



Air Quality and Public Health

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Wood Smoke Program
Specialist

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Presentation Goals

- **Inform residents** about the health impacts of particulate matter from residential activities.
- **Increase awareness** of the wood smoke program, operations, and outcomes.
- **Empower residents** to adopt behavior changes to protect air quality and their health.

Post
Survey:



Overlapping Impacts

Air Pollution

Wood Smoke, Wildfires,
Leaf Blowers

Climate Change

Portland Harbor Superfund Cleanup

Lead Poisoning Prevention

Healthy Homes

Renters and Home
Inspections

Built Environment

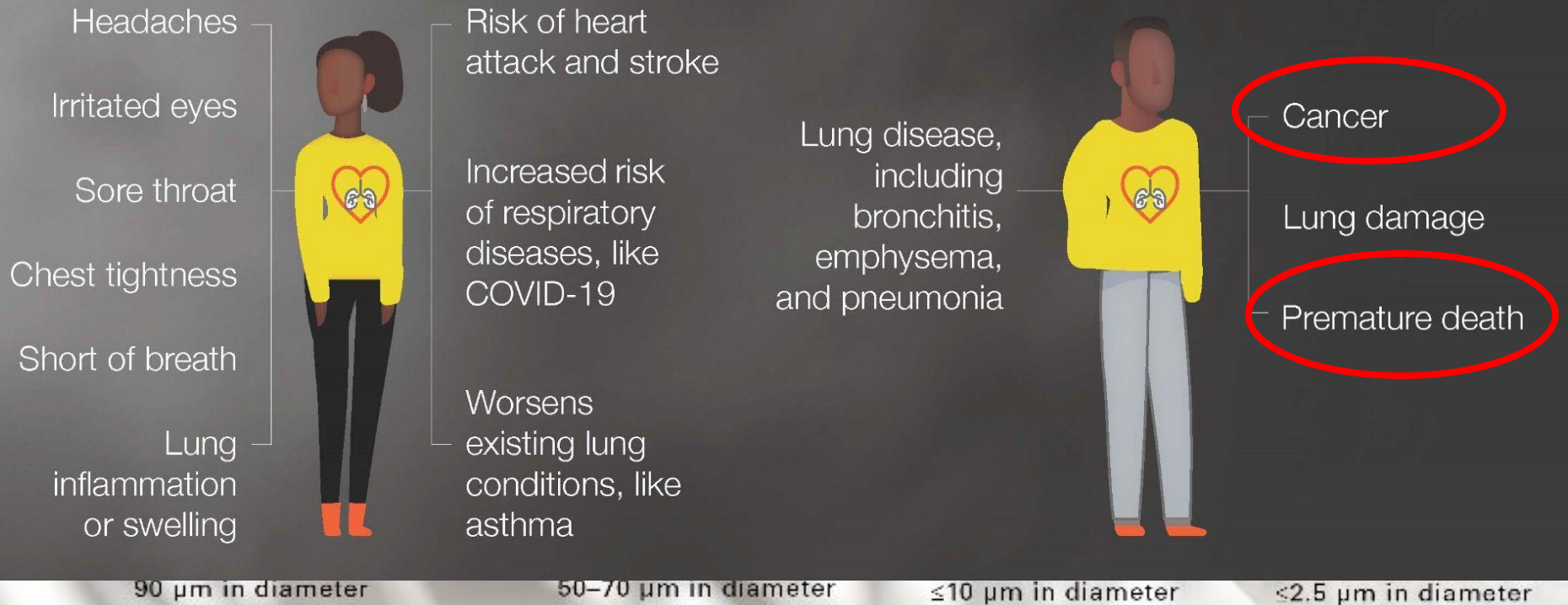
Transportation Safety
and Brownfields

Healthy Homes and Communities Programs



SHORT-TERM HEALTH EFFECTS

LONG-TERM HEALTH EFFECTS



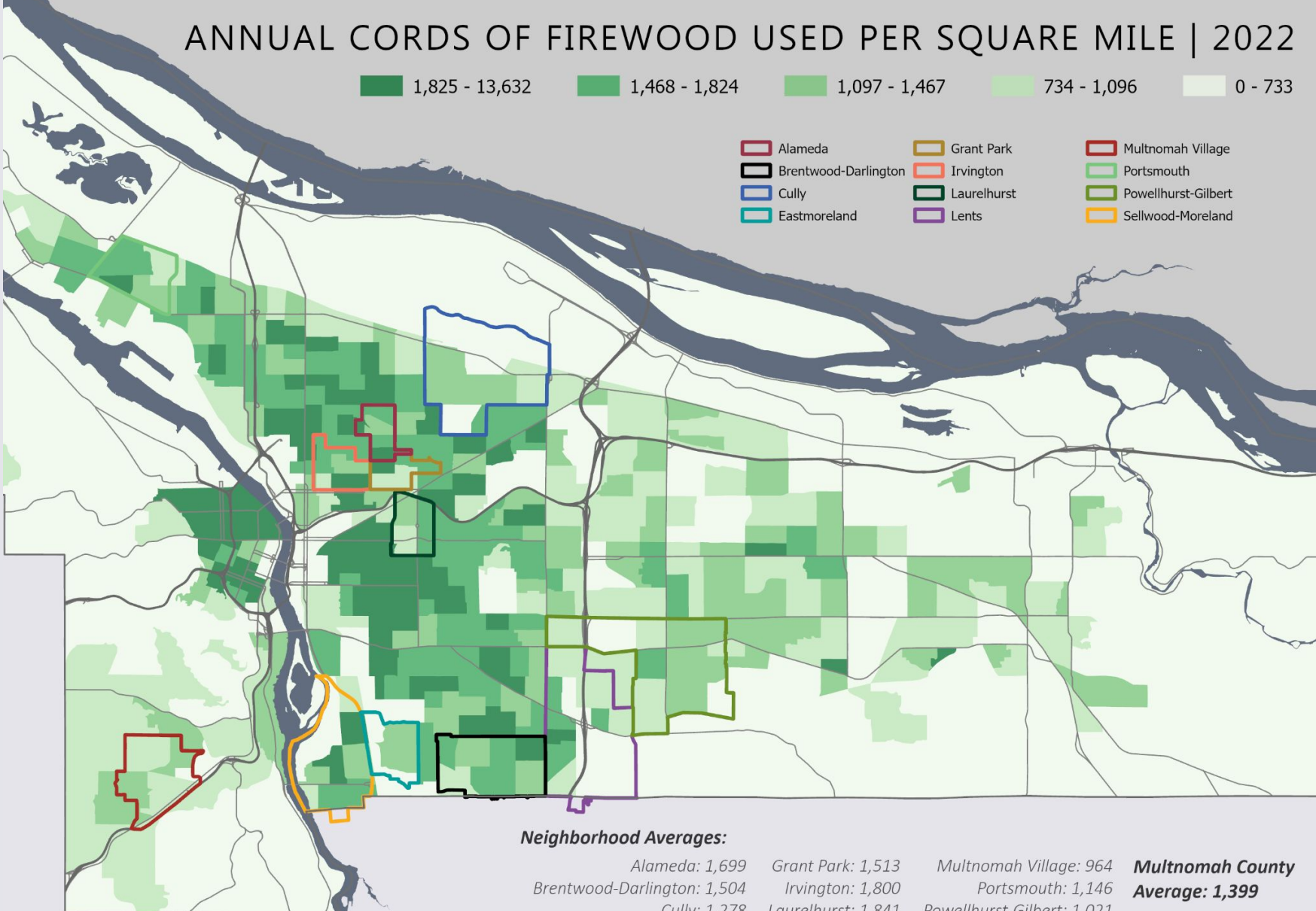
This graphic depicts size comparisons for particulate matter (PM) in micrometers (μm). Note that $\text{PM}_{2.5}$ is not visible to the naked eye.



ANNUAL CORDS OF FIREWOOD USED PER SQUARE MILE | 2022

1,825 - 13,632
 1,468 - 1,824
 1,097 - 1,467
 734 - 1,096
 0 - 733

 Alameda	 Grant Park	 Multnomah Village
 Brentwood-Darlington	 Irvington	 Portsmouth
 Cully	 Laurelhurst	 Powellhurst-Gilbert
 Eastmoreland	 Lents	 Sellwood-Moreland



