Web 57DHYAFZZFLL March 30 2026 UK Heat pumps all new homes and plug in solar in green tech drive

In this Webisode 1 United States 2026 US Home Energy Rebates Rollout State by State Guide What is Live What is Next and How to Get Rebate Ready 2 California 3 Michigan 4 Minnesota 5 Nevada 6 New York 7 North Carolina 8 South Carolina 9 Utah 10 Canada 11 United Kingdom UK Heat pumps all new homes and plug in solar in green tech drive 12 Nigeria 13 India 14 Nepal 15 Laos 16 China 17 South Korea 18 A new Covid 19 variant is getting attention What is going on? Covid 19 continues to mutate and the latest variant attracting attention is BA point 3 point 2 nicknamed Cicada a descendant of Omicron that has been circulating globally for some time BA POINT 3 POINT 2 now accounts for 11 percent of US cases COVID 19 BA point 3 point 2 possible Vaccine and Lyme Disease Vaccine information Main Content

1A United States 2026 US Home Energy Rebates Rollout State by State Guide What is Live What is Next and How to Get Rebate Ready Excerpts edited by Residents Against Wood Smoke Emission Particulates a 501C3 nonprofit organization Intelligent Living March 28 2026 The Intelligent Living website was registered in late 2013 with the aim of shifting focus from negative problem based news to more positive solution based news Intelligent Living publishes stories about global issues such as global warming air pollution health and waste but with more focus on solutions such as planting trees carbon capture technology renewable energy air filtration systems medical breakthroughs recycling facilities and new types of materials Funding comes from advertising revenue provided by reputable online advertising agencies such as Google and affiliate banner ads State level energy programs are shifting from abstract federal policy into tangible household savings as the Inflation Reduction Act Home Energy Rebates reach local markets Residential property owners occupy varying stages of the rollout with some regions offering immediate point of sale discounts through contractor invoices while others fine tune the administrative software required for eligibility Navigation of these energy efficiency rebates requires a clear awareness of which programs have launched which anticipate a 2026 opening and how to verify individual qualification status Every status update provided here aligns with official records released on March 27 2026 Impactful results are already visible in local markets such as a Charlotte rowhouse where air sealing and heat pump integration lowered winter utility costs Budget stability and physical comfort improve immediately when a structure stops leaking conditioned air proving that keeping a home warm while saving energy in winter offers significant value even without total property renovation Technical panel audits and load calculations prevent modern electrification bottlenecks An envelope first strategy prioritizes thermal stability before high draw equipment swaps Navigating both whole home efficiency pathways and point of sale discounts requires the structured approach to state specific rules detailed in this guide Table of Contents US map with highlighted states a home upgrade checklist overlay and large readable text explaining how US Rebates are rolling out state by state Home energy rebates are rolling out unevenly across the country and the rebate ready households are the ones who move first Home Energy Rebates 2026 Program Basics and Covered Upgrades Strategic Quick Facts The 2026 Home Energy Rebates Rollout Two federal tracks under the IRA fund the work a whole home efficiency pathway and an income qualified electrification pathway and federal program requirements and application guidelines dictate how states construct their individual frameworks A concise consumer snapshot of eligible upgrades and program basics appears in the Home Energy Rebates FAQ summary DOE also summarizes the overall funding scale and regional administration in the national funding overview Program designs typically favor insulation and air sealing to maximize performance and the DOE envelope first strategy clarifies why these upgrades often precede equipment swaps Local initiatives issue rebates via contractor administered invoice discounts or point of sale reductions which shifts the homeowner job from save receipts to confirm eligibility and reservation steps before work begins Program caps and eligible upgrades vary by state so state rules are the final authority for dollar amounts and qualifying equipment High demand triggers pause and activate

reservation systems when capacity is exceeded necessitating staged project planning and clear reservation proof How whole home efficiency rebates differ from electrification rebates with tables of upgrade caps and income tiers across multiple states State rebate programs look similar on the surface but their rules change the real world outcome This graphic shows how eligibility tiers energy savings thresholds and per upgrade caps create different best paths by state Eligible Upgrade Coverage Why State Rebate Designs Vary HOMES Versus HEAR in Plain Language Federal funding supports two distinct energy efficiency pathways One pathway rewards deeper whole home efficiency improvements that reduce energy use across the building and the other supports efficient electrification and appliances for households that meet income guidelines Point of sale discounts define the practical electrification pathway for qualified upgrades and how HEAR income qualified electrification rebates are designed clarifies the functional design of income qualified incentives Administrative and legal state requirements establish the timelines reporting and mechanics governing these programs Typical Eligible Upgrades and Delivery Models Modern programs incentivize high efficiency systems that reduce carbon footprints and operational costs These improvements create a more resilient residential energy profile while increasing property value Heat pumps for high efficiency heating and cooling reducing overall emissions Hybrid heat pump water heaters for consistent savings Extensive insulation and precision air sealing to secure the thermal envelope Electrical panel upgrades and updated wiring for increased load capacity High efficiency induction cooking that improves indoor comfort Approved contractor pathways that apply discounts directly to project invoices Retail point of sale reductions for certified energy efficient appliances Centralized portals requiring pre approval and reservation steps before work begins A US map highlighting states with live or partially live home energy rebate programs with a side table listing launch dates rebate caps and total federal allocations The rollout is uneven some states are fully live others are phased and a few are narrow use or capacity limited This map shows what is actually active now and what each live state is offering at a glance State Rollout Map Where Home Energy Rebates Are Currently Live Each entry below includes a status label a short lesson and a single official source link Every status update provided here aligns with official records released on March 27 2026

North Carolina Energy Saver North Carolina Live Status Live The statewide North Carolina enrollment portal details eligibility covered upgrades and the application process

Georgia Home Energy Rebates Live Status Live The Georgia official application workflow outlines how households access the program through registered partners

Wisconsin Focus on Energy Rebates Live Status Live The Wisconsin statewide program rules describe how contractor and retail pathways operate

Colorado Energy Office Staged Live Status Partially Live The Colorado rollout timeline clarifies staged availability by housing type

Indiana Energy Saver Applications Open Status Applications Open The Indiana invoice discount guidelines describe how contractor mediated pathways function

New Mexico Early Mover HEAR Live Status Live The New Mexico HEAR eligibility list provides a clear example of how electrification rebates are structured

Rhode Island HEAR Launch Live Status Live The Rhode Island program overview documents the program structure and eligibility

Michigan Statewide Launch Live Status Live The Michigan rebate launch notice describes household entry and contractor integration

New York Selected Live Elements through State Programs Live in Parts Status Live in Selected Programs The New York electrification funding announcement reflects how rebates layer through existing state channels

The following states have submitted public designs and anticipate opening their windows within the 2026 calendar year Every status update provided here aligns with official records released on March 27 2026

South Carolina Expected 2026 Launch The South Carolina rebate design plan outlines what households should expect from upcoming upgrade One year of utility bills to establish an energy baseline Panel specifications including total amperage and available breaker space Short list of licensed contractors familiar with local rebate enrollment

Oregon Application Submitted Approval Pending The Oregon rebate application update reflects the common pattern of federal review and vendor readiness

New Jersey Planning for a 2025 to 2026 Launch The New Jersey planning timeline outlines how programs roll out across building types

Vermont Software and Federal Review Bottlenecks The Vermont testimony on launch bottlenecks describes software certification steps that can delay launches

Washington Third Party Administrator Model The Washington rebate program hub describes how rebates are delivered through a third party model The Administrative Waiting Room Pending States without Launch Dates

These states have public planning signals but no firm public date based on official sources current as of March 27 2026 The safest approach is to prepare documentation while avoiding rebate dependent contracts Minnesota No Estimated Launch Date The Minnesota rebate status page notes that approval steps are still in progress Maine Application Pending The Maine planning status lists program allocations and federal status Texas Not Launched With Consumer Protection Notices Texas officials currently urge households to avoid unapproved contractors and premature agreements while programs remain in development and the Texas consumer protection guide reflects that caution Documents to Gather Recent utility bills Income documentation if qualification tiers apply Photos of the panel attic access and key equipment labels Past retrofit permits and invoices The California recent reservation controls show how quickly capacity can tighten and these limits were recently evident in the California Energy Commission HEEHRA reservation status notice released in early 2026 The Arizona pause and restart cycle offers another reality check on how funding uncertainty can affect program operations and the Arizona program status update captures that dynamic Applicants typically submit recent tax returns pay stubs or existing categorical eligibility letters like SNAP or LIHEAP to verify their median income status Is Stacking Rebates with Federal Tax Credits Permitted? Coordination between state rebates and the federal Home Energy Improvement Credit is common though specific state rules dictate exactly how these funding sources integrate All status statements reflect official sources current as of March 27 2026 Program details can change as states update portals contractor lists and reservation capacity United States Energy Star dot gov heat pump rebate Heat Pump Rebates at the Checkout How Point of Sale Programs Turn Contractors Intelligent Living Streamlined point of sale heat pump rebates and instant HVAC discounts turn contractors into energy navigators through simplified

invoicing and AI Overview Point of sale POS heat pump rebates instantly deduct incentives from contractor invoices removing the need for homeowners to wait for reimbursement and allowing contractors to close more sales These programs often managed by utilities or state entities simplify the adoption of high efficiency systems by providing immediate discounts on the total project cost Key Aspects of POS Rebate Programs Instant Savings Rebates under the federal Inflation Reduction Act IRA and local programs can offer up to for heat pumps and for water heaters applied immediately at the time of purchase or installation Contractor Led Process Contractors use tools like Coral or Contractor Commerce to calculate eligibility and guarantee rebates which reduces paperwork for customers and boosts contractor conversion rates Lowered Upfront Costs By reducing the initial investment contractors can offer more competitive net pricing to homeowners easing the financial burden of upgrading to electric heating and cooling Simplified Experience Instead of mailing in forms homeowners benefit from a Choose Verify Reserve Apply Discount workflow streamlining the entire installation process Income Based Incentives Specific programs like HEEHRA provide higher instant savings for low and moderate income households These programs detailed further in Understanding Point of Sale Programs | ENERGY STAR are a key part of Heat Pump Rebates at the Checkout How Point of Sale in advancing home electrification

1B United States Energy Star dot gov heat pump rebate 2026 US Home Energy Rebates Rollout State by State Guide Excerpts edited by Residents Against Wood Smoke Emission Particulates a 501C3 nonprofit organization Intelligent Living March 27 2026 2026 Home Energy Rebates by state live launches 2026 watchlists and a rebate ready checklist for heat pumps insulation induction Table of Contents Home Energy Rebates 2026 Program Basics and Covered Upgrades Strategic Quick Facts The 2026 Home Energy Rebates Rollout Eligible Upgrade Coverage Why State Rebate Designs Vary HOMES Versus HEAR in Plain Language Typical Eligible Upgrades and Delivery Models State Rollout Map Where Home Energy Rebates Are Currently Live North Carolina Energy Saver North Carolina Live What Homeowners Should Check First Georgia Home Energy Rebates Live Wisconsin Focus on Energy Rebates Live Colorado Energy Office Staged Live Indiana Energy Saver Applications Open New Mexico Early Mover HEAR Live Rhode Island HEAR Launch Live Michigan Statewide Launch Live New York Selected Live Elements through State Programs Live in Parts 2026 Rollout Watchlist Upcoming State Launches And Pending Programs Launching in 2026 State Programs to Monitor And Preparation Steps South Carolina Expected 2026 Launch Oregon Application Submitted Approval Pending New Jersey Planning for a 2025 to 2026 Launch Vermont Software and Federal Review Bottlenecks Washington Third Party Administrator Model The Administrative Waiting Room Pending States without Launch Dates Minnesota No Estimated Launch Date Maine Application Pending Texas Not Launched With Consumer Protection Notices Getting Rebate Ready Comprehensive Checklists And Funding Pathways Rebate Ready Home Checklist Universal Preparation Tasks What to Prepare Before Applications Open Documents to Gather What Not to Do Technical Prechecks that Save Time The Rebate Interface How Contractors and Retailers Facilitate Funding Avoiding Installation Delays Managing Pause Risk and Reservation Portals Program Reality Check Navigating Funding Pauses and Capacity Limits Fast State Status Verification Avoiding Common Application Errors Maximize Home Energy Rebates with a Rebate Ready Retrofit Plan Home Energy Rebates FAQ Direct Answers for Homeowners How Do I Verify Local Program Readiness? Are Registered Contractors Mandatory for Every Upgrade? Do Multifamily Pathways Include Renters? Which Records Confirm Income Tier Eligibility? Is Stacking Rebates with Federal Tax Credits Permitted?

1C United States heat pump HVAC tech breaks down the top reasons homeowners are switching to high tech heat pumps Yahoo Tech Excerpts edited by Residents Against Wood Smoke Emission Particulates a 501C3 nonprofit organization AI Overview While heat pumps are known to potentially significantly reduce homeowners heating and cooling costs they also provide other

benefits Homeowners are increasingly adopting high tech heat pumps for their energy efficiency cost savings quiet operation and consistent home comfort Energy Efficiency and Cost Savings Modern heat pumps are highly energy efficient because they transfer heat rather than generate it through combustion allowing them to deliver multiple units of heat for every unit of electricity used Some systems can achieve two hundred percent to four hundred percent efficiency meaning they produce more energy than they consume unlike traditional gas furnaces that typically reach eighty percent to ninety five percent efficiency This efficiency translates into lower monthly heating and cooling bills especially when replacing outdated HVAC systems Additionally variable speed compressors and advanced refrigerant management allow heat pumps to adjust output dynamically maintaining comfort while minimizing energy use Comfort and Quiet Operation High tech heat pumps provide consistent indoor temperatures thanks to variable speed technology which prevents the temperature spikes and drops common with traditional systems They also operate quietly reducing the disruptive hum often associated with older HVAC units which is a significant comfort factor for homeowners Space and Maintenance Benefits Modern heat pumps can be smaller than traditional air conditioners without compromising performance freeing up space in homes They also require less maintenance because they eliminate combustion components found in conventional heating systems reducing long term upkeep costs Environmental and Strategic Advantages Heat pumps reduce reliance on fossil fuels making them a more environmentally friendly option compared to traditional gas furnaces They align with sustainability goals and long term energy planning offering homeowners a forward thinking investment that balances efficiency reliability and value creation Tax credits rebates and leasing programs can further reduce upfront costs making the transition more accessible Versatility Heat pumps can work with existing ductwork or ductless mini split systems allowing homeowners to heat or cool specific rooms rather than the entire house which enhances energy savings and comfort They provide both heating and cooling in a single system simplifying home climate control In summary homeowners are switching to high tech heat pumps because they offer superior energy efficiency lower utility bills quieter operation consistent comfort reduced maintenance and environmental benefits making them a smart long term investment for modern homes

1D United States heat pump HVAC tech breaks down the magic behind heat pumps People think that cannot be possible The Cool Down He noted that heat pumps do not create heat they move it which is how a single unit of electricity can deliver up to four units of heat Even on cold Yahoo Shopping heat pump technology He detailed why heat pumps are much more efficient than gas or electric heat He described how industry professionals use United States heat pump The 5 best heat pump water heaters to buy in 2026 according to Consumer Reports Quartz If you are in the market for a more energy efficient heating system but do not know which to choose look no further Most people buying a heat pump United States heat pump Master plumber reveals how next gen water heaters can reduce your power bills The Cool Down Heat pump water heaters are an incredible way to save money on your monthly energy bill as they are far more efficient at heating water than United States heat pump Time and time again surveys of heat pump owners show that the vast majority of people are happy United States heat pump What are heat pumps and how much do they cost? AOL dot com Heat pumps run on electricity instead of gas and are more efficient than traditional boilers They warm buildings by absorbing and amplifying heat

2 California Hayward heat pump Celebrate and Learn More about Heat Pumps City of Hayward ca dot gov Modern heat pumps can also work effectively even during colder weather You will see heat pump technologies in space heating and water heating equipment California Los Altos heat pump rebate Electrification rebates for Los Altos residents live News los altos online dot com Los Altos Town Crier Rebates are eligible for those who

are in the midst of renovating their home and considering shifting from gas water heaters and heat pump heating California San Francisco Bay Area wood smoke Wood Burning Rule Spare The Air dot org The fine particles in wood smoke can bypass the natural defense systems of the body in the nose and throat California San Luis Obispo Santa Barbara and Ventura counties heat pump rebate Officials announce return of fifteen hundred dollar rebate program for new HVACs The Cool Down Past projects have included heat pump water heaters heating and cooling systems insulation and other efficiency improvements by Kaiyo Funaki California Ventura County heat pump rebate Dr John Fankhauser named Director of the Ventura County Health Care Agency – ed hat Ventura County Supervisors Approve Heat Pump Rebate and Workforce Program to Expand Clean Energy Access By Ventura County March 30 2026 Ventura California Ventura County heat pump rebate Ventura County Supervisors Approve Heat Pump Rebate and Workforce Program to Expand ed hat Ventura County Board of Supervisors approved the Skilled and Trained Residential Heat Pump Workforce and Rebate Initiative Ventura County News Channel The program focuses on expanding access to residential heat pumps which are all in one systems that provide both heating and cooling using less

3 RAWSEP View Half Measures Michigan Grand Rapids wood burning City Permits required for backyard fires Grand Rapids Magazine Fire Department is reminding homeowners and renters that a permit is required for any wood burning recreational fire on private property The Michigan Grand Rapids wood burning GRFD reminder permit required for wood burning fires News radio WOOD 13 hundred and 106 point 9 FM iHeart The Grand Rapids Fire Department is reminding residents that a permit is required before starting a wood burning fire on private property Fire Michigan Grand Rapids wood burning Planning a backyard fire in Grand Rapids this spring? Here is what you absolutely need to know first MLive dot com The Fire Department is reminding the community that a sixty dollar permit is required for wood burning fires on private property with strict safety and Michigan Grand Rapids wood burning Reminder from GRFD Permits are needed for recreational fires in Grand Rapids WZZM 13 Residents must have a permit for all wood burning recreational fires within the city limits Fire pits that run on gas or propane do not need a permit

