

# Children's Environmental Health, Research & Civic Engagement

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# Faculty Disclosure Information

I have had no relevant financial relationships with the manufacturer(s) of any commercial product(s) and/or provider(s) of commercial service(s) discussed in this lecture.

I do not intend to discuss an unapproved/investigative use of a commercial product/device in my presentation



# 2020 Top 10 Child Health Concerns

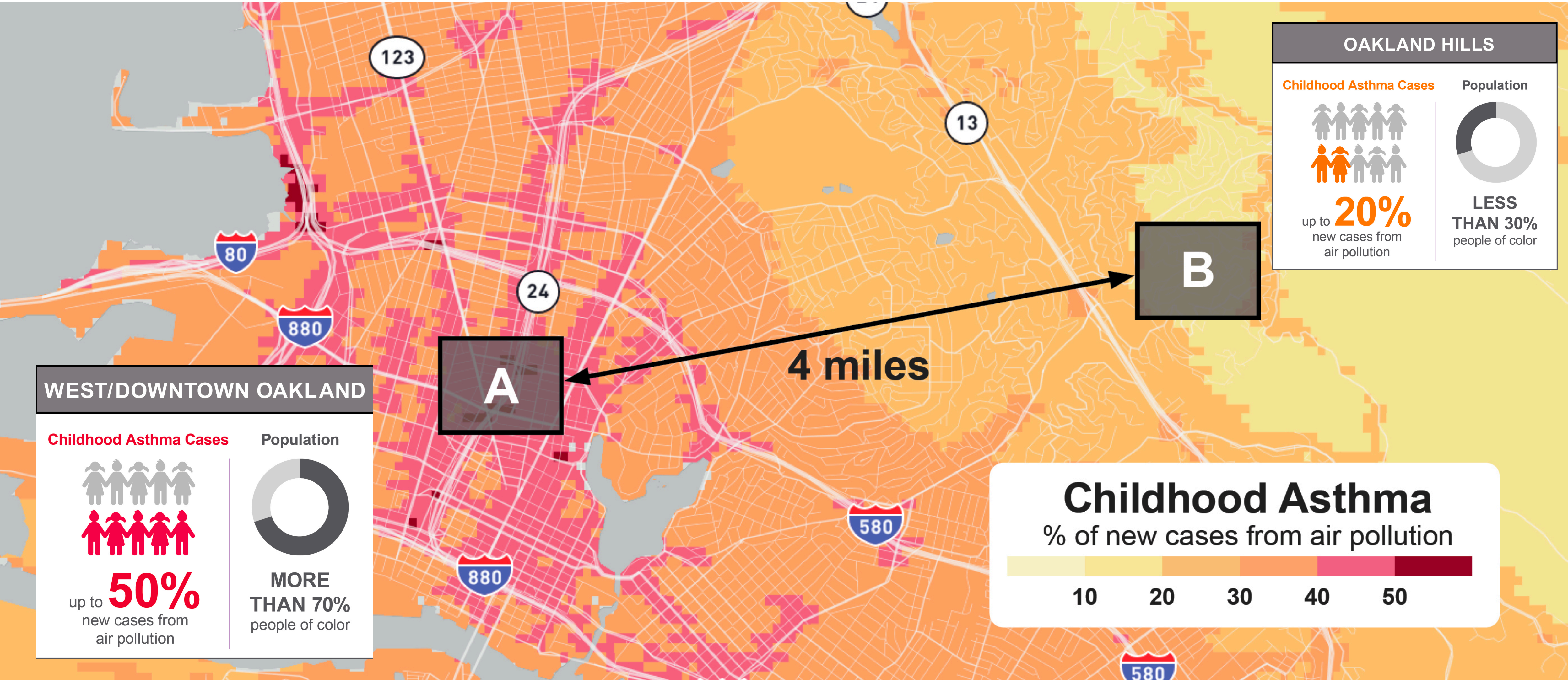


Among Black Parents		Among Hispanic Parents		Among White Parents	
1 Racism	82%	1 Overuse of social media	73%	1 Overuse of social media	72%
2 COVID	73%	2 Bullying/cyberbullying	72%	2 Bullying/cyberbullying	58%
3 Overuse of social media	70%	3 Internet safety	72%	3 Internet safety	57%
4 Unhealthy eating	68%	4 Smoking/vaping	67%	4 Unhealthy eating	56%
5 Internet safety	67%	5 Drinking or using drugs	67%	5 Lack of physical activity	53%
6 Bullying/cyberbullying	66%	6 Racism	65%	6 Stress/anxiety	51%
7 Poverty	66%	7 Depression/suicide	64%	7 Depression/suicide	49%
8 Drinking or using drugs	62%	8 COVID	64%	8 Smoking/vaping	46%
9 Unequal healthcare access	62%	9 Stress/anxiety	62%	9 Child abuse & neglect	42%
10 Gun injuries	61%	10 Child abuse & neglect	61%	10 Drinking or using drugs	41%

