

Episode 56DZ May 5, 2023. “We need a new power grid in the U S, and Adelaide and Sydney women in Australia suffer from residential wood burning by neighbors”.

Residents Against Wood Smoke Emission Particulates (see RAWSEPresidents.wordpress.com and Scroll Down for PDFs of articles with U R L’s to search on. On RAWSEPresidents.wordpress.com are links to 30 minute Youtube videos, and podcasts on Spotify, podcasts.google.com, Amazon Music Prime (free for Prime subscribers), Cast Box, and Pocket Cast (Pocket Cast is only free on the phone App. The phone App works on Apple phones).

Websites

<https://www.facebook.com/groups/819255715292865/user/100068939268945/>

Only Clean Air: Helping to End Wood Smoke Pollution, Facebook

<https://www.facebook.com/groups/819255715292865>

Bay Area Clean Air Coalition, Facebook

[https://www.baaqmd.gov/?sc\\_itemid=B423E924-862D-4D18-9D5D-7A41B21F8F70&fbclid](https://www.baaqmd.gov/?sc_itemid=B423E924-862D-4D18-9D5D-7A41B21F8F70&fbclid)

Bay Area Air Quality Management District  
Clean HEET program coming soon.

- [Air District](#)
- [Funding and Incentives](#)
- [Residents](#)

Clean HEET Program



The Clean HEET Program will improve local air quality, reducing particulate matter pollution by offering incentives to homeowners to **help lower the cost of replacing a wood-burning heating device with an electric heat pump.**

The Clean Heating Efficiently with Electric Technology, or Clean HEET, Program will provide funding for eligible Bay Area homeowners to **replace their existing, operational, freestanding wood stoves or wood-burning fireplace inserts with electric heat pumps.**

The limited funding under this program will be **prioritized to projects located in Bay Area communities most impacted by air pollution.** Homeowners in the AB 617 communities of West Oakland, East Oakland, Richmond-San Pablo, and Bayview Hunters Point/Southeast San Francisco are especially encouraged to apply.

The Clean HEET Program is coming soon and not accepting applications at this time. More information will be available soon. If you would like to be informed about the program launch and all wood smoke reduction incentives opportunities, [sign up](#) to receive email notifications.

The program will not provide reimbursements retroactively. If you would like to be considered for the program when it opens, it is important that you do not do any work or make any purchases before you apply and the Air District has approved your project.

Wood-Burning Regulation

Follow these links for more information on the Air District's [wood-burning regulation](#), and instructions on how to [comply](#).

You may also file a [wood smoke complaint](#) online.

Archive: 2019 Wood Smoke Reduction Incentives Program Documents and Information [Program Requirements, Terms, and Conditions](#)(410 Kb PDF, 8 pgs, posted 10/31/2019)

[Frequently Asked Questions \(FAQs\)](#)(228 Kb PDF, 6 pgs, revised 3/21/2019)

[Contractor Certification Form](#)(113 Kb PDF, 1 pg, posted 1/16/2018)

[Reimbursement Request Cover Letter - Form](#)(186 Kb PDF, 2 pgs, posted 8/20/2019)

[IRS W-9 Form](#)

Contact Us

Clean HEET Program Information Request Line, Strategic Incentives  
415.749.5195 [woodsmokegrants@baaqmd.gov](mailto:woodsmokegrants@baaqmd.gov)

United States





<https://www.dsawsp.org/secondhand-smoke/the-other-secondhand-smoke?fbclid>

Smoke Is Smoke

Wood Smoke Is the Other Secondhand Smoke

Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates.

