CSG MIDWEST

LOOKING BEYOND THE PANDEMIC

Midwestern Legislatures Address New Challenges

A webinar series hosted by the CSG Midwestern Legislative Conference

Lessons Learned: Preparing for the Next Public Health Emergency

Thursday, July 16, 2020 | 10:00 – 11:00 am CDT

MODERATOR
Rep. Jennifer Schultz, Minnesota

PRESENTERS
John Auerbach
Trust for America's Health

Dr. Nasia Safdar
University of Wisconsin-Madison

LOOKING BEYOND THE PANDEMIC WEBINAR SERIES

BACKGROUND & GOALS

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- This webinar series grew out of the desire by the MLC leadership to continue to provide our members with information on new challenges that Midwestern state and provincial legislators are facing in light of the pandemic
- Goals
  - Explore institutional, organizational and policy challenges posed by the continuing pandemic
  - Identify the long-term impacts on Midwestern states and provinces
  - Highlight state and provincial approaches to addressing these new challenges

LOOKING BEYOND THE PANDEMIC WEBINAR SERIES

TOPICS

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Six live, web-based teleconferences that will be made available to a wide audience of state officials, policy experts and interested stakeholders.

In addition to the live webinars, each will be recorded and made available on the CSG Midwest website.

1. Preparing for the 2020 Elections
2. Remote Legislative Sessions
3. Legislative Oversight
4. Fiscal Impact of the Pandemic
5. **Emergency Preparedness**
6. Reopening the Economy

PREPARING FOR THE NEXT PUBLIC HEALTH EMERGENCY

MODERATOR

Rep. Jennifer Schultz
Minnesota
Co-chair, MLC Health & Human Services Committee

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LOOKING BEYOND THE PANDEMIC WEBINAR SERIES

PREPARING FOR THE NEXT PUBLIC HEALTH EMERGENCY

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Today's webinar will cover:

- How we got into our current situation
- Consequences of inaction
- Pandemics' stages
- What public health systems need to meet the next crises/challenges

PREPARING FOR THE NEXT PUBLIC HEALTH EMERGENCY

PANELISTS

Mr. John Auerbach

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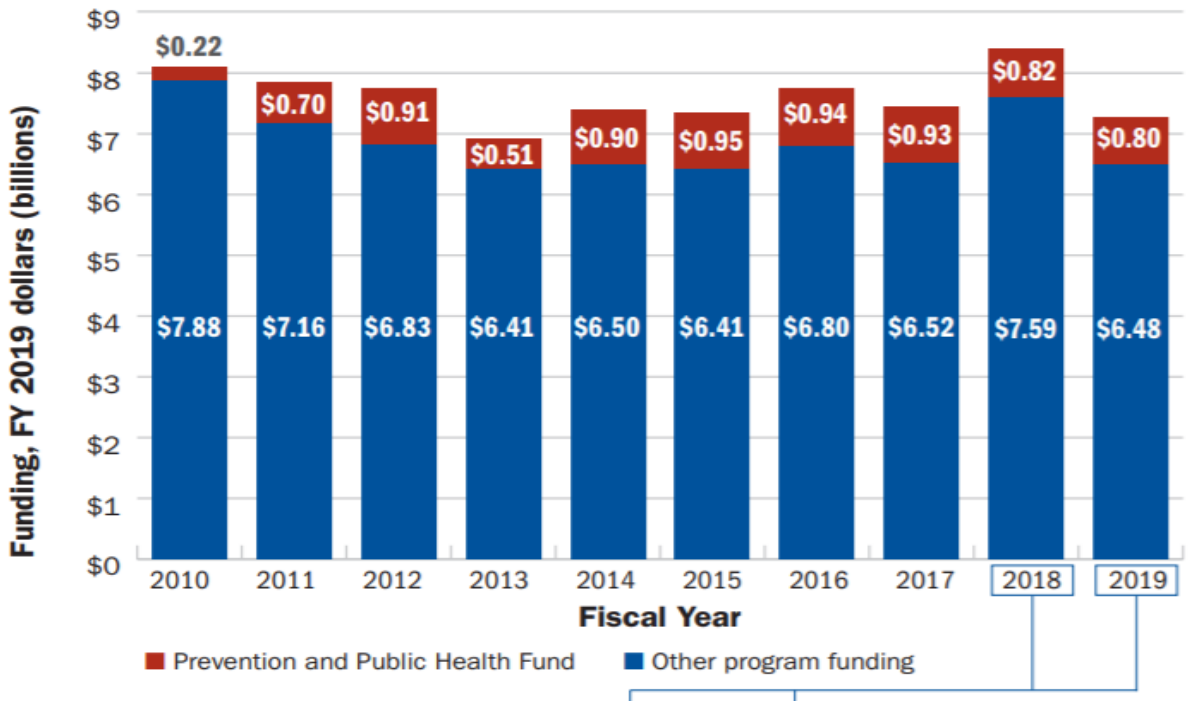
LESSONS LEARNED: PREPARING FOR THE NEXT PUBLIC EMERGENCY

