

SMOKE SENSE CITIZEN SCIENCE PROJECT

A Citizen Science Project To:

1. Understand the subclinical health impacts of wildland fire smoke.
2. Discover how people protect their health during smoke exposure.
3. Develop effective strategies to communicate health risks from smoke exposure.



WHAT IS SMOKE SENSE?

The Smoke Sense project combines the power of crowdsourcing with digital technology to develop innovative approaches and solutions to reduce the health burden during smoke episodes. To the best of our knowledge, Smoke Sense is the only citizen science project that makes a connection between changes in environmental conditions and changes in population health. But Smoke Sense is more than a research study. It is also an educational tool and information resource designed to increase awareness and get people to act when they are exposed to smoke from a wildland fire.

WHY IS SMOKE SENSE IMPORTANT?

Smoke from wildland fires is harmful to health and increases visits to emergency rooms and clinics for problems related to asthma and other respiratory and cardiovascular diseases. As the incidence and intensity of large wildland fires increase in the United States, more people will be exposed to unsafe levels of particulate matter (PM) and other pollutants from smoke. This public health problem emphasizes the need for new and innovative scientific approaches to communicate health risks of exposure to wildland fire smoke to communities.



SMOKE SENSE MOBILE APP

Individuals can participate in the citizen science project by using the Smoke Sense app, a free and publicly available mobile application.

APP FEATURES:

- Current and forecasted air quality information using the Air Quality Index (AQI)
- Map showing current fire locations and smoke plumes
- Log for reporting personal health symptoms and smoke observations
- Learning module about air pollution, wildland fires, and health impacts
- Reward badges for completing tasks

Data gathered through Smoke Sense will help EPA researchers determine how smoke impacts our health and productivity and gain important insights needed to develop health risk communication methods during smoke days. The Smoke Sense app is available for Android and iOS devices.

App user identities are anonymous and non-identifiable.

To Download the App

Visit www.epa.gov/air-research/smoke-sense.

Contact

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