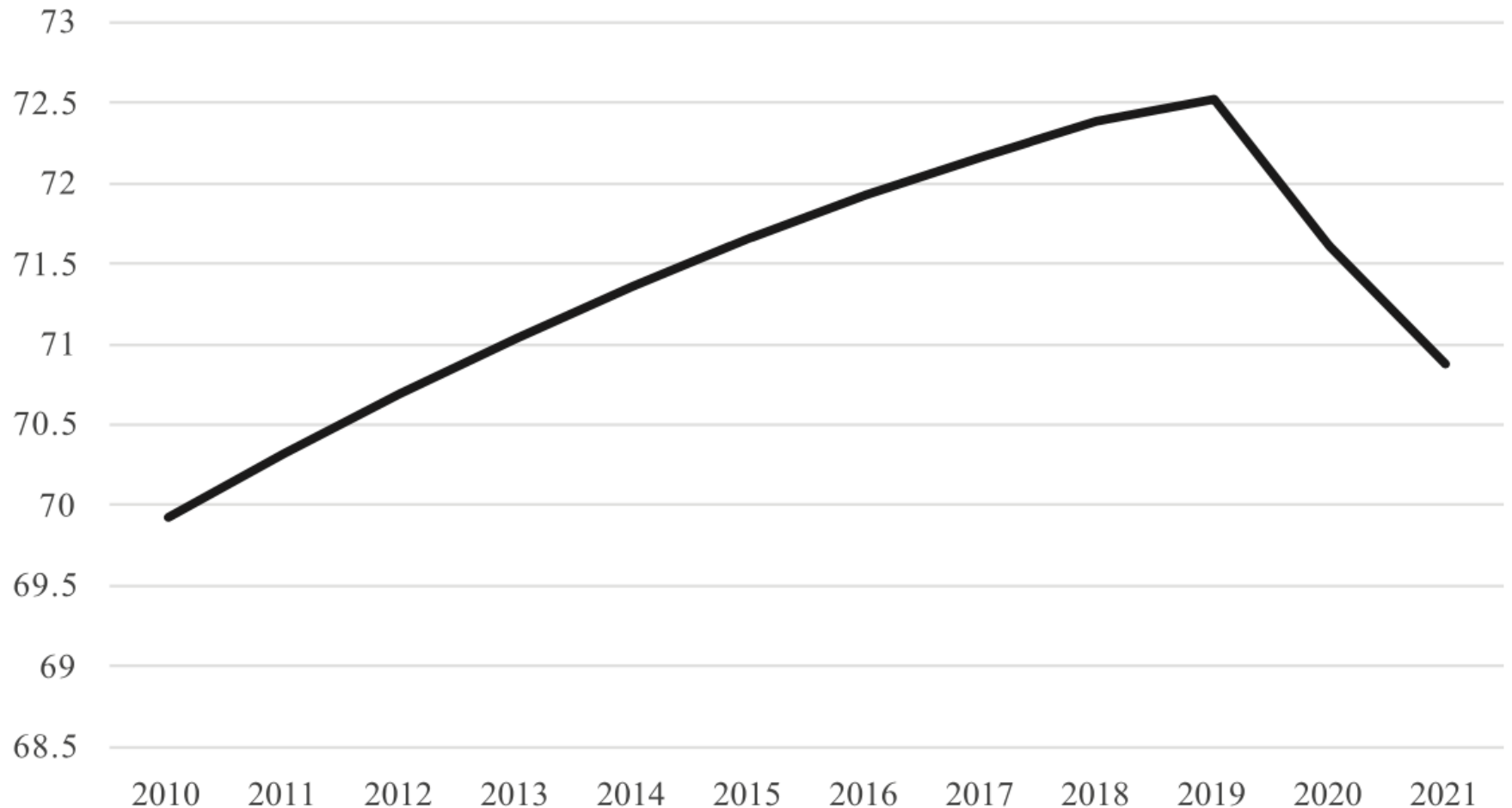


# **Transforming public health in a post-Covid-19 world**

Sandro Galea

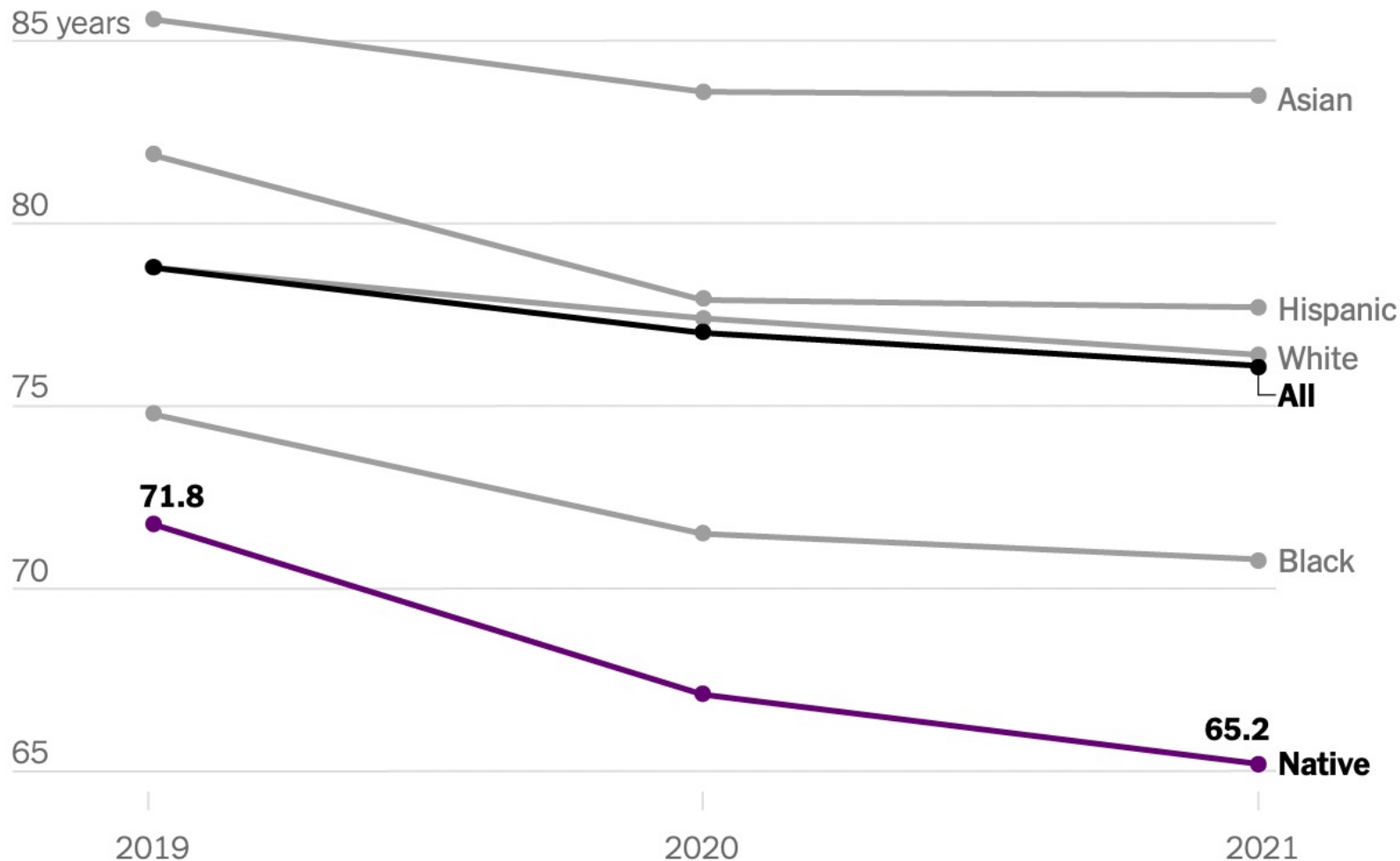
**1. Why should the pandemic change anything?**

