17th Annual

Public Health Finance Roundtable

Tales from the Trenches of Public Health

Sunday, Oct 24, 2021

3:00pm to 5:30pm MST

(Session: 245.0)

Zoom: https://lsuhsc.zoom.us/j/96649844290?from=addon

LSU Health NEW ORLEANS School of Public Health

Moderator: Peggy A. Honoré, DHA, MHA, Endowed Professor

Co-Moderator: Patrick Bernet, PhD, Associate Professor, Florida Atlantic University

Co-Moderator: JP Leider, PhD, Center Director, University of Minnesota School of Public Health

2021 AGENDA

Training & Access in Underserved Populations	**Debra Oliver** **(Maternal and Child Health, Palm Beach County FL)** **T. Leroy Jefferson Medical Society**
Strategy for State Plan Waivers to iIcrease Medicaid Revenues	Sami Jarrah (New York City DOH, NY). CFO/Deputy Commissioner, NYC Department of Health and Mental Hygiene. Sami Kamal Jarrah - de Beaumont Foundation
Comments from the Field	Dr Bob England (Health Director, Pima County AZ). (County bids farewell to Dr. Bob)
Turbulent Times	Leon F. Vinci, DHA, DAAS (Health Promotion Consultants)
Staffing Up	Mac McCullough, PhD (Health Economist, Maricopa County AZ)

http://www.publichealthfinance.org/training-and-education/6622

Strategy for a state plan waiver to increase Medicaid revenue

APHA 17th Annual Public Health Finance Roundtable
Takes from the Trenches of Public Health

October 24, 2021

Sami Jarrah, MPH
Chief Financial Officer, Deputy Commissioner
New York City Department of Health and Mental Hygiene

NYC Health

Declarations

- I have no financial relationships or conflicts of interest to declare related to this presentation.

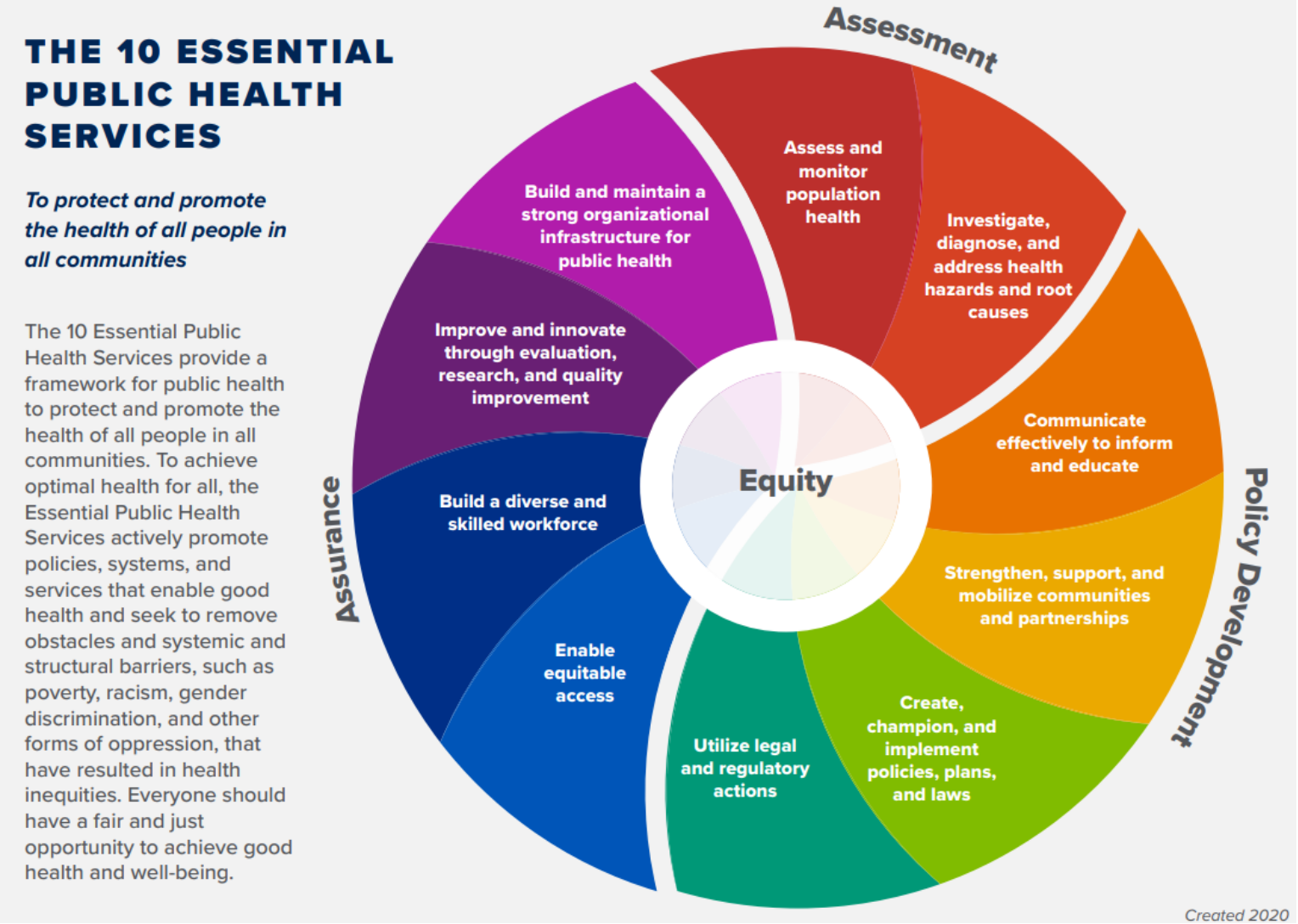
- The views presented are my own and do not necessarily represent the official positions or policies of any organizations named.

Introduction

- Multnomah County (Portland), OR – Deputy Division Director
- Philadelphia, PA – Chief Operating Officer, Deputy Commissioner
- New York, NY – Chief Financial Officer, Deputy Commissioner

NYC Health

A framework to consider



NYC Health

Case study

- Philadelphia partnership with state
  - Medicaid
  - FQHC embedded within a local public health department

- Years-long investment:
  - Internal advocacy within City: Budget Office, Law Department, Risk, etc.
  - External partnership with state Medicaid agency – slow, fits and starts, etc.

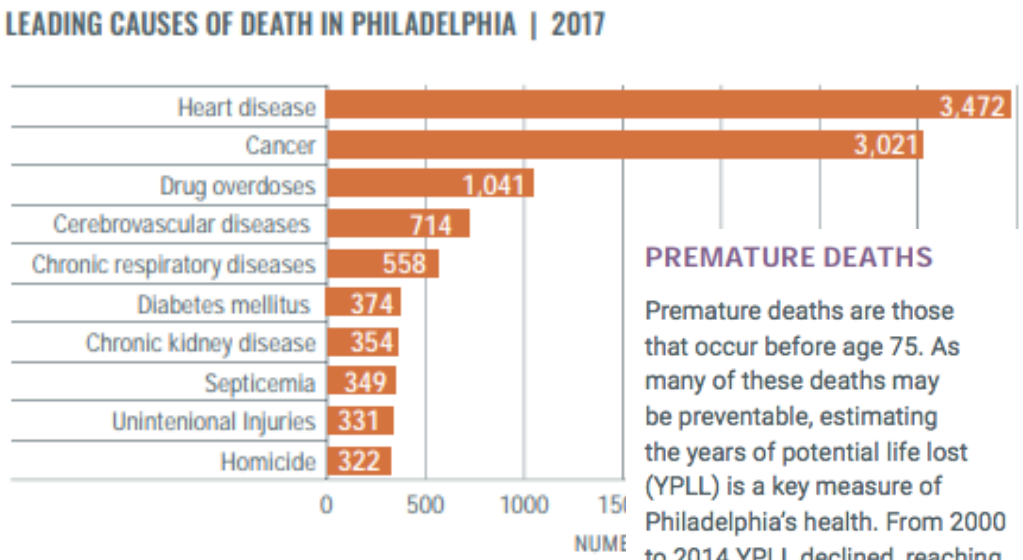
Stakeholders

Case study

- Evidence-based, equity-focused approach
  - Disability-adjusted life year (DALY) investments, through racial justice lens

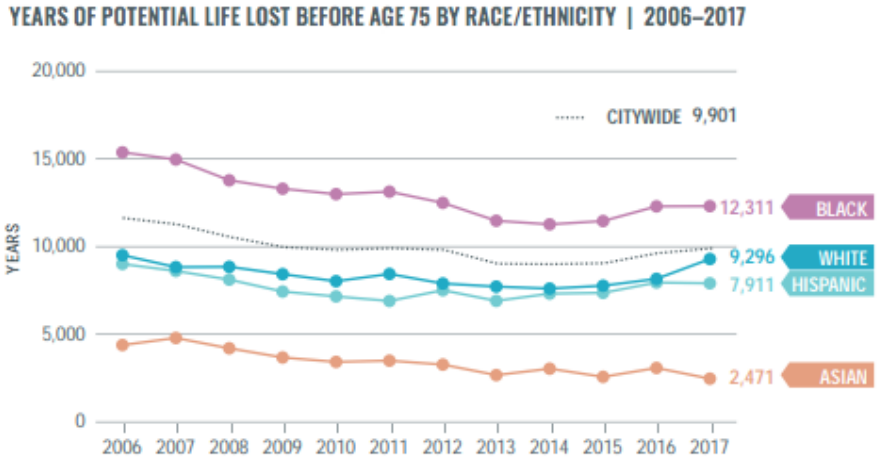
- Started with high-level examination of:
  - Funding gaps
  - Equity-focused examination of needs
  - Revenue opportunities
  - Assets

