# Analysis of State and Local Governmental Public Health Spending 2000-2018 and COVID-19 Response Implications

Strategies to Achieve Alignment, Collaboration, and Synergy Across Delivery and Financing Systems



Research-In-Progress Webinar April 15, 2020 12- 1pm ET

colorado school of public health

# Agenda



Welcome: Chris Lyttle, JD

Deputy Director for Systems for Action

Presenters: Beth Resnick, DrPH, MPH

David Bishai, MD, PhD, MPH

JP Leider, PhD

Johns Hopkins Bloomberg School of Public Health

**Q&A:** Moderated by **Chris Lyttle**, **JD** 

#### Presenter







**Dr. Beth Resnick** is a Senior Scientist at the Johns Hopkins Bloomberg School of Public Health, Department of Health Policy and Management. She is Assistant Dean for Public Health Practice and Training and Director of the MSPH Program in Health Policy. Her research and practice interests include assessing and improving the public health infrastructure, enhancing knowledge of potential environment and health connections, and developing effective public health policies.

Prior to her appointment at Johns Hopkins, Beth Resnick was Director of Environmental Health at the National Association of County and City Health Officials (NACCHO). She provided education, information, research, and technical assistance to the nation's 3,000 local health departments and facilitated partnerships among local, state, and federal agencies in order to promote and strengthen local environmental public health practice.

# Agenda



Research findings

Why this is relevant in light of COVID-19

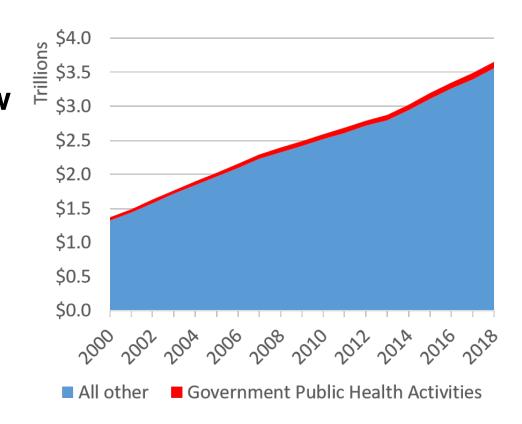
Plans for building on this work

Discussion

# How Much Do We Really Spend on Public Health?



National estimates show public health spending as 3% of total health expenditures...
But are these estimates accurate?



https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData

#### **Strengths**

- Recoded Census State Finance Division Data 2000-2013
- Basis of Public Health Activity estimate in NHEA
- Includes spending by all state agencies
- Includes other agencies with health functions (not just health departments)
- Highly detailed line item expenditures that allows parsing by specific activity

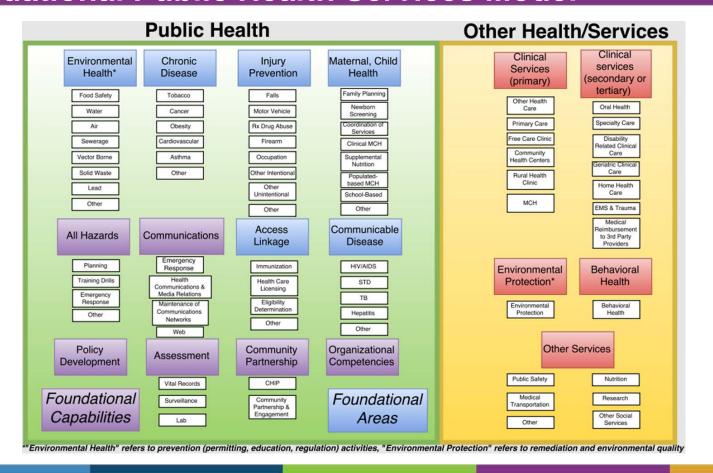
#### Limitations

- Inconsistencies across states in accounting for local public health spending and intergovernmental state to local transfers
- Incomplete data prior to 2008 and absence of California spending data
- Limitations due to initial state coding in South Carolina
- Beholden to Census coding determinations

