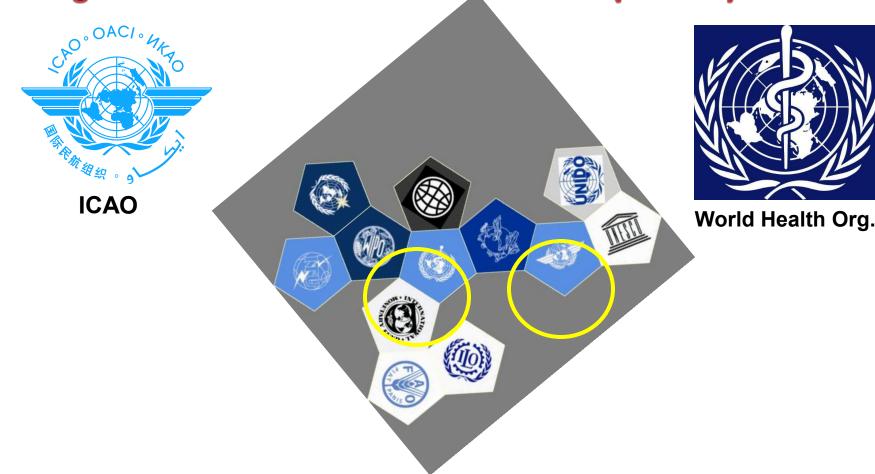


LEGAL AND FINANCIAL IMPLICATIONS PUBLIC HEALTH OUTBREAKS IN AVIATION

DR.LESEGO BOGATSU
MPH,SM AVIATION MEDICAL DEPARTMENT –SACAA

ICAO & WHO-Established Collaborative Arrangement for the Prevention & Management of Public Health in Civil Aviation (CAPSCA)-2007









ICAO ANNEXES -PUBLIC HEALTH EVENT OF INTERNATIONAL CONCERN

- International Health Regulations (IHR) published by WHO
- ICAO An. 6, 9, 11, 14,18 & Docs 4444 (PANS-ATM), 9284 (DG) & 18

National Public Health Emergency Contingency Plan (PHA)

•National Aviation Regulations with standards related to public health (CAA)

National Aviation Plan for a Public Health Emergency (CAA)

•Airport (PoE) Public Health Emergency Contingency Plan – PHECP (PHA, CAA & Airport)

Aerodrome Emergency Plan and Aerodrome Manual including public health emergencies

Air Traffic Services
(ATS) contingency plan
including public health
emergencies

ATS Procedures for PIC notification of suspected public health risk on board an aircraft

Aircraft Operators Procedures for mgmt of suspected public health risk on board an aircraft

BUSINESS CONTINUITY MANAGEMENT PLANS AND PROCEDURES FOR AIRPORTS, AIRLINES & ANSPS

LEGISLATIVE COMPLIANCE CAPSCA PROGRAMME

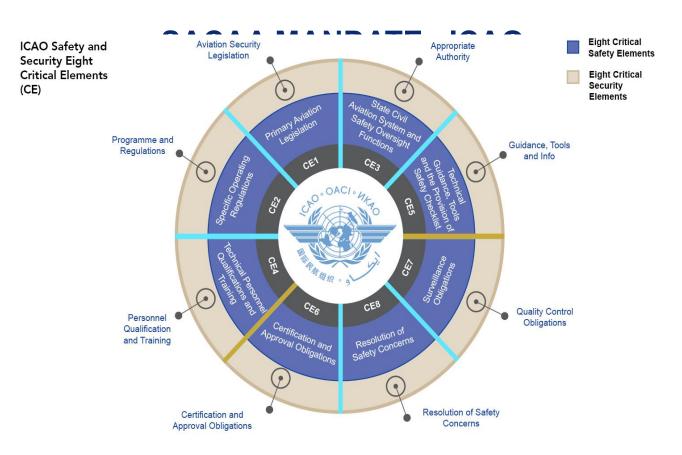


Diagram 1: ICAO Safety and Security Critical Elements

USOAP CMA: 8-Audit Areas

Primary aviation legislation and civil aviation regulations (LEG)
Chicago Convention &
Annexes 2 and 19

Civil aviation organization (ORG) SAAQ

Personnel licensing and training (PEL) Annexes 1 and 19 Aircraft operations (OPS) Annexes 6, 9, 18, 19 and PANS-OPS