Case study



PREMATURE DEATHS

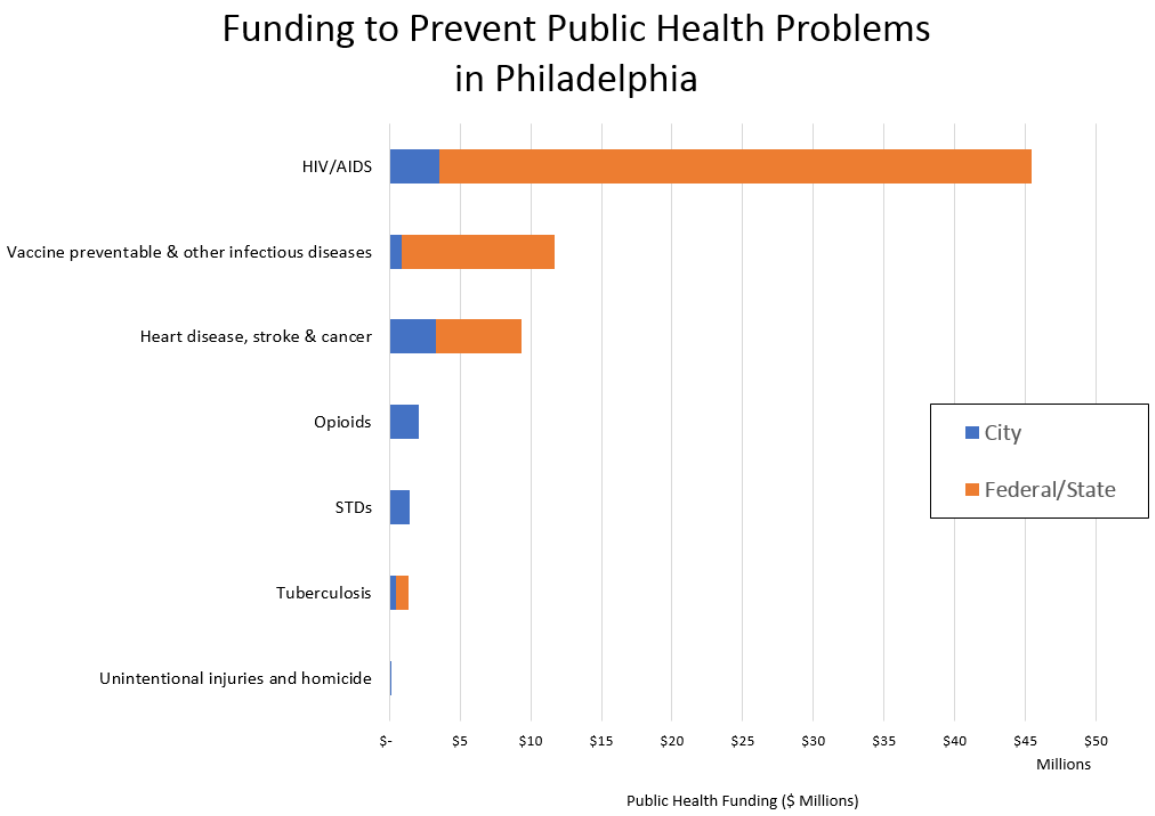
Premature deaths are those that occur before age 75. As many of these deaths may be preventable, estimating the years of potential life lost (YPLL) is a key measure of Philadelphia's health. From 2000 to 2014 YPLL declined, reaching a low of 9,004 years in 2014. In 2015, this trend reversed and has continued to increase due to increasing deaths from drug overdoses and homicides among young adults.

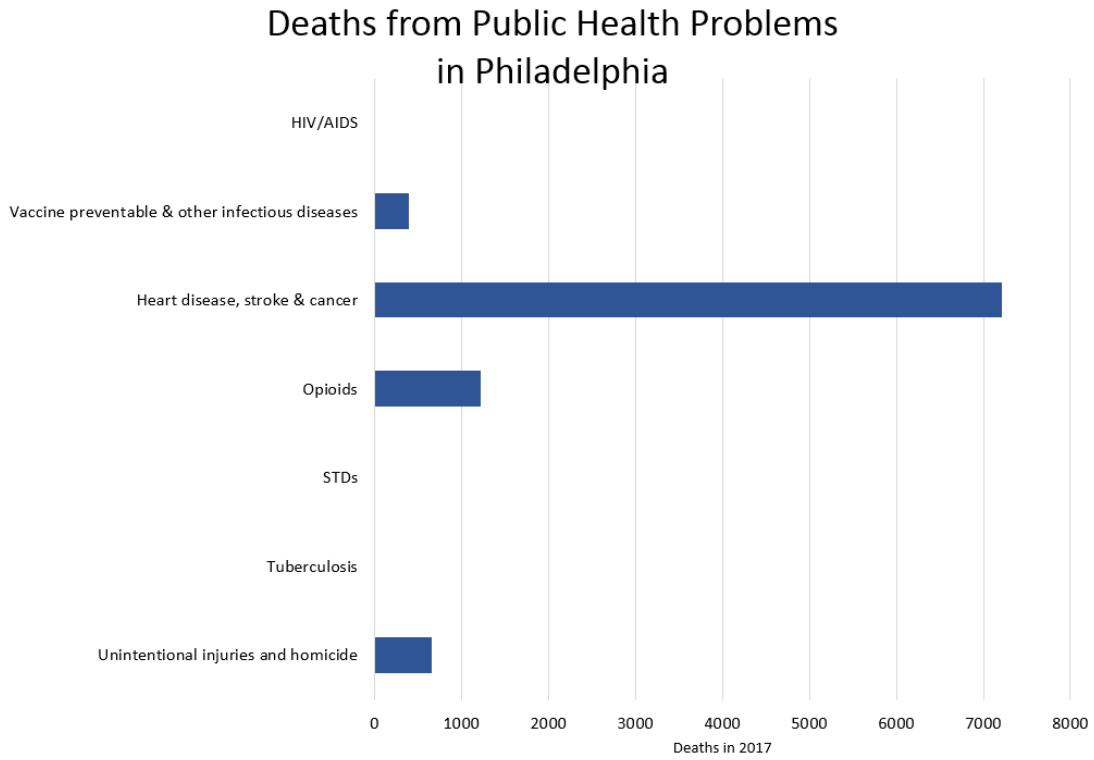


SOURCE: 2007-2017 Vital Statistics, PDPH

Health

Case study





NYC Health

Results

- $15-20M in recurring annual, flexible revenue
  - Freedom to invest in “un-sexy” but proven programs, race-explicit strategies
  - Capital improvements, new facilities
  - Investment shift away from clinical services toward public health programs

NYC Health

Lessons learned

- Challenges:
  - Politics
  - Bravery
  - Endurance
  - Usually not the financial stuff

Lessons learned

- “Tucking” critical agency investments
  - Infrastructure and administration
  - Mission-aligned agencies (more advocates)
  - External pressure (more advocates)

- Stakeholders

- Timelines

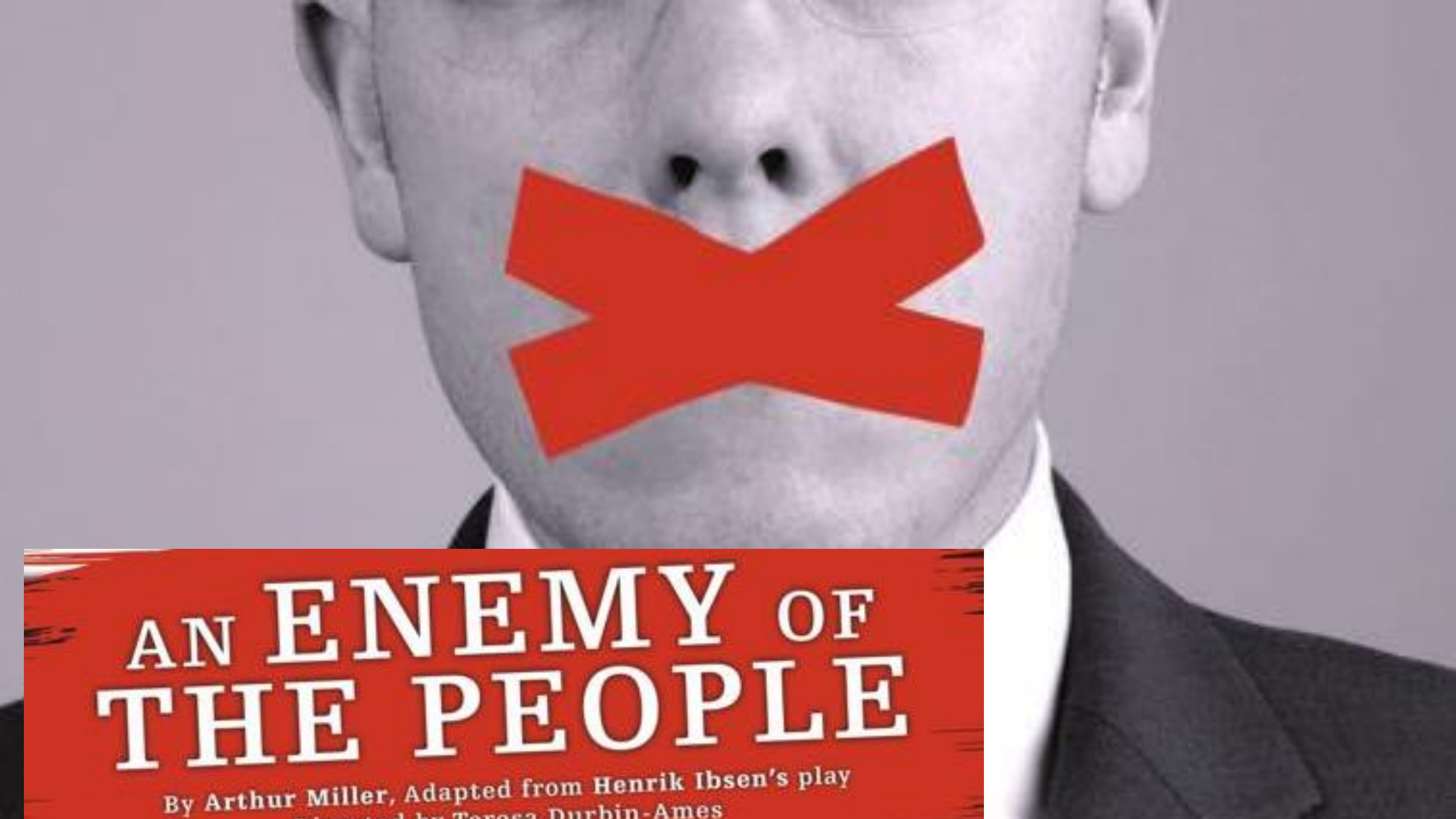
The Reality of Public Health Decision-Making in Our Time

