MOUNTAIN HOME SCHOOL DISTRICT NO. 193
MOUNTAIN HOME, IDAHO

PROCEDURES
Section 1000.5, Pages 1-6

AIR QUALITY ACTION PLAN

PURPOSE OF THE PLAN

Mountain Home School District No. 193 acknowledges the potentially adverse effects of unhealthful air quality on the health of students and employees. It is the purpose of this Plan to: (1) establish a communications protocol from the Idaho Department of Environmental Quality (DEQ) to the school district and school sites and to students and employees; (2) identify action levels based on State regulations and Federal air quality index (AQI) levels reported by the air district; and (3) provide guidance for reducing student exposure to unhealthy air.

AIR QUALITY ACTION PLAN PROCEDURAL GUIDELINE

Mountain Home School District No. 193 acknowledges the potentially adverse effects of unhealthful air quality on the health of students and employees.

NOTIFICATION OF UNHEALTHY AIR QUALITY

Receipt of air district information: It is the responsibility of the Superintendent or designee to monitor air quality information available from the Idaho DEQ, www.deq.idaho.gov.

Transmitting air quality information: MHSD 193 shall use the air quality information from the Treasure Valley and Magic Valley to determine when to notify the schools and employees that actions should be taken to reduce exposures to unhealthy air. The superintendent or designee will notify principals or their designees at affected school sites by Facebook, Twitter, and website posting to ensure that the message is received. In turn, principals or their designees shall disseminate by Blackboard Messaging and building Facebook the air quality information, relevant parts of this Action Plan, and guidance for outdoor activities to teachers and coaches.

School site responsibilities: School sites should implement the school district's policies and procedures for reducing children and employees' exposures.

Parental responsibilities: Parents and guardians need to inform the school if their child has respiratory problems such as asthma. Additionally, parents and guardians need to either ensure that they have provided medicines and inhalers for their child to the school or have the child carry an inhaler on them. They must submit the MHSD 193 Dispensing of Medications Form to the school.

UNHEALTHFUL AIR QUALITY

The AQI is a guide for reporting daily air quality. It indicates how clean or polluted the air is in a particular area and identifies potential health impacts, Air Quality Index - A Guide to Air Quality and Your Health.

Actions and Cautionary Health Messages under Federal Air Quality Categories
U.S. EPA's six categories of AQI for ozone and particulate material (PM):

Air Quality Index Levels of Health Concern	Numerical Value	Meaning
Good	**0 to 50**	**Air quality is considered satisfactory, and air pollution poses little or no risk.**
Moderate	**51 to 100**	**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.** Ozone: Unusually sensitive people should consider reducing prolonged or heavy outdoor exertion; Particulate matter: Unusually sensitive people should consider reducing prolonged or heavy exertion.
Unhealthy for Sensitive Groups	**101 to 150**	**Members of sensitive groups may experience health effects. The general public is not likely to be affected.** Ozone: The following groups should reduce prolonged or heavy outdoor exertion: • People with lung disease, such as asthma • Children and older adults • People who are active outdoors Particulate matter: The following groups should reduce prolonged or heavy outdoor exertion: • People with heart or lung disease • Children and older adults Everyone else should limit prolonged or heavy exertion.
Unhealthy	**151 to 200**	**Everyone may begin to experience health effects; members of sensitive groups may experience more serious health effects.** Ozone: The following groups should avoid prolonged or heavy outdoor exertion: • People with lung disease, such as asthma • Children and older adults • People who are active outdoors Everyone else should limit prolonged outdoor exertion. Particulate matter: The following groups should avoid all physical outdoors: • People with heart or lung disease • Children and older adults Everyone else should avoid prolonged or heavy exertion.
Very Unhealthy	**201 to 300**	**Health warnings of emergency conditions. The entire population is more likely to be affected.** Ozone: The following groups should avoid all outdoor exertion: • People with lung disease, such as asthma • Children and older adults • People who are active outdoors Everyone else should limit outdoor exertion. Particulate matter:

		The following groups should remain indoors and keep activity levels low: • People with heart or lung disease • Children and older adults Everyone else should avoid all physical activity outdoors.
Hazardous	**301 to 500**	**Health alert: everyone may experience more serious health effects.**
Definitions		As used above, the following terms can be generally defined as: • *"unusually sensitive people"* – typically, these people know who they are and are likely to have physical limitations and/or medical conditions that cause them to be more sensitive to air pollutants. • *"prolonged"* – U.S. EPA defines as 4 hours or more. • *"limit"* – shortened duration or reduce intensity • *"moderate exertion"* – breathing rate 25 to 45 liters per minute • *"heavy exertion"* – breathing rate greater than 45 liters per minute

SPECIFIC CONSIDERATIONS AND ACTIONS TO REDUCE EXPOSURES

When air quality is determined by the air district to be "unhealthy for sensitive groups" (AQI = 101 to 150), special consideration shall be given to those who would have trouble breathing or show other health symptoms resulting from outdoor activities. Children with asthma action plans developed in conjunction with their physician, parents, and the school should follow their plan. The school shall ensure that space indoors is available for children with asthma or other respiratory diseases; such children should be allowed to remain indoors if they request to do so. Sensitive children who remain outdoors should reduce the intensity of their activities commensurate with the increase in the AQI. Breathing rates for sensitive groups should not exceed the normal resting (walking) rate as the AQI nears 150.

GUIDELINES FOR OUTDOOR PHYSICAL ACTIVITIES

What would normally be considered safe exposure to ozone or PM 2.5 ("safe" means not likely to result in adverse health effects in the general population") becomes less so with increased breathing rates and the duration of exposures. Therefore, a risk reduction strategy involves reducing intensity (breathing rates) and duration (time) of vigorous outdoor activities.

- Outside activities coaches and physical education instructors are encouraged to develop lesson plans that include options for reduced intensity and duration of outdoor activities on poor air quality days.
- Find ways to reduce risks from exposures to ozone by reducing intensity of the activity (sport).
- Switch out players more often during practice and games.
- Focus on skill development versus endurance training.
- Find alternative endurance activities with skills development.
- Take frequent rest and water breaks.
- Practice indoors.
- Split practice into two parts; one before and one after school.
- During weeks of high ozone, move practices to before school, shorten length of practice, and move practice inside when necessary.

OPTIONS FOR PHYSICAL EDUCATION CLASSES AND RECESSES ON POOR AIR QUALITY DAYS

Air Quality and Outdoor Activities: Recommendations for Schools

Air Quality Index (AQI) Chart for Ozone (8-hr standard)

ACTIVITY	0 to 50 GOOD	51 to 100 MODERATE	101 to 150 UNHEALTHY FOR SENSITIVE GROUPS	151 to 200 UNHEALTHY	201 to 300 VERY UNHEALTHY
Recess (15 min)	No Restrictions	No Restrictions	Make indoor space available for children with asthma or other respiratory problems.	Any child who complains of difficulty breathing, or who has asthma or other respiratory problems, should be allowed to play indoors.	Restrict outdoor activities to light to moderate exercise.
P.E. (1 hr)	No Restrictions	No Restrictions	Consider making indoor play space available for children with asthma or other respiratory problems.	Any child who complains of difficulty breathing, or who has asthma or other respiratory problems, should be allowed to play indoors.	Restrict outdoor activities to light to moderate exercise not to exceed one hour.
Scheduled Sporting Events	No Restrictions	Individuals who are unusually sensitive to ground-level ozone should limit intense activities.	Individuals with asthma or other respiratory or cardiovascular illness should increase rest periods and reduce activities to lower breathing rates.	Consideration should be given to rescheduling or relocating event.	Event should be rescheduled or relocated indoors.
Athletic Practice and Training (over 1 hr)	No Restrictions	Individuals who are unusually sensitive to ground-level ozone should limit intense activities.	Individuals with asthma or other respiratory or cardiovascular illness should increase rest periods and reduce activities to lower breathing rates.	Activities over 1 hour should decrease intensity and duration. Add rest breaks or substitutions to lower breathing rates.	Sustained rigorous exercise for more than one hour should be rescheduled, moved indoors or discontinued