**FIGURE 2 Global life expectancy, 2010–2021 (both sexes, in years)**



**SOURCE:** 2010–2019, United Nations (2019); 2010–2021, author's calculations (see the Appendix for details)

## U.S. life expectancy

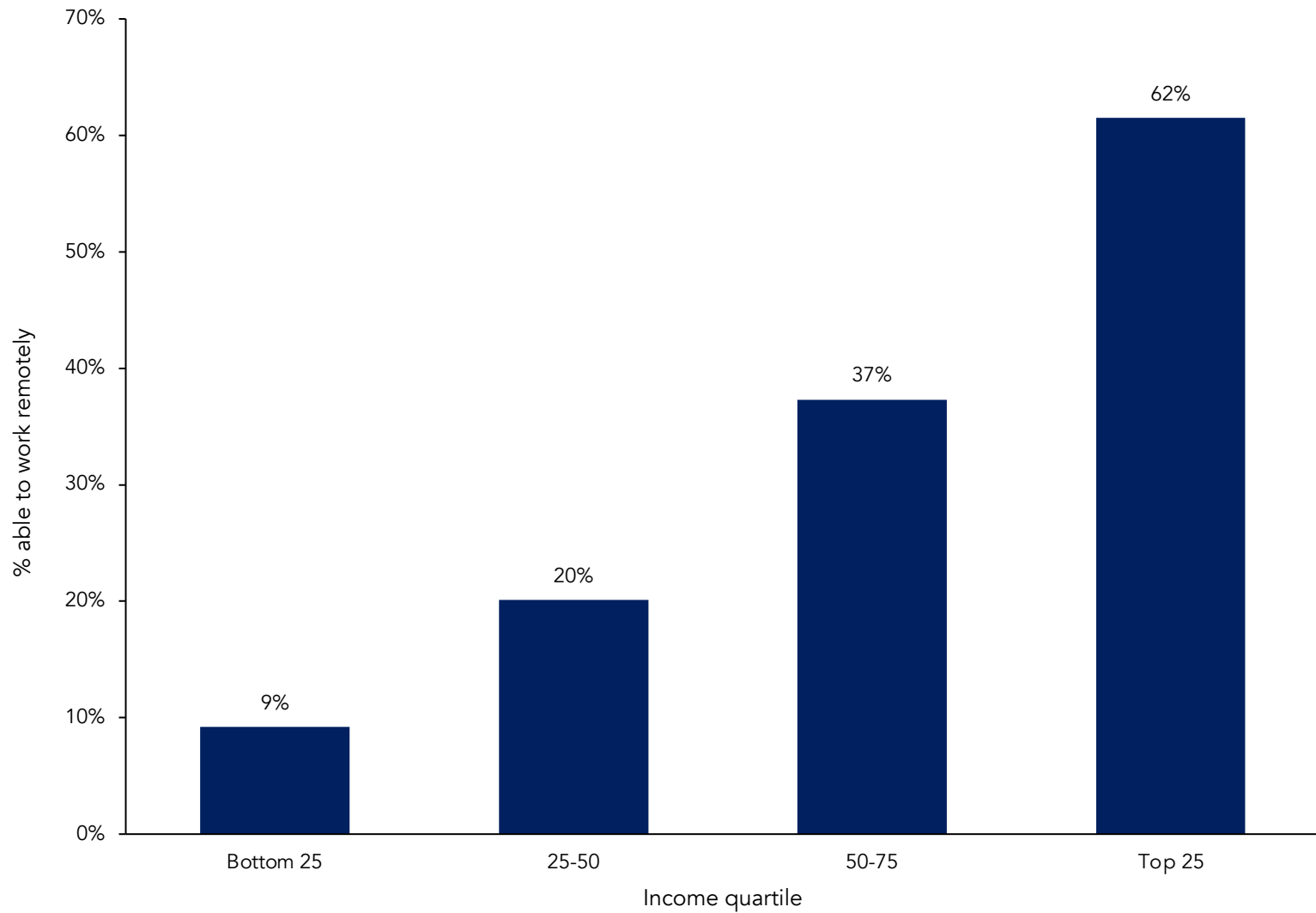


Note: Figures for white, Black, Asian and Native people exclude Hispanic people. • Source: The National Center for Health Statistics

**2. What caused the problems of the pandemic?**

1. Our social structures before the pandemic
2. Our health before the pandemic
3. Our investments in what could help during the pandemic

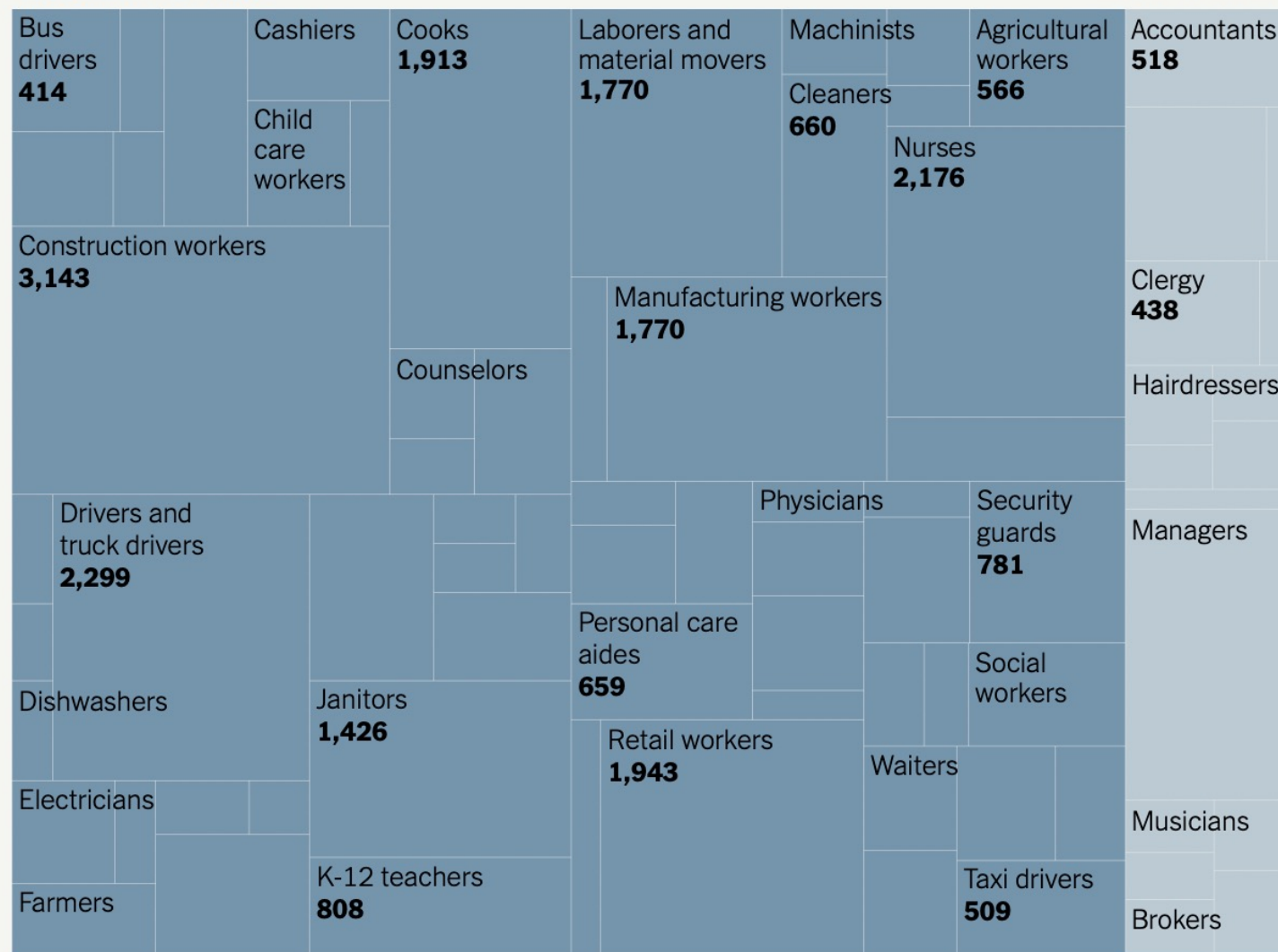
# Ability to work remotely



# Covid-19 deaths by occupation in 2020

## Essential workers

## Other workers



Note: Chart shows 37,905 deaths among workers age 64 and under in 46 states. Some similar occupational categories have been collapsed into larger representative categories. In some cases, similar occupations from different industries are grouped together. Not all occupations are labeled. | Source: Yea-Hung Chen et al., [preprint via medRxiv](https://doi.org/10.1101/2020.09.15.20194441)



