Navigating the Challenges and Shaping the Future of Public Health in the U.S.

Dale W. Bratzler, DO, MPH, MACOI, FIDSA

Dean, Hudson College of Public Health

Edith Kinney Gaylord Presidential Professor

Professor, Colleges of Medicine and Public Health

The Edward E. and Helen T. Bartlett Foundation Chair in Public Health

dale-bratzler@ouhsc.edu

EXPLORE
HEALTHCARE SUMMIT

Disclosures

I have no relevant disclosures or conflicts of interest.

Learning Objectives

- Define public health.
- Explore some of the historic victories of public health.
- Discuss the evolving landscape of public health.
- Understanding ongoing issues that drive health outcomes including health equity issues, access to care, and emerging health threats.
- How do we all contribute to positive changes in a challenging environment?

*A bill introduced in the Minnesota state legislature calls mRNA vaccines **"weapons of mass destruction"** and if passed would carry punishment of up to 20 years in prison for possessing or administering **them**.*

MINNESOTA | *News*

MN Republicans introduce vaccine criminalization bill drafted by Florida hypnotist

GOV & POLITICS | Apr 22, 2025 | 11:50 am ET | By Christopher Ingraham

SHARE

Moderna COVID-19 vaccine at Richmond Raceway in Richmond, Va., February 2, 2021. Photo by Parker Michels-Boyce/Virginia Mercury.

The bill's language appears to have been drafted by Joseph Sansone, a Florida hypnotist and conspiracy theorist who believes that mRNA treatments are "nanoparticle injections" that amount to "biological and technological weapons of mass destruction."

Key Points of My Presentation

What I want you to take home…….

- Most of the improvements in health outcomes and life expectancy in the past century are due to public health initiatives (not medical care).
- Health equity issues are a key drivers of health outcomes at both the individual patient level and for population health.
- In a global economy, diseases transcend borders, moving as freely as goods, services, and people.
- There will be another pandemic!

The Intersection of Public Health and Medicine

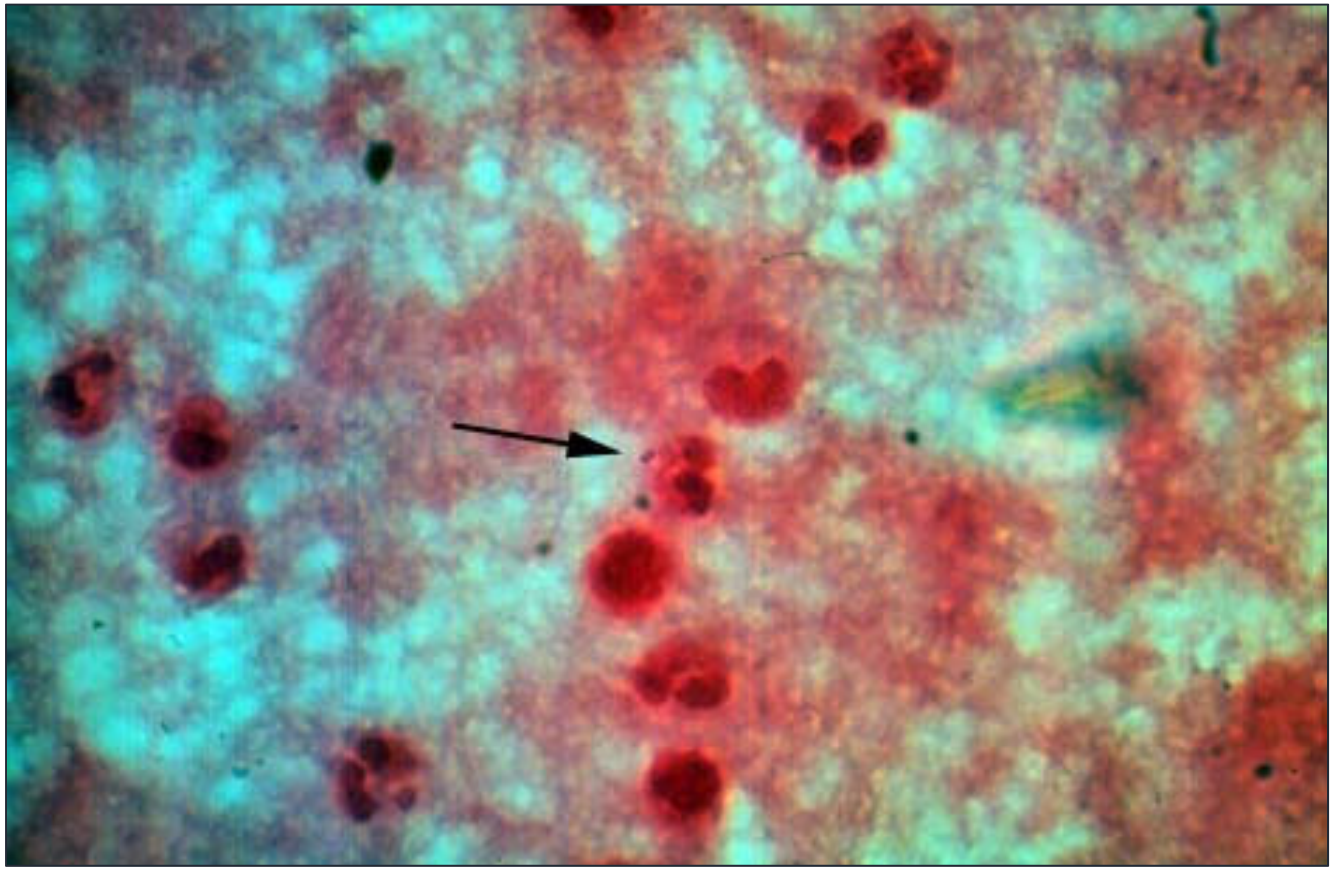
- A previously healthy 19-year-old patient presented to the emergency room with a two-day history of myalgias (muscle aches), arthralgias (sore joints), and pharyngitis (sore throat). He has also had a severe headache.
  - Traveling across the country from Michigan to return to college in Arizona

