

2023 VIRTUAL ANNUAL CONFERENCE & MEETING

BEYOND BUZZWORDS: ACTION FOR EQUITY

DATA IN ACTION PANELISTS



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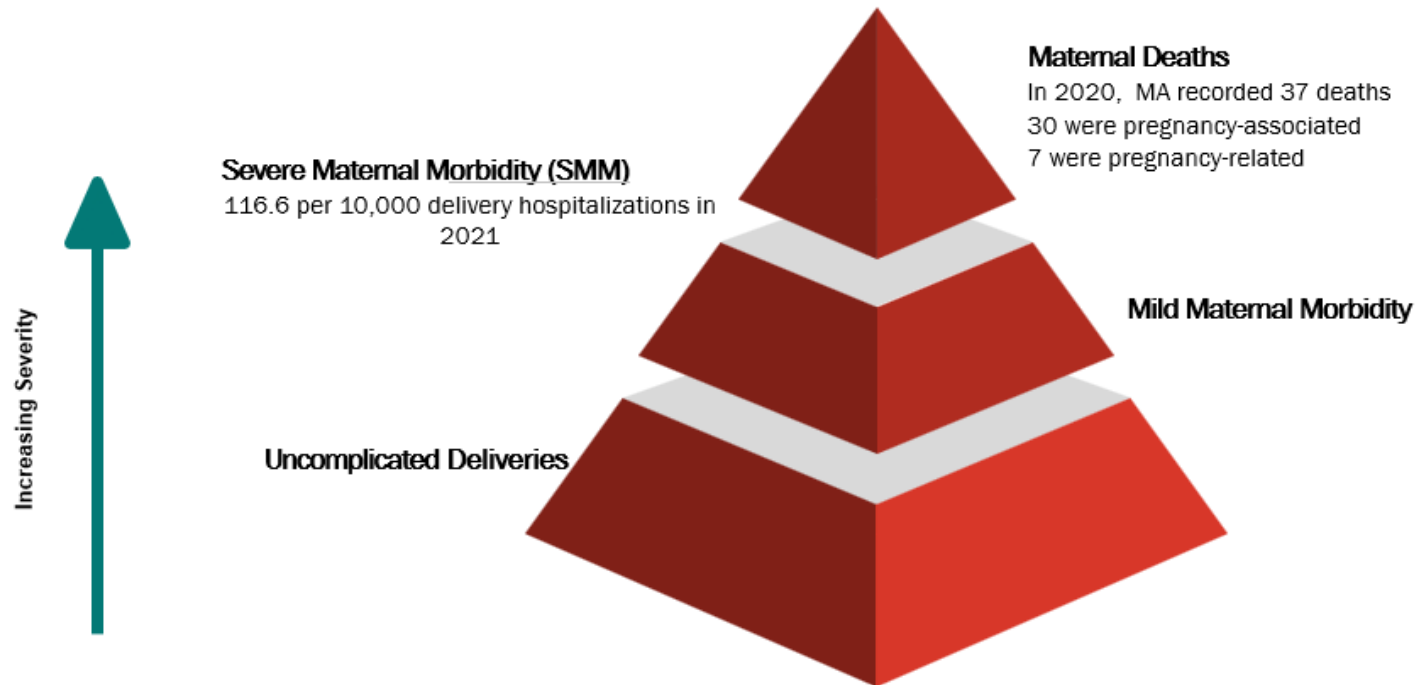
Maternal Mortality and Severe Maternal Morbidity: From Data to Action

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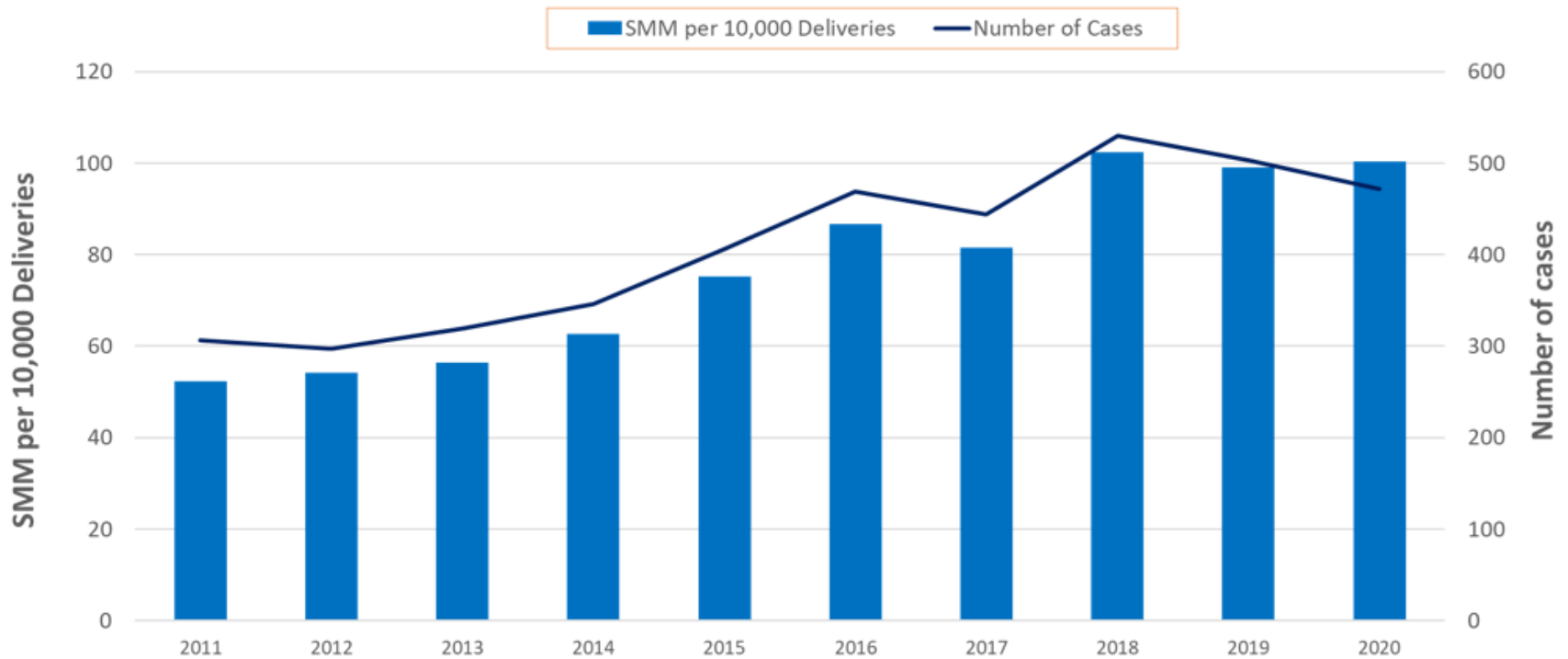
Massachusetts Public Health Association Annual Conference
November 16, 2023

