14-21 days for observation and follow up. Or, • They may be sent home after customs and immigration formalities, but keeping whereabouts and contact details fulfilling the“ Passenger Locator Card” for
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			<p>future follow up.</p> <ul style="list-style-type: none"> • The cleaning team in PPE, again will disinfect the aircraft stairs/ambulift after suspected patient transfer • If the suspected case fulfills case definition, and all the passengers may be exposed; • All the passengers may be sent for isolation/quarantine. • After total evacuation, the cleaning team in PPE, with additional persons will disinfect the whole aircraft following SoP. <p><i>(**MERS-CoV is air-borne disease. Although Ebola is not air – borne disease, but there might be possible contact with fluids in the airplane (e.g. neighbouring seats and other surfaces in the airplane), due to sneezing etc. For MERS-CoV quarantine period is 14 and Ebola 21 days).</i></p> <p>The passengers/crews, particularly the suspected contacts will be provided with detail information about whom and when to contact (Emergency HOT Lines of IEDCR; 01937110011, 01937000011, 01927711784 and 01927711785) if one or more of the following symptom appears; fever, breathing difficulties, weakness, muscle pain, headache, sore throat, vomiting, diarrhoea, rash, or bleeding. Passengers will also be asked to record their temperatures twice daily for 21 days and report higher temperature deviations.</p> <p>The waiting ambulance/van/microbus/bus (for the passengers to be put in quarantine or for the passengers that have to face the immigration formalities, in accordance to the direction of the onboard medical officers will be used as required.</p>

9.4			<p>The drivers and support staffs of the vehicles carrying the suspect or isolated/quarantined passengers will always wear protective clothes.</p> <p>The quarantine provides all necessary conditions (accommodation,</p>
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			food and medical care. The passengers will be provided the means to contact with and inform their families).
9.5			<p>* Within the airport area three entities are responsible for cleaning services. Biman cabin cleaning section (incharge cabin appearance section) is responsible for cleaning the aircraft; the stair and ambulift cleaning is under the Ground Support Equipment (GSE) section and Facilitation and Welfare section of CAAB is responsible for the runway and airport area.</p> <p>* Within the aircraft the Universal Precaution Kit (UPK) contains along with other logistics some disinfectant and biohazard bag, which may be used to dispose of the contaminated materials.</p> <p>* Generally the biohazard bag and PPE will be available for these purposes through the Airport Health Office.</p> <p>* Generally a three member cleaning team, each from different section will be grouped together and trained to perform the cleaning and decontamination activities during this type of emergency.</p> <p>Cleaning team in PPE cleans and disinfects aircraft stairs/ambulift each time the case or contacts use it.</p> <p>After disembarkation of all the passengers, the aircraft will undergo thorough cleaning and decontamination process following cleaning SoP/WHO guidance. All the waste is collected in biohazard bag and disposed off according to waste disposal SoP. Reusable logistics are thoroughly decontaminated and cleaned. The used passenger vehicles will also be treated likewise</p> <p>A cleaner in PPE with pump sprayer disinfects the HERT members before they appropriately remove and dispose off their personal protective equipment in yellow biohazard plastic bags.</p> <p>The cleaners wait for 10 minutes in order that the disinfectant to have the effect, after which they take off the PPE according to the SoP. They perform personal disinfection of hand with appropriate liquid hand disinfectant. The PPEs that has been already used is placed in</p>

			biohazard plastic bags for disposal of infectious waste, and will be handled by the airport common waste management system, with a special vehicle for medical waste.
9.6			<p>At the hospital entrance the ambulance carrying the suspected case arrives along with the nurses/SIs. The case is sent immediately to the isolation room for proper medical care under strict infection control measures following hospital infection control SoP.</p> <p>Once the patient enters the isolation room, a cleaner in PPE disinfects the transportation route.</p> <p>The same cleaner will also disinfect the ambulance as per vehicle cleaning SoP.</p>
9.7			<p>The van transporting close contacts (passengers/crews) arrives and they are put in the quarantine room.</p> <p>A cleaning team in PPE disinfects the transportation route and the ambulance/vehicles.</p> <p>*The passengers remain in quarantine for 21 days or until confirmed to have negative Ebola/MERS-CoV/H7N9 test results.</p>
9.8			<p>The concerned flight operator will provide all the relevant documents/information of the cases and contacts to the Customs and Immigration authorities. The rules for such emergencies/disasters will become effective in such situations.</p> <p>Ground handling will retrieve the baggage of the case and close contacts along with their accompanying person/s, ensure customs check up and deliver the baggage to the referral hospital/quarantine area.</p> <p>Immigration authority will ensure clearance of the sick passenger/close contacts on a priority basis.</p>

10. According to the provisions of the International Health Regulations (2005) and the adopted Protocol for Handling and Reporting at the entry point HSIA in case of public health emergency or URGENT circumstances of international significance caused by biological agent, the national contact point for the International Health Regulations

(Director, communicable Disease Control) informs immediately (within 24 hours) the WHO Regional Office in New Delhi and the WHO Office in Dhaka, Bangladesh.