Core CDC Funding Down

Figure 2: CDC Program Funding Fell Over Decade

CDC program funding, adjusted for inflation, FY 2010-19

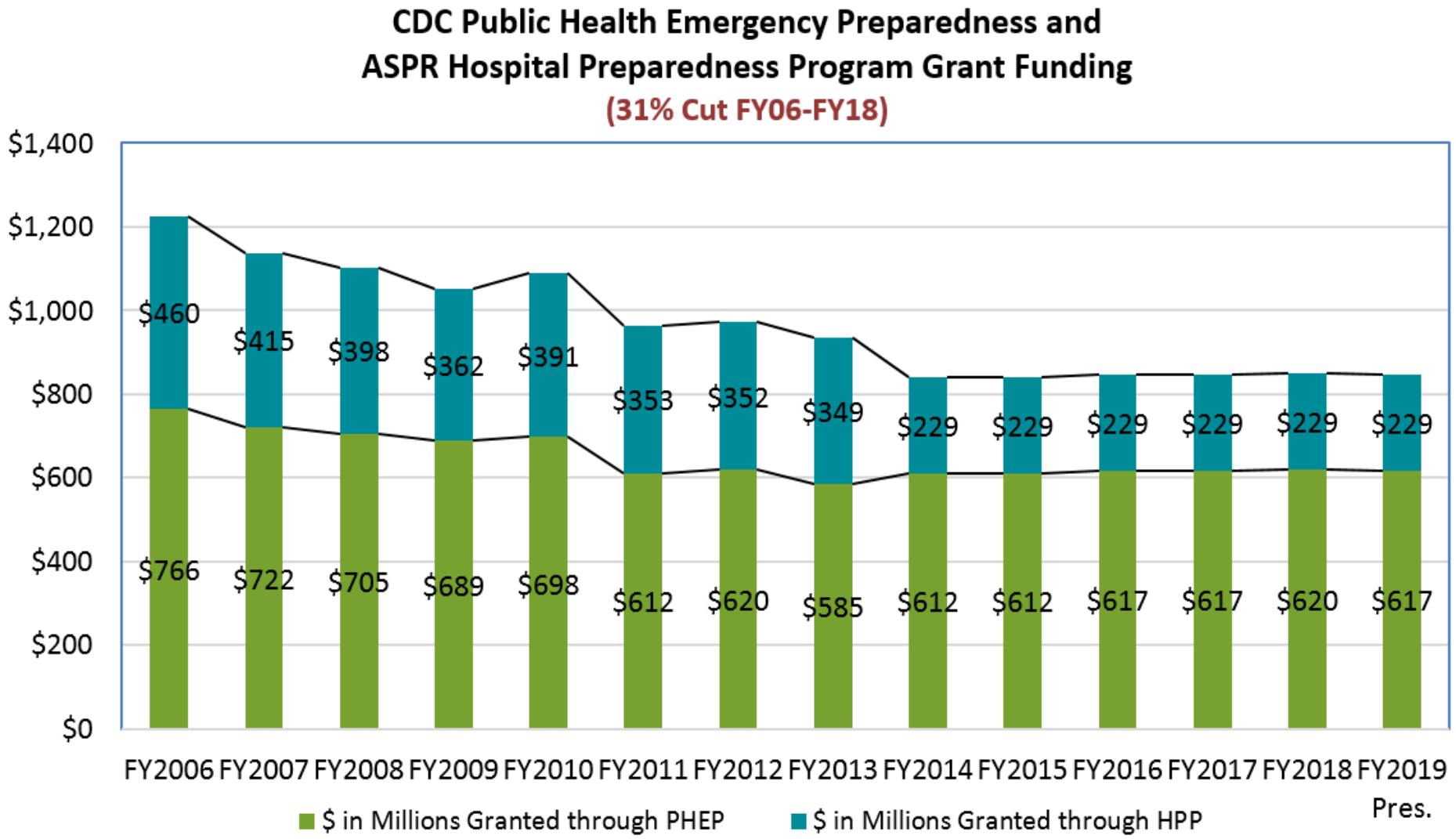


Note: Appropriately comparing funding levels in FY 2018 and FY 2019 requires accounting for the transfer of funding for the Strategic National Stockpile from the CDC to the Assistant Secretary for Preparedness and Response in FY 2019, and excluding one-time lab funding in FY 2018.

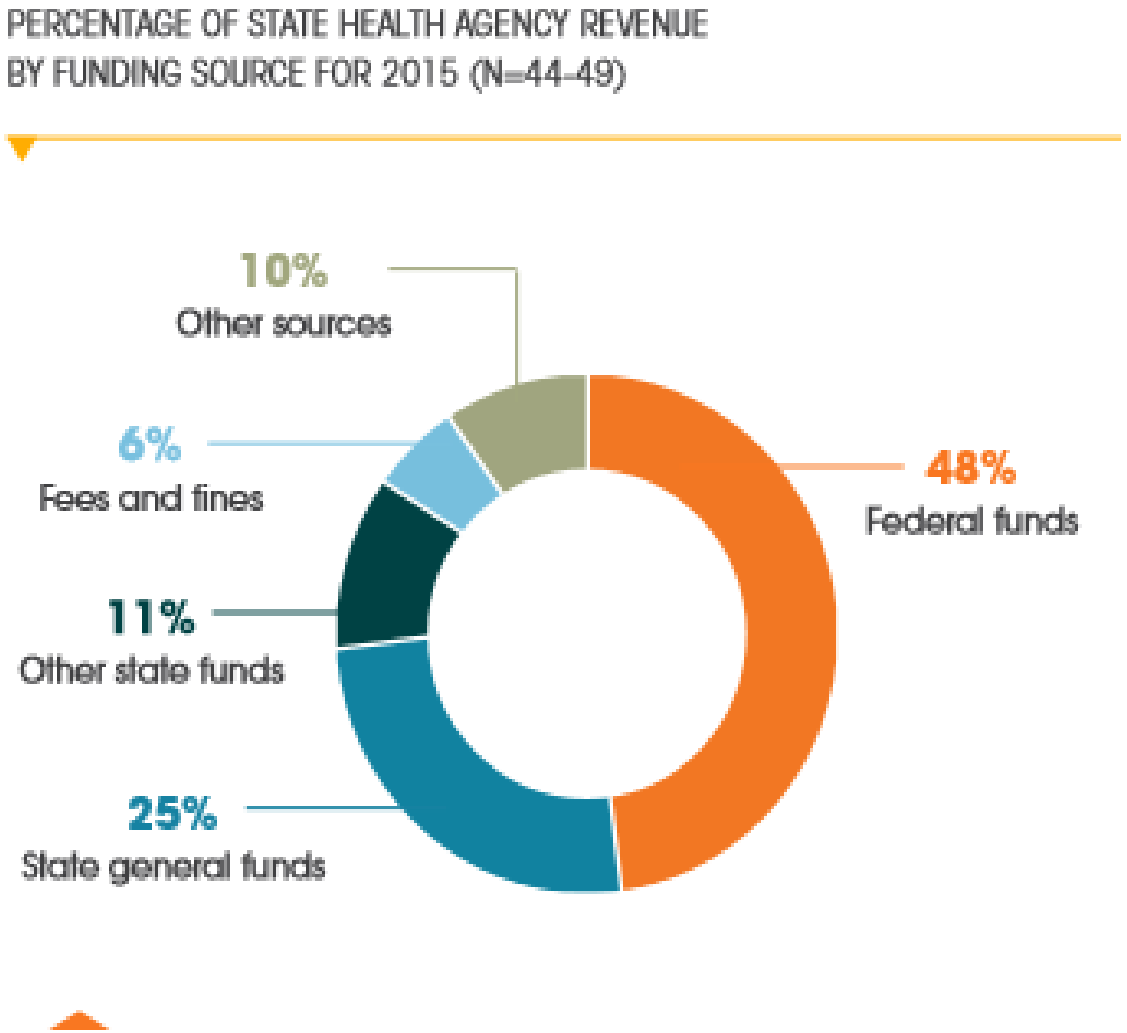
Data were adjusted for inflation using the Bureau of Economic Analysis's implicit price deflators for gross domestic product

