

TB, Policy, Economics, and Equity: Using Multiple Lenses to Strengthen Pandemic Response

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Inaugural Thomas Q. Garvey Memorial Public Health Lecture

Wednesday, March 24, 2021

Disclaimers

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- No conflicts of interest
- Pro-TB elimination

Overview

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- Acknowledge: TB community contributions to COVID-19 response
- Reflect: Policy, economics, and equity
- Celebrate: Collaboration success stories
- Train: Health equity & public health messaging best practices

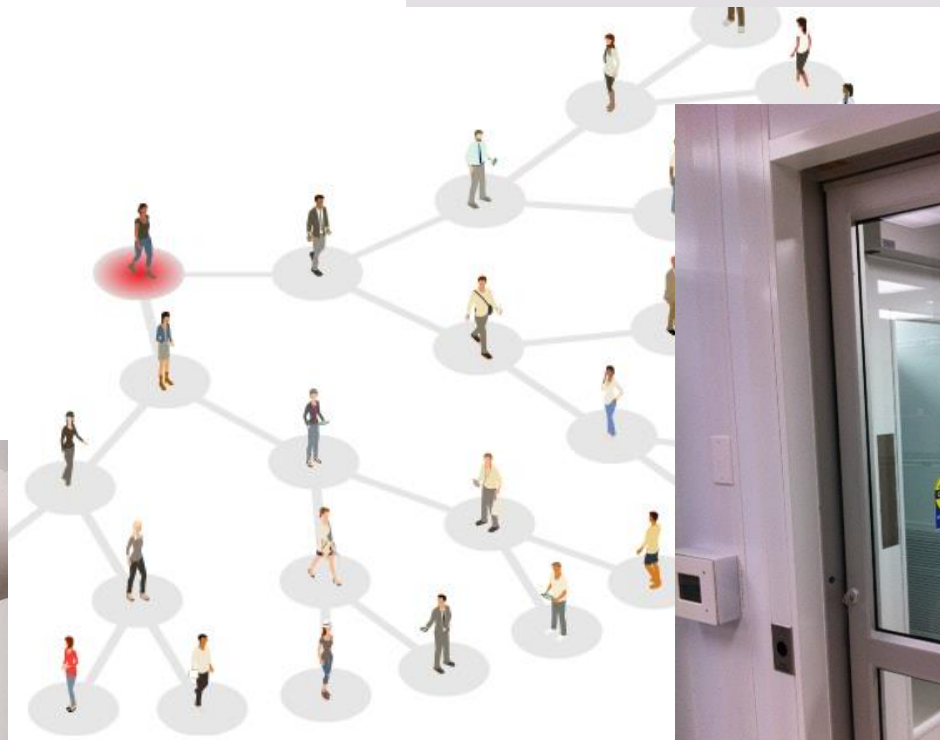
TB folks gave a big boost

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Masks, PCR test, contact tracing, isolation rooms...

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Community outreach, home visits, mobile Dx...

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CORONAVIRUS | Sep 26, 2020, 07:34am EDT | 3,726 views

Tuberculosis And Covid-19: Fighting A Deadly Syndemic



Madhukar Pai Contributor

Healthcare

I write about global health, infectious diseases, and equity



Kiran Sitaras on their mission of ending TB among their local community via door-to-door household ... [+] ASAD ZAIDI, INTERACTIVE RESEARCH & DEVELOPMENT, PAKISTAN

EDITORS' PICK | Oct 22, 2020, 12:08am EDT | 3,364 views

It's Time To Use Covid-19 Innovations And Systems To Reimagine TB Care



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Mobile testing for Covid-19 in South Africa. Photographer: Waldo Swiegers/Bloomberg

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Weaving policy, economics, & equity

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Why policy?

