

COVID-19: Lessons Learned

Preparing for future pandemics

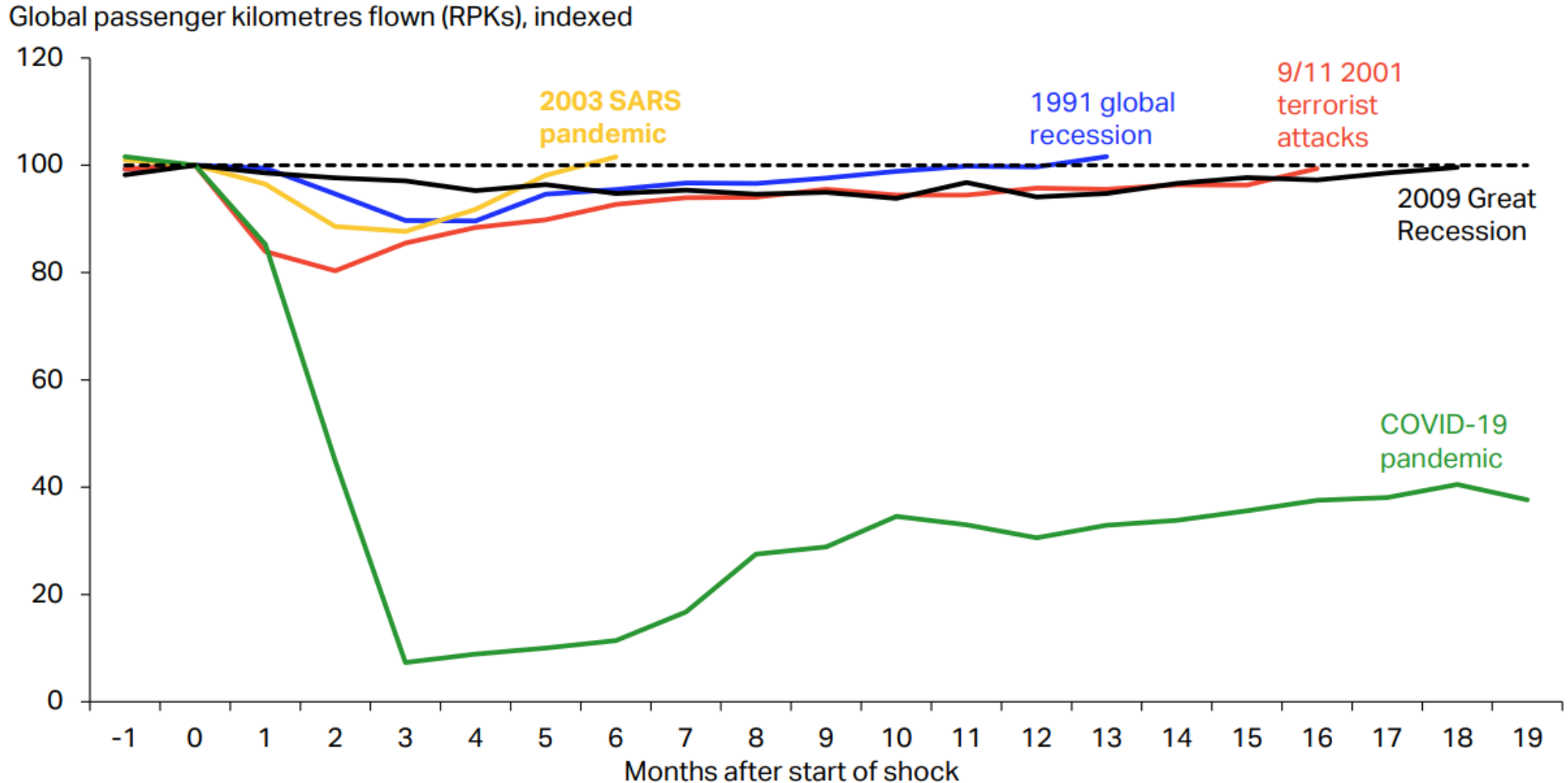
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COVID-19 had an unprecedented impact on air travel



Source: IATA Economics using data from IATA Monthly Statistics. Data is adjusted for seasonality.

Extensive Lessons Learned from COVID-19

Multiple challenges, one key theme: Fragmented response to COVID-19 delayed recovery.