Spectrum of Maternal Morbidity in Massachusetts

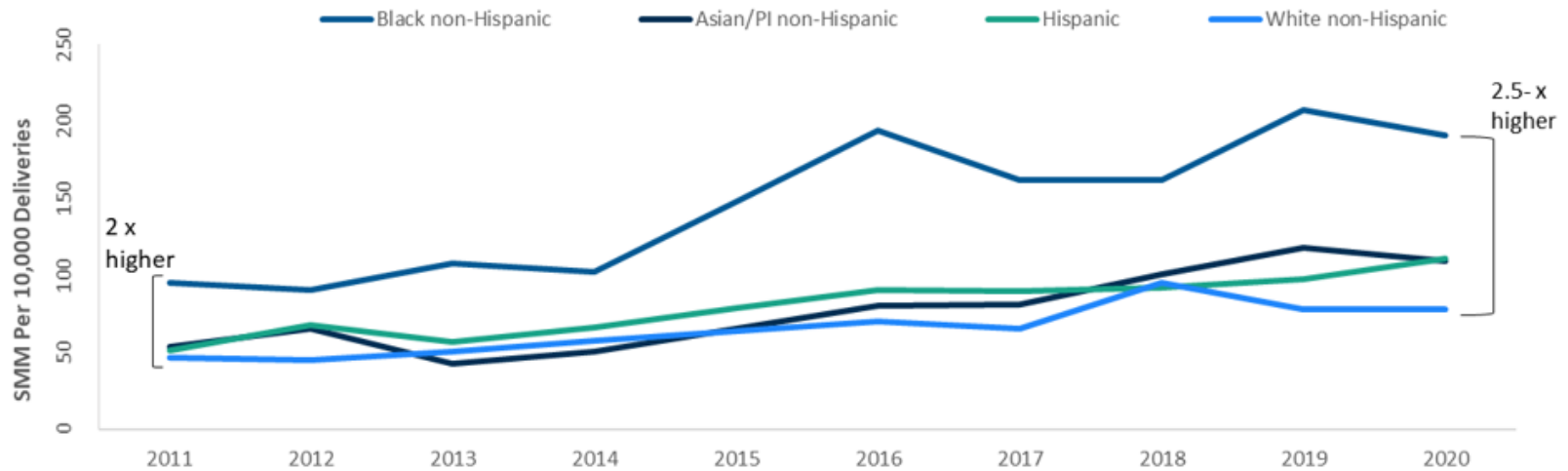


Note: Pregnancy-associated death is defined as the death of person during pregnancy or within one year of the end of pregnancy regardless of the cause. Pregnancy-related (maternal death) is the death of a person during pregnancy or within one year of the end pregnancy from a pregnancy complication, a chain of events initiated by pregnancy, or the aggravation of an unrelated condition from by the physiologic effect of pregnancy.

Severe Maternal Morbidity in Massachusetts: 2011-2020



SMM by Race and Hispanic Ethnicity, MA: 2011-2020



Note: Rates for American Indian and Other non-Hispanic birthing people are not shown because these are based on a total of 39 events ranging from 1-4 for all years except for 2 where the counts were 6.

Data to Action: Legislative Act

- Racial Inequities in Maternal Health Commission was established by Chapter 348 of the Acts of 2020, An Act to reduce racial inequities in maternal health
- Commission was tasked with seeking out steps to address racial inequities in maternal health and provide guidance and advice to the Governor, the General Court and the Secretary of Health and Human Services relative to reducing racial inequities in maternal deaths and severe maternal morbidity
- Make comprehensive recommendations to reduce or eliminate racial inequities in maternal health

Data to Action: Direct Clinical Care

- Implemented remote blood pressure (BP) monitoring programs at Baystate Medical Center in Western MA using Babyscripts, and at Brigham and Women's Hospital in Boston using a Bluetooth-enabled BP monitor to improve awareness of obstetric warning signs for patients with hypertensive disorders of pregnancy in the postpartum period
- More than half of maternal deaths occur during the postpartum
- 35% of pregnancy-associated deaths with medical causes had documented hypertensive disorders, and Black non-Hispanic had the highest percentage of deaths due to a medical cause at 70.6% and the highest percent of documented hypertension on birth and death certificates at 47%.

Data to Action: Perinatal Neonatal Quality Improvement Network (PNQIN)