# Black workers are more likely than other workers to be in front-line jobs

Black workers as a share of all workers in a given industry

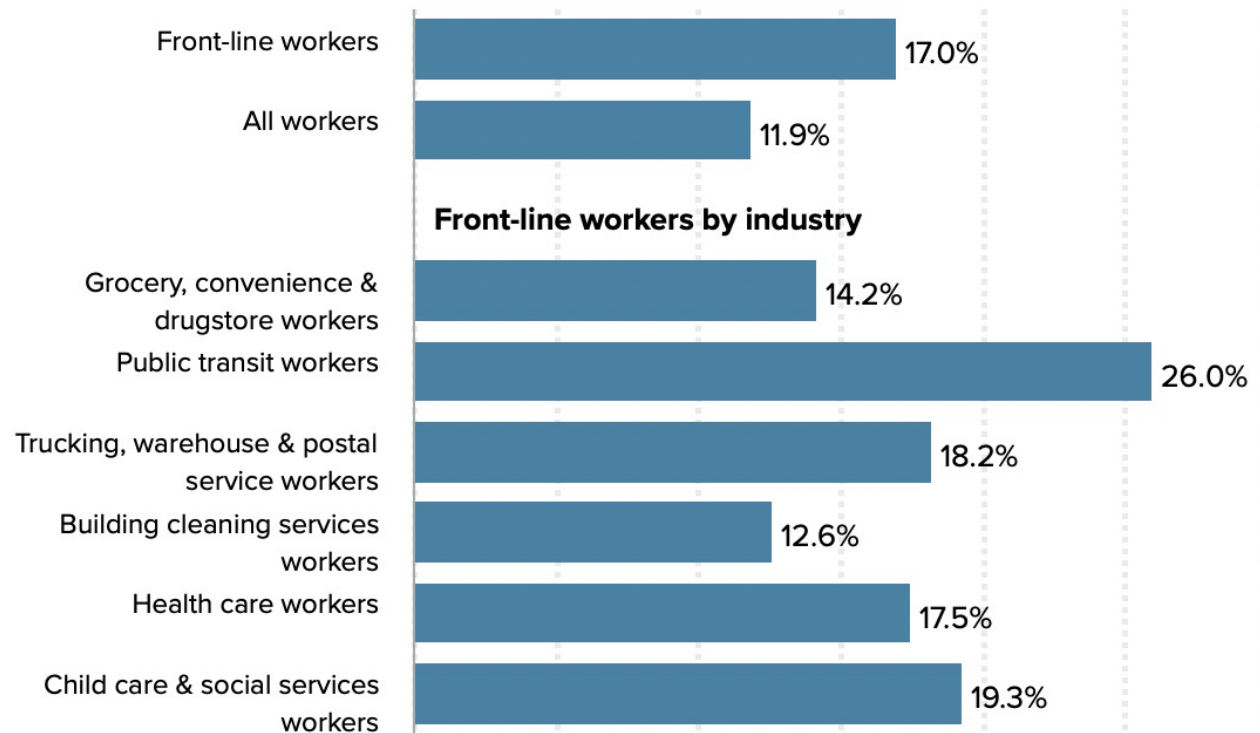


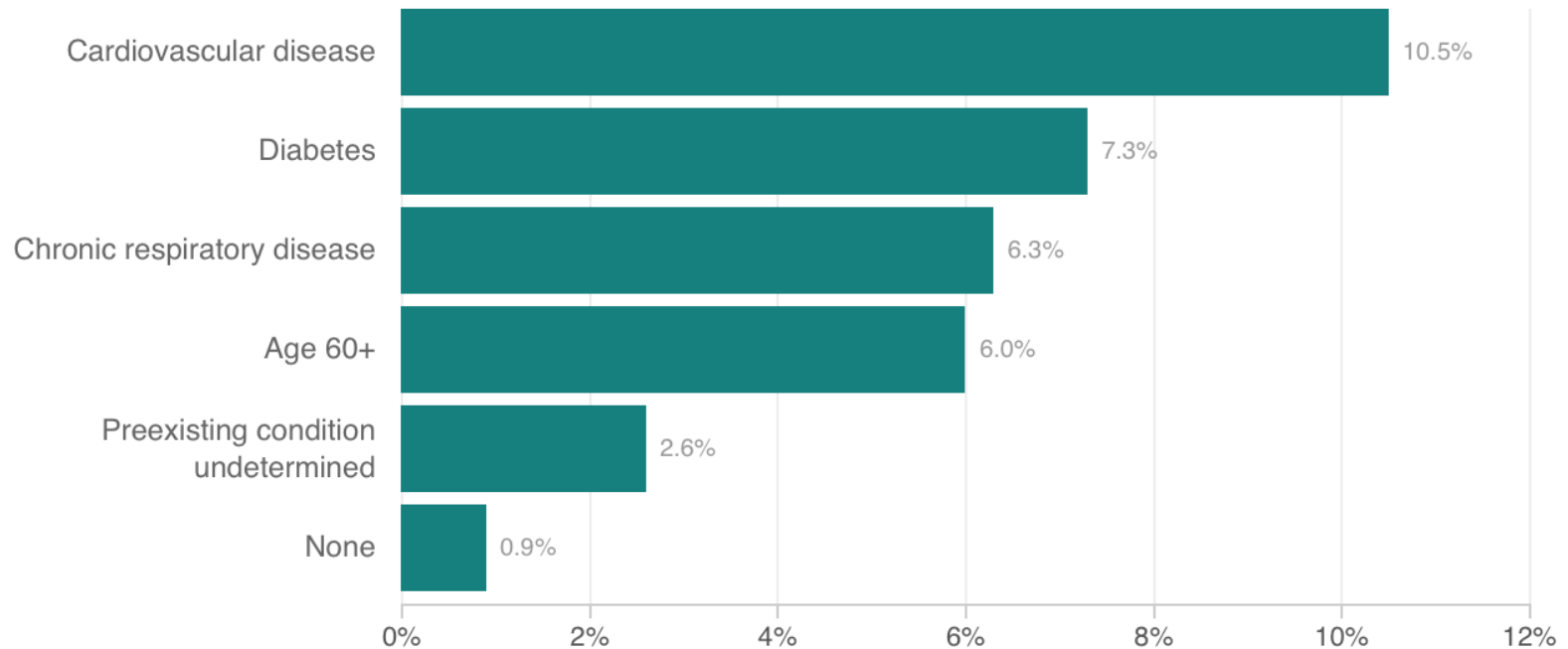
Chart Data

**Notes:** The front-line industry categories used here are the categories used in the CEPR report (see Source below for more information). Sample is a 2014–2018 five-year estimate.

**Source:** EPI analysis of data from the Center for Economic Policy Research (CEPR) report *A Basic Demographic Profile of Workers in Frontline Industries* (April 2020).