Public Health Finance Roundtable
October 24, 2021

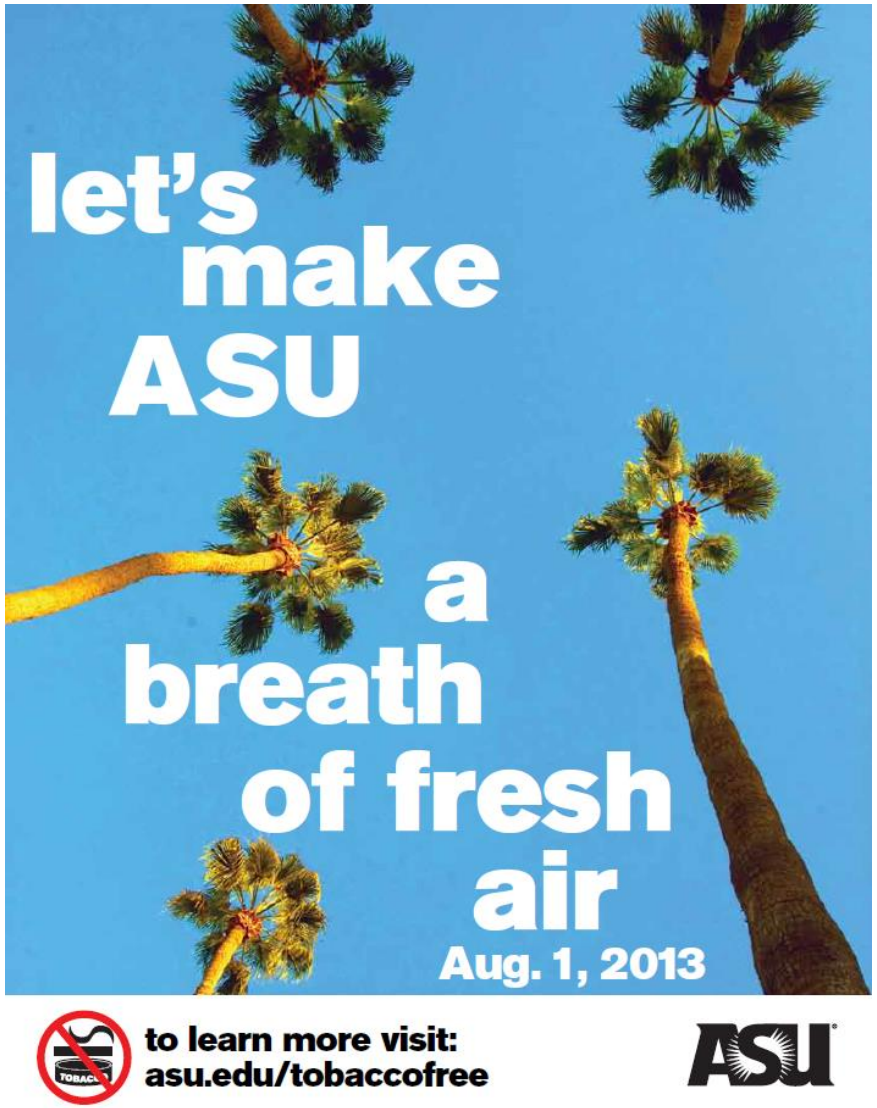
Bob England, MD, MPH
benglandaz@gmail.com

The opinions expressed here are *mine* alone.

Public Health is *PUBLIC*


AN ENEMY OF THE PEOPLE
By Arthur Miller, Adapted from Henrik Ibsen's play

Tobacco-Free College Campuses



~20% decrease in smoking
when colleges go tobacco free

Given current rates,
~9,800 students will quit

=$980 million in
health care savings

Repeat every 2-4 years
with each new cohort

(Cost ~$400K -- ~2,500-to-1 payback)

Economic effects of the pandemic may kill more than COVID itself

Table 5: Cumulative changes of life expectancy and age-adjusted death rates over different horizons following the COVID-19 unemployment shock

	(1) Percentage change in life expectancy			
	5 years	10 years	15 years	20 years
Overall population	−0.42 [−0.95,0.01]	−0.80 [−1.97,0.00]	−0.83 [−2.27,0.00]	−0.83 [−2.29,0.00]
African-American	−0.58 [−1.13,−0.16]	−1.20 [−2.64,−0.32]	−1.16 [−3.16,−0.25]	−1.09 [−3.17,−0.28]
African-American (M)	−0.84 [−1.46,−0.33]	−1.57 [−3.06,−0.58]	−1.53 [−3.64,−0.52]	−1.47 [−3.70,−0.54]
African-American (W)	−0.62 [−1.21,−0.14]	−1.34 [−2.97,−0.27]	−1.32 [−3.65,−0.16]	−1.21 [−3.66,−0.15]
White	−0.37 [−0.94,0.10]	−0.72 [−2.01,0.15]	−0.75 [−2.34,0.16]	−0.76 [−2.41,0.17]
White (M)	−0.40 [−0.93,0.07]	−0.85 [−2.14,0.09]	−0.94 [−2.66,0.11]	−0.94 [−2.85,0.12]
White (W)	−0.52 [−1.28,0.16]	−0.99 [−2.74,0.28]	−1.01 [−3.16,0.34]	−1.00 [−3.15,0.35]

https://www.nber.org/system/files/working_papers/w28304/w28304.pdf

Risk for COVID-19 Infection, Hospitalization, and Death By Race/Ethnicity

Updated Apr. 23, 2021

Rate ratios compared to White, Non-Hispanic persons	American Indian or Alaska Native, Non-Hispanic persons	Asian, Non-Hispanic persons	Black or African American, Non-Hispanic persons	Hispanic or Latino persons
Cases[1]	1.6x	0.7x	1.1x	2.0x
Hospitalization[2]	3.5x	1.0x	2.8x	3.0x
Death[3]	2.4x	1.0x	1.9x	2.3x

https://www.cdc.gov/coronavirus/2019-ncov/covid-data/investigations-discovery/hospitalization-death-by-race-ethnicity.html downloaded 5/5/2021

Risk ratios for mortality, pandemic vs. non-pandemic time, California, by occupation, through October 2020

Occupation	Deaths	Risk Ratio
• Cooks	828	1.60
• Packaging and filling machine	172	1.59
• Agricultural workers	617	1.55
• Construction laborers	1,587	1.49
• Sewing machine operators	127	1.44
• Grounds maintenance workers	712	1.40
• Customer service representatives	562	1.37
• Licensed practical nurses	109	1.34
• Bartenders	148	1.28

The table is restricted to occupations with 100 or more pandemic-time deaths.

https://www.medrxiv.org/content/10.1101/2021.01.21.21250266v1.full.pdf

Racial Disparities of COVID

CDC: COVID-19 Racial and Ethnic Health Disparities

- https://www.cdc.gov/coronavirus/2019-ncov/community/health-equity/racial-ethnic-disparities/index.html

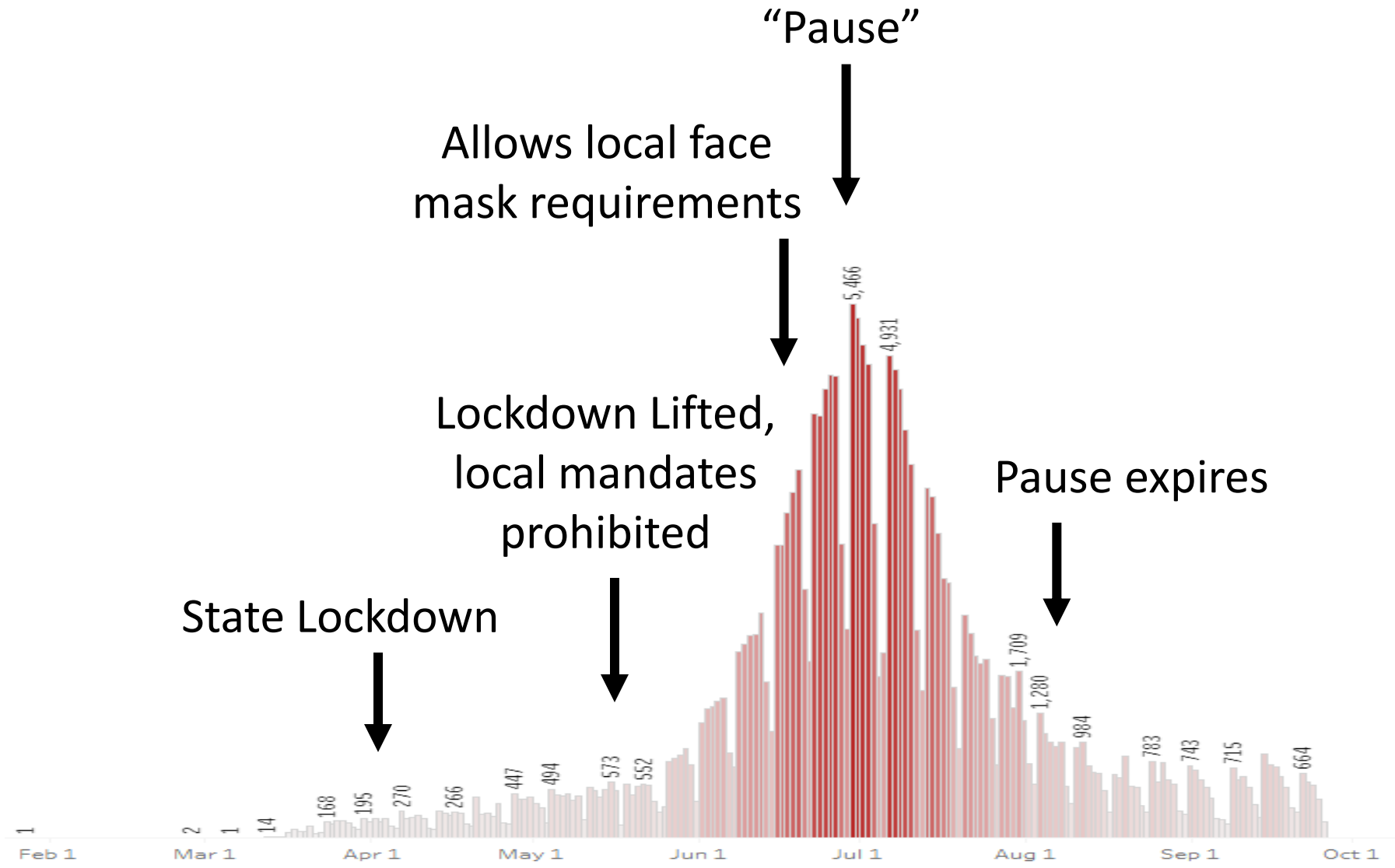
AMA: COVID-19 health equity resources

- https://www.ama-assn.org/delivering-care/health-equity/covid-19-health-equity-resources?gclid=CjwKCAiA9vOABhBfEiwATCi7GP55FrFr78rp9L3dvGSwEmsHYoxm7OYppf_GDXH2nnkv3mX5htukdxoColcQAvD_BwE