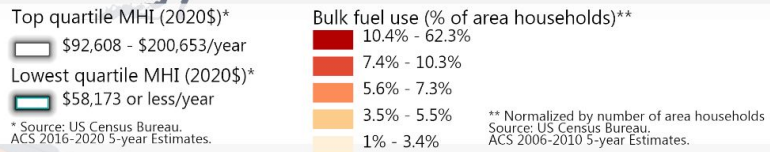
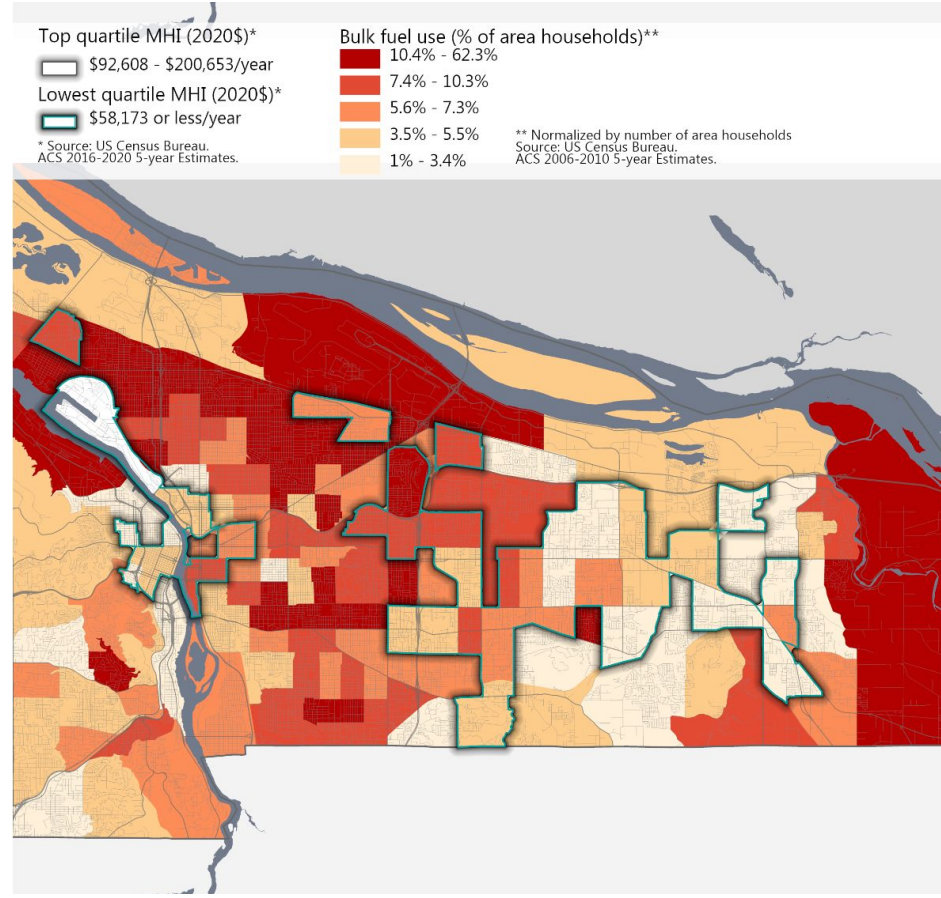
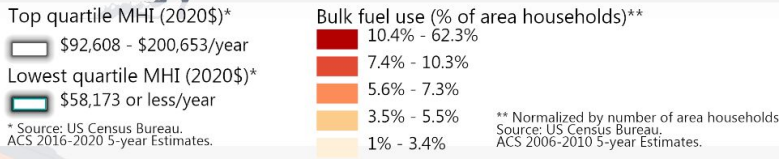
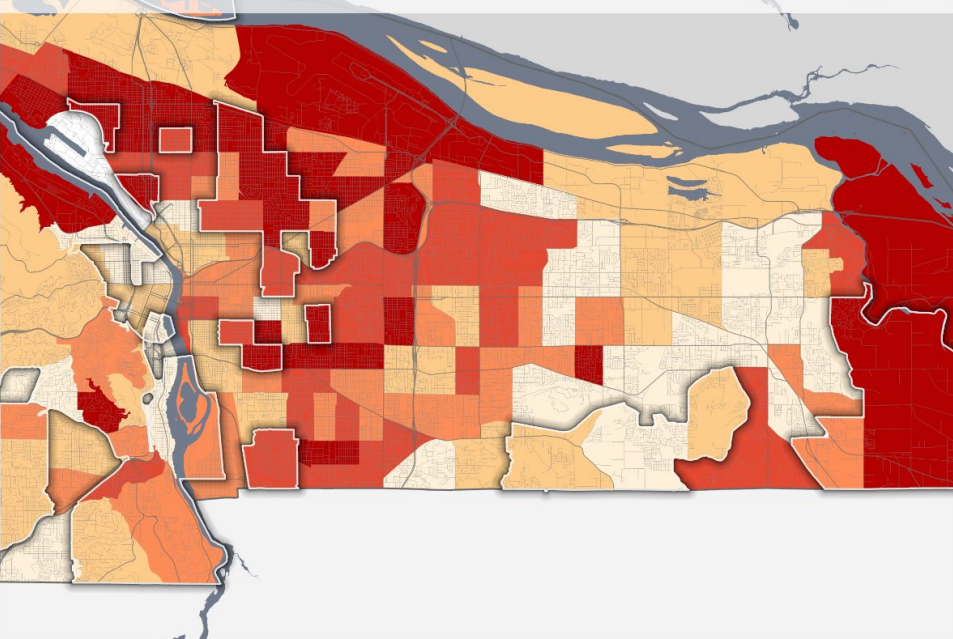
Neighborhood Averages:

Alameda: 1,699	Grant Park: 1,513	Multnomah Village: 964	Multnomah County Average: 1,399
Brentwood-Darlington: 1,504	Irvington: 1,800	Portsmouth: 1,146	
Cully: 1,278	Laurelhurst: 1,841	Powellhurst-Gilbert: 1,021	
Eastmoreland: 1,128	Lents: 1,143	Sellwood-Moreland: 1,295	

Source: Metro RLIS;
Oregon Department of Environmental Quality



Residential Bulk Fuel Use & Median Household Income (2020\$) Multnomah County | 2021

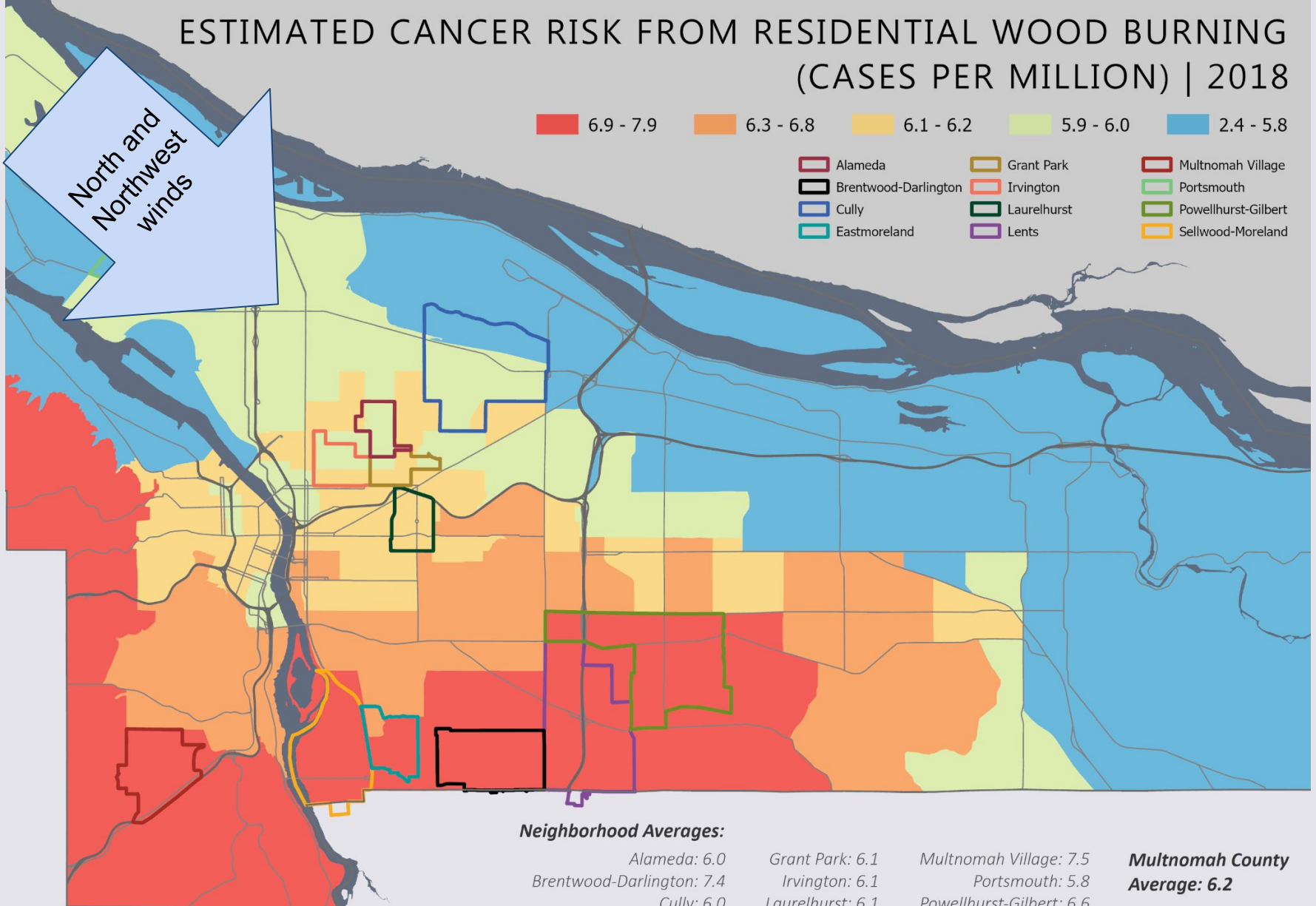


***bulk fuel includes firewood and other heating such as oil and propane**

ESTIMATED CANCER RISK FROM RESIDENTIAL WOOD BURNING (CASES PER MILLION) | 2018

6.9 - 7.9 6.3 - 6.8 6.1 - 6.2 5.9 - 6.0 2.4 - 5.8

Alameda Grant Park Multnomah Village
 Brentwood-Darlington Irvington Portsmouth
 Cully Laurelhurst Powellhurst-Gilbert
 Eastmoreland Lents Sellwood-Moreland



Neighborhood Averages:

Alameda: 6.0	Grant Park: 6.1	Multnomah Village: 7.5	Multnomah County Average: 6.2
Brentwood-Darlington: 7.4	Irvington: 6.1	Portsmouth: 5.8	
Cully: 6.0	Laurelhurst: 6.1	Powellhurst-Gilbert: 6.6	
Eastmoreland: 7.1	Lents: 7.3	Sellwood-Moreland: 7.1	

Source: Metro RLIS;
 US Environmental Protection Agency (EPA), 2018 AirToxScreen.
 Retrieved from: <https://www.epa.gov/AirToxScreen>



ORDINANCE: Language Revisions to Advisory Types

No
burn
restriction

Voluntary
burn
restriction

Mandatory burn
restriction



GOOD

MODERATE

USG

UNHEALTHY

VERY
UNHEALTHY

HAZARDOUS

Air Quality Index (AQI)



Check Before You Burn

- **Check before you burn!**
 - Call 503-988-0035
 - www.multco.us/woodsmokestatus
 - Sign up for alerts via email/text
- Send complaints via phone, web, or email
 - woodsmokecomplaints@multco.us
 - Our program's goal is education, outreach, and referrals
- If you see a fire that is unsafe (actively on fire): call 911
- If a fire is in an unsafe area and has potential to catch fire, call non-emergency: 503-823-3333



WOOD BURNING EXCHANGE

KEEP COZY WITHOUT THE HEALTH HAZARD.

Homeowners may receive \$5000 to the full cost of replacement depending on eligibility and household income.



