

Public Workshop

Draft Amendments to Rule 4901 (Wood Burning Fireplaces and Wood Burning Heaters)

April 11, 2019

webcast@valleyair.org

What is PM2.5?

- Particles with a diameter of 2.5 microns and smaller
- A mixture of solid particles and liquid droplets in the air
- Emitted directly or formed indirectly through chemical reactions between gases

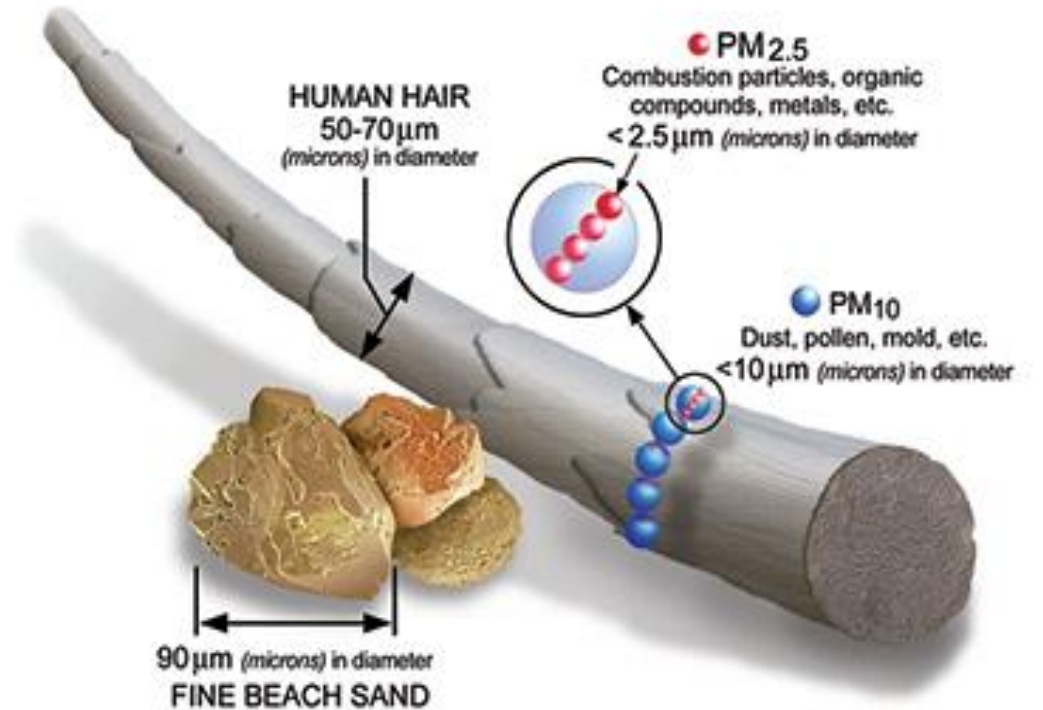
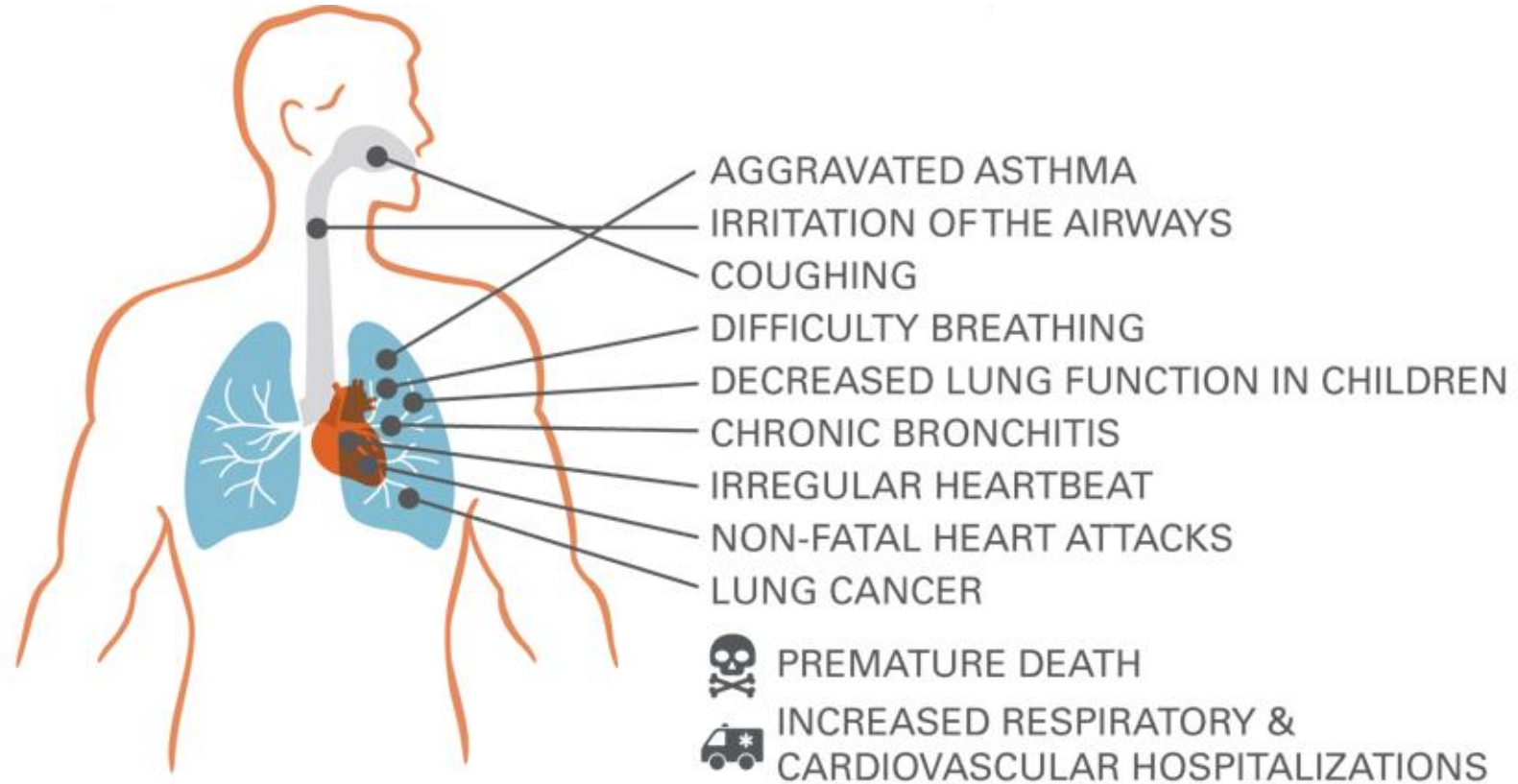