The racial impacts of COVID-19: Regularly updated news articles

- https://www.embracerace.org/resources/disproportionate-racial-impacts-of-covid?gclid=Cj0KCQiA0-6ABhDMARIsAFVdQv-k_j4k8eU51MZn4dgcLH8-97BwohRIoI02Jk1WaLve6NJvdl0nNfwaAiafEALw_wcB

First Wave of COVID-19 Cases in Arizona



By June 2020, COVID in Pima County Long-Term Care Centers

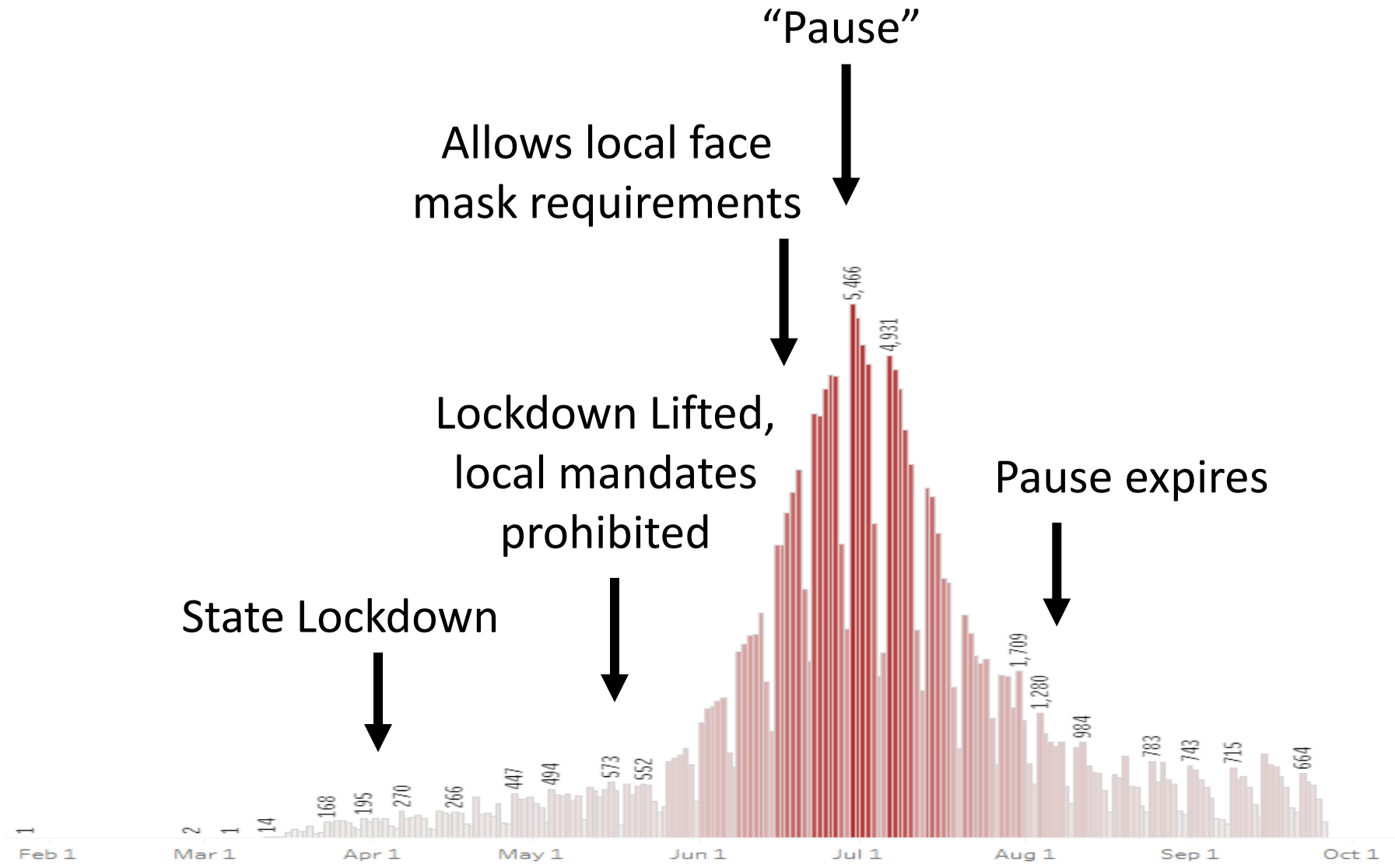
- ~25% of all cases
- ~nearly 50% of hospitalizations
- ~60% of all deaths

By June 2020, COVID in Pima County Long-Term Care Centers

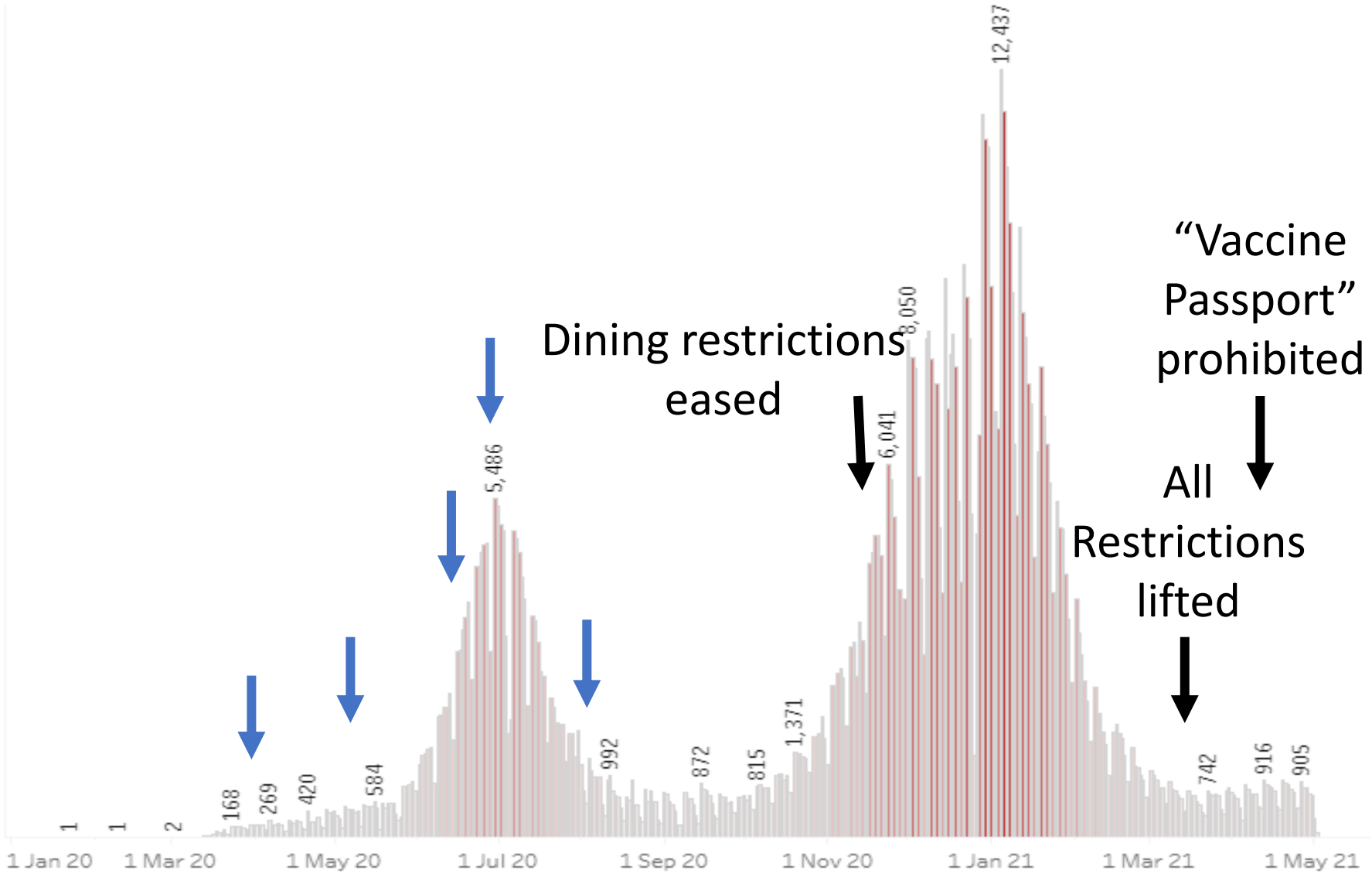
- ~25% of all cases
- ~nearly 50% of hospitalizations
- ~60% of all deaths