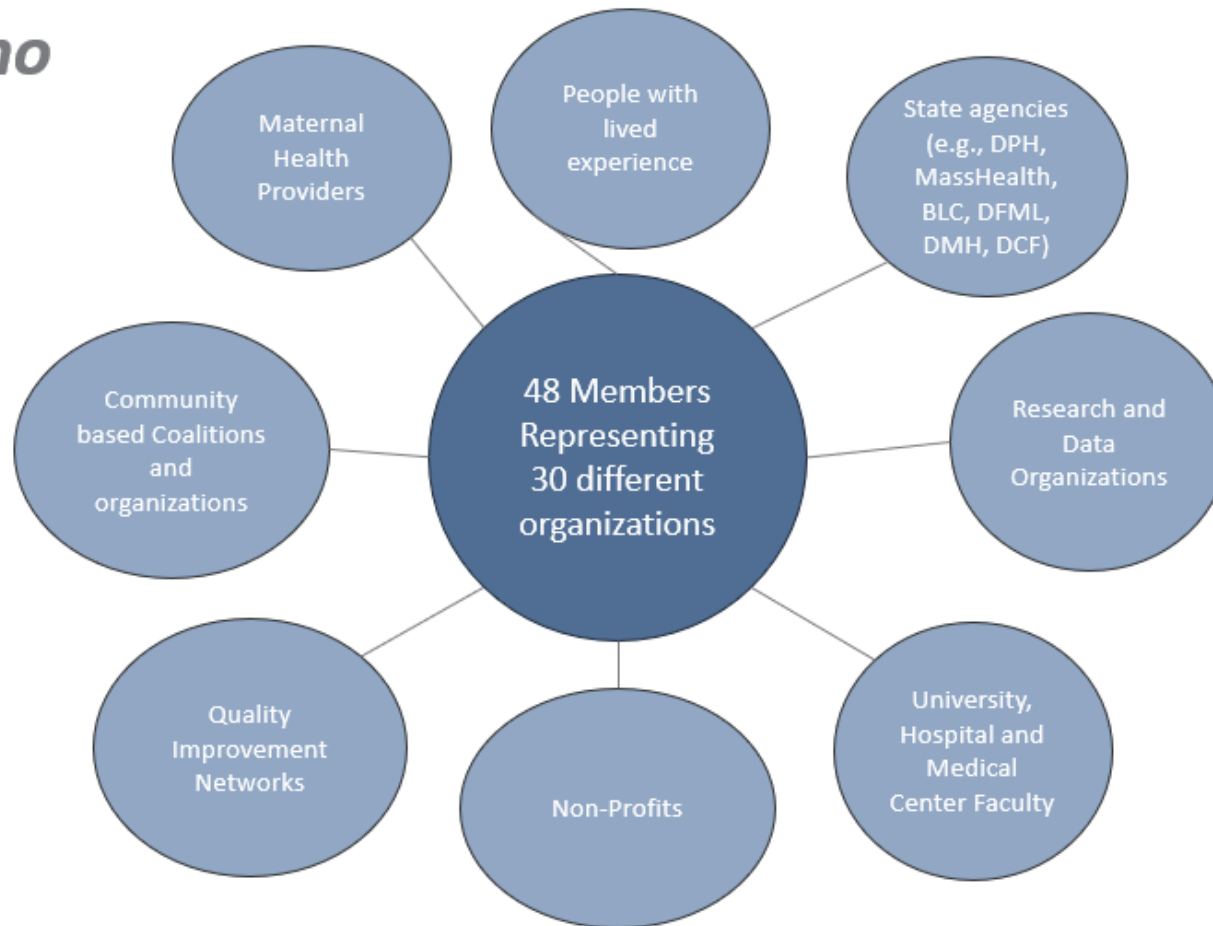
- Implemented hypertension and hemorrhage bundles
- Launched Maternal Equity Bundle in October 2022 to reduce overall rates SMM and to close the Black-White gap in SMM
- DPH provided funding for the SPEAK UP against racism training offered by the Institute for Perinatal Quality Improvement; we have trained over 500 providers across 34 birthing hospitals to dismantle racism, provide respectful care that is equitable and high-quality, and eliminate perinatal health inequities.

Data to Action: Levels of Maternal Care

- Implement the Levels of Maternal Care using the CDC's Levels of Care Assessment Tool (LOCATe) and MA equity focused-questions
 - Does your hospital provide implicit bias and anti-racism training for physicians, nurses, and staff?
 - Does your hospital provide education on peripartum racial and ethnic disparities?
 - Does your hospital have a dedicated system or process for patients and families, and/or for staff to report discrimination, racism, and bias; and addressing social determinants of health?
- Established and convened a multi-disciplinary Implementation Steering Committee including 40 members representing 23 organizations to develop a plan to sustain the Level of Maternal Care model in MA

Massachusetts Maternal Health Task Force

The Who



2023 MPHA Annual Conference

Leveraging Data for Action in Addressing Drinking Water Inequities in Massachusetts

Amie Shei, Ph.D.

President and CEO, The Health Foundation of Central Massachusetts

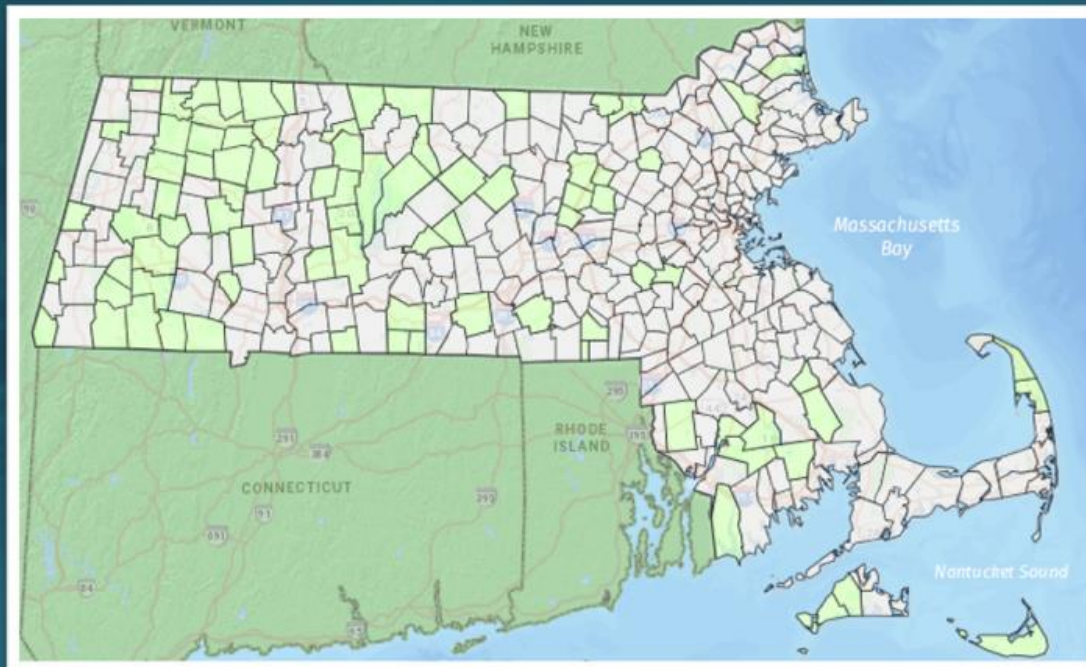
The Health Foundation of Central MA

- Health conversion foundation launched in 1999
- Mission: to improve the health of those who live or work in Central MA, with an emphasis on unmet needs and vulnerable populations



- 81 cities and towns – Worcester County and some surrounding towns
- Range of urban & rural municipalities
 - Worcester: 207,000
 - Warwick: 780

Private Wells Span the Commonwealth



- ~500,000 MA residents (~7%) rely on private wells
- 84 towns have $\geq 60\%$ residents on private wells

Source: MassDEP

Yet, Private Wells Are Unregulated

The image shows two overlapping web browser screenshots. The left screenshot is from the Mass.gov website, specifically the 'Private Wells' page. The right screenshot is from the EPA website, showing an 'Overview of the Safe Drinking Water Act' page.

Mass.gov Screenshot:

- Header: "An official website of the Commonwealth of Massachusetts" and "Here's how you know".
- Navigation: "Menu", "Select Language", and "Search Mass.gov".
- Logo: "Mass.gov" with the state seal.
- Section: "Private Wells" with subtitle "Guidance, Water Quality & Testing, and Other Resources for".
- Offered by: "Massachusetts Department of Environmental Protection".
- Alerts: "Notices & Alerts" (yellow bar).
- Text box: "Private wells typically provide water to single family homes. MassDEP does not regulate private wells. Your local board of health or health department regulates them. We provide these resources to help well owners learn about proper practices for safe water."

