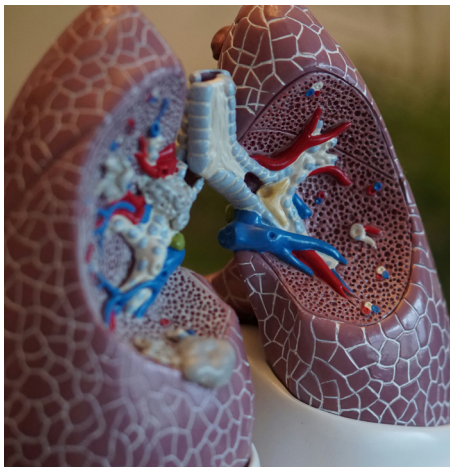










ISSUE BRIEF

Improving Community Respiratory Health

Place-Based Lessons from the Field

FSG REIMAGINING SOCIAL CHANGE

Supported by

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About this Issue Brief

Climate change is intensifying the threats to Americans' respiratory health, and the systems meant to respond are under strain. Worsening ozone, wildfire smoke, and extreme heat mean ~150 million Americans, or 44% of the population, now live in places with unhealthy air. That burden falls hardest on communities already facing high rates of asthma and chronic lung disease.[1] Much of the response is falling to local organizations that are underfunded and working in isolation.

However, communities across the country are implementing practical, place-based solutions that are ready to be learned from and scaled. This brief captures lessons from that work so funders, policymakers, and practitioners can act on what works and invest where it matters most.

Its findings draw on secondary research and interviews with leaders from community-based organizations, global NGOs with U.S. place-based programs, philanthropy, and policy advocacy organizations. A full list of references and contributors appears at the end of this brief.



WHAT'S INSIDE

1. **The Problem** outlines the converging climate, policy, and cost pressures on community respiratory health.
2. **What Works** identifies six elements of effective place-based models.
3. **Local Case Studies** share lessons from Detroit and Western Massachusetts.
4. **Opportunity for Action** lays out what funders, policymakers, and practitioners can do now.

FSG REIMAGINING SOCIAL CHANGE

About FSG

FSG is a global nonprofit consulting firm that advances equitable systems change. Its work spans climate, population health, health equity, and place-based initiatives, drawing on years of partnering with foundations on long-term community health efforts and helping companies act as local change agents.

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About our Sponsor

Our appreciation to FSG partner Sanofi, a global healthcare company, who supported this brief, recognizing the increasingly urgent need for funding, partnership and support for sustainable and equitable community respiratory health.

This brief was sponsored by Sanofi, and FSG retained full editorial control over the research findings and recommendations. It was first published in October 2026.

1 The Problem

Converging Risks to Progress and a Narrowing Window for Action

Leaders across the environment and healthcare sectors have been facing converging risks to respiratory health progress that make the case for collective action. Climate-related exposures, compounded by shifting policy and funding landscapes, are worsening respiratory health outcomes within communities. In 2024, 3,722 deaths were attributed to asthma and 145,643 people died from chronic obstructive pulmonary disease (COPD).[2,3] Asthma death rates have not improved over the past decade, and COPD remains a leading cause of death.[4,5] Unless we address the risks to progress, inequalities in respiratory care will widen, worsening patients' quality of life and increasing deaths.[6] These trends are translating into significant economic and operational costs, weighing on an already strained healthcare system.

EXHIBIT 1

CONVERGING RISKS TO COMMUNITY RESPIRATORY HEALTH

Rising Climate-driven Exposures

Wildfires, extreme heat events, and shifting pollutant patterns are increasing the frequency and severity of poor-air days.

Over 56 million people across 140 counties in 25 states were put at risk on severely polluted days in 2025.[7]

Such short-term increases in pollution have been linked to increases in asthma hospitalization in children and ED visits for COPD.

Policy & Funding Shifts

Data accessibility, environmental protections, coverage, and public health capacity have all been subject to significant policy shifts.

In 2025, 21% of nonprofits that experienced government funding disruptions reported a decrease in total people served.[8]

Over 3,000 federal datasets were removed, hindering the ability to track disparities.[9]

Budget cuts are projected to result in over 10 million people losing coverage under Medicaid and disrupt local care systems.[10]

Escalating Economic & Operational Costs

Climate and air-pollution related health impacts generate substantial economic burdens and strain on the healthcare system.

The Natural Resources Defense Council (NRDC) estimated the health costs to exceed $800 billion per year and are likely to grow without action.[11]

These costs are attributed to premature deaths, increased ED visits and treatment, disrupted patient lives, and other factors.

