

Episode 56TF April 22, 2024. What should individuals who know the source of air pollution do with air quality data?

In Episode 56TF 1)World. PM2.5 causes cancellation of sporting events and flights. 2)World. RAWSEP View: This article is about the W H O redefining their “airborne disease” definition (which includes airborne PM2.5 in RAWSEP’s opinion), with the 2024 approval of engineers as well as scientists, two parties who disagreed in the past. This will allow more stringent measures to be taken to control airborne disease, than was done in the past. In the past, COVID era protective actions up to stringent measures such as mask wearing and lockdowns, were delayed because of disagreement between scientists and engineers. No. Despite the title of the article, the W H O is not further tightening PM2.5 “safe” levels below even 5 micrograms per cubic meter annually. 3)United States. The traditionally reactionary John Birch Society sponsored this opinion piece saying that lowering PM2.5 “safe” levels to 9 micrograms per cubic meter annually is radical. RAWSEP View: Ignoring the health effects of PM2.5 pollution ensures continuing adverse health problems and early deaths. RAWSEP believes that if states are out of compliance they need to work to get into compliance, to protect human health. The World Bank Our Common Air ancillary group argued last week that clean air is a financial asset, and should be viewed and treated as a financial asset. 4)United States. RAWSEP View: For whom is wood burning unsafe? Near neighbors. This article is about the choice of wood burning, made without thought about the health effects to near neighbors. 5)Arizona. 6)California, Coronado. RAWSEP View: A step backward for clean air. 7)California. PM2.5 and preterm birth. 8)Colorado, Boulder, Gross Reservoir. 9)Colorado, Boulder, Banner Lakes. 10)Colorado. RAWSEP View: “Love my Air” PurpleAir PM2.5 monitors at public schools are a good thing as an educational device, but do not detect most hyperlocal indoor residential wood burning as well as monitors hyperlocally located in the yards of near neighbors. PurpleAir PM2.5 monitors are low cost and easy to use. PurpleAir PM2.5 monitors which use a laser to count the number of particulate that pass before the laser, are put on United States AirNow Maps of Smoke and fire alongside \$100,000 United States Environmental Protection Agency (U S E P A) PM2.5 monitors that weigh PM2.5 particulates, and both inform the public of air pollution levels during a wildfire incursion such as the one from Canada in June 2023, for example. In a hyperlocalized setting PurpleAir PM2.5 monitors also accurately measure PM2.5 levels invading a near neighbor’s yard from nearby indoor residential wood burning, accurately identifying the source of the pollution. This is a win win solution to an air pollution problem that causes health problems and early deaths. An additional layer of bureaucracy should not have to be imposed in order for a near neighbor to complain of wood smoke from an indoor residential wood burner infiltrating the yard of a near neighbor and sickening them, using evidence of harm from a data download from a PurpleAir PM2.5 monitor map showing PM2.5 levels that exceed United States Environmental Protection Agency National Ambient Air Quality Standards (US EPA NAAQS) or other air quality standards such as the World Health Organization’s annual PM2.5 “safe” limit of 5 micrograms per cubic meter. An intermediary called a network or government organization should not be needed, except to verify the data download as accurate, if individuals who know the source of air pollution have the air quality data to prove the source of pollution is a nearby indoor residential wood burner. 11)Kansas, Pottawatomie County. In this 2022 article natural gas fire pits were recommended over wood burning fire pits, to protect cattle. 13)New Hampshire, Manchester, Plymouth. 14)New Mexico, Baldy Mountain. 15)New Mexico, Ruidoso. 16)New York, Albany. 17)New York. Man Sets Himself on Fire Near Courthouse Where Trump Is on Trial. The man was standing inside the designated protest area for Trump supporters outside of the downtown courthouse, New York police said during a press conference. 18)Oregon, Portland. 19)Washington. Replacing old wood stoves. Hopefully not with other wood stoves? 20)Washington State University. 21)Canada, Alberta. 22)Canada, Alberta. A regulation of burn piles, but not wood campfires. 23)United Kingdom, Conservative Chief Medical Officer would tell people that wood burners should be avoided. RAWSEP View: Newspapers should provide basic information such as the following. Wood burning emits 450 times the PM2.5 as the fossil fuel natural gas burning. Wood burning emits 2.8 times the PM2.5 and CO2 as the fossil fuel coal burning. Wood burning is 90% PM2.5, particulates of 2.5 micrometer size, the perfect size to infiltrate the human lung, setting off a cascade of human health problems and early deaths. Wood burners should not just be avoided, but be shut down and replaced by clean home heating solutions such as Heat Pumps, available with subsidies in 2024. 24)United Kingdom, Gloucestershire. A new wood burner fine. 25)United Kingdom, Oxford. PM2.5 and cardiovascular disease. 26)United Kingdom, Oxford. PM2.5 and childhood cancer. 27)United Kingdom, Scotland. The Scottish Daily Express digs up a 3 year old report to bolster their odd argument that Heat Pumps are not greener than wood burning. 28)United Kingdom, Scotland. The rural affluent ignore the adverse health effects of indoor residential wood burning. It seems they are quoting from a Mad Magazine article with the Scottish equivalent of a cover boy

