

UW-Madison Youth Programs Air Quality Guidelines

Background:

Many people live in urban areas where air pollution can cause severe health problems. Local air quality affects our daily lives and like the weather, it can change daily and unpredictably. The greatest air quality threat on human health is ground-level ozone and airborne particles. Children are considered a high-risk group.

Ozone can irritate your respiratory system, causing coughing, scratchiness in your throat, or a burning sensation in your airways. Ozone has been known to worsen asthma and trigger asthma attacks. It can also impair lung function so that you may have feelings of **chest tightness, wheezing, or shortness of breath.**

Particle pollution is composed of microscopic droplets that can get deep into the lungs and cause serious health problems. Even healthy individuals may experience temporary symptoms from exposure to elevated levels of particles. Symptoms may include: **irritation of the eyes, nose and throat; coughing; phlegm; chest tightness; and shortness of breath.**

The EPA developed the **Air Quality Index** to make information available about the health effects of air pollutants and how to avoid those effects.

| Air Quality Index (AQI) Values | Levels of Health Concern | Colors |
|---------------------------------------|--------------------------------------|--|
| <i>When the AQI is in this range:</i> | <i>..air quality conditions are:</i> | <i>...as symbolized by this color:</i> |
| 0-50 | Good | Green |
| 51-100 | Moderate | Yellow |
| 101-150 | Unhealthy for Sensitive Groups | Orange |
| 151 to 200 | Unhealthy | Red |
| 201 to 300 | Very Unhealthy | Purple |
| 301 to 500 | Hazardous | Maroon |

The Office of Air Quality Planning and Standards will issue alerts when the Air Quality is expected to reach unhealthy levels. AIRNow (<http://epa.gov/airnow>) is a website that gives daily information about air quality, including ground-level ozone and particles, and

how they may affect groups at risk. Please check this website periodically, especially before strenuous activity, to stay up-to-date on all air quality alerts.

Restraint on Activities

| | |
|-----------------|--|
| Dark Red | This would trigger a health warning of emergency conditions. Cancel all outdoor activities. |
| Maroon | This would trigger a health alert to stop activities of persons with high risk. Allow frequent breaks and consider moving activities indoors. |
| Red | Everyone may begin to experience some adverse health effects, and members of the sensitive groups may experience more serious effects. |
| Orange | High-risk groups (including children) should be monitored for poor air quality related symptoms. |
| Yellow | Air quality is acceptable. Monitor the situation. |
| Green | Air quality is good. |

Recommended Procedures:

The risk of being affected by particle pollution increases with strenuous, outdoor activity. If your activity involves prolonged or heavy exertion, reduce your activity time or substitute another that involves less exertion. Plan outdoor activities for days when particle levels are lower. And don't exercise near busy roads; particle levels generally are higher in these areas.

1. Before an air quality alert

- a. Train staff**-Summer youth program staff should receive training and information regarding air quality alerts as part of their orientation. Staff members working with youth should know the symptoms of air quality problems.
- b. Be aware of high-risk individuals**-Staff members should be aware of program participants who may be at increased risk of air quality issues. High-risk participants include individuals with asthma and other lung disease. High-risk participants will require additional activity modification.

- c. **Develop contingency plans**-Youth programs should develop plans for alternate activities in the event of an extreme air quality alert. Consider moving outdoor activities indoors.

Policy: To reduce the risk of air quality related health problems among summer youth program participants, UW-Madison youth program staff members should develop and follow specific procedures for responding to air quality alerts. UHS will provide guidance and remain available for consultation to individual programs regarding appropriate procedures.

For more information visit the Office of Air Quality Planning and Standards' Air Quality Guide at <http://www.airnow.gov/index.cfm?action=aqibasics.aqi>