Image courtesy of the U.S. EPA

Health Effects of PM2.5

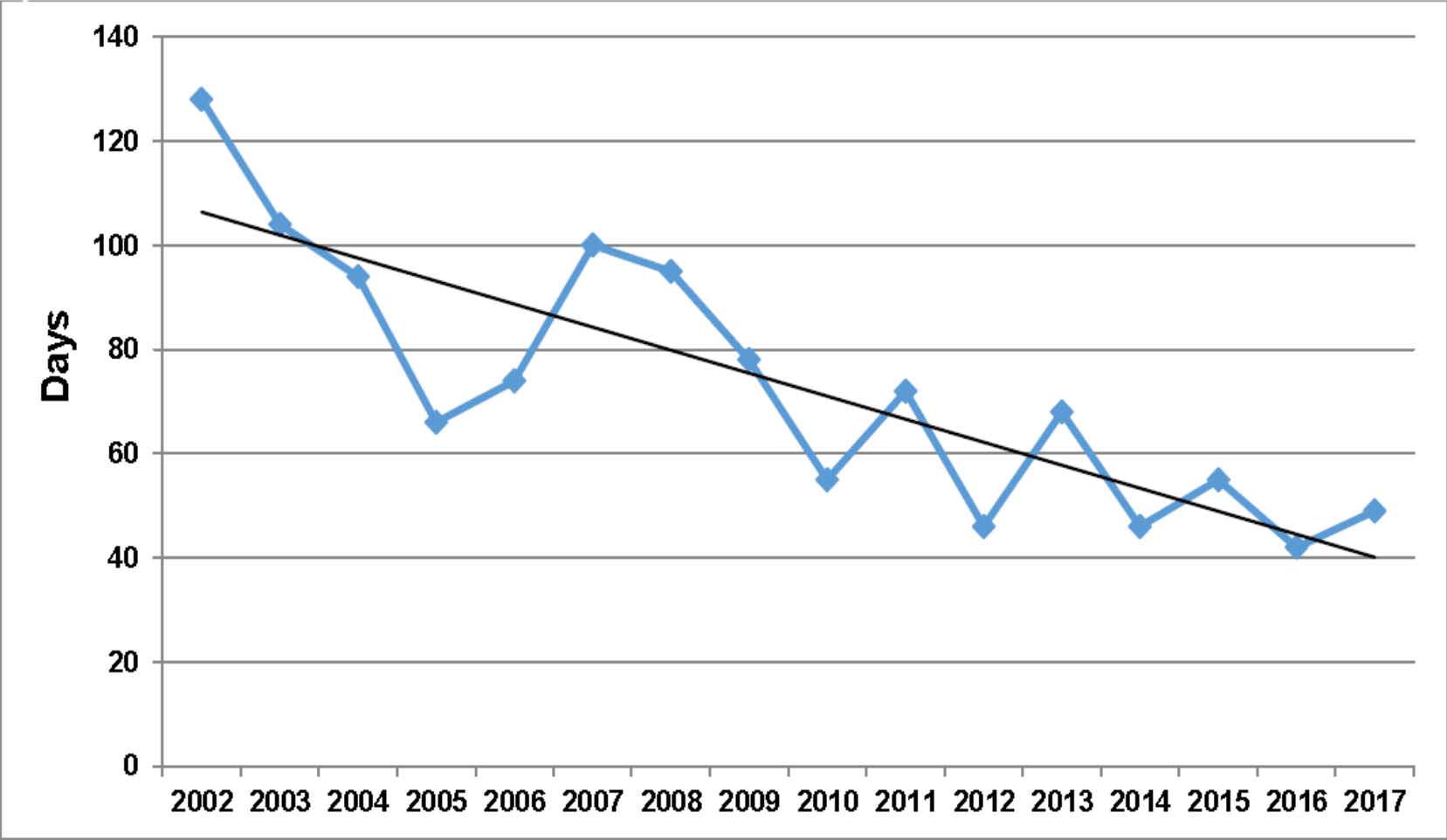


Children, older adults, and individuals with heart or lung diseases are the most likely to be affected by PM2.5.

District's Mission to Improve Air Quality and Protect Public Health

- District/CARB have adopted numerous attainment plans
 - Toughest stationary/mobile regulations in the nation
 - District adopted nearly 650 stringent rules and regulations
 - Groundbreaking rules serve as model for others
- Stationary source emissions reduced by over 90%
- Strong incentive programs (over \$2.2 billion in public/private investment reducing over 145,000 tons of emissions)
- Due to the significant investments made by Valley businesses and residents and stringent regulatory programs by the District and CARB, the Valley's air quality continuing to improve
 - Valley now in attainment with federal PM10 standard, one-hour ozone standard, and 24-hour PM2.5 standard of 65 $\mu\text{g}/\text{m}^3$

Decrease in Days Valley Exceeded 2006 Federal 24-hour PM2.5 Standard (35 $\mu\text{g}/\text{m}^3$)