quoted as saying “What, me worry?” 29)India. 30)India, Patna. 31)Indonesia, Jakarta. 32)PM2.5 and Arctic impacts. 33)PM2.5 and Cardiovascular disease. 34)PM2 and newborns.

1)World. PM2.5 causes cancellation of sporting events and flights. [Air quality concerns cause delays and cancellations to sporting events, flights - MSN](#) “Particularly wood smoke like this is more toxic, it's like smoking cigarettes but you can't avoid doing it,” Dr. Hill said. “Cloth masks won't. 2)World. RAWSEP View: This article is about the W H O redefining their “airborne disease” definition (which includes airborne PM2.5 in RAWSEP’s opinion), with the 2024 approval of engineers as well as scientists, two parties who disagreed in the past. This will allow more stringent measures to be taken to control airborne disease, than was done in the past. In the past, COVID era protective actions up to stringent measures such as mask wearing and lockdowns, were delayed because of disagreement between scientists and engineers. No. Despite the title of the article, the W H O is not further tightening PM2.5 “safe” levels below even 5 micrograms per cubic meter annually. [Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates, a 501c3 organization.](#) The Executive Director of the UN Environment Program says: “WHO redefines 'air-borne' as it relates to diseases.” In related W H O news, the organisation and around 500 experts have agreed for the first time on what it means for a disease to spread through the air. This was in a bid to avoid the confusion seen early in the [COVID-19 pandemic](#) that some scientists said cost lives. Among the health experts who contributed to the new definition were physicists, public health professionals and engineers. WHO said its technical document on air-borne diseases is a first step towards better preventing the transmission of existing diseases and future pandemic threats. The document concludes that the descriptor “through the air” can be used for infectious diseases where the main type of transmission involves the pathogen travelling through the air or being suspended in the air. This is in line with other terms such as “waterborne” diseases, which are understood across disciplines and by the public. The definition is significant because health agencies have historically required high levels of proof before calling diseases airborne, which required stringent containment measures. The new definition says the risk of exposure and severity of disease should also be considered. Past disagreements also centered around whether infectious particles were ‘droplets’ or ‘aerosols’ based on size, which the new definition moves away from. During the early days of COVID in 2020, around 200 aerosol scientists publicly complained that WHO failed to warn people of the risk the virus could spread through the air. This led to an overemphasis on measures like handwashing to stop the virus, rather than focusing on ventilation, they said. [WHO Tightens air Quality Guidelines as Pollution Kills 7mn | Healthcare Digital](#) [Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates, a 501c3 organization.](#) WHO is now calling for lower levels of (PM 2.5). WHO Tightens air Quality Guidelines as Pollution Kills 7million. April 19, 2024. 99% of the world's population breathes air that exceeds WHO air-quality limits. World Health Organisation tightens air pollution guidelines to safeguard health. The higher air-quality bar is the first update to its air quality guidelines in 15 years. As of 2022, just six countries – Australia, Estonia, Finland, Grenada, Iceland, and New Zealand – currently meet the new air quality guidelines. The UK sees between 28,000-36,000 deaths a year related to human-caused air pollution. One source of Air pollution comes from fuel burning (RAWSEP inserts that this should include counting PM2.5 and CO2 emissions from indoor residential wood burning). 3)United States. The traditionally reactionary John Birch Society sponsored this opinion piece saying that lowering PM2.5 “safe” levels to 9 micrograms per cubic meter annually is radical. RAWSEP View: Ignoring the health effects of PM2.5 pollution ensures continuing adverse health problems and early deaths. RAWSEP believes that if states are out of compliance they need to work to get into compliance, to protect human health. The World Bank Our Common Air ancillary group argued last week that clean air is a financial asset, and should be viewed and treated as a financial asset. [Half of States Sue Biden EPA Over "Radical" New Emissions Standards](#) [Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates, a 501c3 organization.](#) The New American. The new rule sets an unrealistic limit on the allowable concentration of particulate matter (aka soot) smaller than 2.5 microns (PM 2.5), reducing it. Half of States Sue Biden EPA Over “Radical” New Emissions Standards. April 19, 2024. Article audio sponsored by [The John Birch Society](#) A coalition of 25 states is suing the Environmental Protection Agency (EPA) over a new rule. The new rule sets strict limits on emissions of “soot” from industrial smokestacks. Texas has filed a separate [lawsuit](#) against the same EPA rule, and the U.S. Chamber of Commerce and National Association of Manufacturers have also filed suit. Led by Kentucky Attorney General Russell Coleman and West Virginia AG Patrick Morrisey, the states [claim](#) that the new regulation could put up to 30 percent of all United States counties out of compliance and, effectively, block new economic activity. The two AGs were joined by counterparts in Alabama, Alaska, Arkansas, Florida, Georgia, Idaho, Indiana, Iowa, Kansas, Louisiana, Mississippi, Missouri, Montana, Nebraska,