- T: 39.6 C, pulse 124, BP 83/44, RR 18

First view entering the patient's room in the Emergency Department

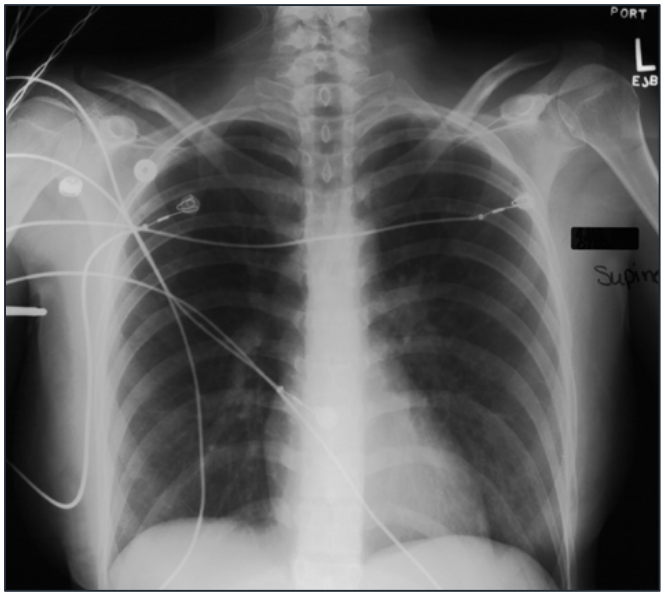
Classic rash (purpura) of meningococcal sepsis

Aerobic **gram-negative** diplococcus in blood smear

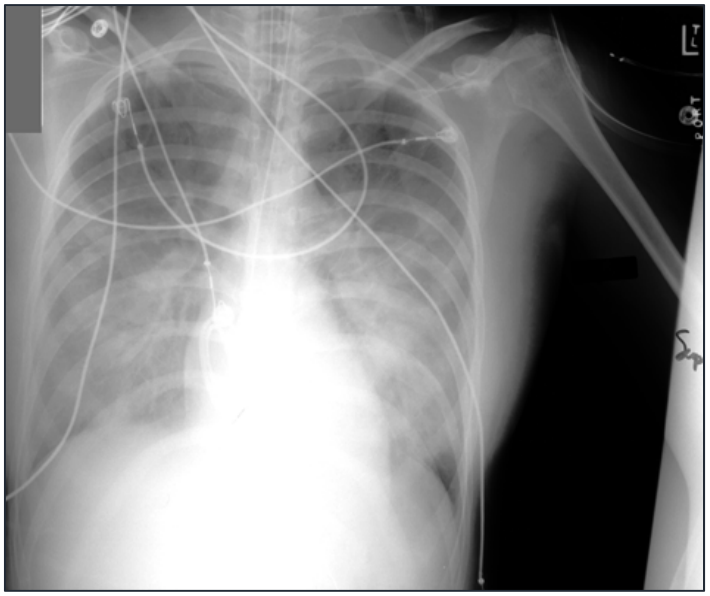


Neisseria meningitidis (meningococcal sepsis)

Admitted to the ICU. Treated with IVs and Appropriate Antibiotics



7:00 AM



8:30 PM

(REV. 10/2019)

Acute Disease Service
Oklahoma State Department of Health
Creating a State of Health