EPA United States Environmental Protection Agency

Office of Air and Radiation(6301A)
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RECOMMENDATIONS FOR SCHOOLS AND OTHERS RESPONSIBLE FOR CHILDREN DURING A WILDFIRE SMOKE EVENT

IDAHO DEPARTMENT OF HEALTH & WELFARE

Recommendations for Schools and Others Responsible for Children during a Wildfire Smoke Event

Activity	0 – 50 AQI (10+ miles visibility) GOOD	51 – 100 AQI (6 – 10 miles visibility) MODERATE	101 – 150 AQI (3 – 6 miles visibility) UNHEALTHY FOR SENSITIVE GROUPS	151 – 200 AQI (1.5 – 3 miles visibility) UNHEALTHY	201 – 300 AQI (<1.5 miles visibility) VERY UNHEALTHY/ HAZARDOUS
Recess (15 minutes)	No restrictions	No restrictions	Keep children with asthma or other respiratory problems indoors. Make indoor space available for all children.	Keep children indoors.	Keep all children indoors.
P.E. (1 hour)	No restrictions	Monitor kids with asthma or other respiratory problems and limit their vigorous activities.	Keep children with asthma or other respiratory problems indoors. Make indoor space available for all children. If outdoors, limit vigorous activities. Individuals with asthma or other respiratory illness should be medically managing their condition.	Conduct P.E. indoors. If outdoors, only allow light activities for all participants. Individuals with asthma or other respiratory illness should be medically managing their condition.	Keep all children indoors.
Scheduled Sporting Events	No restrictions	Monitor kids with asthma or other respiratory problems and limit their vigorous activities.	Individuals with asthma or other respiratory illness should be medically managing their condition. Increase rest periods and substitutions for all participants to lower breathing rates.	Consider rescheduling or relocating event.	Reschedule or relocate event.
Athletic Practice & Training (2-4 hours)	No restrictions	Monitor kids with asthma or other respiratory problems and limit their vigorous activities.	Individuals with asthma or other respiratory illness should be medically managing their condition. Increase rest periods and substitutions for all participants to lower breathing rates.	Conduct practice indoors. If outdoors, allow only light activities for all participants. Add rest breaks or substitutions to lower breathing rates. Individuals with asthma or other respiratory illness should be medically managing their condition.	Conduct practice indoors only.
Examples of light activities: • **Walking slowly on level ground** • **Carrying school books** • **Hanging out with friends**		**Examples of moderate activities:** • **Skateboarding** • **Slow pitch softball** • **Shooting basketballs**		**Examples of vigorous activities:** • **Running, jogging** • **Football, soccer, and basketball**	

How to estimate air quality based on visibility for areas without an air quality monitor or airport visibility estimate:

1. Face away from the sun.
2. Determine the limit of your visible range by looking for targets at known distances (miles).
3. Visible range is that point at which even high contrast objects totally disappear.
4. Use the values above to determine the local forest fire smoke category.

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LEGAL REFERENCE:

Idaho DEQ www.deq.idaho.gov (208) 373-0050
Air Quality Index - A Guide to Air Quality and Your Health
EPA www.epa.gov
EPA School Outdoor Activities https://nepis.epa.gov
EPA AirNow https://cfpub.epa.gov/airnow
National Service Center for Environmental Publications
See the following Charts: Options for Physical Education Classes and Recesses on Poor Air Quality Days, and Recommendations for Schools Responsible for Children during a Wildfire Smoke Event.

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