



Runway to Recovery

The United States Framework for Airlines and Airports to Mitigate the Public Health Risks of Coronavirus

Guidance Jointly Issued by the U.S. Departments of Transportation, Homeland Security, and Health and Human Services

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OVERVIEW

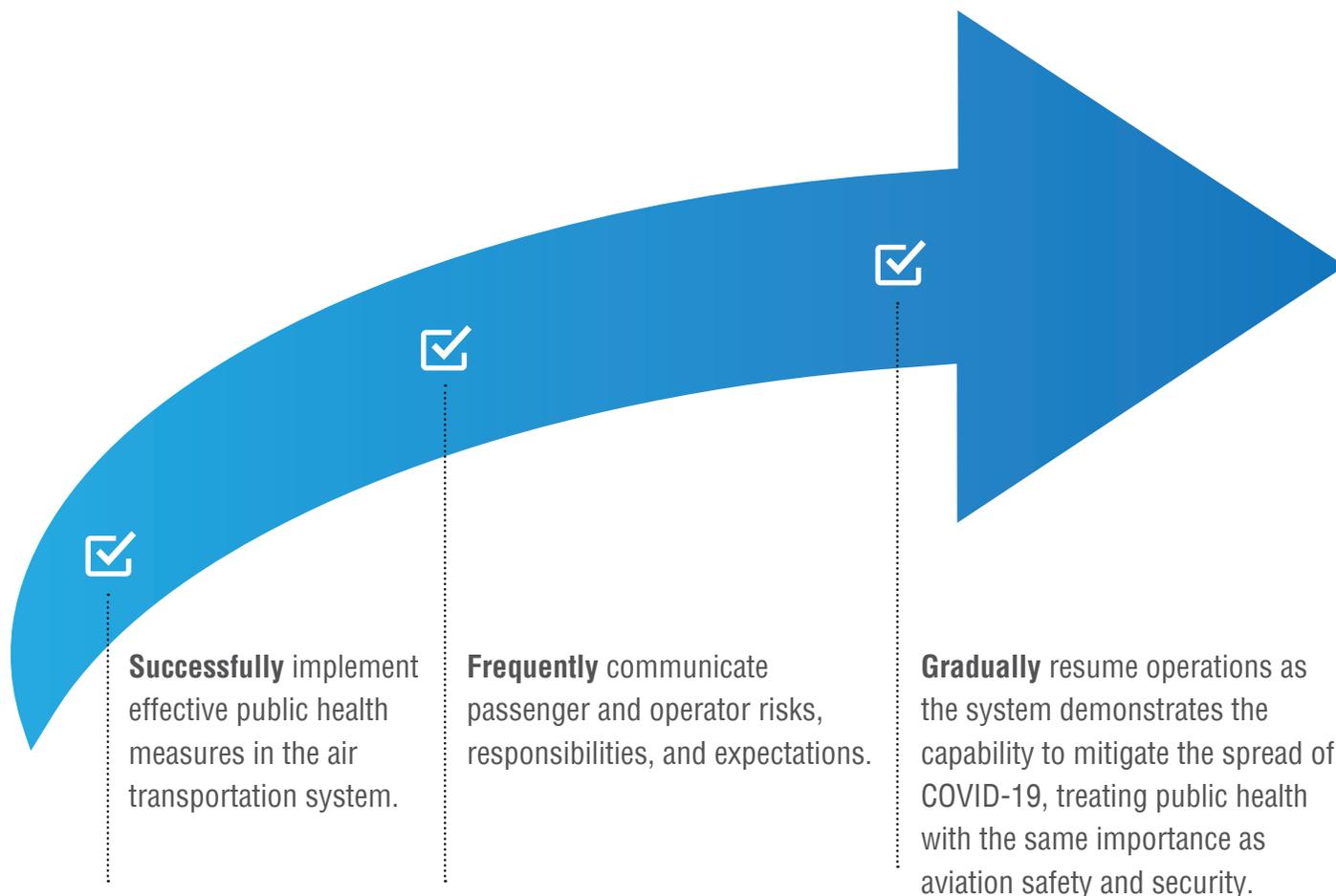
A safe, secure, efficient, and resilient air transportation system is essential to our Nation’s physical, economic, and social health. The Coronavirus Disease 2019 (COVID-19) public health emergency has demonstrated that protecting public health in the air transportation system is just as critical as aviation safety and security to the confidence of the flying public. Government, aviation, and public health leaders have been working together—and must continue to do so—to meaningfully reduce the public health risk and restore passenger, aviation workforce (including aircrew), and public confidence in air travel. The U.S. Government continues to assess the evolving situation and the effectiveness of actions and recommendations implemented to date. This updated guidance reflects this continual assessment and updated information. Although there are some updates and adjustments throughout, the key additions and changes in this document include new information on:

- » Passenger and Aviation Workforce Education
- » Contact Tracing
- » Mask Use, specifically the need to accommodate those who cannot wear masks
- » Passenger Testing

This document provides the U.S. Government’s updated guidance to airports and airlines for implementing measures to mitigate the public health risks associated with COVID-19, support an increase in travel volume, and ensure that traditional aviation safety and security measures are not compromised. This guidance addresses public health concerns and supports U.S. air carriers and airports as they make decisions and implement changes to reduce the spread of SARS-CoV-2 (the virus that causes COVID-19). The aviation industry has maintained a safe and secure system because stakeholders do not compete on safety and security; we expect the aviation industry to take the same system-level approach to implement guidance on public health risk mitigations.

A National Strategy for Recovery of the U.S. Air Transportation System

While it is critically important for all users of the air transportation system to be educated about the public health risk and mitigation measures and to take responsibility for preventing the spread of COVID-19, the U.S. Government has developed this guidance document specifically to support airports and airlines in public health risk reduction. This document identifies measures that airports and airlines should implement across all operations and all phases of travel to, from, and within the United States, and explains how those measures should be adapted to the unique air travel environment.



The U.S. Government recognizes the substantial public health risk mitigation measures that many air carriers and airports have already implemented and the investments they continue to make in new ways to address public health risk. In order to promote consistency throughout the air travel system and enhance confidence, the measures outlined in this document should be implemented as soon as feasible, inasmuch as similar measures are not already in place. The U.S. Government welcomes industry innovation and feedback on best practices, flexible methods for implementation, and metrics that achieve the public health risk reduction outcomes identified in this guidance. Many of the updates in this guidance reflect that ongoing, valuable feedback and sharing of best practices.

Summary of Measures to Prevent the Spread of COVID-19 and Promote Healthy Travel*

*Key points of guidance for airports and airlines to immediately implement or continue implementing across all operations and phases of travel.

1. Educate and communicate with passengers and employees.
2. Require the use of masks.†
3. Accommodate social distancing to the extent possible.
4. Continue to support enhanced cleaning and disinfection procedures.
5. Conduct health assessments for passengers and employees, to include encouraging pre-departure and post-arrival testing for passengers.
6. Collect passenger and crew contact information for public health response purposes (contact tracing).
7. Protect employees.
8. Separate passengers from flight crew as much as practicable.
9. Minimize in-person interaction touch points and shared objects, documents, and surfaces.
10. Report daily status of public health risk mitigation efforts to stakeholders.
11. Enhance airport security checkpoint operations.
12. Utilize technology programs to limit in-person contact and facilitate passenger processing.
13. Accommodate the needs of persons with disabilities pursuant to the Rehabilitation Act, the Americans with Disabilities Act, and the Air Carrier Access Act.



†The term “mask” is used in this document to refer to face coverings and masks that adequately cover the nose and mouth (when properly worn) and include either cloth facial coverings or non-medical disposable masks. See CDC guidance regarding appropriate mask materials and wear at <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/about-face-coverings.html> and https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/cloth-face-cover-guidance.html#anchor_1604966572663. This use of the term “mask” throughout this document is not intended to affect OSHA’s regulatory definitions, oversight, or enforcement authority.

The U.S. Government has reviewed and evaluated the effectiveness of the measures from guidance implemented to date and has updated some of the recommendations to reflect changes in risk and increased understanding of the virus. The need to revise recommended measures quickly through guidance reflects the progressive nature of the U.S. Government's understanding of COVID-19, as well as the ongoing evaluation of effectiveness and availability of any given measure at combatting the spread of the SARS-CoV-2 virus. Continual monitoring of advancements in the scientific understanding of evolving conditions and the effectiveness of risk mitigation measures inform this revision. The U.S. Government will continue to evaluate evolving risk reduction opportunities and may provide additional guidance and revisions as lessons are learned and risk conditions change, particularly as we evaluate the impact of vaccine use on public health risk in the aviation system. Controls and risk mitigation measures employed in the air transportation system should continue to be consistent with, and supportive of, the broader set of community public health interventions recommended by the Centers for Disease Control and Prevention (CDC)¹. →



¹ This guidance document has been designated by the Office of Management and Budget (OMB) as a "significant guidance document," as defined by section 2(c) of Executive Order (E.O.) 13891, "Promoting the Rule of Law Through Improved Agency Guidance Documents." Section 4(a)(iii) of that E.O. requires that a Federal agency issue a significant guidance document for public notice and comment, unless the agency and OMB agree that exigency, safety, health, or other compelling cause warrants an exemption. Section 4(a)(iii)(A) of the Executive Order, as well as agency implementing procedures (see, e.g., 5 CFR 5.41(b)), further provide that public notice and comment may be waived if good cause exists to do so. We find that such exigencies and good cause exist for this guidance document due to the health risks presented by COVID-19 and need to promote critical health mitigation measures quickly and consistently to support containment of the virus and restore the U.S. aviation transportation system. This document adopts relevant Federal guidelines and reflects those already supported in the aviation sector. For these reasons, the agencies, in consultation with OMB, have found that good cause exists to waive public notice and comment because such procedures are unnecessary and contrary to the public interest.



PRINCIPLES

The following principles provide the foundation of the U.S. framework for implementing public health measures in the aviation sector to minimize the risk of SARS-CoV-2 transmission during travel in the air transportation system.

Remain Focused on Fundamentals: Safety and Security

- » While implementing new public health measures, aviation safety and security cannot be compromised.
- » Aviation workers, especially airline crew, should be trained and supported to address the additional stress that passengers and co-workers may be under while traveling in the current environment.

Promote Public Health within the Air Transportation System

- » All aviation stakeholders have a shared interest and responsibility in promoting public health for everyone in the air transportation system.
- » Stakeholders should utilize evidence-based public health measures throughout the continuum of the passenger's journey, including before arrival at an airport, while in an airport, during flight, and after arriving at a destination, to minimize virus transmission throughout the air transportation system, as recommended by the CDC for reduced risk of exposure to and translocation of the SARS-CoV-2 virus.
 - Measures should reflect the full range of passenger needs, including requirements under the Rehabilitation Act, the Americans with Disabilities Act, and the Air Carrier Access Act. Consistent with these laws, it may be necessary for airports and airlines to modify certain measures to accommodate passengers with a disability while maintaining public health.
 - Sufficient information should be provided to passengers in advance of travel regarding public health measures taken at departure, during

flight, and at the destination to facilitate informed decision making on the part of a passenger as to whether and where to travel.

