

Episode 56UP June 11, 2024. Wood smoke choking Canberrans & Tasmanians in Australia. Best tips for dealing with wood smoke in this episode. Create a clean room. Build your own clean air fan. If you must go outside: Reduce physical activity. Choose alternatives to burning, such as composting, bagging, or chipping yard waste. From 14)Washington. It's #SmokeReady Week in the Pacific Northwest (PNW)! In Episode 56UP, 1)World. The push to end harmful cooking methods worldwide. (Solid fuel burning beginning with wood burning). 2)United States. Black Adults and PM2.5 and zip code. 3)United States. US States' Lawsuit asks court to weaken PM2.5 "safe" limits. 4)Arizona. The Arizona Department of Environmental Quality has issued an Ozone High Pollution (which prohibits wood burning). 5)California, RAWSEP View: Problems and Solutions to PM2.5 air pollution from wood burning. A)Solutions first. Southern California Passes Landmark Rule to Electrify Water Heaters & Boilers. B)Problems second. California, Humboldt County. Environmental Power-Plant Generates Electricity from Waste (burning). C)Consequences of PM2.5 air pollution from wood burning. California. California wildfire pollution killed 52,000 in a decade. 6)California, Livermore. Crews stop forward progress on brush fire near Livermore. 7)California, San Francisco. Fire season 2024: What's in store for the Bay Area and beyond. 8)Illinois, Chicago. Active wildfire season, smoky air likely Summer 2024. 9)Michigan, Detroit. PM2.5 and Artwork about PM2.5 pollution. PM2.5 monitors and LED lights indicate air pollution around the sculpture. 10)New Jersey. PM2.5 and Wildfires in June 2023. Check out our visuals from a year ago, when Canadian wildfire smoke blanketed NJ. 11)New York, Nyack. 2023 Wildfire Smoke. Hazardous Wildfire Smoke: Looking Back, Forward. 12)New York, Rochester. Wildfire smoke map and information for Rochester NY area. 13)South Carolina, Columbia. Firefighters contain Kershaw County brush fire, warn of unattended burn dangers. 14)Washington. It's #SmokeReady Week in the Pacific Northwest (PNW)! Since wildfire season will be here soon, now is the perfect time to make sure you and those around you are prepared. Getting #SmokeReady – the focus of this week – means identifying personal health risks, learning how to protect your indoor air, and knowing where to find the most up-to-date information about the location and intensity of wildfire smoke. #SmokeReady themes Over the course of #SmokeReady Week, Ecology will be posting on social media in line with daily themes: Monday, June 10: Learn about smoke. Wildfire smoke is a mixture of harmful gases (including carbon monoxide) and particle pollution (PM). PM2.5 (particles smaller than 2.5 micrometers across) is very dangerous to human health. PM2.5 can enter your lungs and bloodstream, causing and worsening numerous health problems. Tuesday, June 11: Stay informed about smoke. Keep an eye on air quality conditions with the following resources: Washington Smoke Information (smoke blog). Fire and Smoke Map. Washington's Air Monitoring Network (map). Smoke Forecast. AirNow. Wednesday, June 12: Smoke and your health. Symptoms of smoke exposure include:. Eye, nose, and throat irritation. Coughing, sore throat, and phlegm. Headaches. Shortness of breath and asthma attacks. Heart attacks. People in a sensitive group are more likely to be affected, including:. People with breathing or heart conditions. Babies and children under 18. People over 65. Pregnant women. People who smoke or have diabetes. People in these groups should take extra care to avoid exposure to wildfire smoke when possible. Thursday, June 13: Minimize exposure to smoke. When air quality is poor, try to stay inside and: Shut windows and doors. Delay vacuuming, dusting, and lighting candles. Run fans to stay cool in the room you're in. Use HEPA air filters to purify indoor air. Create a clean room. Build your own clean air fan. If you must go outside: Reduce physical activity. Wear a fitted N95 or KN95 mask. (Other kinds or masks don't protect from PM2.5.) Set your car's air conditioner to recirculate. Drink plenty of water. Friday, June 14: Prevent smoke. The increasingly hot and dry conditions caused by climate change mean more – and more intense – wildfires. That said, over 80% of wildland fires are started by humans. Be sure to: Fully extinguish campfires. Obey burn bans. Choose alternatives to burning, such as composting, bagging, or chipping yard waste. Fully