Source: C.S. Mott Children's Hospital National Poll on Children's Health, 2020

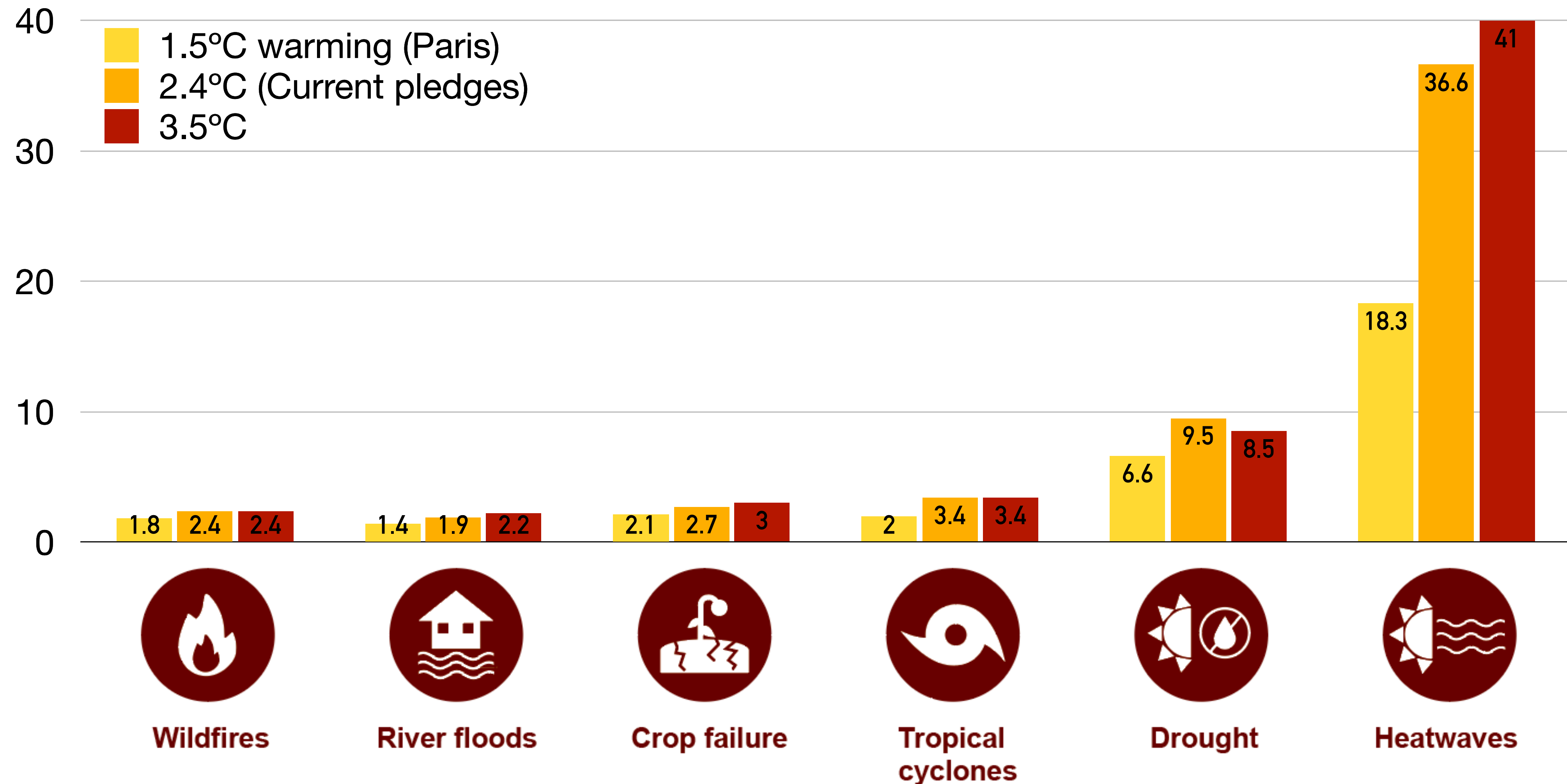


# 1 in 5 American Children Develop Asthma from Traffic Related Air Pollution





**A child born today will experience a greater lifetime exposure to extreme events, the magnitude of which depends on global warming level (GWL) reached.**  
2020 cohort shown, relative to mid-19th century, before human induced climate change began