EPA Screenshot:

- Header: "An official website of the United States government" and "Here's how you know".
- Logo: "EPA United States Environmental Protection Agency".
- Navigation: "Environmental Topics", "Laws & Regulations", "Report a Violation", "About EPA".
- Related Topics: "Safe Drinking Water Act".
- Section: "Overview of the Safe Drinking Water Act".
- Text: "The Safe Drinking Water Act (SDWA) was originally passed by Congress in 1974 to protect public health by regulating the nation's public drinking water supply. The law was amended in 1986 and 1996 and requires many actions to protect drinking water and its sources—rivers, lakes, reservoirs, springs, and ground water wells. SDWA does not regulate private wells which serve fewer than 25 individuals. SDWA authorizes the United States Environmental Protection Agency (US EPA) to set national health-based standards for drinking water to protect against both naturally-occurring and man-made contaminants that may be found in drinking water. US EPA, states, and water systems then work together to make sure that these standards are met."
- Link: "Understanding the Safe Drinking Water Act (pdf) (368.27 KB)".

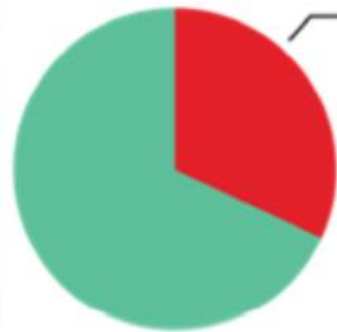
Actual Drinking Water Sources



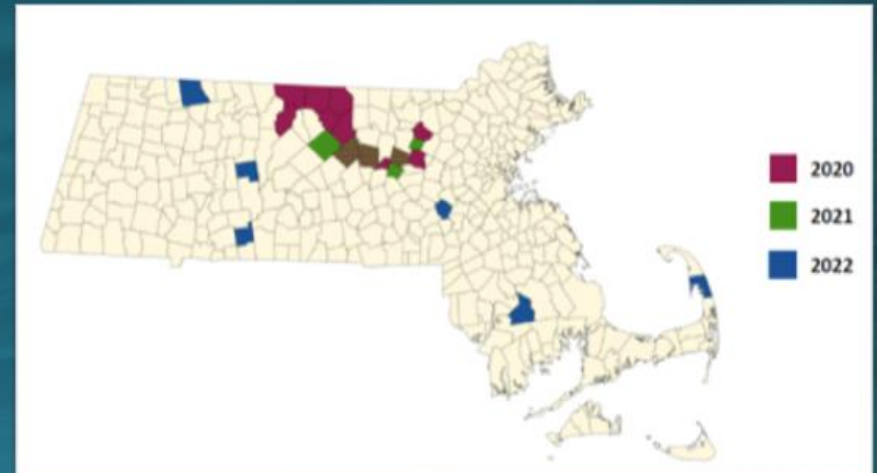
Photo credit: RCAP Solutions

RCAP Solutions Grant (2020-present)

- \$1.5M in grant funding to date
- 502 private wells tested



32% of private wells sampled in 2020–2022 had levels of contaminants exceeding state health standards and/or suggesting potential health risks



Homeowner Surveys

- Participants in the RCAP Solutions project were invited to complete surveys conducted by Education Development Center
- Key findings:
 - The majority of households conduct well assessment and water testing infrequently and irregularly. Only 13% of homeowners reported testing well water annually for contaminants at the time of their RCAP well assessment.
 - Many are likely to make repairs when water tests reveal dangerous levels of contaminants. Nearly half indicated that they had paid for or would pay for well remediation after testing found contaminants.
 - A majority indicated statewide support for statewide private well regulations.

MassDEP PFAS Sampling Program

- Per MassDEP, PFAS exposures have been linked to a variety of health risks, particularly in people who are immune-compromised, women who are pregnant or nursing, and in infants
- 1,668 private wells were sampled under free program funded by Legislature from 2020-2022



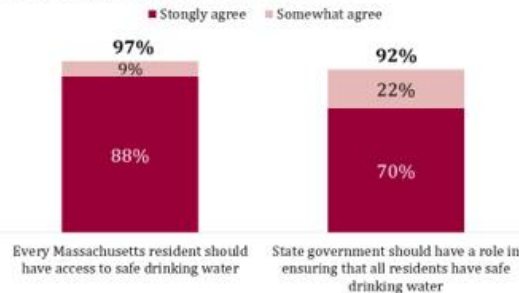
Statewide Poll Shows Strong Support

- 1,013 MA residents polled in August, 2023

Nearly all agree state has a role in water safety

- Nearly all residents agree that every residents should have access to safe drinking water (97%), and that the state should have a role in ensuring that (92%).
- Majorities across all demographic groups *strongly* agree with these statements.

Nearly all agree state has a role in ensuring all residents have safe drinking water
% who say they strongly / somewhat agree with each statement



MassINC
POLLING GROUP

Q: How much do you agree or disagree with each of the following statements?

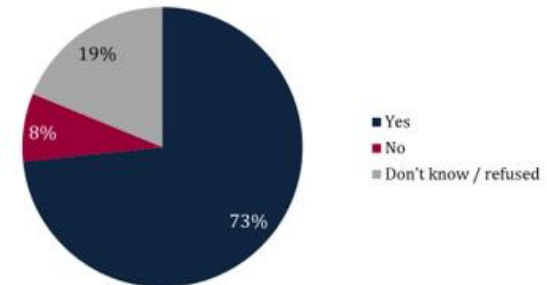
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Support for protecting well water

- Nearly three-quarters (73%) think well water should be protected in the same way as other sources of drinking water.

Nearly three-quarters (73%) say well waters should be protected

% who say well water should or should not be protected in the same way as other water sources



MassINC
POLLING GROUP

Q: Right now, Massachusetts has statewide protections for public water systems across different regions and municipalities but not for private wells, which provide drinking water to approximately half a million residents in Massachusetts. Do you think that well water should be protected in the same way as other sources of drinking water in the state to ensure public health?