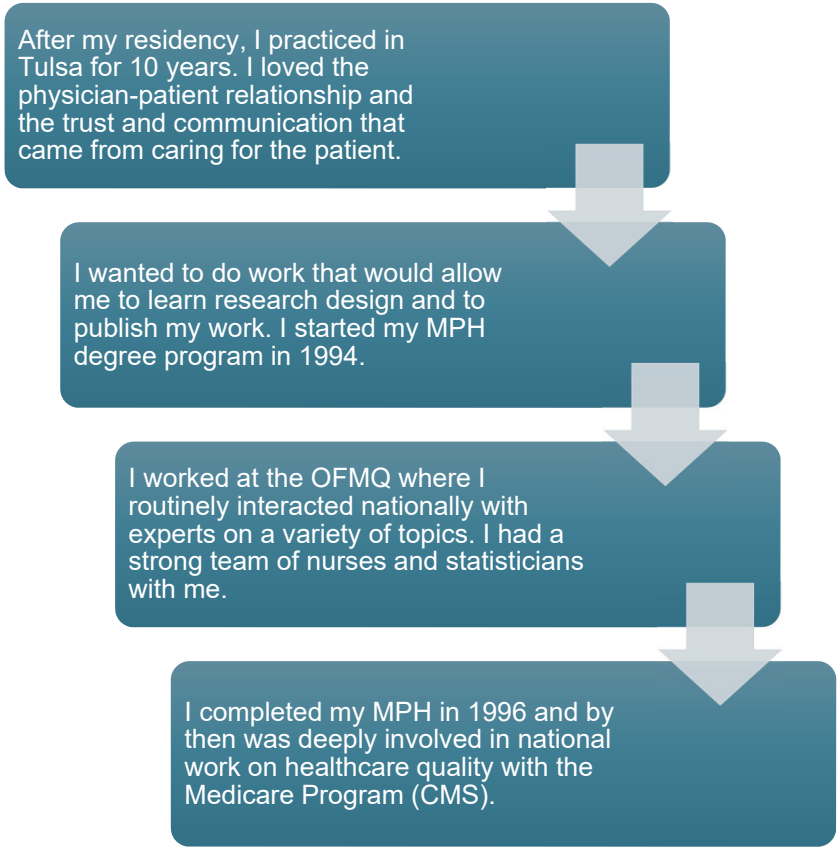
REPORTABLE DISEASES/ CONDITIONS

The following diseases are to be reported to the OSDH by PHIDDO or telephone (405-271-4060) immediately upon suspicion, diagnosis, or positive test.

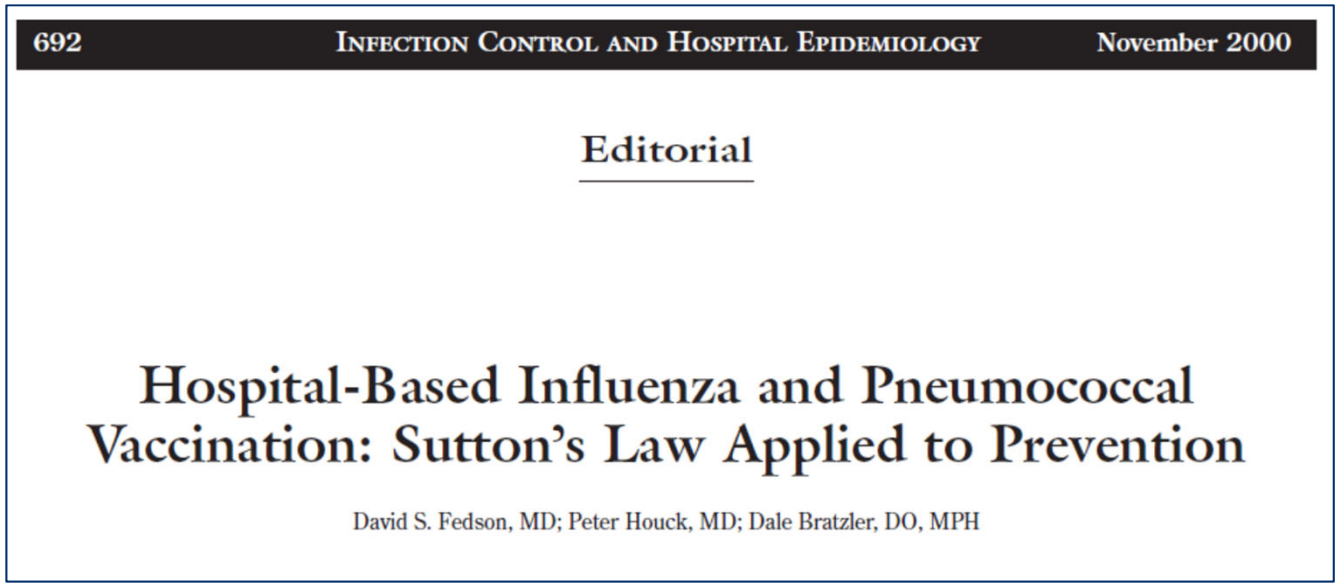
- Anthrax
- Bioterrorism - suspected disease
- Botulism
- Diphtheria
- Free-living amebae infections causing primary amebic meningoencephalitis
- Hepatitis B during pregnancy (HBsAg+)
- Measles (Rubeola)
- Meningococcal invasive disease
- Novel coronavirus
- Novel influenza A
- Outbreaks of apparent infectious disease
- Plague
- Poliomyelitis
- Rabies
- Smallpox
- Typhoid fever
- Viral hemorrhagic fever

https://www.ok.gov/health/Prevention_and_Preparedness/Acute_Disease_Service/Disease_Reporting/What_to_Report/index.html

Road to Public Health



I never stopped patient care as it was an important part of my professional satisfaction.



692 INFECTION CONTROL AND HOSPITAL EPIDEMIOLOGY November 2000

Editorial

Hospital-Based Influenza and Pneumococcal Vaccination: Sutton's Law Applied to Prevention

David S. Fedson, MD; Peter Houck, MD; Dale Bratzler, DO, MPH

Early in their education, virtually all medical students are taught the importance of following Sutton's Law in formulating a differential diagnosis. Sutton's Law is based on the remark made by the notorious bank robber, Willie Sutton. When asked why he robbed banks, he replied, "That's where the money is."……..

In formulating a differential diagnosis, the student is advised to think first of common problems, not rare diseases. More often than not, diagnosing a common problem is "where the money is."