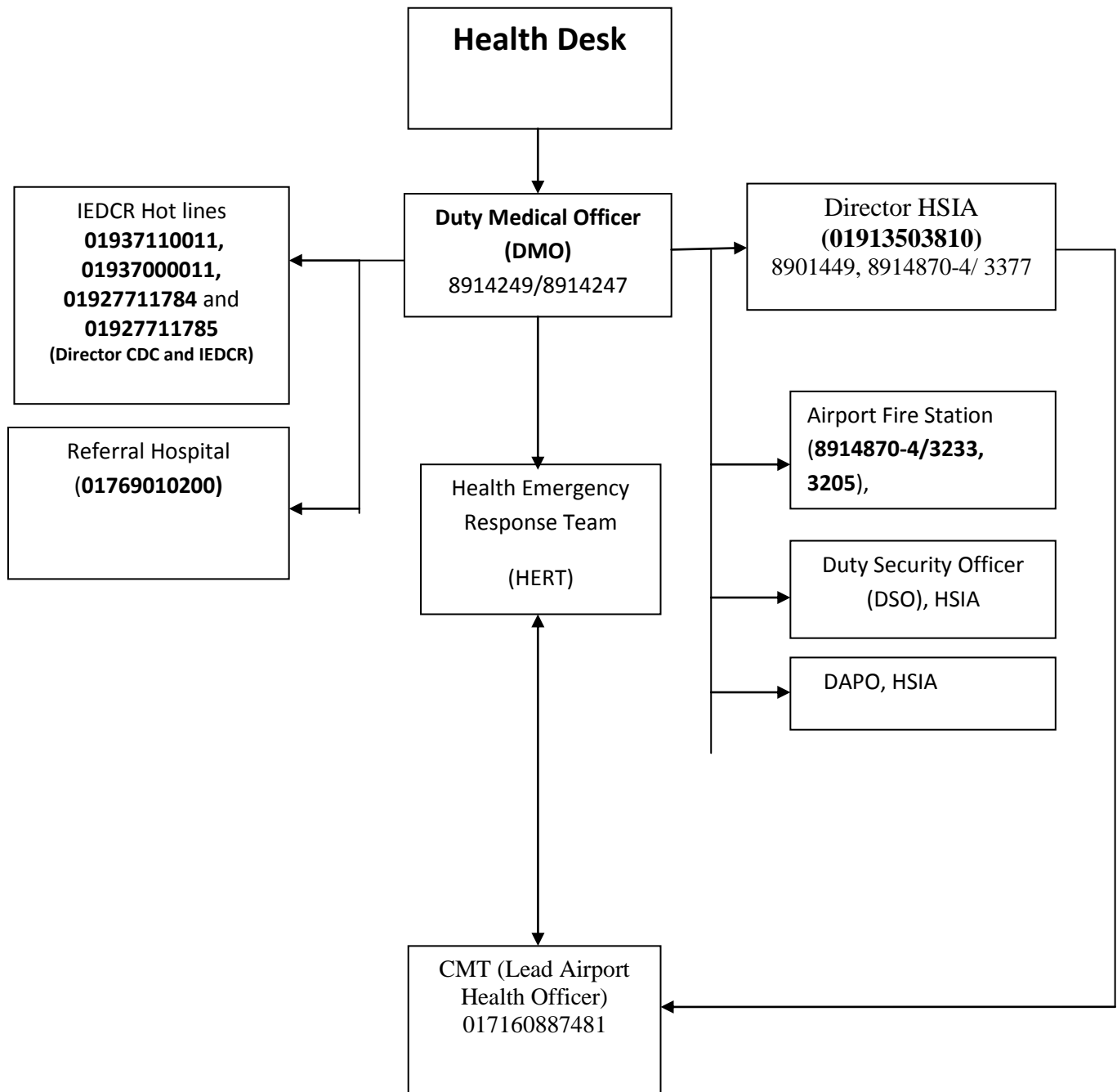
11. upon informed by Director, CDC, the Ministry of Health and Family Welfare immediately organizes a press conference so to present to the media the latest circumstances in a timely and objective manner as well as to prevent the spreading of panic and misinformation among the population.
12. In the upcoming days, the population is regularly updated on the course of events, on the situation with the infected persons and those in quarantine. Information materials are prepared and distributed, providing general facts about Ebola/MERS-CoV/H7N9 (clinical overview, mode of transmission, preventive measures). In order to calm the population, the competent authorities inform: “The cases of Ebola/MERS-CoV/H7N9 have been imported.
13. All necessary measures have been undertaken to prevent the spread of the disease. The persons that were in contact with the infected persons are put in 21-days quarantine under constant supervision. The health status of the remaining passengers who were sent home is continuously monitored for a 21-days period by the epidemiologist of the IEDCR.
14. If the Ebola/MERS-CoV/H7N9 test results obtained in the reference laboratory in (IEDCR/ designated laboratory at home and abroad) are negative, the quarantine will terminate as well as the health monitoring of the remaining passengers. The patients admitted at the KGH for infectious diseases and febrile conditions will be treated for the primary disease as per the evidence-based medicine.

