

# COVID-19

## How to prevent transmission on board airline aircraft

Dr David Powell

Medical Advisor

5<sup>th</sup> May 2020



# What is the risk of transmitting COVID-19 in flight?

## Published studies:

- Contact tracing for a flight China-Canada revealed no transmission
- Contact tracing for a flight New York – Taipei no transmission (all tested)
- One pre-publication suggested transmission but no information provided
- One pre-publication suggested transmission but looks very unlikely

# What is the risk of transmitting COVID-19 in flight?

## IATA Analysis:

- We asked medical contacts of 18 airlines (14% global traffic) about any cases of suspected in-flight transmission:
  - 3 instances suspected passenger to crew
  - 4 instances pilot to pilot (but timing unknown)
  - None of passenger to passenger
- More detailed examination – 4 airlines with public health follow up of 1100 confirmed cases post-flight (total pax >>100K).
  - No known secondary cases amongst other passengers and 2 of possible crew cases.

# The risk of onboard transmission is low

- Cabin characteristics:
  - Face to face interaction limited
  - Seat backs provide physical barrier between rows
  - Little mixing when sitting still

# The risk of onboard transmission is low

- Passenger behavior:
  - People are avoiding travelling when unwell
  - Avoiding touch contact
  - Practicing cough etiquette and hand hygiene

# The risk of onboard transmission is low

- Air flow characteristics on board may minimize droplet spread:
  - High flow rates - no stagnant air
  - Very little fore-aft flow
  - Air supply highly filtered

# Risks can be further reduced through layered approach

- Reduce risk of **people traveling while unwell** with screening (temperature etc)
- **Minimize close contact** at all stages of the journey
  - Contactless check-in and baggage processes
  - Physical distancing throughout the airport process
  - Meticulous hand hygiene
  - Enhanced cleaning procedures
  - Masks / face coverings
- Parallel protections relating to crew members

# Normal seat allocation can be maintained

- Implement in-flight measures, including
  - Limiting movement within the cabin during the flight
  - Mandatory wearing of masks or face coverings on board
  - Simplified catering procedures limiting movement and interaction



# Thank you

[www.iata.org/en/programs/safety/health/diseases/#tab-1](http://www.iata.org/en/programs/safety/health/diseases/#tab-1)