Poll results: <https://www.massincpolling.com/the-topline/water-quality-poll>

Proposed Legislation

- *An Act Promoting Drinking Water Quality for All (S.482/H.902)*
 - Sponsored by Sen. Eldridge, Rep. Sena, and Rep. Pignatelli



- Enable MassDEP to develop minimum statewide private well regulations
- Expand existing MassHousing Septic Repair Loan Program (SRLP) to include private well remediation for low-income homeowners
- Joint Committee on Environment and Natural Resources hearing held September 27, 2023

Media Coverage *(a sampling)*

Everyone deserves safe drinking water

The Boston Globe (editorial)
Oct. 15, 2023

Mass. could require testing private well water with real estate transfers

Worcester Telegram & Gazette
Sept. 20, 2023

Private well owners stuck with costs to treat 'forever chemicals'

WBUR
Feb. 15, 2023

Addressing the drinking water gap in Mass.

CommonWealth Beacon (opinion)
April 2, 2022

Cambridge water issues highlight urban, rural inequities

The Boston Globe (Letter to Editor)
Nov. 24, 2022

Poll cited in push for private well water protections

WWLP
Sept. 20, 2023

Bill introduced to regulate private water wells in Massachusetts

Spectrum News 1
Jan. 31, 2023

What's @ Risk radio show / podcast episode re: drinking water safety and health equity

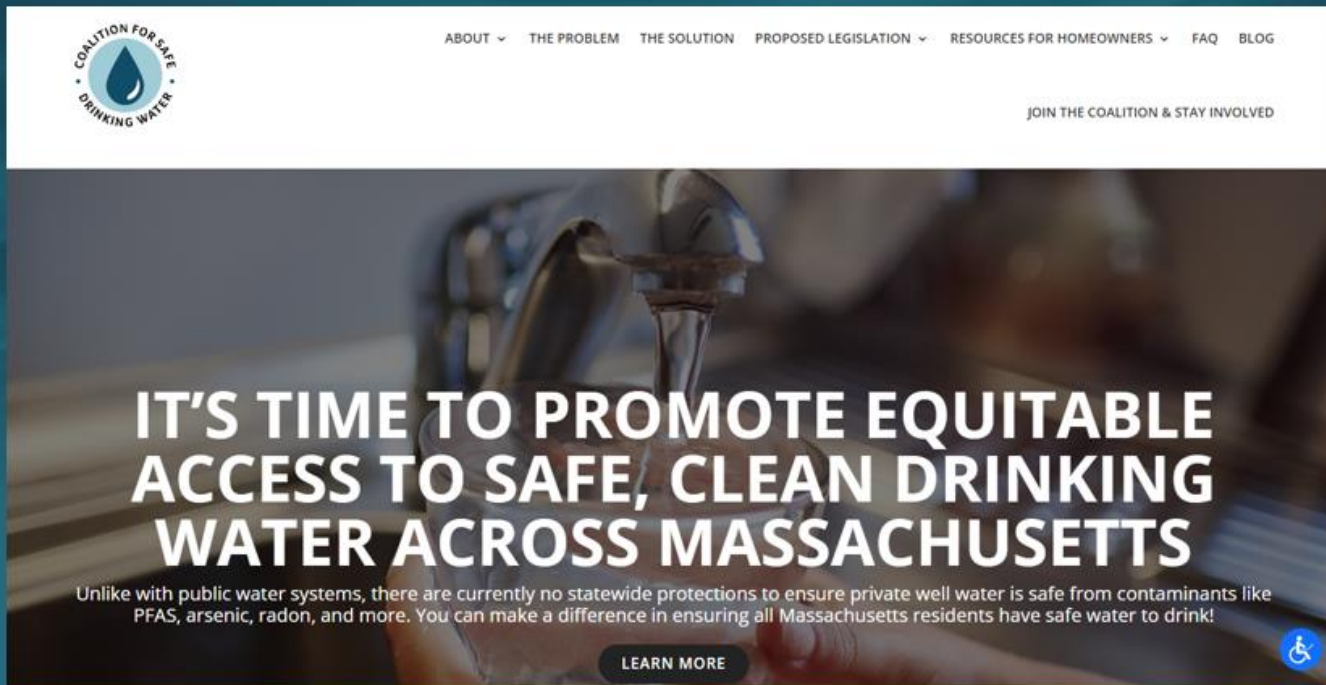
WBZ NewsRadio
Oct. 15, 2023

Mass. plagued by regional inequities

CommonWealth Beacon (opinion)
Dec. 5, 2022

Continuing to Build Momentum

www.whatsinyourwellwater.com



The screenshot shows the homepage of the Coalition for Safe Drinking Water. At the top left is the logo, a blue circle with a white water drop and the text "COALITION FOR SAFE DRINKING WATER". To the right is a navigation menu with links: "ABOUT", "THE PROBLEM", "THE SOLUTION", "PROPOSED LEGISLATION", "RESOURCES FOR HOMEOWNERS", "FAQ", and "BLOG". Below the navigation is a call to action: "JOIN THE COALITION & STAY INVOLVED". The main content area features a background image of a hand holding a glass under a running faucet. Overlaid on this image is the headline: "IT'S TIME TO PROMOTE EQUITABLE ACCESS TO SAFE, CLEAN DRINKING WATER ACROSS MASSACHUSETTS". Below the headline is a sub-headline: "Unlike with public water systems, there are currently no statewide protections to ensure private well water is safe from contaminants like PFAS, arsenic, radon, and more. You can make a difference in ensuring all Massachusetts residents have safe water to drink!". At the bottom center is a "LEARN MORE" button, and at the bottom right is a blue accessibility icon (a person in a wheelchair).