New Hampshire, North Dakota, Ohio, Oklahoma, South Carolina, South Dakota, Utah, Virginia, and Wyoming. The new rule sets an unrealistic limit on the allowable concentration of particulate matter (aka soot) smaller than 2.5 microns (PM 2.5), reducing it from 12 to 9 micrograms per cubic meter. The new rule does not target specific industries but the total air quality for a county.

4)United States. RAWSEP View: For whom is wood burning unsafe? Near neighbors. This article is about the choice of wood burning, made without thought about the health effects to near neighbors. The United States. [Is It Safe to Burn a Backyard Fire Pit Once a Week? - House Beautiful](#) What Are the Health Risks of Burning a Fire Pit? Wood smoke is made up of fine particles, including soot and particulate matter 2.5, Learn about how often you should use a wood-burning fire pit, what you can burn in a fire pit safely, and how to minimize air pollution from a wood fire pit.

5)Arizona. [Arizona issues weekend pollution advisory - Daily Independent](#) Wood burning in residential fireplaces, chimeneas, outdoor fire pits and similar outdoor fires are prohibited in Maricopa County, ADEQ officials said.

6)California, Coronado. RAWSEP View: A step backward for clean air. [In A Compromise, City Council Scales Back New Restrictions on Beach Fires - Coronado Times](#) The city will allow personal fires in either smokeless wood-burning stoves or propane fire pits on the rest of its beach. The eight city-provided. smoke from fires is inundating their homes and harming their health and the environment. wood-burning fire pits on all beaches, will stand.

7)California. PM2.5 and preterm birth. [Exposure to wildfire smoke increases risk of preterm birth | Berkeley Public Health](#) UC Berkeley School of Public Health - University of California, Berkeley. particulate matter PM2.5 from wildfire smoke face a higher risk of preterm birth than women who were not exposed. “It's known that particulate matter.

8)Colorado, Boulder, Gross Reservoir. [Prescribed burn near Gross Reservoir set to resume - Boulder Daily Camera](#) Prescribed fire smoke may affect your health. To learn more, visit <https://www.colorado.gov/pacific/cdphe/wood-smoke-and-health>.

9)Colorado, Boulder, Banner Lakes. [Prescribed burn planned for Banner Lakes State Wildlife Area - Boulder Daily Camera](#) For additional information, contact your doctor or health professional or visit <https://cdphe.colorado.gov/wood-smoke-and-your-health>.

