

Using Visibility to Estimate Health Effects

Categories	Visibility in Miles	Health Effects	Cautionary Statement
Good	10 miles and up	None	None
Moderate	6 to 9 miles	Possibility of aggravation of heart or lung disease among persons with cardiopulmonary disease and the elderly.	People with heart or lung disease should pay attention to symptoms.
Unhealthy for Sensitive Groups	3 to 5 miles	Increasing likelihood of respiratory symptoms in sensitive individuals, aggravation of heart or lung disease (such as asthma) and premature mortality in persons with cardiopulmonary disease and the elderly.	People with respiratory or heart disease, the elderly, and children should <u>limit</u> prolonged exertion and stay indoors when possible.
Unhealthy	1 1/2 to 2 1/2 miles	Increased respiratory symptoms and aggravation of lung and heart diseases and premature mortality in persons with cardiopulmonary disease and the elderly; possible respiratory effects to general population.	People with respiratory or heart disease, the elderly, and children should <u>avoid</u> prolonged exertion and stay indoors when possible; everyone else should <u>limit</u> prolonged exertion.
Very Unhealthy	1 to 1 ¼ miles	Significant aggravation of heart or lung disease and premature mortality in persons with cardiopulmonary disease and the elderly; significant increase in respiratory effects in the general population.	People with respiratory or heart disease, the elderly, and children should <u>avoid</u> any outdoor activity; everyone else should <u>avoid</u> any outdoor exertion.
Hazardous	¾ mile or less	Serious aggravation of heart or lung disease and premature mortality in persons with cardiopulmonary disease and the elderly; serious risk of respiratory effects in general population.	Everyone should <u>avoid</u> any indoor and outdoor exertion; everyone should remain indoors whenever possible.

Sources: Guideline for Reporting of Daily Air Quality—Air Quality Index, U.S. Environmental Protection Agency; Oregon Department of Environmental Quality; University of Washington School of Public Health & Community Medicine

Notes on use of the table: Face away from the sun and use high contrast objects at known distances for targets when determining your visibility range. The table was developed in dry air conditions. For a given particulate level, visibility decreases substantially as the relative humidity (RH) rises above 65%. If the RH is above 65% this method of estimation should not be used.