Wood Burning Has an Image Problem

Today, it is widely understood that secondhand smoke from cigarettes is unhealthy to breathe. Images, for example, of children breathing secondhand cigarette smoke are virtually never seen in a positive light. But the same is not true for wood smoke. Images of children with cigarette smoke are, now, never positive. An air quality agency in southern California has determined that a wood-burning beach fire ring—equivalent to a fire pit—emits [as much fine particle pollution as 800 cigarettes](#). Yet, images of children with fire pits are seen as positive, if not wholesome. “Smoking in public places is recognised as harmful to public health. The same recognition should be extended to domestic wood heaters.” Rob Phair, MD. Wood heaters: The cosy killers, Vicdoc: Magazine of the Australian Medical Association Victoria, February 2020. Similarly, highly polluting wood-burning fireplaces, wood stoves and smoking chimneys are frequently featured in romanticized wintertime imagery, while in reality, wood burning in winter is [a large source of health-damaging air pollution](#) in many communities. Heating a home with wood for a week can create [more toxic chemicals than in the smoke from a million cigarettes](#) (PDF). Images of children breathing wood smoke are often seen as positive and even wholesome. There is a disconnect today between the reality of wood burning and wood smoke—which has health effects very much like those from secondhand cigarette smoke—and the associations we have with wood burning. It’s time to start making the connection. Smoke is harmful to breathe, no matter what form of burning plant material it comes from.



Doctors + Scientists Against Wood Smoke Pollution

2d · ⚙️

“I have had to move away for the months of October through to February as I am struggling to breathe around the smoke... There is no legislation in Scotland to stop the rise of woodburners and they are on the rise.”



United States, new power grid

RAWSEP view: Electric Heat Pumps are being used to replace residential wood burning, and need a new Electric Grid based on wind, solar and geothermal in order to attain particulate-free power.

<https://www.nytimes.com/2023/05/04/opinion/nepa-permitting-reform.html>

We Desperately Need a New Power Grid. Here's How to Make It Happen.

The New York Times.

May 4, 2023.

Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates.

The United States needs to expand the electric grid between places with wind and sunshine and places where people live and work. It needs to happen fast. The government and the private sector are investing in a historic [shift](#) to electric-powered vehicles, heating systems and factories, including hundreds of billions of dollars in federal spending approved last year as part of the Inflation Reduction Act. Without new power lines, much of that electricity will continue to be generated by burning carbon. Unless the United States rapidly accelerates the construction of power lines, researchers [estimate](#) that 80 percent of the environmental benefits of electrification will be squandered. The United States needs 47,300 gigawatt-miles of new power lines by 2035, which would expand the current grid by 57 percent, the Energy Department [reported](#) in February. To hit that target, the United States needs to double the pace of power line construction. Building is the easy part. What makes the target virtually impossible to hit is the byzantine approval process that typically includes separate reviews by every municipality and state through which a power line will pass, as well as many federal agencies. The most important change necessary to overhaul the permitting process is to put a single federal agency in charge of major transmission projects. Congress has empowered the Federal Energy Regulatory Commission (F E R C) to approve major natural gas pipelines. It ought to be at least as easy to build renewable energy projects. To achieve that goal, Senator Sheldon Whitehouse, Democrat of Rhode Island, and Representative Mike Quigley, Democrat of Illinois, proposed [legislation](#) to endow the F E R C with the power to approve the routes of major electric transmission lines that pass through multiple states, replicating the power the agency already has over pipelines. Congress and the Biden administration have taken promising steps toward ending the nation's dependence on carbon. But the absence of a plan to build a new electric grid is a critical hole in that strategy

United States

California, U C Berkeley

<https://cleanenergycampus.berkeley.edu/technology-finance>

Central electric heat & cooling pump plant. The campus is currently studying a campus location that could accommodate a new central electric heat pump plant supplying hot and chilled water for thermal needs. The thermal plant would be powered through utility and on-site solar with 100% clean electricity. A variety of resiliency solutions are being explored including on-site solar, battery, fuel cells and/or a generator farm. Additionally, a reconfigured cogeneration facility will be evaluated as a short-term resiliency option. Gas use will be fully phased out as more on site renewables are added and the plant is fully connected to campus buildings. A central electric heat pump system would all but eliminate campus building energy carbon emissions. This will reduce building energy carbon emissions to levels below the State of California's regulated Cap & Trade threshold.