Source: CDC annual operating plans

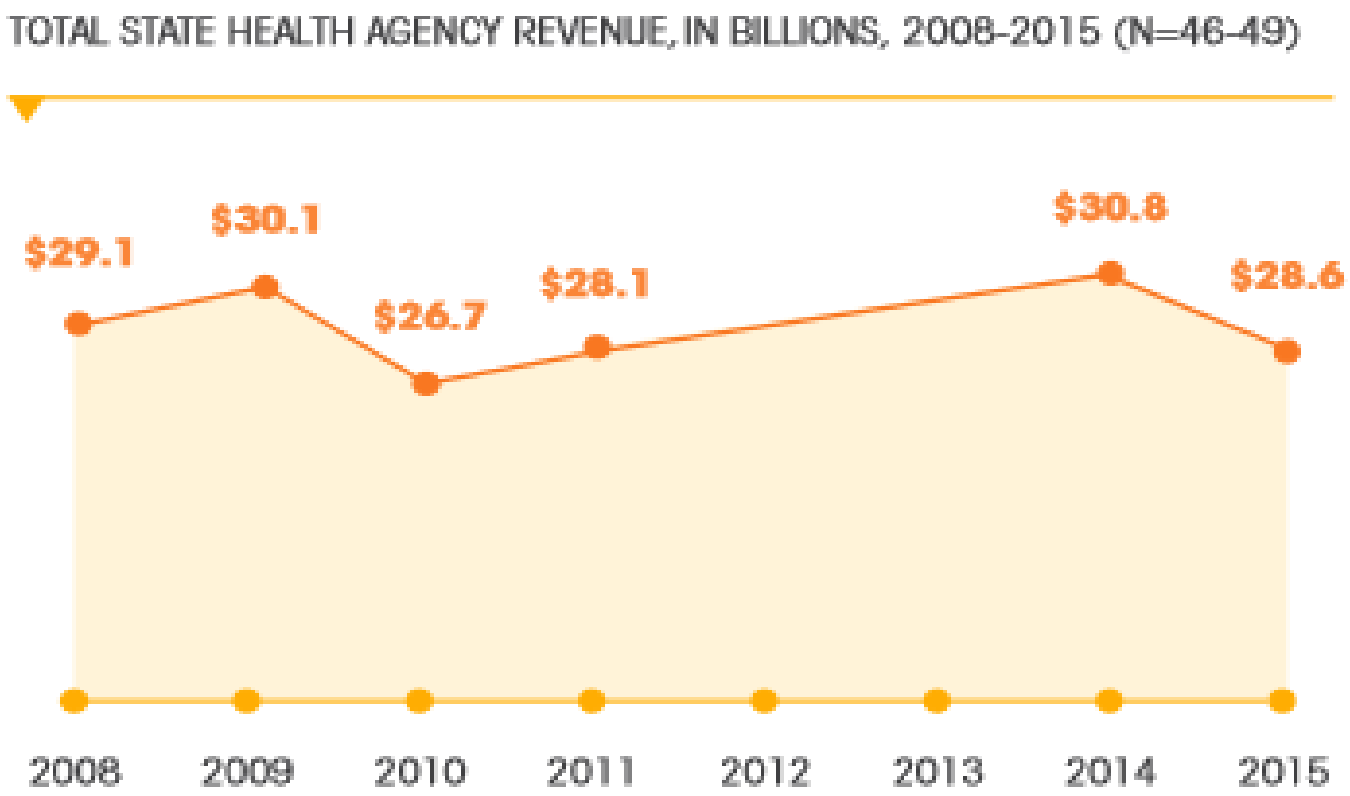
Even for Emergencies



Primary Source: Federal Funding
Largest 2nd Source: State Funding



State Funding Uneven But Lower Than 2008



Decreasing Size of State Departments

ESTIMATED NUMBER OF STATE HEALTH AGENCY FULL-TIME EMPLOYEES, 2010-2016[4]

	2010			2012			2016		
	MEAN	MEDIAN	TOTAL	MEAN	MEDIAN	TOTAL	MEAN	MEDIAN	TOTAL
Number of FTEs (N=50)	2,129	1,210	106,459	2,010	1,152	100,468	1,945	1,090	97,230