Airworthiness of aircraft (AIR) Annexes 6, 7, 8, 16 and 19

Aircraft accident and incident investigation (AIG)
Annexes 13 and 19

Air navigation services (ANS) Annexes 2, 3, 4, 5, 10, 11, 12, 15, 19 and PANS-ATM Aerodromes and ground aids (AGA) Annexes 14 and 19

CIFS

programme

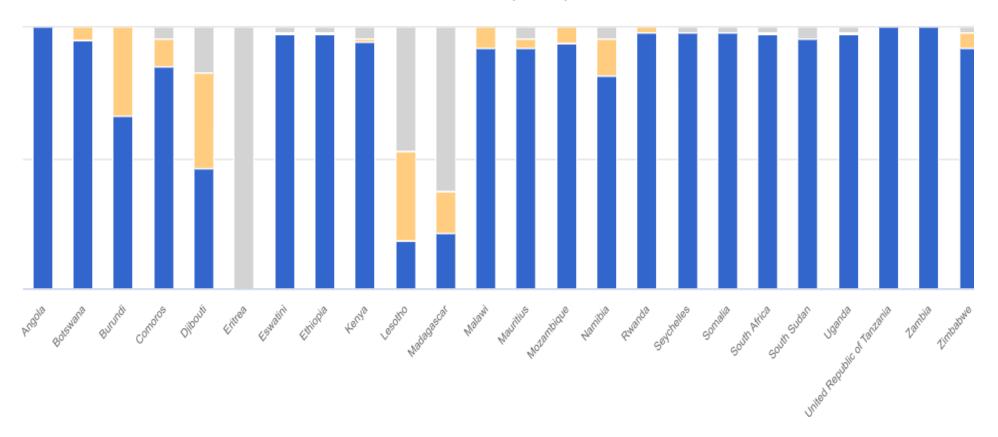








Status of Measure Adoption per State



SA Parliament & Inter-Ministerial Committee **DOT-NATFC-Annex 9 Aviation Pandemic Prepadness** MNORT-NDOH Plan/Aviation Preparedness Committee MOU DG DOT & DOH **DIRECTOR OF SACAA** Part 121 Part 64 Part 72 Part 91 Universal Part 113 Aviation **CC** Training ATC PIC-ATC/Ports Part 92 Dangerous Goods Precaution Pandemic Plan 2016 Instructor Communication Disinfection & Kits/First Aid Part 138 Air Ambulance Airports Annex 9 Designation Disinsection Kits & Drs Bag **Part 139** Annex 9

Annex 6

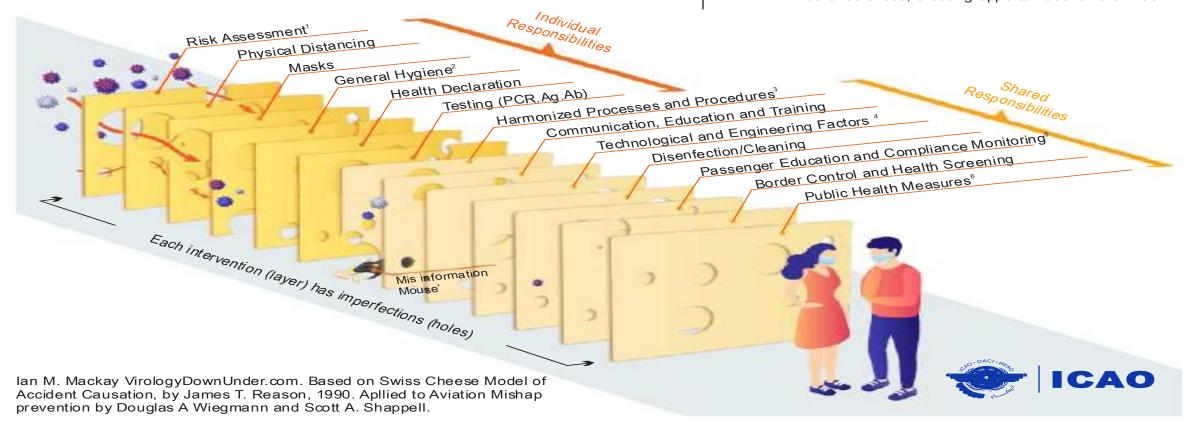
ANNEX 9-SACAA VIATION PANDEMIC PREPAREDNESS PLAN



AVIATION MULTILAYERED DISEASE DEFENCE STRATEGY

A multilayered approach increases success

- 2 Hand hygiene, cough etiquette
- 3 Multi-sector multi-State collaboration (PHC)
- Touchless procedures, cabin airflow HEPA filter
- 5 By airports, airlines and relevant aviation personnel
- ⁶ Contact tracing, quarantine isolation, vaccinations, and travel restrictions
- 7 The "misinformation mouse" eats holes into the defence slices, creating opportunities for the virus





PUBLIC HEALTH CORRIDORS (PHC)

















































































*GM: Developed by CART DG2 and coordinated with ANC

REGIONAL OFFICE FOR ATTICA

Sociedade Portuguesa
Sociedade Brasileira
WFSA

WFSA

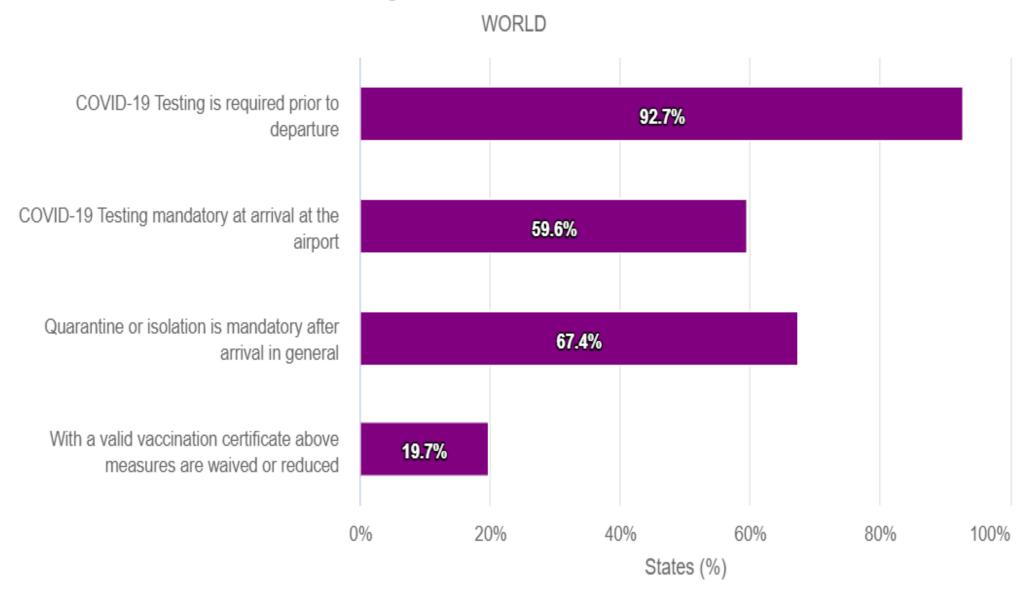
Risk Assessment

Reducing risk to zero is impossible, but multilayer can be one measure supporting a multilayered risk

Mitigation process. There are four main reasons to consider testing:

- Reducing potential transmission during the actual travel
- Reducing potential introduction of disease in a destination region/country.
- Potentially reducing or eliminating quarantine for the traveller at their destination.
- Helping to identify imported cases of new variants through genomic sequencing.

Testing and Quarantine Measures



CASE STUDY SA FLIGHT DISEMBARKED PCR TESTING

The Disaster Management Regulations required for passengers to present a 72 on arrival In line with best practice and the need to protect airport staff, crew and other passengers DOT/CAA Regulations required PCR Testing prior to departure –Regulations supported by NOTAM Airline X was aware of the regulations and operated in East Africa

CASE STUDY SA FLIGHT DISEMBARKED PCR TESTING

Prior to departure with the aircraft doors closed it was identified that an estimated 50 more passengers did not have a test

Operator called DOH for the passengers to be allowed to fly with the hope that they will support flight

CAA refused and the passengers were asked to disembark

Cost Implications Airline

Operator already had financial constrains

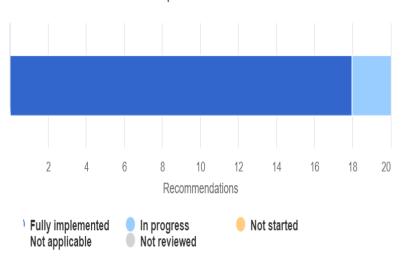
Closed and a Number of Airlines Received Enforcement Action From Testing on Arrival