References:

- (1) CMT composition (Annex C, Multihazard Public Health emergency Contingency Plan of HSIA)
- (2) **Questionnaire** : will include the followings:
 - When did the symptoms first appeared: fever, vomiting, diarrhoea, stomach pain, fatigue, Cold, runny nose?
 - Was there any history of contact with someone infected with similar symptoms ? Where did he travel in the recent past??
 - To the flight attendant and the flight crew: Which crew/s came in contact with the suspected passenger? Did the suspected passenger use the toilets or move

around or were in any contact with any of the other passengers? Whether any symptoms among the close contacts?)

INFECTIOUS DISEASE THREAT IDENTIFIED AT HEALTH DESK



1. After disembarkation, on their way to immigration, the passengers will be passing through the thermal scanner at health desk, and it beeps (there is a WHO/Public Health Authority declared emergency in place).

2. In accordance to the International Health Regulations (IHR 2005) and the protocol for the entry point Hazrat Shah Jalal International Airport (HSIA) in public health emergency caused by biological agent, the following sequence of events shall be taken:

No	Time		Activity
	From	To	
2.1			<ul style="list-style-type: none">• The Nurse/SI in mask and gloves (minimum infection control measure) at the health desk identifies the passenger as a suspect with communicable disease and a potential public health Threat.• They stop the passenger and accompanying personnel and inform on Duty Medical Officer (DMO) for his advice and presence, mentioning the suspected infectious case at the desk.• They request the passenger to come to the examination room designated for and the accompanying passengers to wait in the chairs placed outside.• After doing that, they will remove the mask and gloves, put them in the biohazard bag and wear another set of mask and gloves to welcome new case/s (if any). The Health desk staffs with those minimal infection control measures will not go for any close encounter with the suspects.
2.2			<ul style="list-style-type: none">• DMO arrives;• Before entering the examination room DMO will change into full gear. Personal Protective Equipment in the designated donning area.• DMO will move to the patient examination room -<ul style="list-style-type: none">a. Take history of the patient including symptoms, demographic and contact informationb. Take history of his/her origin of travel including transit places.c. Take travel history e.g. visit history of West African countries (Sierra Leon, Liberia, Nigeria, Guinea) for

			<p>EBOLA within last 21 days and Middle-eastern countries and South Korea for MERS-CoV within last 14 days (<u>at the present context</u>).</p> <p>d. DMO will also check the travel documents of the passengers.</p> <p>e. DMO will take temperature by <u>Infrared thermometer</u> and record it and will examine for other signs</p>
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2.2			<p>f. DMO will ask for any other accompanying persons of the suspected passenger and their physical status.</p> <p>g. DMO will provide immediate medication if required.</p> <p>h. After check up at the examination room of health desk, if there is no signs and symptoms associated with communicable diseases of concern or there is no epidemiological link proven by checking the travel documents and travel history, DMO will inform all concerned about that.</p> <p>The passenger/crew will fill in the “Passenger Locator Card” and allowed to go to the immigration desk to finalize the immigration procedures as usual.</p>
2.3			<p>DMO, if confirmed of suspicion,</p> <ul style="list-style-type: none"> • If required will activate HERT after consultation with AHO • Will inform immediately the <ul style="list-style-type: none"> i Airport Fire Station for Ambulance ii Chief Security Officer iii Flight operator iv Referral hospital v Director HSIA, IEDCR and CDC of DGHS vi Immigration & Customs