These Forces are Straining Community Respiratory Systems

Reduced staffing and narrower data collection diminish the ability to detect and respond to local respiratory risks in real time. These impacts increase operational strain on community health providers through surges in hospitalizations, staffing disruptions, and ensuring patients can access care to manage their respiratory disease.

COPD exacerbations, emergency department (ED) visits, and hospitalizations, already account for over 70% of the total economic burden of the disease, costing approximately $50 billion annually.[12,13] Without sustained policy and funding, these impacts are projected to worsen. Paired with the expansion of data centers, places such as Memphis are facing significant increases in air pollution, heightening the risk of respiratory disease and ED visits. This is predicted to cause $30-40 million per year in health-related damages, from lost productivity, premature death, and hospital visits.[14]

These strains on community respiratory systems reduce patients' quality of life. "It would be great to see more preventative measures, especially focused on resilience, to prevent vulnerabilities from being exacerbated," noted Chandra Taylor-Sawyer, Environmental Justice Initiative Leader at the Southern Environmental Law Center.

Unequal Burdens Rooted in Place

Respiratory health outcomes are inequitable and have been shaped by historical structural factors that affect the social determinants of health (SDOH) at the community level. The highest burdens fall where environmental hazards and social vulnerability overlap. This is typically where industrial sources, traffic corridors, environmental exposure, and substandard housing coincide with low income, hazardous employment, poor insurance coverage, and weak access to care.

Geography plays a major role in respiratory health. Rural residents have higher rates of chronic conditions like COPD and face barriers to primary and specialist care.[15] This results in fewer opportunities for preventive care like routine immunizations, post-hospitalization follow up, and chronic disease management.

Community respiratory outcomes are also affected by healthcare shortages and challenges connecting patients to the care they need. Over 90 million Americans live in a Health Professional Shortage Area.[16] The gap is expected to widen to a shortage of over 70,000 primary care physicians (PCPs) and over 140,000 physicians overall by 2038.[17] Areas with the highest asthma and COPD burden often have the fewest pulmonologists and allergists, leaving patients without the support they need to manage their disease and avoid preventable ED visits and hospitalizations. Rural communities are hit especially hard.[18]











As a result, many people face layered barriers at every stage of the patient journey, from prevention through acute crisis. These barriers contribute to more deaths, ED visits, and hospitalizations, and to lower quality of life.[19] Each one is also a point where local action can close a gap and strengthen community respiratory care.

EXHIBIT 2

BARRIERS ALONG THE PATIENT JOURNEY WITHIN CLIMATE-AFFECTED COMMUNITIES

Stages of Patient Journey

Illustrative Barriers

1 Prevention, Vaccination & Risk Reduction	2 Screening & Early Detection	3 Diagnoses & Treatment Access	4 Ongoing Disease Management	5 Acute Exacerbation & Crisis
Poor housing quality (mold, inadequate ventilation, pests) associated with structural disparities	No FeNO* testing/lung function screening	Uninsured/underinsured populations	Poor medication adherence (cost, complexity, health literacy)	Over-reliance on emergency departments
Low vaccination rates (flu, pneumococcal, RSV) & vaccine hesitancy/ shifting guidelines	Inconsistent prioritization of high-risk patients	Specialist shortages in high burden communities	No personalized action plans tied to air quality/ climate	Inconsistent discharge monitoring for high-risk patients
Occupational exposures (outdoor workers, polluted environments)	Symptoms normalized or attributed to aging/ smoking	Transportation barriers to clinics	Severe disease patients lack necessary supports	Preventable hospitalizations during climate events
Climate events affecting air quality (wildfire smoke, extreme heat)	Lack of air quality monitoring in homes/ communities	Medication costs & vaccine inaccessibility	Lack of follow-up after exacerbations	No coordinated response during heat waves/wildfire seasons
Limited awareness of environmental triggers	Distrust of healthcare system	Language/cultural barriers	Competing priorities (work, caregiving, housing instability)	Lack of protective supplies (air purifiers, N95 masks)
	No early warning systems for climate events	Fragmented care between primary/specialty/ community	Limited CHW/peer support networks	

**FeNO stands for fractional exhaled nitric oxide. A FeNO test measures the amount of nitric oxide in your breath to help doctors tell if you have asthma.*

Source: FSG analysis of stakeholder interviews and secondary research

> One of the biggest barriers is **trust** when communities don't have a voice in a representative way.
>
> - Emmie Mediate, *U.S. Chief Programs Officer, Health Care Without Harm*