Economic Policy Institute

# Death Rate For COVID-19 Patients In China Higher For Those With Underlying Conditions

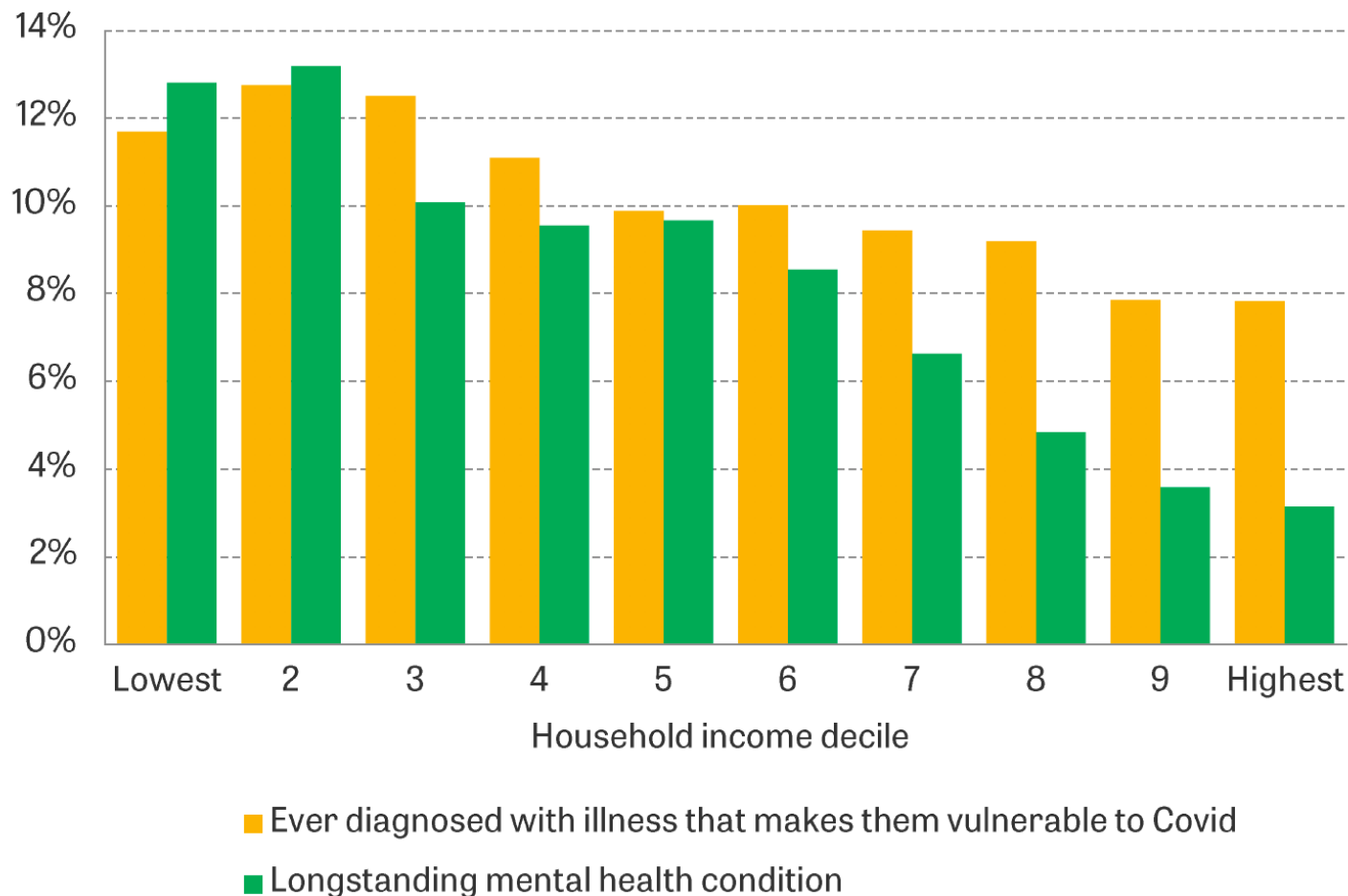


**Notes:** Preexisting condition death rates based on 504 deaths out of 20,812 cases.

*Source: Chinese CDC*

*Credit: Ruth Talbot/NPR and Chris Zubak-Skees/Center for Public Integrity*

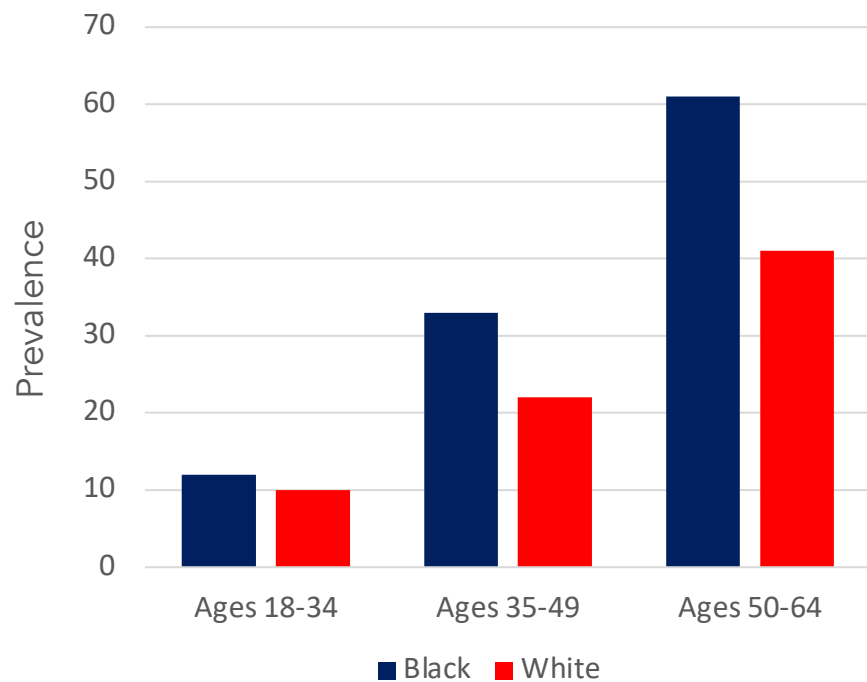
**Figure 16. Medical vulnerability to COVID-19 or the effects of social isolation, by income**



Note: Diagnoses include asthma, congestive heart failure, coronary heart disease, emphysema, chronic bronchitis, cancer or malignancy, diabetes and high blood pressure. Mental health based on self-reported mental health condition lasting or expected to last over 12 months. Deciles based on equivalised net household incomes, using modified OECD equivalence scale.

Source: Authors' calculations using UK Household Longitudinal Survey wave 9 (ever diagnosed) and Family Resources Survey 2018–19 (mental health).

## High blood pressure



## Diabetes

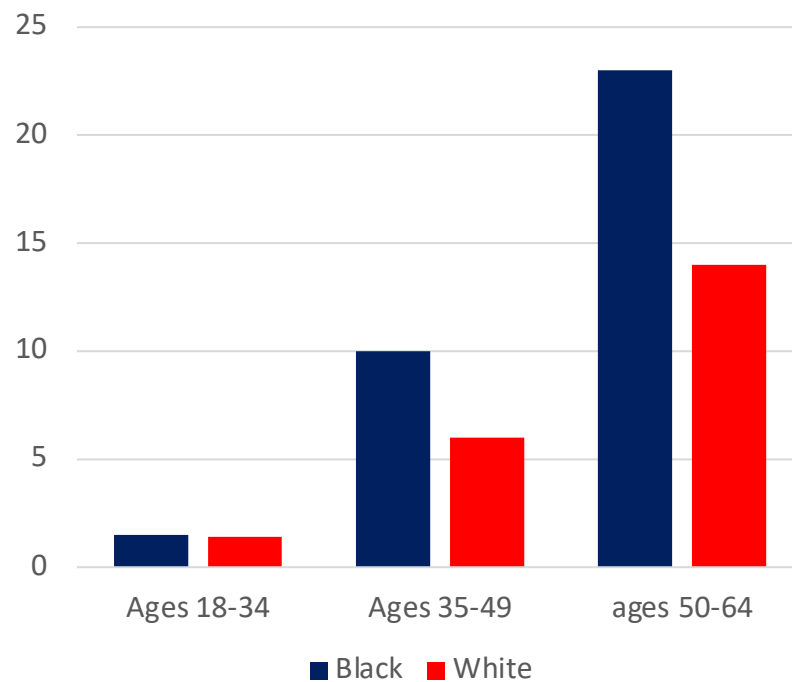
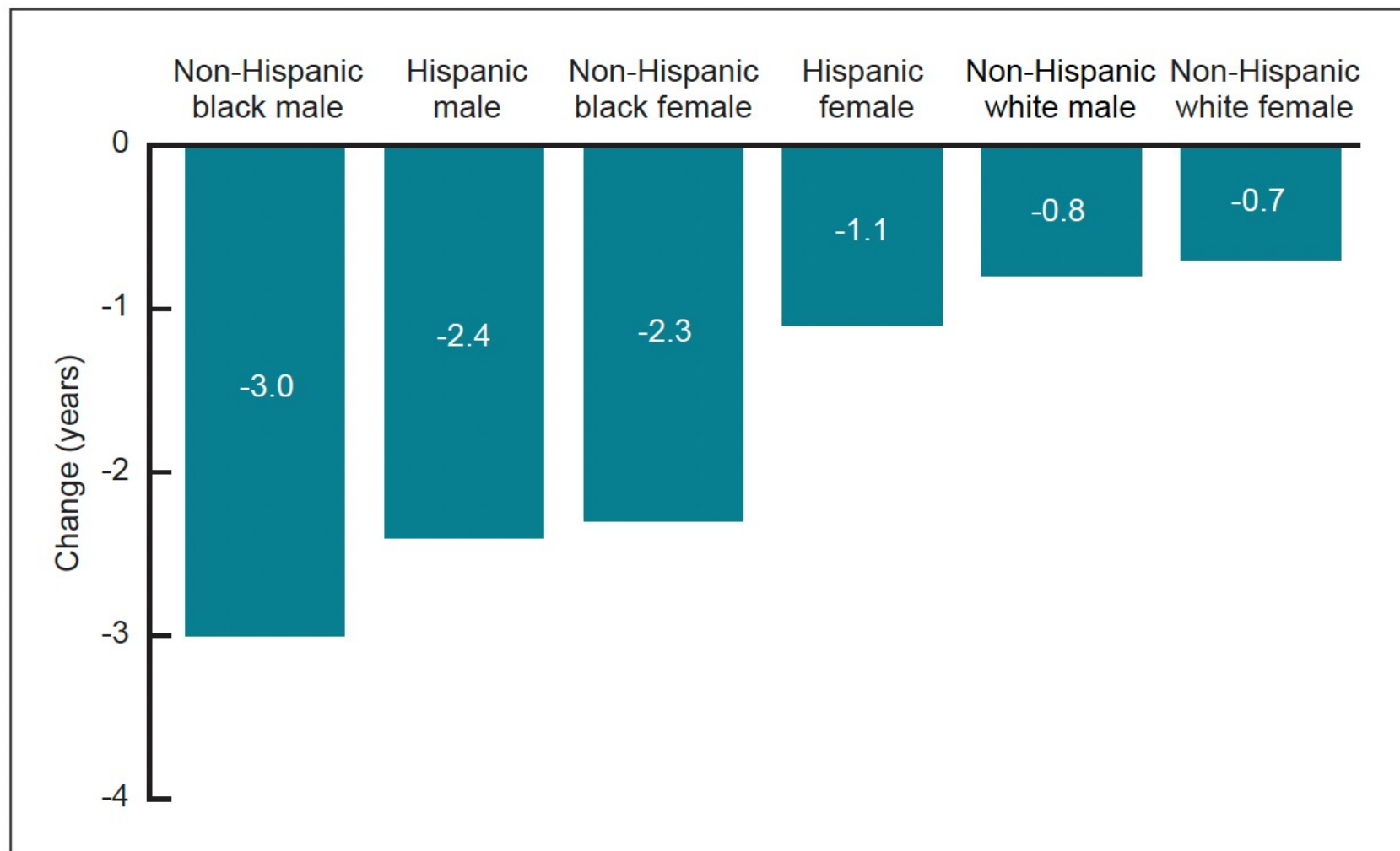