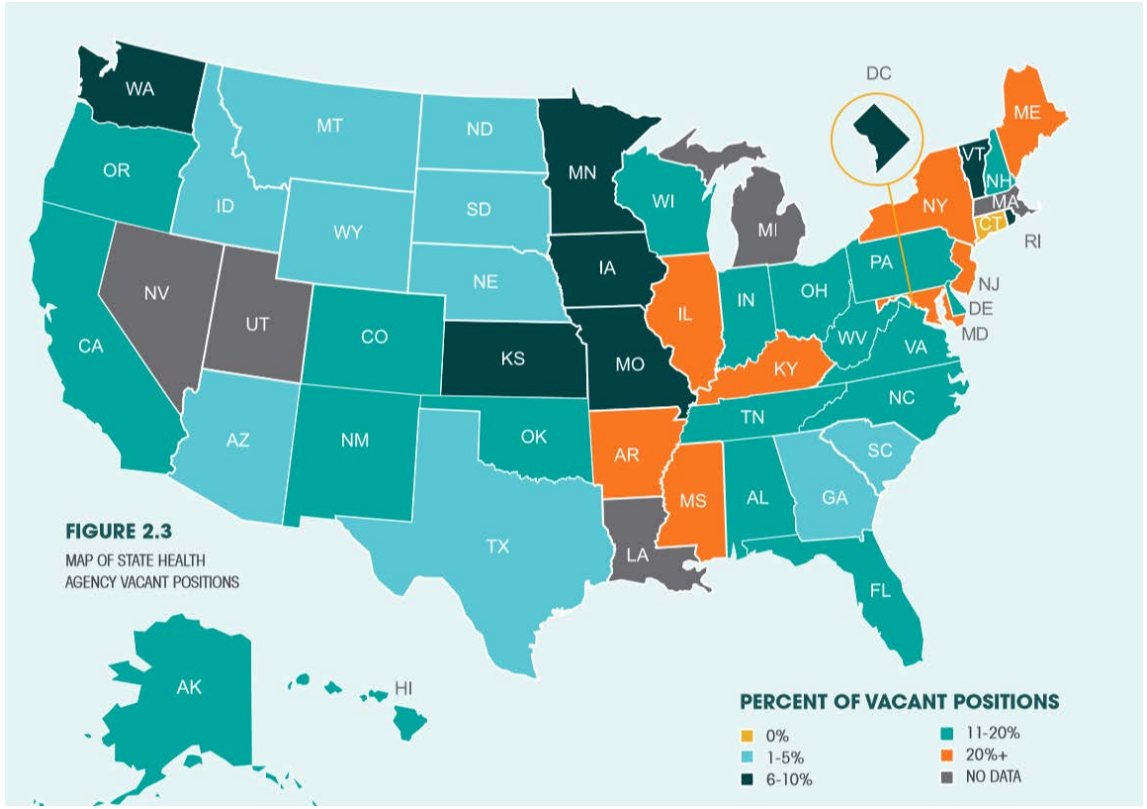


FIGURE 2.3
MAP OF STATE HEALTH AGENCY VACANT POSITIONS

Differing Investments - Per Capita

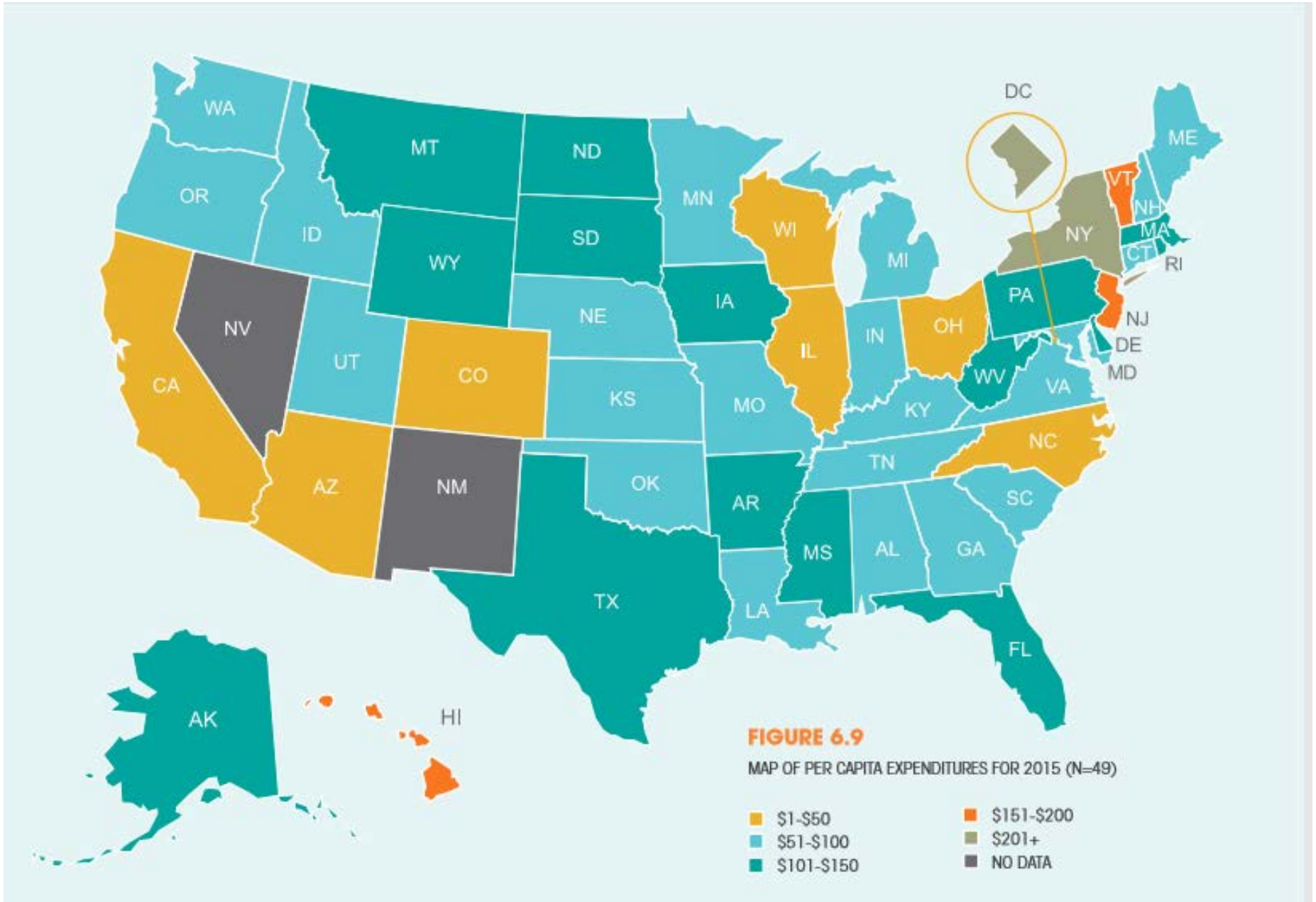
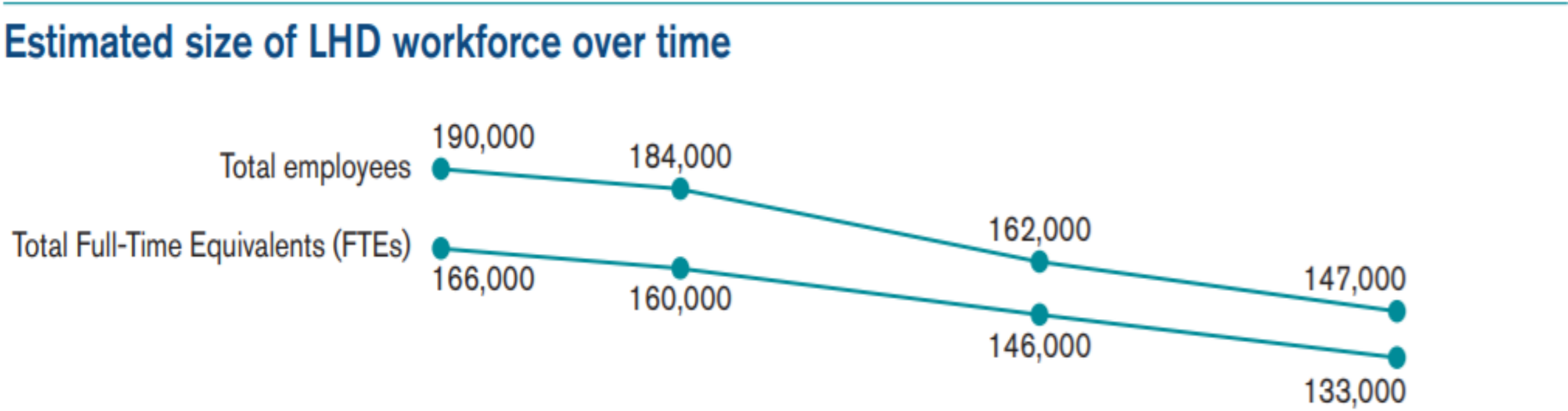