2 What Works

Elements of Effective Place-Based Models for Community Respiratory Health

Since barriers to respiratory health are shaped by local conditions, addressing them requires place-based solutions built on community leadership. Place-based solutions are approaches designed around the conditions, assets, and leadership of a specific community, typically built through collaboration among residents, local organizations, and institutions across sectors. Our review of practice and stakeholder insights shows six elements of integrated, community-led approaches that can improve disease management, quality of life, and reduce hospitalization. These are:

1. **Community co-design and governance:** Programs that center local leadership earn greater trust, uptake, and long-term relevance by allowing residents to set priorities and shape solutions. Emmie Mediate, the U.S. Chief Programs Officer with Health Care Without Harm, explained, "One of the biggest barriers is trust when communities don't have a voice in a representative way. That can be addressed through power sharing to co-design local solutions."







2. **Multi-sector coalitions anchored by trusted institutions:** Place-based partnerships among hospitals, health departments, foundations, academic evaluators, payers and CBOs create the capacity to influence policy, secure funding, and coordinate referrals across systems. Health Care Without Harm's local place-based partnerships around the country, with hospitals as anchors and community governance, have made progress addressing SDOH, developing community driven climate plans, and influencing local policy.[20]

3. **Community Health Workers (CHWs) and Mobile Health Clinics (MHC):** CHWs and community ambassadors improve self-management, vaccination uptake, and linkage to services. An MHC program increased access to COVID-19 vaccination and care among underserved communities, pairing vaccination with social supports and follow-up from Community Health Workers.[21] The same model can extend to flu, pneumococcal, and RSV vaccines, which protect people with chronic respiratory disease. CHWs can play an integral role supporting respiratory patients to improve disease management and reduce unnecessary ED visits and hospitalizations.

4. **Clinically tied home remediation and wraparound supports:** Asthma and Allergy Foundation of America (AAFA) Health Equity Advancement and Leadership (HEAL) programs combine self-management education, home assessments and remediation, specialty linkage, and wraparound social support (food, transportation, utility assistance) demonstrate scalable models. Programs that combine remediation with clinical care and social supports achieve greater reductions in hospitalizations than either approach alone.[22]

5. **Embedded measurement and multi-year commitments:** Continuous evaluation using shared KPIs enables iterative improvement and builds the evidence base needed for policy adoption. For example, the AAFA HEAL program in Los Angeles used data to get CHWs covered through reimbursement by Medi-Cal. Leaders highlighted this as an example





of using evidence to show return on investment to funders and policymakers and a key factor to scale impact.

6. **Supportive policy environments:** States are working with local partners to improve community respiratory health and climate preparedness.[23] North Carolina was cited by stakeholders as an example of using environmental justice executive orders to fill gaps left by federal policy shifts: maintaining air quality monitoring, reducing pollution, protecting vulnerable populations, and improving community engagement. Additionally, California's policy that invests in CHW training and enables coverage for CHW provided preventative, health education, and navigation was highlighted as a model to replicate.[24]

When these elements work together, the most measurable outcomes are fewer hospitalizations and ED visits.[25,26,27,28] Stakeholders interviewed noted that when they are absent, projects struggle, tend to be less equitable, and hard to sustain.

Barriers to Scaling Place-Based Improvements

To reduce hospitalizations and ED visits due to respiratory disease, successful place-based programs need to reach more communities. Three gaps keep local programs from scaling: inconsistent data and measurement, limited health system capacity, and shifting policy and financing.

Data and Measurement: Inconsistent equity and environmental metrics, weakened public data systems, limited interoperability, and fragmented shared measurement make it difficult to prioritize populations at risk, track impact across sites, and collaborate across sectors. Shared data platforms (e.g., community information exchanges), standardized KPIs, and investment in local monitoring are needed to close this gap.[29]

Health System Capacity: Shortages of healthcare professionals (primary care providers, specialists, community pharmacists, and CBO staff), fragmented clinical referrals, and limited education on environmental risks disrupt patient access to providers and specialists, disease management, and delivery of programs. Investments in workforce development and CBO capacity, CHW training and referral pathways, and access to specialists are needed.

Policy and Financing: Underfunding of community respiratory care, policy misaligned with funding needs, and variable coverage across states create gaps that communities are left to close. To support community leaders in improving respiratory care, policies are needed to support value-based care, reduce exposure through environmental protections, expand coverage and access to care, and use innovative financing to sustain disease management.

Addressing these gaps requires reshaping incentives to value prevention, creating shared infrastructure for data and operations, and building durable funding and policy mechanisms that sustain multi-year local commitments and expand coverage for ongoing disease management.