Current Emission Reduction Strategy for Wood Burning Fireplaces and Heaters

- District currently implements highly effective emission reduction strategy for wood burning fireplaces and heaters
 - Most stringent wood burning curtailment regulation (Rule 4901) in the nation
- Strong incentives for transition to cleaner devices
 - Partnered with over 30 hearth retailers throughout the Valley
 - Replaced over 16,000 high-polluting wood burning devices with cleaner alternatives
- Extensive public education and outreach
 - Multi-lingual outreach campaign
 - Check Before You Burn Program
 - Social media presence and partnerships with other media
 - Provide current air quality through the Real-Time Air Advisory Network (RAAN) and mobile app
- Significant resources dedicated to enforcing rule

Importance of Reducing Residential Wood Burning Emissions

- Reduces air pollution where and when needed most
 - During wintertime PM2.5 peak season
 - In Valley neighborhoods where residents live and work
- Valley cannot attain federal PM2.5 standards without additional emissions reductions from wood burning fireplaces and heaters
 - Key component of Valley's strategy to attain federal health-based PM2.5 standards in recently adopted *2018 PM2.5 Plan*
 - Includes Valleywide measures and targeted strategy (hot-spot) aimed at reducing emissions from areas of the Valley with greater air quality challenges (Madera County, Fresno County, and Kern County)

Evolution of Wood Burning Regulation/Strategy



- Voluntary curtailment
- Public education program
- Prohibit sale of used wood burning heaters
- List of prohibited fuel types identified

- Mandatory curtailment threshold set at 65 $\mu\text{g}/\text{m}^3$
- Restrict installation of wood burning devices in new residential developments with density requirement

- Lowered mandatory curtailment threshold set to 30 $\mu\text{g}/\text{m}^3$

- No burn for non-registered units set at or above 20 $\mu\text{g}/\text{m}^3$
- No burn for all devices above 65 $\mu\text{g}/\text{m}^3$

Proposed Draft Amendments

- More stringent wood burning curtailment in hot-spot areas (Madera, Fresno, and Kern counties):
 - Lower burn prohibitions for non-registered units from 20 to 12 $\mu\text{g}/\text{m}^3$
 - Lower burn prohibitions for all devices from 65 to 35 $\mu\text{g}/\text{m}^3$
 - Enhanced incentive levels to fund up to full replacement for transitioning from wood burning device to natural gas devices in areas where natural gas service available
 - Incentives provided for EPA certified wood burning or pellet fueled devices in areas with no access to natural gas services
- Maintain existing strict curtailment levels in non-hot-spot areas (San Joaquin, Stanislaus, Merced, Kings, and Tulare)
 - Continue to offer current level of incentives to transition to cleaner devices

Proposed Draft Amendments (cont'd)

- At elevations below 3,000 feet in areas with natural gas service
 - Prohibit installation of any wood burning fireplace or wood burning heater (effective January 1, 2020)
- At elevations 3,000 feet and above, or areas with no natural gas service
 - Prohibit installation of wood burning fireplaces and non-certified wood burning heaters
 - Prohibit installation of more than (2) EPA Certified wood burning heaters per acre, not to exceed (1) per dwelling unit
 - Effective January 1, 2020
- Until December 31, 2019, for any single or multi-family housing unit, for which construction began on or after January 1, 2004
 - Any acre with more than 2 dwelling units: no installation of wood a burning fireplace allowed and limited to installation of (2) EPA certified wood burning heaters
 - Any acre with 2 or less dwelling units: each dwelling unit is limited to the installation of (1) wood burning fireplace or (1) EPA certified wood burning heater

Proposed Draft Amendments (cont'd)

- Enhanced enforcement during transfer/sale of residential real property
 - Current rule: if property has wood burning heater, seller must provide verification to buyer and District that wood heater was certified during install, exempt, or has been rendered inoperable
 - Proposed amendment: for all house transfers/sales, seller must provide verification
- Remodels of fireplaces/chimneys that meet the following must remove wood burning open hearth fireplace or non-certified heater:
 - Total remodel cost exceeds \$15,000
 - Remodel requires local building permit
 - Application for building permit submitted after January 1, 2020
 - Remodel is physical modification to fireplace/chimney that impacts structure of fireplace
 - Aesthetic modifications that do not affect the physical structure of the fireplace are not considered remodels, i.e. installing decorative stone/tile in front of fireplace