CART Recommendation Gap

Analysis

South Africa

Level of Implementation



Level of Implementation by Area

GAP - PUBLIC HEALTH IMPLEMENTATION

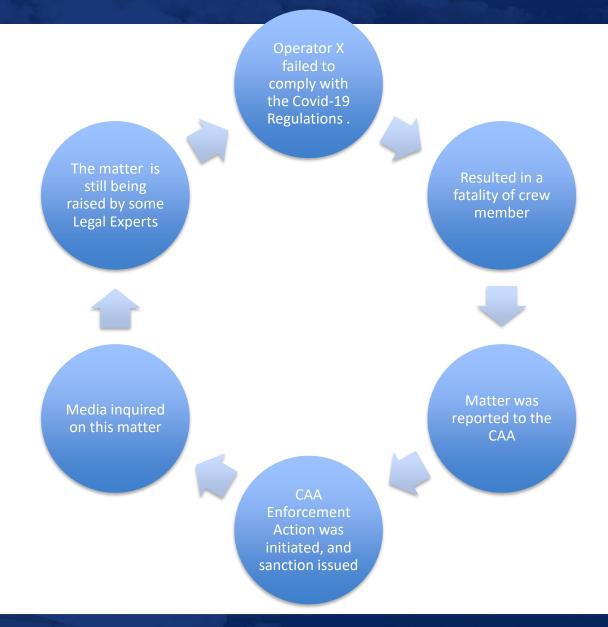
- REC-17 Member States should implement testing certificates based on the protocol, minimum dataset and implementation approaches outlined in the Manual on Testing and Cross-Border Risk Management Measures (Doc 10152) to facilitate air travel.
- 1) States are encouraged to request evidence of testing that is secure, trustworthy, verifiable, convenient to use, compliant with data protection legislation and internationally/globally interoperable.
- Existing solutions should be considered and could incorporate a visible digital seal. This may be applicable to vaccination certificates.
- 3) Public Health Corridor Mutual Agreement Between States
- 4) Solutions –African Union-CDC-Panbios IATA Solution /IATA/ICAO /ICAO IPACK –Angola & Mozambique Implemented







CASE STUDY :OPERATOR ENFORCED FOR NONCOMPLIANCE RESULTED IN FATALITY CREW



- Passenger X came through OR Tambo
- He was sick on board –no measures were taken
- Airline failed to activate –stakeholders
- Admitted in SA Hospital- Confirmed Nisseria Meningitis Lab Confirmed
- NICD notified Ports of entry for contact tracing
- Airline refused to release passenger Manifest
- Dept. Health –Act on Notifiable Disease
- CAA was notified –Based on the Release of Passenger Manifest Reg
- Legal was brought in and finally the document was released-Time Critical
- POPIA –Provision Public Safety



ICAO Annex 9 2022 Passenger Locator Forms

- Recommended Practice.— Contracting States requiring information on passengers and/or crews with the
 objective of contact tracing should consider collecting this information digitally and directly from persons for
 the purpose of pandemic management, or collect the Public Health Passenger Locator Form reproduced in
 Appendix 13 for the purpose of managing a specific
- Note.— To manage a specific health incident requiring the use of Public Health Passenger Locator Forms in paper form, States should make available adequate stocks thereof for use at their international airports and for distribution to aircraft operators.
- Recommended Practice.— Contracting States requiring information concerning the health of passengers should consider collecting this information digitally and directly from persons for the purpose of pandemic management, or collect, for the purpose of managing a specific incident, the Public Health Passenger Self-Declaration Form developed for the specific health threat.

Passenger Manifest

Operator Point of embarkation Point of dise	mbarkation	Marks of Nationality and Registration* Flight No				
Surname and initials	Nationality	For use by operator only	For official use only			

PASSENGERS FALCIFICATION OF THE VACCINATION CERTIFICATE

- Passenger X Departed from SA to Uganda
- Presented a fake vaccination certificate on arrival
- Due to Regional Collaboration with EASAF –SACAA was consulted via whattsup
- Received immediate response
- Passenger was managed accordingly by the authorities in Uganda
- Confessed to the certificate was fraud
- SAD AND MOURN THE PASSING Dr.James Eyul



PASSENGER CLAIMED REIMBURSEMENT FOR BEING INFECTED COVID-19 ONBOARD

- Passenger X flew domestically & few days later contacted DOH
- Claiming to have contracted Covid 19 on board
- Matter was referred to the CAA
- Passenger was asked to provide all the documents
- Passenger Disappeared
- Both CAA and DOH –Agreed that the passenger interested in Financial Gain

ICAO Annex 9 2022 Passenger Locator Forms Digitization



Recommended Practice.— Contracting States requiring information on passengers and/or crews with the objective of contact tracing should consider collecting this information digitally and directly from persons for the purpose of pandemic management, or collect the Public Health Passenger Locator Form reproduced in Appendix 13 for the purpose of managing a specific



Note.— To manage a specific health incident requiring the use of Public Health Passenger Locator Forms in paper form, States should make available adequate stocks thereof for use at their international airports and for distribution to aircraft operators.