- Measures should respect individuals’ privacy, civil rights, and civil liberties.
- » To the extent possible, stakeholders should maximize consistency of measures in the domestic and international air transport systems with recommended practices outlined in the International Civil Aviation Organization (ICAO) Council Aviation Recovery Taskforce (CART) [“Take-off” Guidance](#), also recently updated in November 2020 to reflect changes.

Recognize Aviation as a Driver of Economic Recovery

- » An air transportation system that can move people and goods safely and efficiently without exacerbating public health concerns is critical to support economic recovery nationwide.
- » Innovation, creativity, flexibility, and rapid technology deployment are central to responding to and recovering from the COVID-19 public health emergency and achieving a new paradigm in air travel that is beneficial for passengers, workers, the broader aviation industry, and the U.S. economy.
- » Aviation operations encompass a wide variety of business models. Where possible, consistent with CDC, state, and local guidance, public health measures should be flexible to ensure that a range of airline and airport operational strategies remain viable and support economic recovery.
- » Public health measures in the aviation sector must be consistent with obligations under international law and preserve the competitive structure of the industry by not unnecessarily or unfairly restricting market access for international transportation. →





AIR TRANSPORTATION STAKEHOLDER ROLES AND RESPONSIBILITIES

It is important to emphasize that all persons in the air transportation system, including passengers, have a responsibility to themselves and to others to make every effort to minimize the risk of virus transmission as we respond to and recover from COVID-19.

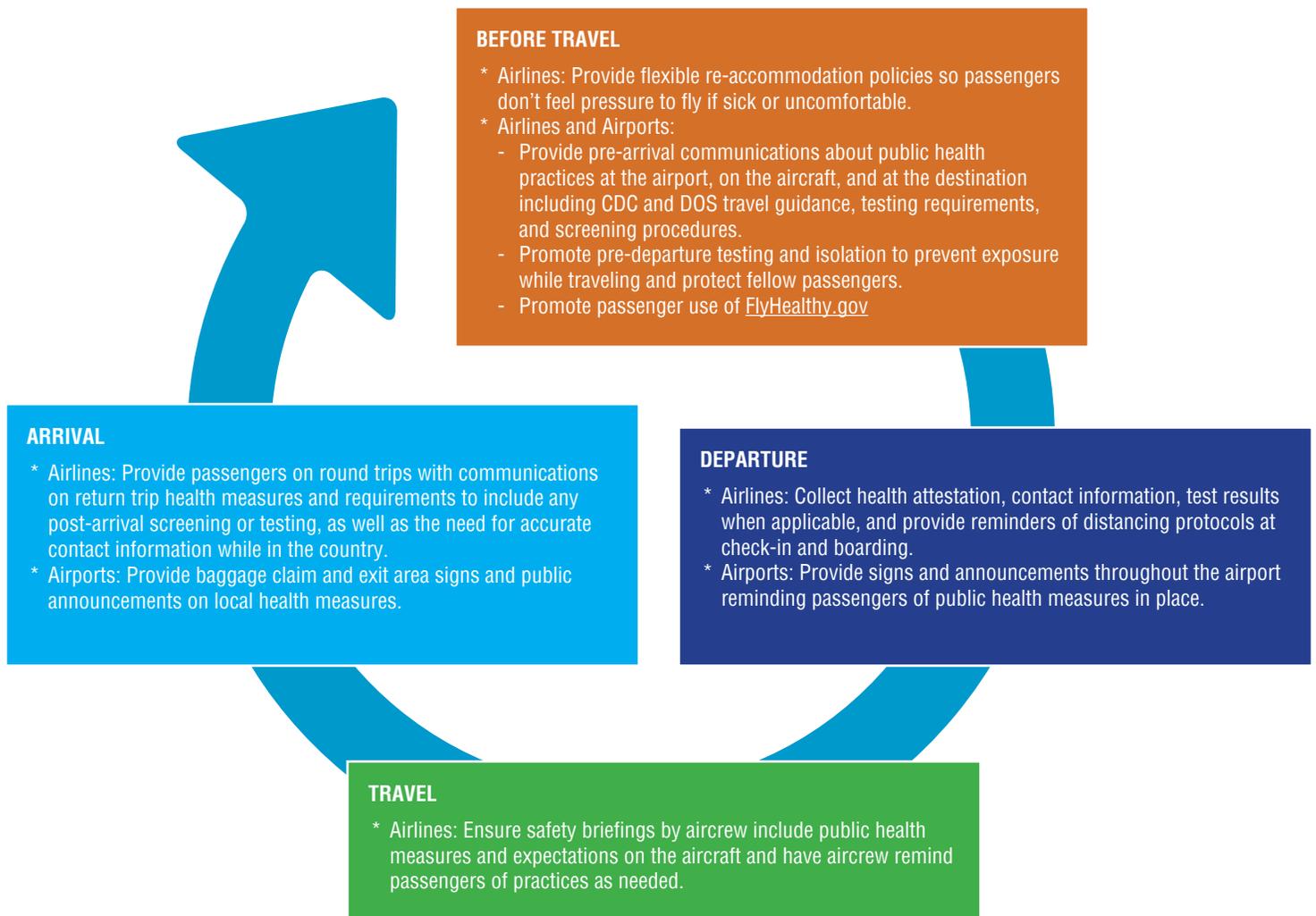
The aviation industry's task is to facilitate and implement measures that are effective in minimizing the risk of virus transmission in air travel, thus restoring confidence that the system does not threaten personal or public health. In accomplishing this task, the aviation industry must also maintain its historical record of aviation safety and security while taking additional measures to safeguard personal and public health based on lessons learned and evolving public health information. Based upon a May 2020 survey, passengers expect to see a blend of technology, civic responsibility, and public health measures implemented.²

It is important to understand that until transmission in communities and countries is controlled and/or there is an effective vaccine with widespread uptake, a public health risk from COVID-19 will remain in the air transportation system. However, by implementing the public health recommendations in this guidance, the aviation industry can help reduce the spread of the SARS-CoV-2 virus and provide a passenger experience that is responsive to immediate public health concerns. The aviation industry is expected to continue implementing measures in the travel process that reduce the risk of disease exposure during travel and, in doing so, also support measures that will help destination communities remain open and willing to allow passenger entry. Key elements of a functioning air transportation system and a successful recovery include public education, cooperation, and situational awareness by all levels of government and the aviation industry.

² Honeywell Survey of Passenger Preferences, Released May 26, 2020 ([honeywell.com/en-us/newsroom/pressreleases/2020/05/honeywell-survey-reveals-air-travel-passenger-preferences](https://www.honeywell.com/en-us/newsroom/pressreleases/2020/05/honeywell-survey-reveals-air-travel-passenger-preferences))

Industry, governments, and quasi-government entities, such as airport authorities, must work cooperatively to achieve the common objective of minimizing risk exposure, using consistent mitigation measures, and providing consistent communications on expected behaviors. →

The Communications Cycle



A RISK-BASED APPROACH FOR COVID-19 OUTBREAK MITIGATION PLANNING

Future air passenger travel volume, especially in the domestic market, will depend on a number of factors such as levels of community transmission within the United States; efforts to reduce public health risk related to travel; passenger, aviation workforce, and public confidence; removal of travel restrictions; local government rules and responses to public health concerns; and air carrier operational capacity.

A risk-based approach will support adjusting the mitigation measures based on geographical and individualized differences in risk, recognizing that reverting to more stringent measures may be necessary if data suggest transmission rates are high. Likewise, adjusting mitigation strategies may be prudent to address a change in public health data or results of the efficacy of actions and recommendations undertaken. Geographical differences in risk may occur between U.S. communities and between U.S. and international locations, resulting in different measures for U.S. domestic and international travel. The goal is to minimize risk and maximize consistency of application of mitigation strategies. The recommendations in this document reflect measures that should generally be in place until community transmission is minimal. The pattern of the outbreak continues to be asymmetrical in communities across the U.S. and, therefore, states have varying levels of restrictions in place; overall, the U.S. is still experiencing large-scale community transmission.

One of the greatest difficulties COVID-19 has posed to public health and the air transportation system is that people can transmit the virus while asymptomatic (feeling well and showing no detectable sign of sickness) or pre-symptomatic (before development of symptoms), which makes stopping the spread of the virus a communal problem where the efficacy of mitigations, such as wearing masks, depends on everyone's participation. Similarly, some passengers may be exposed or become infectious after pre-departure tests or upon arrival at a

destination. Previous U.S. experience³ from earlier in the pandemic suggests there is a low yield of detection for COVID-19 through temperature and symptom screening of inbound passengers. For example, of the 766,044 people that underwent enhanced entry health screening at the U.S. airports previously designated for passenger funneling, only nine passengers were identified as having COVID-19, representing one case per every 85,000 passengers screened. Screening for symptoms is neither sensitive nor specific, and only represents one point in time. This type of health screening is not a stand-alone measure and, if used, should only be part of a broader set of measures applied across the continuum of the passenger journey.

Resumption of higher volumes of passenger air travel will be dependent on the effectiveness of control measures and the future availability of treatments and/or vaccinations. The U.S. Government, using a data-driven, risk assessment process, will continue to work with industry to provide additional guidance on when it may be appropriate to adjust mitigation strategies based on the level of community transmission in a given location.

Key Considerations for Adapting New Public Health Measures to the Aviation System

The U.S. Government has continually analyzed a wide range of public health risk mitigations to identify an effective set of recommendations. These recommendations include: assessment of impacts to public health, safety, security, efficiency, and viability; unintended consequences; and effectiveness in restoring public confidence. A multi-layered approach continues to prove vital to minimize the spread of COVID-19 in the air transportation system. No single mitigation strategy alone is adequate, but together, these recommendations offer an effective risk reduction approach. As a result, the U.S. Government emphasizes the importance of airlines and airports implementing and enforcing the measures included in this document and expects adoption, to the extent practicable.

³ https://www.cdc.gov/mmwr/volumes/69/wr/mm6945a4.htm?s_cid=mm6945a4_w

While this guidance seeks to provide a sufficient level of detail in these recommendations to promote consistency and achieve risk reduction, the U.S. Government realizes that airports and airlines may have innovative, creative, and practical solutions, as well as constraints, and welcomes dialogue on those mitigations. This guidance will continue to be evaluated for necessary modifications to ensure the mitigations keep pace with the virus transmission risk. The U.S. Government will continue to work with industry partners on those changes and invites suggestions on best practices and new ideas. →



PUBLIC HEALTH RISK MITIGATION IN THE PASSENGER AIR TRANSPORTATION SYSTEM

The U.S. Government expects airports and airlines to implement and/or support implementation of the measures outlined below, to the extent feasible, throughout the U.S. passenger air transportation system.

General Risk Mitigation

The following risk mitigation measures should be applied generally for the entire passenger journey in the air transportation system. Risk mitigation measures are based on CDC guidance to help people protect themselves and others as part of a multi-layered approach including use of social distancing, wearing masks, handwashing, monitoring health, and cleaning/disinfection of surfaces.

- » <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html>
- » <https://www.cdc.gov/quarantine/masks/mask-travel-guidance.html>
- » <https://www.cdc.gov/coronavirus/2019-ncov/travelers/face-masks-public-transportation.html>
- » <https://www.cdc.gov/coronavirus/2019-ncov/php/risk-assessment.html>

Additional mitigations in subsequent sections may be sector-specific or based on changes in the level of community transmission and should be layered on top of these system-wide measures. Ultimately, the goal is health risk mitigation. The U.S. Government recognizes that, as we all learn more about the risks associated with COVID-19 and the virus itself, innovation, technology, other new mitigation measures may be appropriate to use to achieve the same outcome. We may also discover that some mitigation measures are not as effective as initially assessed. This guidance will be updated and reflect our evolving understanding of this novel virus.