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“Medicine is a social science, and politics is nothing else but medicine on a large scale. Medicine, as a social science, as the science of human beings, has the obligation to point out problems and to attempt their theoretical solution: the politician, the practical anthropologist, must find the means for their actual solution. The physicians are the natural attorneys of the poor, and social problems fall to a large extent within their jurisdiction.” —Dr. Rudolf Virchow

U-shaped curve of concern

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“Direct Federal Public Health Service support to New York was \$1.4M in 1979 and \$283,00 in 1980.”

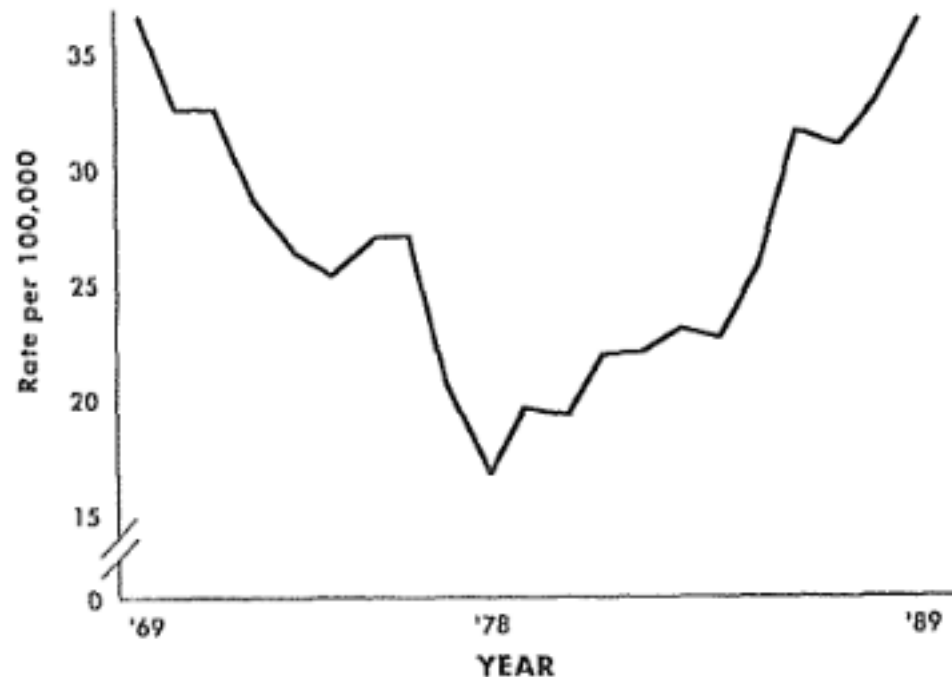


Fig. 2. New York City Tuberculosis Rate/100,000 population 1969 to 1989 (adapted from [4]) (see text).

Stop TB Massachusetts

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- 100s of visits with legislators & staff
- Successful budget amendments and/or increases for essential public health infrastructure in 2006, 2009, 2012, 2013, 2014, 2019, and 2020



RESULTS.org

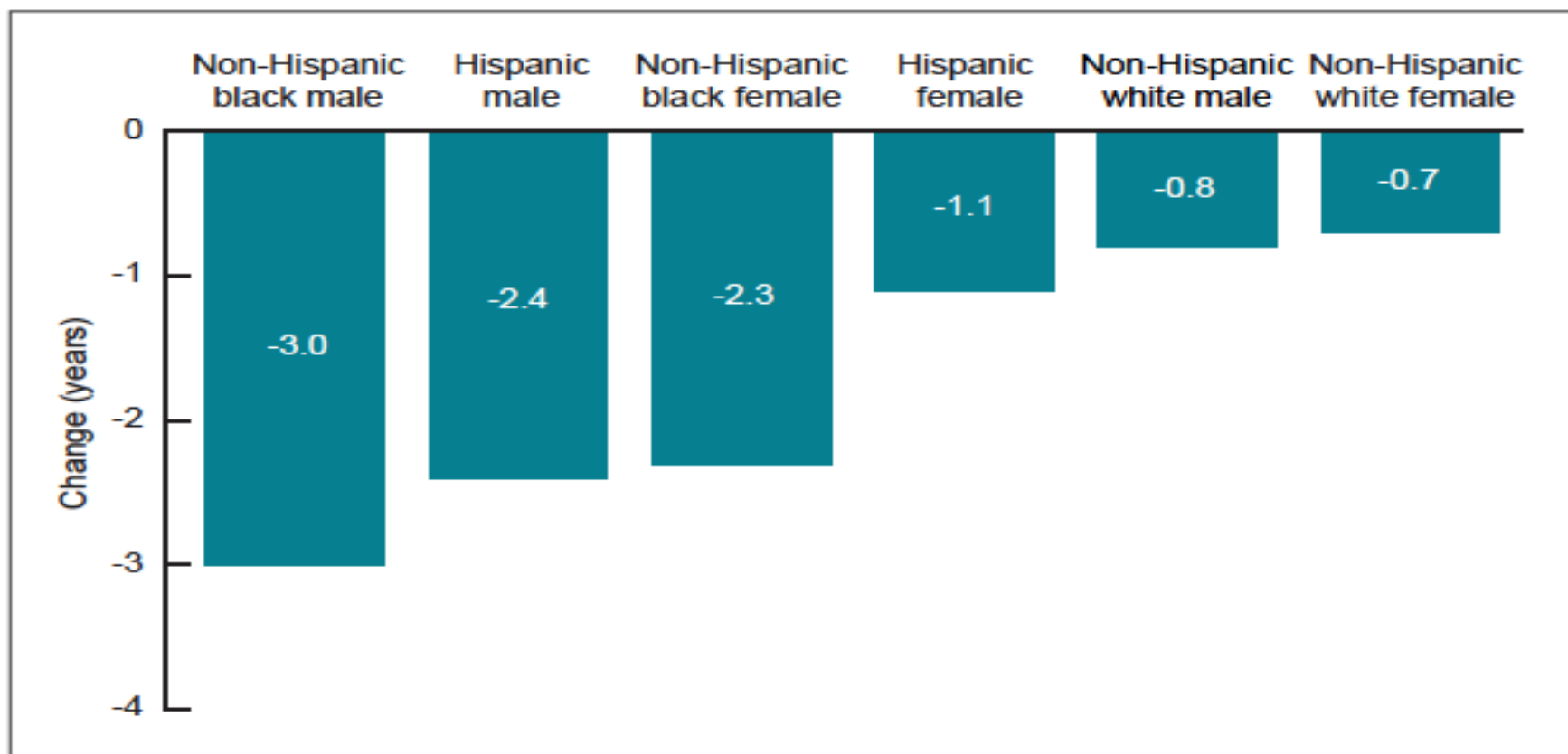
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- 40 years of everyday people using their voices to shift lawmakers' decisions on poverty-reduction:
 - Creation of Global Fund to Fight AIDS, TB, and Malaria
 - \$4B for GAVI-Global Vaccine Alliance, Dec 2020
 - Mar 2021: \$3.5B for Global Fund and \$250M for PEPFAR as part of nearly \$11B for the international response to COVID-19.

Fiscal Year	FY18	FY19	FY20	FY21	RESULTS' FY22 Request
USAID Tuberculosis	\$261 million	\$301 million	\$310 million	\$319 million	\$1 billion

Why equity?

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.

Chicago's vaccine equity

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<https://tradeoffs.org/2021/03/04/data-and-door-knocking-one-citys-push-for-racial-equity-in-vaccines/>

- From 18% to 51% vaccines going to Black and Latinx folks
- Policies & policy makers, partnerships, persistence, door knocking, and a safe place

Inspiration from Denver's Dr. Burman

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- Framework for addressing systemic racism and classism
 - Local data
 - Communication – public, policy makers
 - Patient, family, and community engagement
 - System-level partnerships to move policy & funding
 - Constancy – long-term commitment to key issues and communities

End stigmatizing language in TB

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- Dr. Burman: Case supporters (vs. case investigators)
- Resources on the Heartland National TB center website
 - <https://www.heartlandntbc.org/stigma.html>
- See also Frick et al. 2015 *End stigmatizing language in tuberculosis research and practice*
 - <https://www.bmj.com/content/350/bmj.h1479>

Why economics?

