CDC's role in air quality communication

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Disclaimer

The opinions expressed in this presentation are the author's own and do not reflect the view of the Centers for Disease Control and Prevention, the Department of Health and Human Services, or the United States government.
Current information

Air Quality

Air Quality
Air Pollutants
Air Quality and Emergencies
Prescribed Fires and Air Quality
Air Quality Resources for Professionals
Infographics
Ozone and Your Health
Particle Pollution
Public Health Issues

CDC > Air Quality > Air Quality and Emergencies

Air Quality and Emergencies

Wildfires
Smoke from wildfires can affect the air that you breathe. Use these resources to protect your family’s health if there’s a wildfire in your area.

- Choosing and fitting respirators to reduce exposure to wildfire smoke
- Fires: Current Conditions (AirNow)
- Prescribed Fires and Air Quality
- National Weather Service Air Quality Forecast
- Wildfire Smoke: A Guide for Public Health Officials
- Wildfires: Emergency Preparedness and Response
- Wildfires: Information for Pregnant Women and Parents of Young Infants
- Wildfires: What YOU Need to Know (Public Health Matters Blog)

Volcanoes
When volcanoes erupt, they release ash and harmful gases that can make it hard to breathe. Find out how to stay safe during and after a volcanic eruption.

Key Facts About Protecting Yourself During a Volcanic Eruption
Wildfire Smoke

Wildfire smoke can harm you in multiple ways. Smoke can hurt your eyes, irritate your respiratory system, and worsen chronic heart and lung diseases. This fact sheet tells you how you can protect your health and be safe if you are exposed to wildfire smoke.

What is Wildfire Smoke and Can it Make Me Sick?

Wildfire smoke is a mix of gases and fine particles from burning vegetation, building materials, and other materials. Wildfire smoke can make anyone sick. Even someone who is healthy can get sick if there is enough smoke in the air. Breathing in smoke can have immediate health effects, including:

- Coughing
- Trouble breathing normally
- Stinging eyes
- A scratchy throat
- Runny nose
- Irritated sinuses
- Wheezing and shortness of breath
- Chest pain
- Headaches
- An asthma attack
- Tiredness
Qualitative field research

- Conducted spring and summer 2016
- Interviews with clinicians, focus groups with at-risk individuals

**Recommendations:**
- Raise awareness of the existing AQI website and app
- Provide materials about outdoor air quality and its effect on health
- Educate clinicians about the connection between air quality and conditions other than asthma
- Adapt and promote existing AQI tools and resources.
- Provide behavioral recommendations on platforms that consumers already use.
### Quantitative findings

<table>
<thead>
<tr>
<th>Year</th>
<th>Aware of Air Quality Alerts</th>
<th>Avoided Busy Roads to Reduce Air Pollution Exposure</th>
<th>Discussed with a Health Professional Strategies to Reduce Air Pollution</th>
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</thead>
<tbody>
<tr>
<td>2014</td>
<td>48%</td>
<td>25%</td>
<td>4%</td>
</tr>
<tr>
<td>2015</td>
<td>49%</td>
<td>27%</td>
<td>3%</td>
</tr>
<tr>
<td>2016</td>
<td>50%</td>
<td>28%</td>
<td>3%</td>
</tr>
</tbody>
</table>

Note: The data represents weighted percentages with 95% confidence intervals.
Combined findings

- At-risk individuals want more information on air quality
- Interest in air quality varies with perception of risk
- Healthcare providers almost never bring up air quality with patients
- Air quality alerts are relatively well-known
- Protective action steps not adequately followed
- Push technology would improve accessing of AQI
Next steps

- Develop more audience-specific prototypes and messaging and field test
  - Focus groups in Atlanta, Denver, Detroit
  - Asthma, COPD, CVD (3 each)
- Continuing Styles
- New web course
Shameless self-promotion

Warmth Temperatures Mean Higher Ozone Levels

Who's most affected by poor air quality?
- People who have:
  - Asthma
  - Heart disease
  - COPD (a long-term lung disease)

How can I protect myself from air pollution during physical activity?

When air quality is poor, adjust your physical activity routine to avoid breathing in too much air pollution:

- Move your physical activities indoors.
- Change your physical activity to something less intense (for example, walking instead of jogging).
- Shorten the amount of time that you spend physically active.

Particle pollution can affect your health. What causes it?

- Factories
- Cars and Trucks
- Construction Sites

www.cdc.gov/air