4 Minnesota Rochester PM 2 POINT 5 Evaluating the semi chronic effects of household air pollution exposure on cardiopulmonary Nature Household air pollution HAP particularly from cooking related particulate matter PM 2 POINT 5 poses significant health risks but remains
Europe European Medical Journal PM 2 POINT 5 Indoor Air Pollution Peaks Linked to Daily Activities Excerpts edited by Residents Against Wood Smoke Emission Particulates a 501C3 nonprofit organization European Medical Journal EMJ The analysis focused on fine particulate matter including particulate matter 2 point 5 PM 2 POINT 5 and particulate matter 1 PM1 which can penetrate deep indoor air pollution peaks often exceeding safety limits are directly linked to daily household activities like cooking cleaning and heating particularly during 6 pm–9 pm These activities generate high levels of fine particulate matter Major Drivers of Indoor Pollution Peaks Cooking A primary source of pollution often around 106 particles per cubic centimeter due to burning food oil or wood specifically on gas stoves Heating Appliances Unvented space heaters and cooking appliances cause significant emission peaks Impact on Health and Environment Respiratory and Cardiovascular Issues Pollutants enter deep into the lungs directly affecting individuals with asthma or COPD Environmental Impact Household energy use for cooking heating contributes to over 50 percent of ambient air pollution locally

5 Nevada Reno and Massachusetts Lynn heat pump rebate Understanding Heat Pump Rebates in Lynn With Insight From Revise Inc Reno Gazette Journal Interest in heat pump systems has grown steadily across Massachusetts as homeowners seek ways to improve energy efficiency and manage heating and

6 New York heat pump I Spent a Year Testing The Midea Latest HVAC Miracle a Full Blown Window Heat Pump The New York Times After months of using a packaged window heat pump and mostly positive experiences we would consider it as a year round alternative to a traditional New York Ulster County heat pump rebate Ulster County urges governor to move forward with climate action Middle Hudson News It would provide up to two thousand dollars or 30 percent of the cost of a heat pump Hinchey is also proposing to double the residential solar tax credit from

7 North Carolina North Carolina Forestry Commission has issued a statewide ban on outdoor burning for the entire state Doug Wood with the Forestry Commission North Carolina Greensboro wood burning ALERT Statewide burn ban due to high wildfire risk YouTube FOX8 WGHP New

8 South Carolina wood burning Statewide burning ban in effect in South Carolina YouTube The South Carolina

9 Utah Salt Lake City PM 2 POINT 5 Letter The effects of air pollution in the Salt Lake Valley are ominous There are some ways The Salt Lake Tribune Research on increasing exposures to common pollutants such as PM 2 POINT 5 ozone noxious gasses and Traffic Related Air Pollution TRAP show increased

10 Canada British Columbia wood burning Why Humans Still Burn Logs for Power The Tyee What the persistent use of wood for heat and electricity says about shifting to new energy sources Canada Ontario Manitoulin heat pump rebate Homeowners can now access up to twenty five thousand dollars for oil to heat pump upgrades The Manitoulin Expositor The federal government opened its own Oil to Heat Pump rebate for provincial delivery letting Ontario use local programs to simplify the process for

11A United Kingdom England heat pump Heat pumps for all new homes and plug in solar in green tech drive BBC Developers will be required to install solar panels and heat pumps in all new homes in England as part of updated planning requirements published by Excerpts edited by Residents Against Wood Smoke Emission Particulates a 501C3 nonprofit organization BBC March 22 2026 Heat pumps for all new homes and plug in solar in green tech drive Around 5 percent of all homes in the UK currently have solar installed Developers will be required to install solar panels and heat pumps in all new homes in England as part of updated planning requirements published by the government It also said plug in panels that homeowners can install themselves on balconies would be available in supermarkets in the coming months These small versions of the green tech are already deployed across Europe but are not currently sold in the UK due to safety regulations Announcing the raft of measures to ramp up solar the energy secretary said the Iran war had shown clean power was essential The move has been welcomed by some energy companies but developers have raised concerns about the scale of solar required What is a heat pump and what grants are available? Planning change to make installing heat pump easier for millions More solar farms on the way after record renewables auction For the last decade successive governments have been trying to develop the Future Homes Standard an update to the way that new homes have to be designed in England The guidance