Recommended Practice.— Contracting States requiring information concerning the health of passengers should consider collecting this information digitally and directly from persons for the purpose of pandemic management, or collect, for the purpose of managing a specific incident, the Public Health Passenger Self-Declaration Form developed for the specific health threat.

AFRICA CDC POWERED SOLUTIONS

PanaBIOS AU XChange

Harmonizing Travel protocols and restrictions across Africa. Thus, makes it easier to establish protocols for travel between countries across the continent



Digital Lab Registry that links labs across Africa to enable lab test standards monitoring and improve quality of results



A global solution in partnership with UNDP for connecting Africa and the rest of the world through all the other Africa CDC powered platforms



Mechanism of verifying test certificates and other medical data across the continent by port health authorities and government officials



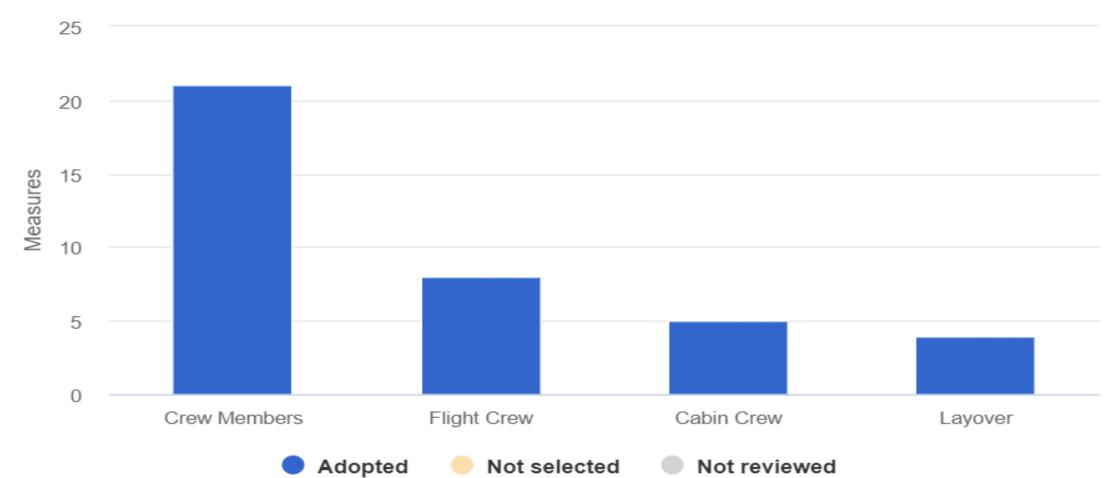
- i. A means to generate vaccine certificates and passports.
- ii. For fair and efficient allocation of vaccines and accountability

- International Operator X flew with a passenger who was positive
- Presented at one of our airports
- Operator reported to our office
- Enforcement sanction applied



Crew

Level of Measure Adoption by Element



Covid-19 Testing of Crew

Initially there were requirements for crew to be tested

ICAO had issued guidance on crew testing exemption based on measures in place and the frequency of testing that would be required

Some International Airlines raised this matter on the media & threatened to cancel flights to SA

Matter was raised was elevated to the Embassy of that Airline with complaints Health DG

Ultimately crew was resolved with restrictions

WHO TESTED POSITIVE DOMESTICTLY INTENDED TO FLY



Domestic Airport X had a vigilant Manager



Worked well the community



More than 1 anonymous tip off of positive passengers



Who intended to fly



They were not allowed to enter the airport

REPATRIATION OF CITIZENS

- Airline X
- Trained with approved procedures and have been trained
- CAA Med Assesors Ramp Inspections –
 Crew was not sure of Universal Precaution

Kit

- Aircraft delayed take off
- Used a defeat name for a
- CPR Cardiac Arrest –Covid-19



Single Cabin Crew Operators

- Regional Operators with a single cabin crew
- What happens when the crew become incapacitated
- What happens when there is a suspected case of communicable disease on board or other medical emergencies
- What happens to safety demonstrations
- Who takes care of cabin
- Crew operate few legs and normally fatigues