			<ul style="list-style-type: none"> • To be vigilant for other similar suspects in line • To take appropriate measure for infection control by wearing mask and gloves and follow safe hygienic practices • To request passengers to fill in the “Passenger Locator Card” and collect those from the passengers Will have relevant information of the suspects travel and baggage documents • Will ask the Nurse at the health desk to wear PPE to accompany the case/s when the ambulance arrives
2.4			Director HSIA (after consultation with Director IEDCR and CDC, DGHS) will declare health emergency and activate the Crisis Management Team (CMT).
2.5			<ul style="list-style-type: none"> • Ambulance will arrive immediately, the driver and auxiliary staff will wear PPE. • The suspect patient will be shifted to the ambulance through a separate door with no/minimum chance of contact with other passengers and airport staffs. <p>The Nurse in PPE will accompany the patient.</p>
2.6			<ul style="list-style-type: none"> • After the probable case is transferred, • DMO will doff PPE at the designated doffing station • The whole examination room, doffing area including exit way upto the ambulance parking area has to be decontaminated with 0.5% chlorine solution • Desk, table, chair and other used logistics will be decontaminated. • All the waste including the used mask, gloves, PPEs will be put in a biohazard bag and disposed off accordingly. • The process will be performed by the trained cleaning team in PPE. Health Team will supervise the decontamination process.
2.7			<ul style="list-style-type: none"> • Ambulance driver and accompanying Nurse and support

			<p>staff will wear PPE just before receiving the patient.</p> <ul style="list-style-type: none"> • Ambulance will transfer the patient/s to the referral hospital through a specified route (shortest possible way towards Gate 8) with adequate precaution of infection control measures. • After transfer of the patient to the referral hospital, they will doff their PPE, put them in biohazard bag and complete hand hygiene practices. The ambulance will be thoroughly decontaminated with 0.5% chlorine solution spray/fog by trained cleaners in PPE in the referred hospital. After that the ambulance will be again washed with soap water to wash off the residual chlorine and dried for new assignments. • The waste including the PPEs used will be put in a biohazard bag and dispose off accordingly.
2.8			<ul style="list-style-type: none"> • The “Passenger Locator Card” available at health desk and immigration area will be collected at the Immigration. For these passengers a Leaflet will be provided with detail information about whom and when to contact (Emergency HOT Lines of IEDCR; 01937110011, 01937000011, 01927711784 and 01927711785) if one or more of the following symptom appears; fever, weakness, muscle pain, headache, sore throat, vomiting, diarrhoea, rash, difficulty in breathing or bleeding. Passengers will be asked to record their temperatures twice daily for 21 days and report any symptom of illness on a daily basis.

2.8			<p>“Passenger Locator Card ” will be available in the Aircraft, health desk and in the immigration area</p> <p>AHO will update Director DC and IEDCR of DGHS and HSIA, on the details of travellers detected by the thermal scanners, total number of travellers examined, details of the cases sent to the referral hospital including their current updates, status of the close contacts etc.</p> <ul style="list-style-type: none"> • After being informed by DMO, assisted by the flight operator, <p>A .Ground handling agents will retrieve the baggage of the passenger and/or accompanying person/s, conduct surface cleaning, and ensure customs check up. The patient need not stay back for baggage, but authority will ensure that the baggage reaches to the passenger.</p> <p>Immigration authority will ensure clearance of all immigration formalities for an arriving sick traveler and any accompanying person/s on a priority basis in accordance to the plan in emergency and disasters.</p>
2.9			<p>Just after being informed of the situation AOC, PRO and SATO together or individually within their capacities will handle the next of kin’s of the affected flight passengers and the media. They need to update time to time the status of the affected flight and the passengers, prepare and deliver press release when seen appropriate.</p>

3. According to the provisions of the International Health Regulations (2005) and the adopted Protocol for Handling and Reporting at the entry point HSIA in case of public health emergency of national/international concern caused by biological agent, the national contact point for the International Health Regulations (Director, Disease Control) informs immediately to the Ministry of Health and Family Welfare and within 24 hours, the WHO Regional Office in New Delhi and the WHO Office in Dhaka, Bangladesh.
4. Upon informed by Director (Disease Control), DGHS, the Ministry of Health and Family Welfare immediately activates the IHR committees at different level. At the

same time initiates the Risk Communication activities to provide the latest updates to the media and general population in a timely and objective manner as well as to prevent the spreading of panic and misinformation among the population.