SHED available at: https://www.icpsr.umich.edu/icpsrweb/ICPSR/studies/36741

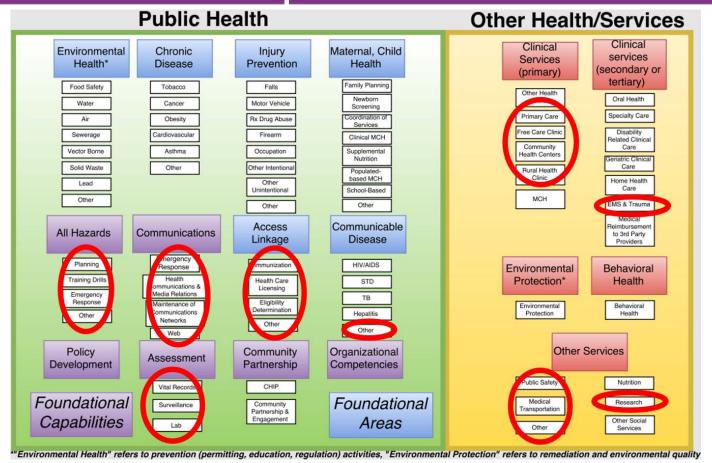
# SHED Coding Framework Built on the Foundational Public Health Services Model





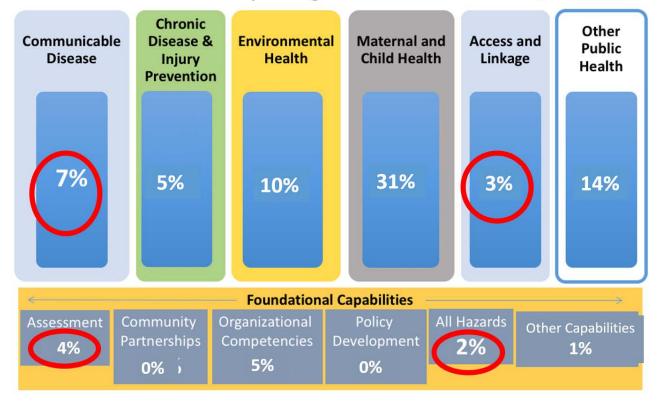
# Foundational Public Health Services Model in the Context of COVID-19 Response







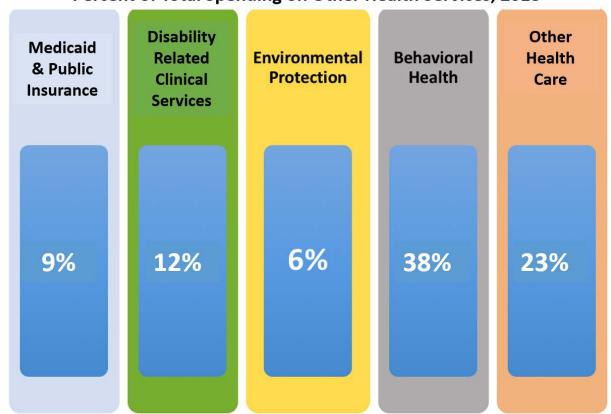
#### Percent of Total State Spending on Public Health Services, 2018



<sup>\*</sup>Only public health component using the FPHS coding framework, as a percentage of Code 32 spending