- Lack of coordination between States in terms of measures applied
- Patchy collaboration and engagement between travel and health sectors
- Absence of transparency around risk assessments
- Confused communication of measures
- Lack of global standard for health credentials – vaccine certificates, test results
- Collection of traveler information - Industry became *de facto* health inspector
- Particular challenge around treatment of crew

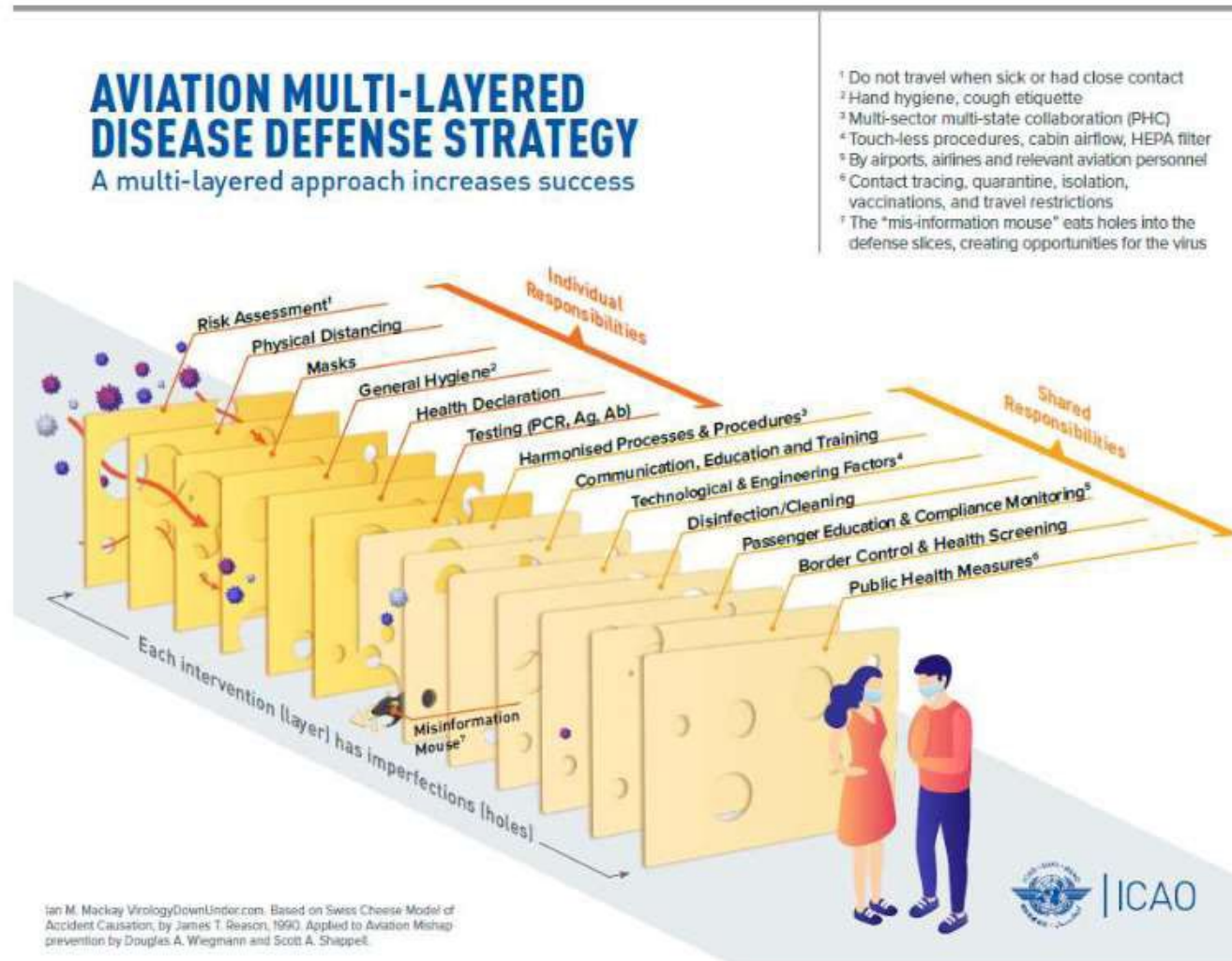
Focus of science-based review limited to health measures applied to air transport

Purpose: To inform development of a playbook for responding to “Disease X”



CART was critical and transformational in mid-2020

"Swiss-cheese" model appropriate given unknowns at the time



Extensive research into airflow in cabin environment

Ventilation Air Rate (VAR) is a standard measure for the exchange of air in a given space – office, shopping mall, airplane...