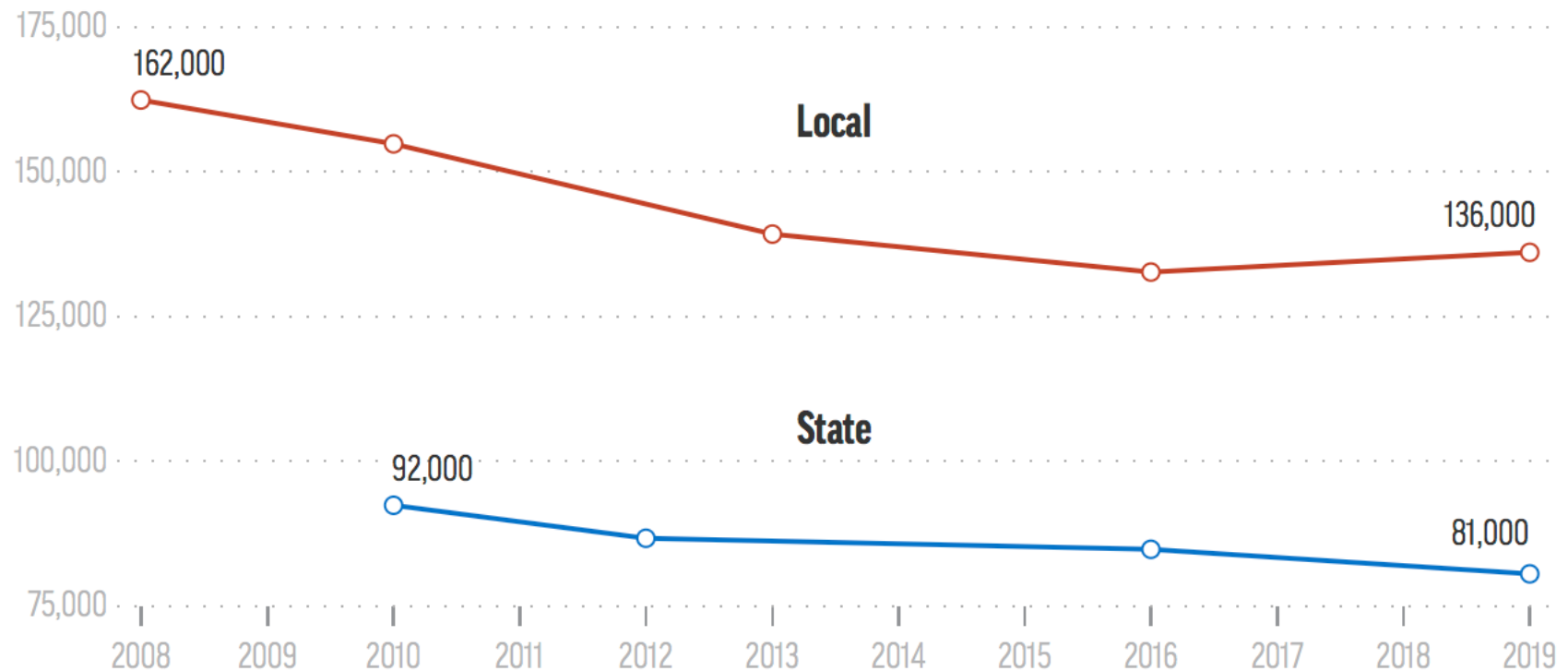
Figure 4. Change in life expectancy at birth, by Hispanic origin and race and sex: United States, 2019 and 2020



NOTES: Life expectancies for 2019 by Hispanic origin and race are not final estimates; see Technical Notes. Estimates are based on provisional data from January 2020 through June 2020.

SOURCE: National Center for Health Statistics, National Vital Statistics System, Mortality data.

# State and local public health workforces have shrunk



State figures are for full-time equivalent employees in state public health agencies excluding Kansas, New Jersey, Texas and Wyoming, which do not have comparable data. Local figures are for full-time equivalent employees of local health departments.

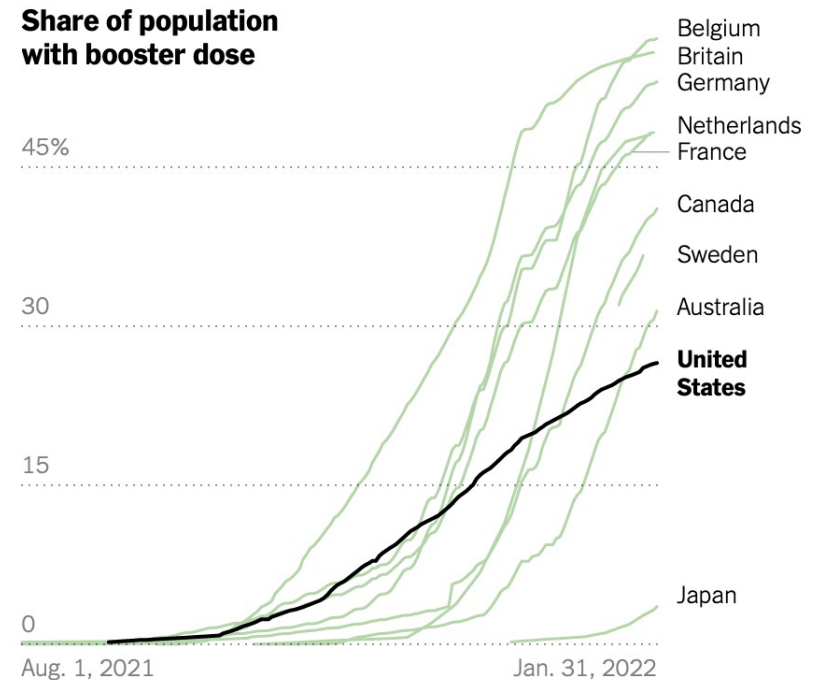
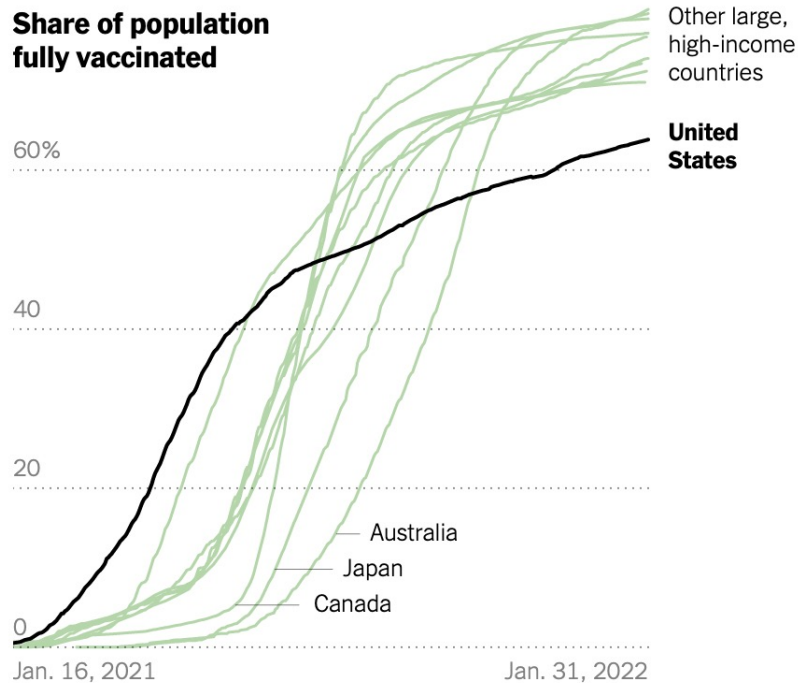
Source: Association of State and Territorial Health Officials, National Association of County and City Health Officials /

Graphic: Hannah Recht/KHN, Francois Duckett/AP



## U.S. vaccinations lag behind other large, high-income countries

Despite beginning Covid-19 vaccinations months earlier than countries like Japan and Australia, a smaller share of people in the United States are now fully vaccinated.



Sources: Our World in Data (world vaccinations); Centers for Disease Control and Prevention (U.S. vaccinations) • Note: Vaccination and booster data in some countries are available infrequently. Sweden data for booster doses is available only from Jan. 20, 2022.