Passenger and Aviation Worker Education

Recommendation: Airlines and airports should communicate with passengers and employees prior to arrival at the airport:

- » Discourage symptomatic or ill passengers, crewmembers, or airport workers from coming to the airport.
- » Crewmembers and airport workers should be restricted from working on aircraft or at the airport if they:
 - Display COVID-19 symptoms.
 - Have had a positive COVID-19 test and have not met criteria to [discontinue isolation](#).
 - Have had [close contact](#)⁴ with a person with COVID-19 in the past 14 days [until they have met criteria to discontinue quarantine](#).⁵
- » Ill passengers should not travel.
- » Inform passengers that they should not travel if they:
 - Have COVID-19 symptoms.
 - Have had a positive COVID-19 test and have not met criteria to [discontinue isolation](#).
 - Have had [close contact](#) with a person with COVID-19 in the past 14 days [until they have met criteria to discontinue quarantine](#).⁵
- » Encourage passengers to check on local turnaround times for COVID-19 viral test results to ensure that they have been tested in time to receive their results prior to departure. Discourage passengers from traveling if they have a pending COVID-19 viral test, even if they are asymptomatic and have not been exposed to a person with COVID-19.
 - Passengers whose tests come back positive during their trip or when they are at their destination will need to isolate and delay their return until they meet criteria to [discontinue isolation](#).
 - Their travel companions will need to isolate as well and delay their return until 14 days after their last known exposure or until they have met criteria to [discontinue quarantine](#).

⁴ CDC defines close contact as exposure within 6 feet for a cumulative total of 15 minutes or more over a 24-hour period during the period from 2 days before illness onset (or, for asymptomatic infected persons, 2 days before test specimen collection) until the infected person meets criteria for discontinuing isolation.

⁵ Local public health authorities may consider shortening the recommended 14-day quarantine period to 10 days if no symptoms develop or seven days if the traveler tests negative on day five or later and remains asymptomatic. Travelers released on day 7 or 10 of quarantine should continue to monitor for symptoms, isolate if symptoms develop, and wear a mask when around others for the full 14 days. See [CDC guidance on options for reducing quarantine](#).

- » Passengers or crewmembers who have tested positive for COVID-19 or had close contact with a person with COVID-19 should not travel on commercial flights until they have met public health criteria for release from isolation or quarantine. If air transport is needed prior to their release, special medical or charter transport must be coordinated with public health and civil aviation authorities at origin and destination.
- » Enhance education for passengers throughout the travel continuum on what to do and what to expect before, during, and after travel, including the additional time and responsibility they should expect to incur as part of a safe travel environment (screening, social distancing, masks, etc.).
- » Provide passengers with as much information on local conditions, including any restrictions on travel, testing or other entry requirements, and orders mandating local isolation or other restrictions, via as many communication channels as possible, including websites such as the U.S. Government's [FlyHealthy.gov](https://www.flyhealthy.gov) site and CDC's [Travel Planner](https://www.cdc.gov/travel). FlyHealthy.gov offers passengers a portal that includes key information for all parts of the passenger journey, as well as curated links to select U.S. Government Department/Agency sites with passenger information and select industry sites with critical passenger information, as well as CDC's [Travel Planner](https://www.cdc.gov/travel) that helps travelers find COVID-19 restrictions in the U.S. cities, counties, tribal areas, territories, and states they are visiting.

Rationale: It is imperative that passengers and employees make informed decisions about travel and understand their responsibilities in mitigating virus transmission while using or working in the air transportation system. Exercising multiple methods of communicating with the traveling public, such as email, text messaging, signage, website content, and other modes of communication will help reinforce the risk infected travelers may pose to others. Every effort should be made to provide accurate timely information regarding the risk of virus transmission at their destination as well as the public health risk measures and mitigations implemented throughout the phases of their travel. For passengers, this information should be readily available on airport and airline websites, as well as directly provided to passengers when booking tickets. Information should be accessible in multiple formats and languages and adhere to the Americans with Disabilities Act.

Resources: CDC developed an air travel communications toolkit for airline partners to help reach passengers and employees with COVID-19 prevention messaging:

- » <https://www.cdc.gov/coronavirus/2019-ncov/travelers/airline-toolkit.html>⁶
- » <https://www.cdc.gov/coronavirus/2019-ncov/travelers/when-to-delay-travel.html>
- » <https://www.cdc.gov/coronavirus/2019-ncov/travelers/map-and-travel-notices.html>
- » <http://flyhealthy.gov>
- » <https://www.cdc.gov/coronavirus/2019-ncov/travelers/travel-planner/index.html>

Collecting Information to Support Contact Tracing

Airlines are encouraged to continue supporting the collection of complete and current passenger and crew contact information prior to international flight departures to the United States. Airlines are also encouraged to provide flight-specific contact information in an electronic format to the U.S. Government for passengers inbound to the U.S. to facilitate further dissemination to destination U.S. health authorities that support passenger contact tracing notifications and other public health mitigation measures in the United States. Likewise, some outbound travel from the U.S. to international locations may require passengers to provide contact tracing information, mandated by the government of the foreign destination to support that country's public health efforts.

On February 6, 2020, the Secretary of Health and Human Services published an interim final rule requiring any airline with a flight arriving into the U.S. to collect passenger and crew contact information and provide it to the U.S. Government within 24 hours of an order by the CDC Director. CDC may issue orders under this authority, 42 CFR 71.31(b), or its pre-existing passenger manifest authority, 42 CFR §71.4(a), among others.

U.S. Customs and Border Protection (CBP) collaborates with CDC on an ongoing basis and provides CDC with available contact information for all requested arriving international air travelers, which supports domestic COVID-19 control efforts by subsequently providing relevant information to state and local health departments for the purpose of public health follow-up or contact tracing.

⁶ The International Air Transport Association (IATA) also publishes an interactive Coronavirus Travel Regulations Map. (www.iatatravelcentre.com/international-travel-document-news/1580226297.htm)

Recommendation: Airlines are encouraged to support the collection and transmission of accurate, trip-specific passenger and crew contact information. This information is essential for health authorities to conduct rapid notification of travelers for contact tracing or other public health education and risk mitigation activities when necessary. Airlines are also encouraged to provide privacy notices of what information will be collected, with whom it will be shared, and for what purposes.

The following passenger information should be collected to the extent such information exists for arriving international passengers prior to departure:

- » Name
- » Address while in the U.S.
- » Email address
- » Primary and secondary (or emergency) telephone numbers

The U.S. Government will continue to work with airlines to identify appropriate options for providing this information on both an interim and long-term basis.

When a COVID-positive passenger is located onboard an aircraft and contact information is not provided through CBP, CDC may request that, within 24 hours, the airline provide contact information for all passengers and crew onboard that aircraft to support an active contact tracing investigation. This information should be routinely collected/updated close to the time of departure or, ideally, as part of the international flight check-in process to avoid the time lags and insufficient data to conduct appropriate notifications, health interventions, and follow-up.

Rationale: Critical components of aggressive response to COVID-19 include: early case finding and rapid isolation; contact tracing (both retrospective and prospective); and quarantine of exposed contacts/isolation of infected persons. As air travel increases, and domestic spread decreases, this capability to contact trace is essential to the health of the airline crew, passengers, airport staff, and communities in reducing the global spread of COVID-19 and maintaining the confidence of passengers, the aviation workforce, and their destination and home communities. A reliable contact tracing and passenger notification capability is critical to enabling adjustments in travel restrictions and other

layered mitigation measures, such as quarantine of exposed persons and post-travel testing and stay-at-home recommendations.

Availability of reliable contact information for international passengers and crew is critical to prevent reintroduction, once we have domestic community spread controlled, as contact tracing timelines can be further challenged by international notification delays. Having updated contact information to allow rapid contact tracing and other public health notifications, is not only necessary to protect the travel journey but is essential to supporting public health. Aggressive containment efforts are necessary to further reduce the risk of spread via air travel, which can introduce additional cases in destination communities, lead to new outbreaks, and further accelerate and expand the public health emergency.

If a positive COVID-19 case is traced back to a specific flight into the United States, if necessary, CDC will provide the aforementioned contact information to state and local public health authorities to facilitate notifications to others that a person with confirmed COVID-19 has traveled and exposed other passengers during flight. Contact tracing investigations are generally handled directly by state or local public health authorities.

Resources: The CDC website has resources that explain the purpose and intent of contact tracing, including:

- » <https://www.cdc.gov/coronavirus/2019-ncov/php/open-america/contact-tracing-resources.html>
- » <https://www.cdc.gov/quarantine/contact-investigation.html>

Social Distancing

Recommendation: Airports should continue to use appropriate measures in any shared spaces to assist people in staying socially distanced (e.g., floor markings, blocking terminal or gate area seating, etc.); airlines should also do so to the extent feasible, as discussed later in this document. This recommendation also applies to any third-party vendors operating at the airport, such as concessionaires or lounge providers. To the maximum extent possible, people should maintain at least six feet of distance from each other, unless they are a household family/social unit, in which case they can congregate amongst

themselves, but should maintain at least six feet of distance from others outside of their group. Strategies to allow for social distancing should also be employed for passenger transports used within the airport (e.g., trains, buses, etc.). It is imperative that airlines and airports inform passengers when it may not be possible to meet social distancing expectations and, as a result, emphasize the additional importance of observing all the other preventive measures, including strict hand hygiene, respiratory etiquette⁷, and wearing a mask.

Rationale: SARS-CoV-2 spreads mainly among people who are in close contact with an infected person or persons for greater than 15 minutes over a 24-hour period. Social distancing of at least six feet is a way to reduce the spread of infection in an indoor setting. However, the air transportation system presents many areas where confined physical spaces make recommended social distancing difficult or impossible to achieve at times. Where space constraints limit the practice of social distancing, such as onboard aircraft or within the Federal Inspection Station (FIS) area during peak international arrival times, it is essential that passengers, crew members, and aviation workers adhere at all times to all other preventive measures, especially handwashing, respiratory etiquette, and wearing a mask.

Resources: CDC developed guidance on social distancing, including for people with disabilities, on its website: <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/social-distancing.html>

Masks

Recommendation: Everyone should wear a mask per [CDC guidance](#), over their nose and mouth, at all times in the passenger air transportation system (excluding children under age 2, or anyone who has a medical condition for which wearing a mask is contraindicated, is unconscious and unable to be awakened, or otherwise unable to remove the mask without assistance). [Masks](#) should have two or more layers of non-synthetic and tightly woven materials, fit snugly on the face without gaps, be large enough to comfortably cover the mouth and nose during speech and physical activity, and should not contain an exhalation valve or vent. Airlines and airports are strongly encouraged to

⁷ <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html>

require that everyone correctly wear a mask in shared spaces unless they meet the exceptions described above. People should also wear masks over the mouth and nose in other transportation settings that are connected to airports, such as shuttle vans, buses, trains, subways, or similar transportation systems or car rental locations. Airports and airlines should have masks available for passengers and aviation workers who may arrive without one or require a replacement. Wearing a mask is particularly necessary any time social distancing cannot be maintained. Brief removal of masks should be permitted for minimal drinking, eating, or taking medication. During the brief removal of the mask in these circumstances, individuals should refrain from conversation.