published on Tuesday means that from 2028 no new homes will be on the gas network and will instead be on a heat network or get a heat pump and they must have solar panels on their roofs covering an area equivalent to 40 percent of the ground floor space The Iran war has once again shown our drive for clean power is essential for our energy security so we can escape the grip of fossil fuel markets we do not control said Energy Secretary Ed Miliband The announced changes have been welcomed by the energy industry and those working in green technology for providing certainty that heat pumps and solar panels are worth investing in It is going to give clarity to the UK market installers builders manufacturers that there is a significant market that is there said Garry Felgate CEO of MCS Foundation which certifies installers of low carbon heating systems The changes in building requirements are estimated to add an additional ten thousand pounds onto the cost of the home for developers but over the long term will likely bring down the cost of energy bills for customers The savings could be significantly increased where homes have batteries but the government opted not to include those as a requirement Hannah McCarthy head of partnerships for new homes at Octopus Energy told the BBC Decarbonizing the new housing stock is a fantastic step batteries would take that a step further What is a heat pump and can it save me money? Although the Home Builders Federation HBF said the additional cost that developers now face from the changes was not welcome at any time it said the industry had been given a lot of forewarning There are exemptions to the requirement such as when the design does not give enough space for the solar panels But Jefferson said Each home will have to be looked at individually There are some challenges within the process and we do not want bottlenecks The government has a target to build 1 point 5 million homes by 2029 but in December the housing secretary Steve Reed told the BBC there would need to be a surge in building after rates of construction appeared to drop Both the Liberal Democrats and the Green Party welcomed the move to ensure all new homes have solar panels But Doctor Ellie Chowns from the Green Party added that it was utterly ridiculous to wait until 2028 before implementing the changes In Scotland gas and oil based heating in new build homes was banned two years ago Housebuilders are now required to install what it classifies as climate friendly heating systems which can include wood burners as well as heat pumps or district heating Two small solar panels are shown hanging from a balcony in Germany there is a red tiled roof to the left Plug in solar that can be hung from balconies is already legal and deployed in Germany Speaking on R4 Today program the Energy Minister Michael Shanks said he did not accept that drilling more in the North Sea was the answer to lowering energy bills For 60 years the North Sea has been a hugely important asset powering the country but for the last 20 years it has been in decline The North Sea will remain hugely important but our long term future does not lie in fossil fuels he said As well as changes to requirements for new builds the government wants to make it easier for those in existing homes in the UK particularly those in flats to access renewable energy The government said it was working with major retailers like Lidl and Amazon to make plug in solar available on the high street These DIY solar panels do not have upfront installation costs and are designed for balconies and small garden spaces They have been successful in Germany where it is estimated that more than 1 point 5 million homes have them But currently the panels are not sold in the UK as they do not meet safety regulations for electrical installations The government said it was working to review and update these in the coming months Mark Coles head of technical regulations at the IET said that because of the UK ageing housing stock and poorly maintained electrical installations introducing plug in solar could pose risks to homeowners Before purchasing any off the shelf generation product householders should have their electrical installation checked by a competent electrician What may be safe in one home may pose a significant risk in another he said A simple guide to climate change Four ways climate change worsens extreme weather What you can do to reduce carbon emissions Second wind turbine approved for port The Port of Immingham is to gain two wind turbines which will play a crucial role in energy security A general view of solar panels installed on the roof of a home Green energy company sees 8 hundred inquiries in a week Renewable energy firms say there is increased demand for things like solar and air source pumps Oxford Photovoltaics Limited

Oxford PV a trailblazing Oxfordshire enterprise developing advanced solar panels capable of converting more of the sun spectrum into clean affordable energy

11B United Kingdom England heat pump Heat pumps for all new homes and plug in solar in green tech drive AOL Developers will be required to install solar panels and heat pumps in all new homes in England as part of updated planning requirements published United Kingdom wood burning Has the wood burner had its final winter? Middle classes flocking to buy ecofriendly ceramic stoves MSN As DEFRA introduces ever stricter rules for traditional wood burners those seeking a statement fire without the side portion of eco guilt are 11C RAWSEP View Idiot Corner United Kingdom England London wood burning The top log burning stove problems and how to fix them Ideal Home Our troubleshooting guide to the most common log burning stove problems is here to ensure that you can fully enjoy all the benefits a wood burner United Kingdom Manchester wood burning Wood stoves heat up in UK as households hedge against soaring costs Courthouse News Service MANCHESTER England CN — Wood burning stoves are making a comeback in Britain as people look for cheaper or backup heating amid high energy prices

12 Nigeria Lagos PM 2 POINT 5 World Athletics Expands Air Quality Monitoring But Can Sports Fill the Global South Data Void? Health Policy Watch The walk coordinators carried portable air quality sensors logging particulate matter PM2 point 5 fine particles and PM10 coarse particles

13 India PM 2 POINT 5 Estimation of surface PM 2 POINT 5 over the Indo Gangetic Basin using MERRA 2 reanalysis and Nature Fine particulate matter PM 2 POINT 5 is a significant air pollutant in the Indo Gangetic Basin IGB where levels frequently exceed national and WHO India PM 2 POINT 5 India has 5 of the 10 most polluted cities in the world Loni in UP tops with alarming PM 2 POINT 5 levels Mint As per the recommended World Health Organization PM 2 POINT 5 levels the concentration of this hazardous air pollutant less than 5 micrograms per cubic

