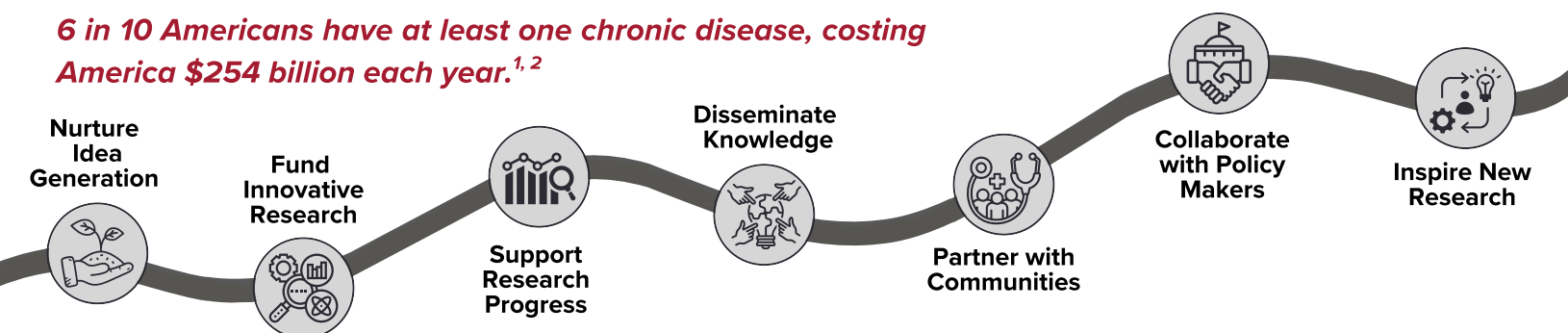


TRAILBLAZERS IN CHRONIC DISEASE PREVENTION

6 in 10 Americans have at least one chronic disease, costing America \$254 billion each year.^{1,2}

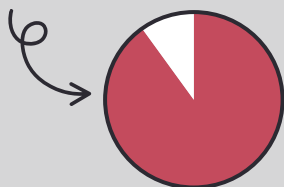


Identifying solutions to reduce the burden of environmental impacts on chronic disease

The Harvard Chan NIEHS Center for Environmental Health is home to over 80 scientists who are actively working to identify and reduce environmental contributors to chronic disease burdening millions of Americans. Below are examples of some of our ongoing research and wins!

How is our environment connected to chronic disease?

Almost **90%** of chronic diseases such as asthma or diabetes are linked to the environment.³



Funding Life-Enhancing Research

We provide small grants to researchers answering tough questions. The effects of these grants include research papers informing policy and larger grants that solve the growing chronic disease crisis.

Providing Health Education

We partner with organizations like the Region 1 Pediatric Environmental Health Specialty Unit and the Boston Museum of Science to create age-appropriate educational materials for children and communities.

Reducing Air Pollution

Our scientists' research led to healthier air standards after finding links between air pollution and diseases like asthma, breast cancer, and heart disease. Air pollution costs Americans **\$820 billion** in health spending each year.⁴



Removing Lead from Water

Our scientists identified the clear cost-savings of replacing lead pipes to reduce lead in drinking water, which is linked to brain damage in children. Replacement is estimated to save Americans **\$9 billion** in health costs.⁵



Making Personal Care Products Safer

Millions of Americans use personal care products daily. Our scientists identified a link between harmful chemicals in personal care products and health conditions, such as preterm birth and cancer. Phthalate exposure can result in **\$67 billion** in yearly health costs from conditions like preterm birth.⁶

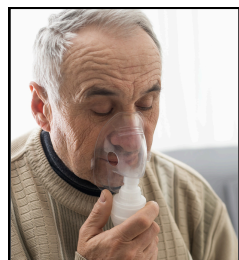


Tackling 'Forever Chemicals'

Our scientists conduct research on the health impacts of per- and polyfluoroalkyl substances (PFAS), often referred to as 'forever chemicals'. Their findings have led to national discussion, reports, and studies on chronic diseases, such as kidney cancer, linked to these forever chemicals. Daily exposure to PFAS is responsible for up to **\$63 billion** in health costs.⁷



Delivering Chronic Obstructive Pulmonary Disease (COPD) Relief



Our scientists conduct low-cost interventions using HEPA filters to lower indoor air pollution and reduce inflammation and COPD symptoms. Interventions like this can help to reduce the **\$24 billion** health burden placed on Americans each year.⁸

Quantifying the Impact of Heat on Alzheimer's

Our scientists found that exposure to extreme heat led to **over 5,000 additional hospitalizations per day** among individuals with Alzheimer's and other dementias across the U.S.

Protecting Green Space for Healthier Communities



We partner with community groups to test for lead in soil. We also take action to transform these areas into safe community spaces, especially for children. Studies have found that those living closest to green space spent roughly **\$400** less on health care per year than those living farthest away.⁹

Our Center by the Numbers

In 2025, the Center celebrated 63 years of sustained impact! We continue to be productive and in the past 6 years, we:

- Published more than **770** articles in high-impact journals like the *New England Journal of Medicine* and *JAMA*.
- Awarded \$1.7M in pilot grants that contributed to **\$31.8M** in additional grant funding.
- Granted \$496K in rapid-response awards that led to **\$37.7M** in additional grant funding.
- Funded **10** community-engaged projects ranging from PFAS reduction in rural Maine, to environmental health summer camps for middle schoolers in Boston.

How we can work together:

- **Identify mutual goals** between scientists and policymakers interested in reducing chronic diseases
- Consider ways in which our science can **improve the policies** you and your constituents are most concerned about
- **Fund P30 Environmental Health Sciences Core Centers** to ensure that research continues to provide needed solutions to the chronic disease crisis in the U.S.



1. Buttorff C, Ruder T, Bauman M. Multiple Chronic Conditions in the United States. Rand Corp. 2017. | 2. CDC. Fast Facts: Health and Economic Costs of Chronic Conditions. Chronic Disease. 2024. | 3. Rappaport S, Smith M. Epidemiology. Environment and Disease Risks. Science. 2010. | 4. Lavietes, M. Air pollution costs each American \$2,500 a year in healthcare. World Economic Forum. 2021. | 5. HSPH. Plan to eliminate lead pipes a 'big win' for Harvard Chan School scientists. 2023. | 6. Williams C, Glenn Gingery J. U.S. health costs related to chemicals in plastics reached \$250 billion in 2018. Endocrine Society. 2024. | 7. Kahn L, Trasande L. Daily Exposure to 'Forever Chemicals' Costs United States Billions in Health Costs. NYU Langone News. 2022. | 8. American Lung Association. COPD Trends Brief - Burden. | 9. Rochman S. Neighborhood green space tied to lower health care costs. Kaiser Permanente. 2022.