Reasonable accommodations should be made for persons with disabilities or ailments who cannot wear masks. However, under the Americans with Disabilities Act, entities may impose legitimate safety requirements necessary for safe operation that do not require modification, so long as those safety requirements are based on actual risks, and not mere speculation, stereotypes, or generalizations about persons with disabilities. Other accommodations for persons with disabilities or ailments who cannot wear a mask should be considered on a case-by-case basis. This may include, for example, seating in waiting areas that allows social distancing from non-companion passengers.

Airport and airline personnel should consider reasonable alternatives to removing their own face masks in order to [communicate with persons who are deaf or hearing impaired](#), such as using clear face masks, writing on a pad of paper that can be shown without contact, or protective barriers.

- » **Note:** *Passengers and aviation workers may be asked to remove their masks briefly when interacting with government officials or systems that must verify identity or confirm entry/exit, such as U.S. Customs and Border Protection (CBP) Officers, Transportation Security Administration staff, law enforcement, or airline or airport staff. Physical barriers or face shields should be used to protect employees and the public in these instances.*

Rationale: The greatest risk of spreading COVID-19 is when an infected person coughs, sneezes, talks, or breathes and respiratory droplets or small particles, such as those in aerosols, are launched into the air from his or her mouth or nose. Requiring all persons to wear masks reduces the risk of droplets or airborne particles from spreading, including from potentially asymptomatic

infected individuals. If everyone in an environment participates in covering their mouths and noses, masks can be effective at reducing viral spread.

Airports must comply with the Americans with Disabilities Act and the Rehabilitation Act regulations in considering reasonable modifications for persons with disabilities who cannot wear a mask. However, as discussed above, reasonable modifications of legitimate safety requirements are not required. Under the Air Carrier Access Act, U.S. and foreign air carriers have legal obligations to accommodate the needs of passengers with disabilities when the airlines develop and implement policies requiring the use of masks to mitigate the public health risks associated with COVID-19. The Air Carrier Access Act and its implementing regulations in 14 CFR Part 382 require airlines to ensure that their mask policies provide for reasonable accommodations, based on individualized assessments, for passengers with disabilities who are unable to wear a face covering for medical reasons. The Office of Aviation Consumer Protection within the Department of Transportation and the Office of Civil Rights in the Federal Aviation Administration enforce aspects of these requirements within their jurisdiction.

Resources: The following websites provide information related to appropriate mask use and special accommodations:

- » <https://www.cdc.gov/quarantine/masks/mask-travel-guidance.html>
- » <https://www.cdc.gov/coronavirus/2019-ncov/travelers/face-masks-public-transportation.html>
- » <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/cloth-face-cover-guidance.html>
- » <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/about-face-coverings.html>
- » <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/how-to-wear-cloth-face-coverings.html>
- » <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/diy-cloth-face-coverings.html>
- » <https://www.transportation.gov/airconsumer>

- » https://www.faa.gov/about/office_org/headquarters_offices/acr/com_civ_support/
- » <https://www.justice.gov/opa/pr/departments-justice-warns-inaccurate-flyers-and-postings-regarding-use-face-masks-and>

Cleaning and Disinfection

Recommendation: Airlines and airports should require all areas with potential for human contact and transmission be cleaned and disinfected per defined schedules as recommended by CDC and the Occupational Safety and Health Administration (OSHA). Special attention should be given to increasing the frequency of cleaning high-touch surfaces like door handles, armrests, elevator buttons, escalator/stair handrails, and kiosks. Additionally, hand sanitizer stations and disinfecting wipes should be provided at kiosks and other common areas passengers are expected to touch frequently. Selected disinfectants should be on the Environmental Protection Agency’s (EPA) N-list, EPA’s list of Disinfectants for Coronavirus (COVID-19). In addition, the application of surface disinfectants using fog or mist generators should only be done if the selected application method is indicated in the disinfectant manufacturer’s “Instructions for use” guidance and with appropriate PPE that is compatible with the aerosolized disinfectant application method. Special care must be taken with fog/mist disinfectant applications to ensure that sufficient wetted surface contact time is achieved, in accordance with manufacturer instructions.

Rationale: SARS-CoV-2 can be killed on surfaces with proper cleaning and disinfection procedures. Although, as discussed above, the primary method of transmission is through close contact with an infected person or persons for greater than 15 minutes (cumulatively) over a 24-hour period, CDC continues to recommend enhanced cleaning of high-touch surfaces.

Resources: CDC developed information about **cleaning** and **disinfection** at:

- » <https://www.cdc.gov/coronavirus/2019-ncov/community/clean-disinfect/index.html>

Aircraft cleaning and disinfection are included in CDC, OSHA, and FAA airline guidance at:

- » <https://www.cdc.gov/quarantine/air/managing-sick-travelers/ncov-airlines.html>
- » <https://www.osha.gov/SLTC/covid-19/>
- » [https://rgl.faa.gov/Regulatory_and_Guidance_Library/rgSAIB.nsf/\(LookupSAIBs\)/NM-20-17?OpenDocument](https://rgl.faa.gov/Regulatory_and_Guidance_Library/rgSAIB.nsf/(LookupSAIBs)/NM-20-17?OpenDocument)

Guidance for **airport custodial staff** is available at:

- » <https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/airport-custodial-staff.html>

EPA has compiled a list of **disinfectant products** that can be used against COVID-19, including ready-to-use sprays, concentrates, and wipes:

- » <https://www.epa.gov/pesticide-registration/list-n-disinfectants-coronavirus-covid-19>

Passenger Health Assessments

Health Attestations

Recommendation: Airlines should incorporate health attestations to reinforce the expectation that passengers will not travel when they are ill, have tested positive for COVID-19, or are at a higher risk of developing and/or spreading COVID-19 (e.g., recent close contact to a person with COVID-19). The attestation, which should be presented at the earliest feasible opportunity at check-in, should also have the passenger affirm awareness and willingness to follow other required measures while on the aircraft (e.g., mask use, remaining in assigned seating unless reseated by the crew, etc.). The attestation should also include a reference to symptoms of COVID-19, exposure to a person with COVID-19 in the past 14 days, and any pending or recent positive COVID-19 test results. Passengers who identify themselves unfit to fly through this process should be allowed to rebook themselves and travel companions without penalty. Airlines should promulgate this policy to passengers in advance of check-in. Infected or exposed passengers should not travel on commercial flights. If air transport is needed, special medical or charter transport must be coordinated with public health and civil aviation authorities at origin and destination.

Rationale: While health attestations are self-declarations, they encourage passengers to pause and make an honest evaluation of their health status prior

to flight. The ability to rebook without penalty is a key incentive to making health attestations accurate and effective. Although health attestations cannot assure detection of asymptomatic/pre-symptomatic passengers with active or incubating COVID-19 infections, it may identify some ill passengers who should defer travel until evaluated or recovered, or those who should defer travel due to exposure to a person with COVID-19. They may also serve as a general deterrent for passengers who may have otherwise considered traveling when ill.

- » **Note:** *Post-arrival requirements, such as screening, education, registration, monitoring, or testing, may be conducted by authorities in domestic or foreign destinations. These requirements may be implemented prior to disembarkation, upon arrival in the airport, and/or after arrival at the final destination. Airlines should provide passengers information on destination requirements, and airports should provide awareness of local requirements in airport exit areas per guidance posted in the communications cycle. Passengers should be directed to check the state, local, tribal, territorial, or national website of their domestic or foreign travel destination to determine what requirements or restrictions are in place for arriving passengers, so they can plan appropriately.*

Resources: ICAO CART created a sample crew health attestation form that could be adapted for electronic, contactless passenger entry, available at:

- » <https://www.icao.int/covid/cart/Documents/PUBLIC%20HEALTH%20COVID-19%20PASSENGER%20SELF%20DECLARATION%20FORM.pdf>

COVID-19 Testing

The strategies for urging testing and the availability and reliability of testing continue to evolve. As testing capacity and capabilities have increased, many international and some domestic locations have implemented pre-departure or post-arrival testing requirements for travelers entering their jurisdictions. Increasing access to reliable and timely testing may help further facilitate safer domestic and international travel, and any requirements for testing should be communicated to passengers prior to beginning their travel journey. Testing before and after travel, used in combination with other measures such as isolation, mask use, social distancing, good hand hygiene, and self-monitoring for symptoms, can further reduce the risk of spreading COVID-19 by:

1. Reducing transmission during passenger travel in the air transportation system;

2. Reducing potential introductions or re-introductions of disease in a region/ country; and
3. Potentially reducing or eliminating travel restrictions and/or quarantine (or stay-at-home periods) for the passenger at the destination.

Completely eliminating COVID-19 as a travel health risk is not possible at this time, but testing can be one of the multiple measures used as part of a risk mitigation system. A sensible preflight testing approach should mitigate a significant portion of the in-transit risk to the individual traveler. Testing should be performed by individuals trained to perform the test at sites approved by the appropriate public health authorities and, in the U.S., must comply with applicable Clinical Laboratory Improvement Amendments (CLIA) regulations. Test results should be available prior to travel and meet any specific validity or documentation requirements of origin and destination municipalities where testing prior to travel may be required. The list of available tests has expanded rapidly since the beginning of the COVID-19 public health emergency with more receiving [emergency use authorizations](#), which are issued by the [Food and Drug Administration](#).

Airport-associated laboratories providing point of care testing for COVID-19 should have plans for preventing travel of persons who receive a positive COVID-19 SARS-CoV-2 viral test result and their travel companions, who in most cases would be considered close contacts, until the local public health authority can review and provide clearance for travel. The process should include pre-test counseling on public health recommendations that persons who test positive for COVID-19 infection (and their close contacts) not travel, and traveler attestations whereby persons being tested acknowledge their understanding of the recommendation. In addition, airport-associated laboratories should establish a reporting mechanism to allow for immediate reporting of persons who test positive to the local health authority, the [quarantine station](#) with jurisdiction for the airport, the airport sponsor, and airlines in a timeframe that enables swift travel restriction when needed.

Recommendation: For passenger testing strategies, the U.S. Government recommends adopting a dual test approach, involving one test before departure and one test post-arrival. Ideally, pre-departure testing should occur before both the outbound and the inbound flight of a roundtrip itinerary. Depending on the

duration of stay at the destination, this could prove challenging for travelers on shorter trips. Airlines and airports should facilitate passengers' efforts to be aware of recommendations or requirements for pre-departure and post-arrival testing, as well as testing availability and the time to obtain results, at both their destination and the location they will be returning to, so that timing of testing in relation to travel itineraries can be planned for in advance of travel. Airport testing sites should have plans to appropriately manage individuals who test positive, as well as their travel companions (contacts). Considerations may include temporary onsite isolation or quarantine and safe private transportation to a location of quarantine or isolation (e.g., home, hotel, or other identified facility).