Michigan, Detroit

[Crime and fire report: 21 fires in three days; majority grass fires, one dumpster fire - Detroit ...](#)

Detroit Lakes Tribune

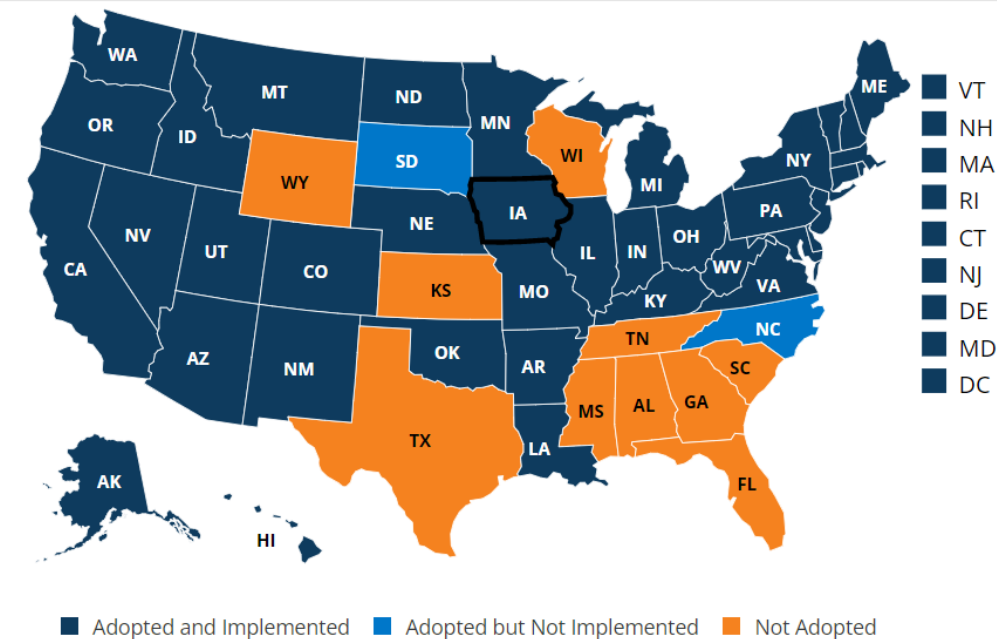
The smoke was determined to be coming from a wood-burning barrel. The homeowner was told to extinguish the fire. 7:49 a.m., Drugs were left in a ...

Pennsylvania, Pittsburgh

[Crews battle Hempfield house fire | TribLIVE.com](#)

Pittsburgh Tribune-Review

Smith indicated that he had lit a fire in his wood-burning stove and had lighter fluid stored nearby. He went to the front door to call for his ...



Key States with Expansion Activity



Utah

RAWSEP View: This article does not discuss PM2.5 from residential wood smoke, but the author does discuss the PM2.5 contribution from automobile exhaust to Utah's air.

<https://www.sltrib.com/opinion/commentary/2023/04/30/dio-tararrel-theres-lot-more-than/?fbclid>

Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates.

April 30, 2023, When the renderings of a new Major League Baseball ballpark were unveiled this month, there was something dominating in straightaway center field. Three massive brown smokestacks. They're impossible to miss, obscuring the Wasatch Mountains and downtown, and they're a perfect metaphor for what Utah is today. On top of the three in center field, the stadium would be located near the tallest smokestack west of the Mississippi . The new ballpark would sit a few miles downwind of the new inland port, a 16,000-acre industrial hub that will have a major impact on air quality. The ballpark could be within a few miles of a newly expanded I-15 (highway), potentially 20 lanes wide . About half of the inversion is caused by automobile pollution. The Fighting PM2.5ers? The ballpark would sit in one of the most highly air polluted census tracts in the state , nestled between four cancer-causing "hot spots" for industrial air pollution. It's two years off your life expectancy from air pollution!" We need those smokestacks. If you're reading this online, those Rocky Mountain Power smokestacks likely charged the screen you're using. I wrote this piece on a laptop using electricity from 42 percent coal, 19 percent natural gas and only 26 percent renewable sources. I agree with the benefits of the west-side location. But I'm more worried about the air we breathe 24 hours a day. I'm doing what climate scientist Katharine Hayhoe says is one of the most important things you can do about climate change: I'm talking about it . There are options for anyone to make a difference, here in Salt Lake City and globally. But the first step (is) acknowledging and talking honestly about where we are. So, I'll be rooting for my hometown Salt Lake Smokestacks. Everyone together now, deep breath: "Let's Go, Smokestacks! (cough, cough, cough cough. cough!)" The author was born in Provo, developed asthma as a child on the Wasatch Front, and lives and breathes in Salt Lake City today.