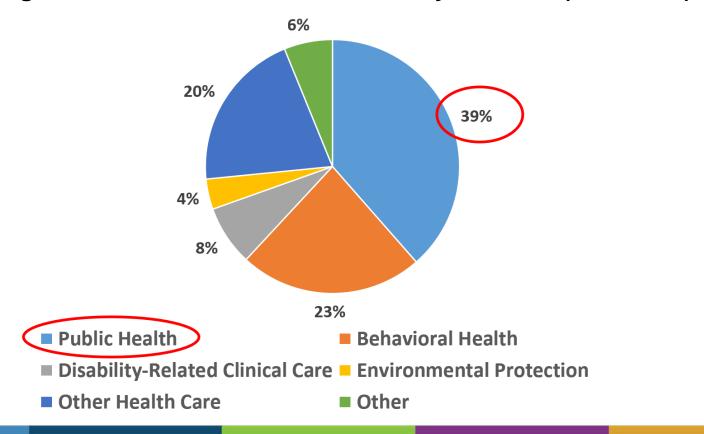


#### Percent of Total Spending on Other Health Services, 2018



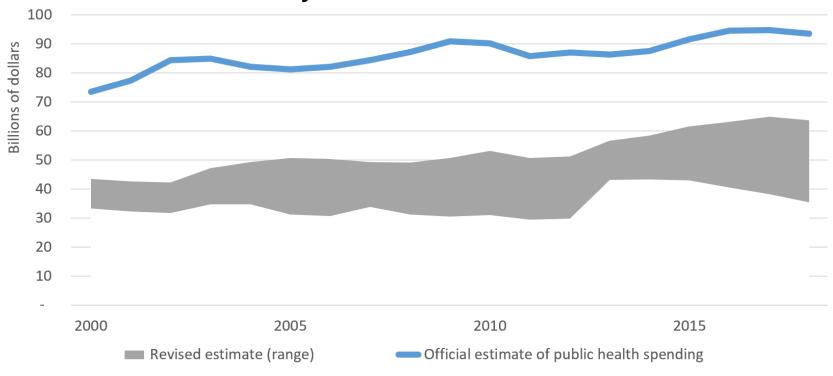


#### State Spending in the Census Public Health Activity Estimate (2000-2018)





#### **National Public Health Activity Estimate 2000-2018**



<sup>\*</sup>JHSPH estimate includes added-back federal dollars.

<sup>\*\*</sup>JHSPH estimate is a range to include margin of error.

## **Need for Accurate Spending Data Now**

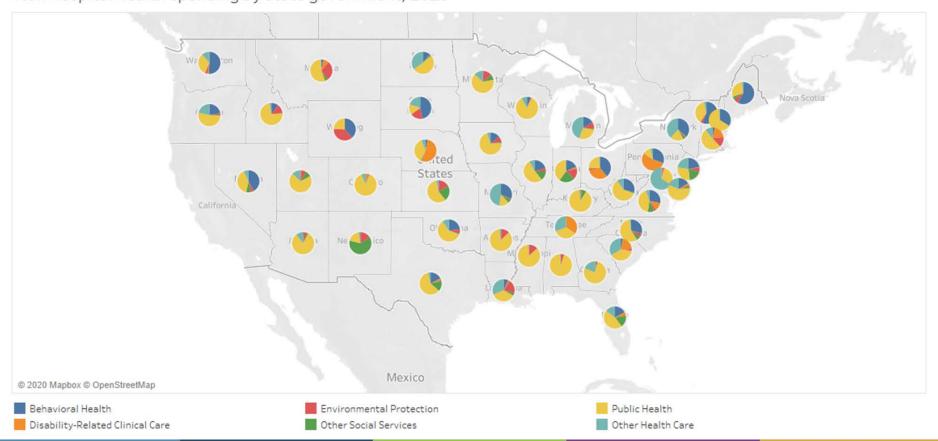




Health care spending grew by <u>52 percent</u> in the past decade, while the budgets of local health departments shrank by as much as 24 percent, according to a <u>2019 report</u> from the public health nonprofit Trust for America's Health, and the C.D.C.'s budget <u>remained flat</u>. Today, public health claims just 3 cents of every health dollar spent in the country.