Fedson DS, Houck P, Bratzler D. *Infect Control Hosp Epidemiol*. 2000 Nov;21(11):692-9. doi: 10.1086/501716. PMID: 11089652.

Why give vaccines to hospitalized patients?

Fedson DS, Houck P, Bratzler D. *Infect Control Hosp Epidemiol*. 2000 Nov;21(11):692-9. doi: 10.1086/501716. PMID: 11089652.

- *"What is the best vaccination strategy for reaching people who, if not vaccinated, will have the greatest likelihood of being hospitalized or dying of these two diseases?" The answer is patients who are being discharged from the hospital. Hospital-based influenza and pneumococcal vaccination is "where the money is."*

Discharged elderly patients accounted for 39% to 46% of all subsequent influenza-related hospital admissions and approximately two thirds of all influenza-related deaths."

"The US studies showed that 50% to 66% of bacteremic* patients who survived and 67% to 78% of those who died had been discharged within the previous 3 to 5 years."

***pneumococcal bacteremia.**

ORIGINAL INVESTIGATION

Failure to Vaccinate Medicare Inpatients

A Missed Opportunity

Dale W. Bratzler, DO, MPH; Peter M. Houck, MD; Hui Jiang, MS; Wato Nsa, MD, PhD; Claudette Shook, RN; Lori Moore, RN; Lisa Red, MSHA

Background: Hospitalized elderly patients are at risk for subsequent influenza and pneumococcal disease. Despite this risk, they are often not vaccinated in this setting.

Methods: We reviewed the medical records of a national sample of 107311 fee-for-service Medicare patients, 65 years or older, discharged from April 1, 1998, through March 31, 1999, with a principal diagnosis of acute myocardial infarction, heart failure, pneumonia, or stroke. We linked patient identifiers to Medicare Part B claims to identify influenza and pneumococcal vaccines paid for before, during, or after hospitalization. The main outcome measures were documentation by chart review or paid claim of influenza or pneumococcal vaccination.

Results: Of the 104976 patients with a single hospitalization, 35169 (33.5%; 95% confidence interval [CI], 33.2%-33.8%) received pneumococcal vaccination prior to admission, 444 (0.4%; 95% CI, 0.4%-0.5%) were vaccinated in the hospital, and 1076 (1.0%; 95% CI, 1.0%-1.1%) were vaccinated within 30 days of discharge. In the subgroup of 40488 patients discharged from October through December, 12782 (31.6%; 95% CI, 31.1%-32.0%) received influenza vaccination prior to admission, 755 (1.9%; 95% CI, 1.7%-2.0%) were vaccinated in the hospital, and 4302 (10.6%; 95% CI, 10.3%-10.9%) were vaccinated after discharge. Of patients who were unvaccinated prior to admission, 97.3% (95% CI, 97.1%-97.5%) did not receive influenza vaccine and 99.4% (95% CI, 99.3%-99.4%) did not receive pneumococcal vaccine before hospital discharge.

Conclusion: National recommendations for inpatient vaccination against influenza and pneumococcal disease are not being followed for the vast majority of eligible Medicare patients admitted to the hospital.

Arch Intern Med. 2002;162:2349-2356

We reviewed the medical records of 107,311 Medicare patients who were 65 years or older!

"National recommendations for inpatient vaccination against influenza and pneumococcal disease are not being followed."

Bratzler DW, Houck PM, et al. *Arch Intern Med*. 2002;162:2349-56

Table 2. Proportion of Medicare Inpatients Who Received Influenza Vaccination Before, During, or After Hospitalization*

	Prior to Admission†		During Admission‡		After Discharge§		Total	
Diagnosis (n)	Unweighted % (95% CI)	Weighted % (95% CI)	Unweighted % (95% CI)	Weighted % (95% CI)	Unweighted % (95% CI)	Weighted % (95% CI)	Unweighted‖ % (95% CI)	Weighted % (95% CI)
AMI (6549)	31.2 (30.1-32.3)	30.3 (29.2-31.4)	1.4 (1.2-1.8)	1.3 (1.1-1.7)	11.4 (10.7-12.2)		(42.8-45.3)	42.4 (41.2-43.6)
Heart failure (10 529)	31.4 (30.5-32.3)	31.2 (30.3-32.1)	1.9 (1.6-2.2)	1.7 (1.5-2.0)	10.5 (9.9-11.1)		3.8 (42.8-44.7)	42.7 (41.7-43.6)
Pneumonia (13 772)	31.7 (30.9-32.5)	31.4 (30.6-32.2)	2.4 (2.2-2.7)	1.9 (1.6-2.1)	10.7 (10.2		44.9 (44.0-45.7)	43.4 (42.6-44.2)
Stroke (9638)	31.9 (31.0-32.8)	31.1 (30.2-32.0)	1.3 (1.1-1.5)	1.0 (0.8-1.2)	10	9.3-10.5)	43.3 (42.3-44.3)	42.0 (41.0-43.0)
All patients (40 488)	31.6 (31.1-32.0)	31.1 (30.7-31.6)	1.9 (1.7-2.0)	1.5 (1.4-1.7)		.1 (9.8-10.4)	44.1 (43.6-44.5)	42.7 (42.2-43.2)

*Analysis is limited to Medicare patients with a single hospitalization who we October 1 and December 31, 1998. Weighted results reflect adjustment based on the state-specific sampling scheme. CI indicates confid er of patients; and AMI, acute myocardial infarction.
†Based on an analysis of Medicare Part B paid claims or documentatio al record of prior vaccination during the current influenza season.
‡Based on hospital medical record abstraction and analysis of paid s.
§Based on an analysis of Medicare Part B paid claims through J
‖There were no significant differences across clinical topics i enza vaccine ($P = .12$).