Vermont, Orleans County, Newport

## [Five Newport City Firefighters Pull Couple From Smoke Filled Home-full](#)

Newport Daily Express

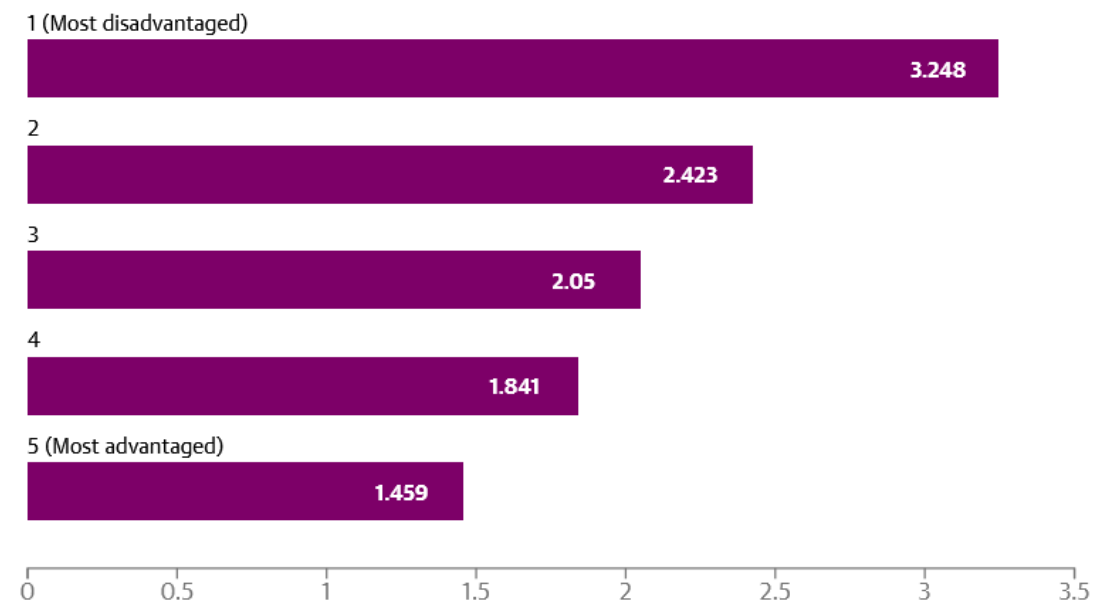
Harlamert said that the man had been doing something near the wood burning furnace, and somehow the fire got out of the furnace.

Australia

RAWSEP View: Two women in this article talk about the effect of wood stoves on their health, Katherine in Adelaide and Kerry in Sydney, Australia. Katherine in Adelaide experienced symptoms when inhaling residential wood smoke from her near neighbors' wood burning. A retiree who developed asthma in later life, Katherine said, "I used to live in a suburb of Adelaide where lots of people had (wood) combustion heaters and open fires. For me, it's not being in the same room as the (wood) heater [that causes a problem], it's the smoke in the air from other people's (wood) combustion heaters. It's streaming eyes, sneezing and coughing, and just generally feeling like I've suddenly got a bad cold. [Whereas] my poor old husband [who had severe asthma] – he would become really breathless." She believes (indoor residential wood stoves) should be banned. A woman who had lived in Sydney, named Kerry, has been influenced by the advertising of residential wood stove manufacturers and sellers, and says, "If I sit in a room with an open wood fire, I love the ambience of it, but I can't breathe very well,". Kerry is simultaneously buying into the advertising of using wood stoves for ambience, but also knowing the reality that she cannot physically tolerate breathing in wood smoke. After years of breathing difficulties, Kerry eventually decided to move away from western Sydney to the coastal city of Port Macquarie. "Every time I came up here [on holidays] we'd go to the beach, and I could just feel that I could breathe better. It was just crisp, clean air." Her asthma has drastically improved. "I've been here eight years and I've probably been to the hospital (only) once for my breathing." One conclusion near the end of the article below is that "One measure experts insist would help is a transition away from wood burners. Domestic wood heaters in Sydney are the single largest source of small particulate pollution there, according to [one study](#) that found they contributed to 19% of primary PM2.5 emissions despite just 4.4% of Sydney residents using them as their main heating source. A wood heater buyback scheme in Launceston in the early 2000s significantly improved winter air quality and reduced mortality on some measures, according to [research led by Johnston](#).

