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Multi-Layered Approach to Reducing COVID-19 Risk in Air Travel

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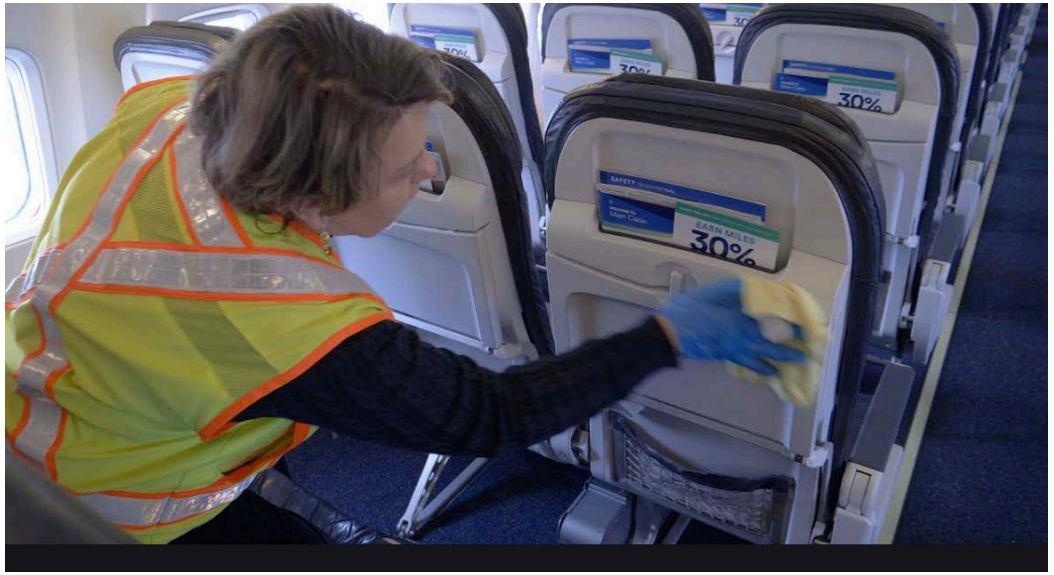
Flying in the COVID-19 Era--Science-based Risk Assessments and Mitigation Strategies on the Ground and in the Air: A Workshop

Hosted by the Aeronautics and Space Engineering Board
National Academies of Sciences, Engineering, and Medicine
February 4, 2021 – February 5, 2021

