



# Naugatuck Valley Health District

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*Ansonia Beacon Falls Derby Naugatuck Seymour Shelton*

**Public Health**

Prevent. Promote. Protect.

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## Invitation to Host a Community Air Quality Sensor in Ansonia and Derby

[Ansonia & Derby] - The Naugatuck Valley Health District (NVHD) invites local businesses, public buildings, community organizations, and residents in Ansonia and Derby to participate in an exciting community science initiative: the NVHD Air Quality Monitoring Program.

Through funding provided by the U.S. Environmental Protection Agency, and in partnership with the Connecticut Department of Public Health, Yale University, the University of Connecticut, and the Yale-Griffin Prevention Research Center, NVHD and its partners will install 35 PurpleState Air Quality Sensors in a pilot program to improve local understanding of outdoor air quality conditions.

We are currently seeking volunteer host locations in Ansonia and Derby to help us expand this important environmental health monitoring network.

### What Hosts Receive

Selected host sites will receive a PurpleState Air Quality Sensor, including the power source and SD data microchip, with a total value of \$359. These devices are provided completely free of charge to participating locations through federal grant funding.

Upon completion of 1-year of data collection, residential host sites will be eligible to receive a one-time \$120.00 Visa gift card as appreciation for their participation.

### How Much Power Does a PurpleAir Sensor Draw?

About 1 watt. For context, one LED lightbulb draws ten times as much energy. A phone charger plugged-in but left idle/not charging anything draws approximately 2-5 watts.

### What is Required from Host Sites

To serve as a host location, the site must be able to provide:

- Outdoor placement space for the sensor (such as a building exterior, porch, or mounted structure)
- Access to a standard outdoor electrical outlet
- WiFi internet connectivity for data transmission
- Authorize access to the monitor should the equipment need servicing or maintenance

NVHD's grant partners will complete the calibration, installation, and setup. We will also provide guidance to ensure the sensor works properly.

## Why Participate

By volunteering as a host site, you will help:

- Expand local air quality monitoring in the Naugatuck Valley
- Support public health research and environmental awareness
- Provide valuable real-time data to residents, researchers, and public health officials
- Contribute to improved understanding of environmental factors that impact respiratory health, including asthma

Community participation is essential to building a reliable and representative air monitoring network that benefits all residents of Ansonia and Derby.

## What Type of Data is Collected?

PurpleAir sensors measure particulate matter (PM). The United States Environmental Protection Agency (EPA) defines PM as “a mixture of solid particles and liquid droplets found in the air. Some particles, such as dust, dirt, soot, or smoke, are large or dark enough to be seen with the naked eye. When discussing air quality, you may hear the term “PM2.5,” which refers to particles that are 2.5 microns (micrometers) in diameter and smaller. For comparison, a human hair is generally 50 to 70 microns in diameter. People concerned about air quality related health issues often discuss PM2.5, as it has been found to be harmful to human health.

An Air Quality Index (AQI) is a measure of health impact that corresponds with air quality data. The AQI is divided into six categories. Each category corresponds to a different level of health concern. Each category also has a specific color. The color makes it easy for people to quickly determine whether air quality is reaching unhealthy levels in their communities.

AQI values at or below 100 are generally thought of as satisfactory. When AQI values are above 100, air quality is unhealthy.

## How Will the Data be Shared?

The sensors will relay data in real time to a publicly available online dashboard, the PurpleAir Real-Time Map, which is accessible on any smart device or web browser.

## How to Volunteer

If you are interested in serving as a host site in Ansonia or Derby, please contact the Naugatuck Valley Health District to express your interest or request additional information.

Contact: John Mucha, MPH, RS, Head Sanitarian

Email: [jmuch@nvhd.org](mailto:jmuch@nvhd.org)

Phone: 203-881-3255 x 112

Participation will be filled on a first-come, first-served basis for 35 total locations.

We appreciate your support in helping protect and improve the environmental health of our community.



### END ###

*Healthy people in a healthy Naugatuck Valley*