## Years of healthy life lost from death and illness due to air pollution

Showing disability-adjusted life years by socioeconomic quintile for Australians in 2018



Guardian graphic | Source: Australian Institute of Health and Welfare

[https://www.theguardian.com/environment/2023/may/04/australia-air-pollution-socioeconomic-disadvantage-local-government-areas-suburbs-hotspots?CMP=Share\\_AndroidApp\\_Other&fbclid](https://www.theguardian.com/environment/2023/may/04/australia-air-pollution-socioeconomic-disadvantage-local-government-areas-suburbs-hotspots?CMP=Share_AndroidApp_Other&fbclid)

Australia’s air pollution hotspots hit disadvantaged people harder. Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates.

Exclusive: Analysis shows unfair distribution of airborne particulates, compounding existing inequalities.

[How bad is particulate matter for your health?](#)  
[Where are the worst places for air pollution in Australia? Search by postcode on our interactive map](#)

May 3, 2023. People with asthma are “the canary in the coalmine” for air pollution, says the chief executive of [Asthma](#) Australia. “If you’re in an area where there is air pollution, a person with asthma is going to have symptoms ... and it’s quite explicit that the air quality’s bad. Whereas with cardiovascular disease, with cancers, with other diseases where air pollution is a contributing factor – they might only manifest years or decades down the track.”

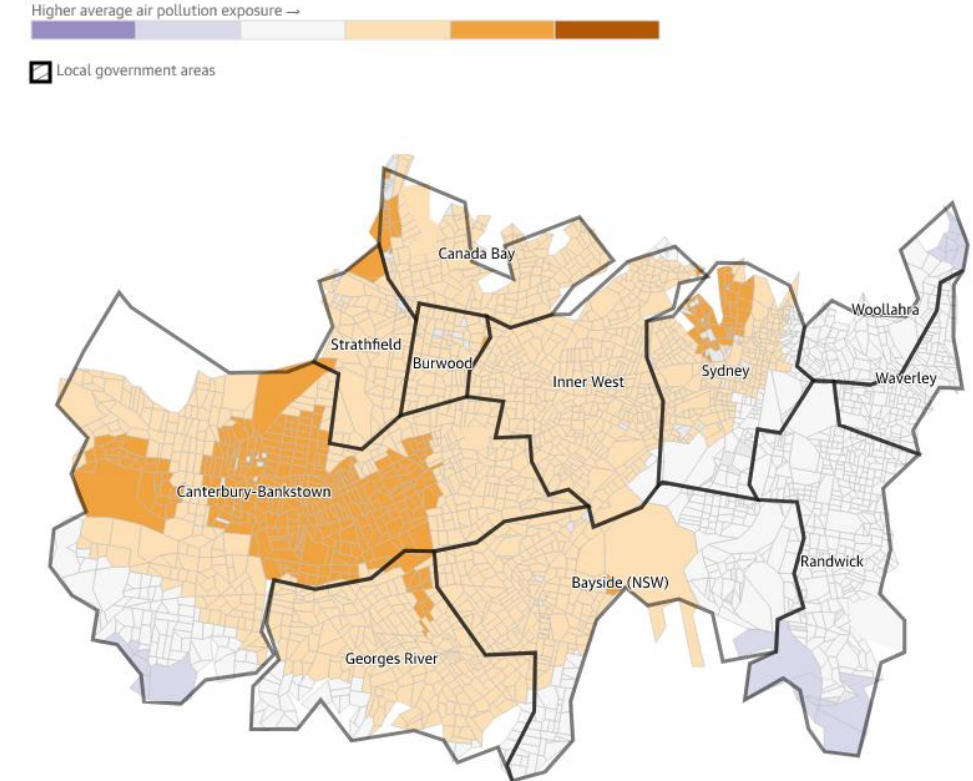
Air pollution has been linked directly to myriad health problems, both as a result of short periods of high pollution – acute exposure – and chronic exposure to lower levels over time. There is no safe level of exposure, experts say.