- >1/3 of all these cases were staff

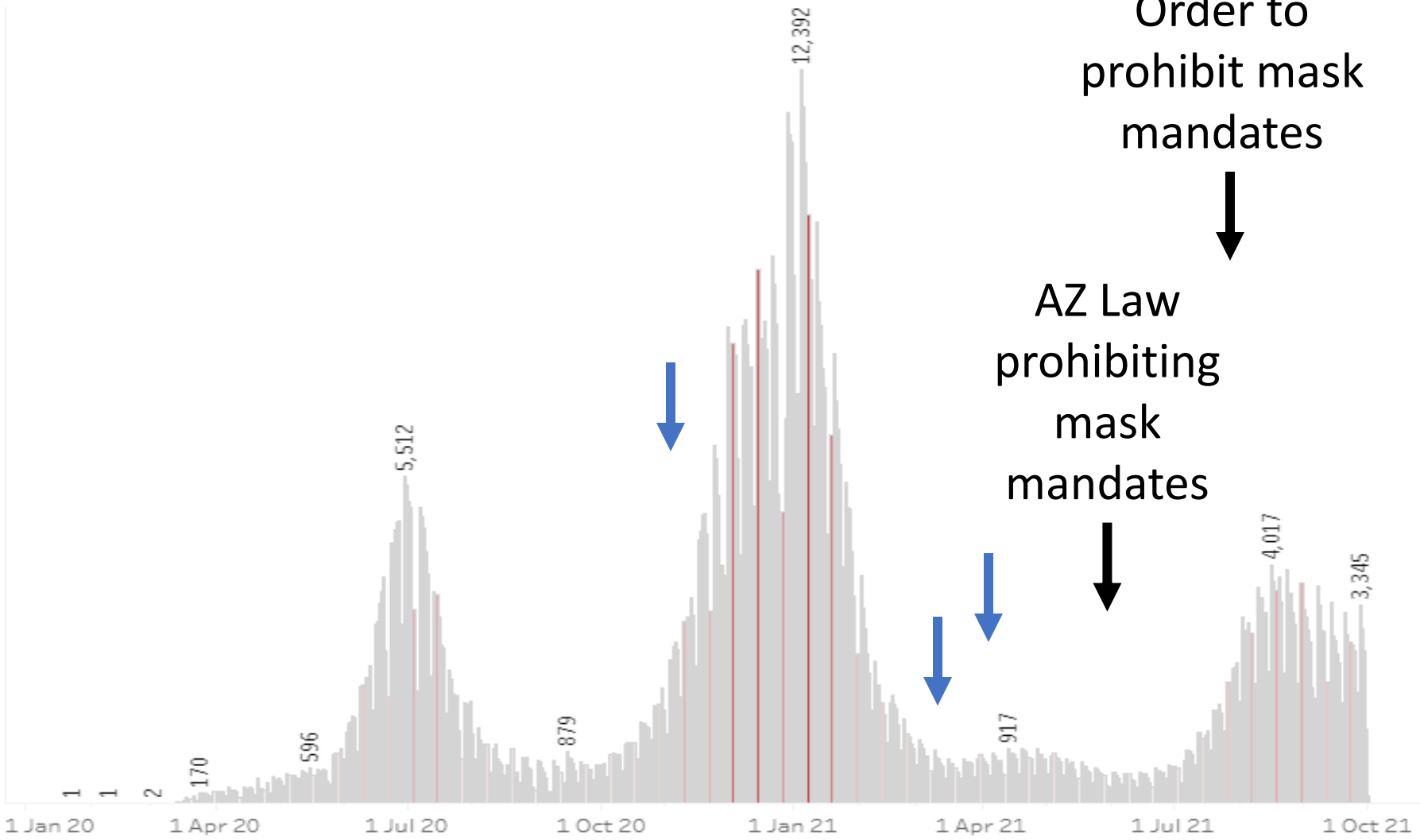
First Wave of COVID-19 Cases in Arizona



Through the 2nd Wave…



And to date…


Gov Exec Order to prohibit mask mandates
AZ Law prohibiting mask mandates
12,392
5,512
4,017
3,345
879
596
917
170
2
1
1
1 Jan 20
1 Apr 20
1 Jul 20
1 Oct 20
1 Jan 21
1 Apr 21
1 Jul 21
1 Oct 21

Best summary of decision points:

- https://static1.squarespace.com/static/56ec8d2562cd9413e14c0019/t/60103500446e8b1a6813570a/1611674880880/Ultimate+Pandemic+Year+in+Review+2020+1.pdf

And of the total toll:

- https://static1.squarespace.com/static/56ec8d2562cd9413e14c0019/t/600c9d47c6ff8351451b5d71/1611439432103/Final+Final+AZMortalityRates+2020.pdf

Arizona Public Health Association AzPHA.org

Best Arizona modeling reports (weekly)

- https://publichealth.arizona.edu/news/2021/covid-19-forecast-model (Joe Gerald, U. of Arizona)

So now what?

- Not the same political overreach in every state, but…
- Confirmation bias in the extreme
- Changes seen as evidence of prior “lies”
- Ferocity of opinion over minimal interventions
- HCW & PH exhaustion and trauma
- Sizable chunk of population for whom science is invalid

- How do we get past this tribalism?

Public Health Finance Roundtable

TALES FROM THE TRENCHES OF PUBLIC HEALTH

TURBULENT TIMES : LOCAL PUBLIC HEALTH FINANCING

Leon F. Vinci, DHA, MPH

Denver, CO

October 24, 2021

Turbulent Times : Local Public Health Financing

- Two Case Examples
  - Loss/Reinstatement of Health Education
  - Senior Health Services

Turbulent Times: Local Public Health Financing

- Community Health Educator

Existing Position ..... cut due to City Cutbacks
(convenience -- vacant)

3/2 Years -- Reinstated (Data, Collaboration)

Turbulent Times: Local Public Health Financing

- Health-Wellness Services to Senior Citizens

  Existing Program ..... cut due to 'Mayor's Agenda' (convenient)

  Priority List -- 10 Items (picked #9) (?)

  Full-court-press -- 11.9 th Hour

Turbulent Times: Local Public Health Financing

- Health-Wellness Services to Senior Citizens

  Informed Mayor‘s Aide (Save Face)

  Reinstate via City & County Commissioners

  Public Arena, Boxed-in, Testimony

  “Their” Budget vs “Mayor’s”

Turbulent Times: Local Public Health Financing

- PUT IN THE MIDDLE

  Whipping Post

  -- Take the hits

  -- Directed me to review/cut/etc

  -- Come back

Turbulent Times: Local Public Health Financing

- Scrambling Actions (SUCCESS)

  -- Review of Visit : (Timing & Services)

  -- State Grant -- permission

  -- Workable Alternatives

Turbulent Times: Local Public Health Financing

- TAKE HOME MESSAGES :

Patience

Health Risks

Alternative Financing

Take the Hits

Data

Collaboration

Public Support

Perseverance

Public Health Finance Roundtable

TALES FROM THE TRENCHES OF PUBLIC HEALTH

TURBULENT TIMES : LOCAL PUBLIC HEALTH FINANCING

Leon F. Vinci, DHA, MPH

Staffing Up: Determining Public Health Workforce Levels to Serve the Nation

Public Health Finance Roundtable
APHA Annual Meeting
Denver, CO

de Beaumont
BOLD SOLUTIONS FOR HEALTHIER COMMUNITIES

phnci

PHAB

October 24, 2021

Presenter & Disclaimer

Presented today by Mac McCullough on behalf of a (much) larger team

- Consultant on this project. My effort sponsored by deBeaumont Foundation & PHAB
- Day job: Associate Professor @ ASU & Health Economist @ Maricopa County Public Health

Disclaimer

- Views are my own and do not necessarily reflect any official positions of the Staffing Up project sponsors or other team members

Goal & Agenda

GOAL

- Describe Staffing Up project, share Phase I findings, and analyze public health finance implications of findings

AGENDA

- Project Background
- Methods
- Findings
- Implications (overall & public health finance-specific)
- Phase II

Follow Along at the Hotel or at Home

https://phnci.org/national-frameworks/staffing-up

Project Goals

- Phase I: Provide local and state staffing **estimates** of the size of public health workforce needed to fully implement minimum public health services (i.e. FPHS)
  - Released October 2021

- Phase II: Create a public health workforce **calculator** that that will allow health departments to determine the number and type of staff to provide sufficient levels of public health services.
  - Expected Summer 2022

Project Partners

- de Beaumont Foundation
- Public Health National Center for Innovations
- Quantitative and qualitative research experts
- CDC, CSTLTS (since July 2021)
- University of Washington (since July 2021)

Guidance provided by a Steering Committee and Research Advisory Committee. Qualitative interviews and focus groups also informed the work.

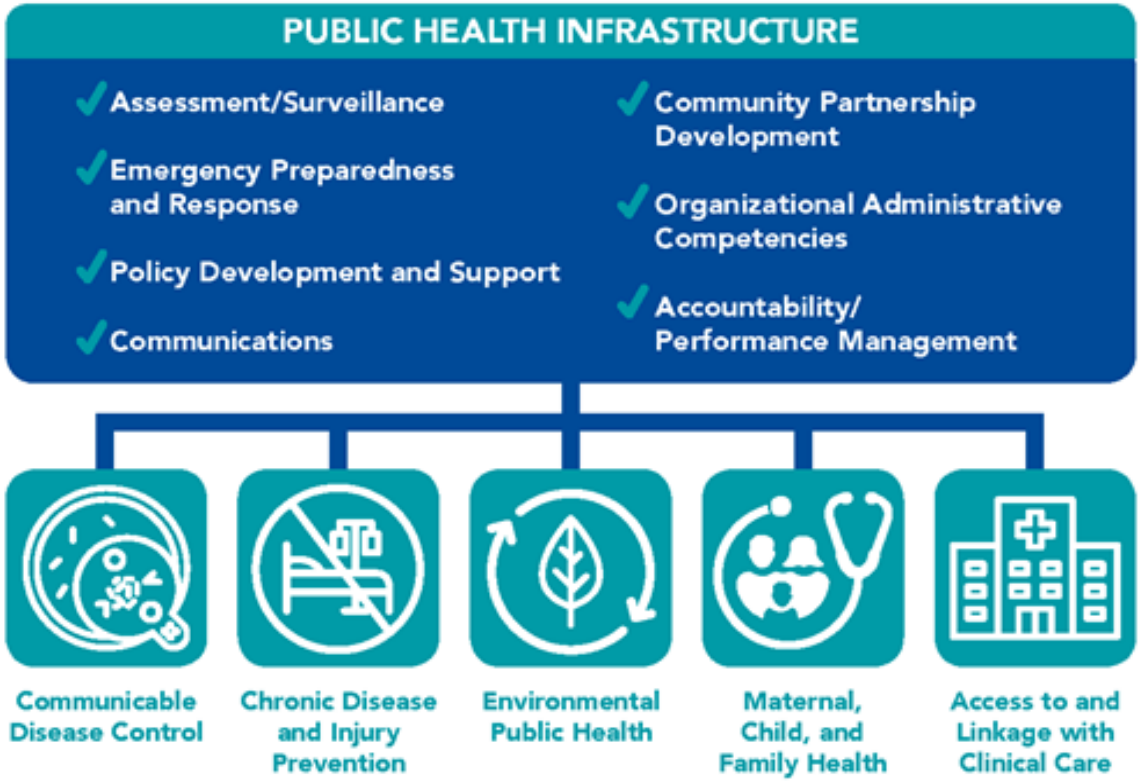
*José Montero (CSTLS) and Pattie Simone (CSELS) served as ex-officio members of the Steering Committee

Staffing Estimate

How many staff are needed in state and local health departments to perform the Foundational Public Health Services (FPHS)?