Test Characteristics: CDC recommends that people who are tested before traveling utilize a viral detection test (e.g., a nucleic acid amplification test or a viral antigen test). The ICAO Collaborative Arrangement for the Prevention and Management of Public Health Events in Aviation (CAPSCA), [Manual on Testing and Cross-border Risk Management Measures](#), published in November 2020 as part of the updated ICAO Council Aviation Recovery Taskforce Guidance, recommends that any test selected should have a minimum of 95% Sensitivity and 95% Specificity, with higher percentages yielding higher confidence in the identification of infected individuals. The values allow the potential use of rapid antigen tests and several other testing modalities. Rapid antigen test performance may be impacted by multiple factors, including the prevalence of infection in the community. Testing programs implemented by airports or airlines should be closely coordinated with the appropriate local public health authorities to determine consequence management and follow up procedures. COVID-19 test results, positive and negative, must be reported to the appropriate health authorities by every laboratory that performs or analyzes a diagnostic test intended to detect SARS-CoV-2 in accordance with local, state, and national requirements.

Pre-Departure Testing: The CDC recommends testing one to three days prior to departure for international travel. The closer the testing is conducted to departure, the lower the potential to enter the air transportation system while asymptomatic but contagious. The ICAO Testing and Cross-Border Risk Mitigation Measures Manual recommends testing within 48 hours of departure;

although, many countries and health authorities accept a negative test performed within 72 hours of commencing travel. Airlines should provide as much information as feasible to passengers regarding the testing requirements of their point of departure and arrival; consideration should be made for possible delays in travel or layovers. CDC also recommends that people traveling domestically consider getting tested one to three days prior to their trip.

Travelers should have their test results before they depart and not travel if results are pending. Travelers who test positive should not be allowed to travel, should isolate at home (or another comparable location such as a hotel room), should follow the guidance of local health authorities until they are no longer infectious and have met criteria for discontinuing isolation.

Passengers who test positive at the airport (along with their close contact travel companions) should be isolated as soon as feasible and denied boarding. Therefore, the airport and airlines should be notified immediately if a traveler tests positive and still intends to travel. Airlines and airports should work with each other, the testing provider, and with local public health authorities to coordinate a consequence management plan on how to handle passengers with positive test results (and their close contact travel companions) to minimize risk to other passengers and personnel at the airport.

Onsite Airport Testing: When available, testing 24-72 hours before initiating travel with results available prior to arriving at the airport (rather than testing at the airport) is preferable and would further reduce the risk of in-airport exposures, which simplifies in-airport consequence management (i.e., passengers could remain at home and receive follow up from local public health for evaluation) and rebooking of itineraries. Though pre-testing prior to arrival to the airport is preferable, testing onsite at an airport may be necessary for transiting passengers with broken travel itineraries or to accommodate those who originate in locations where testing for travel screening is not available or feasible. Positive test results obtained on the date of departure or during transit should be reported immediately to the public health authority with jurisdiction as well as the airline that the passenger intends to fly, assuming consent has been obtained. Testing at the airport may be easier for passengers, but it does necessitate an increased level of preparation, consequence planning and

management, as well as airport stakeholder coordination to reduce risks to the extent feasible.

If testing is offered in US airport settings, all results (positive or negative) must be reported to the health department of jurisdiction and positive results for departing air travelers should be reported immediately to both the local health department and the CDC [quarantine](#) station with jurisdiction for the airport. Ideally, travelers' consent should also be obtained prior to testing allowing notification of the airline of a positive result. Consideration of travel companions should also be made in the case of a positive result of a traveler. Travel companions of a traveler who tests positive, in most cases, would be considered [close contacts](#) and should also be identified. Procedures should be in place to prevent travel for persons who test positive and their exposed travel companions, including denial of boarding by the airline or request by the health department to CDC for use of federal public health travel restrictions if necessary.

Post Arrival Testing: Post-arrival testing, with or without pre-departure testing, may further reduce risk of introducing additional COVID-19 cases to destination communities (domestic and international). This testing may be done on arrival at the airport or conducted by local authorities at a different time, post-arrival, depending on the destination requirements. Testing may also be used as an option to reduce other traveler restrictions such as quarantine or a stay-at-home period. To prevent further introduction of COVID-19 into destination communities, CDC recommends testing at three to five days post-arrival in combination with self-monitoring for symptoms of COVID-19, staying home (or in a comparable location such as a hotel room) for seven days post-arrival, and other measures including mask use, social distancing, and hand hygiene. Travelers should follow local public health authority's recommendations or requirements related to travel.

Management of Positive Tests: If testing is done upon arrival at the airport, all passengers with positive tests and their travel companions should be removed from the airport as soon as feasible with necessary precautions taken to minimize exposure to other travelers and airport personnel. They should be referred to the appropriate local health authorities for clinical assessment and additional testing if needed, to reconfirm the diagnosis and isolation

requirements. A contact tracing investigation may be necessary. Airlines should develop a policy to establish how travelers who test positive can be “cleared” to travel at a future time. That policy should be provided to passengers prior to their travel. Passengers should be informed of any testing requirements and consequences of a positive test result well before they arrive at the departure and arrival airports.

Documentation: COVID-19 test results presented for travel purposes should be verified if there is any uncertainty as to the validity of the result. Standards for test result documentation have not been developed within the U.S. nor internationally, although such efforts are getting underway in the near future. Several companies have developed smartphone applications or “health wallets” and are working with laboratories to establish secure and convenient platforms for sharing test results.

Rationale: Testing is becoming widely available in the United States. Many countries and states are recommending or requiring testing to reduce virus transmission, eliminate travel restrictions, and/or reduce or eliminate post-arrival quarantine or stay-at-home requirements. In certain scenarios, depending on country or state risk tolerance, testing, used in conjunction with other risk mitigation measures, may prove beneficial in protecting the traveling public and aviation industry personnel in the air transportation system, while further reducing the translocation of disease as travel increases. This mitigation measure may be significantly hampered by variance in local testing capabilities and turnaround times for results. In some parts of the country, 72 hours is not currently enough time for an individual to be tested and to receive a result. Any requirements to demonstrate negative tests should take this into consideration.

Resources: CDC recommendations for pre-departure and post-arrival testing can be found at:

- » <https://www.cdc.gov/coronavirus/2019-ncov/travelers/testing-air-travel.html>
- » <https://www.cdc.gov/coronavirus/2019-ncov/travelers/travel-during-covid19.html>
- » CDC Interim Guidance for Antigen Testing for SARS-CoV-2 can be found

at: <https://www.cdc.gov/coronavirus/2019-ncov/lab/resources/antigen-tests-guidelines.html>

- » ICAO CAPSCA Manual on Testing and Cross-border Risk Management Measures is available at: <https://www.icao.int/safety/CAPSCA/PublishingImages/Pages/ICAO-Manuals/Manual%20on%20Testing%20and%20Cross-border%20Risk%20Management%20Measures.pdf>
- » <https://www.fda.gov/emergency-preparedness-and-response/mcm-legal-regulatory-and-policy-framework/emergency-use-authorization#covid19euas>

Public Health Corridors

COVID-19 testing as part of the travel continuum has become more prominent, particularly with the worldwide pervasiveness of the disease, as a part of an expanded mitigation strategy. Some countries have begun transitioning from geography-based risk management to a paradigm that focuses on managing the risk of the individual traveler. The initial focus for this effort on testing has centered on enabling international travel. The U.S. Government has engaged in and continues to engage in multiple discussions with partner countries about possible mutual recognition of public health mitigation measures that enable the free flow of travelers between the U.S. and other partner countries, thus establishing a Public Health Corridor. The U.S. Government and participating foreign governments have concentrated on defining recommended performance standards for this Public Health Corridor framework that allows implementation by the air travel industry. The objective of implementing such a framework is to give the U.S. Government and the respective other countries, states, and localities increased confidence that individual passengers do not pose an increased public health risk and in turn should not be subject to blanket travel restrictions or lengthy post-arrival quarantines. Industry has developed a range of pilot programs that feature testing as a means to reduce quarantines or other restrictions, as they assess the viability of offering “COVID-free flights.” Public Health Corridors are a topic of lengthy discussion in the [CART II guidance](#).

Temperature Screening

Some airports or airlines may decide to use temperature screening in their multi-layered approach to identify potentially sick passengers. Temperature screening, however, does not detect asymptomatic or pre-symptomatic people

with COVID-19, those who are ill but do not have fever, and those who have treated their fever with medication. It may also inadvertently flag passengers as febrile who have other, non-contagious chronic ailments such as arthritis or other systemic inflammatory diseases. Therefore, it should not be relied upon as a stand-alone public health measure.

Temperature screening has limited reliability in detecting individuals with COVID-19, though it may detect some noticeably sick passengers, and it may also serve as a general deterrent for passengers who may have otherwise considered traveling when ill. It should be noted that some persons with chronic, non-COVID-19 related health issues may have an elevated body temperature; policies should be implemented as part of any temperature screening program to ensure such persons are not unfairly blocked from air travel if their illness does not threaten public health.

» **Note:** *If conducted, pre-travel temperature screening of passengers should be done in accordance with the protocols of the relevant local health authorities and should not create significant passenger flow delays or crowding, which can create additional exposure risks. The screening should include a passenger health attestation and may include visual observations for signs of illness conducted by trained staff. If conducted, temperature screening could occur upon arrival at the airport (airport entry), at the airline check-in location, or before or after entering the “sterile” gate areas. If an airport, airline, or other authority makes the decision that it will bar those with temperatures over a certain threshold from flying, the policy should be transparent, posted in advance, and all passengers should be directly notified of the policy before making a decision on whether they will attempt to fly or not. The policy should note that a temperature check does not verify that a person does or does not have COVID-19, and industry screening protocols should include a process to allow individuals with known reasons for having elevated temperatures, other than COVID-19 or another communicable disease that threatens public health, to fly with appropriate medical documentation.*

Vaccination

As data about the impact of COVID-19 vaccines on virus transmission become available in the United States and internationally, we may be able to better assess the impact on travel. At this time, there is not evidence that vaccines prevent

transmission of the virus from person-to-person. Currently, efforts continue domestically and internationally to reduce travel risks through other preventative measures, such as wearing a mask, social distancing, frequent handwashing, cleaning and disinfecting frequently touched surfaces, monitoring health, and expanding the use of testing before and after travel. If data support that vaccines can reduce person-to-person transmission of the virus, vaccination may be another strategy to reduce the incidence of COVID-19 associated with travel. We anticipate providing more guidance in future updates of this document as vaccination becomes more widespread in general populations throughout the world and as data becomes available regarding the impact of vaccination on virus transmission.

Separation of Crew/Aviation Workers and Passengers

Recommendation: Airlines and airports should minimize contact between aircrews/aviation workers and passengers to the maximum extent practicable, consistent with their job requirements. Additionally, aircrews and aviation workers should be expedited through shared screening areas, separate from passengers, as applicable to their job requirements. Providing separate on-airport transport options should also be considered. The use of masks should be required, especially when maintaining the recommended six feet between persons for social distancing is not possible.

Rationale: Crews and aviation workers, including pilots, flight attendants, TSA and CBP officers, ticket agents, and retail workers, are essential personnel who may be required to interact with hundreds or thousands of passengers each day. For their safety, and the safety of passengers, their exposure to passengers outside their job duties should be reduced to the maximum extent feasible.

