



**HARVARD T.H. CHAN**  
SCHOOL OF PUBLIC HEALTH



**HARVARD Kennedy School**  
Center for Public  
**LEADERSHIP**

The National Preparedness Leadership Initiative is a joint program of the Harvard TH Chan School of Public Health and the Harvard Kennedy School of Government, Center for Public Leadership.

## AVIATION PUBLIC HEALTH INITIATIVE

### Harvard T.H. Chan School of Public Health Researchers Release Phase Two “Curb-to-Curb” Report of SARS CoV-2 Transmission and Risk Mitigation in Airport Environment

Boston, MA (February 11, 2021) – Researchers with the [Aviation Public Health Initiative \(APHI\)](#), a project of the Harvard T.H. Chan School of Public Health, today released its Phase Two Report “Assessment of Risks of SARS-CoV-2 Transmission during Air Travel and Non-Pharmaceutical Interventions to Reduce Risk.”

The [Phase One “Gate-to-Gate” Report](#) focused on public health considerations aboard the aircraft, with scientific evidence showing that consistently following a layered approach serves as a strong risk mitigation strategy for SARS-COV-2 transmission on an aircraft.

The Phase Two “Curb-to-Curb” Report <https://npli.sph.harvard.edu/resources-2/aviation-public-health-initiative-aphi> similarly finds that a layered approach significantly mitigates risks at airports. “As with the Phase One Report, our team found multiple actions that airports, airlines and travelers are taking and can take to lower COVID-19 related risks during air travel,” said Dr. Leonard Marcus, Co-Director of APHI. “Our hope is that this report provides industry and travelers with the scientific foundation for how to manage air travel and lower risk in the face of this enigmatic and pernicious disease.” Dr. Marcus noted that guidance from public health authorities regarding travel is evolving along with our understanding of the SARS-CoV-2 virus, and that people should remain attuned to their advice regarding the changing risk environment.

The report cautions that the layering of risk mitigation measures should be tailored to address the features at each airport, as every airport is different and various areas in airports present lesser or greater risk than others. This depends on congestion or overcrowding, such as in gate holds, intra-airport transport, checkpoints and break rooms. Additionally, the Phase Two Report notes that the emergence of more infectious strains since the publication of the Phase One Report makes these mitigation measures even more imperative.

The Harvard APHI Team surveyed 25 airports of various sizes, performed its own modeling of air quality in airport settings, and then applied those findings to a comprehensive assessment of current research on the SARS-CoV-2 virus. The Team found that airports are diligently applying many effective risk-mitigation measures, adopting a layered approach. However, some interventions could serve to increase risk under certain conditions.

The Team’s analysis provides a set of recommendations to refine, support and enhance the mitigation efforts of the airports. Among them, airports should analyze and optimize ventilation systems where feasible; reduce congestion where possible; and regularly remind travelers of critical behaviors – mask wearing, physical distancing, and hand hygiene. Airlines should continue to encourage the use of no or contact-limiting devices, explore the feasibility of testing for health screening as new, lower cost tests become available.

Both the Phase One and Phase Two Reports stress the importance of compliance by passengers with science-based SARS-COV-2 guidelines. “Generally, airports are making every effort to do their part. If you are going to travel, the most important things you should do are make a COVID plan, evaluate your health risks in consultation with your doctor, and follow the latest guidelines from the World Health Organization and the Centers for Disease Control and Prevention,” added Dr. Marcus. “A few simple actions, such as careful disciplined mask wearing, can keep you healthy and safe and do the same for others.”

The APHI Report is an independent study, sponsored by a consortium of aviation industry airlines, manufacturers, and airports. They provided researchers both the data and access for the substantive analysis as well as the distance to support evidence-based findings and recommendations. This enabled investigators to adopt a systems-based, scientific approach to problem assessment and solution building regarding SARS-CoV-2 mitigation in aviation settings.

This Phase Two Report concludes APHI’s research on strategies and practices to reduce the public health risks of flying during the COVID-19 pandemic.

The Phase One and Phase Two Reports and report highlights can be found <https://npli.sph.harvard.edu/resources-2/aviation-public-health-initiative-aphi>.

For more information contact:

**Richard Ades, Media Advisor**

Email: [rades@hsph.harvard.edu](mailto:rades@hsph.harvard.edu)

Aviation Public Health Initiative