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“We estimate that the costs incurred in controlling these epidemics exceeded \$50 billion (in 2004 dollars); in contrast, the overall budgetary saving during the fiscal crisis was \$10 billion.

The Impact of New York City's 1975 Fiscal Crisis on the **Tuberculosis, HIV,** and **Homicide Syndemic**

In 1975, New York City experienced a fiscal crisis rooted in long-term political and economic changes in the city. Budget and policy decisions designed

Nicholas Freudenberg, DrPH, Marianne Fahs, PhD,
Sandro Galea, MD, DrPH, and Andrew Greenberg, MS

IN THE 1980s AND EARLY 1990s,

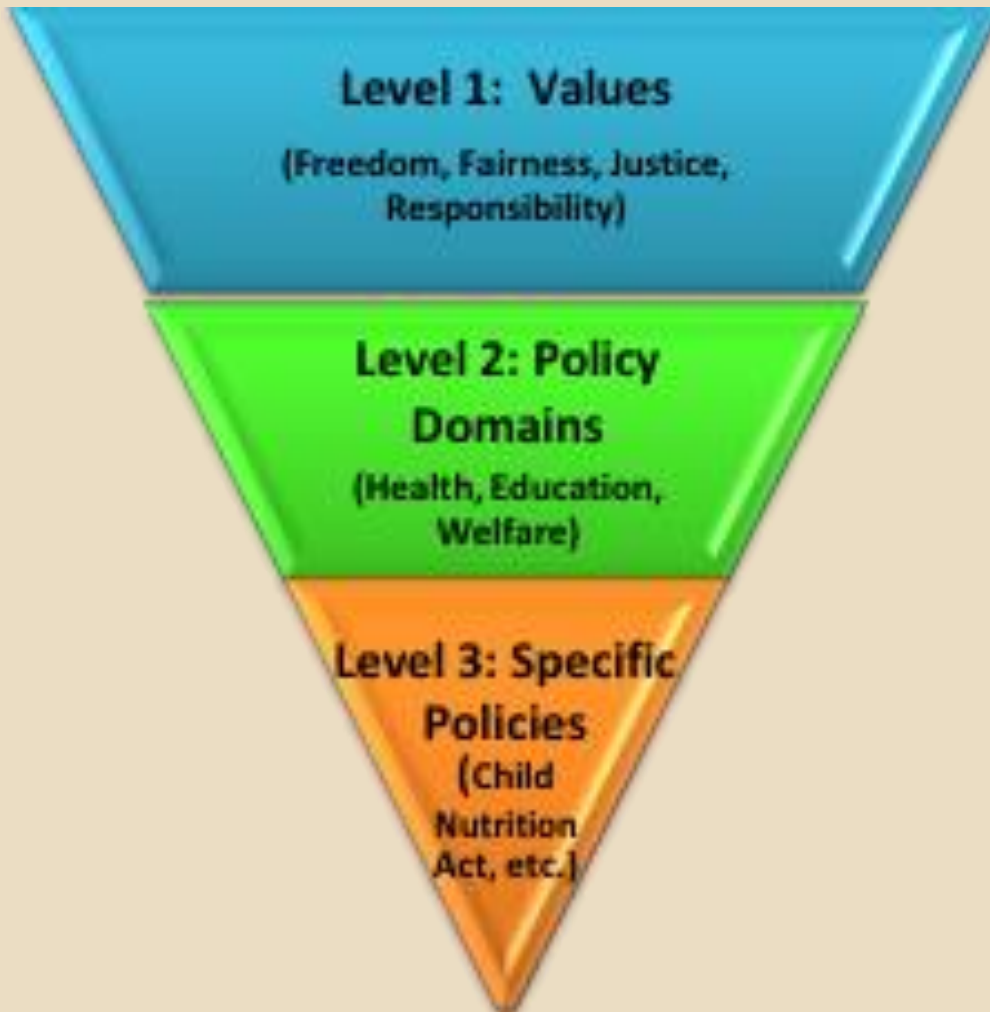
New York City experienced epi-

1980s and 1990s. Municipal,
state, and federal policy and

and city fiscal and tax policies
that failed to generate the re-

Often essential; never enough

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- Policy makers almost always ask for economic evaluations
- But will move with or without EEs depending on context (incl. political)
- In messaging, don't lead with the \$\$

Economic evaluations primer

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- Cost-benefit analysis
 - Answers the value question
 - Including is it worth expanding a budget for this?
- Cost-effectiveness analysis
 - Answers the value question,
 - Especially how to get the most value out of a budget
- Budget impact analysis
 - Answers the immediate affordability question

Economic evaluations, continued