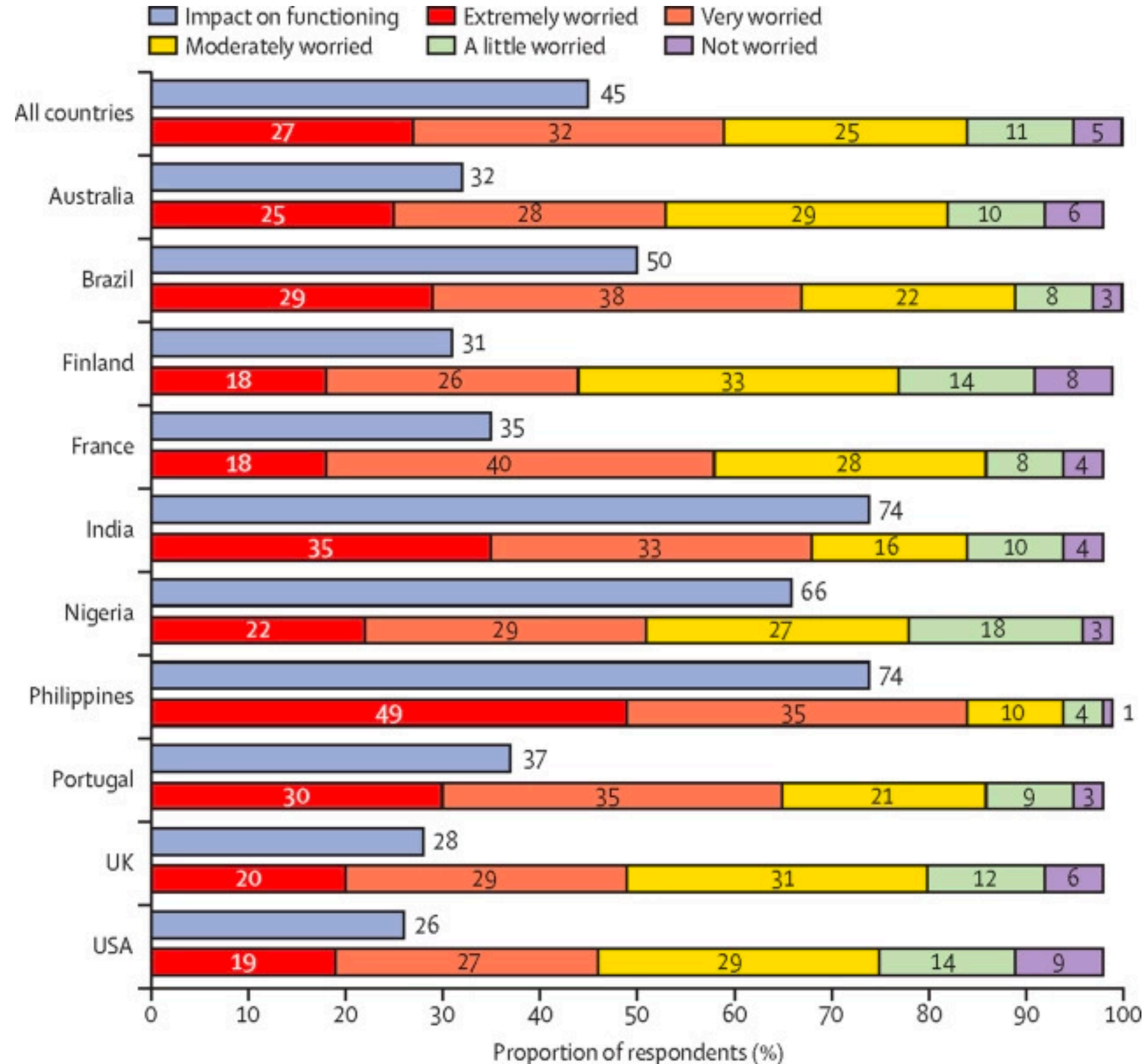


Health Equity Requires Climate Action



# Anxiety about climate change among young people aged 16-25

n=10,000





# How do environmental problems