3 Local Case Studies

Lessons from Detroit and Western Massachusetts

Two regions show how communities with different local features are tackling similar challenges to improve respiratory health outcomes.



Detroit faces acute respiratory health needs with a very high asthma and COPD burden: an estimated 800,000 people in the metro area live with asthma or COPD.[30] The burden is driven by chronic industrial and highway air pollution, aging substandard housing, and concentrated socioeconomic disadvantages. Air pollution contributes to 721 premature deaths, 1,500 hospitalizations, and 500,000 missed workdays in the metro area.[31] Community-led efforts to overcome these challenges have shown promise and are receiving national corporate and local philanthropic support.

"On community readiness, Detroit shines," explained Samantha Pickering, Public & Environmental Health Policy Manager at the Michigan Environmental Council and a Detroit area resident. Detroit has established asthma networks, active local programs and coalitions, strong anchors and partners (e.g., Henry Ford Health, Detroit Health Department, Eastside Community Network), and Sanofi supported initiatives such as a community led AAFA HEAL program, which also includes prevention and vaccination education. After 6 months, participants reported better asthma control, fewer days of missed school, and more confidence managing their disease.[32]

KEY LESSONS

Designing for access to specialty care: Use care navigation and social supports to overcome barriers such as lack of transportation and competing life priorities.

Advocate for enabling policies: Close decades-old gaps in permitting that allow industrial pollution exposure, and secure financing and coverage for CHW care and home remediation.

WESTERN MASSACHUSETTS



We intervene at all levels...

Springfield, Chicopee, and Holyoke once held the top spot (2018 & 2019) as the nation's "Asthma capital" and still face a high respiratory burden. An estimated ~30,000 people have asthma or COPD and ~80,000 residents living in poverty, putting them at higher risk.[33] This burden has been driven by chronic air pollution, older housing, low vaccination rates and high ED/hospital visit rates. However, there is an ecosystem of local efforts that have, with focused effort, made progress resulting in moving down the list of worst areas in the nation for respiratory burden.

Existing efforts have reduced regional ED visits. The Public Health Institute of Western Massachusetts (PHIWM) acts as an anchor institution across coalitions, collaborative efforts, and policy advocacy with a recent focus on expanding policy support for Healthy Homes programs.[34] The Healthy Air Network has expanded air sensors, and the newly launched Respiratory Health Coalition connects CHWs and Healthy Homes programs, led by Revitalize CDC, in the community health system. CHWs provide culturally relevant home-based respiratory health education, environmental assessments, and care navigation. The program also offers home repairs to address triggers. Policy such as support from state level Accountable Care Organization (ACO) programs, have been important enabling factors as well. Jessica Collins, Executive Director of PHIWM, described their approach, "We intervene through partnerships at all levels, to reach individuals, create community change, and shape policy at the systems levels."

KEY LESSONS

Align policy advocacy and funding: Legislation passed in 2024 established the MA Healthy Homes Program but without funding; proposed bond funding through the 2026 MA Ready Act is pending.[35]

Anchor institutions support community governance: Using anchor institutions to build local coalitions and community partnerships creates credibility and operational pathways.

Designing for equity and uptake: Bilingual, culturally tailored CHW models are essential given high Spanish-speaking populations and variable infrastructure.

Build system capacity to overcome fragmentation: Lost funding has stalled efforts to improve discharge monitoring, expand availability of PCPs, and referral and access to specialists.

4 Opportunity for Action

What Funders, Policymakers, and Practitioners Can Do Now

Strengthening community respiratory health will require partners across sectors to approach the work with humility and a learning mindset, recognizing and supporting community-led solutions. For funders in particular, this means listening to and centering community voice while aligning resources around locally-led approaches.

Funders, policymakers, and practitioners can accelerate progress by acting together in three ways:

1

Drive Urgency

Elevate community priorities, generate and share evidence from effective solutions, and sustain advocacy and risk communication at community and policy levels to show that local successes can scale.

2

Close Access Gaps

Integrate vaccination coordination and Community Health Worker (CHW) home visits; build referral and pathways for CHWs and home remediation to address respiratory triggers; support navigation to care and access to specialists to reduce hospitalization; and strengthen post hospital follow up.

3

Strengthen Health-System Capacity

Support durable financing, patient access to specialty care, training and priority placement of PCPs and specialists, shared measurement, CBO capacity building, and locally led partnerships.

The potential returns are substantial: fewer avoidable ED visits, lower health care costs, improved quality of life, and, crucially, communities leading the way on their own health.





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