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- Positive developments
 - 2nd Panel on Cost-effectiveness in Health and Medicine: societal and health systems' perspective
 - Distributional CEA
- As good as assumptions & data
 - WHO said don't treat drug-resistant TB in 1998 with false assumption of low virulence
- Be as transparent as possible
 - Tschampl et al., IJID 2020, especially the appendix!

Good things happen outside of silos

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Dream team example

The Joint Commission Journal on Quality and Patient Safety

Performance Measures

The Need for Performance Measures on Testing for Latent Tuberculosis Infection in Primary Care

Cynthia Tschampl, M.A.; John Bernardo, M.D.; Thomas Garvey, J.D., M.D.; Deborah Garnick, Sc.D.

Contrary to popular belief, tuberculosis (TB) is still a disease of significant consequence. Air-borne when contagious, TB claims nearly two million lives annually throughout the world, and approximately two billion people globally have latent tuberculosis infection (LTBI),¹ forming the reservoir of future cases. Although LTBI is not contagious, there is a 1%–13% lifetime chance of activation in a newly infected, healthy adult.² The rate of activation can increase dramatically depending on risk factors. For example, the rate is 7%–10% *per year* for persons with HIV.²⁻⁴ In the United States, there are at least 11,500 cases of active TB annually, representing a case rate of approximately four per 100,000 population.⁵ Genotyping studies suggest that the