Of specific concern is [small particulate matter, PM2.5](#) – particles 2.5 microns or less in diameter that can travel deep into the lungs, bloodstream, brain and other organs. Exposure to these particles increases the risk for a long list of conditions: lung diseases such as cancer, chronic obstructive pulmonary disease and pneumonia, cardiovascular disease, strokes, neurological diseases and adverse pregnancy outcomes.

Australia has relatively low levels of air pollution compared with other countries, but the impacts are greater in areas with more socioeconomically disadvantaged people.

### Average air pollution (PM2.5) across Sydney

Showing air pollution exposure averaged over 2018. Hover or click on the map to get values for specific areas. Data is averaged up to Statistical Area 1 from Mesh Blocks.



Guardian graphic | Source: Luke Knibbs, Australian Bureau of Statistics.



Working with academics, Guardian Australia has analysed PM2.5 data for 2015 and 2018, the most recent non-pandemic years without extreme bushfires, to produce an interactive map showing estimated pollution levels in each suburb.

Air pollution tends to be greatest in the centre of cities, but the data also shows isolated pockets of higher pollution. Parts of western Sydney, especially around Bankstown and Parramatta, are hotspots, with some of the highest levels of air pollution in the country. Australia's national ambient air quality standards set a limit of PM2.5 air pollution to average 8 micrograms per cubic metre of air ( $\mu\text{g}/\text{m}^3$ ) annually. The government [has a goal](#) to reduce this to  $7\mu\text{g}/\text{m}^3$  annually by 2025. But many parts of Sydney and Wollongong exceed this level, especially in more disadvantaged areas. The recommended World [Health](#) Organization threshold is  $5\mu\text{g}/\text{m}^3$ .

South America

[Indigenous South Americans Far More Likely to Die From Wildfire Smoke, Study Says](#)

State of the Planet - Columbia University

Fires release tiny smoke particles called PM2.5, which are known to significantly impact human health. Exposure to particles can result in ...

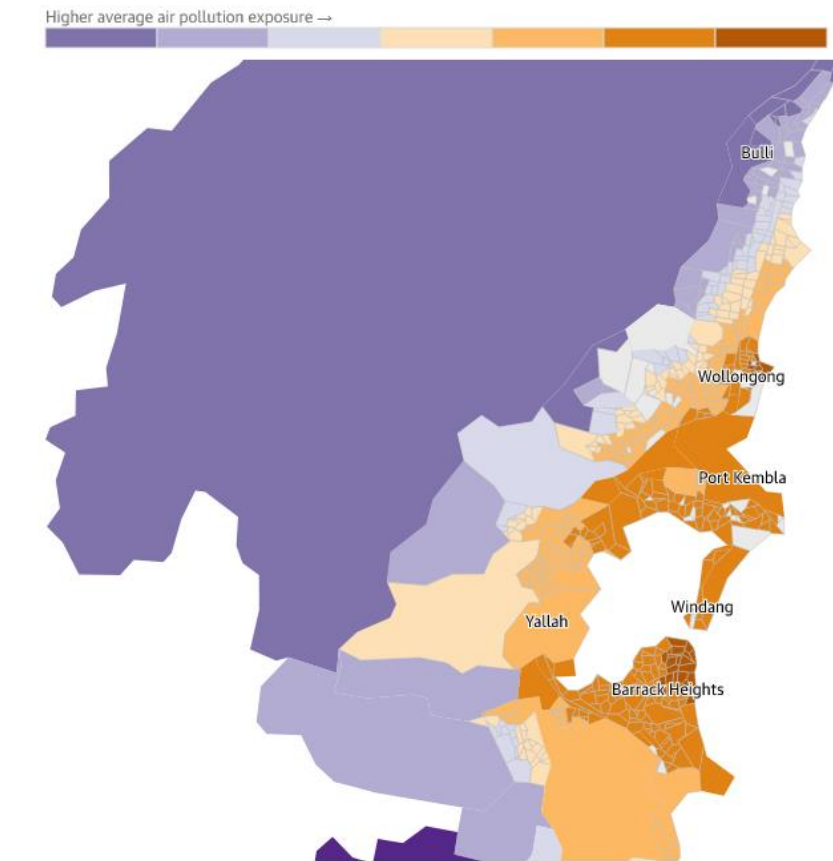
[South American Indigenous Twice as Likely to Die in Wildfires | Mirage News](#)

Mirage News

Wildfires release tiny smoke particles called PM2.5, which are known to significantly contribute to aerosol concentrations and negatively impact ...