### **3. What the pandemic taught us**



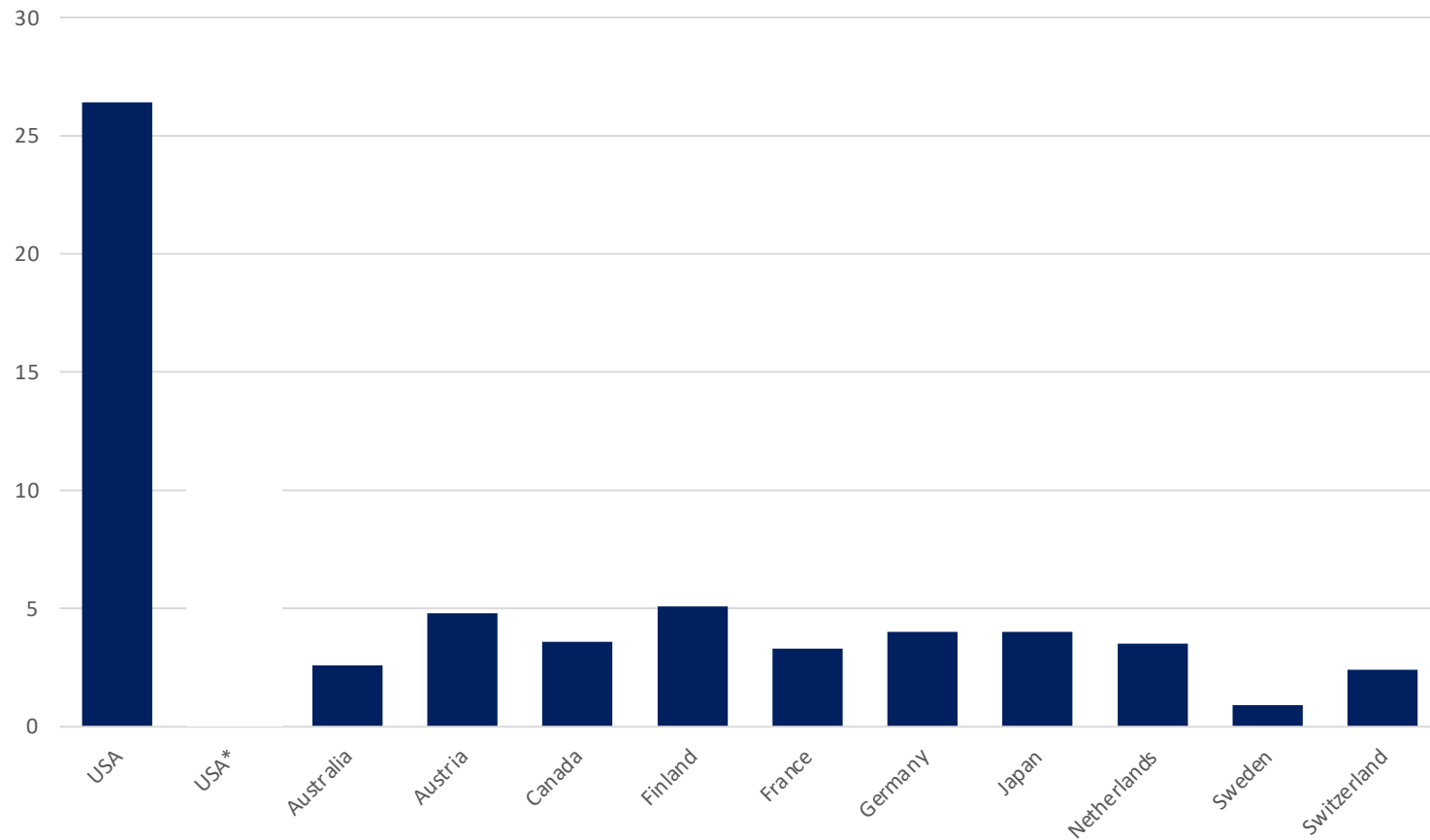


**It's not about the pandemic**

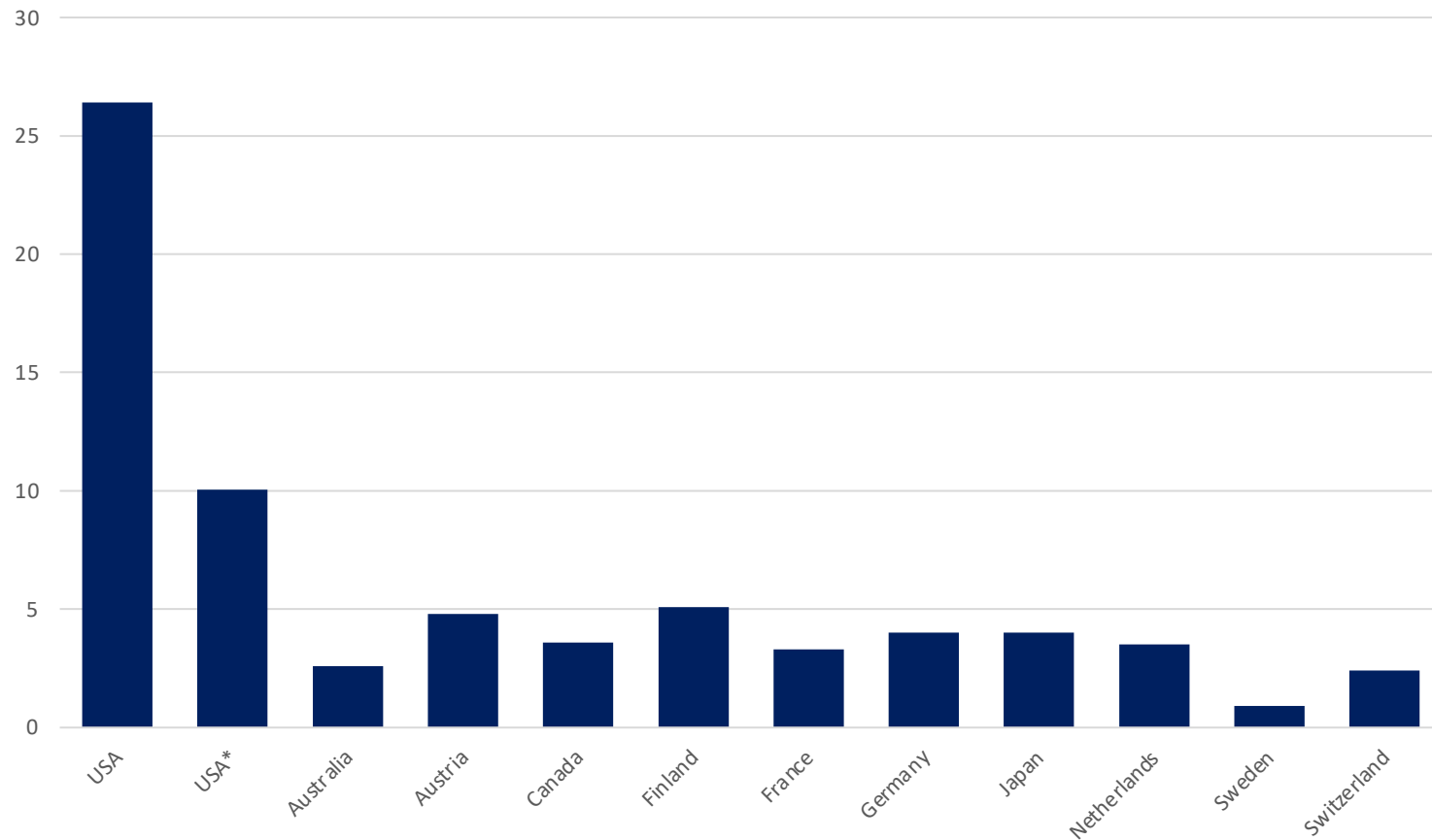


“  
..the problems of any of us are the problems of all of us...”

# Maternal mortality, per 100,000 births



# Maternal mortality, per 100,000 births, including white Americans in 1% richest counties



## **4. Re-imaging public health in a post-Covid-19 world**

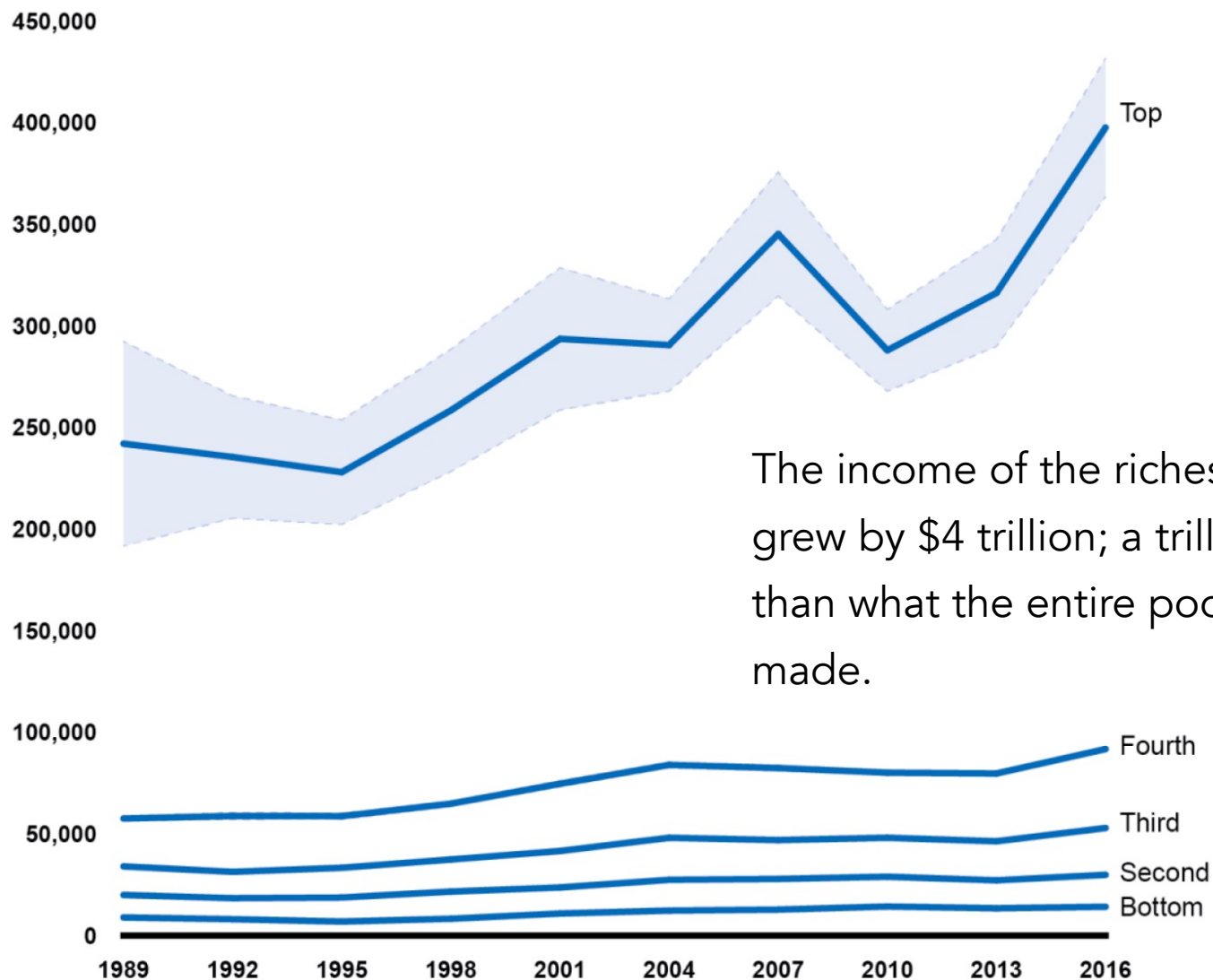
1. Centering equity in all we do
2. Better population health science to guide decision making
3. Better public health practice