FSF Multi-Layered Strategy to Reducing COVID-19 Risk in Air Travel

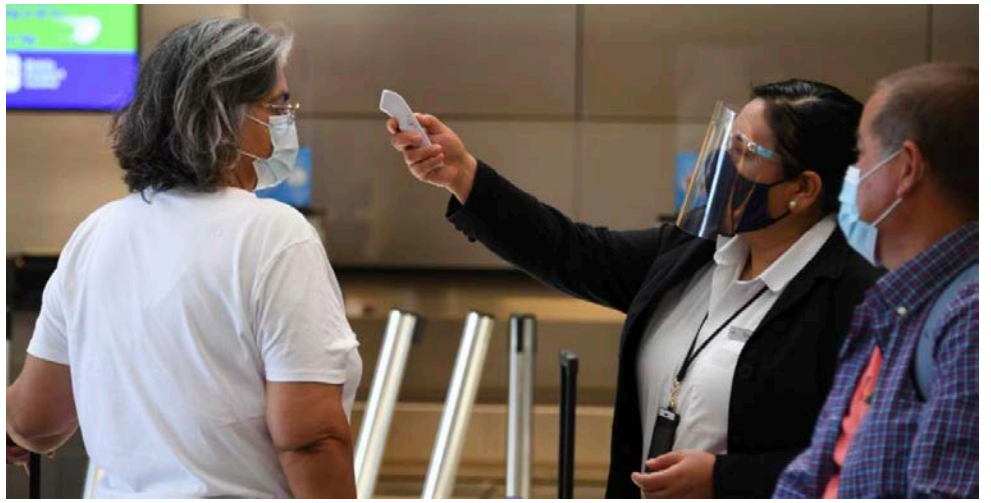
Improved Airline Procedures

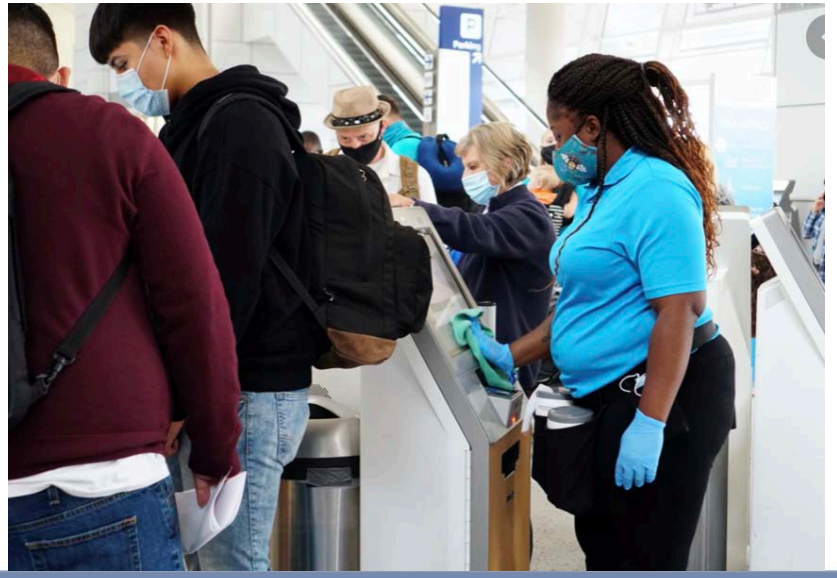
- **Contactless check-in**
- Requiring passengers to **wear face coverings**
- **Flight attendants** wearing masks and gloves
- Improved **aircraft boarding** and deplaning procedures
- Reducing/eliminating **in-flight service**
- Enhanced and more **frequent cabin cleaning** and disinfection
- **Training ground staff** in best cleaning and disinfection procedures
- Use of **new technologies**, including UV light cabin disinfection



Improved Airport Procedures

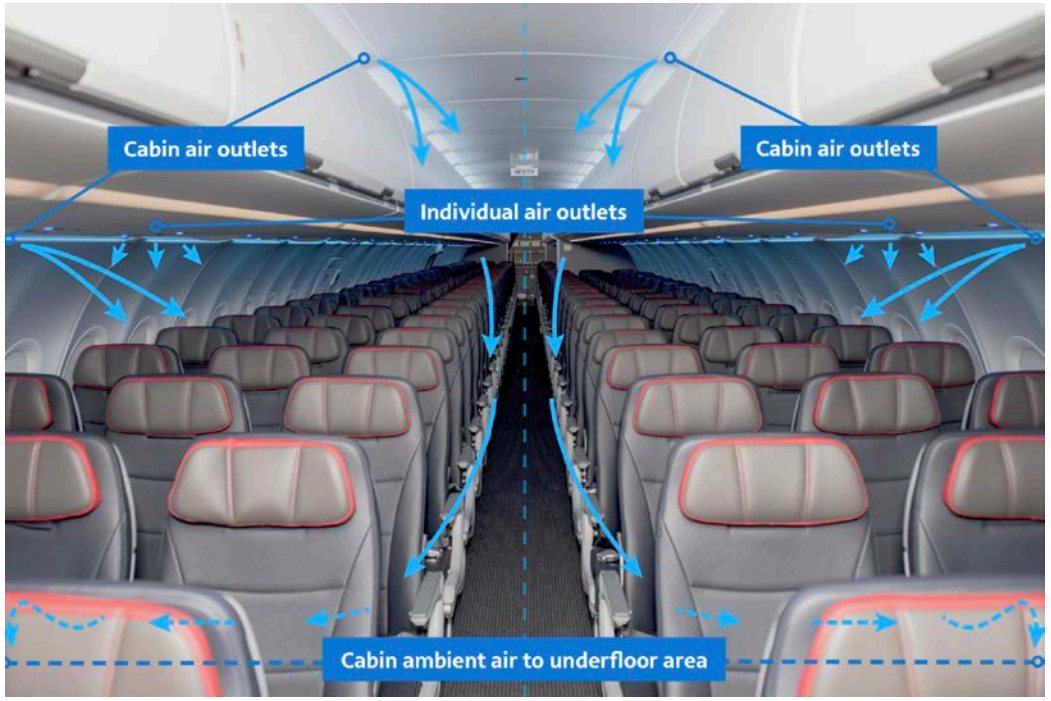
- **Facilities cleaned** more often and more thoroughly
- **Hand sanitizer stations** installed throughout the airport
- **Plexiglass shields** installed at check-in counters and in retail outlets
- Physical layout changes made to **maximize physical distancing**
- Retail stores are controlling access to maintain distancing
- Travelers are encouraged to **wear face coverings** within the airport
- Enhanced **screening procedures**
- ACI **health accreditation program** to ensure airport health measures are aligned with international guidelines