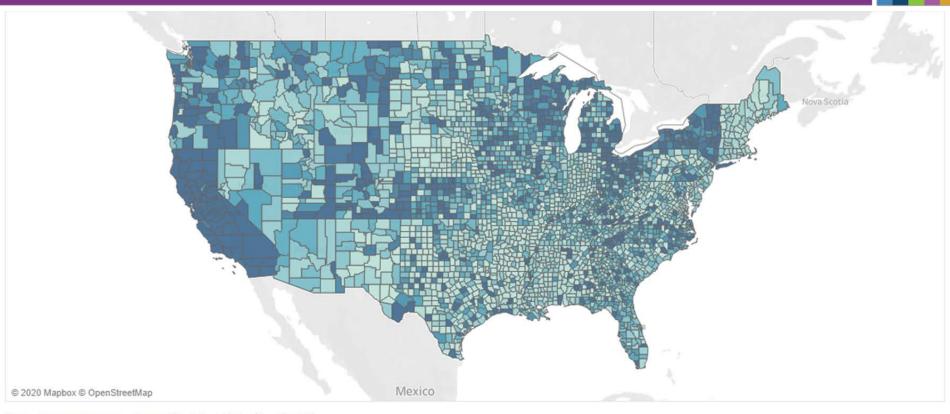


Non-hospital health spending by state government, 2018



# **Local Level Public Health Spending Estimates, 2017**





Per capita spending on non-hospital health activities (Function 32)

50 \_\_\_\_\_\_ \$20

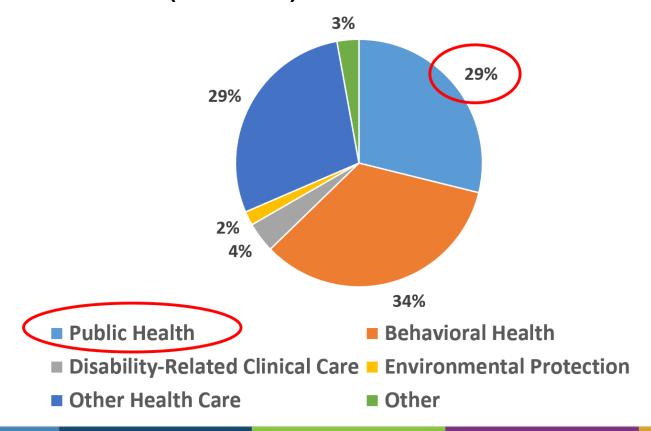
# **Key Local Level Findings**



- County level spending on health and public health statistically significantly lowered all cause mortality
  - Models controlled for county spending on hospitals and total county revenue
  - Based on data from 2850 counties from 1972- 2012
  - Fixed effects models with Koyck lags
- Effect sizes were larger in counties with a high proportion of African American
  - Can infer that county health spending lowers racial disparities in mortality



#### **State to Local Transfers (2000-2018)**



# Summary



- We spend considerably less on population-level services than estimates indicate
  - We are seeing impact on inadequate capacity for COVID-19 response
- Better understanding of what we really spend on public health:
  - Assess impact of actual spending
  - Uncover spending disparities and reallocations
  - Inform future resource allocations
  - Assure adequate public health capacity for emergencies such as COVID-19

# **Next Steps**



#### **Publishing**

- AJPH:
  - Inaccuracy of Official Estimates of Public Health Spending in the United States, 2000-2018
  - The state of rural public health: enduring needs in a new decade
  - Aligning US spending priorities using the Health Impact Pyramid lens

In process for submission: US States' Spending on Public Health 2008-2018

 Seeking funding to build on this work to track spending preand post-COVID-19

### **Discussion**



## Implications for the Public Health Systems of the Future

How do we increase transparency in resource allocations & spending to assure:

- Adequate public health protections are maintained for the long-term
- Assure that other key public health protections are not defunded in wake of COVID-19
- A sustainable funding model



# Thank you!

# **Questions?**



www.systemsforaction.org



# **Upcoming ResProg Webinars**



#### **April 29 | 12 pm ET**

**Integrating Cross-Sectoral Health and Social Services for the Homeless** 

Jesus Valero, PhD, University of Utah

Hee Soun Jang, PhD, University of North Texas

#### May 13 | 12 pm ET

<u>Testing an Integrated Delivery and Financing System for Older Adults</u> <u>with Health and Social Needs</u>

José Pagán, PhD, New York University

Elisa Fisher, MPH, MSW, New York Academy of Medicine

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