10)Colorado. RAWSEP View: “Love my Air” PurpleAir PM2.5 monitors at public schools are a good thing as an educational device, but do not detect most hyperlocal indoor residential wood burning as well as monitors hyperlocally located in the yards of near neighbors. PurpleAir PM2.5 monitors are low cost and easy to use. PurpleAir PM2.5 monitors which use a laser to count the number of particulate that pass before the laser, are put on United States AirNow Maps of Smoke and fire alongside \$100,000 United States Environmental Protection Agency (U S E P A) PM2.5 monitors that weigh PM2.5 particulates, and both inform the public of air pollution levels during a wildfire incursion such as the one from Canada in June 2023, for example. In a hyperlocalized setting PurpleAir PM2.5 monitors also accurately measure PM2.5 levels invading a near neighbor’s yard from nearby indoor residential wood burning, accurately identifying the source of the pollution.This is a win win solution to an air pollution problem that causes health problems and early deaths. An additional layer of bureaucracy should not have to be imposed in order for a near neighbor to complain of wood smoke from an indoor residential wood burner infiltrating the yard of a near neighbor and sickening them, using evidence of harm from a data download from a PurpleAir PM2.5 monitor map showing PM2.5 levels that exceed United States Environmental Protection Agency National Ambient Air Quality Standards (US EPA NAAQS) or other air quality standards such as the World Health Organization’s annual PM2.5 “safe” limit of 5 micrograms per cubic meter. An intermediary called a network or government organization should not be needed, except to verify the data download as accurate, if individuals who know the source of air pollution have the air quality data to prove the source of pollution is a nearby indoor residential wood burner. Outdoor wood burning usually has some sort of regulation by the Health Department, but indoor residential wood burning is treated differently, for no good reason. The near neighbor of an indoor wood burner whose wood smoke enters the yard of the near neighbor and sickens them should be able to complain to their Health Department and use that data to shut down that wood burning appliance, one burning appliance at a time, if necessary. RAWSEP View: There are 2 views in this article.number 1 against and number 2 in favor of the need for more and more hyperlocalized PM2.5 monitors to provide information about levels of pollution in communities down to the street level.

1)The first view in this article against use of PM2.5 monitors is the view of one of the Republicans in the United States Senate. Not everyone agrees that more low-cost sensors are a good investment. Sen. Shelley Moore Capito, Republican of West Virginia, said at the Senate committee hearing, “Despite the challenges faced by the existing network used for regulatory purposes, there has been a choice to prioritize funding for less-accurate, difficult-to-use, low-cost monitors.” She called for improvements to the existing monitoring network, a sentiment echoed by hearing witness Anne Austin, the EPA Office of Air and Radiation’s former principal deputy assistant administrator during the Trump administration.

2)The second view in this article is that of Colorado, Denver. [Air quality data is now widely available, but what should communities do with it?](#)

Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates, a 501c3 organization. Smart Cities Dive. PM 2.5 can lead to various health issues by deeply penetrating the lungs and entering the bloodstream. With (real time) air quality sensors now costing as little as \$100, some communities are hoping for more federal guidance on how to use them. RAWSEP View: The second view in this article is that 2) Recent federal investments will bring even more of this technology to U.S. communities. In 2022, the EPA announced over \$53 million in grants for [132 community air monitoring projects](#), most of which plan on using low-cost air sensors, said the Congressional Research Service environmental policy analyst, at the Senate committee hearing. EPA guidance is needed on how high-caliber air quality data can be used in planning, especially with the federal agency's recently [tightened standard for PM 2.5](#), and communities need to know how local air quality monitoring near industrial facilities can be used to support air compliance oversight. local governments and smaller organizations, especially those in historically disadvantaged communities, need more technical assistance from the EPA to site sensors, maintain the equipment, analyze data, transmit data and educate the public. Many communities end up contracting out this work to private companies, spending grant money they could have used to build local capacity. Obermann suggested an alternative model where EPA staff or the agency's contracted consultants provide and install database systems at the local level and teach local agencies and groups on how to use the data to improve oversight, rules or requirements on local air pollution sources. "While personal air sensors can be useful tools to better understand our air quality and perhaps even direct regulatory resources to areas of concern, the existing air monitoring network, which we rely upon for regulatory decision-making, deserves our far greater focus, energy, and resources now and in the future," April 19, 2024. RAWSEP View: What follows are more excerpts from the article, about the Love My Air program at Boulder, Colorado Schools, using PM2.5 monitors. Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates, a 501c3 organization. A person looks out at the New York City skyline covered with haze and smoke from Canadian wildfires on June 7, 2023, in Weehawken, N.J. "There is an unprecedented level of air quality data being collected today," said the air program supervisor at Denver's Department of Public Health and Environment, at a [Senate Committee on Environment and Public Works hearing](#) last week. While low-cost air sensors [can go for as little as \\$100](#) each and typically cost less than \$2,500, regulatory ambient air monitors can come with a price tag of up to \$50,000, according to the EPA. Denver is one of the local governments taking advantage of these easier-to-access sensors by operating them at 33 schools to monitor the levels of air pollution known as PM 2.5, which can lead to various health issues by deeply penetrating the lungs and entering the bloodstream. The real-time data is displayed in school lobbies, and it has provided an opportunity to educate the community, especially school nurses, about how to protect themselves and others when air quality is low — an increasing concern as climate change fuels more wildfires in the West. The city is planning on expanding the "Love My Air" program to local clinics in the next two years, bringing these locations interactive kiosks with information about air quality and public health. 11) Kansas, Pottawatomie County. In this 2022 article natural gas fire pits were recommended over wood burning fire pits, to protect cattle. [Hay bales: Pond water quality and livestock - AOL.com](#) Fire pits that are gas fired (meaning they use compressed natural gas or propane for fuel) tend to be safer alternatives to wood-burning fire pits as. 12) Michigan and Canadian Wildfires. [Michigan's EPA updates air quality alerts after Canadian wildfires - UpNorthLive](#) PM 2.5 concentrations," Kownacki said. "I think it updates every hour. So input your location. So it's kind of just like a weather app, but for. 13) New Hampshire, Manchester, Plymouth. [Intense flames seen as firefighters battle fire in Plymouth - YouTube](#) Fire burning on Main Street in Plymouth. WMUR-TV New 14) New Mexico, Baldy Mountain. [Baldy Mountain Prescribed Fire Anticipated in April - USDA Forest Service](#) Grand Mesa Uncompahgre and Gunnison National Forests - News & Events. wood-smoke-and-health. The public is reminded not to call 911 or emergency services if smoke is visible in specific burn areas. 15) New Mexico, Ruidoso. [Village of Ruidoso Issues Level II Fire Protections](#) Ruidoso-NM.gov ALL ISSUED FIRE PERMITS FOR RECREATIONAL FIRE DEVICES AND WOOD-BURNING HEAT DEVICES ARE VOID AND WILL BE REINSTATED

