## Air Quality Facts FINE PARTICLES – SEASONAL CLIMATOLOGY

## WHEN IS FINE PARTICLE POLLUTION THE WORST ANNUALLY?

Fine particle pollution (aka. PM Fine or  $PM_{2.5}$ ) is a year-round air pollutant. In Maryland, bad air days caused by  $PM_{2.5}$  air pollution typically exhibits maximums during December and July but isolated  $PM_{2.5}$  bad air days can occur at any time throughout the year. A bad air day caused by  $PM_{2.5}$  occurs when the Air Quality Index (AQI) for the  $PM_{2.5}$  daily average reaches 101, the Unhealthy for Sensitive Groups (USG) category or higher.



Apr May Jun Jul Aug Sep Oct Nov Dec Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Jan  $PM_{25}$  concentrations are lowest during the spring (March-May) and early fall (September-October). About 71 percent of the days during those months are in the Good AQI range. The Good days are in part associated with relatively cool and pleasant weather conditions as compared to extreme hothumid and cold-dry conditions during the summer and winter, respectively. Isolated bad air days during the winter months (November-January) are typically associated with stagnant weather conditions and strong surface inversions which lead to local accumulations of PM<sub>2.5</sub>. During the summer months (June-August), days where the AQI is USG or above are most likely to occur with weather patterns transporting wildfire smoke into Maryland. Protect your health by knowing the current air quality conditions and forecasts: see MDE's air quality forecast or visit Airnow.

Air Quality Index (AQI)					
0-50 Good	51-100 Moderate	101-150 USG	151-200 Unhealthy	201-300 Very Unhealthy	301-500 Hazardous
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