Table 3. Proportion of Medicare Inpatie Pneumococcal Vaccination Before, During, or After Hospitalization*

	Prior to Adm		During Admission‡		After Discharge§		Total	
Diagnosis (n)	Unweighted % (95% C		Unweighted % (95% CI)	Weighted % (95% CI)	Unweighted % (95% CI)	Weighted % (95% CI)	Unweighted‖ % (95% CI)	Weighted % (95% CI)
AMI (18 701)	31.1 (	.4-31.8)	0.2 (0.2-0.3)	0.2 (0.2-0.3)	0.8 (0.7-0.9)	0.8 (0.6-0.9)	32.1 (31.4-32.8)	32.1 (31.4-32.7)
Heart failure (31 180)	33.8 (	(32.5-33.5)	0.3 (0.2-0.3)	0.2 (0.2-0.3)	0.8 (0.7-0.9)	0.6 (0.6-0.7)	34.8 (34.3-35.4)	33.9 (33.3-34.4)
Pneumonia (24 846)	37.0 (36.4-3	36.2 (35.6-36.8)	1.0 (0.9-1.2)	0.8 (0.7-0.9)	2.0 (1.8-2.2)	1.8 (1.6-2.0)	40.0 (39.4-40.6)	38.8 (38.2-39.4)
Stroke (30 249)	31.9 (31.3-32.4)	31.2 (30.7-31.7)	0.2 (0.2-0.3)	0.2 (0.2-0.3)	0.6 (0.5-0.7)	0.6 (0.5-0.6)	32.7 (32.2-33.2)	32.0 (31.4-32.5)
All patients (104 976)	33.5 (33.2-33.8)	32.9 (32.6-33.2)	0.4 (0.4-0.5)	0.3 (0.3-0.4)	1.0 (1.0-1.1)	0.9 (0.9-1.0)	34.9 (34.7-35.2)	34.2 (33.9-34.4)

A Missed Opportunity!

Before, during, or after hospitalization:

Only 43% of the hospitalized patients 65 and older received the influenza vaccine.

Only 34% of the hospitalized patients 65 and older received the pneumococcal vaccine!

Study says vaccination rules for elderly ignored
LINDSEY TANNER Associated Press
11/11/2002
Tulsa World (Final Home Edition), Page A18 of News

Policy changes:
- Allowed for standing orders for vaccines in hospitals.
- Required hospitals to capture and publicly report their vaccination rates.

Annual flu shots are recommended for all adults age 50 and older. Pneumococcal vaccine, recommended for adults 65 and older, is usually given once to prevent pneumonia, meningitis and bloodstream infections.

To boost vaccination rates, the government's Advisory Committee on Immunization Practices recommends that both vaccines be administered to adults during hospitalizations. Hospitalized adults are a captive audience and are especially vulnerable to serious complications from flu or pneumonia because they're already sick, said the lead researcher, Dr. Dale W. Bratzler of the Oklahoma Foundation for Medical Quality.

Bratzler said lack of awareness about the guidelines and patients' unfounded concerns about the vaccines' safety were partly to blame.

The Mayo Clinic in Rochester, Minn., has made the two vaccines part of a "standing orders" program, said Dr. Greg Poland, the director of the Mayo Vaccine Research Group. Nurses screen every adult inpatient and vaccinate those who consent and are not already immunized, Poland said.

The study suggests that far too few hospitals are doing the same, he said.

"To actually have hard numbers now that that's how miserable this is should embarrass the medical system and hopefully outrage us and propel us to action," Poland said.