“

Health equity is...the allocation of resources according to need, in a way that preventable differences in health outcomes are minimized, and access is fair. ”

**Figure 1: Estimated Average Household Income of Older Households by Income Quintiles, 1989 to 2016**

Average household income (in 2016 dollars)

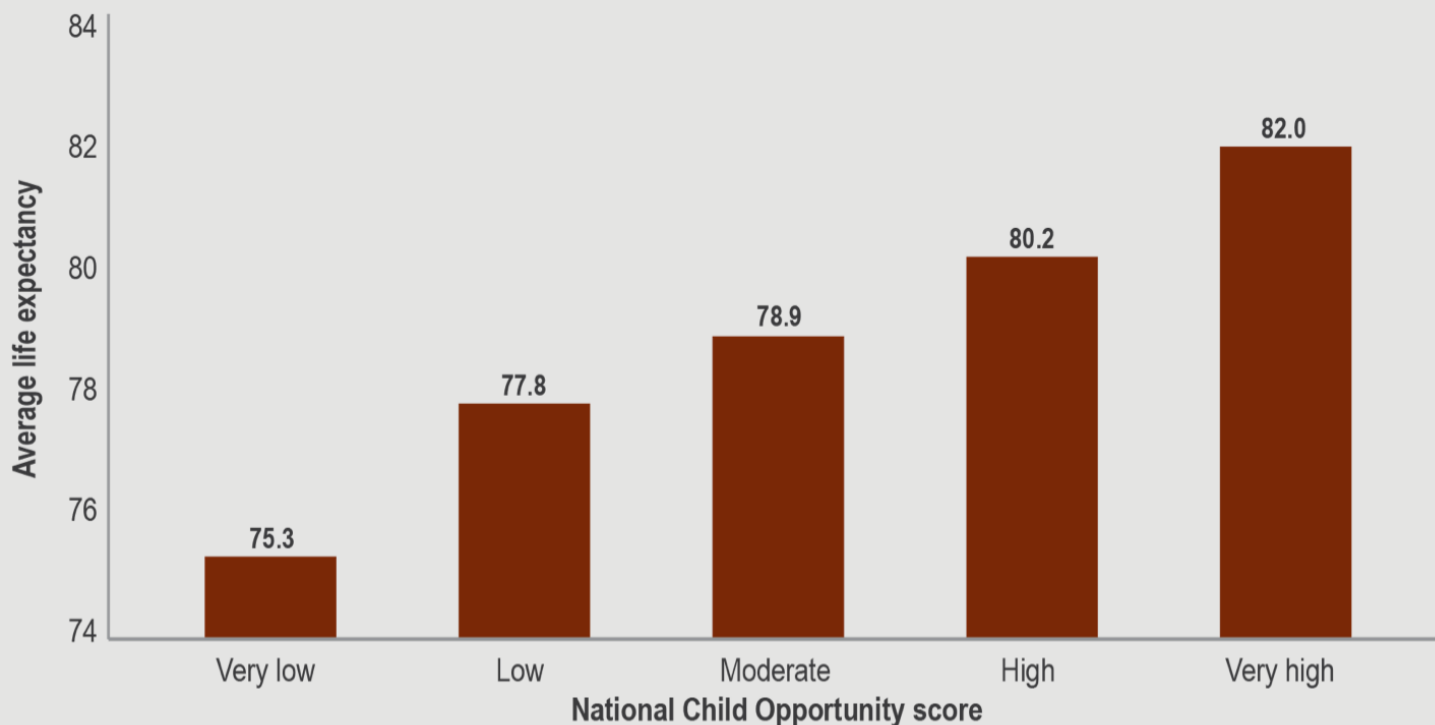


The income of the richest 20% grew by \$4 trillion; a trillion more than what the entire poorest 80% made.

Source: GAO analysis of 1989 through 2016 Survey of Consumer Finances data. | GAO-19-587



**Figure 2.2 Child neighborhood opportunity level and average life expectancy at birth in the 100-largest U.S. metropolitan areas**

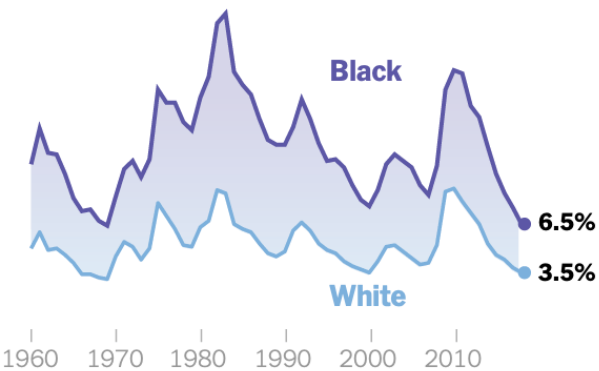


*Notes:* Life expectancy is the average number of years a person can expect to live at birth for individuals born in a given neighborhood (Census tract) for the years 2010–2015. Each neighborhood is assigned to one of five opportunity levels (very low, low, moderate, high, or very high) based on its COI 2.0 score. Each opportunity level contains 20% of the U.S. child population. Average life expectancy at birth was calculated across all Census tracts with the same opportunity level weighted by the population of children 0–17 years of age in each tract.

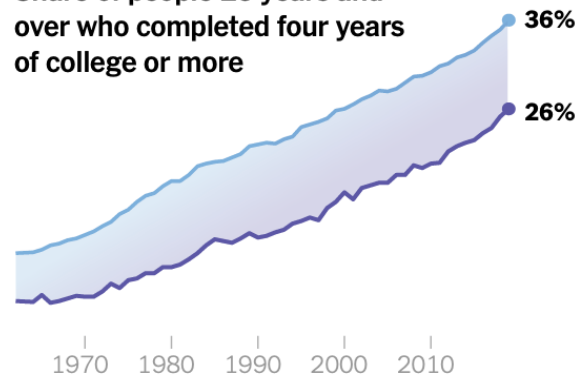
U.S. Department of Health and Human Services, Office of Surgeon General. (2021). Community Health and Economic Prosperity Engaging Businesses as Stewards and Stakeholders—A Report of the Surgeon General. Retrieved from <https://www.hhs.gov/sites/default/files/chep-sgr-full-report.pdf>

Child Opportunity Index 2.0, 2019: [diversitydatakids.org](https://diversitydatakids.org). (n.d.). *Child Opportunity Index 2.0, 2019*. Waltham, MA: Brandeis University, The Heller School for Social Policy and Management, Institute for Child Youth and Family Policy; and Life expectancy data from the U.S. Small-Area Life Expectancy Estimates Project (CDC-NCHS).

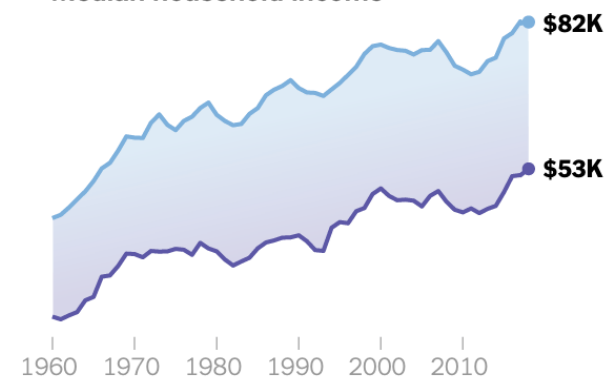
Unemployment rate, age 16 years and over



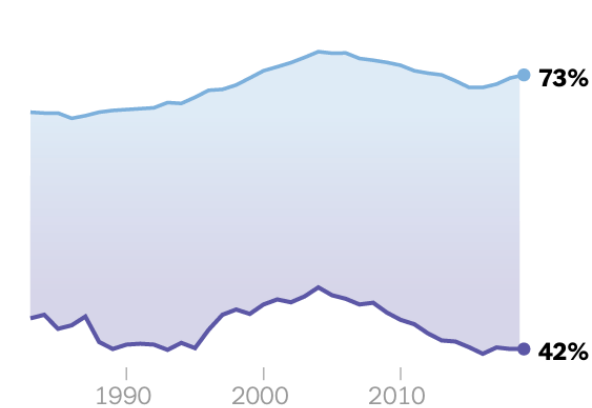
Share of people 25 years and over who completed four years of college or more