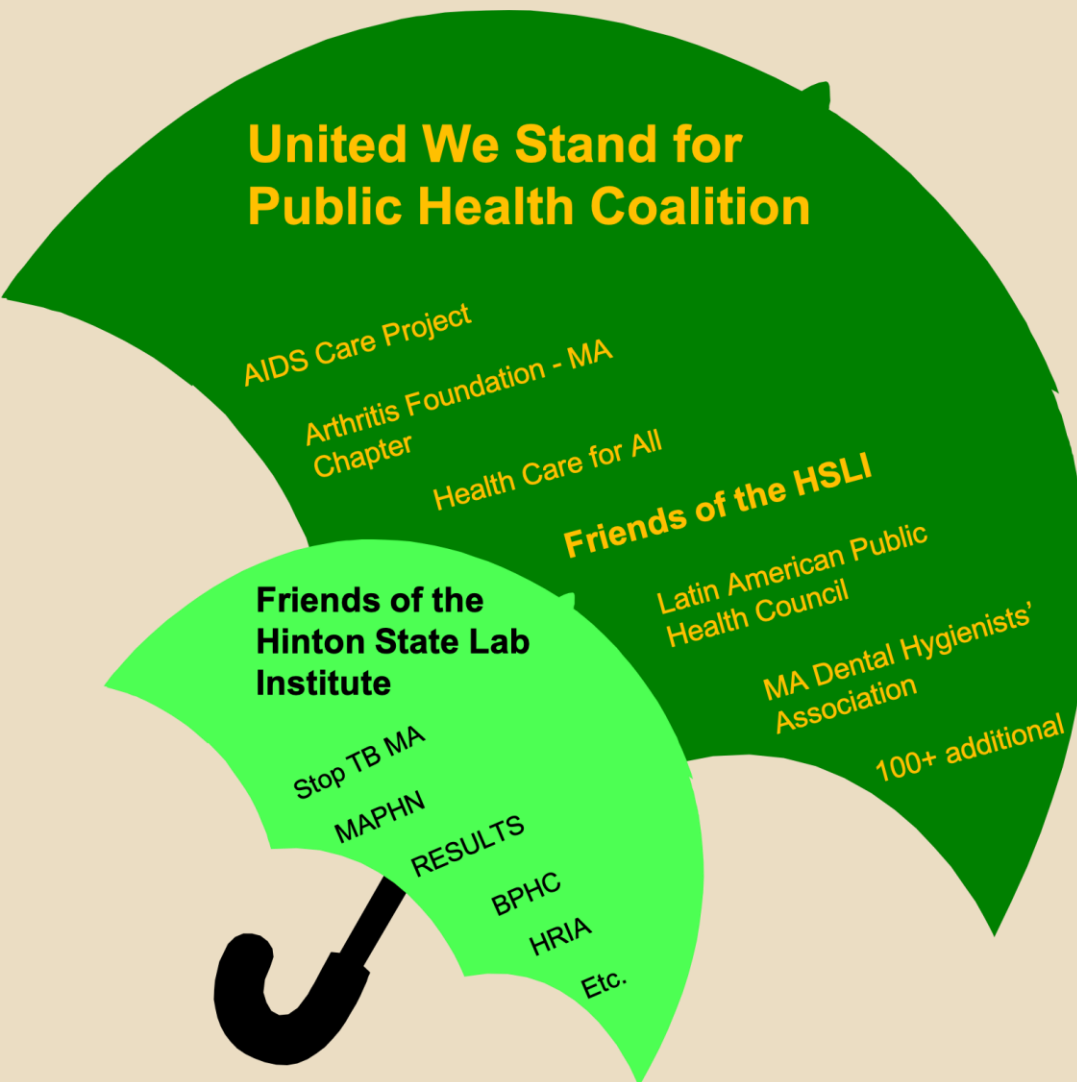
Article-at-a-Glance

Background: The millions of people living in the United States with latent tuberculosis infection (LTBI) represent a reservoir of potentially active tuberculosis (TB) disease. When LTBI is left to activate, the consequences may include intense suffering, permanent disability, and high economic costs for patients, their caretakers, and society at large as TB spreads. The introduction of performance measures would improve accountability for quality of care and to reduce disparities, especially if the measures are group-targeted.

Performance Measures Proposal: One National Qual-

Emergency coalition 2008-2009

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- Friends of the HSLI educated ~70 offices (of 200)
- Stopped massive proposed budget cuts to the public health state lab and affiliated programs/departments

+MOX trial (TBTC S31 /ACTG A5349)

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- Major milestone: eliminating 2 months of treatment!
 - 2 global clinical trials networks
 - 2 major government agencies
 - 1 Pharma partner
 - 34 clinical research sites in 13 countries
 - 100's staff and community partners
 - 2516 patients and their families

Public health messaging best practices

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Health equity messaging

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- Start with justice as shared value/aspiration
 - “A just society makes sure no community is singled out or overexposed to harm”
 - ~~Unequal outcomes~~ < Unequal obstacles
 - ~~One-size-fits-all equal opportunity~~ < Targeted justice
- Pair with collective solutions
- Shine light into the black box (give a cause)

Additional public health messaging

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- Give tangible examples of the benefits of partnering with public health
 - Business leaders: improved community conditions => reduced absenteeism
 - School leaders: better student health => higher graduation rates & test scores
- Connect with core mission of other sectors
- Much more at Public Health Reaching Across Sectors, PHRASES.org