ORIGINAL ARTICLE

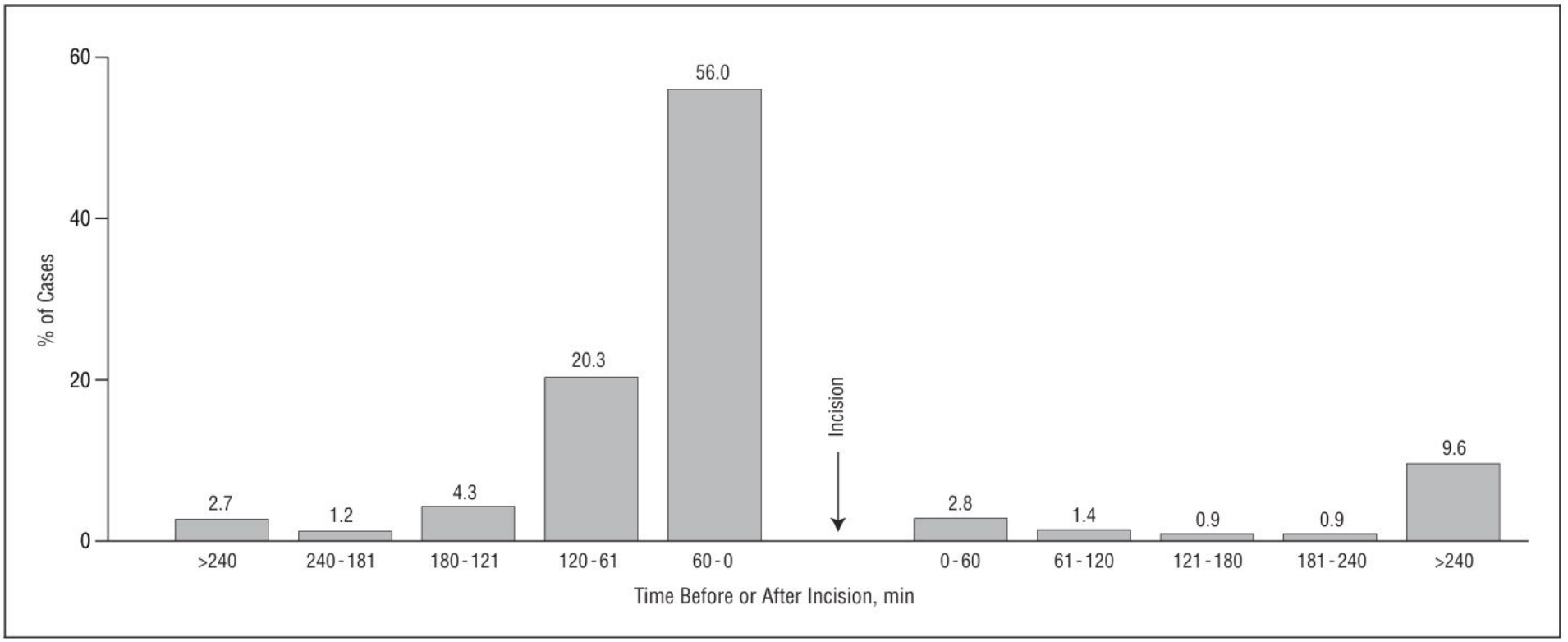
Use of Antimicrobial Prophylaxis for Major Surgery

Baseline Results From the National Surgical Infection Prevention Project

Dale W. Bratzler, DO, MPH; Peter M. Houck, MD; Chesley Richards, MD, MPH; Lynn Steele, MS, CIC; E. Patchen Dellinger, MD; Donald E. Fry, MD; Claudia Wright, MS; Allen Ma, PhD; Karina Carr, RN; Lisa Red, MSHA

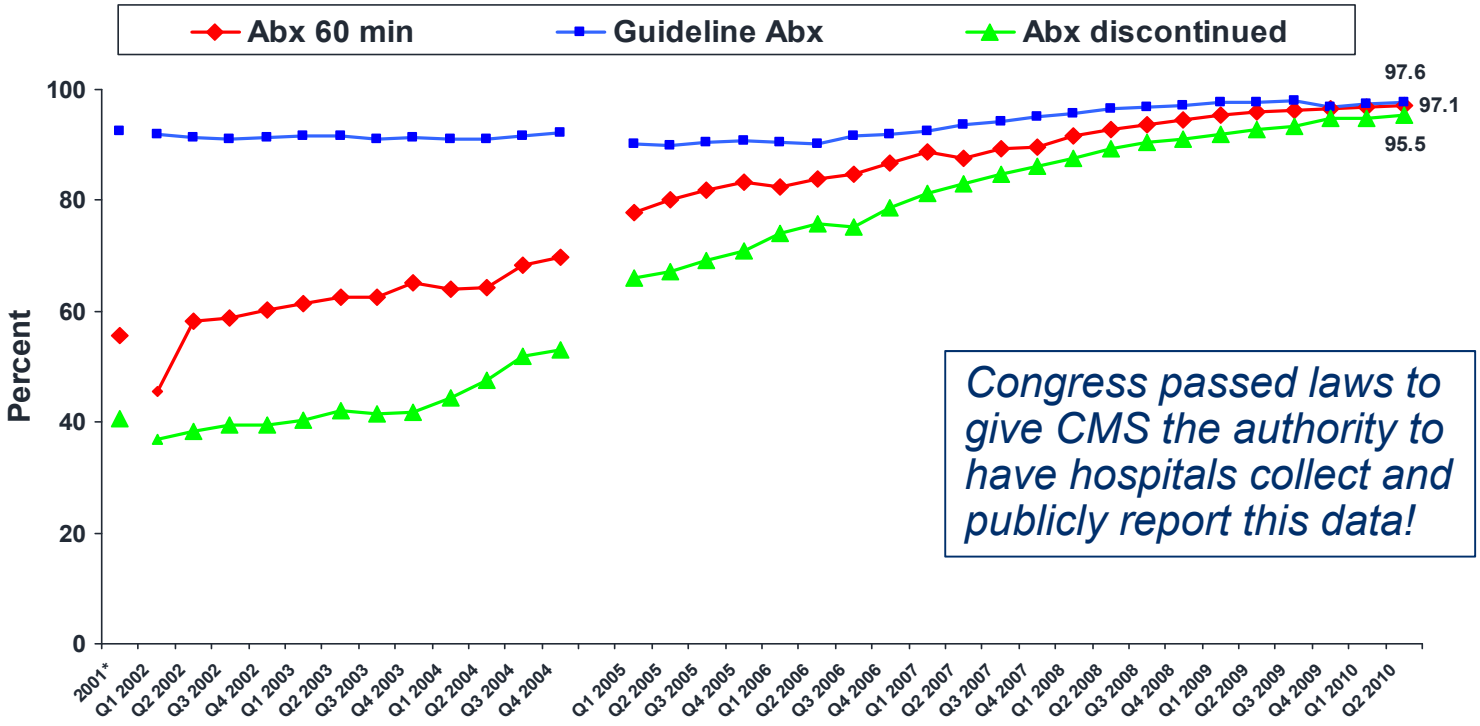
In review of the medical records of 34,133 Medicare inpatients undergoing major surgery we found substantial opportunities to improve the use of prophylactic antimicrobials.