5. In the upcoming days, the population is regularly updated on the course of events, on the situation with the infected persons, those in quarantine and the measures taken to contain the situation. Information materials are prepared and distributed, providing general facts about Ebola/MERS-CoV/H7N9 (clinical overview, mode of transmission, preventive measures etc.).
6. If the Ebola/MERS-CoV/H7N9 test results obtained in the reference laboratory are negative, the quarantine will terminate as well as the health monitoring of the remaining passengers. The patients admitted at the KGH for infectious diseases and febrile conditions will be treated for the primary disease as per the evidence-based medicine. All these will be coordinated and decided by the National Rapid Response Team of IEDCR.

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APPENDIX 3

**ICAO COOPERATIVE ARRANGEMENT FOR THE PREVENTION OF SPREAD OF
COMMUNICABLE DISEASE THROUGH AIR TRAVEL (CAPSCA)**

(STATE AND AIRPORT ASSISTANCE VISIT CHECKLIST)

State

Airport/City

Dates

Civil Aviation

Authority

National Coordinator

Airport Operator

Focal Point

Public Health

Authority

Focal Point

CAPSCA Visit Team

Leader and Technical

Advisors

Areas	Reference	Yes	No	Remarks
A. ADMINISTRATIVE				
1. Does an entity fulfil the function of the “Competent Authority” (as defined in the WHO International Health Regulations (2005) i.e. does an entity have responsibility for implementation of, In particular, IHR (2005) Articles: 24, 25, 27, 28, 30, 31, 32, 35, 36, 38, 40, 41, 43, 46 and Annex 1(B), 4, 5 and 9? Which entity?	IHR Article 1, Definitions			
2. Do the Civil Aviation Regulations cover public health emergency related provisions of ICAO Annexes and guidance material?	National Documentation			
- Annex 6				
- Annex 9				
- Annex 11				
- Annex 14				
- Annex 18				
- PANS ATM Doc 4444				
3. Is a Contact point established for policy formulation and operational organization of preparedness plan for aviation?	ICAO web-based Guidelines for States, Section “General Preparedness” National Documentation			
4. Does the Public Health Authority have designated personnel at the airport?	National documentation			

5. Has the State established a national committee for Public Health Emergency planning?	IHR Annex 1, A, 3			
6. Is this Committee involved in airport/aerodrome Public Health Emergency Planning?	ICAO Annex 14, 9.1.1-9.1.3			
7. Is the Civil Aviation Authority involved?	ICAO Annex 14, 9.1.1-9.1.3			
8. Is the Public Health Authority involved?	ICAO Annex 14, 9.1.1-9.1.3			
9. If so, under a formal contract/agreement?	ICAO Annex 14, 9.1.1-9.1.3			
10. Are aircraft operators involved?	ICAO Annex 14, 9.1.1-9.1.3			
11. Are the Rescue and Fire Fighting services involved?	ICAO Annex 14, 9.1.1-9.1.3			
12. Is the Air Navigation Services Provider involved?	ICAO Annex 14, 9.1.1-9.1.3			
13. Are the Immigration/Customs Services involved?	ICAO Annex 14, 9.1.1-9.1.3			
14. Are the security services involved?	ICAO Annex 14, 9.1.1-9.1.3			
15. Are private health services involved?	ICAO Annex 14, 9.1.1-9.1.3			
16. Are the service providers involved? (Airlines, Ground Handling Service (GHS), cargo, etc.)	ICAO Annex 14, 9.1.1-9.1.3			

17. Are formal contracts/agreements utilised specifying the involvement of stakeholders?	National documentation			
B. DOCUMENTATION				
1. Does the airport have in place a Plan for Public Health Emergencies?	ICAO Annex 14, 9.1.1-9.1.3			
2. Is it part of the Aerodrome Emergency Plan?	ICAO Annex 14, 9.1.1-9.1.3			
3. Is it compatible with the national Aviation Preparedness Plan for Public Health Emergencies?	ICAO Annex 9, 8.16			
4. Is it compatible with the National Preparedness Plan for Public Health Emergencies?				
5. Has the Airport/Aerodrome Emergency Plan (Public Health Emergency component) been tested by conducting full-scale exercises and/or table-top exercises? Specify what and when	Template for a National Aviation Public Health Emergency Preparedness Plan ICAO web-based Guidelines for States....Section "General Preparedness"			
6.Preparedness planning involves:	ICAO Annex 9, 8.19 ICAO web-based Guidelines for States....Section "General Preparedness" National Documentation			