extinguish cigarettes in an ashtray. Park hot vehicles on asphalt, not dry grass. Check your trailer chains to avoid sparks from dragging. Check on current and future smoke conditions. In addition to Ecology's website and social media pages, be sure to check the Washington Smoke Information blog – the state's leading public resource for wildfire smoke information. You will find a map with near real-time Air Quality Index (AQI) values from air monitors and sensors across the state and nation. In addition to current air quality conditions, the map shows a smoke forecast for the next five days. It's important to check the forecast regularly. Conditions can change very quickly! Below the map, there are tabs for the latest smoke data, local smoke outlooks, and external resources. Among these are monitoring and forecasting, fire, and health impacts information. The Washington Department of Health's information about smoke from fires is an excellent place to go if you have more questions about keeping yourself and your family safe and healthy this summer. Act now! In the days and weeks to come, take the time to look over these resources. Being prepared will reduce the stress when wildfire smoke arrives, so please share this information to help others get #SmokeReady, too! 15)Australia, Canberra. 'Prisoner in his own home': how wood fire smoke is choking Canberrans. 16)Australia, Tasmania, Launceston and Armidale. Comment. Should Launceston re-introduce wood heater buyback scheme? 17)Australia, Tasmania. Tasmanians urged to clear the air and breathe easier this winter. 18)New Zealand. Our Region's Air Quality Has Improved - But More Needs To Be Done. 19)United Kingdom, Gloucestershire, Forest of Dean, ancient woodland site. Thousands of trees 'killed by cigarette butt fire' 20)United Kingdom, London. After a fire in a London homeless camp, 'home' is what they hang onto. CBC Despite working hard to get it out, the smell the wood smoke still clings to the air inside. 21)United Kingdom, London. These light paintings let us visualize invisible clouds of air pollution. Ars Technica. 22)United Kingdom. Volunteers in UK inhale (wood smoke), exhaust, cleaning products to study effects on the brain. 23)Finland. Finland's air quality among best in Europe. 24)Greece. Climate crisis to amplify atmospheric pollution in Greece. 25)Africa, Kenya. Wood burning fuels respiratory disease crisis in Kenya.



Cooks work over open fires in Kivukoni fish market in Dar es Salaam, Tanzania.

26)China, Hong Kong. Changes of PM2.5 and O3 and their impact on human health in the Guangdong-Hong Kong. 27)India, Delhi. United resumes Newark -Delhi flights after halt due to poor air quality. 28)Indonesia, Jakarta. Press Pollution, DKI Provincial Government Asked To Pursue Target Green Open Space Up. 29)Singapore. PM2.5 and water used to control it. 30)PM2.5 and aging. 31)PM2.5 and Death. 32)PM2.5 and a Diabetes and Obesity combination, called Diabesity. 33)PM2.5 and Depression. 34)PM2.5 and effects on pregnancy. 1)World. In France at UNESCO's Headquarters in May 2024. 1A)The push to end harmful cooking methods worldwide. (Solid fuel burning beginning with wood burning). The World from PRX theworld.org particles produced by cooking with wood, charcoal, coal, animal dung When that fuel is burned, the toxic particulate is inhaled by people near the. Switching to clean cooking methods, such as LPG or electric cooking, would save 1.5 billion tons of CO₂ a year by 2030, roughly the amount emitted by ships and planes last year, according to the IEA. Subsidized LPG and free stoves in China, India and Indonesia led to a decline in people without access to clean cooking between 2010 to 2022. 1B)May 13, 2024. Phys.org Bid to end deadly cooking methods which stoke global warming. Cooks work over open fires in Kivukoni fish market in Dar es Salaam, Tanzania. Fifty countries are meeting in France on Tuesday to discuss the lack of access to clean cooking methods worldwide which causes millions of deaths every year and fuels global warming. Some 2.3 billion people across 128 countries breathe in harmful smoke when they cook on basic stoves or over open fires, according to an International Energy Agency (IEA)-African Development Bank (ADB) report that sounded the alarm last year. It said 3.7 million people a year die prematurely from harmful cooking practices, with children and women most at risk. The IEA said the "unprecedented" Paris gathering aims to be "a moment of changing the