get incorporated into policies and regulations?

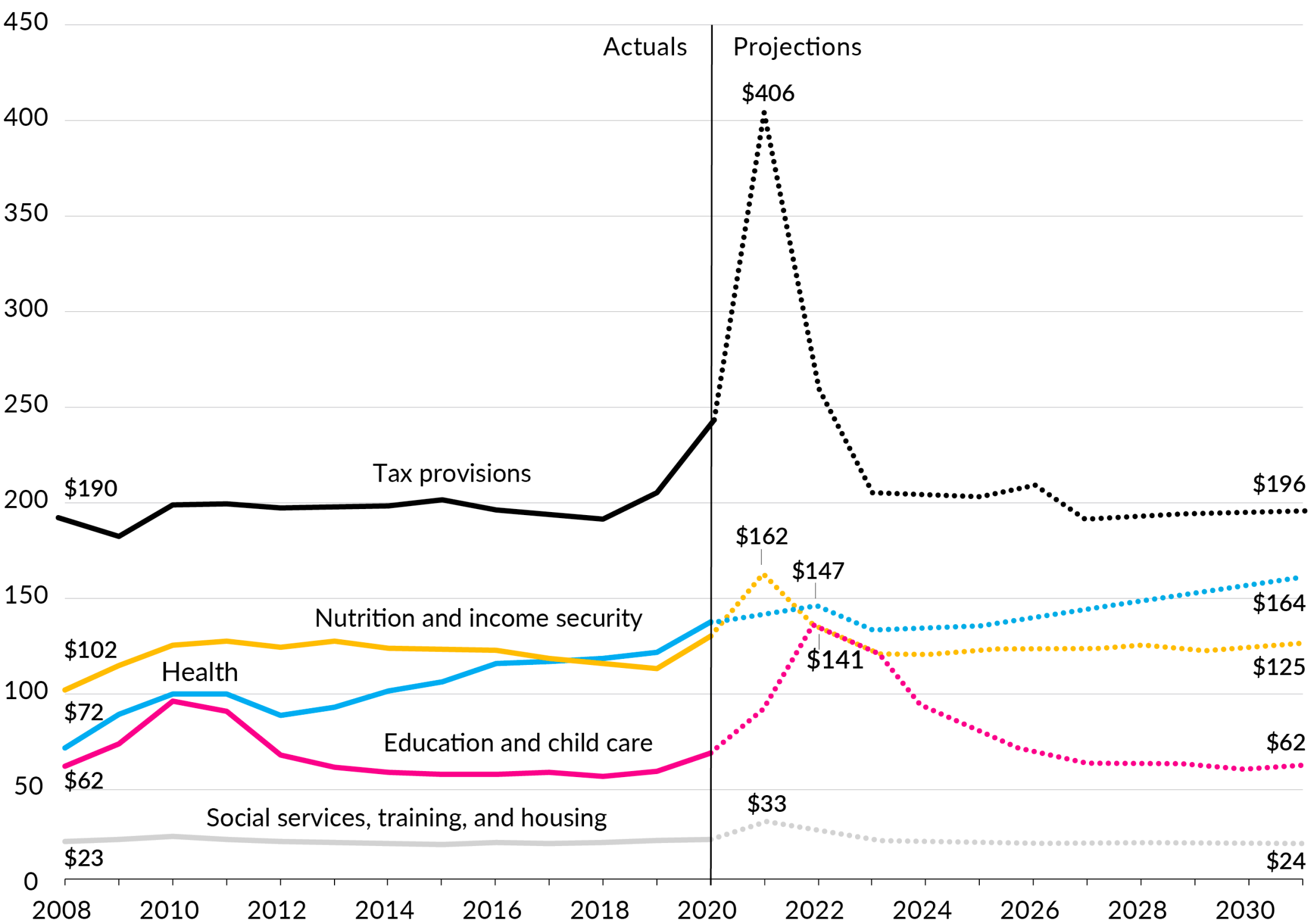
- Social cost of carbon
- CBA in federal agencies
- Assessment of state and city level policies