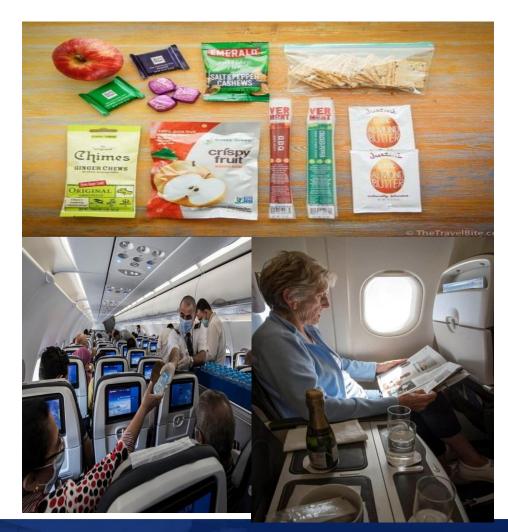
Masks

- Exemptions for Passengers with underlying conditions (example Autism) can be exemptedpresent a medical practitioner letter-Response of other passengers
- Passenger X was a frequent flyer who presented medical certificate indicating that he had a health illness and could not wear a mask
- Airline were concerned about the received medical certificate and their concerned was that he did not look visibly ill
- Airline referred the matter to the CAA
- Requested to submit the certificate to the CAA for follow-up but it never happened



CATERING ON BOARD -SHORT HAUL FLIGHTS

- ICAO -Limit or suspend food and beverage service
- Food and beverage service should be limited or
- Suspended on short-haul flights or should be considered to be dispensed in sealed, pre-packaged containers.
- SA –Variant-Infectious-not well understood
- SA –WHO Criteria Community transmission



AIRPORT BUSES CONFIGURATION

- Bus configurations are not the same, risk assessment required
- Close Contact between Passengers
- Limitation of masks-Filtration
- 15 Minutes Exposure /Variants not well understood
- Conflicting laws



LESSONS LEARNED ENFORCEMENT ACTION FROM COVID-19 -AIRPORTS

CAA & Passengers Complaints

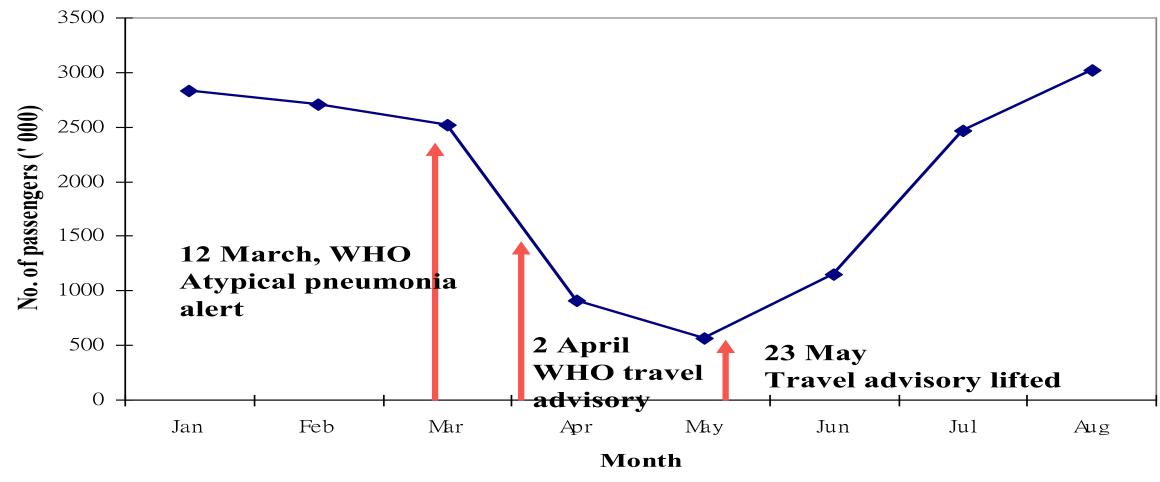
- Escalators, elevators and lifts, handrails cleaning
- Passengers complained washrooms, toilets and baby changing areas not cleaned
- Courasell crowding despite social distance stickers ,afterhours no monitoring
- Luggage trolleys ,security collection bins not continuously disinfected
- Parking shuttle buses and airside buses
- Ventilation -Increase the use of air conditioning and effective filtration systems to keep air clean, reduce re-circulation and increase the fresh-air ratio and horizontal airflows should be limited





