

# Keep Trust in Air Travel

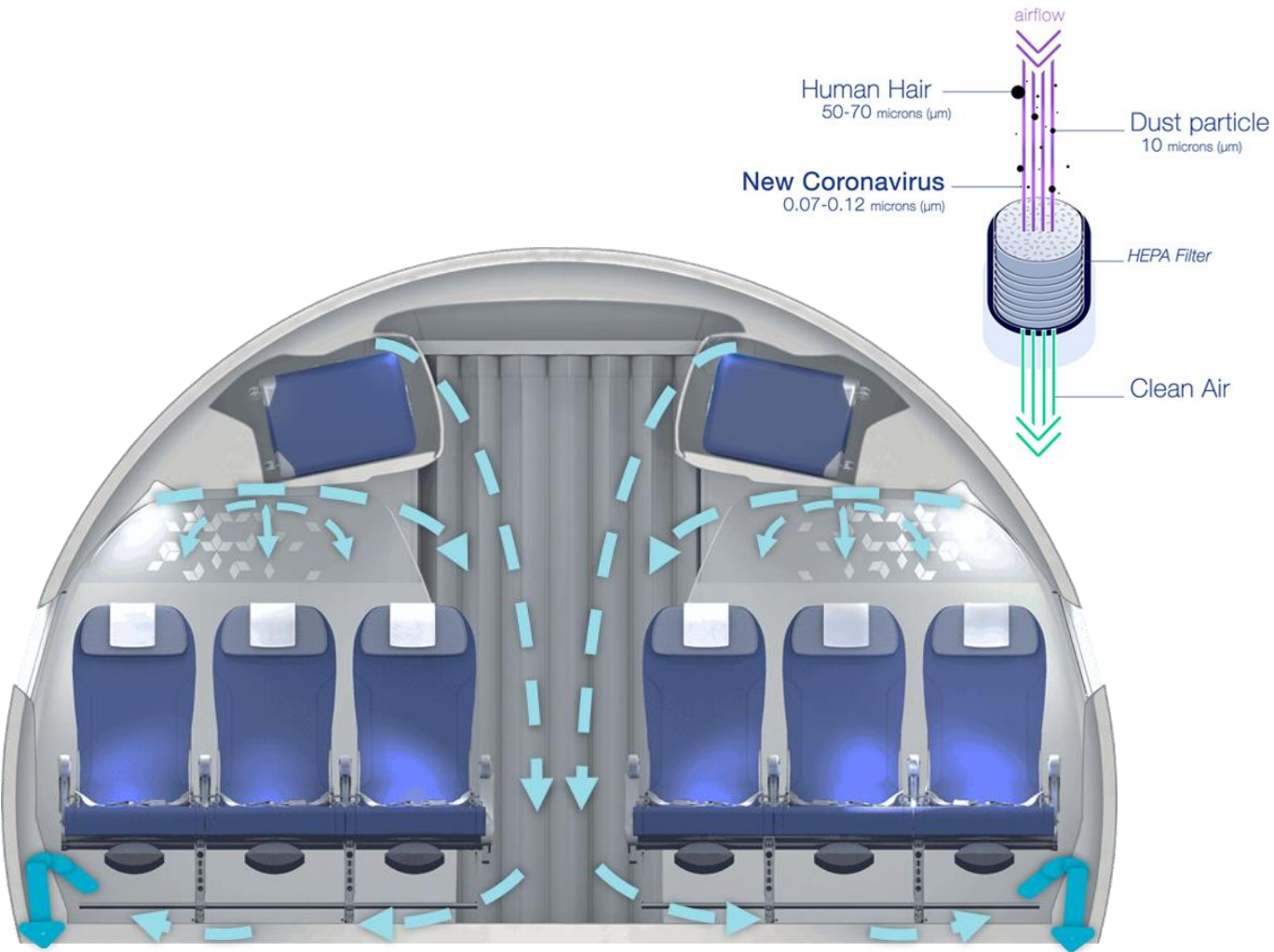
## Preview of Airbus' latest cabin air studies