14 Nepal PM 2 POINT 5 Estimating the risk of anemia associated with PM 2 POINT 5 exposure in Nepalese women of Nature Here we show that higher PM 2 POINT 5 exposure is associated with an increased risk of anemia among Nepalese women Weighted regression models revealed a

15 Laos PM 2 POINT 5 Air pollution in Laos reaches unhealthy levels Xinhua PM 2 POINT 5 the fine particulate matter that causes smog is an air pollutant containing tiny particles with a diameter of less than 2 point 5 micrometers PM

16 China PM 2 POINT 5 AI guided multi omics analysis identifies NPC1 modulated susceptibility to SARS CoV 2 Nature Exposure to airborne fine particulate matter PM 2 POINT 5 has been linked to increased risk of the severe acute respiratory syndrome coronavirus 2

17 South Korea PM 2 POINT 5 Advanced reusable SAW based particulate matter sensor with microheater and porous Nature PM is typically classified into three categories based on particle size PM10 particles with a diameter less than or equal to 10 micrometer PM 2 POINT 5 less than or equal to 2 point 5 micrometer PM1 point 0 particles Excerpts edited by Residents Against Wood Smoke Emission Particulates a 501C3 nonprofit organization Nature March 24 2026 Advanced reusable SAW based particulate matter sensor with microheater and porous microstructured filter membrane for simultaneous PM10 and PM 2 POINT 5 detection Microsystems and Nanoengineering volume 12 Article number 104 2026 In this study we present a novel reusable surface

acoustic wave SAW based particulate matter PM sensor system capable of simultaneously and selectively detecting PM10 and PM 2 POINT 5 This is the first implementation of an integrated porous microstructure membrane acting as a mechanical filter for particle separation combined with an on board microheater for particle detachment enabling sensor reusability The membrane featured holes of approximately 3 micrometer and 11 micrometer in diameter allowing for selective detection of PM 2 POINT 5 and PM10 respectively Testing was conducted using PM10 and PM 2 POINT 5 fine dust and the sensor demonstrated high sensitivity to both PM categories A detailed calibration study was performed to ensure the system exclusively detects PM10 and PM 2 POINT 5 After exposing the sensor surface to three different concentrations of PM the microheater was activated by applying 12 V allowing the device to reach a maximum temperature of approximately one hundred degrees Centigrade This facilitated the sensor recovery to baseline levels under vacuum conditions making the sensor reusable

18 A new Covid 19 variant is getting attention What is going on? Covid 19 continues to mutate and the latest variant attracting attention is BA point 3 point 2 nicknamed Cicada a descendant of Omicron that has been circulating globally for some time BA POINT 3 POINT 2 now accounts for 11 percent of US cases COVID 19 BA point 3 point 2 possible Vaccine and Lyme Disease Vaccine information A new covid variant called Cicada ticks and a new Lyme vaccine common cold and good news Excerpts edited by Residents Against Wood Smoke Emission Particulates a 501C3 nonprofit organization The Dose newsletter by Katelyn Jetelina Your Local Epidemiologist March 31 2026 Good morning! Spring is here and so is a shift in what is circulating Flu season is officially behind us tick season is just getting started and a new Covid 19 variant is making the rounds in the news and on social media but has not yet been felt in hospitals And with Lyme disease season upon us the news of a long awaited vaccine could not be more timely though there are some real caveats worth understanding Here is what is going on and more importantly what it means for you Disease weather report what is spreading right now? Good riddance flu season We are officially out as rates have now fallen below the epidemic threshold Some states are still high like New Mexico but the trend is the same The other main fall winter viruses including RSV and Covid 19 are all decreasing too Odds are that if you get sick in the next month or two it will be the common cold the gray line below This will continue to increase until May June Percent of positive tests for respiratory viruses Source NREVSS Annotated by Your Local Epidemiologist Enter tick season Emergency department visits for tick bites are low but climbing which is normal for this time of year Expect two waves one peaking in May and another in the middle of October By the end of year 2026 more than five hundred thousand people will likely be diagnosed and treated for Lyme disease Source CDC Tick Bite Data Tracker Annotated by Your Local Epidemiologist Ticks thrive in warm lush spring environments and can carry pathogens responsible for over a dozen diseases Lyme is the most known well It can cause flu like symptoms and if untreated serious complications including neurological and cardiac issues Not all ticks carry disease Risk depends on the species geography and duration of a tick attachment Currently tick borne illnesses are most concentrated in the Northeast with emergency department ED visits at 13 per one hundred thousand people What this means You can take several steps to protect yourself from ticks including applying DEET or picaridin treating clothing and gear with products containing 0 point 5 percent permethrin and conducting thorough tick checks after engaging in outdoor activities Here is a YLE deep dive on tick threats A new Covid 19 variant is getting attention What is going on? Covid 19 continues to mutate and the latest variant attracting attention is BA point 3 point 2 nicknamed Cicada a descendant of Omicron that has been circulating globally for some time BA POINT 3 POINT 2 now accounts for 11 percent of US cases but it is too early to tell how quickly it is growing What is clear is that it has yet to trigger a surge Wastewater levels emergency department visits and hospitalizations all remain low Historically a variant does not drive a significant new wave until it reaches approximately 50 percent of cases percent of circulating variants for Covid 19 Source CDC What is drawing attention is the spike protein which has 75 mutations compared with the strains included in last fall 2025 Covid 19 vaccines The spike protein acts like a key that unlocks our