- Totals and ratios based on the number of staff needed per 100,000 people
- Estimates reflect an infrastructure that can be “surged” up during a crisis (i.e. a pandemic), but are not inclusive of that surge
- Estimates reflect the current state and practice of public health rather than any potential “future-state” or re-imagined public health system

phnci Foundational Public Health Services in Action



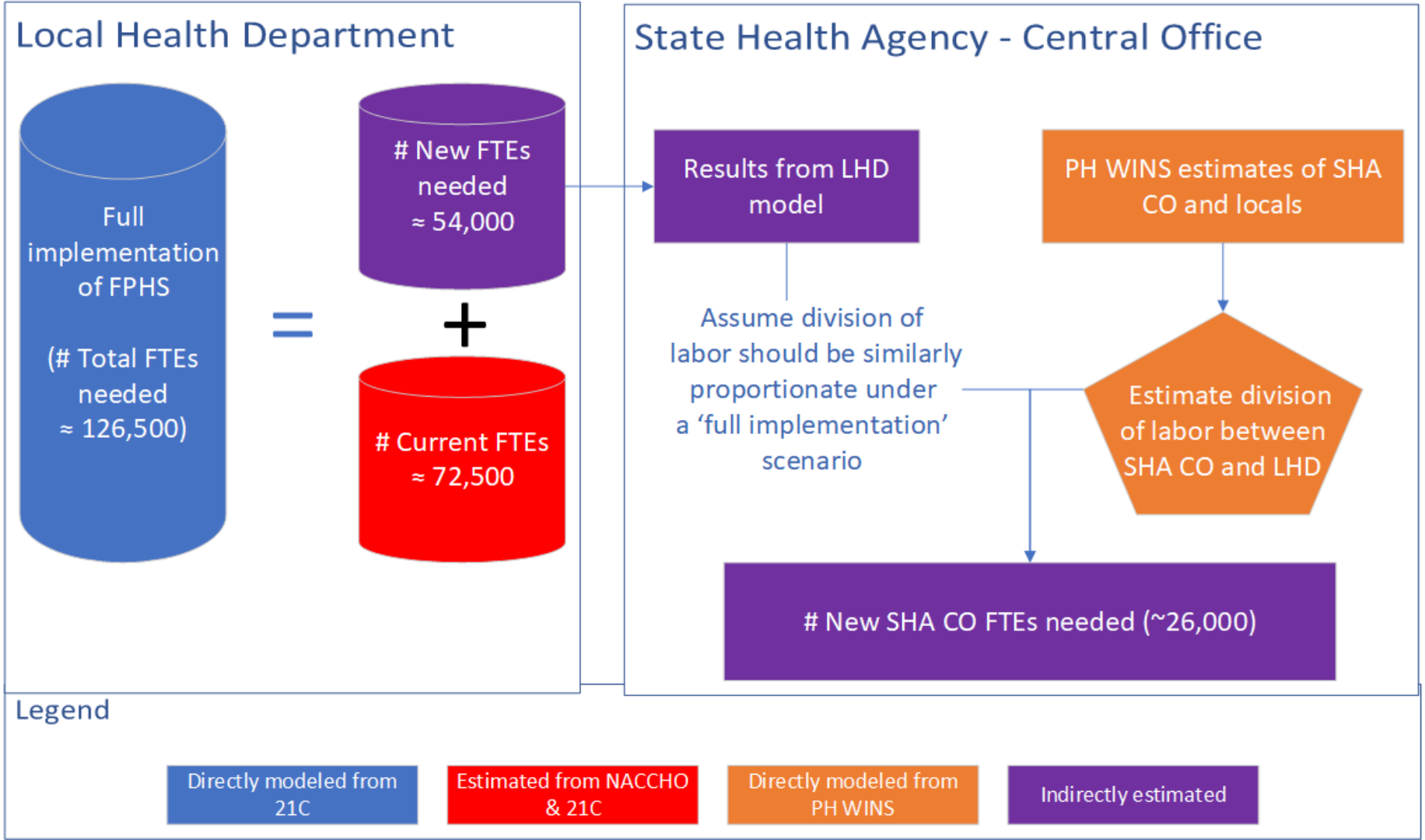
http://phnci.org/national-frameworks/fphs

Methods:
Data Sources

- ASTHO and NACCHO Profiles
- Public Health Workforce Interest and Needs Survey (PH WINS)
- Financial/FTE information from approximately 170 local health departments in 21C states (OH, WA, OR, CO)
    - For this group, we have: (1) actual number of current FTEs/spending by FPHS *and* (2) a rigorous estimation from agency leadership of FTEs/spending levels they would need to "fully implement" each FPHS

Methods: Modeling Approaches

- Objective: determine how many FTEs (and FTEs per 100,000) are needed at state and local level
- Several modeling approaches considered
  - Rurality, service mix, measures of health and social need, etc.
  - Best performing model was relatively straightforward: fit a power curve to the log of FTEs and population size, by FPHS
    - FTEs calculated both in terms of “current” (FY2018) below-the-line (core) service provision and what it would take to do “full implementation”


Local Health Department
Full implementation of FPHS
(# Total FTEs needed ≈ 126,500)
=
New FTEs needed ≈ 54,000
+
Current FTEs ≈ 72,500
State Health Agency - Central Office
Results from LHD model
PH WINS estimates of SHA CO and locals
Assume division of labor should be similarly proportionate under a 'full implementation' scenario
Estimate division of labor between SHA CO and LHD
New SHA CO FTEs needed (~26,000)
Legend
Directly modeled from 21C
Estimated from NACCHO & 21C
Directly modeled from PH WINS
Indirectly estimated

Assumptions

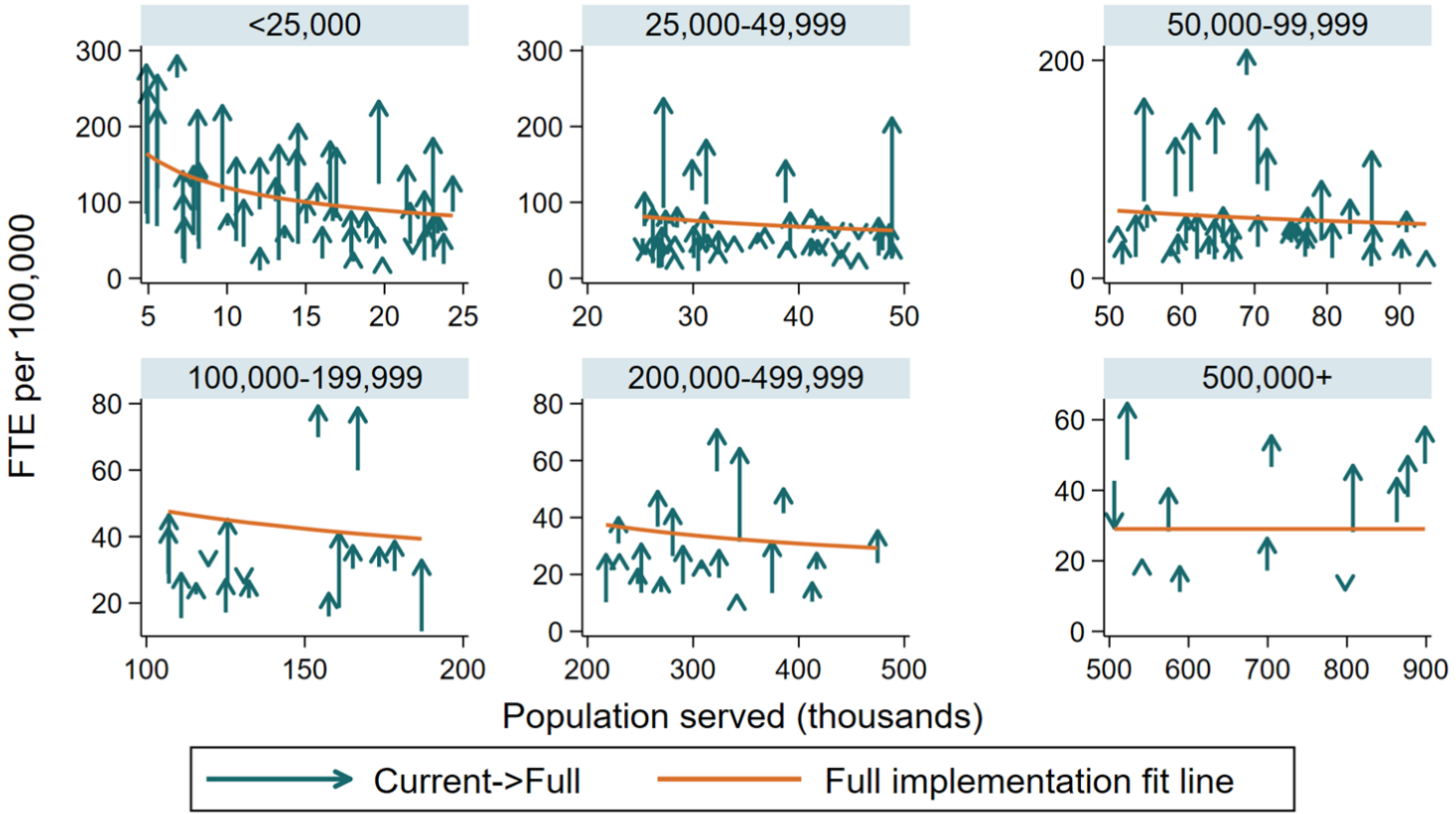
- Generalizability of 170 LHDs to national context
  - Microsimulation and macrosimulation modeling to better understand stability of estimates
- Relatively few data points for large LHDs
  - Steering and Research Advisory Committees recommended ‘fixing’ FTEs per 100,000 for LHDs 500,000 and above in ‘full implementation model’
- Different approaches for LHDs vs SHAs due to lack of robust SHA data
- Included ‘floors’ and ‘ceilings’ (minimum 5 FTE in a LHD; max 300 FTE per 100,000 if above minimum)