a Public health?				
b Regulatory aviation authority?				
c Airport operator?				
d Aircraft operator?				
e Air traffic management?				
f Other service providers? Specify				
7. Are the stakeholders familiar with Annex 6, in particular Attachment B (Medical Supplies)?	ICAO Annex 6, Attachment B			
8. Are the stakeholders familiar with Annex 9, Chap. 8, Appendices 1 (General Declaration) and 13 (Public Health Passenger Locator Card)?	ICAO Annex 9, Appendices 1, 13; WHO IHR (2005) Annex 9			
9. Specify (1) who collects the General Declaration and Passenger Location Cards and (2) who processes the information on arrival.	National documentation			
10. Are the stakeholders familiar with Annex 11, in particular Attachment C (Material Relating to Contingency Planning)?	ICAO Annex 11, Attachment C			
11. Are the stakeholders familiar with Annex 14, Chapter 9 (Aerodrome operational services, equipment and installations) in particular paragraph 9.1 (Aerodrome Emergency Planning)?	ICAO Annex 14, Chapter 9			

12. Are the stakeholders familiar with the WHO International Health Regulations (2005)?	WHO IHR (2005)			
13. Are the stakeholders familiar with ICAO Procedures for Air Navigation Services-Air Traffic Management, Doc. 4444, in particular paragraph 16.6: “Notification of suspected communicable diseases on board an aircraft, or other public health risk”?	ICAO PANS-ATM, Doc 4444			
14. For travellers designated as suspect cases and asymptomatic contacts are there systems in place for? <ul style="list-style-type: none"> - Handling of their baggage - Security Screening - Customs clearance - Immigration 	ACI web-based Guidelines for airport operators, Section 6			
15. Are stakeholders familiar with related guidance material, available from:				
ICAO	www.capsca.org			
WHO	www.capsca.org			
IATA	www.capsca.org			
ACI	www.capsca.org			
16. Is there a national Preparedness Plan for a Public Health Emergency?	WHO IHR (2005) Article 13			

17. Which stakeholders receive training concerning the national Preparedness Plan for a Public Health Emergency (airport personnel, public health authority, etc.)?	National documentation			
18. Is there a National <i>Aviation</i> Preparedness Plan for a Public Health Emergency of International Concern (PHEIC)? Is this Plan part of a National Public Health Emergency Plan?	ICAO Annex 9, 8.16			
19. Does the Preparedness Plan include phases as defined by WHO in “Pandemic Influenza Preparedness and Response 2009”?	WHO Pandemic Influenza Preparedness & Response, 2009			
20. Does a mechanism exist for deciding when to initiate the pandemic contingency plan <ul style="list-style-type: none"> - When to stop it? - What kind of measures need to be put in place 	Template for a National Aviation Public Health Emergency Preparedness Plan www.capsca.org			
21. Are communication methods in place to inform public on travel risks/procedures?	ICAO web-based Guidelines for States, Section “Communication”			
22. Is there a National Business Continuity Plan for Public Health Emergencies?	National documentation			

23. Is the aviation sector considered in whole of society approach to pandemic preparedness?	ICAO web-based Guidelines for States....Section “General Preparedness”			
24. Is there an Airport/Aerodrome Operator Business Continuity Plan for Public Health Emergencies?	Airport/aerodrome operator documentation			
C. EMERGENCY OPERATION CENTRE (EOC)				
1. Is there in place a flow chart to initiate the aviation emergency response plan process?	National documentation			
2. Command and control system is established for management of public health event ‘on the day’?	ICAO Annex 14 para. 9.17 – 18 ICAO web-based Guidelines for States....Section “General Preparedness”. National documentation			

2. Do Public Health Authority personnel participate in developing the aviation preparedness plan?	ICAO web-based Guidelines for States....Section “General Preparedness”			
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D. RESCUE AND FIRE FIGHTING (RFF) SERVICES				
1. Do the RFF Services participate in the development and testing of the Aerodrome Emergency Plan for Public Health emergencies?	ICAO web-based Guidelines for States....Section "General Preparedness"			
2. Are personnel familiar with related guidance material, available on www.capsca.org	www.capsca.org			
E. IMMIGRATION				
1. Does the immigration service participate in development and testing of the Aerodrome Emergency Plan for public health emergencies?	ICAO web-based Guidelines for States....Section "General Preparedness"			
2. Are personnel familiar with related guidance material, available on www.capsca.org	www.capsca.org			
3. Are there procedures for handling passengers suspected of being affected by a communicable disease?	Airports Council International web-based Guidelines for airport operators, Section 6			
4. Are personnel trained about protective measures for handling from suspected passengers?	ACI web-based Guidelines for airport operators, Section 6			