# How we prioritize investments in children

## Federal Spending on Children by Category, 2008–31

Billions of 2020 dollars



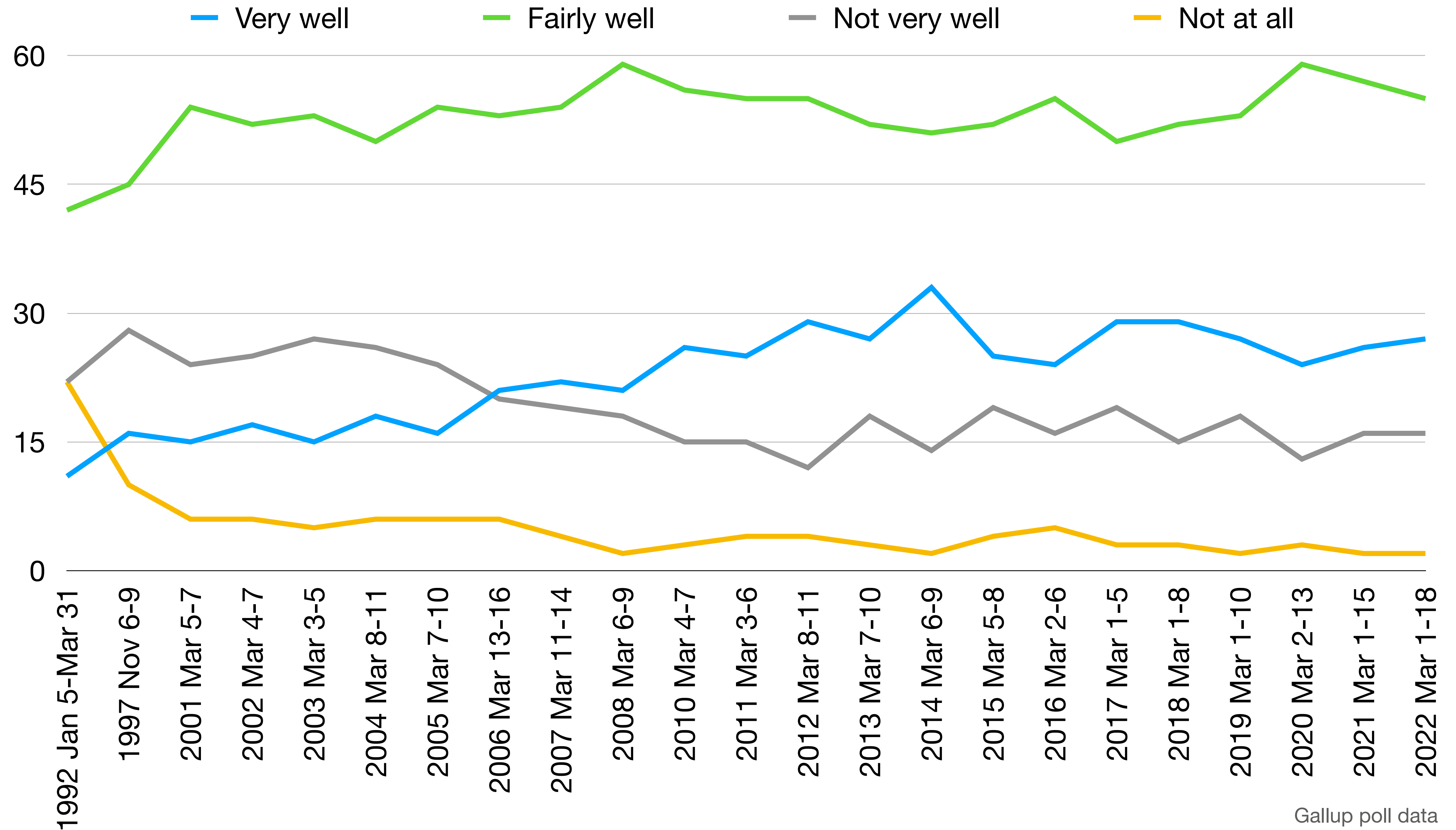
URBAN INSTITUTE

**Sources:** Authors’ estimates based primarily on Congressional Budget Office, *An Update to the Budget and Economic Outlook: 2021 to 2031* (Washington, DC: Congressional Budget Office, 2021); Office of Management and Budget, *Budget of the United States Government, Fiscal Year 2022* (Washington, DC: US Government Printing Office, 2021); and past years. For more source information, see the appendix.