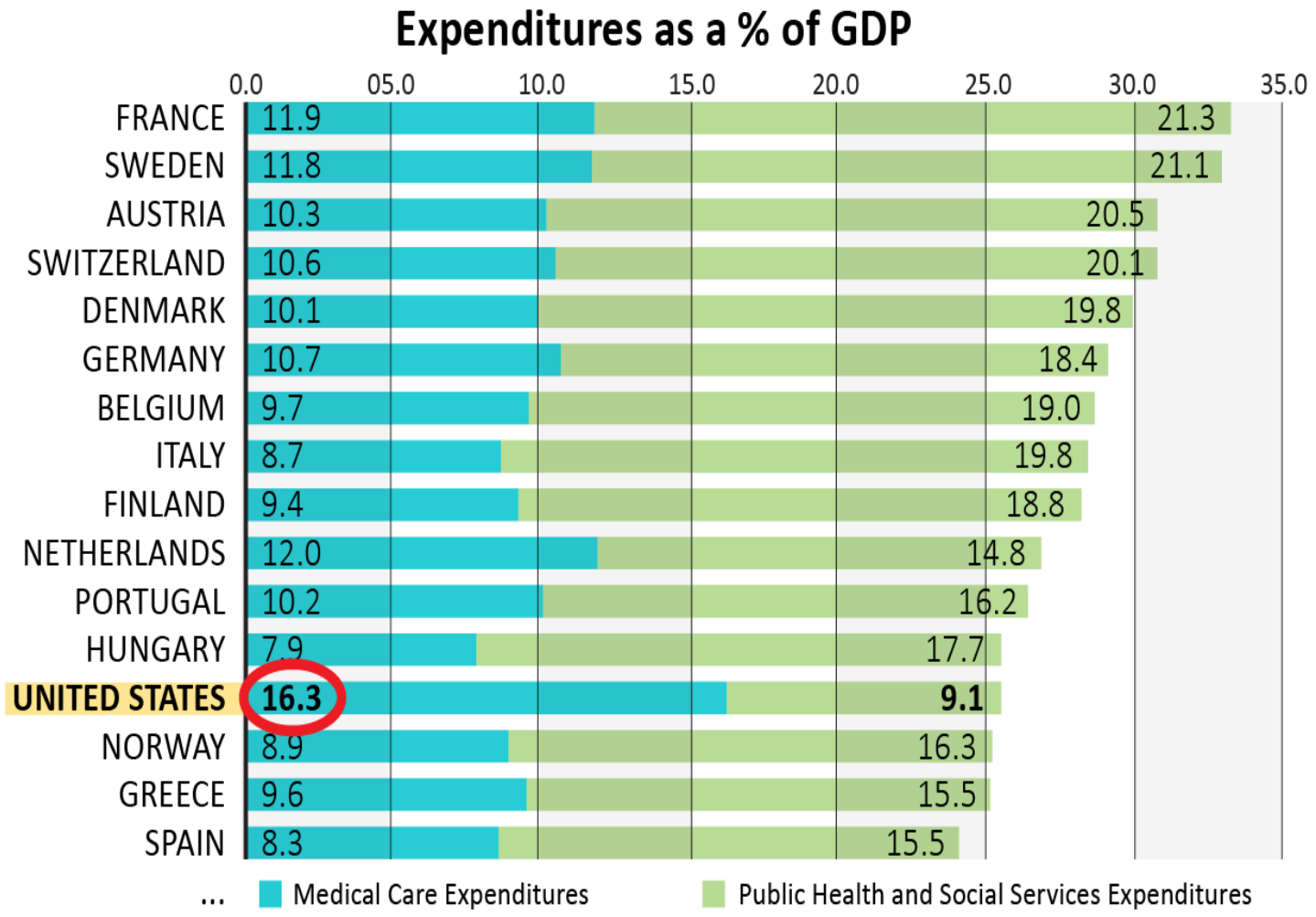
FIGURE 6.9

MAP OF PER CAPITA EXPENDITURES FOR 2015 (N=49)

Local Staffing is Decreasing Since 2008 Recession



U.S. Spends More on Medical Care Than Social & Public Health Needs Combined



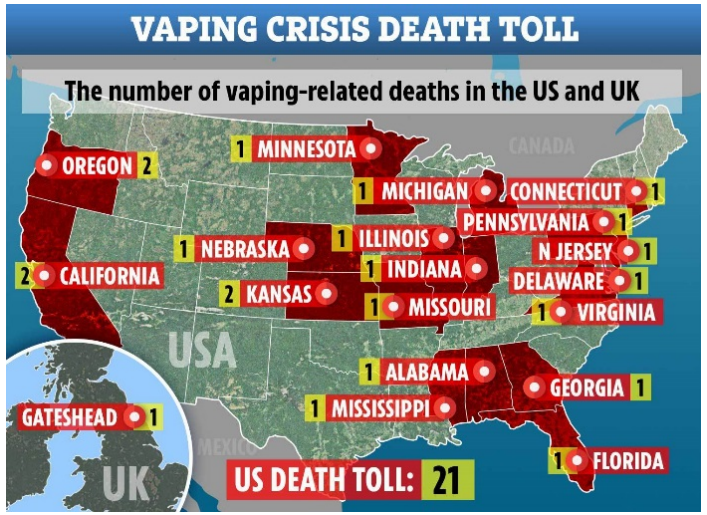
Europe: for $1 spent on health care, $2 spent on public health & social services.

USA: for $1 spent on health care, 55 cents spent on public health & social services.

Yet Emergencies Are Increasing

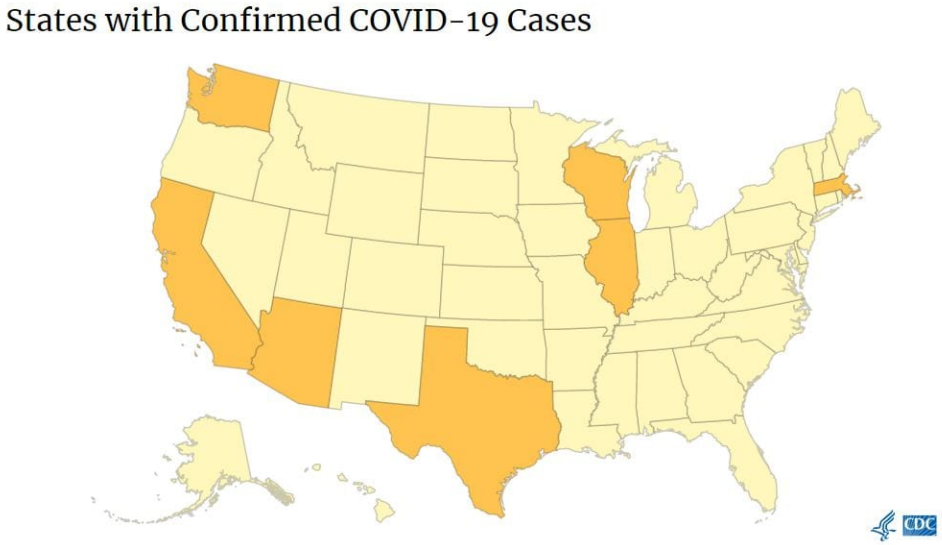
Number of federal public health yearly emergencies:

- 2010 – 2
- 2011 – 6
- 2012 – 3
- 2013 – 1
- 2016 – 2
- 2017 – 18
- 2018 – 15
- 2019 – 12



States & Locals Responding to COVID - 19

- **Epidemiology** - investigating cases
- **Laboratory** - testing specimens
- **Quarantine** - setting policies/identifying locations to house people
- **Screening** - staffing at airports, other sites
- **Collaborating with clinical sites** - screening, diagnosing, treating
- **Media** - providing information
- **Policy-making** - advising elected officials & taking emergency action



The Consequences Of Underfunding For COVID

- Slowed response
- Limited capacity to test
- Low capacity for contact tracing
- Outdated data systems
- Old school communications systems

The Consequences Of Underfunding For Equity

- Elevated chronic disease - diabetes, heart disease, obesity
- Elevated infectious disease - COVID, HIV
- Lack of timely and/or accurate data by race/ethnicity
- Inadequate resources in affected communities
- Lack of culturally/linguistically appropriate efforts
- Limited community input

Some Current Efforts With Congress

- Increase public health infrastructure by $4.5 B (150 groups endorse)
- Improve data collection & analysis systems by race/ethnicity
- Establish scaled up contact tracing initiative
- Strengthen focus on impact of systemic discrimination

- Change social/economic conditions to promote health (SDOH line item)
- Use COVID attention to drive long-term change

PREPARING FOR THE NEXT PUBLIC HEALTH EMERGENCY

DISCUSSION

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Questions?

Comments?