5. Are cargo and baggage handlers trained to use appropriate protective measures for handling luggage from suspected passengers?	IATA web-based Guidelines for aircraft operators, Section “Air Transport and Communicable Diseases”			
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H. AIR NAVIGATION SERVICE PROVIDER (ANSP)

1. Does the ANSP participate in development and testing of the aerodrome Emergency Plan for public health emergencies?	ICAO web-based Guidelines for States, Section “General Preparedness”			
2. Are personnel familiar with related guidance material, available on www.capsca.org	www.capsca.org			
3. Does the ANSP provide training with the PANS-ATM (Doc 4444, paragraph 16.6) procedure for notifying the destination airport of a potential on-board public health emergency?	PANS-ATM (Doc 4444)			
4. Is a procedure in place for transfer of information from the ANSP to the public health authority, notifying that anticipated arrival of an affected aircraft?	National documentation			

5. Does the ANSP have a contingency plan for managing Public Health Emergencies?	ICAO Annex 11, Attachment C			
6. Does the ANSP have a Business Continuity Plan for managing Public Health Emergencies?	National documentation			
I. MEDICAL SERVICES				
1. Is the airport medical service provided by the State or a private enterprise?	National documentation			
2. Has the service provider received training in managing public health emergencies?	WHO IHR (2005) Annex 1 B			

3. Has it established a communication process with the Public Health Authority?	National documentation			
4. Has ease of access to the affected aircraft by medical service providers been considered in designating an aircraft parking position?	ACI web-based Guidelines for airport operators, Section 6			
5. Are medical service providers aware of (1) Notification procedure of a suspected case by the pilot in command (2) Health part of the aircraft general declaration?	1 - ICAO PANS-ATM 2 - ICAO Annex 9, Appendix 1; WHO IHR (2005) Annex 9			
6. Is there a procedure enabling the public health authority to communicate with the affected aircraft before landing?	WHO technical advice for case management of Influenza A (H1N1) in Air Transport			

7. Have Port Health Officers been made aware of cabin crew identification procedures for suspect cases (Health part of Aircraft General Declaration)?	ICAO Annex 9, Appendix 1; WHO IHR (2005) Annex 9			
8. Does the medical service provider participate in the development and testing of the airport emergency plan for public health emergencies?	ICAO web-based Guidelines for States, Section "General Preparedness"			
9. Does the medical service use and process (1) the General Declaration and/or (2) the Public Health Passenger Locator Card?	National documentation			
10. Are suitable designated areas / facilities provided for:				
- Review of suspect cases by medical staff?	IHR (2005) Annex 1B			
- Transport of cases to medical facility designated for purpose?	IHR (2005) Annex 1B			
11. Does the medical service provider have access to the suspect or affected traveller's assessment area?	National documentation			

12. Is the use of personal protective equipment (PPE) considered?	National documentation			
Types of PPE - _____				
13. Which personnel are required to use PPE - _____	National documentation			
- Training provided to personnel?				

14. Procedure is in place for obtaining a timely diagnosis of a suspect traveller?	National documentation			
15. Does the medical service have procedures for transfer of suspect or affected travellers to specialized evaluation units?	WHO IHR (2005) Annex 1 B			
16. Are facilities available to enable rapid testing of biological specimens? What are they?	National documentation			
17. Does the medical service have procedures for aircraft disinfection?	WHO Guide to Hygiene and Sanitation in Aviation			
18. What disinfectant product(s) is used to disinfect an affected aircraft?	WHO Guide to Hygiene and Sanitation in Aviation			
19. What procedure is used? How long does it normally take?	WHO Guide to Hygiene and Sanitation in Aviation			
20. Is the service provider aware of relevant aspects of the IHR (2005)?	IHR (2005)			
21. In the case of an affected aircraft carrying a suspected case of a communicable disease, are efforts made to minimize the delay to other travellers and the return to service of the aircraft?	ACI web-based Guidelines for airport operators, Section 6			