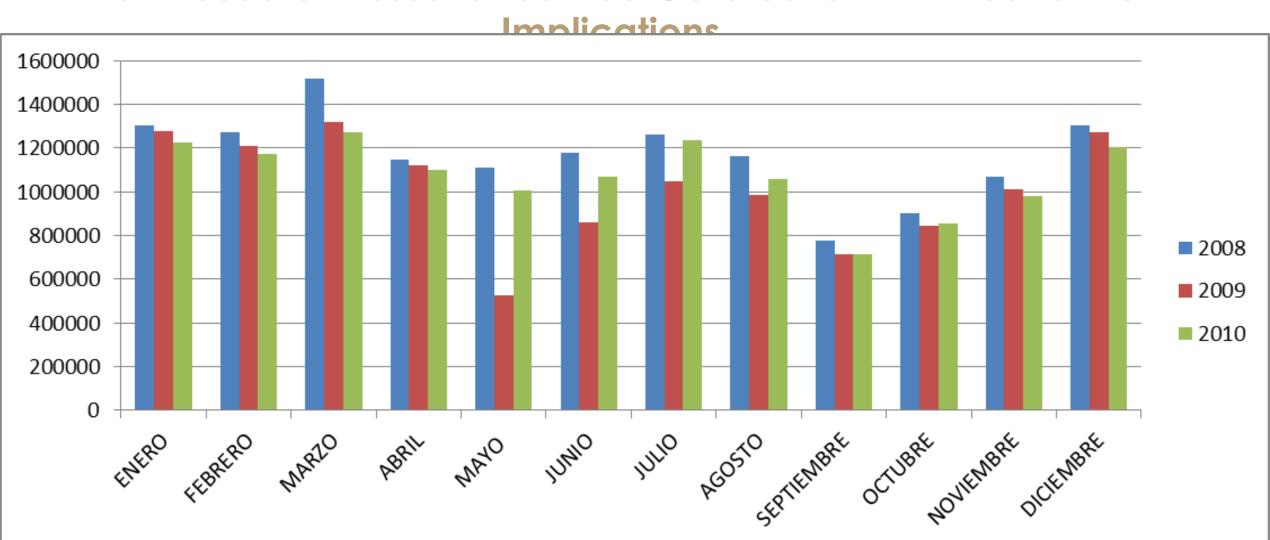


Passengers of Hong Kong International Airport, January to August 2003



Courtesy: Dr Henry Kong, Chief Port Officer, Hong Kong

Plan Based on Lessons Learned Outbreaks H1N1 Economic







2014

EBOLA

34,781

PRE-EBOLA

27, 147

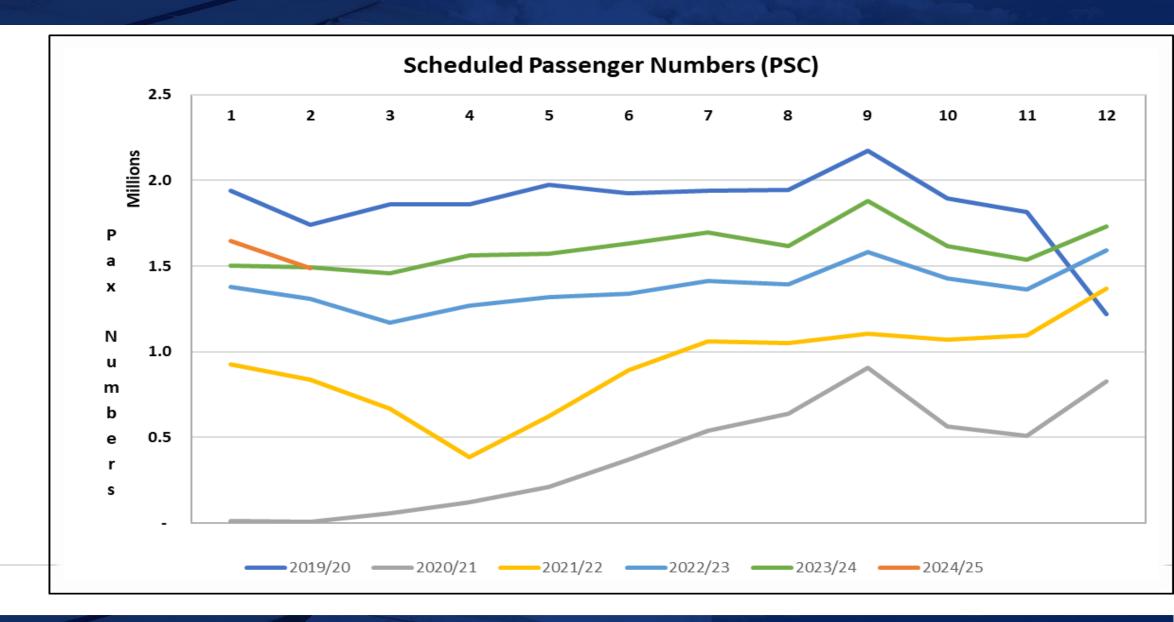
12, 578

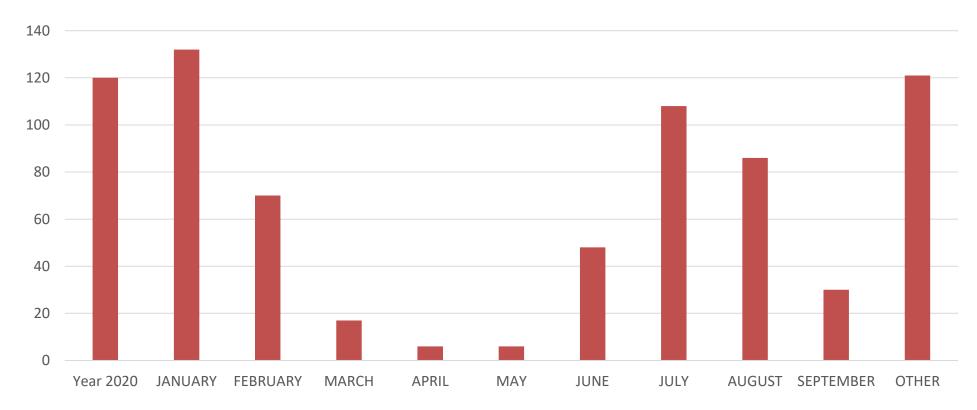
POST-EBOLA

PAX **MOVEMENT**

APPROX

Scheduled Passenger Numbers										
	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	Variance vs 2022/23	Variance vs 2019/20 (Pre Covid)		
Apr	1,938,540	12,567	926,361	1,379,978	1,502,387	1,645,163	9.5%	-15.1%		
May	1,740,168	6,639	836,408	1,310,488	1,491,055	1,485,132	-0.4%	-14.7%		
Jun	1,858,691	54,481	670,010	1,169,184	1,459,423					
Jul	1,860,686	123,167	387,157	1,267,807	1,563,003					
Aug	1,972,690	209,803	622,173	1,318,297	1,571,948					
Sept	1,924,409	369,050	892,802	1,339,319	1,633,309					