Aircraft Cabin Air Quality

- Cabin **air exchanged every 2-3 minutes** (in hospitals it's about every 10 mins)
- Aircraft equipped with hospital-grade **HEPA filters:** 99.9% effective at removing viruses, bacteria
- **Airflow in passenger cabin** is from ceiling to floor: less conducive to droplet spread
- **High seatbacks** and passengers facing forward mitigate spread
- **Computational fluid dynamics** to show that risk of exposure was lower an aircraft than in a grocery story or office
- OEMs working with airlines on **effective cleaning procedures and technologies** like UV light cleaning methods



Role of the Passengers:
Golden Rules for Healthy Travel

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New Norms in Air Travel Hygiene Etiquette:

The Passenger's Role in Sustaining a Healthy Environment

COVID-19 GOLDEN RULES

If unwell, do not travel or go to work

Maintain physical distance (if possible, 1 to 2 metres plus)

Comply with Personal Protective Equipment requirements

Minimise touching of surfaces and own face

Clean hands thoroughly and regularly

Apply proper etiquette regarding coughing and sneezing

Place all waste in an appropriate receptacle

Effective Vaccination & Testing Protocols

- Countries are expanding quarantines and restrictions for air travel in the face of continuing pandemic
- Medical community has advanced:
  - Rapid COVID-19 testing – highly accurate
  - Effective vaccines are emerging
- A need for a pre- and post- COVID-19 test protocol and standards that are internationally harmonized
- A need for vaccine “passport”

Looking Forward: Stakeholder Cooperation is Critical to Recovery of Air Transportation Sector