Healthy Air NETWORK

Healthy Air Network: *Data to Action*

MPHA
November 16, 2023



Yale
SCHOOL OF
PUBLIC HEALTH

ReGreen
Springfield



**PUBLIC HEALTH INSTITUTE
OF WESTERN MASSACHUSETTS**
PARTNERS FOR HEALTH EQUITY



Massachusetts
Asthma Action Partnership



Health Resources in Action
Advancing Public Health and Medical Research

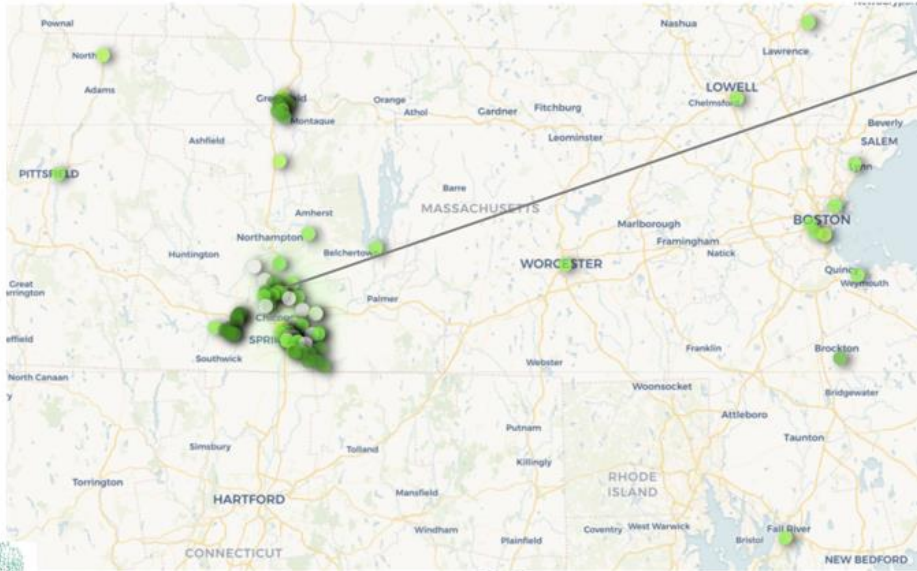
HealthyAirNetwork.org

Local Air Quality Why air quality? Advocacy Host an Air Monitor Resources Photos About Contact



Explore Air Quality Across Massachusetts

Each circle on the map shows an air monitor located in the Healthy Air Network. The color will change based on measured air quality. You can click on each circle for more information about the monitoring site and what precautions to consider – if any. The grey moving lines show the current wind conditions.



Pine Point, Springfield

Springfield City Library at Pine Point

Air Quality

AQI 67 **Moderate**
Who should be concerned?
People with respiratory or heart disease, the elderly and children.

PM_{2.5} 18.0 **What should I do?**
People with respiratory or heart disease, the elderly and children: Consider reducing prolonged or heavy exertion. Watch for symptoms such as coughing or shortness of breath. These are signs to take it easier.

Ozone 60
AQI is based on **PM_{2.5}** Everyone else: It's a good day to be active outside.

Weather

☁️ **68°** Clouds giving way to some sun; less humid this afternoon.
💧 **40%**
🌬️ **5 mph**

Pollen

🌳 **Tree** **Low**
🌿 **Grass** **Low**
🌾 **Ragweed** **Low**

Updated: Jan 12, 2023 14:00



Collaborative Partners

Organizations

- Public Health Institute of Western MA
- Yale University
- City of Springfield
- City of Holyoke
- ReGreen Springfield
- Hitchcock Center for the Environment
- WRAFT-Westfield Resident Advocating for Themselves
- Earthwatch
- US Forest Service
- Pioneer Valley Asthma Coalition
- Live Well Springfield
- Massachusetts Asthma Action Partnership

Western MA Resident Advisory Board

- Residents from Springfield, Holyoke, Chicopee, Westfield
- Recruited from climate, healthcare, community groups



Why we're involved

- “Because of my son who has asthma, and because I now have asthma too”
- “To bring community voice in science decisions.”
- “Air is life. If you don't breathe you die, and you need to focus on the environment.”
- “To use this healthy air quality mapping tool, as evidence for policies.”



Capacity Building

- Health Equity
- Policy Advocacy
- Environmental Justice
- Water Quality
- Data to Action



Community Outreach

- Demonstration of Air Sensor/
DIY Air Purifier



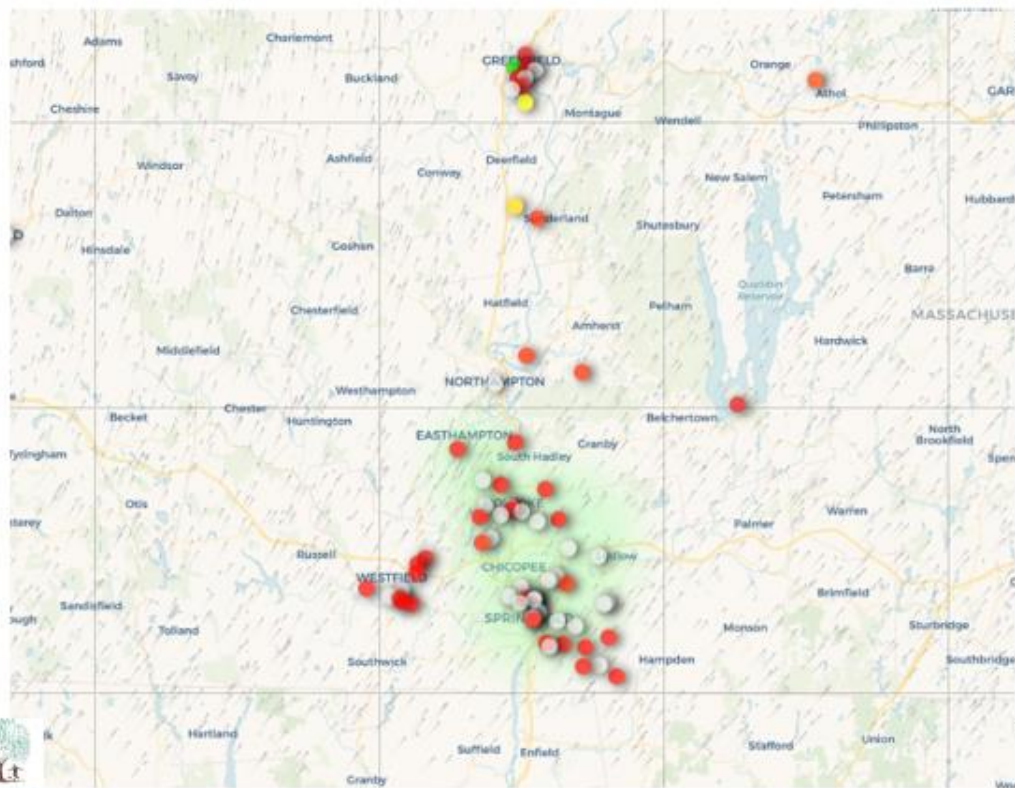
Tracking Air Pollution Episodes

- Reduced air quality from wildfires!



Explore Air Quality in Western Massachusetts

Each circle on the map shows an air monitor located in the Healthy Air Network. The color will change based on measured air quality. You can click on each circle for more information about the monitoring site and what precautions to consider – if any. The grey moving lines show the current wind conditions.



Rock Valley, Holyoke

Holyoke
157485

Air Quality

AQI 104
Unhealthy Sensitive
Who should be concerned?
Sensitive groups: people with heart or lung disease, older adults, children and teenagers

PM_{2.5} 42.3 $\mu\text{g}/\text{m}^3$

Ozone N/A
AQI is based on PM

What should I do?
Sensitive groups: Reduce prolonged or heavy exertion. It's OK to be active outside but take more breaks and do less intense activities. Watch for symptoms such as coughing or shortness of breath. If you have asthma, follow your asthma action plans and keep quick relief medicine handy. If you have heart disease, symptoms such as palpitations, shortness of breath, or unusual fatigue may indicate a serious problem. If you have any of these, contact your health care provider.

