Air Pollution Causes 2 Year Drop in Global Life Expectancy

Excerpted from Greenwire EPA-Funded Group: Life Expectancy Shrinking Because of Bad Air by Sean Reilly

Dirty air stands to shave almost two years off the average life expectancy of a child born today, according to a worldwide overview that finds that nations are making uneven progress toward confronting the problem.

Overall, indoor and outdoor air pollution contributed to almost 5 million early deaths in 2017, the Health Effects Institute said in its third annual "State of Global Air" report. Among the risk factors for early death, it ranks fifth, behind such forces as high blood pressure and tobacco exposure, but ahead of alcoholism and malnutrition.

The highest toll came from exposure to fine particles, technically known as PM2.5 because they are no more than 2.5 micrometers in diameter, or onethirty-sixth the width of a human hair. In 2017, PM2.5 exposure contributed to 2.9 million premature deaths, the report estimates. Already linked to an array of heart and lung problems, inhalation of such particles is now the third highest risk factor for development of type 2 diabetes. More than 90% of the world’s population lived in areas that exceeded the World Health Organization's PM2.5 exposure guideline.

For newborns today, the cumulative effect is that they will die 20 months earlier on average.

"A child's health is critical to the future of every society, and this newest evidence suggests a much shorter life for anyone born into highly polluted air," Dan Greenbaum, president of the Health Effects Institute, a Boston-based nonprofit, said in a news release.

In passing, the report notes a particularly striking decrease in the U.S., where the ratio of the population living in areas that exceeded the WHO guidelines plummeted from 50% in 1990 to 3% in 2017.

Air pollution truly is a global concern. Simply because the US enjoys air quality that routinely meets the World Health Organization standards does not mean our responsibility ends there. We can be innovators leading the way to new clean air technologies!
Important Engineering Updates

<10 ton BAT Exemption SIP Approved

US EPA approved a revision to Ohio’s State Implementation Plan (SIP) regarding Best Availability Technology (BAT) requirements. The change is in response to 2006 Senate Bill 265 that modified BAT requirements.

EG 51 Revised 3/1/2019

Compliance tests and Relative Accuracy Test Audits (RATAs) should be scheduled during normal working hours whenever possible. Test firms are required to submit an Intent to Test (ITT) notification form at least 30 days prior to the requested test date(s). The Ohio EPA requires that three sampling runs be performed (for most source categories) during a source compliance demonstration and at least nine runs for a RATA. For compliance demonstrations, every reasonable effort should be made to witness all 3 runs.

EG 83 Revised 4/29/2019

For asphalt plants, the maximum rated production capacity refers to the maximum tons of asphalt that can be produced by the source during a production hour and is normally expressed in tons per hour (TPH). If the production rate during the test is < 80% of the maximum rated production capacity of the asphalt plant, then there are four options:

- **Retest.** For this option the facility will coordinate rescheduling the test with their respective DO/LAA when they can operate the plant at ≥ 80% of the maximum rated production capacity.

- **Determine the Historical Operating Rate.** This option is available if the facility can demonstrate that the tested production rate is representative of how the plant has been historically operated. The facility can demonstrate that the plant operates at a reduced rate by submitting the most recent two years of production data with the average daily production rate in tons produced per hour operated.

- **Restrict the Permitted Operating Rate.** This option is available if the facility does not achieve either ≥ 80% of the maximum rated production capacity or ≥ 90% of the highest average daily production rate from the most recent two years.

Air Quality Awareness Week 2019

Air Quality Awareness Week 2019 was celebrated April 29th - May 3rd. Our local theme, as seen below, was Saving Energy = Air Care. That theme was chosen to coincide with this newsletter’s It’s Our Turn feature highlighting ways individuals can make positive choices for air quality.

Often these choices don’t feel directly connected to air quality. In fact, many people only see saving energy as an opportunity to lower their electric bill. And, that is for sure a great reason to save energy! However, when we reduce demand for energy by replacing old, energy hogging appliances and other electronic items, we can actually spare the air.

To encourage folks to make one easy switch, ARAQMD loaded up 1,000 small, reusable bags with energy saving information, and 2 LED light bulbs. Sometimes we have to try something and realize we like it before we’ll invest our own hard earned money! These 1,000 bags were distributed by our partner health departments in Medina, Summit and Portage counties.

To learn more about our Air Quality Awareness Week theme, you can log on to: www.araqmd.org/air-quality-awareness-week.
AQ by the Numbers: First Quarter 2019

Air Quality Index

**JANUARY 2019**
- UNHEALTHY
- UNHEALTHY FOR SENSITIVE GROUPS
- MODERATE
- GOOD

**FEBRUARY 2019**
- UNHEALTHY
- UNHEALTHY FOR SENSITIVE GROUPS
- MODERATE
- GOOD

**MARCH 2019**
- UNHEALTHY
- UNHEALTHY FOR SENSITIVE GROUPS
- MODERATE
- GOOD

Complaints & Inspections

<table>
<thead>
<tr>
<th>Area/Health District</th>
<th>Commercial/Industrial</th>
<th>Residential</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summit County</td>
<td>6</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Medina County</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Portage County</td>
<td>3</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Kent</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

1st Quarter Complaints

- Portage County 29.4%
- Summit County 58.8%
- Medina County 11.8%

Site Visits

- FEPTIO: 3
- Title V: 2
- Non Title V: 34
- Full Compliance Evaluations: 2

Permits Issued

<table>
<thead>
<tr>
<th>1st Quarter 2019</th>
<th>Permit to Install</th>
<th>Permit to Install &amp; Operate</th>
<th>Title V</th>
<th>Permit by Rule</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Draft</td>
<td>Final</td>
<td>Draft</td>
<td>Final</td>
</tr>
<tr>
<td>Preliminary Proposed Permits &amp; Proposed Permits</td>
<td>1</td>
<td>2</td>
<td>7</td>
<td>22</td>
</tr>
</tbody>
</table>

Asbestos

- 1st Q—Notifications: 49
- 1st Q—Inspections: 61
How does saving energy actually spare our air? In Ohio, a good amount of our electricity is generated by burning coal. And, while coal based power plants have worked very hard to add pollution control technology, it still packs a pretty decent air pollution punch.

If you can switch to more energy saving behaviors or electronic items, you reduce the demand for electric to be generated, and in turn, reduce the amount of air pollution generated on your household’s behalf.

What Can We Do?

⇒ Turn off and unplug electronic items that are not regularly in use.
⇒ Reduce demand by switching to energy efficient lighting.
⇒ When it’s time to replace appliances, look for Energy Star rated appliances. A little extra $ at the store will save you $$ on your energy bill and help spare the air.
⇒ Don’t run you air conditioning like your home is a refrigerator. Leave your thermostat at the warmest setting that still provides you comfort.