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Airbus Engineering

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**AIRBUS**



## Cabin air - clean by design

Cabin air is fully **renewed** every 2-3 min

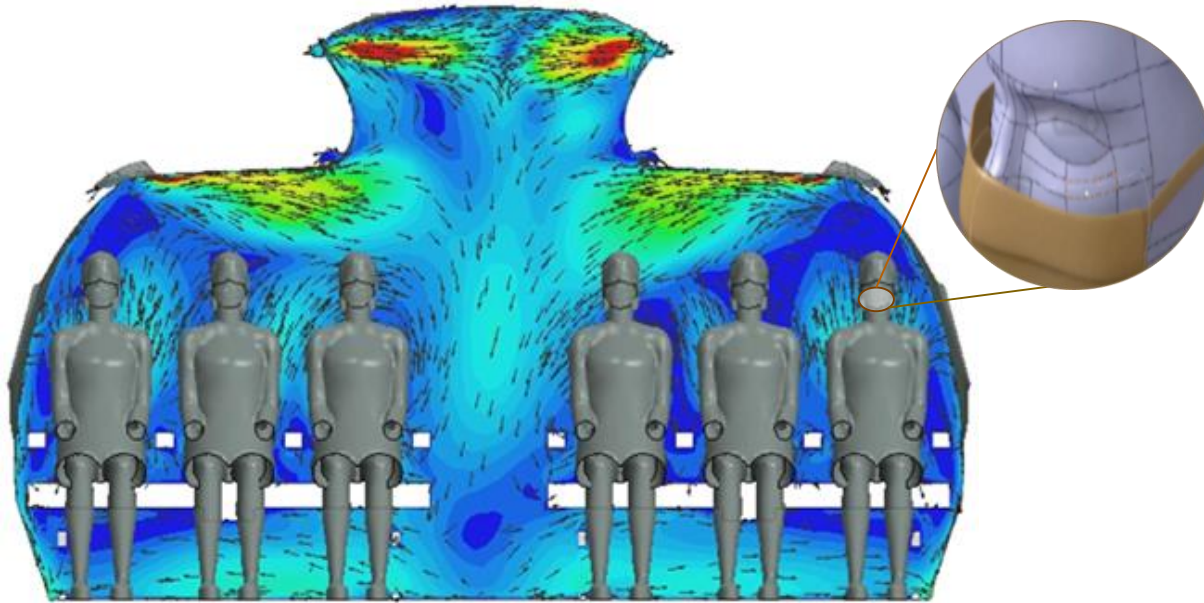
Constant injection of **fresh air**

**Hospital-grade filters** remove > 99.9 % of particles

Optimised **top-to-bottom flows** limit air mixing between rows

Back of the seats acting as additional barriers

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## Airbus study & methodology

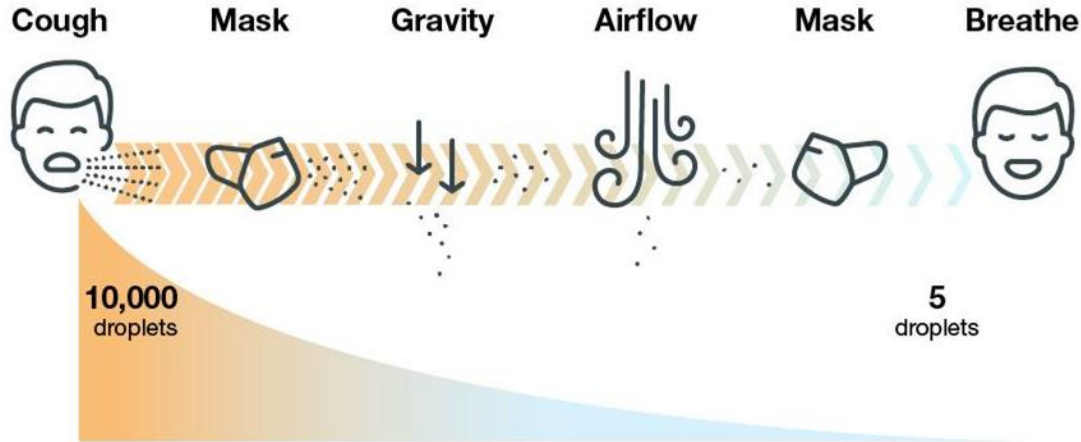
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To further understand  
particle propagation inside  
an aircraft cabin