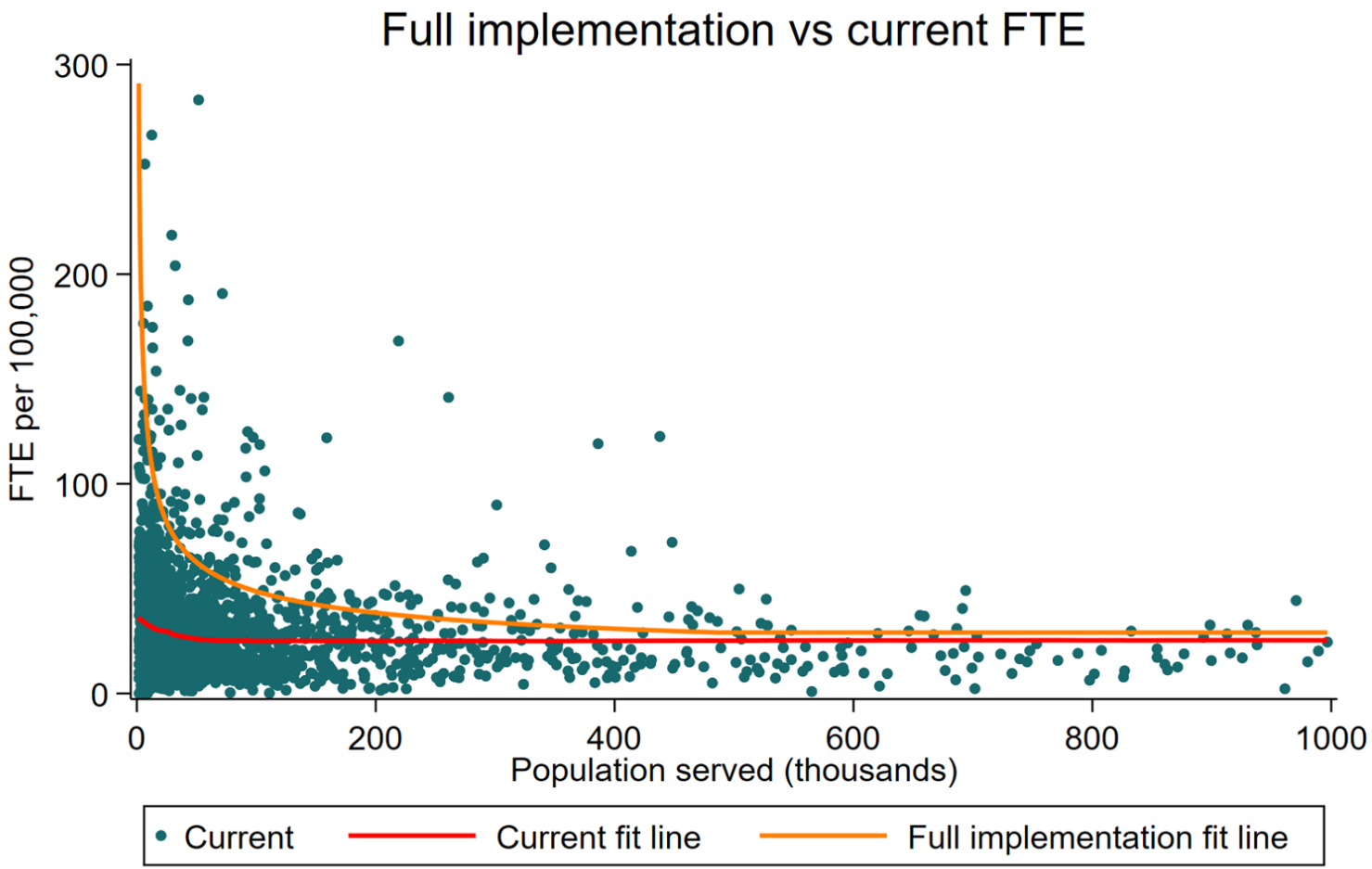
The Findings

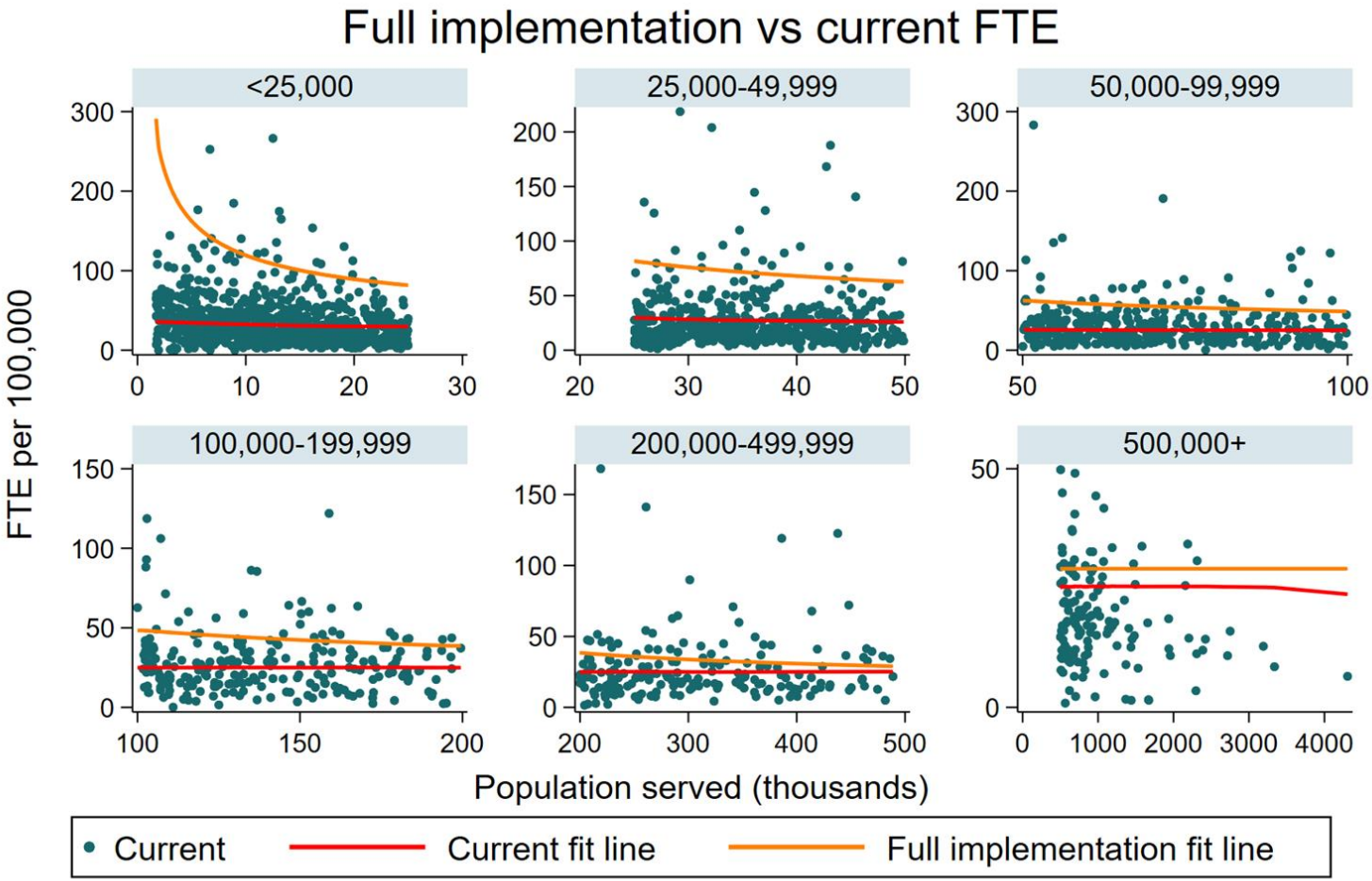
- State and local governmental public health agencies need an **80% increase** in workforce to provide minimum public health services to the nation.*
- Based on existing shortages, 54,000 of these additional FTEs should be deployed to local health departments and 26,000 to state health departments.

*This estimate does not account for additional workforce needs beyond core infrastructure and programs

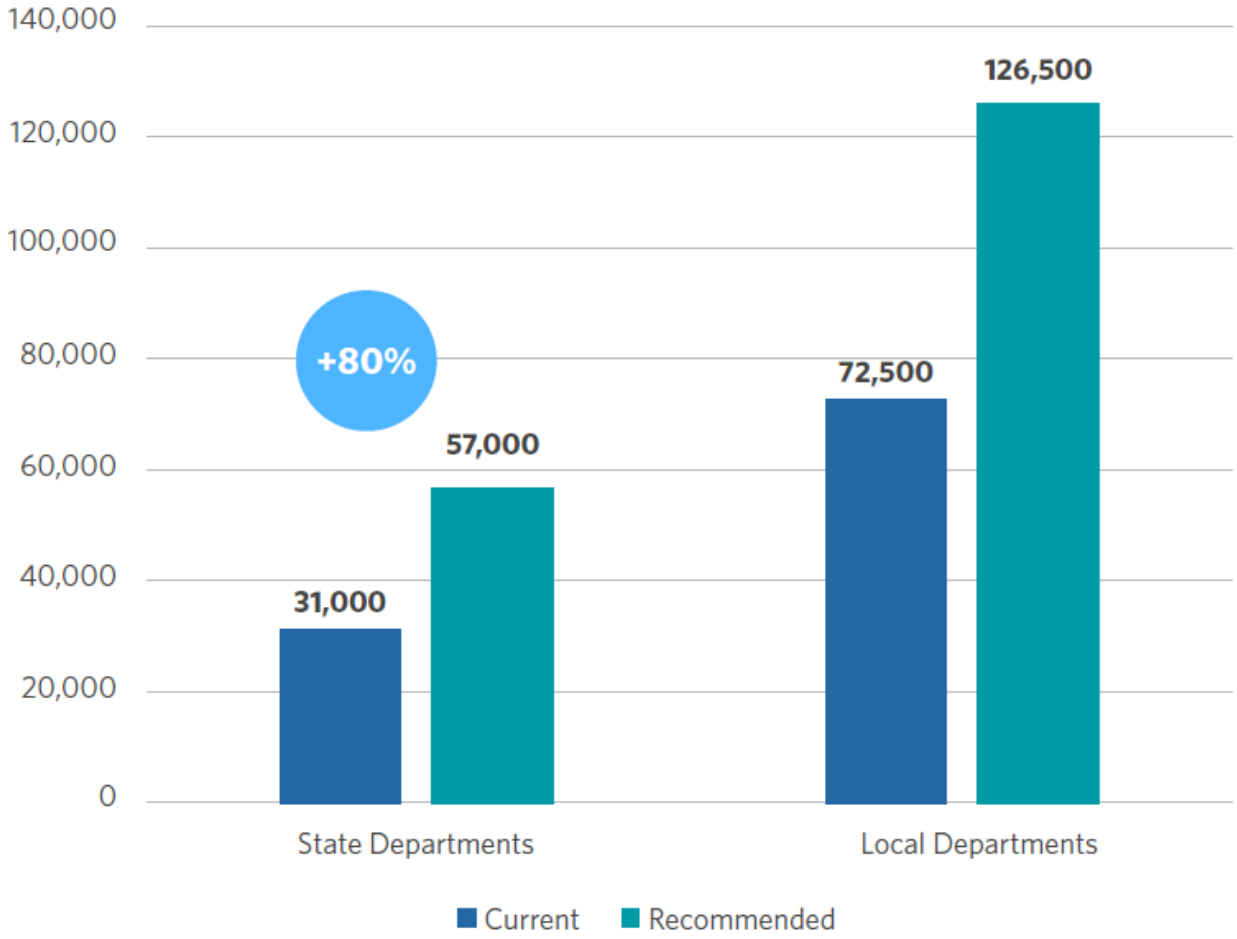
Full implementation vs current FTE among 21C LHDs (n=170)



