

## Visibility Index for Estimating Particulate Matter Levels During Smoke Episodes

Visibility Range in Miles	Levels of Health Concern	Cautionary Statement	Particulate Matter Levels (1 hour average)
11 miles and up	Good	None	0-38
6-10	Moderate	Unusually sensitive individuals should consider reducing prolonged or heavy exertion	39-88
3 to 5	Unhealthy for Sensitive Groups	People with heart or lung disease, older adults, and children should reduce prolonged exertion.	89-138
1.5 to 2.75	Unhealthy	People with heart or lung disease, older adults, and children should avoid prolonged exertion. Everyone else should reduce prolonged or heavy exertion.	139-350
1- 1.25	Very Unhealthy	People with heart or lung disease, older adults, and children should avoid all outdoor physical activity. Everyone else should avoid prolonged or heavy exertion.	351-526
less than 1 mile	Hazardous	People with heart or lung disease, older adults, and children should remain indoors and keep activity levels low. Everyone else should avoid all outdoor physical activity.	Over 526

When using the visibility index to determine smoke concentrations, it is important to:

- Face away from the sun.
- Determine the limit of your visibility range by looking for targets at known distances (miles). The visible range is the point at which even high-contrast objects (e.g., a dark forested mountain viewed against the sky at noon) totally disappear.
- At times, the visibility index may be hard to use, especially if specific landmarks at known distances are not available for judging visibility range, or at dawn or dusk. Furthermore, the above visibility

categories for PM levels only apply in dry air conditions. For a given PM level, visibility decreases substantially at relative humidity above 65%, therefore, this method of estimation should not be used under conditions of high humidity. At night or during periods when visibility cannot be used to estimate smoke levels, intense smoky odor can be used to indicate potentially harmful levels.