Federal Leadership Needed to Advance Research

Why GAO Did This Study

The COVID-19 pandemic has intensified ongoing concerns about air travel's role in spreading disease and raised questions about the safety of passengers and crew. Research that could provide quality information on communicable diseases in air travel can help to protect public health.

The CARES Act includes a provision for GAO to monitor and report on federal efforts related to the COVID-19 pandemic. GAO was also asked to review research on disease transmission in air travel. This report examines: (1) the status of research on communicable diseases in air travel, including stakeholders' views on additional needed research and challenges to conducting it, and (2) the extent to which FAA and other federal agencies are advancing such research.

To conduct this work, GAO interviewed stakeholders, including federal officials, researchers, and aviation industry and union representatives. GAO also reviewed academic literature and agency documents, including research plans, as well as key considerations for interagency collaboration.

What GAO Found

GAO identified research conducted on communicable diseases in air travel in several areas. For example, research has examined how air moves in aircraft and studied the effect of different airline operations—such as boarding aircraft from back to front—on the risk of disease exposure. However, stakeholders GAO interviewed described the need for more research involving real-world situations and human behavior. Additional research could inform the development of evidence-based mitigation measures, policy, and regulations to protect public health. Stakeholders cited several challenges, particularly the lack of federal leadership to facilitate interdisciplinary research and address gaps, to conducting research on communicable diseases in air travel. Stakeholders said researchers’ inability to access aircraft, airports, or data also poses challenges to performing needed research.

Examples of Conditions or Behaviors That May Affect Disease Transmission on an Airplane

Several agencies have focused on those research areas most relevant to their priorities and mission. Such agencies include the Department of Health and Human Services (HHS), the Department of Transportation’s Federal Aviation Administration (FAA), and the Department of Homeland Security (DHS). None of these agencies have undertaken efforts to advance needed research on communicable diseases in air travel more broadly. Officials with each of these agencies said a more coordinated federal approach to identify and advance relevant research could generate valuable information and inform policy development and guidance. In addition, bringing various federal agencies’ assets to bear could link researchers with aviation stakeholders across areas of expertise, provide clearer access to federal funding for research, and help identify needed research across different disciplines.

What GAO Recommends

Congress should consider directing FAA to develop and implement a strategy to identify and advance needed research on communicable diseases in air travel, in coordination with appropriate federal agencies—such as DHS and HHS—and external partners.

View GAO-22-104579. For more information, contact Heather Krause at (202) 512-2834 or krauseh@gao.gov.