**What are pathways to improve understanding  
about children's environmental health?**

# Thinking about the issue of global warming, how well do you feel you understand this issue?

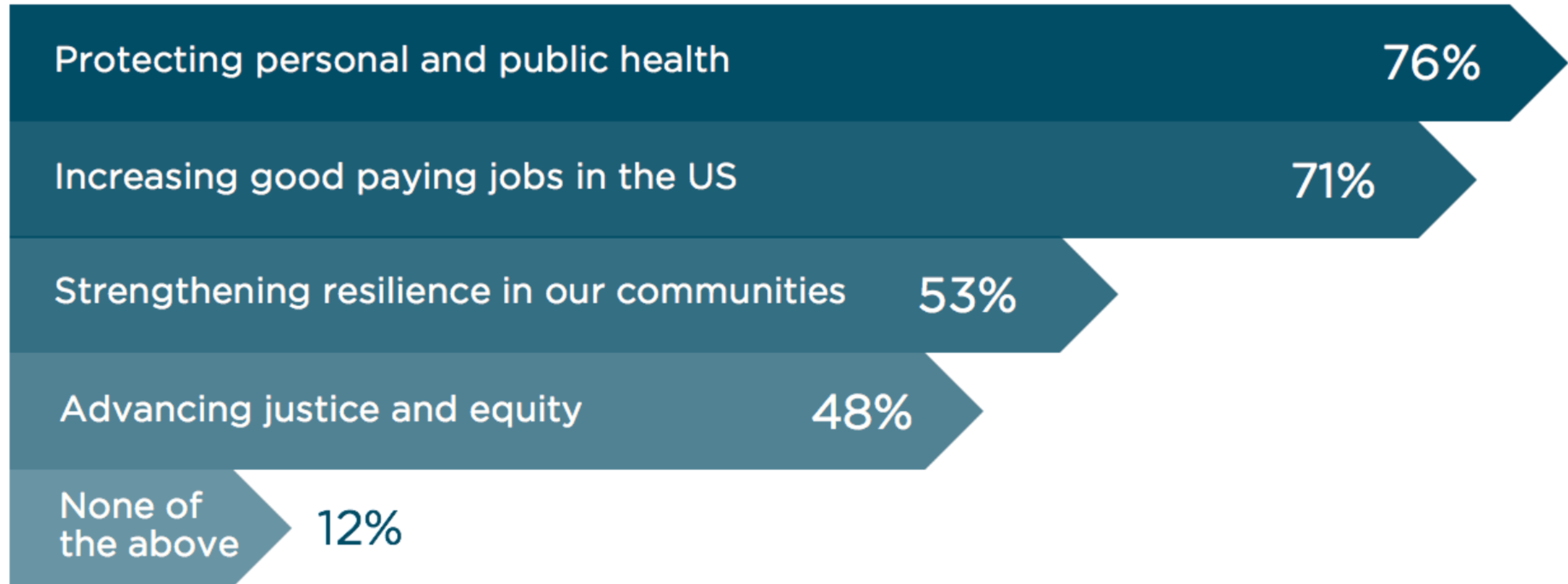




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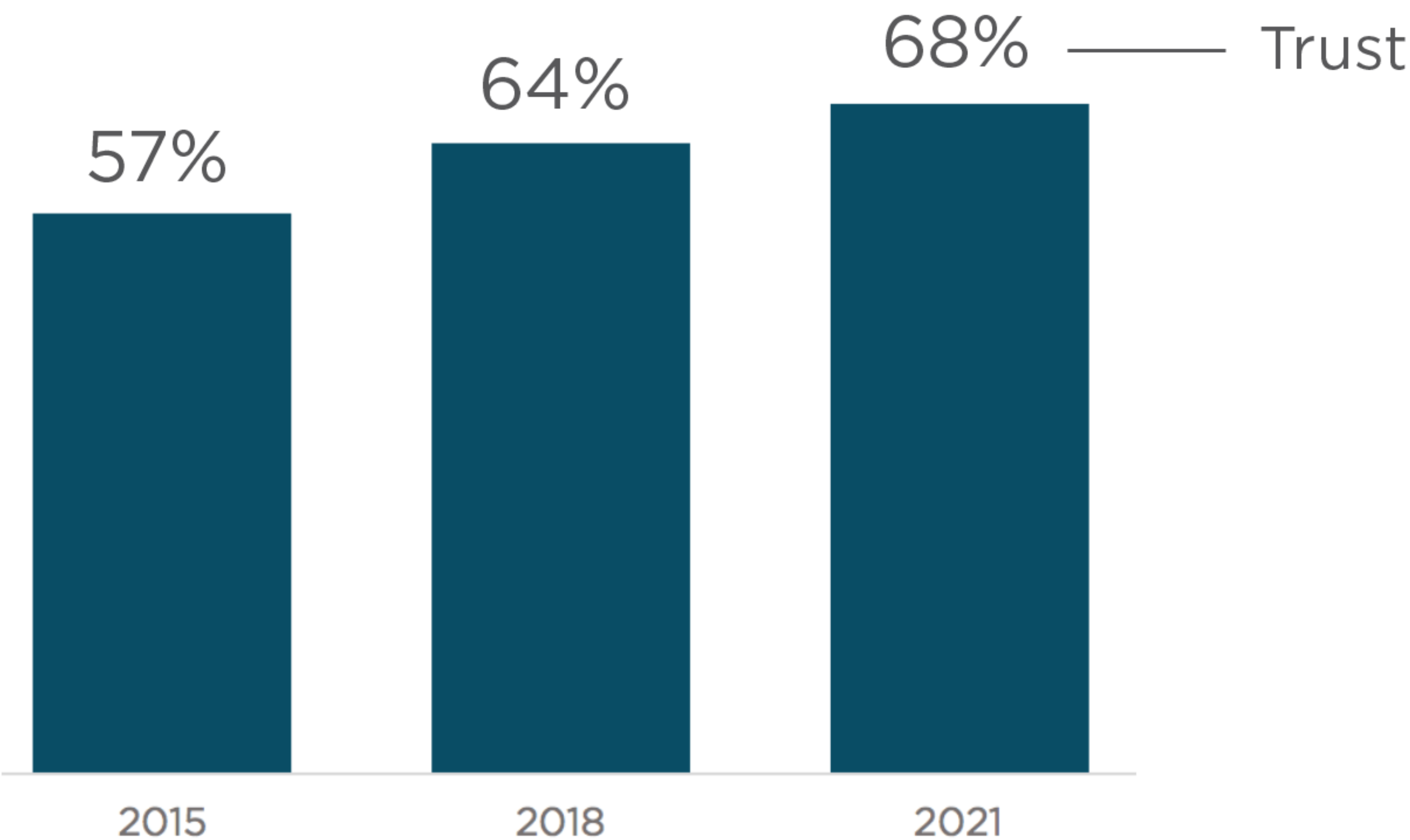
## The majority of Americans support climate change solutions that protect health