Lessons Learned from the COVID-19 pandemic

Nasia Safdar, MD, PhD

Professor of Infectious Diseases, Medical Director for Infection Prevention at UW health

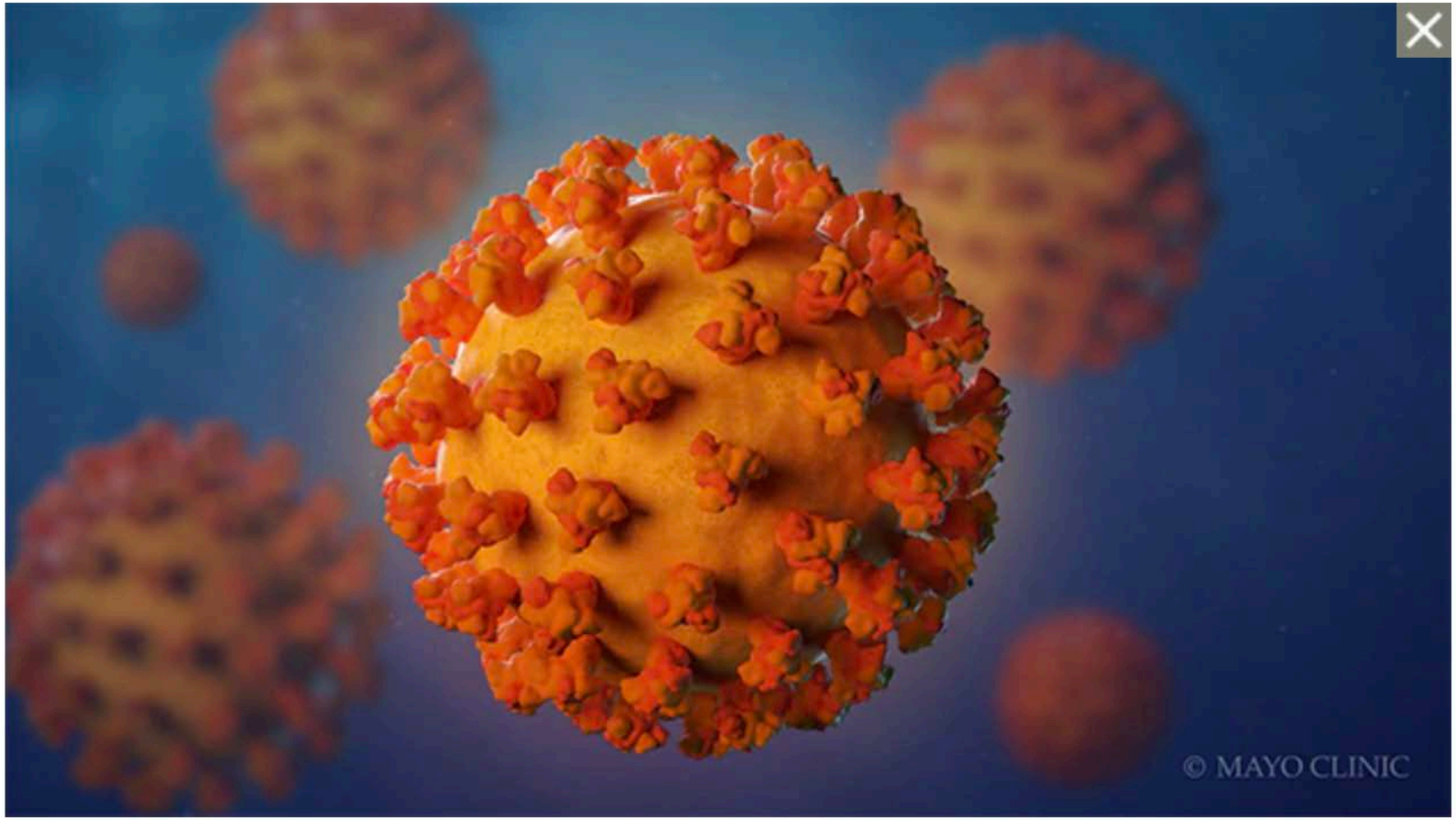
University of Wisconsin School of Medicine and Public Health, Madison WI

Objectives

- Review the COVID-19 pandemic - key differences from other pandemics

- Identify gaps and lessons learned using the pandemic preparedness framework

Background



Epidemiology of coronavirus outbreaks

- Family of RNA viruses that typically cause mild respiratory disease in humans.
- Emergence of the severe acute respiratory syndrome coronavirus (SARS-CoV), in 2003, demonstrated that CoVs are also capable of causing outbreaks of severe infections in humans.
- A second severe CoV, Middle East respiratory syndrome coronavirus (MERS- CoV), emerged in 2012 in Saudi Arabia.
- The third severe CoV, severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), was identified in Wuhan, China, in December 2019 and has driven this current pandemic.

https://www.centerforhealthsecurity.org/resources/fact-sheets/pdfs/coronaviruses.pdf

Epidemiology

Key features

- **No immunity in the population**
- **No widely effective therapeutic**
- **Asymptomatic transmission**
- **Uncertain duration of post-infection immunity**
- **Older adults and those with pre-existing conditions at high risk**
- **Transmission is via large droplets and therefore masks and physical distancing work**

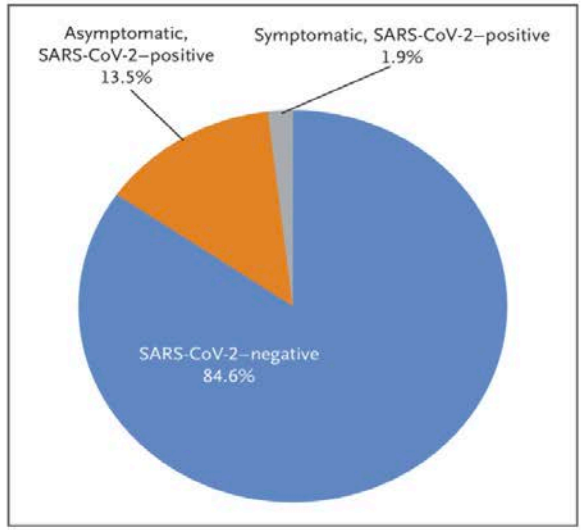
CORRESPONDENCE

Universal Screening for SARS-CoV-2 in Women Admitted for Delivery

Between March 22 and April 4, 2020, a total of 215 pregnant women delivered infants at the New York–Presbyterian Allen Hospital and Columbia University Irving Medical Center . All the women were screened on admission for symptoms of Covid-19. Four women (1.9%) had fever or other symptoms of Covid-19 on admission, and all 4 women tested positive for SARS-CoV-2 (Figure 1). Of the 211 women without symptoms, all were afebrile on admission. Nasopharyngeal swabs were obtained from 210 of the 211 women (99.5%) who did not have symptoms of Covid-19; of these women, 29 (13.7%) were positive for SARS-CoV-2. Thus, 29 of the 33 patients who were positive for SARS-CoV-2 at admission (87.9%) had no symptoms of Covid-19 at presentation.

Of the 29 women who had been asymptomatic but who were positive for SARS-CoV-2 on admission, fever developed in 3 (10%) before postpartum discharge

Figure 1.



