

# CDC's role in air quality communication

Scott A. Damon

Senior Health Communication Specialist  
CDC Asthma & Community Health Branch

National Air Quality Conference  
Austin, TX January 2018



## 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

https://www.cdc.gov/air-quality/emergencies/

File Edit View Favorites Tools Help

ICON Thinkstock Air Pollution and Respirat... NetScaler Gateway Ast Asthma treatment in adol... Audience Data CCI color palette Dispersion ARC FrameWorks Inst HCD http--aops-mas-iis.cdc.go... I LEAD

## 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

[f](#) [t](#) [+](#)

#### 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](#) [PDF - 1.91 MB]
- [Wildfires: Emergency Preparedness and Response](#)
- [Wildfires: Information for Pregnant Women and Parents of Young Infants](#)
- [Wildfires: What YOU Need to Know \(Public Health Matters Blog\)](#)



### Smoke Sense

[Join a wildland fire smoke and health citizen science study](#)

#### 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](#)

Search Windows

2:55 PM 1/17/2018

# Current information

Browser window showing the CDC website page for Wildfire Smoke. The address bar displays <https://www.cdc.gov/disasters/wildfires/smoke.html>. The page title is "Wildfire Smoke | Wildfires" and the URL is [projects.erg.com](http://projects.erg.com).

The page content includes a navigation menu on the left with categories like "Natural Disasters and Severe Weather", "Earthquakes", "Extreme Heat", "Floods", "Hurricanes", "Landslides & Mudslides", "Lightning", "Tornadoes", "Tsunamis", "Volcanoes", "Wildfires", "Before a Wildfire", "During a Wildfire", "Responders", "Wildfire Smoke", and "After a Fire".

The main content area is titled "Wildfire Smoke" and includes a breadcrumb trail: [Natural Disasters and Severe Weather](#) > [Wildfires](#) > [During a Wildfire](#) > [Wildfire Smoke](#). It features social media sharing icons for Facebook, Twitter, and a plus sign. A language dropdown menu is set to "English (US)".

The text describes 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."

The section "What is Wildfire Smoke and Can it Make Me Sick?" explains that wildfire smoke is a mix of gases and fine particles from burning vegetation, building materials, and other materials. It states that wildfire smoke can make anyone sick, even someone who is healthy, 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

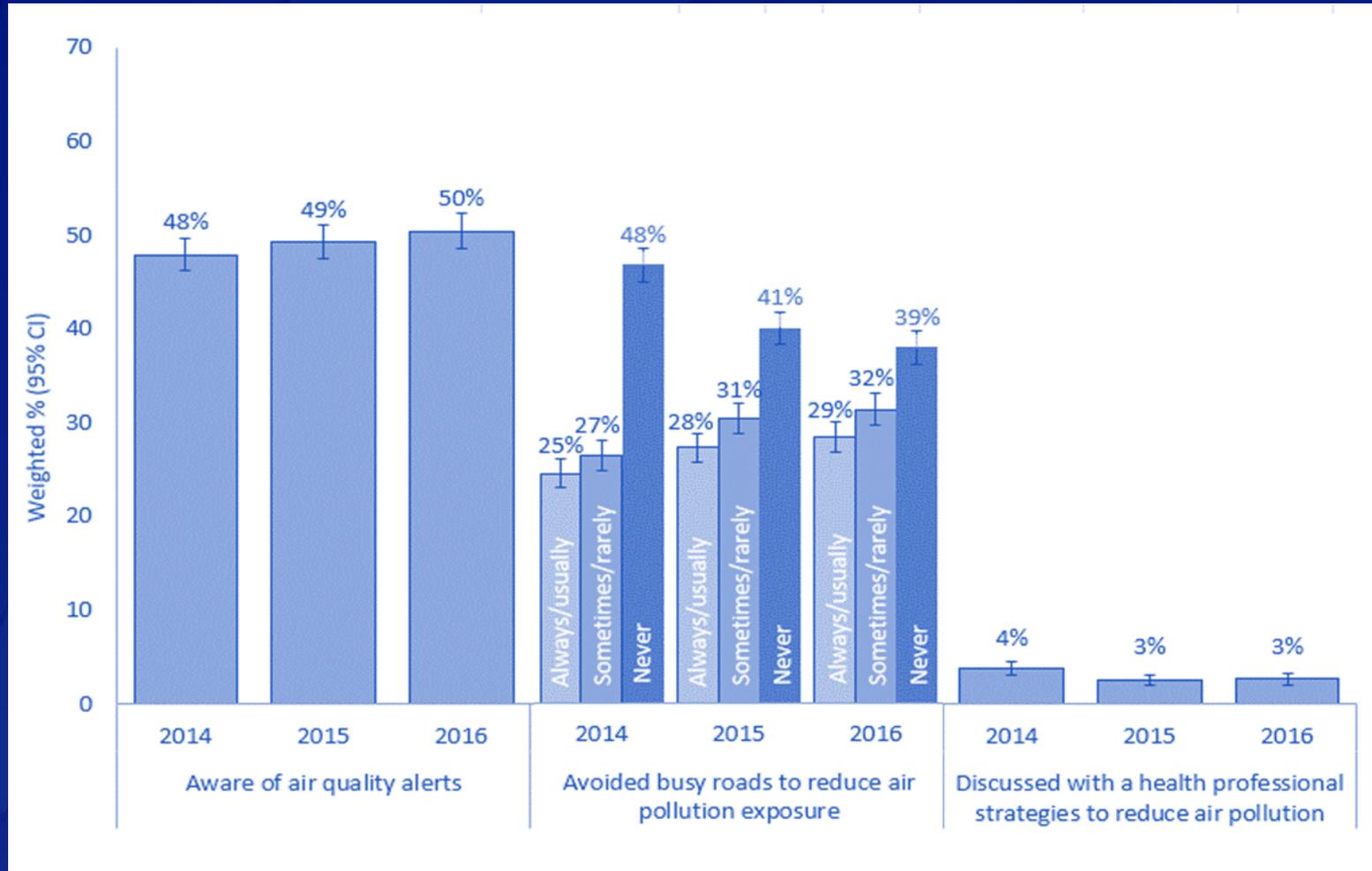
An image shows a road sign that reads "SMOKE ON ROADWAY" and "SPEED 55" next to orange and white striped traffic barrels.