Here's how an airplane's Ventilation Air Rate compares:

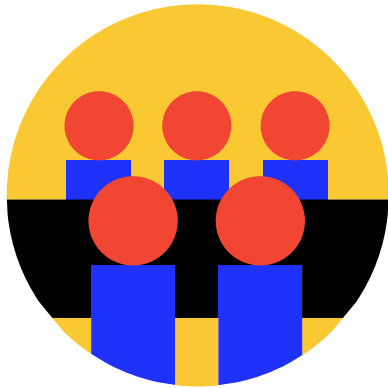
x2

Better than a
classroom



x3

Better than a
conference room



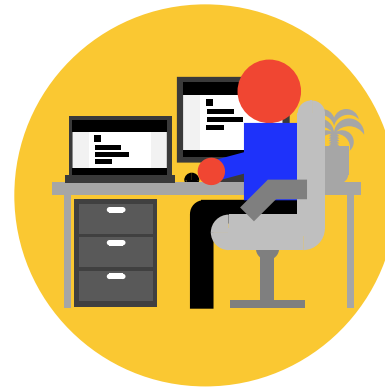
x8

Better than a **mall**
or **supermarket**



x12

Better than an
office space



Comparison based on data from ANSI/ASHRAE Standard 62.1 – Ventilation for Acceptable Indoor Air Quality (2019) and an aircraft operation with the max certificated number of passengers.

99.993%

**bacteria/virus removal
efficiency rate**

Including SARS, which is similar to COVID-19,
according to independent testing.

50/50

**Mix of HEPA-filtered / fresh air
onboard**

And this is changed 20-30 times per hour.

3 minutes

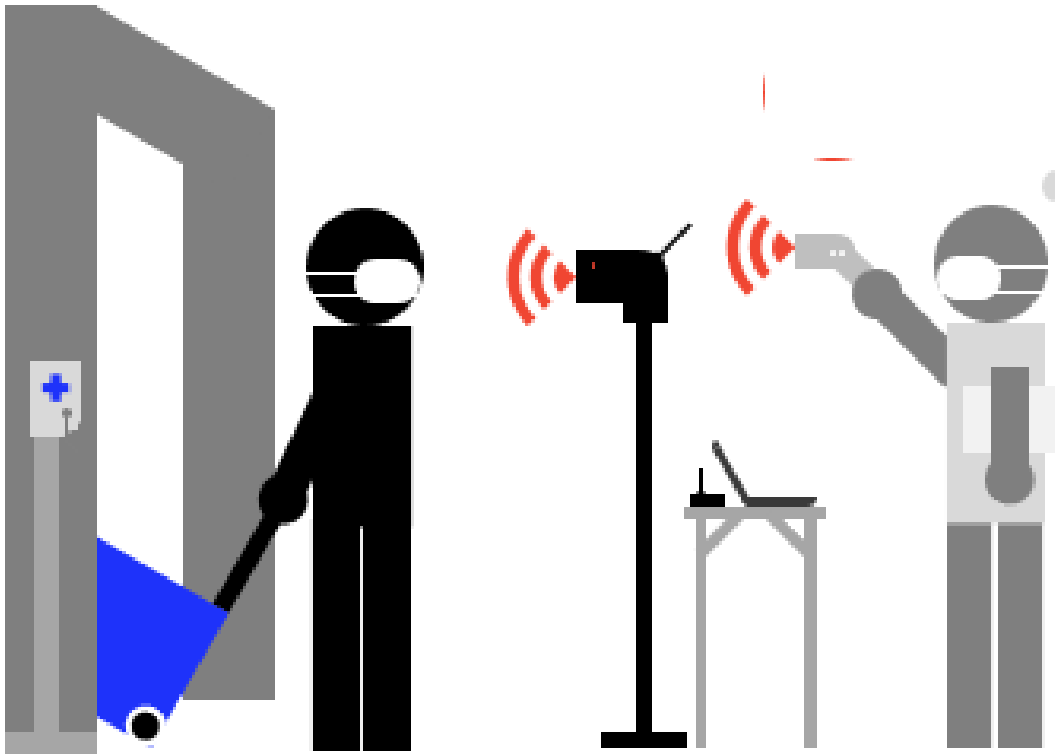
**Cabin air is refreshed on average
every 3 minutes**