Resources: CDC developed guidance for different types of aviation and critical infrastructure workers at:

- » <https://www.cdc.gov/coronavirus/2019-ncov/community/worker-safety-support/index.html>

FAA and CDC partnered to provide specific guidance to aircrew members and airlines at:

» https://www.faa.gov/other_visit/aviation_industry/airline_operators/airline_safety/safo/all_safos/media/2020/SAFO20009.pdf⁸

Minimize Document Handling and Physical Contact between Airport Workers and Passengers

Recommendation: Wherever possible, airlines and airports should minimize document exchanges between passengers and aviation workers. Airlines and airports are encouraged to enable contactless, electronic document exchanges (e.g., during check-in, at the screening checkpoint, and when boarding an aircraft). When passengers must consult with aviation workers, barriers should be installed to maintain social distance, and workers should wear masks and gloves when touching or transferring items, such as passenger documents, money, and/or credit cards; sharing of pens or other writing implements should be discouraged as well. Workers should have easy access to a sufficient supply of new gloves and hand sanitizer and should sanitize hands after glove removal.

Rationale: Limiting contact by reducing the need for hand-to-hand transfer of materials that could potentially hold virus droplets protects both aviation workers and passengers. Contactless document exchange and review also have the potential to expedite processes and limit passenger queuing, which should facilitate greater usage of social distancing.

Resources: DHS has partnerships available to offer to the aviation industry whereby a passenger flying internationally can use only his or her face as an identity verifier and therefore minimizes the exchange of any travel documents throughout the journey. This may include check-in, bag drop, security checkpoint, boarding, and processing in entry. This process is more secure, convenient, and provides the health benefits of minimizing physical exchange of documents. Additional information may be found at CBP Travel Biometrics: <https://www.cbp.gov/travel/biometrics>.

Daily/Routine Reporting

Recommendation: Designated airport personnel should consider completing and submitting a daily report of activities, issues, and potential hazards at

⁸ FAA Safety Alert for Operators (SAFO) 20009, most recently updated on December 10, 2020, provides joint CDC-FAA health and aircraft cleaning guidance to aircrews and airlines.

the airport, such as malfunctioning of or failure to use personal protective equipment (PPE), shortages of cleaning materials, incidents involving passengers and aviation workers that result from a failure to follow public health measures, and passenger/concession/contractor non-compliance with policies and requirements. These reports should be shared with airport stakeholders, including airlines and, when applicable, also list best practices and recommended actions for airport leadership to consider.

Rationale: Reviewing daily activities and issues can enable the identification of systemic issues and provide an opportunity for changes and adjustments as necessary to maximize the health benefits of these measures and quickly identify unintended consequences of procedures or situations where additional education, training, or signage may be required. Additionally, continuous discussion amongst stakeholders at the airport enables dialogue and promotion of partnership and roles and responsibilities of each stakeholder to contribute to reducing the risk of virus transmission for passengers and aviation workers. This process also supports future planning and development of lessons learned.

Airport Ground Transport

Recommendation: Airports should use applicable general risk measures to reduce public health risks during ground transport activities. Airports should encourage social distancing while in queue for and while on airport ground transport by spacing passengers (floor marking, blocking seats), increasing the number of transport vehicles in use to reduce the passenger volume for each vehicle, and/or regulating passenger loads (e.g., limiting the number of passengers per car of train).

Rationale: Like an aircraft, many forms of on-airport transportation have limited space to accommodate passengers. Ground transport can take several forms, including buses, trams/trains, and people movers. Some may be elective, but others may be the only way to move point to point throughout the airport property. Increasing the number of transport vehicles where possible allows greater use of social distancing, which should be maintained to the greatest degree possible.

Resources: CDC recommendations for mass transit operation and operators can be found at:

- » <https://www.cdc.gov/coronavirus/2019-ncov/community/mass-transit-decision-tool.html>
- » <https://www.cdc.gov/coronavirus/2019-ncov/community/worker-safety-support/index.html>

Airport Common Areas, Terminals, and Retail

Contactless Check-in

Recommendation: Airlines and airports should encourage passenger use of online check-in options through web or smart device applications, thus reducing use of high-touch surfaces like kiosks or ticket agent interactions.

- » When passengers must use kiosks, hand sanitizer stations and disinfecting wipes should be readily available. Kiosks should be cleaned frequently when in use. When passengers must consult with ticket agents, barriers should be installed to maintain social distance. Agents should wear gloves when touching passenger documents. Agents should wear masks, even if behind barriers.
- » Travelers, airports, and airlines should consider increasing participation in DHS facial biometrics and seamless and touchless passenger facilitation programs to further increase contactless check-in and passenger flows.

Rationale: SARS-CoV-2 spread occurs most often when an infected person coughs, sneezes, talks, or breathes, and droplets or airborne particles from their mouth or nose are launched into the air. Requiring all persons to wear masks reduces the risk of droplets or airborne particles spreading, including from asymptomatic or pre-symptomatic individuals. If everyone in an environment participates in covering their mouths and noses, then masks can be effective at reducing virus spread. Minimizing use of high-touch surfaces or an exchange of documents also reduces this risk from droplets.

Resources: CDC developed applicable guidance for:

- » Customer service and gate agents at: <https://www.cdc.gov/coronavirus/2019-ncov/community/airport-customer-factsheet.html>
- » Cleaning high-touch surfaces at: <https://www.cdc.gov/coronavirus/2019-ncov/community/disinfecting-building-facility.html>

Information on DHS trusted traveler and biometrics programs:

- » Trusted Traveler Programs: <https://ttp.dhs.gov>
- » CBP Biometrics: <https://biometrics.cbp.gov/>
- » TSA Biometrics: <https://www.tsa.gov/biometrics-technology>

Checked Baggage Drop

Recommendation: Airlines and airports should ensure baggage handlers wear gloves when handling passenger baggage. Handlers should be trained on the proper use of gloves and hand hygiene to prevent virus contamination, and they should be provided with an adequate supply of handwashing materials, disinfectant wipes, and gloves to change as needed.

Rationale: Gloves can prevent baggage handlers from inadvertently transferring virus droplets by keeping the droplets from contacting the skin on the hands. However, droplets can survive on the surface of the gloves, so baggage handlers should know to remove gloves and practice good hand hygiene prior to eating or touching any part of their faces. Additionally, baggage handlers should have supplies of sanitizing wipes for commonly touched surfaces and ample soap/sanitizer for proper hand hygiene between uses of gloves.

Resources: CDC guidance for baggage and cargo handlers is available at:

- » <https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/airport-baggage-cargo-handlers.html>

Airport Security Checkpoints

Recommendation: TSA continues to work with industry to implement procedural changes and sanitization and technology changes at the security checkpoint and checked baggage locations to reduce exposure of passengers and Transportation Security Officers (TSOs), while maintaining security effectiveness. Through each of these measures, TSA will work with airports in carrying out these mitigations to include assisting in the overseeing of acrylic shield barrier installations, as well as placement of signage to promote social distancing and communicate procedural changes as necessary.

TSA recognizes the extensive actions the airport and airline industry have already taken, to include guidance from ICAO⁹, industry, and academia, to restore public confidence, protect public health, and ensure the safety and security of air transportation in the United States. TSA will continue to identify enhancements at the security checkpoint and checked baggage locations. Airports should assist and support TSA in enhancing these mitigations to include:

- » **Identity Verification:** Altered procedures exist to allow for self-scanning of boarding passes and identification documents to minimize the passing of documents between passengers and security personnel. TSA and airlines are promoting the use of digital boarding passes and using facial biometrics where feasible.
- » **Food and Liquids:** Passengers are asked to place carry-on snacks and food items in a clear plastic bag and place that bag into a bin for screening. Food items can sometimes cause a false alarm and the need for additional screening of accessible property. TSA is allowing passengers to carry greater quantities (up to 12 fl. oz., increased from 3.4) of hand sanitizer, through checkpoints. Airlines and airports should promote these changes and new allowances in passenger education materials and signage.
- » **Implement Passenger Metering throughout the Checkpoint:** TSA is adjusting the screening queuing process to increase the distance between passengers and TSOs at all stages of the security screening process, including the travel document check, on-person screening, accessible property screening, and alarm resolutions/pat-downs. As part of these efforts, TSA is exploring metering at the screening checkpoint entrance and signage on the floor to increase physical distancing throughout the checkpoint area. Airport personnel can support these efforts by helpfully directing traffic and respectfully enforcing distancing, as practicable.
- » **Minimize wait times for the traveling public:** Maximizing staffing will decrease wait times, which will minimize exposure between passengers, TSA personnel, and other aviation workers. Wait times may increase public health risk, as passengers may congregate or cluster. TSA is committed to keeping the traveling public safe and secure. The traveling public should continue to budget plenty of time to minimize increased arrival traffic, which could potentially create longer wait times and queuing. Airlines and airports should work with TSA to promote these practices in passenger education materials.

⁹ Council Aviation Recovery Taskforce (CART). Take-off: Guidance for Air Travel through the COVID-19 Public Health Crisis. Montréal, Canada, 27 May 2020 and [updated in mid-November 2020](#).

- » **Personal Protective Equipment (PPE) & Cleaning and Sanitization:** TSA has adjusted checkpoint measures to reduce public health risk to TSOs and passengers. These changes include PPE requirements for officers, installation of acrylic shield barriers at high contact locations within the checkpoint, such as travel document check, divestment, and alarm resolution stations. All TSA screening checkpoint employees are required to wear surgical masks or N95 respirators and gloves. Officers are also required to wear face shields when not behind an acrylic shield barrier. Additionally, TSA requires officers to offer passengers a mask when a pat-down is required. In coordination with the Chief Medical Officer (CMO), TSA developed a comprehensive set of enhanced cleaning guidelines for implementation across the entire enterprise. TSA created the Airport Reimbursement Program to reimburse airport authorities, airlines, and tenant operators for cleaning services performed to achieve TSA standards. TSA also set up a TSA contract option to directly fund enhanced cleaning at airports that do not elect to pursue reimbursement. All this guidance can be found in the TSA Communicable Disease Response Playbook, which was developed as a resource for Federal Security Directors and airport leadership. The Playbook collects best practices, guidance, and public health solutions into one easy to reference document. Airlines and airports should work with TSA to achieve these standards and promote these new practices in passenger education materials and signage.
- » **Communications:** Beyond the checkpoint environment, TSA’s “Stay Healthy. Stay Secure” campaign builds on the checkpoint communications to provide passengers with information outside the checkpoint space. TSA also created a website with COVID-19 specific travel trips (tsa.gov/coronavirus) and issued national and local press releases. TSA’s multiple social media accounts and blogs with timely and educational posts further complement communications. TSA has also established reporting and tracking mechanisms, including transparency to the public on the number and location of presumed or confirmed positive infections.
- » **Increase of Technology Deployments:** TSA’s biggest accomplishment in addressing the COVID public health emergency’s impact to TSA’s mission has been the implementation of changes to security screening processes that reduce physical contact between TSA officers and passengers. TSA has repositioned Credential Authentication Technology (CAT) units to minimize touch during passenger travel document check, rolled-out in-person screening enhancements that reduce false alarm rates and, therefore, the number of pat-downs, and continued the deployment of Computed Tomography systems that require fewer manual bag checks. TSA is also exploring technologies, such as UVC sanitization units, to

disinfect checkpoint bins. Airports can work with TSA on the adoption of these technologies and promotion of new practices in passenger education materials and signage.