22. Are procedures in place for safe removal, transport and disposal of liquid and solid waste generated from the on board management of a case of a potential communicable disease?	WHO Guide to Hygiene and Sanitation in Aviation			
J: SECURITY				
1. Does the aviation security (AVSEC) provider participate in the development and testing of the airport emergency plan for public health emergencies?	ICAO web-based Guidelines for States, Section “General Preparedness”			
2. Are there procedures in place for managing aviation security in the designated passenger assessment area for suspect or affected travellers?	National documentation			
3. Are personnel trained in the use of protective measures for managing suspect or affected travellers?	ACI web-based Guidelines for airport operators, Section 6			
K. INFRASTRUCTURE				
1. Are the international passenger flows mixed, on arrival and departure?	National documentation			
2. Is there a designated parking position for an affected aircraft?	ACI web-based Guidelines for airport operators....Section 6			
3. If so, where is the designated position?	National documentation			

4. Are there provisions for maintaining electricity, water supply, waste disposal, etc. at the aircraft after parking?	National documentation			
5. Does the airport have a designated holding or waiting area for suspect or affected travellers?	WHO IHR (2005) Annex 1 B			

6. Requirements considered for screening equipment	ICAO web-based Guidelines for States, Section "Screening"			
- Maintenance				
- Calibration				
- Personnel Training				
L. AIRCRAFT OPERATORS:				
1. Do the aircraft operators participate in the development and testing of the aerodrome emergency plan for public health emergencies?	ICAO web-based Guidelines for States, Section "General Preparedness"			
2. Are aircraft operators aware of (1) Notification procedure of a suspected case by the pilot in command (2) Health part of the aircraft general declaration?	1 - ICAO PANS ATM 2 - ICAO Annex 9, Appendix 1, WHO IHR (2005) Annex 9			
3. Are aircraft operators aware of IATA guidelines for: cabin crew; maintenance crew; bird-strike; cleaning crew; passenger agents?	IATA web-based Air Transport and Communicable Diseases Guidelines			

4. Do the aircraft operators have procedures enabling cabin crew to identify travellers suspected of having a communicable disease	IATA web-based Air Transport and Communicable Diseases Guidelines – Cabin Crew			
5. Do the aircraft operators have procedures for managing a suspected case of communicable disease on board a flight?	IATA web-based Air Transport and Communicable Diseases Guidelines – Cabin Crew			
6. Are Ground Personnel familiar with World Health Organization (WHO) global influenza preparedness plan?	WHO Pandemic Influenza Preparedness & Response, 2009			
7. Number of trained personnel assigned for these d23 Nov 2015 Page App 9-3 uties, in relation to volume and frequency of travellers:	National documentation			
8. Are arrangements for translation and interpreters considered?	WHO IHR (2005) Article 32			

9. Have personnel undergone a training programme, to recognize disease symptoms?	National Documentation			
10. Are personnel familiar with procedures regarding prompt assessment, care and reporting of ill travellers?	National documentation			

M. MEDIA:

1. Is there a communications strategy and plan?	CAPSCA Global Meeting Conclusion			
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ADDITIONAL REMARKS AND RECOMMENDATIONS

REMARKS	RECOMMENDATIONS	COMMENTS

Contact information of the focal point officer(s) for the CAPSCA State & Airport Assistance Visit:	
Name:	
Position:	
Department/Office:	
Organisation:	
Email:	
Telephone:	
Fax:	
Name:	
Position:	
Department/Office:	
Organisation:	
Email:	
Telephone:	
Fax:	

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- (1) Airport preparedness guidelines for outbreaks of communicable diseases, issued by ACI and ICAO: Revised April 2009.
- (2) Environmental Conservation Rules, 1997 (ECR 97) Ministry of Environment and Forest, Government of the People's Republic of Bangladesh.
- (3) ICAO Annex 9 to the convention on International Civil Aviation (Facilitation), Thirteen edition, July 2011
- (4) ICAO: An Aviation Public Health Emergency Preparedness Plan: Cooperative Arrangement for the Prevention of Spread of Communicable disease through air travel (CAPSCA)
- (5) ICAO Annex 14, Doc 9137, Part 7, Airport Services Manual
- (6) Procedures for Air Navigation Services- Air Traffic Management (PANS-ATM, Doc 4444)
- (7) WHO International Health Regulations (2005), 2nd edition, Reprinted 2008
- (8) World Health Organization (WHO), Guide to Hygiene and Sanitation in Aviation, third edition, Geneva 2009

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