Before work



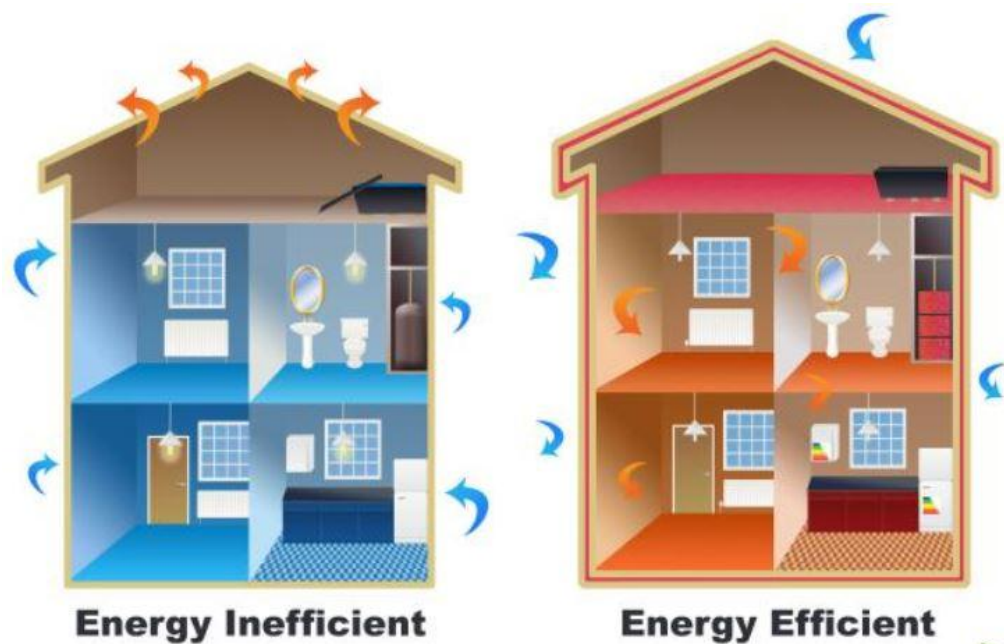
Post repairs



Healthy Homes Grant

Healthy Homes repair and renovation services to be offered in partnership with [Multnomah County Weatherization](#) and the Health Department. The program will improve home indoor air quality for low income residents of Multnomah County who qualify.

Contact Tiffany Hitchcock at: healthyhomes@multco.us for more information



Resources Available to Help with Air Quality

[Multnomah County Weatherization](#) works in all of Multnomah County

[Community Energy Project](#) works in the city of Portland

[NAYA](#) works with east Portland homeowners

[REACH Community Development](#) works in Portland

[Unlimited Choices](#) works in all of Multnomah County

[Energy Trust](#) work in Oregon but is a rebate program



Buying or Making an Air Filter



Photo: Sarah Kobos

Molekule Retracts Most of Its Advertising Claims

PUBLISHED JUNE 10, 2020

Air cleaners pull in dirty air, trap tiny harmful particles, and blow out cleaner air. Check for:

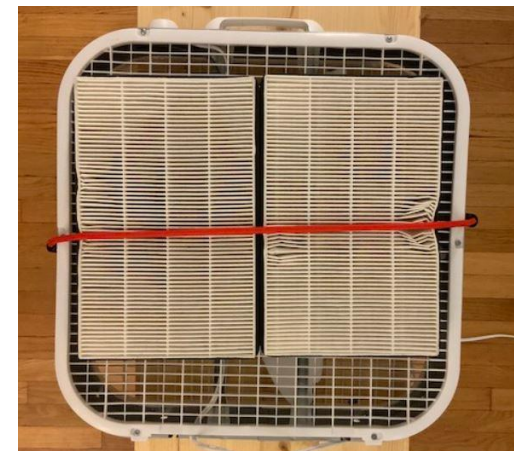
- Search for [California Certification](#) before you buy
 - Look for Air Delivery Rate vs. Size of Room
 - Remember: Ionizers create ozone
 - Check for MERV 13+ Filter Rating

More information: multco.us/wildfiresmoke and [EPA](#)



How to Protect Your Health in Other Ways

What's wrong with the picture on the right?



Below are some ways to make an purifier

Good **Better** **Best**

Ways to Improve Effectiveness:

- Add a cardboard shroud (no-cost improvement)
- Use thicker filters (4" rather than 1" MERV 13 filters)
- Use multiple filters (2-5 filter designs)

Key Reminders:





- Only use certified fans with UL or ETL marking (2012 model or newer)
- Keep extra filters on hand
- Replace filters when dirty



Rockwood Grant

Environmental Justice Projects in Rockwood in 2024.

There are 4 pieces of the puzzle:

-  1. Blueprint Foundation
-  2. Friends of Trees
-  3. Weatherization to retrofit healthier and resilient housing
-  4. Latino Network and Slavic Community Center



Outreach and Presentations

Healthy Homes and Communities (HHC) participates in community events and presentations about the health benefits of choosing not to burn wood, preparing for smoke from wildfires, and information about indoor air quality



Collaborating on Camp AQ

Camp AQ is in its third year hosting students ages 13-19 to learn about air quality.

We work in partnership with [Neighbors for Clean Air](#) and Oregon Department of Environmental Quality.

Participants learned about environmental forces driving health inequities across the county and how to improve AQ.



Pictures from Camp AQ 2024



Shared Air, Shared Action

- Check Before You Burn
- Buy or Make an Air Filter
- Choose other ways to stay warm, such as heat pumps or electrification.
- Insulate and weatherize your home.
- Advocate for more action to protect our airshed



Thank you!

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Post Survey,
Questions +
Request
Presentation:

