

St. Helens Air Quality Study Update



Oregon State University and
Pacific Northwest National Laboratory



Research Purpose

Assess air quality for residents in St. Helens, Oregon in relation to their address. We are using air and personal passive samplers in this study.

About the samplers

i *Passive samplers absorb thousands of different chemicals in the air and require no motor or maintenance to operate.*

What we did

Air and personal samplers were set up and worn for **7-days** at a time. There were 4 sampling timepoints over the course of 1 year.

When we sampled



1



2



3

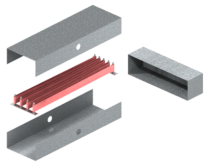


4

Two types of samples were collected during each sampling period:

1 Passive Air Samplers

173 total air samples



Sampling strips were strung inside metal boxes and placed outside in participants' yards or around the city of St. Helens.

- ✓ 19 households participated.
- ✓ We placed air samplers at 10 other locations around St. Helens.

2 Personal Passive Samplers

162 total wristband samples



Study participants wore silicone wristbands to measure their individual chemical exposures.

- ✓ 46 people participated

What comes next?

We will be measuring chemicals called **PAHs** in all of the collected samples. We plan to report this data back to participants in Spring, 2024.



Polycyclic aromatic hydrocarbons (PAHs) are a common type of air pollution that can be produced by burning or industrial activity.



On the web:

- <http://superfund.oregonstate.edu/all-about-PAHs>



On YouTube:

- <https://youtu.be/fjgvmL61e5k>



To Learn More

about passive sampling and similar projects, visit:
<http://fses.oregonstate.edu/PSDs>



Contact: Dr. Diana Rohlman
Community Engagement Director



PHONE
541-357-8577



EMAIL
diana.rohlman@oregonstate.edu