Simulation of passenger  
particle emission events;  
breathing, talking,  
coughing and sneezing

- High quality full **3D Computational Fluid Dynamic models** of cabin air flow, **correlated with aircraft test-data** and physical ground tests
- Medical specialists consulted in several countries enabling accurate representation of passenger emission events (**breathing, talking, coughing and sneezing**),
- Air speed, direction, temperature computed at **50 million data points** inside the cabin
- Calculations repeated up to **1,000 times to represent 1 second** in real time

# Protective barrier layers



→ The study demonstrates **very low risk** of particle exposure for passengers

Result of a combination of all cabin features, airflow patterns and fresh air injection

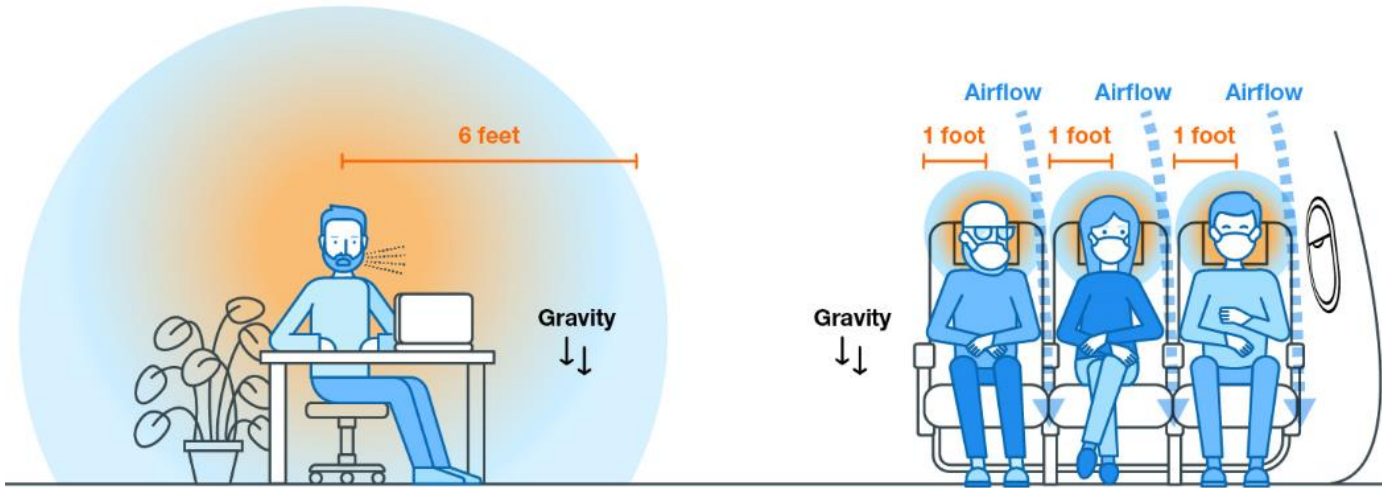
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Passengers wearing masks, following safety instructions

## Key findings

Physical distancing onboard aircraft can be **achieved** even when **all seats** are occupied

# Physical distance in both worlds



## Potential exposure is very low

...even with **ALL** seats occupied

Based on the **CDC\*** recommendation of 6 feet physical distancing minimum without a mask

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1 foot distance onboard the aircraft with a mask

\*CDC = Center for Disease Control

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Thank you