

Air Travel in the Time of Covid-19 Pandemic: Precautions and Preventions

Dear Sir,

Coronavirus disease 2019 (COVID-19), caused by the severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) has emerged as a pandemic affecting 162,177,376 people and leading to deaths of 3,364,178 people worldwide as of 16th May 2021.^[1] The disease carries with itself a high infectivity rate, and a mortality rate ranging between 1% and 10%, depending upon the criterion used to define case fatality rate. Because of these reasons, this pandemic has raised serious concerns worldwide leading to lockdowns of activity and movement in various nations across the globe, in efforts to slow down the spread of the disease.^[2] Efforts to combat the spread of COVID-19 and its consequent impact on global health, such as mass vaccination have been marred by the emergence of mutant strains of SARS-CoV-2 in Brazil (P. 1), South Africa (1.351), and the United Kingdom (UK) (B.1.1.7), which have now spread globally.^[3]

Global air travel has been brought to a halt, with many European, Asian, and Middle Eastern countries continuing to restrict air travel. It has been estimated that global air traffic has been reduced to less than 20% of the pre-COVID era traffic.^[4] However, many flights continue to operate, including many domestic flights within the United States of America (USA), and few repatriating flights between various countries. This air travel carries with itself, the risk of additional human-to-human transmission of the virus due to additional human-to-human contact, and further the risk of introduction of infection into previously uninfected areas.^[5] Therefore, it becomes imperative that all necessary precautions should be taken so that the safety of all passengers, flight crew, and that of their contacts is not compromised. Only essential travel must be allowed in time of the pandemic.

We suggest the following measures, which are based on common practices which can prevent transmission of the coronavirus.^[6] These should be undertaken by the appropriate airline authorities, and these can be supervised by the respective incharges of relevant government departments:

1. The flight ticket booking software should be modified to incorporate a “yes or no” type of questionnaire which should include a relevant history of the intending traveler related to the symptomatology of COVID-19 and contact with an infected person. If the answer to any of the questions is marked by the intending traveler as “yes,” then the ticketing system should abort the ticketing process and should guide the intending traveler to visit a health care professional.
2. There should be a provision of pre-flight safety leaflets given along with the flight ticket, highlighting the

information about COVID-19 and measures to reduce its spread, which include wearing a face mask, frequent hand-washing or sanitizing with an alcohol-based hand sanitizer, and social distancing.

3. The provision of distribution of food and drinks in-flight by cabin crew should be avoided as far as possible, especially in short-distance air travel. The provision for carrying own food and water should be allowed to the intending traveler so as to reduce the physical contact between crew members and the traveler.
4. The number of personnel working inside the flight should be kept as low as possible, all the personnel should have their health screening done, and no personnel displaying symptoms of COVID-19 or those having a history of contact with an infected person be allowed on the flight.
5. Measurement of body temperature of all travelers and flight crew should be done by noncontact thermometer before boarding, and only asymptomatic people should be allowed to board the flight.
6. All cabin crew members and travelers should wear face masks and face shields. In-flight hand sanitizer provision should be made for frequent hand decontamination whenever required, such as after touching the high-touch areas, for instance, toilet door.
7. In-flight spacing of the travelers should be done, with only every third seat to be occupied leaving two seats vacant between any two travelers.
8. There should be in-flight announcements highlighting the information about COVID-19 and measures to reduce its spread, in addition to the routine in-flight announcements and safety briefings.
9. Only those air-crafts should be allowed to operate which have true high-efficiency particulate air (filters) (True HEPA) for air circulation which can in theory filter viruses, including the SARS-CoV-2 virus responsible for COVID-19.^[7]
10. After a flight, the aircraft should be decontaminated using decontaminant sprays and washings.

Although rigorous, these measures should be followed ardently by all the persons involved in all the flights that operate. These measures cannot guarantee that the spread of the coronavirus will not take place during the flight, as many persons stay asymptomatic yet infective throughout the course of illness. However, following these measures can reduce the risk of transmission of the disease.

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Conflicts of interest

There are no conflicts of interest.

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