Symptom Status and SARS-CoV-2 Test Results among 215 Obstetrical Patients Presenting for Delivery.

https://www.nejm.org/doi/full/10.1056/NEJMc2009316

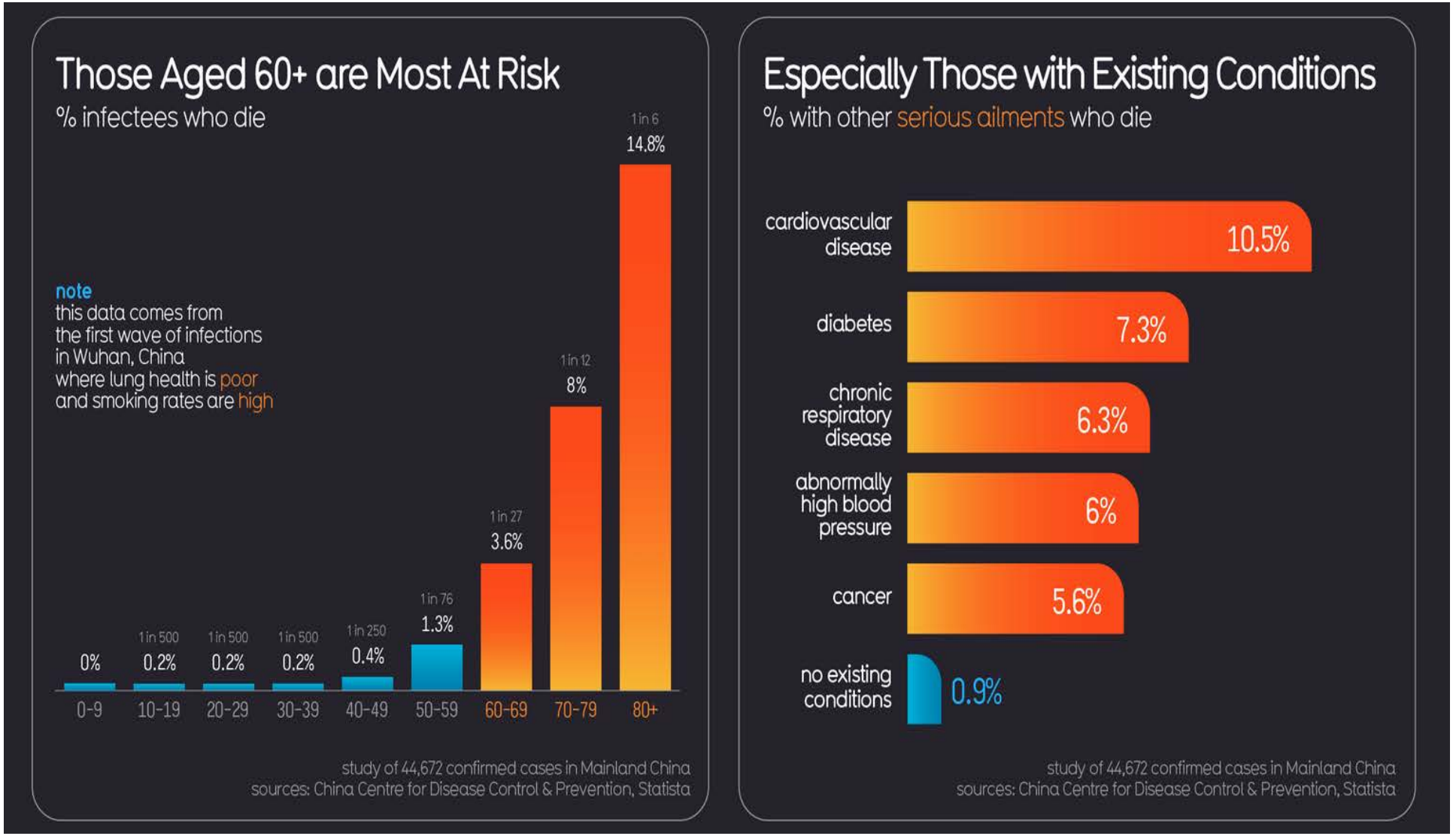
Key principle of preparedness

- Knowledge of virus biology, transmission, clinical features and
- expected population at risk drives all prevention/preparedness activities

Symptoms

- Symptoms usually present roughly 5 days after exposure, but can show up as early as 2 days and as long as 14 days after exposure
- 80% of cases are mild, 20% hospitalization, 5% ICU, 70% require mechanical ventilation while in ICU
- Length of stay is 8 days for hospitalization, 10 days in ICU
- Fever, cough, chest tightness
- Loss of sense of smell and taste
- Pneumonia complications
- Occasional GI symptoms-mainly diarrhea

Mortality from COVID-19



Interventions to reduce risk

	Studies and participants	Relative effect (95% CI)	Anticipated absolute effect (95% CI), eg, chance of viral infection or transmission		Difference (95% CI)	Certainty*	What happens (standardised GRADE terminology)[29]
			Comparison group	Intervention group			
Physical distance ≥1 m *vs* <1 m	Nine adjusted studies (n=7782); 29 unadjusted studies (n=10 736)	aOR 0·18 (0·09 to 0·38); unadjusted RR 0·30 (95% CI 0·20 to 0·44)	Shorter distance, 12·8%	Further distance, 2·6% (1·3 to 5·3)	−10·2% (−11·5 to −7·5)	Moderate†	A physical distance of more than 1 m probably results in a large reduction in virus infection; for every 1 m further away in distancing, the relative effect might increase 2·02 times
Face mask *vs* no face mask	Ten adjusted studies (n=2647); 29 unadjusted studies (n=10 170)	aOR 0·15 (0·07 to 0·34); unadjusted RR 0·34 (95% CI 0·26 to 0·45)	No face mask, 17·4%	Face mask, 3·1% (1·5 to 6·7)	−14·3% (−15·9 to −10·7)	Low‡	Medical or surgical face masks might result in a large reduction in virus infection; N95 respirators might be associated with a larger reduction in risk compared with surgical or similar masks§
Eye protection (faceshield, goggles) *vs* no eye protection	13 unadjusted studies (n=3713)	Unadjusted RR 0·34 (0·22 to 0·52)¶	No eye protection, 16·0%	Eye protection, 5·5% (3·6 to 8·5)	−10·6% (−12·5 to −7·7)	Low‖	Eye protection might result in a large reduction in virus infection