Oct	1,937,208	539,326	1,059,543	1,413,525	1,695,106					
Nov	1,945,855	638,259	1,051,249	1,390,864	1,618,956					
Dec	2,173,220	905,558	1,106,568	1,582,695	1,881,595					
Jan	1,893,700	561,364	1,068,892	1,425,578	1,617,266					
Feb	1,815,147	507,600	1,096,849	1,362,277	1,537,427					
Mar	1,216,864	824,379	1,368,667	1,592,313	1,729,501					
Total	22,277,178	4,752,193	11,086,679	16,552,325	19,300,975	3,130,295				
Average	1,856,432	396,016	923,890	1,379,360	1,608,415	1,565,148				
% growth	-1.7%	-78.7%	133.3%	49.3%	17.5%	4.6%				





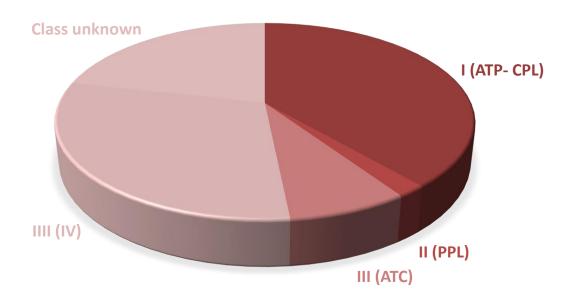








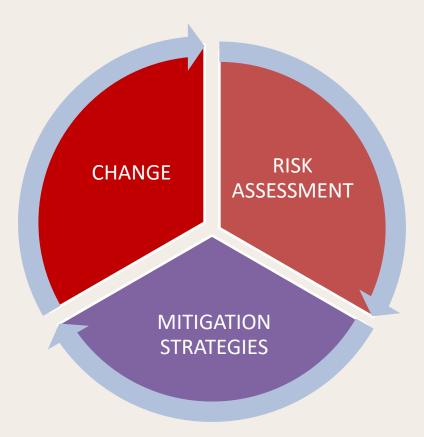






CHANGE IS INEVITABLE

- The situation changes frequently & regulations will change accordingly and vary according to the routes being operated and the prevalence of the outbreak in each country.
- Risk assessment should be continuous to ensure appropriate mitigation strategies



CONCLUSION