Bratzler DW, Houck PM, et al. Use of antimicrobial prophylaxis for major surgery: baseline results from the National Surgical Infection Prevention Project. *Arch Surg*. 2005 Feb;140(2):174-82. doi: 10.1001/archsurg.140.2.174. PMID: 15724000.



The ideal time to give antibiotics before surgery to prevent infection is to start the infusion in the hour before incision.

National Performance in Response to CMS Requirements



Congress passed laws to give CMS the authority to have hospitals collect and publicly report this data!

My public health journey……..

I came to the realization that these two studies and the national response they got probably saved more lives than anything I had done in my medical career to that point.

- Both initiatives were supported by a large national team of collaborators.
- Both involved change to public policy.
- Both focused on evidence-based interventions to reduce harm and save patient lives.

Characteristic of public health interventions, you don’t know the names of any people who may have been saved.

What is Public Health?

Definition of Public Health

Winslow played a leading role in defining and shaping the public health profession in America, and his papers trace the growth of the profession from its origin in bacteriology and sanitary engineering.

- "The science and art of preventing disease, prolonging life, and promoting health through the organized efforts and informed choices of society, organizations, public and private communities, and individuals."

Charles-Edward Armory Winslow

On Public Health

Professor Winslow on the American Public Health Association, 1947

- The history of our Association is, in essence, the history of perhaps the most significant social movement of modern times. It was founded in the dawn of a new era, the era in which-for the first time in human history-the life span of the human animal ceased to be a play-thing of Lachesis* and became a factor largely under the control of the human will; when, in the words of Hermann M. Biggs, it became clear that 'within natural limitations, a community can determine its own death rate."'

*In Greek mythology, Lachesis is the measurer of the thread spun on Clotho's spindle, and in some texts, determines Destiny, or thread of life.