Hospitals ≈ 10 minutes

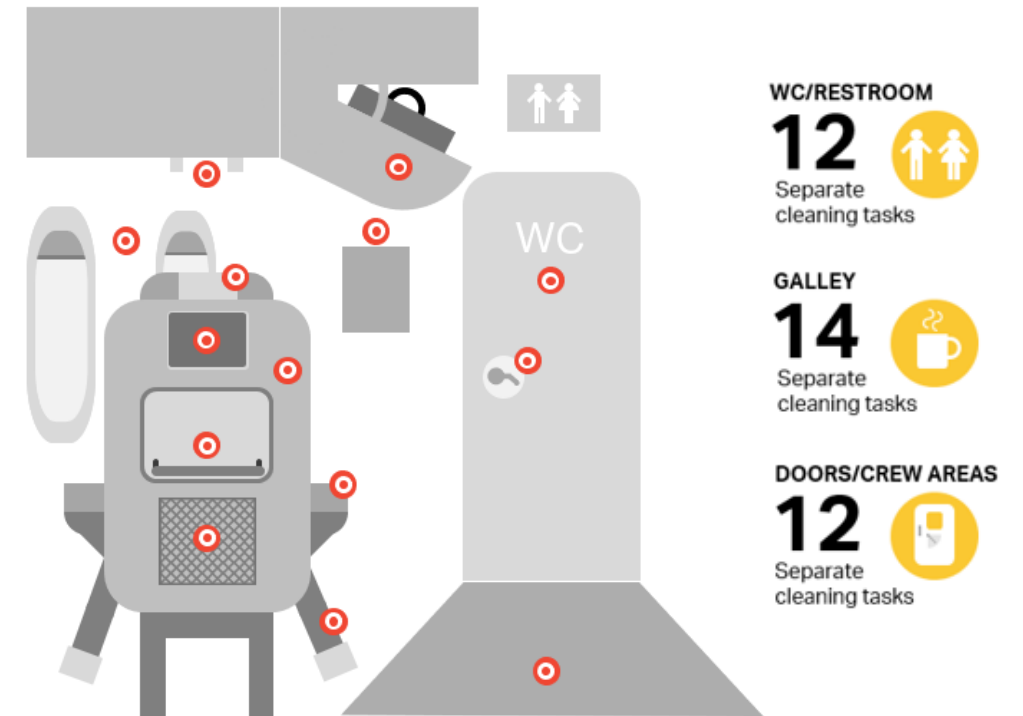
Offices ≈ 20 minutes.

Merits of measures unclear; operational impact significant

Temperature checks and extra disinfection largely ineffective



Pana et al “Real-World Evidence: The Low Validity of Temperature Screening for COVID-19 Triage” Public Health, Infectious Diseases – Surveillance, Prevention and Treatment Volume 9 - 2021 30 June 2021.



CDC US Centers for Disease Control and Prevention. Science Brief: SARS-CoV-2 and Surface (Fomite) Transmission for Indoor Community Environments. Posted 2021, Apr 5

Important to consider new and alternative approaches

Wastewater testing could play a key role in surveillance



IATA will support ICAO in this effort

IATA will support the Secretariat with our medical and facilitation experts as well as the knowledge and intelligence gathered during COVID-19.

- Since the beginning of the pandemic, IATA has been collating [medical evidence](#) relevant to COVID-19 and air travel
- IATA's Medical Advisor is supported by an Advisory Group of 10 airline CMOs
- IATA is already a core participant in CAPSCA and the CAPSCA Scientific Advisory Group
- IATA is also closely engaged in the work of the TF-HIOA to ensure consistency with facilitation workstreams such as review of health-related SARPs in Annex 9
- IATA is a Non-State Actor in official relations with WHO and has a triennial collaboration agreement and plan, so can support ICAO in liaison with WHO

IATA will organize and co-host joint ICAO-IATA workshops if needed – to collate evidence, share conclusions and promote preparedness ,



Summary

Magnitude of COVID impact on air transport highlights importance of preparedness

Review of documentation produced by ICAO and CART deliverable if properly scoped:

- ✓ Narrow focus on public health risk mitigation measures – not reopening all of CART
- ✓ Science-based approach – there is already a significant evidence base to draw on
- ✓ Should incorporate new technologies and approaches where appropriate

Key outputs are targeted and build on existing resources

- ✓ Evidence review document
- ✓ Guidance for responding to future health emergencies – robust to different pathogens

IATA will support the effort, from a medical and operational perspective

CAPSCA a useful platform for coordination – if A41 recommendations are applied

- ✓ Effective project management will be key to timely delivery

