

Episode 56OC December 29, 2023. Yearend in 2023. Five failures. Two possible solutions for 2024. Yearend in 2023, five failures. RAWSEP normally likes to proceed as if success in ending PM2.5 from indoor residential wood burning is just around the corner. Maybe it will be in 2024. A1 through A5)The standout five 2023 failures allowing continued Indoor Residential Wood Burning to continue. After these five failures, there was continued Indoor Residential Wood Burning causing health risks for near neighbors in 2023. What follows is what people, en masse, did not learn from, in 2023.

A1)Canadian Wildfire smoke invaded the United States in June 2023, causing interruption of commerce, closed schools and widespread understanding of the health effects of PM2.5, particulate matter of 2.5 micrometer size, the perfect size to infiltrate the human lung, setting off a cascade of human health problems and early deaths. Residents affected by wildfire smoke were told by Health authorities to stay inside sealed homes with multiple air purifiers running, and told not to exercise outdoors, since exercise drives PM2.5 farther and faster into the lungs. Canadian Wildfire smoke in the air in June 2023 is how near neighbors of indoor residential wood burners have lived for years, inside their sealed homes with multiple air purifiers running. PM2.5 emissions from wood smoke affects near neighbors the most because wood burning emissions are hyper-localized. Near neighbors have acted like canaries in a coal mine, dropping from their perches to their deaths, unnoticed until they fall, and then only used as monitors of air pollution, not human beings with a right to breathe clean air. PurpleAir PM2.5 monitors could be used instead, without human health effects or human loss of life in the process of PM2.5 monitoring. The miners in the canary's cave are now affected because of the magnitude of the emissions now and in the future from Canada. It is the classic pyrrhic victory for near neighbors of indoor residential wood burners. The harbingers of unkind fates when nothing is done to control pollution have the satisfaction of seeing all people experience what near neighbors have experienced in unseen suffering for years. The failure was that this Canadian wildfire smoke was blamed on fossil fuel burning, by people who would like to continue burning wood in their own homes without responsibility aimed directly at individuals who could change their own behavior of indoor residential wood burning. Every indoor residential wood burner contributes to PM2.5 air pollution that not only harms human health but hastens climate change. Wood burning emits more PM2.5 and CO₂ than the fossil fuel coal burning. Wood burning emits 450 times the particulates as the fossil fuel natural gas burning. Wood burning is 90% PM2.5

A2)Numerous scientific, medical, and statistical studies were released in 2023, showing the health effects of breathing wood burning emission PM2.5 caused deaths from cancer, heart disease, lung disease, stroke, heart attack and asthma, to name only a few diseases, underlying the experience of the average person during the Canadian wildfire incident in June 2023, who realized, some for the first time, that when you can't breathe, nothing else matters. Not acting on the scientific studies in 2023 to stop indoor residential wood burning was the failure.

A3)Japan decided to count wood burning emissions from Japan's wood burning power plants beginning in April 2023, unlike any other country in the world. The count of PM2.5 emissions from Japan's wood burning power plants was not used in statistics used to show Japan's Climate Goals would improve if wood burning stopped, however. Not including wood burning emission statistics in Japan's Climate Goals was the failure in 2023. At COP 28, in Dubai, PM2.5 sickened COP 28 participants during the conference. In Madison, Wisconsin, one local official who attended the COP 28 conference in Dubai came back proposing tree planting as one solution to the problems discussed at COP 28. Tree planting is nice, but is used as a form of greenwashing to obscure the worst immediate cause of PM2.5 pollution, wood burning itself, not possibly the worst immediate cause of Oxygen depletion in the world, cutting down trees. Cutting down trees deprives us of one source of Oxygen, which humans need to survive, but planting a tree in the burnt tree's place does not magically erase the PM2.5 produced when the tree is burned. Failure to address the root problem of PM2.5 pollution from wood burning was also a failure in the locality of Madison, Wisconsin in 2023.

A4)New Hampshire's Republican governor acted to essentially close a large, polluting, wood burning power plant. The fact that new wood burning plants were proposed in 2023 to replace the cleaner burning coal plants was the failure in 2023. The unscientific justification given for continued wood burning in the face of all evidence that it pollutes the air more than fossil fuels is the political, not scientific, and incoherent theory of Carbon Neutrality of wood burning. There are also the day by day indoor residential wood stove bans, called Spare the Air, in the winter in reaction to high PM2.5 readings, (not done proactively to prevent wood smoke pollution in the first place) notably in December 2023 in Arizona and California. The failure is that the PM2.5 levels are allowed to predictably rise and only then is action taken to call for a day by day ban of indoor residential wood burning.