No silver bullet

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- Narrower focus in order to make gains leads to some exclusion (e.g. Fujiwara, 2005)
- Short term wins vs. long-term goals
- It matters who the messenger is (Bullock & Fenald, 2005)
 - BetweenUsAboutUs.org
- Leading with economic impacts backfired

Talking about government

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- “...a new story about government as an essential part of providing and protecting the common good.”
 - Name specifics (e.g., highways, libraries, public health agencies)
 - Emphasize roles only government can fill
 - Avoid “broken beyond repair” trap
 - Focus on how to repair the public systems we need to respond to collective challenges => shared progress & prosperity
 - Use “public structures” metaphor

Recommendations in action

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“Our country’s prosperity and quality of life depend on the public structures that we have created to keep society going. Structures like health and safety agencies have been put to the test during the pandemic, but their role remains crucial in keeping us all safe. Businesses, nonprofits, and individuals can all play a part in getting our country back on track, but only government has the reach and funding to properly and more equitably direct resources into vaccines, rollout, and economic recovery. Government is not perfect, but it can be fixed to ensure it works for everyone. We must continue to hold our elected officials accountable and work with them to heal and rebuild.”

Billions in COVID/rescue relief

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- 1995-2010: 130 agents for HIV vs. 0 for TB, (Harrington, CID 2010)
- 2020 Access to Medicine Index:
 - 63 vaccines & drugs for COVID-19 vs. 13 for all other infectious diseases
 - “Empty pipeline” for 10/16 emerging diseases identified by WHO

Only if we speak up

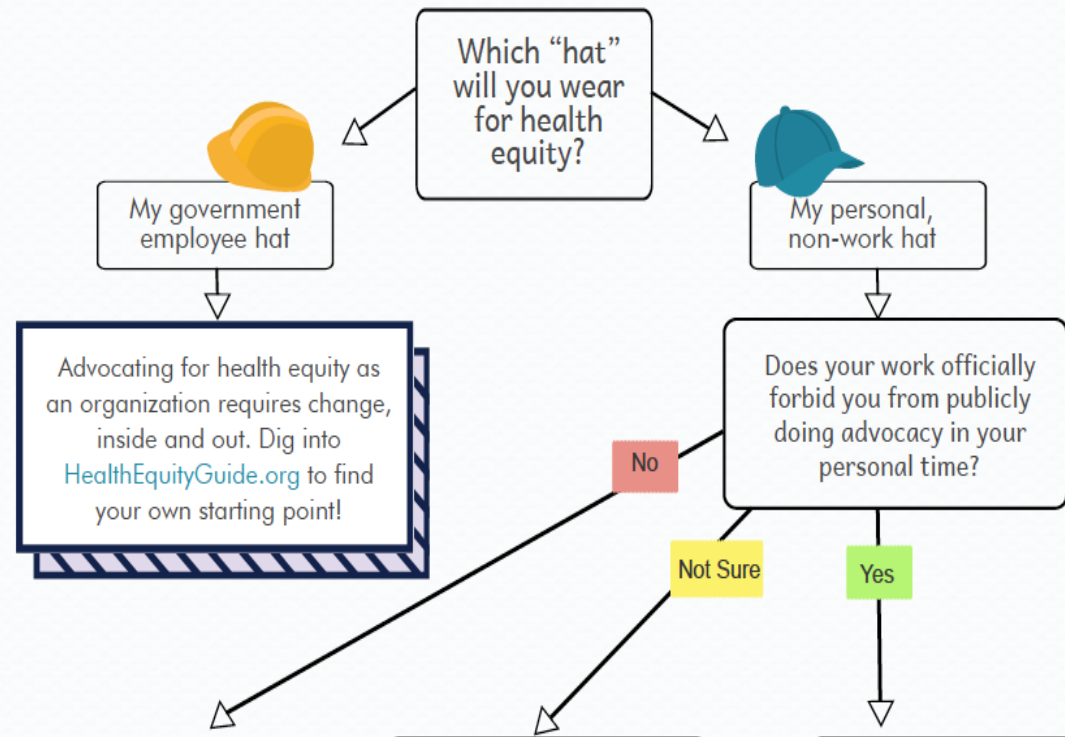
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- To the community, media, and policy makers
- Toolkit:
<https://results.org/volunteers/advocacy-basics/>
- Decision tree:
<https://publichealthawakened.org/advocacy-for-government-workers/>



Psst! Government workers:

What kind of advocacy are you ready for?