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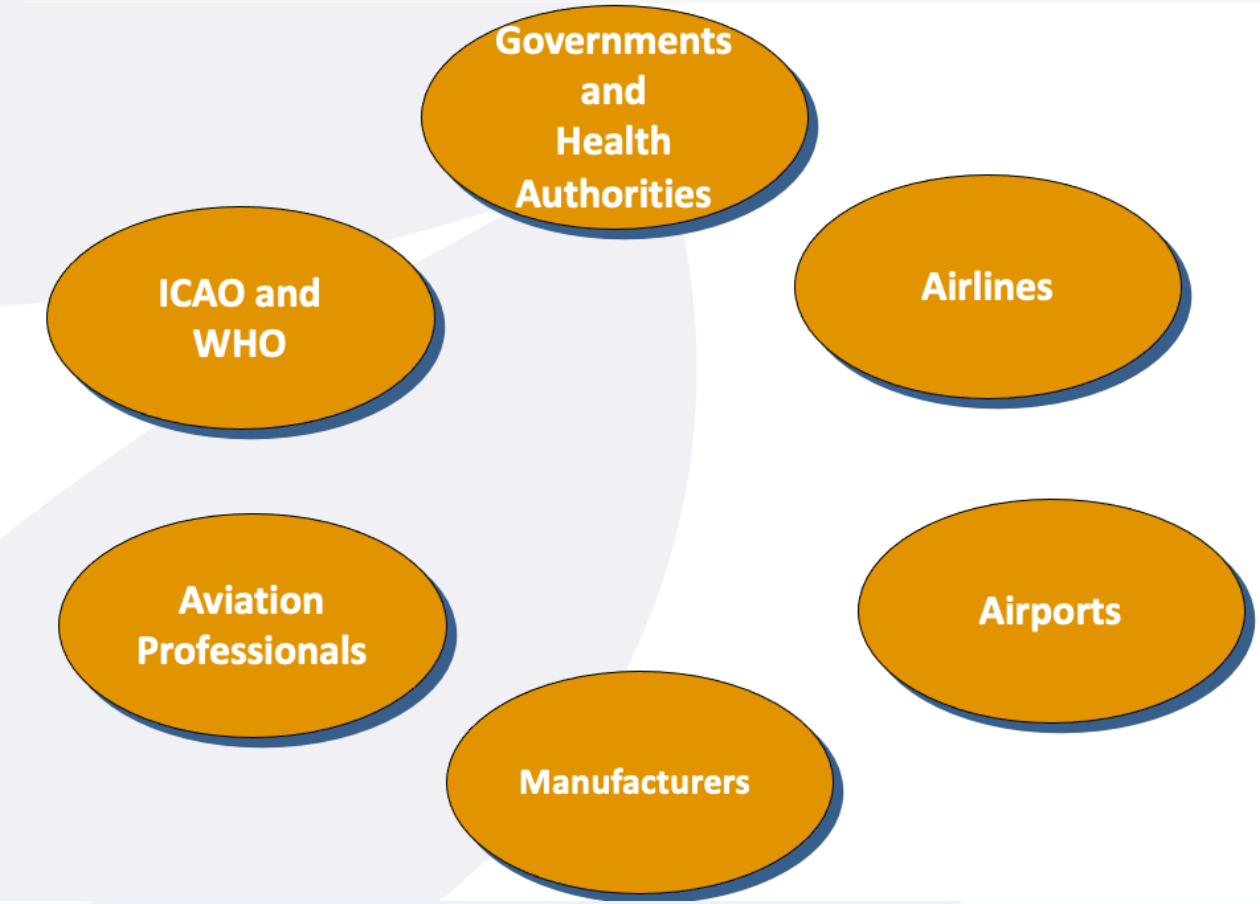
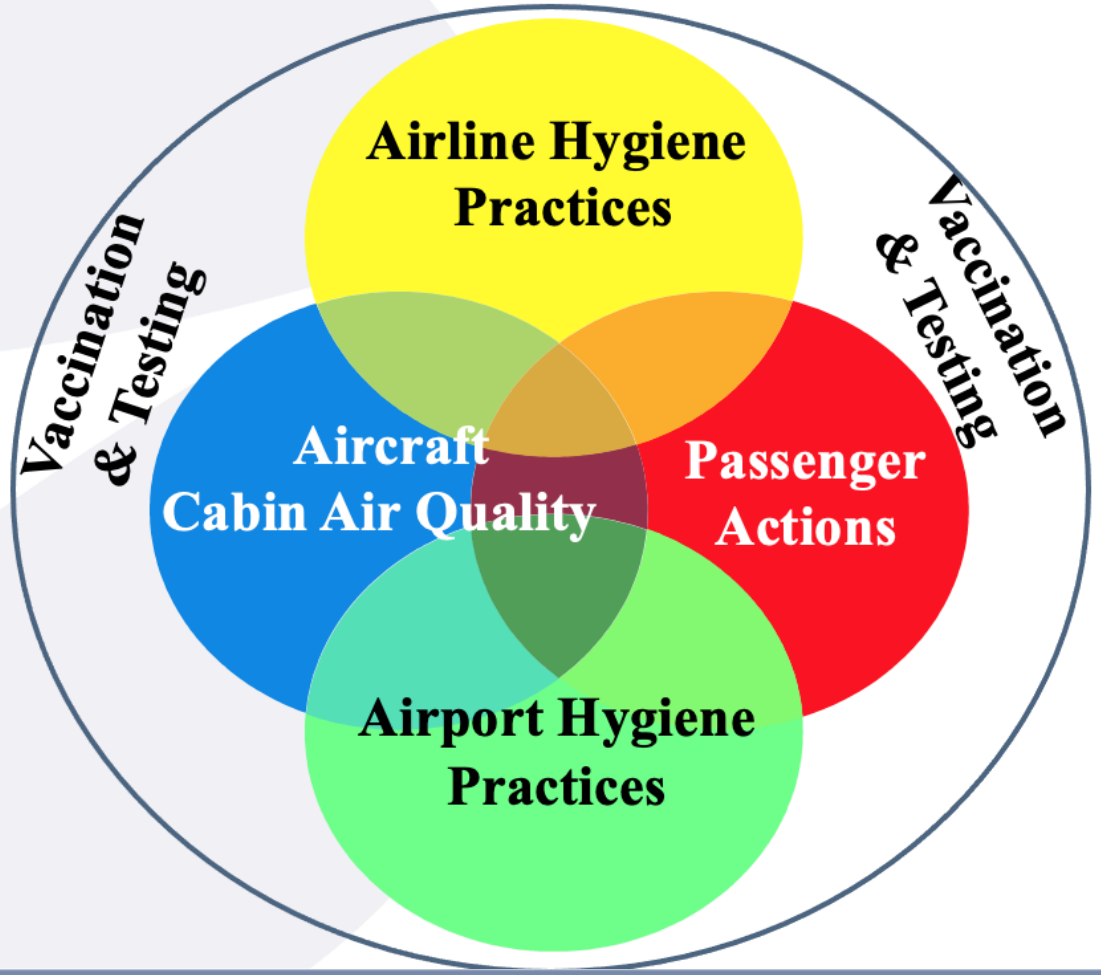
FSF Calls for Greater International Cooperation in Response to COVID-19





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Thank You