direction (of premature death from harmful cooking practices, including wood burning for cooking)". A third of the world cooks with fuels which produce harmful fumes when burned, including wood, charcoal, coal, animal dung and agricultural waste. They pollute indoor and outdoor air with (PM2.5), fine particles that penetrate the lungs and cause multiple respiratory and cardiovascular problems, including cancer and strokes. These cooking practices are the third highest cause of premature deaths in the world and the second highest in Africa. In young children, they are a major cause of pneumonia, experts say. They also prevent women and children from accessing education or earning a wage, as they spend hours looking for fuel. The meeting at UNESCO's headquarters will primarily focus on Africa and aims to garner financial backing for a major push on the problem. Huge 'bang for its buck' Switching to clean cooking methods, such as LPG or electric cooking, would save 1.5 billion tons of CO₂ a year by 2030—roughly the amount emitted by ships and planes last year, according to the IEA. Subsidized LPG and free stoves in China, India and Indonesia led to a decline in people without access to clean cooking between 2010 to 2022. But the same was not true for Africa. Four out of five households in sub-Saharan Africa still rely on highly polluting cooking fuels and the situation is getting worse. "We're seeing a lot of concerted efforts that are yielding benefits in Kenya, Ghana, Tanzania". The estimated \$8 billion needed annually worldwide is less than one percent of government spending on energy measures in 2022. Of this sub-Saharan Africa would need \$4 billion. Current worldwide investment in clean cooking is about \$2.5 billion. "Dollar for dollar, it's hard to imagine a single intervention that could have more bang for its buck in terms of health emissions and development than this". Such financial support is essential as many African households cannot afford a suitable cooker or fuel. The IEA also recommends strong national leadership as well as grassroots efforts to change social norms. 2)United States. Black Adults and PM2.5 and zip code. Li and colleagues gathered ZIP code-level annualized particulate matter (PM2.5), a form of air pollution, and matched it to each candidate's ZIP code. 3)United States. US States' Lawsuit asks court to weaken PM2.5 "safe" limits. States Urge DC Circuit To Smoke EPA Particulate Matter Rule. Law360 The standards unveiled by the EPA strengthened the primary, health-based annual standard for particulate matter, or PM 2.5, which is a mixture of. United States. States Insist EPA Ignored Constraints With Tougher Soot Rule - Bloomberg Law News particulate matter, also called soot or PM 2.5. The agency tightened. 4)Arizona. The Arizona Department of Environmental Quality has issued an Ozone High Pollution (which prohibits wood burning). Arizona Emergency Information Network - az.gov Conserve electricity. HPA Restrictions. Wood burning in residential fireplaces, chimeneas, outdoor fire pits, and similar outdoor fires is prohibited. 5)California, RAWSEP View: Problems and Solutions to PM2.5 air pollution from wood burning. A)Solutions first. Southern California Passes Landmark Rule to Electrify Water Heaters & Boilers. Earthjustice. particulate matter (PM 2.5) in the region. "When it comes to our industrial sector, we don't have to boil the planet to boil water. California, Southern California. Southern California Passes First US Rule to Electrify Water Heaters, Boilers. Common Dreams. particulate matter (PM 2.5) in the region. "When it comes to our industrial sector, we don't have to boil the planet to boil water," said Adrian. B)Problems second. RAWSEP View: This article about biomass burning does not mention the adverse health effects of PM2.5 produced by wood burning. California, Humboldt County. Environmental Power-Plant Generates Electricity from Waste (burning). KIEM-TV Redwood News. **Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates, a 501c3 nonprofit organization.** Salvage wood is considered a fire hazard. The California department of forestry has partnered with biomass one in southern Oregon in a program for bioenergy. Biomass one is a power plant which makes use of these biomass (wood) to generate energy. A supervisory forester, states; "the wood chips that they stay on the side of the highway actually start to spontaneously combust. if you, if they get too warm." They burned the left-over scraps and were able to generate over 3,000 megawatts of electricity. They do this by grinding the wood into uniform particles, feeding it to two large boilers full of water which produce steam, which generates electricity. This is done in an attempt to reduce fossil fuels and create more eco-friendly methods of energy production. Some (people) may ask if it is worth the fossil fuel used to transport by truck to the power plant. A supervisory forester says that both the California division of forestry and Caltrans plan on using biomass from