Weather

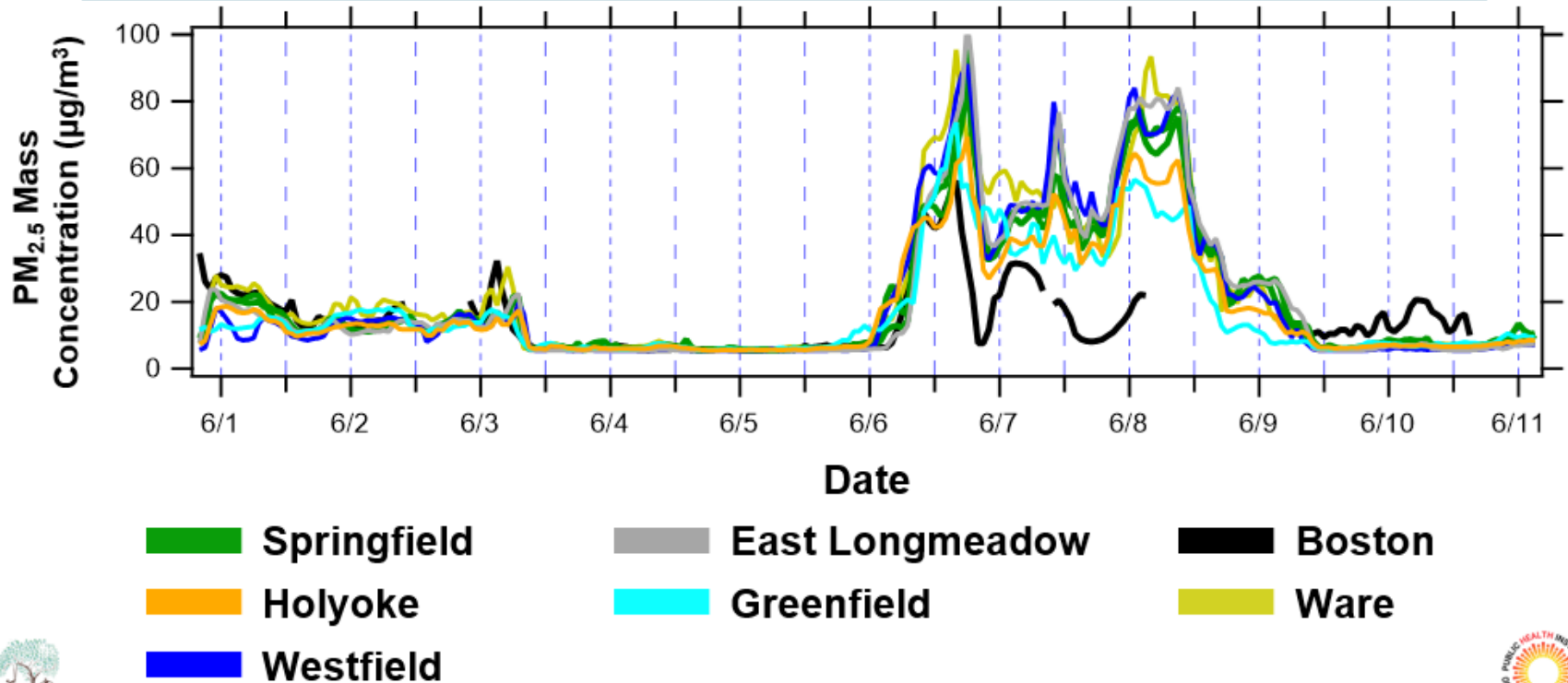
Temperature 58.3°F
Precipitation % 7%

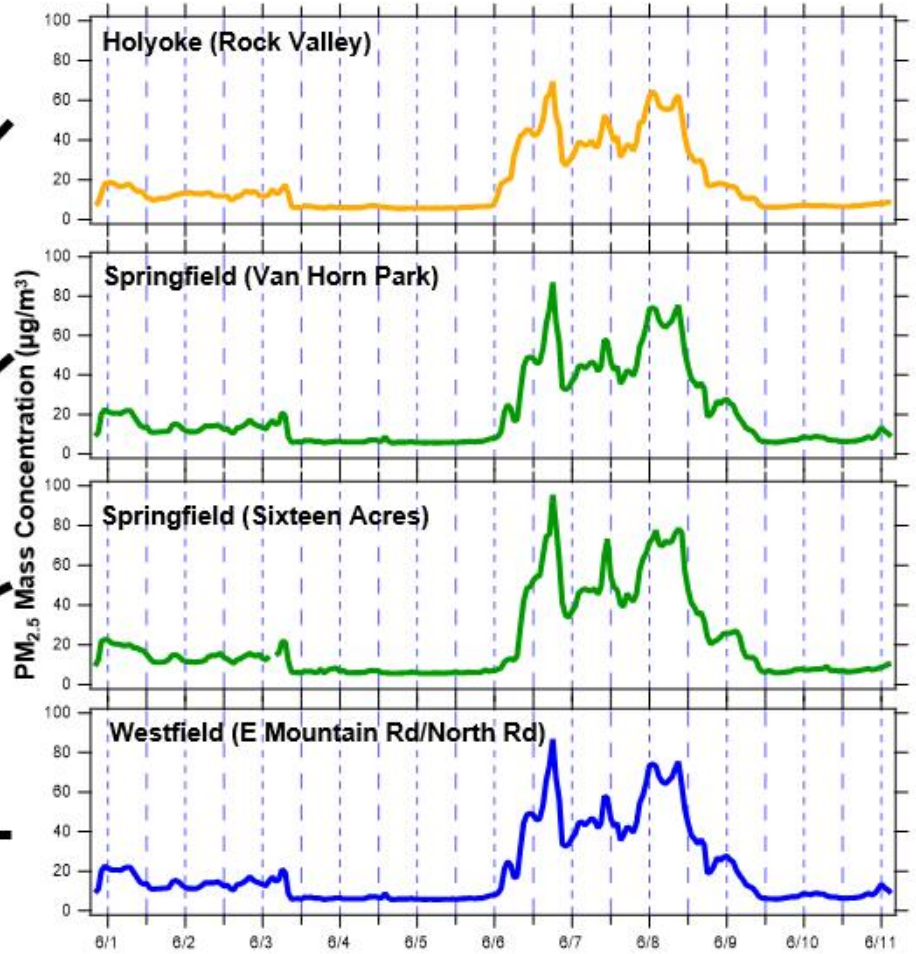
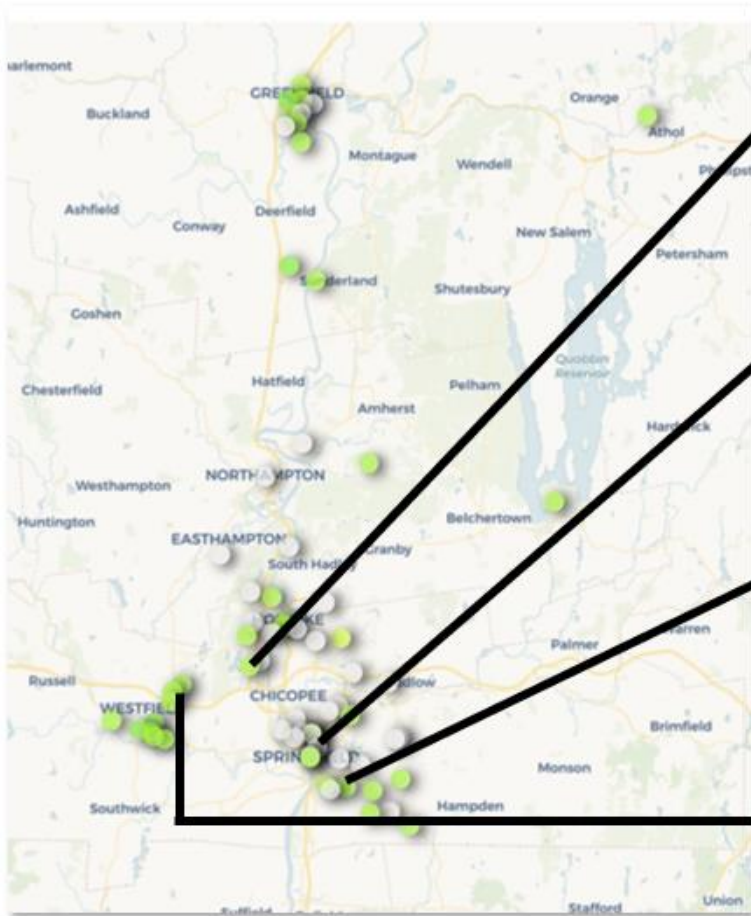
Pollen