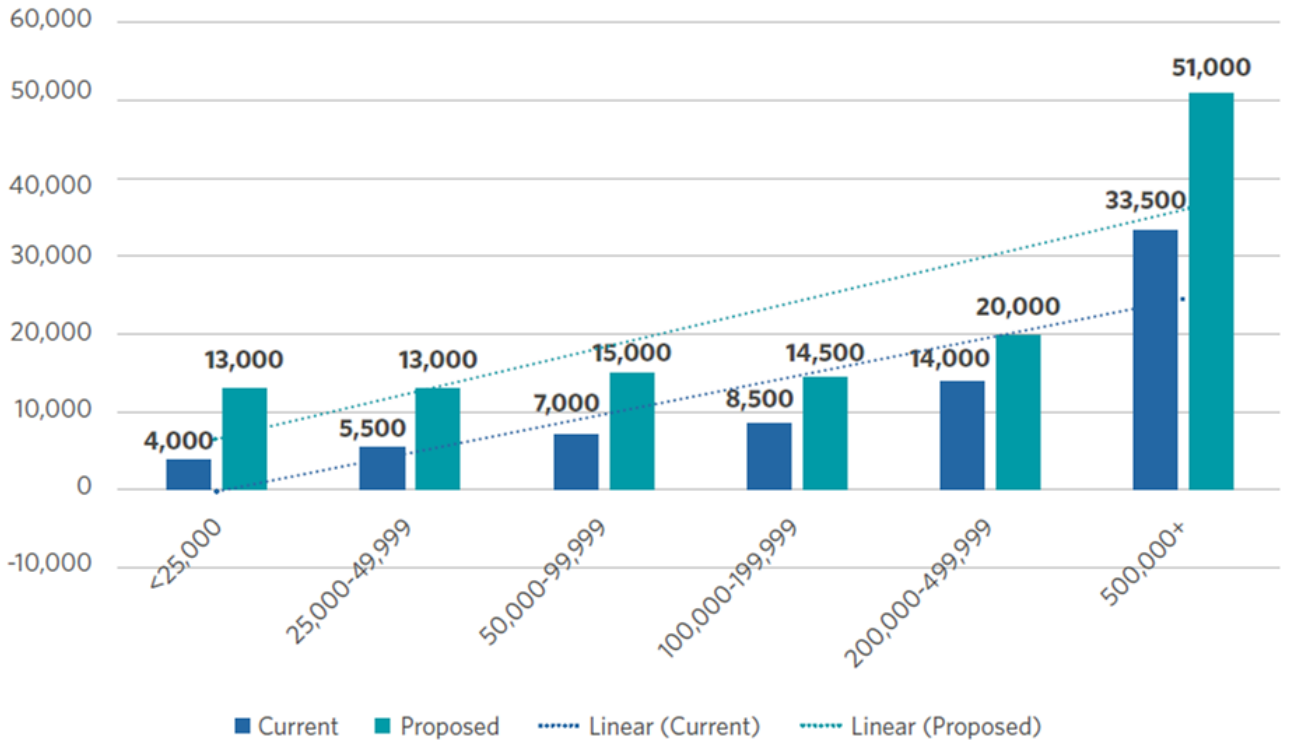

Full implementation vs current FTE
FTE per 100,000
300
200
100
0
0
200
400
600
800
1000
Population served (thousands)
Current
Current fit line
Full implementation fit line


Full implementation vs current FTE
<25,000
25,000-49,999
50,000-99,999
100,000-199,999
200,000-499,999
500,000+
FTE per 100,000
Population served (thousands)
Current
Current fit line
Full implementation fit line

Current and Recommended FTEs for State and Local Health Departments

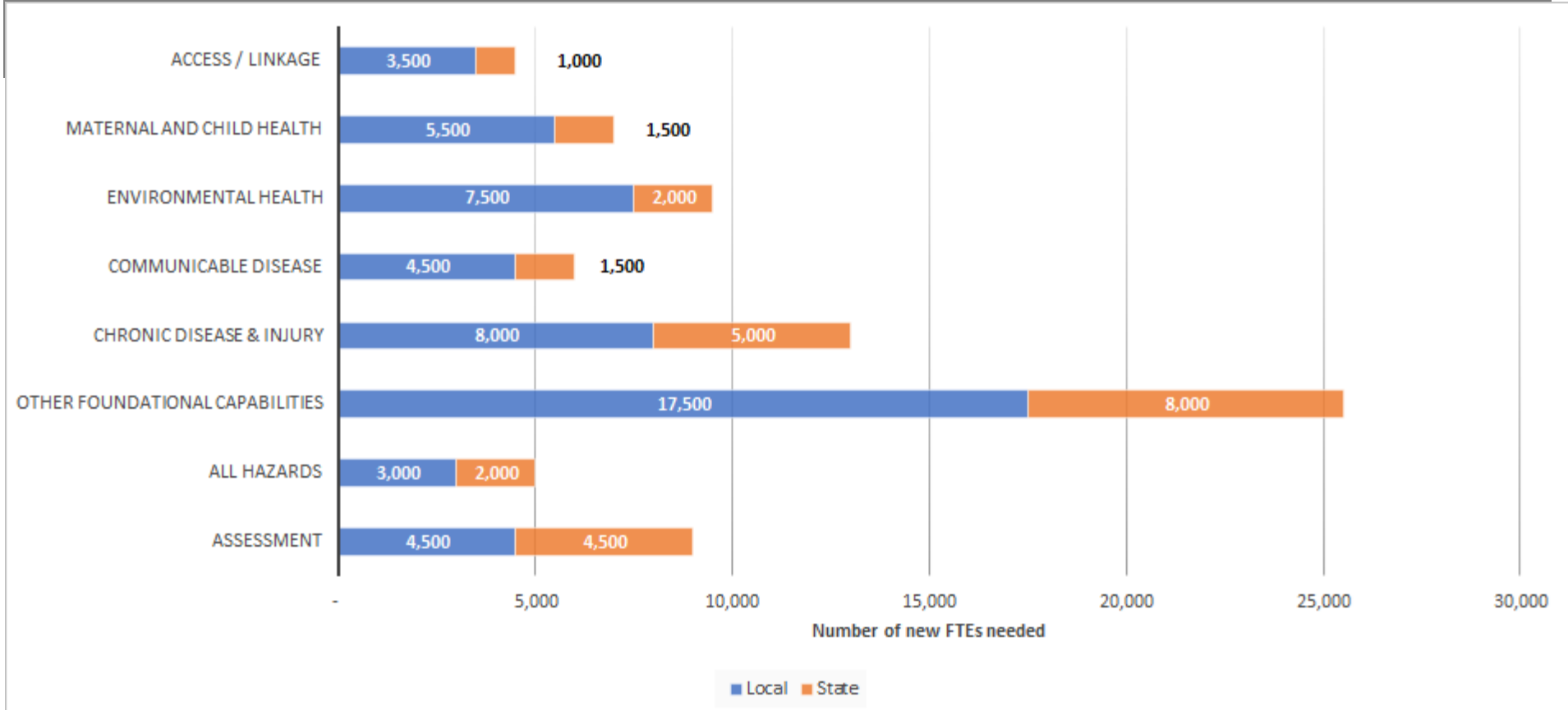


Number of Foundational FTEs (Current vs. Needed)



	Current FTEs for core public health services	Total FTEs needed for full implementation	Additional FTEs needed for full implementation	Percentage change needed
<25,000	4,000	13,000	9,000	230%
25,000-49,999	5,500	13,000	7,500	140%
50,000-99,999	7,000	15,000	8,000	110%
100,000-199,999	8,500	14,500	6,000	70%
200,000-499,999	14,000	20,000	6,000	40%
500,000+	33,500	51,000	17,500	50%
Local Health Departments	72,500	126,500	54,000	70%
State Health Departments	31,000	57,000	26,000	80%
Total	**103,500**	**183,500**	**80,000**	**80%**

New FTEs needed by FPHS



	Local	State	Total
Infrastructure			
Assessment	4,500	4,500	9,000
All Hazards	3,000	2,000	5,000
Other Foundational Capabilities	17,500	8,000	25,500
Foundational Areas			
Chronic Disease & Injury	8,000	5,000	13,000
Communicable Disease	4,500	1,500	6,000
Environmental Health	7,500	2,000	9,500
Maternal and Child Health	5,500	1,000	6,500
Access/Linkage to Care	3,500	1,000	4,500
Total	**54,000**	**26,000**	**80,000**

Benefits

- Evidence-informed requests for new staff
- Critical assessment of FPHS workforce gaps within jurisdiction
- Crafting job descriptions that are specific to the needs of the agency
- Highlight value/need for cross-training of workforce

"To me, a calculator, formulas, standards give us the foundation for data driven decisions. You need data to go to a legislator. You need data to support why laws need to change. You need data to convey to your community why the public health tax may need to increase. So, calculators, formulas, those types of things provide us with another mechanism for providing the data we need to communicate why it is we are doing what we're doing."

Phase II:
Public Health Workforce Calculator

- Next steps include developing a tool that health departments can use to estimate their own workforce needs to provide the foundational public health services within their current context.
  - Resource for health departments to plan for the type and number of staff they will need to support their communities, provide the FPHS, and ultimately, work toward accreditation
  - Support advancing equity among health departments so that they have the adequate staff to provide the FPHS
  - Guided with support from public health stakeholders at various stages in the tool development process in an advisory capacity

Finance Implications

- **Staffed up workforce: 103,500 → 183,000 FTEs**
  - **Locals: 72,500 → 126,500**
  - **States: 31,000 → 57,000**
- Direct financial implications:
  - More people needed = More funding needed
- Indirect financial implications:
  - 2nd & 3rd Order Workforce Needs: Supervisors & expanded org charts [*can we pay for them?*]
  - Organizational resources: Technology, supplies, space, etc. [*can we pay for them?*]
  - Additional revenues?

Finance Implications

- Considering practicalities
  - HR processes
  - Short-term vs. Ongoing funding streams?
- Recruiting
  - Ongoing workforce shortages
  - Increases in prevailing wages
- Retaining
  - Capitalize on interest in public health?
  - Expanded portfolio/responsibilities for existing staff?
- Aligning Inputs & Outputs
  - ROI impacts of Current vs. Full Implementation
  - Extensive vs. Intensive Service Delivery

Thank you

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Views expressed here today do not necessarily reflect official positions of sponsoring agencies