Rationale: Beginning in June 2020, TSA implemented procedural, sanitization, and technology changes at the security checkpoint and checked baggage locations to reduce exposure of passengers and TSOs while maintaining security effectiveness. Airport support in implementing these measures is crucial. Depending on the spread of COVID-19 throughout the United States and how this impacts the TSA workforce and passengers, TSA will continue to consider issuance of regulations that pertain to certain health and public safety mitigation elements.

Resources: TSA information to advise passengers of COVID-19-related changes to traveling is available at:

- » <https://www.tsa.gov/blog/2020/04/21/traveling-during-covid-19-pandemic>

Information on TSA efforts can be found at:

- » <https://ttp.dhs.gov/> (Trusted Traveler Program)
- » https://www.tsa.gov/travel/special-procedures?field_disability_type_value=15 (Liquid Hygiene Allowance)
- » <https://www.tsa.gov/travel/security-screening/emerging-technology> (Technology developments)
- » <https://www.tsa.gov/for-industry/small-business> (Cleaning and Sanitization Activities)
- » <https://www.tsa.gov/coronavirus> (General Guidance)
- » <https://www.tsa.gov/precheck>

Aircraft¹⁰

Seat Assignment Processes

Recommendation: Airlines should continue to consider the feasibility of limiting seat availability as an additive measure to enable passengers to maintain

¹⁰ FAA Safety Alert for Operators (SAFO) 20009, most recently updated on December 10, 2020, provides joint CDC-FAA health and aircraft cleaning guidance to aircrews and airlines.

social distance from each other during the flight when feasible. Maximum risk reduction results from maintaining a social distance of at least six feet between passengers unless seating a family/unit together.

- » When social distancing can no longer be accommodated on a flight, passengers should be made immediately aware of the status and be offered alternative flight options, such as a flight change, without penalty.
- » It is particularly important when physical distancing is not achieved on a flight, because of the passenger load, seat configuration, crew dead-heading, or other operational constraints, that crew members actively ensure passengers on board an aircraft adhere, at all times, to all other preventive measures, including wearing of masks, strict hand hygiene, and respiratory etiquette.

Rationale: Social distancing and the universal use of masks are the most effective mitigations available for preventing the spread of COVID-19. Therefore, social distancing should be practiced within the confines of the aircraft to the greatest degree practicable, and crew should enforce the use of masks to the extent possible.

Resources: CDC has information about the definition and importance of social distancing at:

- » <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/social-distancing.html>

In addition, information regarding the importance of following these key preventions is provided at:

- » <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html>

Adjusted Boarding Processes

Recommendation: Airlines should board passengers in ways that reduce the likelihood of passengers having to pass or wait in close proximity to each other (e.g., board all window seats first, board from the back of the aircraft forward), as long as the boarding process is consistent with FAA weight and balance requirements.

Rationale: Limiting passenger contact reduces opportunities for transmission. Therefore, limiting the need for passengers to pass each other or stand in line to board and reach their seats should be pursued to the greatest practical extent.

Resources: CDC has information about the definition and importance of social distancing at:

- » <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/social-distancing.html>

Aircraft Ventilation Adjustments

Recommendation: In consultation with the aircraft manufacturer, airlines should ensure ventilation systems are operating at maximum effectiveness for air filtration, throughout the occupied period, to include during the aircraft boarding and disembarkation process, as well as during ground delays.

Rationale: Depending on the type of aircraft, air in the cabin may be completely renewed every two to three minutes; it also flows from ceiling to floor, which helps with minimizing virus spread. Changes in ventilation, airflow rates, and air filtration adjustments may reduce the duration of exposure to viruses circulating in the cabin.

Resources: Many aircraft manufacturers are working with airlines on ways to utilize cabin airflow as a risk reduction measure. Some manufacturers have information online including:

- » <https://www.boeing.com/confident-travel/#safeguards>
- » <https://www.airbus.com/aircraft/passenger-aircraft/cabin-comfort.html#airquality>

Limit or Suspend Onboard Customer Services

Recommendation: Airlines should:

- » Limit or discontinue food and beverage service on short-haul flights to encourage continuous mask use when possible. If food or drink is provided, it must be dispensed in a sealed, prepackaged container.

- » Suspend unnecessary in-flight services that require crew/passenger interactions, such as duty-free item sales.
- » **Note:** Airlines are still expected to comply with the disability access requirements under the Air Carrier Access Act such as providing boarding or deplaning assistance to passengers with disabilities, providing on-board wheelchairs and assistance to the aircraft lavatory if requested, and opening food packages for people with disabilities as needed.

Rationale: Limiting passenger-to-crew contact reduces opportunities for transmission. Therefore, airlines should take all practical measures to reduce interactions and movement through the cabin unless necessary.

Resources: CDC has information on the importance of avoiding interpersonal contact at:

- » <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html>

Lavatory Use

Recommendation: When practicable, airlines should:

- » Minimize passenger queuing for lavatory use to reduce prolonged passenger proximity.
- » Provide soap, hand sanitizer, and disinfectant wipes in lavatories for passengers and crew to wipe down high touch surfaces before and after use.

Rationale: Lavatories are known areas for virus transmission. Passengers should have limited contact with each other and the opportunity to help prevent the spread of virus infection with a means to sanitize lavatory surfaces prior to and after use.

Resources: CDC has information about aircraft lavatories at:

- » <https://www.cdc.gov/quarantine/air/managing-sick-travelers/ncov-airlines.html>

Personal Protective Equipment for Crew and Ill Passengers

Recommendation: Airlines should ensure crew have adequate onboard PPE to mitigate the spread of COVID-19. This should include ensuring all flights have Universal Precaution Kits (UPKs) onboard that contain adequate protection in cases of suspected COVID-19 related illness for both crew and potentially affected passengers. All flights should provide the necessary PPE to enable crew to follow CDC guidelines for responding to a sick passenger with symptoms of COVID-19. Specifically, airlines should:

- » Have protocols in place for how to isolate potentially ill passengers or crew discovered during flight, and all crewmembers should be trained on that plan.
- » Use standard procedures in place to respond to reports of illness or death during travel.
- » Report ill travelers or deaths on board to public health authorities at the destination according to established procedures.

Rationale: Due to the incubation period of COVID-19, passengers may not develop symptoms of illness until onboard an aircraft. Aircrews need to be adequately prepared to handle ill passengers while protecting healthy passengers to the greatest extent possible.

Resources: Guidance for Airlines on Reporting Onboard Deaths or Illnesses to CDC is available at:

- » <https://www.cdc.gov/quarantine/air/reporting-deaths-illness/guidance-reporting-onboard-deaths-illnesses.html>
- » CDC guidance for managing ill travelers onboard if COVID-19 is suspected is available at: <https://www.cdc.gov/quarantine/air/managing-sick-travelers/ncov-airlines.html>
- » Preventing Spread of Disease on Commercial Aircraft: Guidance for Cabin Crew is available at: <https://www.cdc.gov/quarantine/air/managing-sick-travelers/commercial-aircraft/infection-control-cabin-crew.html>

Additional Crew Protections

Recommendation: To further protect cabin crew, airlines should:

- » Assign crewmembers to provide service only to specific sections of the cabin to the maximum extent practicable.
- » To the extent consistent with FAA regulations:
 - Allow cabin crewmembers to be seated in passenger seats, if necessary, to enable social distancing.
 - Crewmembers should not share safety equipment used for safety demonstrations without adequate sanitization before another crewmember uses it.

Rationale: Aircrews are essential personnel who may be required to interact with hundreds or thousands of passengers each day. For their safety, and the safety of passengers, their exposure to passengers and potentially contaminated materials outside their safety job duties should be reduced to the maximum extent feasible.

Resources: CDC has information on the importance of avoiding interpersonal contact at:

- » <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html>
- » [FAA Safety Alert for Operators \(SAFO\) 20009](#), most recently updated on December 10, 2020, provides joint CDC-FAA occupational health and safety and aircraft cleaning guidance to aircrews and airlines.

Disembarkation Procedures

Recommendation: Airlines should prohibit passenger queueing in the aisle when departing the aircraft and require passengers to stay seated until it is their turn to depart.

Rationale: Passengers should have minimal contact with each other to reduce the chances of virus transmission.

Resources: CDC has information on the importance of avoiding interpersonal contact at:

- » <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html>

Aircraft Disinfecting

Recommendation: Airlines should ensure aircraft cabins are cleaned and disinfected frequently to minimize risk to passengers and crew. Personnel with appropriate PPE and cleaning supplies should clean frequently touched surfaces in the cabin between each flight, including the galley, armrests, tray tables, screens, and seatbelt buckles, etc. Lavatories must be cleaned between each flight. The flight deck should be cleaned between each crew change. The entire aircraft should receive deep cleaning at least once per day in service.

Airlines should consult with aircraft manufacturers to ensure cleaning products and processes do not damage aircraft equipment. Selected disinfectants should be on EPA N-list. In addition, the application of surface disinfectants using fog or mist generators should only be done if the selected application method is indicated in the disinfectant manufacturer's "Instructions for use" guidance and with appropriate PPE that is compatible with the aerosolized disinfectant application method. Special care must be taken with fog/mist disinfectant applications to ensure that sufficient wetted surface contact time is achieved, in accordance with manufacturer instructions, and that excess liquid does not pool on surfaces and equipment that can be damaged.

All owners and operators, as well as any other person responsible for the airworthiness of affected aircraft, should implement the aircraft manufacturer's disinfection guidelines and be aware of the potential negative impacts of disinfectants. Aircraft manufacturers have published information on the products and methods they have evaluated and found acceptable from an airworthiness standpoint. Failure to follow the aircraft manufacturer's recommended practices on the use of materials for disinfection can lead to airworthiness issues. Although the Environmental Protection Agency publishes a list of disinfectants effective at inactivating the SARS-CoV-2 virus, most listed products may not be suitable for use on aircraft, except in very limited and localized application.

Rationale: SARS-CoV-2 can be killed when effective cleaning products are used. EPA has compiled a list of disinfectant products that can be used against COVID-19, including ready-to-use sprays, concentrates, and wipes. Each product has been shown to be effective against viruses that are harder to kill than viruses like the one that causes COVID-19. However, equipment and systems can be

damaged by the use of improper cleaning products or application processes if aircraft manufacturer guidance is not followed.

Resources: Aircraft cleaning recommendations are included in CDC airline guidance at:

- » <https://www.cdc.gov/quarantine/air/managing-sick-travelers/ncov-airlines.html>
- » Applicable OSHA guidance is available at: <https://www.osha.gov/SLTC/covid-19/>
- » EPA product list is available at: <https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2-covid-19>
- » FAA Special Airworthiness Information Bulletin is available at: [https://rgl.faa.gov/Regulatory and Guidance Library/rqSAIB.nsf/dc7bd4f27e5f107486257221005f069d/eb6c8208f4ccd3318625861600518af8/\\$FILE/NM-20-17.pdf](https://rgl.faa.gov/Regulatory%20and%20Guidance%20Library/rqSAIB.nsf/dc7bd4f27e5f107486257221005f069d/eb6c8208f4ccd3318625861600518af8/$FILE/NM-20-17.pdf)

U.S. Customs and Border Protection (CBP) Clearance

Recommendation: Airlines and airports should work locally with CBP to support and promote the following measures:

- » Separating passengers within the queuing space to adhere to social distancing practices and limiting the number of passengers allowed into the Federal Inspection Station (FIS) at any one time to the extent practicable.
- » Considering the expansion of existing facial biometrics capabilities for primary processing to limit the need to handle documents and maintain separation between the traveling public and officers.
- » Consider expanding ways to verify traveler documentation and identity while maintaining maximum social distancing, such as methods implemented by TSA.
- » Streamlining local processes and passenger flows for the rescreening of passengers with connecting flights.
- » Developing any necessary infrastructure changes to implement modified egress, enable installation of Plexiglas barriers at locations not currently available, and eliminate any potential choke points upon exiting the FIS.