Trees High
Grass Moderate



Wildfires Caused Poor Air Quality Across MA





Data to Action: Wildfire Response

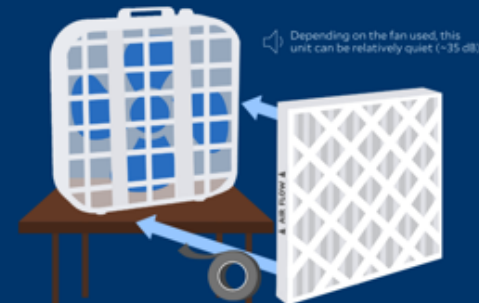
- City of Northampton issues press release
- School district asks about school activities
- Parents reach out about sports activities

DIY AIR CLEANER



Improve the Air Quality in Your Home

LOW-COST AIR CLEANER



WHAT YOU NEED:

- 20" x 20" box fan
- 20" x 20" x 2" MERV13 or higher rated (i.e. HEPA) filter
- Duct tape

HOW TO ASSEMBLE:

Attach the filter to the back of the fan with duct tape. This air purifier works best if above the ground – placement on a small table is a good option.

Yale SCHOOL OF PUBLIC HEALTH

FAQ

- Before attaching the filter, check the filter direction and make sure it is pointing to the fan.
- Place fan in the middle of a room, away drapes & sources of dust.
- It can take 10-15 minutes to clean the air in a small room.
- In a large room, keep the filter closer to you.
- It costs only a few cents per hour in electricity.
- Replace the filter every 90 days or when it looks dirty.
- Turn off the fan periodically to prevent overheating.
- Don't leave it unattended or on overnight.

Because Air Pollutants Harm Your Health.

Cooking, lighting candles, burning fuels, construction, and other common activities both in and outside the home can pollute the air with fine particulate matter. These particles are very small and may float in the air for a long time. Once inhaled, they can move from the lungs into the bloodstream, impacting other organs in the body. Poor air quality can worsen the health of people with asthma, allergies, heart disease, and other illnesses.

THIS IS A PROJECT OF THE HEALTHY AIR NETWORK.
VISIT HEALTHYAIRNETWORK.ORG TO LEARN MORE.

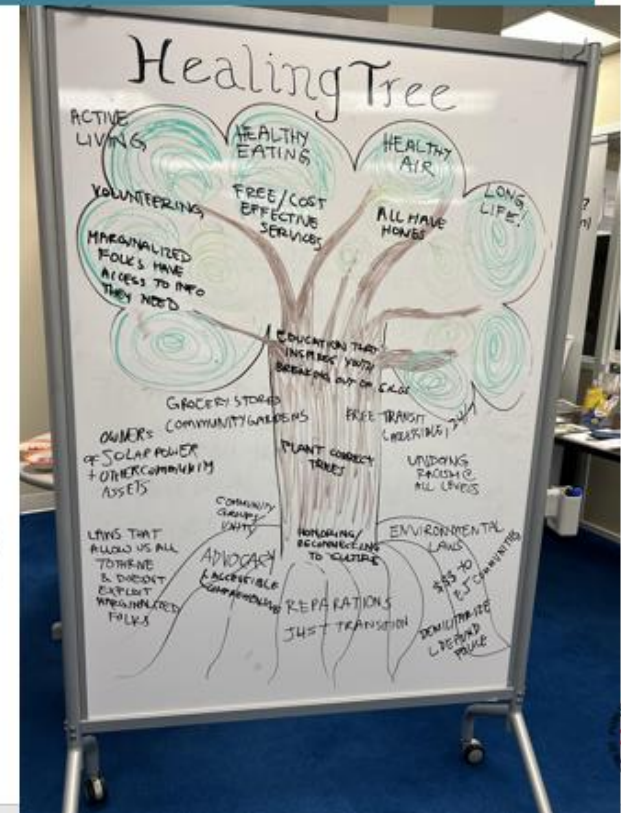


What makes air quality better?

Understanding the root causes can help us create better solutions.

Examples:

- Urban Forestry to address Heat Islands
- Improved Public Transit to decrease emissions
- Energy Efficiency and Clean Energy to reduce emissions from home heating



Healthyairnetwork.org

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Healthy Air
NETWORK

