



Respiratory Precautions

Many illnesses (e.g., COVID-19, influenza, meningitis, pertussis, tuberculosis) are spread by coughing, sneezing, or unclean hands, and some cause serious illness or death. Travelers can help minimize their risk and risk to others by following the precautions and protective measures discussed below:

- Observe hand hygiene (frequent, thorough handwashing with soap and water for 20 seconds [or using a hand sanitizer containing 60% alcohol]).
- Social distancing (remaining out of congregate settings such as shopping centers, movie theaters, and stadiums, avoiding mass gatherings and public transportation, and maintaining a distance of 2 m [6 ft] from others).
- Avoid close contact with ill-appearing persons.
- Avoid touching eyes, nose, or mouth.
- Disinfect frequently touched surfaces at home, work, or school.
- Observe respiratory hygiene (cough and sneeze etiquette).
- Avoid prolonged or excessive outdoor activity in areas with heavy air pollution, especially during hot or humid times of the day.

Air Pollution

Air pollution, both indoor and outdoor, is a health concern for travelers and expatriates, particularly for children, older adults, and those with underlying diseases (especially those with asthma, chronic obstructive pulmonary disease, or heart disease). Outdoor air pollution in urban areas is caused mainly by motor vehicle emissions, power and heat generation, and wind-blown dust. Indoor air pollution is caused by cooking and heating with organic fuels, coal, or gas. Annually, millions of deaths worldwide are caused by air

pollution. Levels of air pollution have been increasing significantly in low- and middle-income countries, especially in India and China. Air pollution adversely affects the

cerebrovascular, cardiovascular, and respiratory systems. The US Environmental Protection Agency Air Quality Index (AQI) describes health effects at different air quality levels.

Guideline Values	Health Effects
0-50 (Good)	Air quality is considered satisfactory, and air pollution poses little or no risk.
51-100 (Moderate)	Air quality is acceptable; however, for some pollutants, there may be a moderate health concern for a very small number of people who are unusually sensitive to air pollution.
101-150 (Unhealthy for sensitive groups)	Air quality is frequently unhealthy for members of sensitive groups (persons with lung or heart disease, adults 70 years and older, teenagers, or children). Members of sensitive groups may experience health effects. The general public is not likely to be affected. Members of sensitive groups should reduce prolonged or heavy outdoor exertion.
151-200 (Unhealthy)	Air quality is frequently unhealthy. All travelers may begin to experience health effects. Members of sensitive groups (persons with lung or heart disease, adults 70 years and older, teenagers, or children) may be more seriously affected. Members of sensitive groups should avoid prolonged or heavy outdoor exertion. Others should reduce prolonged or heavy outdoor exertion.
201-300 (Very unhealthy)	Air quality is frequently very unhealthy. All travelers are likely to experience health effects. Members of sensitive groups (persons with lung or heart disease, adults 70 years and older, teenagers, or children) should avoid all outdoor physical activity except at times when air quality is better. Others should avoid prolonged or heavy outdoor exertion and consider postponing such activities until air quality is better.
301-500 (Hazardous)	Air quality is frequently hazardous. All travelers are likely to experience serious health effects. Members of sensitive groups (persons with lung or heart disease, adults 70 years and older, teenagers, or children) should remain indoors and keep activity levels low. Others should avoid all outdoor physical activity and postpone such activity until air quality is better.

Prevention: Monitor the local AQI if one is available; check weather-oriented websites or local media. Exposure to air pollution can be reduced or avoided by exercising outdoors early in the day when air pollution levels are lower; traveling

at times of the year when outdoor air quality is least affected by pollution; wearing a mask if traveling to highly polluted cities; or considering a different destination and avoiding areas of high exposure if at greater risk.