Survey question: “Would you support climate solutions if they benefited any of the following? (Please select all that apply).” 1,029 national respondents. +/- 3% margin of error.



# More Americans trust health professionals for climate change information

Survey question: As a source of information about climate change, how much do you trust health professionals? 1,029 national respondents in 2021. “A lot” and “Some” presented +/- 3% margin of error





VIEWPOINT

**Aaron S. Bernstein, MD, MPH**

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**Kristin L. Stevens, MS**  
Americares, Stamford, Connecticut.

**Howard K. Koh, MD, MPH**  
Department of Health Policy and Management, Harvard T.H. Chan School of Public Health, Boston, Massachusetts.

# Patient-Centered Climate Action and Health Equity

**Destructive heat waves, floods, and wildfires**, all made more likely because of climate change, have already contributed to an estimated average \$148 billion in damages annually over the last 5 years in the US.<sup>1</sup> In the health care sector, while some progress has been made to eliminate the 8.5% of all US greenhouse gas emissions that come from the provision of health care and to advance climate resilience in health care, more is needed. To date, of the 50 largest health care systems in the country, which provide half the hospital beds in the country, only 19 have set targets for emissions reductions.<sup>2</sup> To accelerate progress, climate action must align with foundational goals of health care and be patient-centered and advance health equity.

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An equitable, patient-centered approach to climate action could enable health care to meet its climate change obligations and its responsibilities to deliver high-quality care for the betterment of all.