In summary
(and as an homage to Tom's nature
photography)...

Make friends across disciplines



Speak out

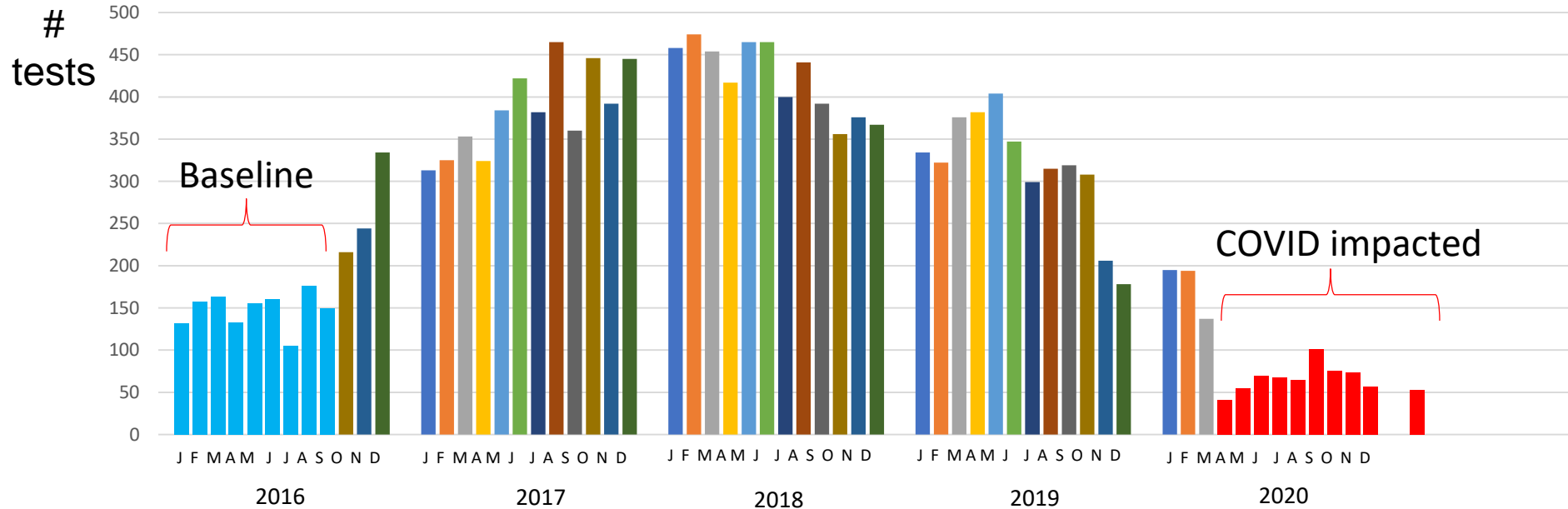


THANK YOU!

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TB Infection Test* Volume by Month: Before, During, and After Demonstration Project to Scale up Testing and Treatment, 2016-2020, LCHC

Community-based TB prevention demonstration project



* Interferon Gamma Release Assay (IGRA) or Tuberculin Skin Test (TST)

Local public health & communities

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NACCHO360 Health Equity Town Hall

**Shifting Community Power:
Local Public Health and Community Organizing
Collaborations to Confront the Root Causes of Racial
Injustice and Health Inequity**

**July 9, 2020
3:00-4:30pm PM ET**