future fuel-hazard clean-ups. C)Consequences of PM2.5 air pollution from wood burning. California. California wildfire pollution killed 52,000 in a decade. study - Phys.org More information: Rachel Connolly et al, Mortality attributable to PM 2.5 from wildland fires in California from 2008 to 2018, Science Advances (2024). California. Wildfire smoke may cause tens of thousands of premature deaths - Science News. Fine particulate matter, called PM2.5, describes airborne particles of pollution that have a diameter of 2.5 micrometers or smaller. Once inhaled. California wildfire smoke caused over 50,000 premature deaths: study. San Francisco Chronicle. Fine particulate matter from wildfire smoke can cause a wide range of PM 2.5. In terms of which counties had the most premature deaths from. Pollution from California wildfires has killed thousands, study states. Fox Weather. Route Fire burns in California on Aug. 31, 2022. (California Transportation Dept.) What's so bad about PM 2.5? Due to the particles' small size, they. 6)California, Livermore. Crews stop forward progress on brush fire near Livermore. MSN. The fire is burning north of Interstate 580 and on the west side of. The Altamont Pass. 9 Types of Wood You Shouldn't Burn. 7)California, San Francisco. Fire season 2024: What's in store for the Bay Area and beyond. AOL.com burning wood, wildfire smoke continued to sweep into the region well into July. It was at lower levels, but still concentrated enough to cause. 8)Illinois, Chicago. Active wildfire season, smoky air likely Summer 2024. WBEZ The report that ranks Chicago so high on the list of polluted cities was looking at something called PM 2.5. Can you explain what that is and how 9)Michigan, Detroit. PM2.5 and Artwork about PM2.5 pollution. PM2.5 monitors and LED lights indicate air pollution around the sculpture. Jordan Weber creates installation that monitors Detroit's air quality. Dezeen. A monitoring system and LED lights affixed to the sculpture indicate the level of harmful air pollutants, or particulate matter (PM), surrounding. 10)New Jersey. PM2.5 and Wildfires in June 2023. Check out our visuals from a year ago, when Canadian wildfire smoke blanketed NJ. northjersey.com Those most at risk, the elderly and the young, were urged indoors as the thick smoke filled the air, bringing with it a pungent, wood-burning-like. 11)New York, Nyack. 2023 Wildfire Smoke. Hazardous Wildfire Smoke: Looking Back, Forward. Nyack, NY Patch. Air quality alerts are triggered by a number of factors, including the detection of fine-particle pollution — known as “PM 2.5” , which can irritate. 12)New York, Rochester. Wildfire smoke map and information for Rochester NY area. Democrat and Chronicle. According to Yale Medicine, the PM 2.5 particles are so small they can pass the usual defense mechanisms of the upper airway and penetrate deep. Wildfire smoke arrives again in Rochester: Wildfire map and air quality in your area. AOL.com According to Yale Medicine, the PM 2.5 particles are so small they can Dangerous underground fires spark record-setting wildfires in Arctic Circle. 13)South Carolina, Columbia. Firefighters contain Kershaw County brush fire, warn of unattended burn dangers. WLTX The firefighter notified emergency dispatch, and multiple battalions arrived at a brush and wood fire threatening a structure. 14)Washington. It's #SmokeReady Week in the Pacific Northwest (PNW)! Washington State Department of Ecology. Washington State Department of Ecology. Wildfire smoke is a mixture of harmful gases (including carbon monoxide) and particle pollution (PM). PM2.5 (particles smaller than 2.5 micrometers. 15)Australia, Canberra. 'Prisoner in his own home': how wood fire smoke is choking Canberrans. RAWSEP View: Comment. 