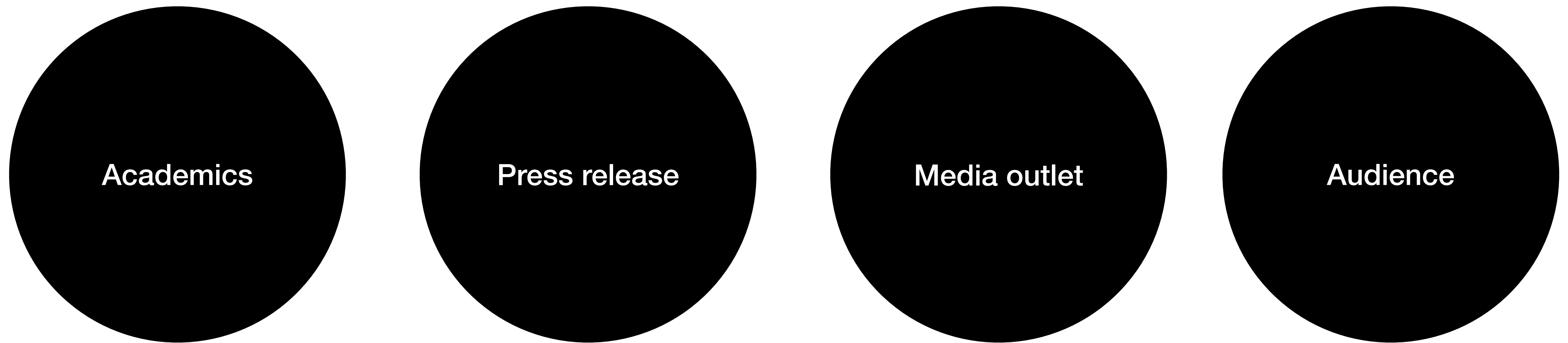


# Patient-Centered Climate Resilient Clinics





# Traditional path of knowledge translation from academia





# Climate creators to watch 2022



**LEAH THOMAS**



**MIRIAM NIELSEN**



**DORIA BROWN**



**ALAINA WOOD**



**ROLLIE WILLIAMS**



**ROSS REID**



**KAYLA ANDERSON**



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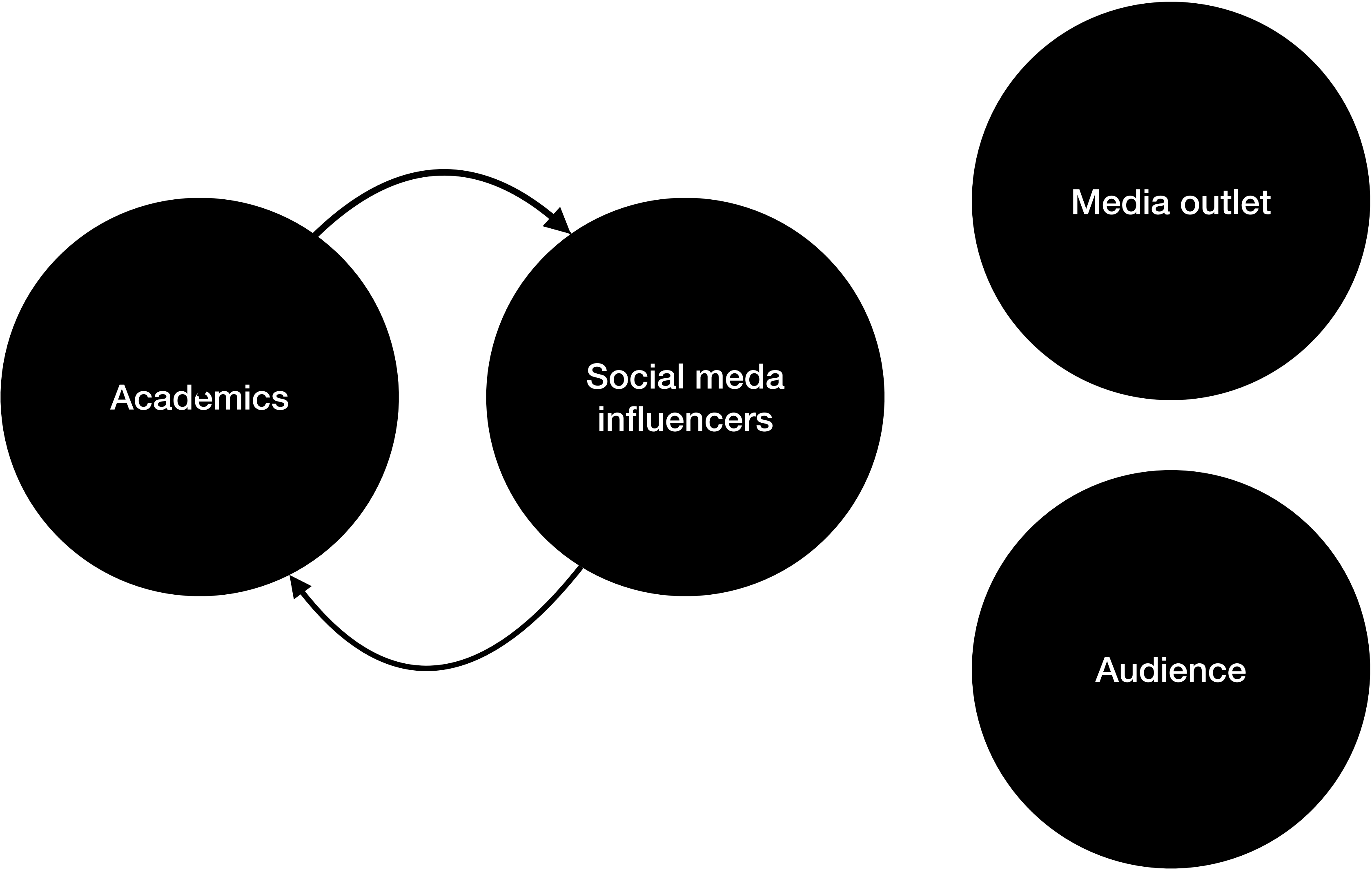
**KRISTY DRUTMAN**



**GENESIS BUTLER**



# A new path of knowledge translation from academia



# Harvard Chan C-CHANGE Youth Summits

in collaboration with Putney Pre-College

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125 Students

Most states represented

25% scholarships



**Your monthly dose of *good news*  
about climate change.**

Climate heroes are not only designing and building the healthier future we need; they are also defending against actions that threaten science and our health. This issue highlights key stories from this month.

<https://www.hsph.harvard.edu/c-change/climateoptimist/>