https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)31142-9/fulltext

Pandemic Preparedness Framework

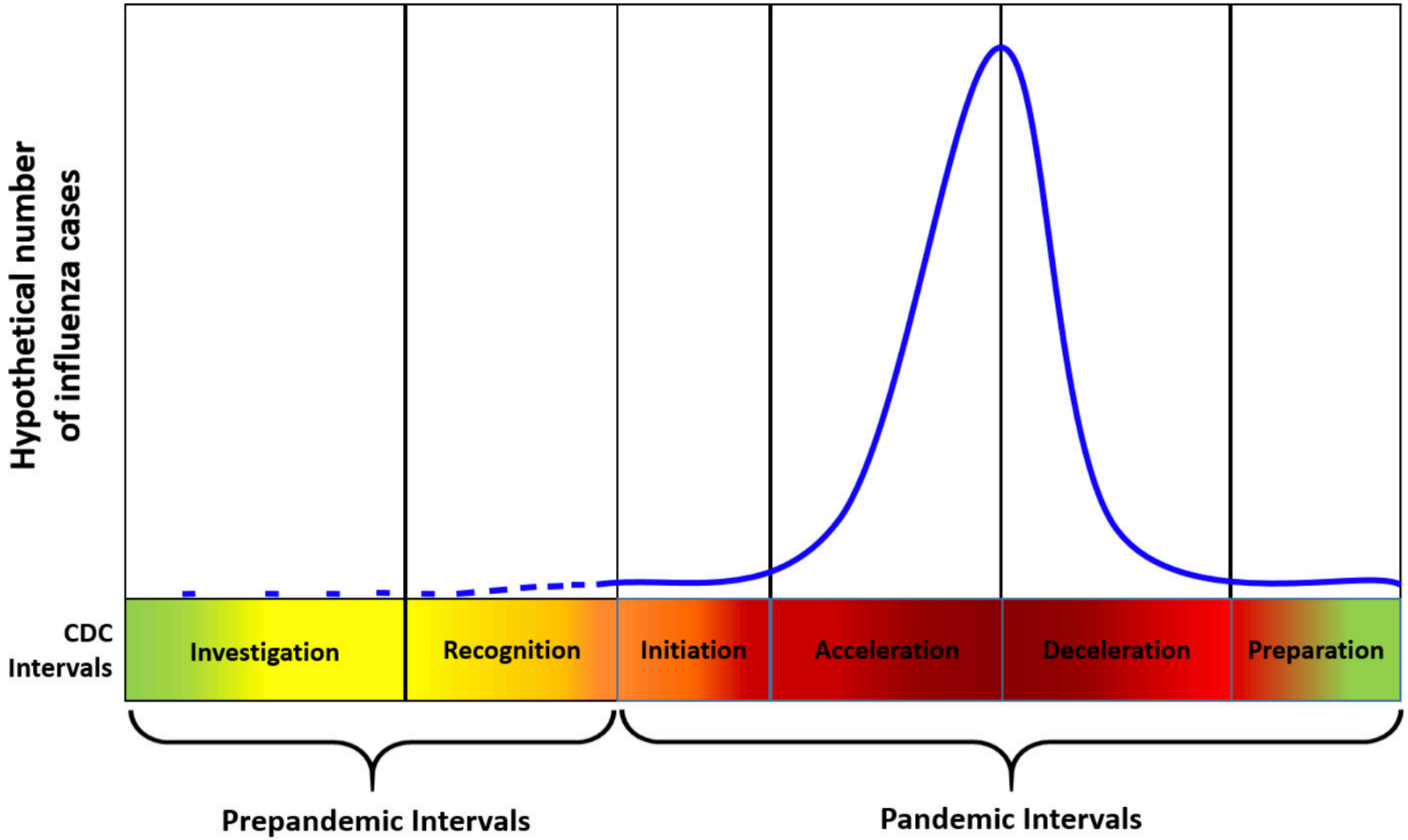
- https://www.cdc.gov/flu/pandemic-resources/national-strategy/intervals-framework.html

- Developed for influenza but pertinent to COVID-19 also

Description of the Six Pandemic Intervals

Interval	Description
1) Investigation of cases of novel influenza A virus infection in humans	When novel influenza A viruses are identified in people, public health actions focus on targeted monitoring and investigation. This can trigger a risk assessment of that virus with the Influenza Risk Assessment Tool (IRAT), which is used to evaluate if the virus has the potential to cause a pandemic.
2) Recognition of increased potential for ongoing transmission of a novel influenza A virus	When increasing numbers of human cases of novel influenza A illness are identified and the virus has the potential to spread from person-to-person, public health actions focus on control of the outbreak, including treatment of sick persons.
3) Initiation of a pandemic wave	A pandemic occurs when people are easily infected with a novel influenza A virus that has the ability to spread in a sustained manner from person-to-person.
4) Acceleration of a pandemic wave	The acceleration (or "speeding up") is the upward epidemiological curve as the new virus infects susceptible people. Public health actions at this time may focus on the use of appropriate non-pharmaceutical interventions in the community (e.g. school and child-care facility closures, social distancing), as well the use of medications (e.g. antivirals) and vaccines, if available. These actions combined can reduce the spread of the disease, and prevent illness or death.
5) Deceleration of a pandemic wave	The deceleration (or "slowing down") happens when pandemic influenza cases consistently decrease in the United States. Public health actions include continued vaccination, monitoring of pandemic influenza A virus circulation and illness, and reducing the use of non-pharmaceutical interventions in the community (e.g. school closures).
6) Preparation for future pandemic waves	When pandemic influenza has subsided, public health actions include continued monitoring of pandemic influenza A virus activity and preparing for potential additional waves of

Figure 1. Preparedness and response framework for novel influenza A virus pandemics: CDC intervals



Response needs to be proportionate to the crisis

Figure 2

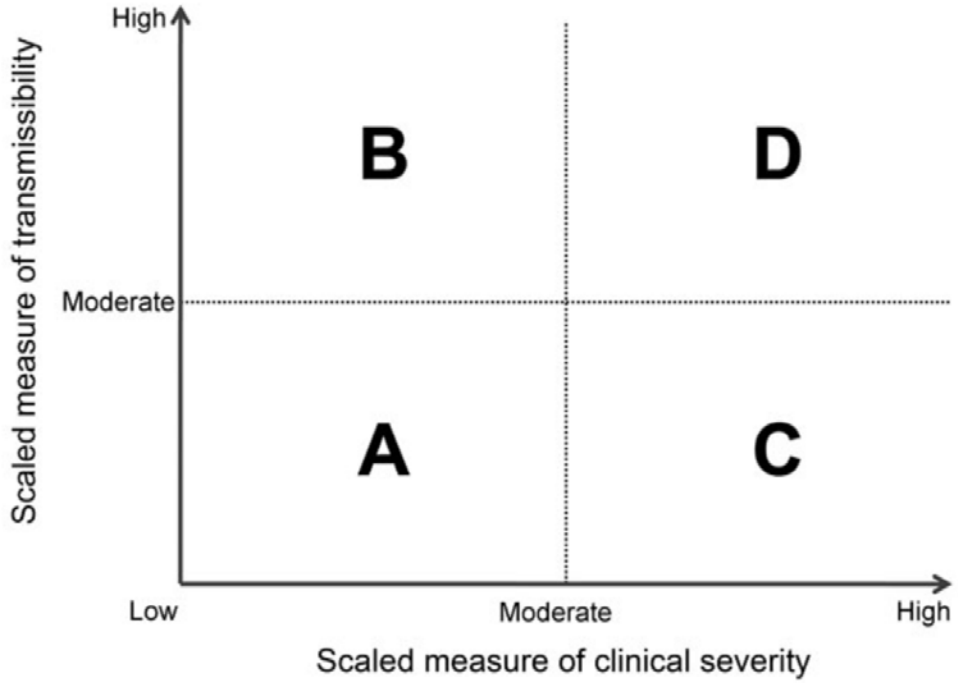


Figure 2. . . . Framework for the initial assessment of the effects of an influenza pandemic.

Paul Farmer’s 4 S framework

- Stuff
  - Diagnostic test
  - PPE
- Space
  - Hospitals
  - Nursing homes
  - Alternative care sites
- Staff
  - Workforce planning
- Systems
  - Communication
  - Coordination
  - Capacity planning
  - Resource sharing
  - Data sharing

Lessons Learned

- Strengthen the internal capacity of public health
- Improve health systems preparedness
- Revise pandemic preparedness guidance to reflect COVID-19
- Develop and apply measures to assess the severity
- Streamline the management of guidance documents
- Develop and implement an organization wide communications policy
- Encourage advance agreements for treatments, vaccine
- Create an extensive public heath reserve workforce
- Develop and implement contingency funding plans
- Pursue comprehensive research and evaluation program

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RESOURCES

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The Council of State Governments

- COVID-19 Resources for State Leaders
- CSG Midwest's Health Policy & Research page

Trust for America's Health

- TFAH's Portal of COVID-19 Resources

U.S. Centers for Disease Control

- CDC home page

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  July 23 | 10:00 am CDT

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