2024 and we're still burning wood for heating in this country whilst arguing about renewables. Come on. RAWSEP View: The rest of the article is unavailable without a subscription. The Canberra Times. Canberrans with breathing difficulties are suffering due to wood fire smoke. Winter exacerbates health issues, trapping many indoors. How winter wood fire smoke is impacting Canberrans' health. The Canberra Times. Canberrans with breathing difficulties are suffering due to wood fire smoke. Winter exacerbates health issues, trapping many indoors. 16)Australia, Tasmania, Launceston and Armidale. Comment. Should Launceston re-introduce wood heater buyback scheme? Examiner. As the weather settles and the evenings become still, wood fires rage against the cold with the lack of effective breeze making the smoke move at a. Comment 6/10/2024. Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates, a 501c3 nonprofit organization. When we bought our house the nearest neighbor had a heat pump and pellet heater - reasonably clean outdoor air throughout winter resulted (our place has a heat pump too). The elderly couple who moved in next actually spent money to rip out their pellet heater and replaced it with a wood fire, it was just what they were used to I guess, at the end of the day they're lovely people and nothing illegal we could complain about anyway. Unfortunately, however, it now means that my other half gets serious asthma problems and I also breathe in a lot of woodsmoke which freaks me out due to cancer risks in my family. Launceston (and I think Armidale NSW) have the worst woodsmoke problems in the country and it's not just asthma (breathing in pollution can cause cancer and all sorts of other nasties). It would be good for genuine incentives (and probably disincentives for anyone wanting to go back to wood smoke!) to be implemented for everyone's good health purposes. Sure, there will still be a good portion of houses with wood smoke, but the fewer there are then the better all of us can breathe and live in winter. I've done things like walk my mum's dog in Trevallyn on a winter night and got home feeling like I'd spent a few hours in a Nineties nightclub (e.g. having to wash the smell of smoke out of my hair ASAP) - that's really not a good sign regarding our Launceston smoke levels! 17)Australia, Tasmania. Tasmanians urged to clear the air and breathe easier this winter. Premier of Tasmania. Tasmanians are being encouraged to 'Burn Brighter This Winter' to control smoke from household wood heaters. Minister for Parks and Environment. 18)New Zealand. Our Region's Air Quality Has Improved - But More Needs To Be Done. Scoop. Over the last 15 to 20 years, the air pollutant of most concern in many parts of New Zealand has been particulate matter (PM) from burning wood. 19)United Kingdom, Gloucestershire, Forest of Dean, ancient woodland site. Thousands of trees 'killed by cigarette butt fire' Yahoo News Singapore. Nests and charred wood have been found after flames ripped through thousands of trees in Harrow Hill in the Forest of Dean following a "short hot. Anyone who noticed a forest fire was advised to get to safety before calling 999, with a what3words location that was particularly helpful to fire crews. BBC

Gloucestershire. 20)United Kingdom, London. After a fire in a London homeless camp, 'home' is what they hang onto. CBC Despite working hard to get it out, the smell the wood smoke still clings to the air inside. Karla said she likes her neighbors but isn't big on (their wood burning). 21)United Kingdom, London. These light paintings let us visualize invisible clouds of air pollution. Ars Technica. IIT Nursery Playground, Delhi, India: PM 2.5 500–600 micrograms per cubic meter. Robin Price. IIT Nursery Playground, Delhi, India: PM 2.5 500–600. 22)United Kingdom. Volunteers in UK inhale (wood smoke), exhaust, cleaning products to study effects on the brain. MSN. Researchers create four different kinds of pollutants: diesel exhaust, wood smoke, cleaning products and cooking fumes. An actual engine is used. 23)Finland. Finland's air quality among best in Europe. Yle News below the European average in terms of fine air particles caused by small-scale wood burning. particles caused by small-scale burning of wood, according to the report. According to the EEA, fine particulate matter causes the biggest. 24)Greece. Climate crisis to amplify atmospheric pollution in Greece. eKathimerini.com smoke from fires, shedding light on air quality and particle types. According burning and limiting wood-burning stove usage.” 