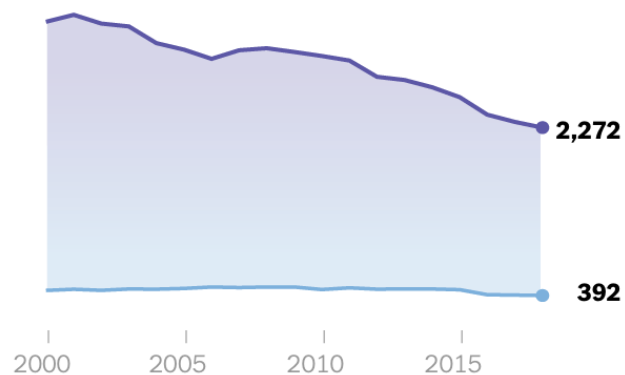
Median household income



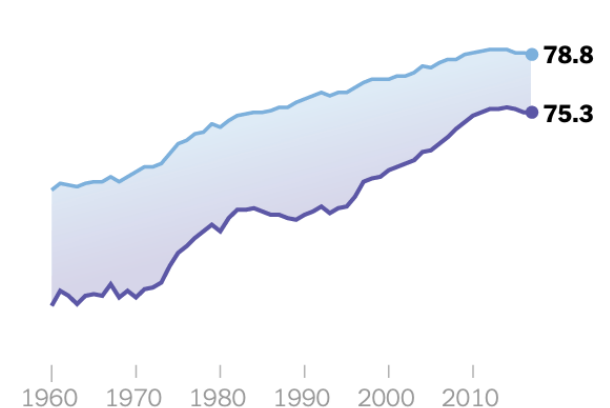
Homeownership rate



Sentenced male prisoners per 100,000 residents of the corresponding group



Life expectancy at birth

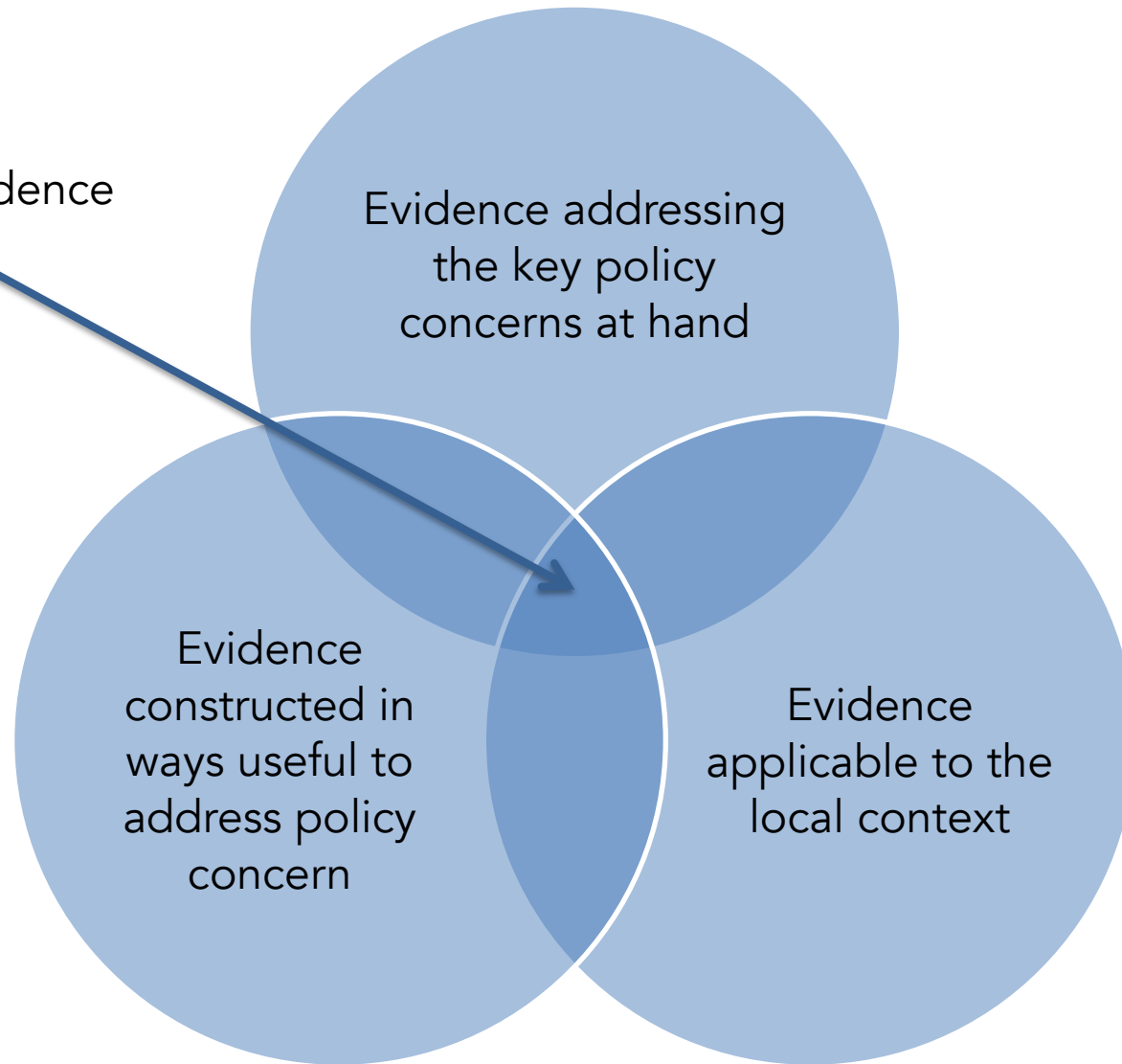


# ***Follow the Science?***

If only it were so easy.

# Appropriate evidence for the policy context

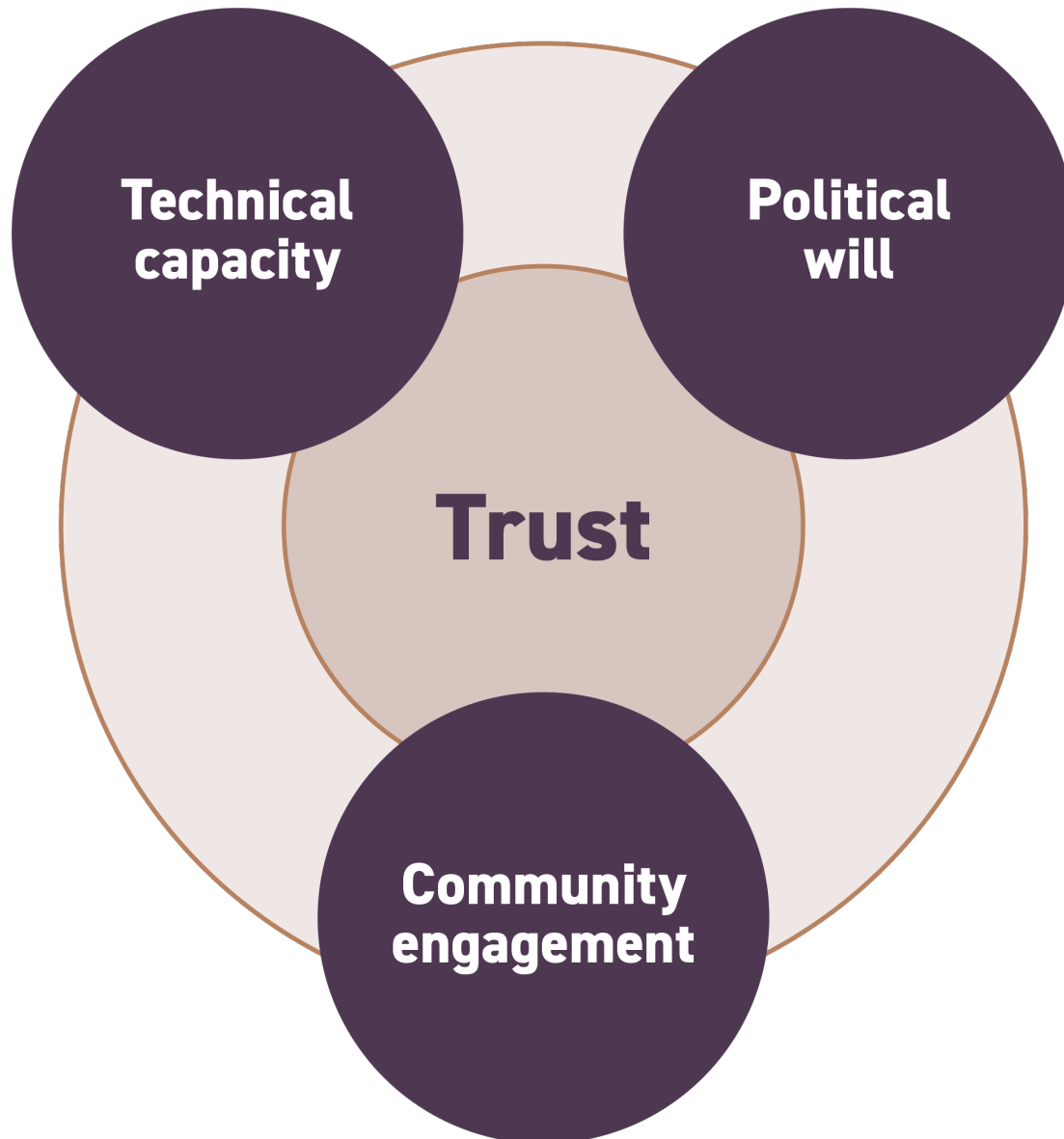
Appropriate evidence  
for policy





<https://www.nbcnews.com/politics/donald-trump/timeline-trump-administration-s-response-coronavirus-n1162206>  
<https://chicagocrusader.com/chicago/rising-omicron-cases-cdc-guidance-threatens-businesses>

# Key elements for actionable and impactful decision making



## **5. A closing metaphor**







[sandrogalea.org](http://sandrogalea.org)