### Average air pollution (PM2.5) across Wollongong

Showing air pollution exposure averaged over 2018. Hover or click on the map to get values for specific areas. Data is averaged up to Statistical Area 1 from Mesh Blocks.



Guardian graphic | Source: Luke Knibbs, Australian Bureau of Statistics.

Papua New Guinea, Port Moresby

Port Moresby is the sprawling capital of Papua New Guinea, a country north of Australia. The vast anthropological collection at the PNG National Museum and Art Gallery includes masks and carved wooden poles. Nearby, Parliament House is modeled on a traditional house of worship. Its entrance is dominated by a large, colorful mosaic featuring national motifs. There are views over Port Moresby Harbour from Paga Hill.

[32 families left homeless - Post Courier](#)

Post Courier

Hopeless cries of anguish filled the morning silence as thick black smoke billowed from the debris of charred wood and

United Kingdom

U K

<https://dsawsp.org/personal-stories.html>

Doctors and Scientists against wood smoke pollution

Chimney Right Next to Bedroom Window

Our neighbour installed a wood burner, where the flue exits close to our main bedroom window. The smell of smoke most days and nights apart from in summer means we can't have windows open or even think of using the garden. We now have to live with smoke stained curtains and all our windows shut in fear of the fumes coming in. As my wife is asthmatic this is causing us huge stress and potential health issues. Despite being in contact with our local council they've said as it's built to regs there's not a lot they can do. Our neighbours have refused to stop using it as "it cost them 3 grand to have installed." I'm shocked that this type of pollution is still allowed when the known health ramifications are huge.

U K, England

[Councils in England say they lack funds to bring in clean air strategy - The Guardian](#)

The Guardian

... local authorities in England to improve air quality, through measures such as traffic restrictions and clamping down on wood-burning stoves.

Local authorities in England have not been given the funding or powers to fulfil the government's strategy on air pollution, and air quality in English towns and cities is likely to suffer as a result, local governments and charities have said.



Doctors + Scientists Against Wood Smoke Pollution

2d · ⚙️

"I have had to move away for the months of October through to February as I am struggling to breathe around the smoke... There is no legislation in Scotland to stop the rise of woodburners and they are on the rise."



U K, Scotland

<https://dsawsp.org/personal-stories.html>

Doctors and Scientists against wood smoke pollution

Struggling to Breathe in Scotland

Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates.

We moved to a rural village in Dollar in Scotland to get away from the drug dealing neighbour. This was our dream home, and it had a huge garden where I was going to be able to relax and learn to live with my new diagnosis of chronic fatigue and fibromyalgia. We hadn't long moved in when the neighbours next door installed a woodburner with the chimney being just 2 metres away from our windows. Fortunately they didn't use it much and moved soon after. The next person who moved in couldn't keep it lit so never used it but now we have a new neighbour who burns from 3.30 in the afternoon to 12 midnight. She even has her gas central heating on at the same time. I went around to ask her not to use it so much and told her how it impacts on my health, and she said she would but then went ahead and burnt it until 2am 2 nights in a row. Since we moved in, another 6 woodburners have been installed around us. We are being choked out. All these people have gas central heating and none of them need a woodburner. They have them for aesthetic reasons. As we live next to hills, the weather is cold and damp and misty and foggy a lot of the time. There is no wind to move the air away so the woodsmoke from all the woodburners just hangs in the air all night and all day. I have had to move away for the months of October through to February as I am struggling to breathe around the smoke. Environmental Health can do nothing about it other than tell the people to burn dry wood. There is no legislation in Scotland to stop the rise of woodburners and they are on the rise.