WHEN THE FIRE DANGER LOWERS TO. 16)New York, Albany. [Wildfire smoke could return to Albany this summer, experts say - Times Union](#). Avoid strenuous activities and activities that could worsen air quality such as smoking, frying food, burning candles or using gas, propane or wood. 17)New York. Man Sets Himself on Fire Near Courthouse Where Trump Is on Trial. The man was standing inside the designated protest area for Trump supporters outside of the downtown courthouse, New York police said during a press conference. <https://nymag.com/intelligencer/article/person-on-fire-outside-of-trump-trial-live-updates.html> April 19, 2024. Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates, a 501c3 organization. Onlookers screamed as fire engulfed the man, who had thrown pamphlets in the air before he set himself aflame. He was taken to a hospital and died hours later. The man, who had lingered outside the Manhattan Criminal Courthouse earlier this week, doused himself with accelerant at around 1:35 p.m. in Collect Pond Park, across the street from the building. Onlookers screamed and started to run, and soon, bright orange flames engulfed the man. He threw leaflets espousing anti-government conspiracy theories into the air before setting himself on fire. People rushed and tried to put out the flames, but the intensity of the heat could be felt from some distance. After a minute or two, dozens of police officers arrived, running around and climbing over barricades to extinguish the blaze. The man was loaded into an ambulance and rushed to a hospital burn unit. He died on Friday night. If you are having thoughts of suicide, you can call or text 988 to reach the 988 Suicide and Crisis Lifeline or go to [SpeakingOfSuicide.com/resources](https://www.speakingofsuicide.com/resources) for a list of additional resources. 18)Oregon, Portland. [Massive Fire at Portland, OR, Recycling Plant Difficult to Extinguish - Firehouse Magazine](#). Firehouse Magazine, The firefighting effort was challenging as there were no close hydrants and there were deep piles of wood debris burning. [Massive fire contained but continues to burn at wood recycling plant in N Portland - KPTV](#). Big plumes of smoke. [Wood plant in St. Johns neighborhood burning - KPTV Full Coverage](#). [Massive fire contained but continues to burn at wood recycling plant in N Portland](#). YouTube. Big plumes of smoke filled the sky in North Portland as a two-alarm fire burned at JOPP Energy off North Lombard Street. [Wood plant in St. Johns neighborhood burning - KPTV](#). Wood plant in St. Johns neighborhood burning. Apr. 18, 2024. 19)Washington. Replacing old wood stoves. Hopefully not with other wood stoves? [Everyone wins when communities recycle and replace old wood stoves](#). Washington State Department of Ecology - WA.gov. Wood stoves, fireplaces, and other residential wood burning devices put out hundreds of times more fine particle air pollution than other sources. 20)Washington State University. [WSU Institutes New Wildfire Smoke Policy for Employees - Dailyfly](#). particulate matter concentrations. Each campus's Department. Depending on the concentration of respirable airborne particulates, or PM 2.5, 21)Canada, Alberta. [High Level Forest Area Update - April 19, 2024](#). The Alberta Wildfire Blog - Government of Alberta. Any burning without a valid fire permit, other than a campfire, is prohibited. Allowed: Safe wood campfires. Backyard fire pits; Portable propane. 22)Canada, Alberta. A regulation of burn piles, but not wood campfires. [Fort McMurray Forest Area Wildfire Update - April 18, 2024](#). The Alberta Wildfire Blog. Government of Alberta. Safe wood campfires are not affected by this advisory. Smoke may not be present from these burn piles. Smoke is anticipated to be visible. Canada, Alberta. [Whitecourt Forest Area Wildfire Update - April 18, 2024](#). The Alberta Wildfire Blog - Government of Alberta. Safe wood campfires within fire rings in campgrounds are allowed. All outdoor wood fires. Fires fueled. Wildfire Smoke and Your Health · 511 Road. 23)United Kingdom, Conservative Chief Medical Officer would tell people that wood burners should be avoided. RAWSEP View: Newspapers should provide basic information such as the following. Wood burning emits 450 times the PM2.5 as the fossil fuel natural gas burning. Wood burning emits 2.8 times the PM2.5 and CO2 as the fossil fuel coal burning. Wood burning is 90% PM2.5, particulates of 2.5 micrometer size, the perfect size to infiltrate the human lung, setting off a cascade of human health problems and early deaths. Wood burners should not just be avoided, but be shut down and replaced by clean home heating solutions such as Heat Pumps, available with subsidies in 2024. [Chris Witty: Air fresheners and wood burners are air pollution risk - MSN](#). Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates, a 501c3 organization. Sir Chris Whitty has said. The Chief Medical Officer for [England](#) told [MPs](#) he would have “no problem” telling someone with an asthmatic child not to use air freshener. He also said people who use wood burners should only do so “when it really matters to them for aesthetic reasons” rather than as the main way of heating their home. 24)United Kingdom, Gloucestershire. A new wood burner fine. [New wood burner fine to hit parts of South Gloucestershire | Gazette Series](#)

Council leaders approved the introduction of financial penalties in the district's smoke control area but insisted it was not a blanket ban on. 25)United Kingdom, Oxford. PM2.5 and cardiovascular disease. [New insight into air pollution-related cardiovascular disease: an adverse outcome pathway](#) Oxford Academic - Oxford University Press. Despite the air quality has been generally improved in recent years, ambient fine particulate matter (PM2.5), a major contributor to air pollution. 26)United Kingdom, Oxford. PM2.5 and childhood cancer. [The complexities of PM 2.5 , greenspace, and childhood cancer - Oxford Academic](#) Oxford University Press. Most studies of outdoor air pollution and cancer have observed associations between exposure to fine particulate matter (PM2.5), 27)United Kingdom, Scotland. The Scottish Daily Express digs up a 3 year old report to bolster their odd argument that Heat Pumps are not greener than wood burning. [Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates, a 501c3 organization](#). RAWSEP View: This old report probably uses the Carbon Neutrality of Wood Burning argument, that one should not count CO2 and PM2.5 emissions from wood burning, because you can plant a tree in placed of the cut down tree which you burn. Carbon Neutrality of Wood Burning ignores the fact that it takes decades or centuries to replace the tree that was cut down, and in the meantime the CO2 and PM2.5 from wood burning over the decades and centuries accumulates. Trees do absorb CO2 and emit oxygen, but trees do not absorb PM2.5 from the air. Wood burning emits 2.8 times the CO2 and PM2.5 as the fossil fuel coal burning. Wood burning emits 450 times the PM2.5 as the fossil fuel natural gas burning. Wood burning emits 90% 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. If this news article does not contain these facts of use to the public in understanding the actual pollution from wood burning, this newspaper is shirking its duty to provide the information to help citizens make informed decisions about their own health, and help them to find ways to be a good neighbor and protect their near neighbors from adverse health effects of wood burning and early deaths. Embrace a new, cleaner future and don't look back, in 2024, to 2021's dubious and odd statistics. Heat Pumps did not in 2021 and do not emit in 2024 discernable amounts of PM2.5. Heat Pumps run on electricity. If the source of the electricity is wind or solar power, rather than electricity from a wood burning power plant such as Drax, there will be no PM2.5 emitted from the entire energy cycle of running a Heat Pump. Individual homeowners, by responsible actions, can be responsible for their own contribution to a clean future for everyone. [Wood burning stoves are greener than heat pumps says Scottish Government's own report!](#) Scottish Daily Express. It adds: "Wood fuel-fired installations can achieve significant reductions in emissions of carbon dioxide (CO2) compared with other fuels." RAWSEP View: the preceding Scottish Daily Express statement is demonstrably false, and does not mention the other main pollutant from indoor residential wood burning, PM2.5, 28)United Kingdom, Scotland. The rural affluent ignore the adverse health effects of indoor residential wood burning. It seems they are quoting from a Mad Magazine article with the Scottish equivalent of a cover boy quoted as saying "What, me worry?" [Why the 'ban' on wood-burning stoves ignores the needs of rural Scotland - Holyrood](#) [Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates, a 501c3 organization](#). The row over wood-burning stoves may seem like a minor fuss but to many in rural Scotland, such policies seem a blunt and unfair imposition. Since 1 April, it is no longer permissible to install a direct-emission heating system (one which produces more than a negligible level of greenhouse-gas emissions) in a new-build house or conversion. 29)India. [Clean-up of Indian coal-fired power plants 'could have saved 720000 lives' - The Guardian](#) risk from wood burning. 22 Mar 2024. 973. comments. Ammonia levels four times higher in Europe's farming regions, study finds. 8 Mar 2024. 30)India, Patna. [Patna 2nd Most Polluted City in Country With Aqi Of 276 - Times of India](#) PM2.5 (particulate matter less than 2.5 microns)The average level of PM 2.5 in the air was 92 micrograms per cubic. 31)Indonesia, Jakarta. [IQ AIR Data, This Morning Air Quality In Jakarta Ranked The Worst 30 In The World - VOI](#) PM 2.5 is an air particle that is small in size from 2.5 microns (micrometers). The moderate category. 32)PM2.5 and Arctic impacts. [Research Article Impacts of emission reduction and meteorological conditions on air quality](#) ScienceDirect.com PM2.5, Additionally, pollution control measures have been found to decrease pollutant concentrations by 3.6 % to 53.5. 33)PM2.5 and Cardiovascular disease. [Wildfire Smoke, Health Effects, and the Relationship With Cardiovascular Disease](#) The Cardiology Advisor. PM2.5 exposure during each study period. 8, 9, Overall, however, findings regarding the connection between wildfire smoke and CV outcomes are mixed. 34)PM2.5 and newborns,. [Mutual Associations of Exposure to Ambient Air Pollutants in the First 1000 Days of Life With](#) ResearchGate. PM 2.5 absorbance ("soot") at the residential.