Proposed Draft Amendments (cont'd)

- Prohibit use of non-seasoned wood
- Visible emission limitation from any wood burning fireplaces and heaters consistent with District Rule 4101
 - No discharge into the atmosphere from any single source of emission, any air contaminant, other than uncombined water vapor, for a period or periods aggregating more than three (3) minutes in any one (1) hour which is as dark or darker in shade as that designated as No. 1 on the Ringelmann Chart
- Any county failing to meet regulatory requirement necessitating implementation of contingency will be subject to more stringent hot-spot curtailment thresholds (District's 2018 PM2.5 Plan Contingency Requirement)
- General language clean up to remove expired or redundant language
- Clarifications to definitions and applicability throughout rule

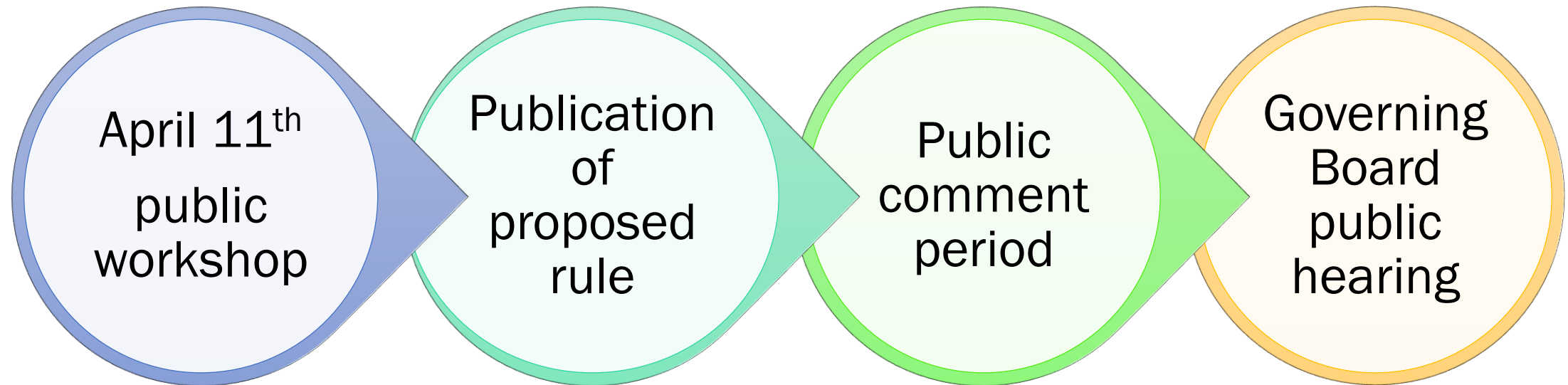
Potential Outreach and Education Enhancements

- Leverage District's successful outreach initiative to better educate public about air quality/public health importance
- Incorporate health information into messaging
- Increase participation in *Burn Cleaner* incentive program
- Enhance advertising/social media to increase reach
- More direct outreach at events (Tune In Tune Up, etc.)
- Presentations to civic organizations (Rotary, Lions, etc.)
- Parents/students through Healthy Air Living Schools
- Partnerships with agencies, non-profits, and employers

Additional Enhancements to Strategy

- Staffing resources dedicated to surveillance and complaint response
- Enhanced targeting of enforcement based on areas of concern, Hot-Spots, etc.
- Advanced technology to enhance effectiveness of enforcement, especially night-time enforcement (cutting edge low-light tech)
- Evaluate penalties
- Enhanced curtailment forecasting to assist in implementing new stringent curtailments through use of new meteorological and air quality models and tools as feasible

Next Steps



Public Participation and Comment Encouraged throughout Process

Contact

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Please submit comments by April 25, 2019 at 5 PM

Open Discussion

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