Mandy

Europe



The image shows a social media post on a dark background. At the top left is a circular profile picture of a blue and white globe. To its right, the text reads "Doctors + Scientists Against Wood Smoke Pollution" in white, with "2d · ⚙️" below it. The main text of the post is a quote: "I have had to move away for the months of October through to February as I am struggling to breathe around the smoke... There is no legislation in Scotland to stop the rise of woodburners and they are on the rise." Below the text is a photograph of a misty landscape with trees and a building. Overlaid on the bottom half of the photo is the text "Wood Smoke Stories" in large, white, bold font. In the bottom right corner of the image, there is a small white information icon (an 'i' in a circle).



Germany

<https://www.mopo.de/im-norden/schleswig-holstein/holztransporter-brennt-in-wald-schwerstarbeit-fuer-die-feuerwehr/?fbclid>

RAWSEP translated this news report from German with Google Translate.

Timber transporter burns in the forest - hard work for the fire brigade. In Weest (Schleswig-Flensburg district) there was a fire on Wednesday that demanded everything from the firefighters. In a wooded area, a timber truck caught fire on rough terrain. A cloud of smoke could be seen above the forest between Wees and Oxbüll around 12 noon. The alarmed fire brigades first drove to the site on sight, but they were then able to approach the source of the fire via Weesrieser Straße.

Kazakhstan, Almaty

<https://journals.plos.org/plosone/article?id>

High levels of indoor fine particulate matter during the cold season in Almaty prompt urgent public health action

Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates.

Almaty is the largest city of Kazakhstan with a population of 2 million people and situated in the Southeast of the country. Historically, this has been an industrially developed region within the economic system of the Soviet Union, and a fairly wide range of industries employed most of the population. Plants and factories together with private and public automobiles contributed most to air pollution, in contrast with formerly developed network of zero emission buses (trolleybuses) and trams. However, after the demolition of the Soviet Union, when all heavy industry was terminated, air pollution was still gradually worsening, and recently, PM pollution was reported very high, almost extreme, in the city during the cold season, November through March. This is likely due to low rate of natural gas use in the suburbs, when a large fraction of population in the suburbs may use coal, wood and even tires, plastic, and dung for heating in the cold season. Pollution with PM in Almaty is summer, including months from May through September, remains within the exposure limits set by the government and is of no public health concern, but increases 10-20-fold in winter, which

Es ist falsch, seine Nachbarn mit Holzrauch krankzumachen.

Man muss keine drei Regalmeter Kant lesen, um das zu verstehen.

Es reicht, sich einen Funken menschlicher Empathie bewahrt zu haben.

#holzofengate

Translated from German by Google

It is wrong to make your neighbors sick with wood smoke.

You don't have to read three shelf meters of Kant to understand that.

It is enough to have retained a spark of human empathy.

#holzofengate



includes December, January and February, coinciding with the heating season. Therefore, air pollution is a pronounced public health issue in Almaty during the cold season only.

Nepal, The Himalayas

[Hard Days Are Good Days: Why Kids Are Worth the Cost | Desiring God](#)

Desiring God

I had imagined mothering a large family would warm my world like a well-lit wood-burning stove. You would open the doors to our house and, ...

PM2.5 and Health Effects (Wood Smoke is 90% PM2.5)

PM2.5 and Heart Failure

[Air pollution exposure tied to increased diagnostic testing in adults with heart failure - Healio](#)

Healio

Researchers used daily modeled fine particulate matter (PM2.5) at 1x1 km resolution to estimate the annual average PM2.5 at the time of HF ...

[Particulate matter linked to increased hospital procedures in heart failure patients](#)

Medical Xpress

Tiny airborne particles smaller than 2.5µm in diameter (PM2.5) are air pollutants generated by traffic, industry activity, combustion, and more.

[Individual and joint associations of long-term exposure to air pollutants and ... - The Lancet](#)

The Lancet

Annual particulate matter (PM) with diameters  $\leq 2.5 \mu\text{m}$  (PM2.5),  $\leq 10 \mu\text{m}$  (PM10), sulfur dioxide (SO2) and nitrogen dioxide (NO2) were estimated using ...

PM2.5 and visual cognition

[New study links visual cognition and poor air quality - Health-e News](#)

Health-e News -

This research is particularly important in the context of SA because PM10-2.5 and PM2.5 aerosol samples are present and can be collected in the air we ...

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