A5)The United Kingdom expanded regulation of indoor residential wood burning, which produces the most PM2.5 emissions across the United Kingdom, surpassing PM2.5 from vehicle use for the last several years. The fact that indoor residential wood burning was found to be done largely by the more affluent for fashionable reasons was the dismal exposure of unnecessary failure, and continued air pollution, in 2023.

Two proposed solutions for 2024.

B1)Point out that PM2.5 Haze also has non-health effects, affecting commerce. Not new in 2023. India, which is open about the level of its air pollution from solid fuel burning, notably unnecessary crop burning in farmer's fields, done traditionally, continues to have incidents where airports are closed due to PM2.5 haze. Tourists are now unable to see the Taj Mahal on many occasions because of the PM2.5 haze. In 2023 a Canadian airport also closed at the height of the Canadian wildfires. A scientific study shows that in New York State in June 2023 PM2.5 smoke from Canadian Wildfires obscured the sun so that statewide networks of solar panels worked at only 50% of their normal efficiency. The failure is that human health should be the number one priority when making decisions that affect the public, not commerce as the first priority. But if both human health and commerce can be improved, then that can be a win.

B2) In 2023 Residents Against Wood Smoke Emission Particulates gave citizen scientists (near neighbors) a framework to measure, in 3 day increments, the actual, real-time levels of PM2.5 pollution invading near neighbors yards from indoor residential wood burning, using download of data from PurpleAir PM2.5 monitors and an Excel sheet. This measurement has to be hyper-localized because wood smoke emissions are hyper-localized. EPA \$100,000 regulatory PM2.5 monitors are not located in residential yards. EPA \$100,000 PM2.5 monitors are not as numerous as PurpleAir PM2.5 monitors across the United States. Overall statistics of PM2.5 levels are based on PM2.5 monitors, which are lacking in number and in PM2.5 measurement in areas affected by PM2.5 hyper-locally. For that reason, United States PM2.5 statistics leave much of residential area sourced PM2.5 uncounted. PurpleAir PM2.5 monitors cost less than \$300 and are usually resident owned. Residents who own PurpleAir PM2.5 monitors would like to act as citizen scientists, if they are near neighbors of indoor residential wood burners whose wood smoke is invading their yards and sickening them. Near neighbors of indoor wood burners would like to present their scientific evidence of harm from levels of PM2.5 above the EPA's own National Ambient Air Quality Standards (NAAQS), (12 micrograms per cubic meter annually and 35 micrograms per cubic meter in a 24 hour period) invading near neighbors' yards and sickening them. Are these RAWSEP frameworks (Excel templates) being used by near neighbors? Should these Excel Templates just be used by Health department employees when near neighbors complain of wood smoke entering the near neighbors' yards and sickening them? The failure is that these are not being used, or not used enough, in enough localities to communicate with Health departments. RAWSEP will continue to work in 2024 to disseminate this method of contacting Health Departments and causing change for the better, which would be shutting down indoor residential wood burning, wood stove by wood stove if necessary, in 2024.

California, Los Angeles. KTLA [Wood burning temporarily banned in these Southern California counties - KTLA](#)

"Smoke from wood burning can cause health problems. Particles in wood smoke — also known as fine particulate matter or PM2.5 — can get deep into. [L.A. County libraries will be closed on New Year's Day - KTLA](#) Wood burning temporarily banned in these Southern California counties Wood burning temporarily banned in these SoCal counties · More than 30. [Police break window of stolen Tesla to get to suspect - KTLA](#) Wood burning temporarily banned in these SoCal counties · More than 30 arrested after protest near LAX · Man attacked in violent Torrance mall robbery.

California, Los Angeles. [Ban on fires extended amid poor air quality caused, in part, by people ignoring the burn ban](#)