cells and when that key changes enough existing antibodies struggle to recognize and block it Lab studies confirm this is happening but antibodies are just one layer of defense The immune system has other tools that protect against serious illness and current immunity is expected to hold up One thing researchers are actively tracking early signals suggest BA POINT 3 POINT 2 may be infecting kids at higher rates than previous variants It is hard to know whether this is real or just random chance but if it is real it is likely due to a combination of many factors For example younger kids might not have seen as many Covid 19 variants or had as many coronavirus infections as adults so they might be less immune to it Q Could this cause a spring summer wave? A We have very little data on how fast this is growing so time will tell My guess is this will cause a spring summer wave but not a nothing burger or a tsunami Q Should people over 65 get a spring Covid 19 shot? A If it is been at least three months since your last dose a spring shot is a reasonable call Timing it around May or June tends to align well with how Covid 19 seasons typically play out Q Is a second shot within a year a booster? Or is it only a booster if the formulation is different? A The term gets thrown around loosely Generally a booster means a repeat dose of the same vaccine not necessarily a new formulation The strains for the next updated Covid 19 vaccine have not been selected yet so there is no new version available right now If a pharmacist tells you there is no booster available they may be thinking specifically of an updated formulation A repeat dose of the current vaccine is still an option worth asking about Q Could BA POINT 3 POINT 2 spark the next pandemic? A No In fact researchers have argued that another coronavirus pandemic is now less likely not more precisely because Covid 19 and the vaccines that followed built widespread robust immunity across the global population A Lyme disease vaccine may finally be on the horizon Ticks spread Lyme disease one of the most common and debilitating infections in the country and for the first time in over two decades a vaccine to prevent it may finally be on the way The only vaccine we had before LYME r ix was pulled from the market in 2002 Not because it was unsafe the FDA found no real problems but because rumors about arthritis side effects amplified by bad press and lawsuits scared people Now Pfizer and French vaccine company Valneva have announced their new vaccine candidate worked in more than 70 percent of cases in a large late stage trial of ninety four hundred people aged five and older How does the Lyme disease vaccine work? The vaccine works differently from most other vaccines in a very cool way Instead of just protecting you it actually works inside the tick The vaccine trains your body to make antibodies against a protein called O s p A found on Lyme causing bacteria When a tick bites you it drinks your blood along with those antibodies The antibodies neutralize the bacteria in the tick gut stopping it from ever reaching its salivary glands and getting into you But there are a few things worth understanding The trial hit a statistical snag The trial had fewer Lyme disease cases than expected making the results too uncertain to be conclusive Researchers had planned two ways to measure the vaccine effectiveness before the study began one starting twenty eight days after the final dose which fell just short of the required confidence threshold and one starting the day after the final dose which cleared it Pfizer cited both results in deciding to seek regulatory approval The regulatory path is murky The manufacturer will seek FDA approval and if granted the vaccine will go to ACIP for a policy recommendation The problem ACIP currently has no members What happens next is genuinely unclear The bigger question is whether people will actually use it The vaccine requires four doses over about a year plus what looks like an annual booster before tick season That is a real commitment Lyme disease is far better known today than it was in 2002 which gives people more reason to seek protection But wanting a vaccine and completing every dose are two very different things Good news TB rates are falling after years after the rise during the COVID 19 pandemic New CDC data show that last year ten thousand two hundred sixty TB cases were reported representing a 2 percent decline in the national rate compared with the year before Cases fell across twenty six states and Washington DC The seasonal transition brings real shifts in disease risk and a little awareness goes a long way Have a wonderful week! Love Your Local Epidemiologist YLE