25)Africa, Kenya. Wood burning fuels respiratory disease crisis in Kenya. YouTube. As a continent, Africa accounts for the smallest share of greenhouse gas emissions but suffers more than most from the climate crisis. Africa, Kenya. Respiratory diseases plague Kenya as more people burn wood to save money - Olean Times Herald. Respiratory diseases affect the health of millions of people in Kenya. Cooking with biomass like firewood is a big part of the problem. Respiratory diseases plague Kenya as more people burn wood to save money. YouTube. particulate matters. The particulate matters are the ones we usually call PM 2.5 and this is associated with pneumonia, it is the one associated Respiratory diseases plague Kenya as more people burn wood to save money – YouTube (3 Jun 2024) KENYA CLEAN COOKING SOURCE: RESTRICTION SUMMARY : ASSOCIATED PRESS Kiambu, Kenya. May 23, 2024. 26)China, Hong Kong. Changes of PM2.5 and O3 and their impact on human health in the Guangdong-Hong Kong. Nature. Utilizing observed PM2.5 data, Maji et al. reported that in China, PM2.5-related hospital admissions due to respiratory and cardiovascular diseases. 27)India, Delhi. United resumes Newark -Delhi flights after halt due to poor air quality. Reuters. particulate matter smaller than 2.5 micrometers, known as PM 2.5. A U.S. embassy measure of PM 2.5 showed a reading of 481 in New Delhi on Monday. 28)Indonesia, Jakarta. Press Pollution, DKI Provincial Government Asked To Pursue Target Green Open Space Up. VOI.ID. (particulate matter / PM) 2.5 at the concentration rate of 43 micrograms per cubic meter. This concentration is equivalent to 8.7 times the annual. JAKARTA - Member of Commission A of the DKI Jakarta DPRD, Simon Lamakadu, asked the DKI Provincial Government to continue to pursue the target of Green Open Space (RTH) of 30 percent of the area. This is in order to reduce air pollution which continues to fall into the unhealthy category 29)Singapore. PM2.5 and water used to control it. North MCD sprinkles water in Sadar Bazaar area to control air pollution - Yahoo News Singapore. The Air Quality Index (AQI) for PM 2.5 pollutant stood at 481 in Anand Vihar, 444 in IGI Airport area, 457 in ITO, and 414 in Lodhi Road area, all. 30)PM2.5 and aging. Ambient PM2.5 exposure and rapid population aging: A double threat to public health in the. ScienceDirect.com 31)PM2.5 and Death. Particulate matter from over a decade of wildfires caused over 52000 premature deaths in. Courthouse News. Premature deaths from particulate matter from wildfire smoke accounted for 19% of all deaths attributed to all sources of PM2.5 pollution in. PM2.5 and Death. United States, National Aeronautical and Space Administration (NASA). Research Links Millions of Deaths to Fine Particle Pollution - Mirage News To understand how PM2.5 pollution affects mortality rates, the researchers studied satellite data from NASA on the levels of fine particulate matter. Study unearths cause of million premature deaths - Geo.tv The minute particles called particulate matter 2.5, or "PM 2.5", have adverse impacts on humans when inhaled because they easily enter the bloodstream. Study: An estimated 135 million premature deaths linked to fine particulate matter pollution. Phys.org As they are so small, PM2.5 particles can easily get into the air we breathe and penetrate deep into our lungs, leading to a range of health problems. Air Pollution Linked To 135 Million Premature Deaths: Study, Barron's The tiny particles called particulate matter 2.5, or "PM 2.5", are harmful to human health when inhaled because they are small enough to enter the. 32)PM2.5 and a Diabetes and Obesity combination, called Diabetes. Exposure to particulate matter 2.5 increases risk of “diabetesity” - Clinical Trials Arena particulate matter 2.5 (PM2.5) exposure and the risk of comorbid type 2 diabetes and obesity, or “diabetesity.” The study's environmental and. 33)PM2.5 and Depression. Early-Life Exposure to Pollution Linked to Psychosis, Anxiety, Depression, Medscape. Investigators captured levels of air pollutants, which included nitrogen dioxide and PM2.5, fine particulate matter with a diameter smaller than 2.5 micrometers. 34)PM2.5 and effects on pregnancy. Exposure to urban ambient particles (PM2.5) before pregnancy affects the expression of. ScienceDirect.com PM diameter (Colmer et al., 2020). The smaller particle with the diameter of 2.5 micrometers and lower (PM2.5) is capable of crossing the air/blood barrier (the blood/brain barrier).



Cooks work over open fires in Kivukoni fish market in Dar es Salaam, Tanzania.