Los Angeles Times. "We've seen high levels of fine particle pollution over the past few days due to stagnant weather conditions and increased emissions from wood burning. California, Los Angeles. [Wood-Burning Extended Through Thursday in Inland Empire - MyNewsLA.com](#) MyNewsLA.com A ban on indoor and outdoor wood burning in much of the Inland Empire has been extended through Thursday due to a forecast of high air pollution. California, Orange County. Patch. [Poor Air Quality Prompts Another Wood-Burning Ban In Orange County - Patch](#) Poor Air Quality Prompts Another Wood-Burning Ban In Orange County - Orange County, CA - As poor air quality persists in OC, chestnuts roasting on California, Orange County, Laguna Beach. [No Burn Order In Laguna Beach: Skip The Bonfire - Patch](#) wood burning due to a forecast of high pollution in the area. The wood-burning ban will be in effect through 11:59 p.m. Thursday for all those in. Gas and other non-wood burning fireplaces are not restricted, the SCAQMD said. Fine particles in wood smoke, also known as particulate matter or California, Orange County, Mission Viejo. [No Burn Order In Mission Viejo: Skip The Bonfire - Patch](#) Gas and other non-wood burning fireplaces are not restricted, the SCAQMD said. Fine particles in wood smoke, also known as particulate matter or California, Orange County, Newport Beach. [No Burn Order In Newport Beach: Skip The Bonfire - Patch](#) The wood-burning ban will be in effect through 11:59 p.m. Thursday for all those in the South Coast Air Basin, which includes the non-desert portions. Louisiana, Lafayette. [UPDATE: Details released in fatal Opelousas fire - KATC](#) wood-burning stoves • Do not leave candles/open flames (or space heaters) left unattended. Lastly, there were no working smoke alarms in this home. Montana, Missoula. [When to take your Christmas tree down, and how to dispose of it - KPAX](#) Most importantly, never burn a Christmas tree in an indoor fireplace or wood-burning stove. smoke, but because coniferous tree needles contain. Oregon, Eugene. [Weather Status | Eugene Daily News](#) The Stadium has a moveable roof so the weather is not a factor. Home Wood Heating Advisory: Eugene-Springfield: GREEN- Burning wood in wood stoves or. Oregon, Eugene. [Weather Status | Eugene Daily News](#) The Air Quality Index is 110 in the Unhealthy for Sensitive Groups category measuring Particulate Matter. Oakridge: GREEN- Burning wood in wood . Washington, Richland. KNDU [Smoke rises over the northern Gaza Strip during Israeli bombardment - KNDU](#) Smoke rises over the northern Gaza Strip during Israeli bombardment. Wood burning stove causes shop fire in Spokane More than 900 without. United Kingdom. [May Review: Guido Investigates ULEZ Hypocrisy and GB News Ratings Soar](#) Guido Fawkes. Armed with an industry-standard Temtop Air Quality Monitor, he discovered that high levels of PM 2.5, known to cause asthma, lung cancer. United Kingdom, Blackpool. [Blackpool Tower 'blaze' is actually just orange netting, fire service confirms](#) Yahoo News UK. smoke in her face'. 10 hours ago. The National. The National. Scottish Government faces calls to impose further regulations on wood burning. United Kingdom, Leominster. [Leominster fire crews called to wood-burner fire in house | Hereford Times](#) The fire was in the chimney of a wood-burning stove and the wood-burner was removed and cooled outside. smoke from cracks, installing a working. United Kingdom, Scotland. [Wood burning stove ban: Is Scotland considering further regulations? | The National](#) wood-burner. THE Scottish Government are facing calls to impose regulations on wood burning stoves to limit air pollution. Asthma. China. [China's Air Quality Deteriorates in Most of Its Major Cities for the First Time in a Decade](#) One Green Planet. These elevated levels of PM 2.5 - microscopic particles produced from burning fossil fuels - pose serious health risks. China. [Lucknow: 25% Surge In Patients With Respiratory Disorder As Air Pollution Crisis Worsens In Winter](#) English Jagran. Communicable disease expert, Dr D Himanshu of KGMU said, "Since ultrafine pollutants (PM 2.5 micron) enter lungs through. India. [Air pollution turns Kashmir into a blurry landscape - greaterkashmir](#) smoke, and dust. The trapped aerosols absorb and scatter incoming sunlight wood burning for hammams, and coal. "The haze and fog events are. India. [Fog & Chilly Weather Set In, Locals Prefer To Stay Indoors | Kanpur News - Times of India](#) The current PM 2.5 reading was 136. Dense fog continues to affect several parts of the northeast, including Guwahati, with the lowest visibility. [Over 100 flights affected as fog continues to blanket Delhi-NCR - The Siasat Daily](#) The AQI monitoring station at the IGI airport recorded PM 2.5 at 216, in the 'poor' category and PM 10 at 117, or 'moderate'. The AQI at the ITO. Thailand. [PM2.5 levels exceed standards in scores of areas across Bangkok and surrounding](#) Thai PBS World. PM2.5 levels here range from 15.7µg to 28,1µg. Tags: Bangkok. Nong Khem · PM 2.5 dust · surrounding · Thailand.