The Windows taskbar at the bottom shows the search bar, taskbar icons for File Explorer, Edge, Outlook, and PowerPoint, and the system tray with the time 2:57 PM and date 1/17/2018.

## 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

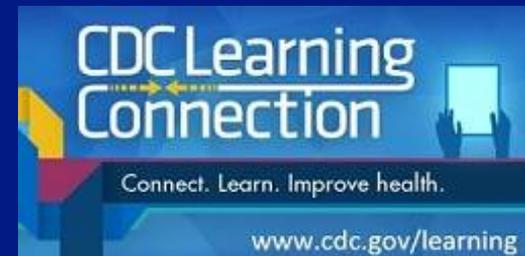
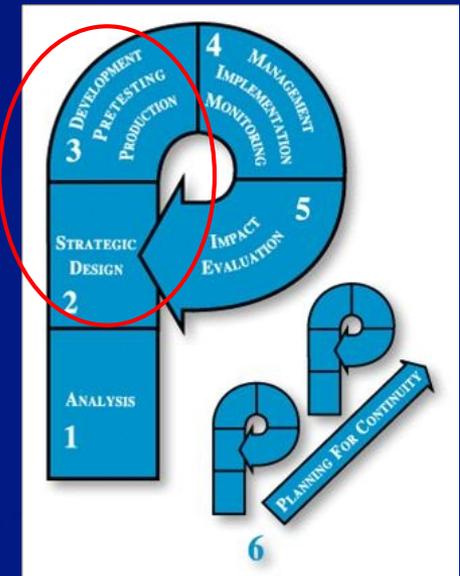


## Combined findings

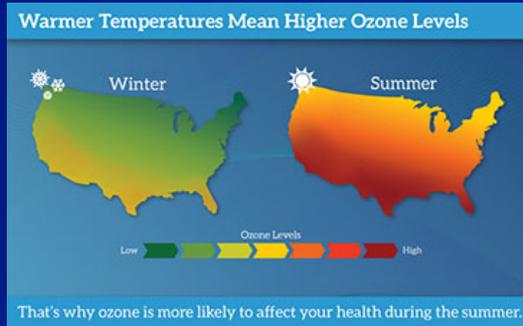
- ❑ At-risk individuals want more information on air quality
- ❑ Interest in air quality varies with perception of risk
- ❑ Healthcare providers almost never bring up air quality with patients
- ❑ Air quality alerts are relatively well-known
- ❑ Protective action steps not adequately followed
- ❑ Push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



**Who's most affected by poor air quality?**

- People who have:
  - Asthma
  - Heart disease
  - COPD (a long-term lung disease)

**CDC** Centers for Disease Control and Prevention  
National Center for Environmental Health

**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're physically active

If you have asthma, be sure you keep your inhaler with you at all times – especially when you're outside.

**CDC**

**Particle pollution can affect your health. What causes it?**

Factories  
Cars and Trucks  
Construction Sites

[www.cdc.gov/air](http://www.cdc.gov/air)