AIR POLLUTION:
WHAT IS PARTICULATE MATTER (PM)?

PM is a mixture of small liquid and solid particles in the air we breathe. They vary in size and chemical make-up.

PM is a component of smog.

WHO IS MOST AT RISK TO AIR POLLUTION?

Even healthy young adults can experience health issues on days when the air is heavily polluted but some groups are more at risk:

- Children
- Seniors
- People with asthma, chronic obstructive pulmonary disease (COPD), cardiovascular diseases, diabetes
- Active people of all ages who exercise or work hard outdoors

HOW CAN I PROTECT MYSELF FROM AIR POLLUTION?

Know when the air is unhealthy:

- Check the Air Quality Health Index in your community to find out the best time to be active outside (https://weather.gc.ca/airquality/pages/index_e.html)
- If you have a heart or lung condition, talk to your health care professional about additional ways to protect your health when air pollution levels are high

Ways to reduce exposure:

- Avoid or reduce strenuous outdoor activities when air pollution levels are high
- Avoid or reduce exercising near areas of heavy traffic, especially during rush hour

WHAT ACTION IS THE GOVERNMENT OF CANADA TAKING ON PM?

- Federal regulations have reduced PM emissions in Canada from key sources.
- Canada has agreed to international treaties to reduce PM emissions.
- Canada has established the Canadian Ambient Air Quality Standards (CAAQS). These are health- and environment-based numerical values of outdoor air concentrations of pollutants intended to drive continuous air quality improvement in Canada. The CAAQS, a key element of the Air Quality Management System, were developed through a process steered by the Canadian Council of Ministers of the Environment (CCME).

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LEVELS OF PM IN OUTDOOR AIR

Levels of PM in outdoor air can vary by region and by season. More information can be found on the STATE OF THE AIR website http://airquality-qualite-delair.ccme.ca/en

CAAS Numerical Values

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Averaging Time</th>
<th>Effective in 2015</th>
<th>Effective in 2020</th>
<th>Units</th>
<th>Metric</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM\textsubscript{2.5}</td>
<td>24 hours (calendar day)</td>
<td>28</td>
<td>27</td>
<td>Micrograms per cubic metre ((\mu g/m^3))</td>
<td>The 3-year average of the annual 98th percentile of the daily 24-hour average concentrations</td>
</tr>
<tr>
<td></td>
<td>Annual (calendar year)</td>
<td>10.0</td>
<td>8.8</td>
<td></td>
<td>The 3-year average of the annual average concentrations</td>
</tr>
</tbody>
</table>

For more information on air pollution, please visit www.canada.ca/en/health-canada/services/air-quality.html or contact us at: HC.air.SC@canada.ca

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