- » Encouraging participation in Global Entry for crew and passengers, which will allow people to leverage this expedited inspection and clearance program, reducing lines and congregation in the FIS.

Rationale: CBP is implementing applicable risk mitigation measures, including segregation of aircrews and passengers. These measures are being implemented to the maximum extent practicable within the FIS to minimize risk to arriving passengers, as well as CBP Officers. Additionally, streamlining passenger flows in and outside the FIS allows for greater use of social distancing, greater public health protections for passengers and CBP officers, and greater travel satisfaction for passengers.

Resources: CBP information regarding response to COVID-19 is available at:

- » <https://www.cbp.gov/newsroom/coronavirus>

Baggage Claim

Recommendation: Airlines and airports should prohibit access of persons waiting for arriving passengers from the baggage claim area unless special accommodations are necessary for passengers that require assistance in retrieving their baggage. Baggage claim signage and announcements should remind passengers of local public health requirements per the communications cycle chart.

Rationale: Airports should limit exposure and human contact to the greatest extent possible to help prevent the spread of COVID-19. Limiting airport access to essential personnel and passengers protects those using the air transportation system and local communities from unnecessary exposure risks.

Resources: CDC has produced general guidance on prevention of virus transmission at:

- » <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/index.html>

In addition, see CDC guidance for airport baggage or cargo handlers at:

- » <https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/airport-baggage-cargo-handlers.html> →



FUTURE AREAS OF RESEARCH AND EVALUATION FOR PUBLIC HEALTH RISK MITIGATIONS

As new tools are developed and more is learned about the SARS-CoV-2 virus that causes COVID-19, opportunities for mitigation integration and enhancement should be explored. These tools may include technologies, processes, and capabilities.

- » **Facilitation of Low Health Risk Passengers:** The U.S. Government has improved efficiency of aviation and border security measures by facilitating the movement of passengers that pose a low-security risk through trusted passenger programs. As long-term solutions emerge, a similarly customized experience for low health-risk individuals who can prove vaccination, recovery, or immunity may be warranted.
- » **Travel Facilitation through Advanced Biometrics:** DHS, in partnership with individual airlines, proved that contactless biometrics can improve security, reduce processing time, and improve the traveler experience, reduce processing time, and improve security. However, the DHS contactless biometrics capability is currently only used to service limited air travel routes and populations. These programs have the potential to fundamentally re-shape how travelers, airlines, and government interact throughout the travel system. In addition to existing benefits for passenger facilitation and enhanced security, the inherent reduction in person-to-person contact can help mitigate the spread of disease while travelers transit through the airport.
- » As with all biometric modalities, facial recognition poses some privacy issues. Accordingly, CBP has developed a privacy framework to mitigate these privacy risks, as outlined in its Traveler Verification Service (TVS) Privacy Impact Assessment (PIA). Published in 2018, the TVS PIA provides in-depth analysis regarding how CBP implements privacy protections into the facial recognition aspect of its Entry/Exit program. Any future or expanded uses of this system will continually be reviewed for privacy risks and mitigation strategies, as appropriate. DHS's Chief Privacy Officer (CPO) has the authority to order a Privacy Compliance Review

(PCR) of biometric programs to ensure information is accessed and used per the PIA. Also, the CPO has the authority to develop a [new privacy policy](#) on facial recognition and biometrics at the Department-level.

- » **Automated Sanitization:** New processes and products are under research and development that may sanitize baggage and belongings while being x-rayed. Further research could be conducted that may allow for automating sanitization of high touch/use areas (i.e. kiosks, bathrooms, water fountains).
- » **Onboard Risks:** Aircraft manufacturers, associations, academia, and the U.S. Government are conducting testing and modeling related to air-flow, virus movement, and mask use onboard aircraft in an effort to quantify the risk of exposure if an infected passenger is onboard an aircraft. Many of these studies suggest the likelihood of transmission onboard an aircraft is relatively low. Public health authorities in several countries are also reviewing and assessing data related to COVID-positive travelers. While gate-to-gate travel may be low risk, the broader concerns about door-to-door risk continues. →



IMPLEMENTATION CHALLENGES SPECIFIC TO INTERNATIONAL TRAVEL

This guidance is to be used by airports and airlines that handle passengers and crew traveling to, from, or within the United States and its territories and possessions. International travel raises unique considerations to which airlines and airports – not to mention governments – should pay close attention, including communicating – in a clear, consistent, and accessible fashion – public health measures and travel restrictions in place at a foreign destination and avoiding inconsistent restrictions on market access for international transportation. [FlyHealthy.gov](https://www.flyhealthy.gov) offers passengers a portal that includes key information for all parts of the passenger journey, as well as curated links to select U.S. Government Department/Agency sites with passenger information and select industry sites with critical passenger information regarding travel restrictions and requirements.

This guidance aligns with international recommended measures, which the United States Government helped to develop at ICAO¹¹, and uses the same modular, risk-based approach as those measures. Notwithstanding the goal of global coordination on measures, differences in virus containment strategies and effectiveness, and vaccine uptake as well as risk tolerance, may result in variations of risk mitigation measures internationally. Accordingly:

- » As U.S. entities implement health measures relating to international travel, careful consideration should be given to potential unintended effects on competition and market access distortions as they relate to U.S. obligations under its various international air transport agreements and other relevant international agreements relating to aviation.
- » For the duration of the Presidential Proclamations imposing travel restrictions on certain foreign nationals who have been in specified

¹¹ See ICAO's Council Aviation Recovery Task Force (CART), available [here](#). This guidance contains modules for airports and airlines. "Modules" for crew and cargo have already been developed by the CDC and Federal Aviation Administration and will be updated as necessary, as Safety Alerts for Operators (SAFOs), available [here](#), as well as exemptions to in-flight requirements. The Department of Transportation's Office of the General Counsel has developed guidance to regarding refunds for airline customers, available [here](#).

countries, individuals subject to those restrictions will continue to require exceptions to enter the United States.

- » Although the severity of the public health emergency will vary by geographic region, it is important to consider implementing public health measures as consistently as possible in accordance with federal, state and local requirements, including any available exceptions where threats to life or safety of its citizens are deemed more severe than the current public health emergency.
- » Secure data exchange platforms should be explored within the existing legal framework to allow the protected exchange of personally identifiable information. →



APPENDIX A: KEY PARTNERS AND DECISION-MAKERS

In the United States, the following organizations are critical partners in determining the set of mitigation measures that are necessary, feasible, and sustainable to reduce public health risk and restore confidence. For international recovery and consistency in the global air transportation system, foreign governments, including Ministries of Health, Transport, and Foreign Affairs and Civil Aviation Authorities, as well as International Organizations, including ICAO, will be potential partners. To support innovative and creative solutions and overall operational feasibility and execution, industry will be essential partners.

U.S. Federal Departments/Agencies:

Department of Health and Human Services (HHS), including the Centers for Disease Control and Prevention (CDC).

- » **CDC** is the national public health agency that provides the technical specifications for public health risk mitigations and recommended guidance for commercial air travel passengers and crewmembers. It has statutory authority to publish regulations that are necessary to prevent the introduction, transmission, and spread of COVID-19 and other communicable diseases from foreign countries into the United States, or from one state or possession into any other state or possession.



Department of Transportation (DOT), including the Federal Aviation Administration (FAA), and the Office of the Secretary (OST).

- » **DOT:** The Secretary of Transportation has authorities related to air carrier economic authority, enforcement of international air transport agreements, and aviation consumer protection, including disability rights.
- » FAA is responsible for evaluating whether specific mitigations degrade aviation safety, substantially disrupt or prevent commercial aircraft operations or air traffic services, or directly impact FAA employees.



Department of Homeland Security (DHS), including U.S. Customs and Border Protection (CBP) and the Transportation Security Administration (TSA).



- » **DHS:** The Secretary of Homeland Security is responsible for the security and resiliency of the air transport system, other modes of transportation, and administering the borders of the United States, including by confirming the identity and risks associated with people interacting with those systems. The Secretary has authority to work with foreign governments to share best practices, develop common approaches, and share information with respect to these responsibilities. Through DHS's Science and Technology Directorate, DHS may test or develop technologies to achieve this mission, which are deployed by DHS Components and Offices.
- » **CBP** is responsible for determining if an air passenger is admissible to the United States, including based on health-related grounds of inadmissibility. CBP also collects information regarding people seeking admission to the U.S. both from the individual and from the air carriers and analyzes that data to determine admissibility and security risk. CBP also evaluates if specific mitigations affect their border control operations and CBP employees.
- » **TSA** is responsible for evaluating entry of passengers into the secure area of the airport and regulating the industry to protect the security of aircraft and the air transport system. TSA must also determine if proposed solutions disrupt security screening operations and ensure the safety of TSA employees.

Department of State (DOS)

- » **DOS** is responsible for engaging with bilateral partners on issues related to travel, including issuing visas and passports, as well as harmonizing restart efforts.



Department of Justice (DOJ)

- » **DOJ**, including the Disability Rights Section of the Civil Rights Division, is responsible for the enforcement of relevant provisions of the Americans with Disabilities Act.



Executive Office of the President

- » **EOP**, including the National Security Council/Border and Transportation Security Directorate, and the National Economic Council coordinate the national policy.

The Department of Labor

- » **DOL**, including the Occupational Safety and Health Administration (OSHA), is responsible for ensuring healthful working environments.



The U.S. Environmental Protection Agency

- » **EPA** is responsible for determining the requirements for the safety of cleaning chemicals and processes.



The Department of Commerce

- » **DOC's** National Travel and Tourism Office provides national statistics on travel and tourism including international visitation to the United States by residency and citizenship, and the contribution of travel and tourism to the national economy.



Additional U.S. Domestic Government Partners:

- » The traveling public.
- » State, local, tribal, and territorial Governments, including governors and mayors.
- » National governmental associations, such as the National Association of State Aviation Officials and the National Governors Association.
- » Private Sector/Industry Partners.
- » Airports, including airport operators, airport sponsors, and associations.
- » Airlines and associations.
- » Government, airline, and airport labor unions and organizations.
- » Technology companies and associations.
- » Scientific community, including laboratories and universities.
- » Destination management organizations.

- » The travel trade (travel advisors/agents, tour operators, hospitality sector, etc., including associations).
- » Brand USA.

International Partners:

- » Foreign Governments, including Ministries of Health, Transport, Home Affairs, Foreign Affairs, and Tourism, and Civil Aviation Authorities.
- » International organizations, including ICAO and U.N. World Tourism Organization. →



Runway to Recovery

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