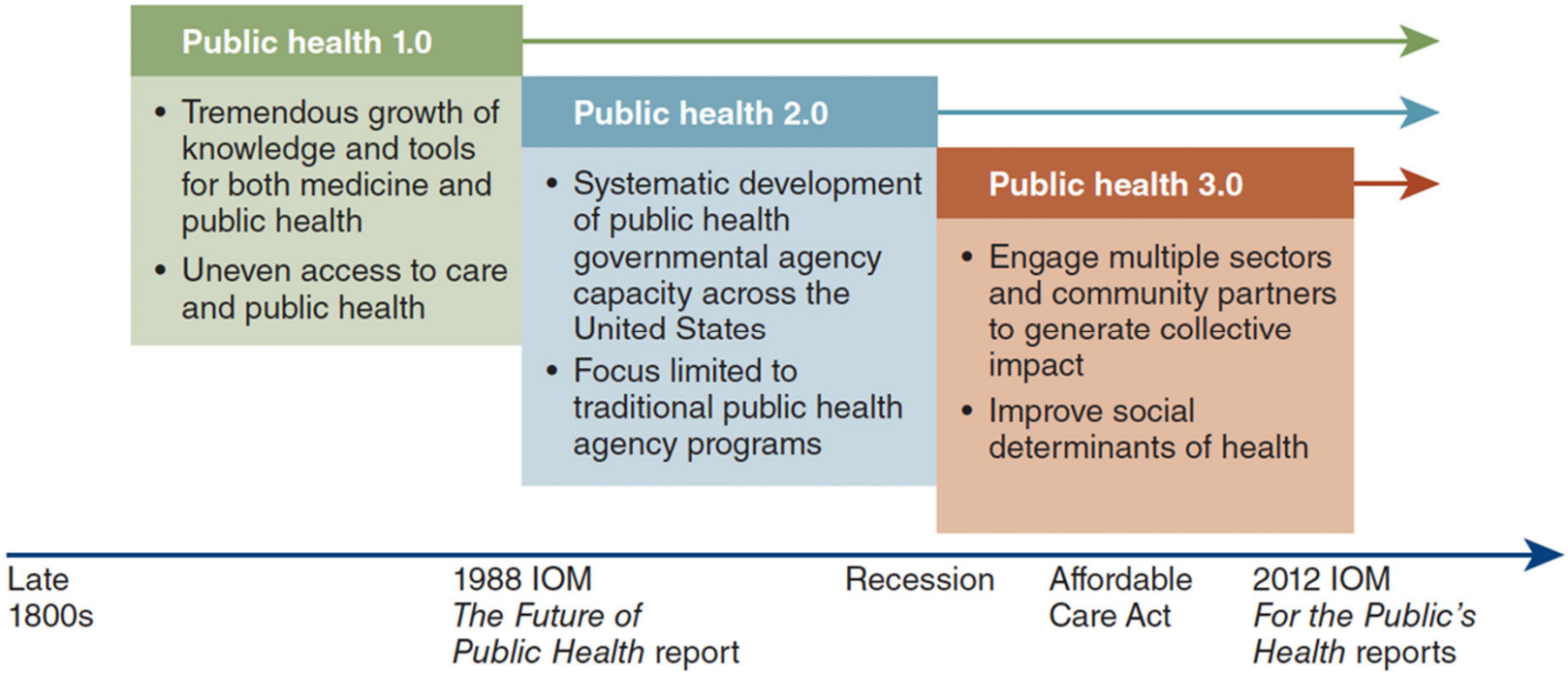
Definition of Public Health

CDC Foundation

- Public health is the science of protecting and improving the health of people and their communities. This work is achieved by promoting healthy lifestyles, researching disease and injury prevention, and detecting, preventing and responding to infectious diseases. Overall, public health is concerned with protecting the health of entire populations. These populations can be as small as a local neighborhood, or as big as an entire country or region of the world.

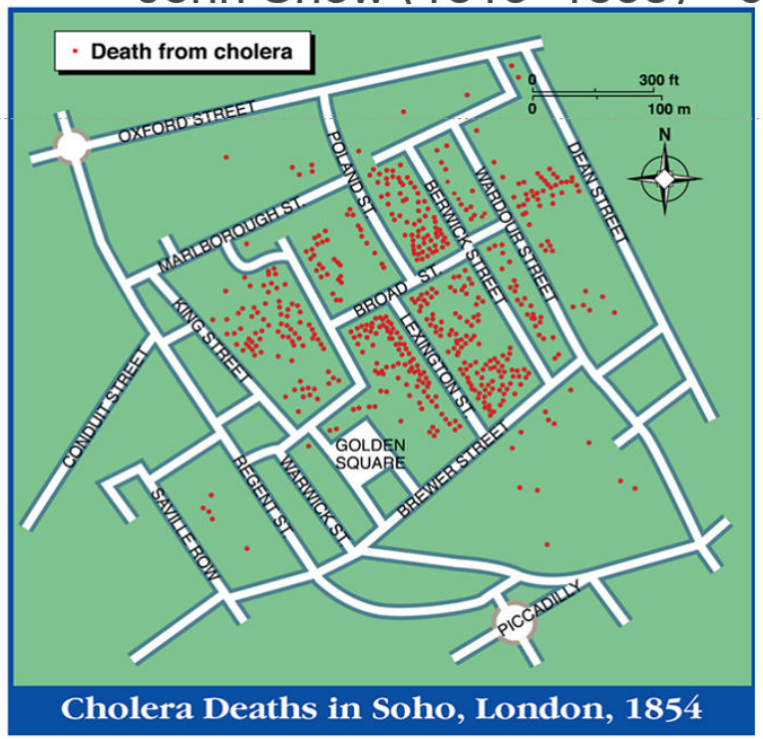
Brief History of Public Health in the United States

Evolution of Public Health Eras in the United StatesPublic Health

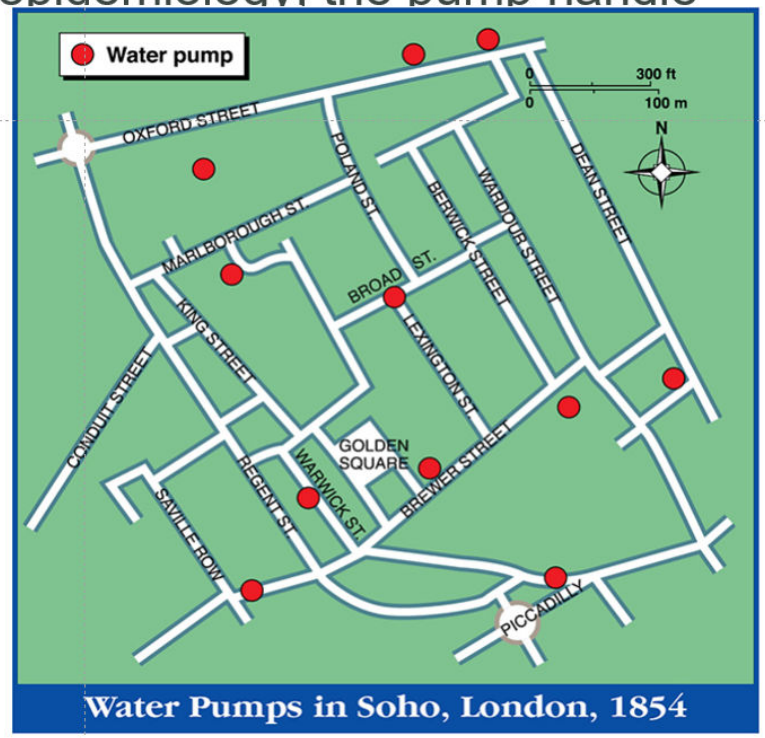


Early Public Health – Water and Sanitation

- John Snow (1813–1858)—cholera epidemiology, the pump handle



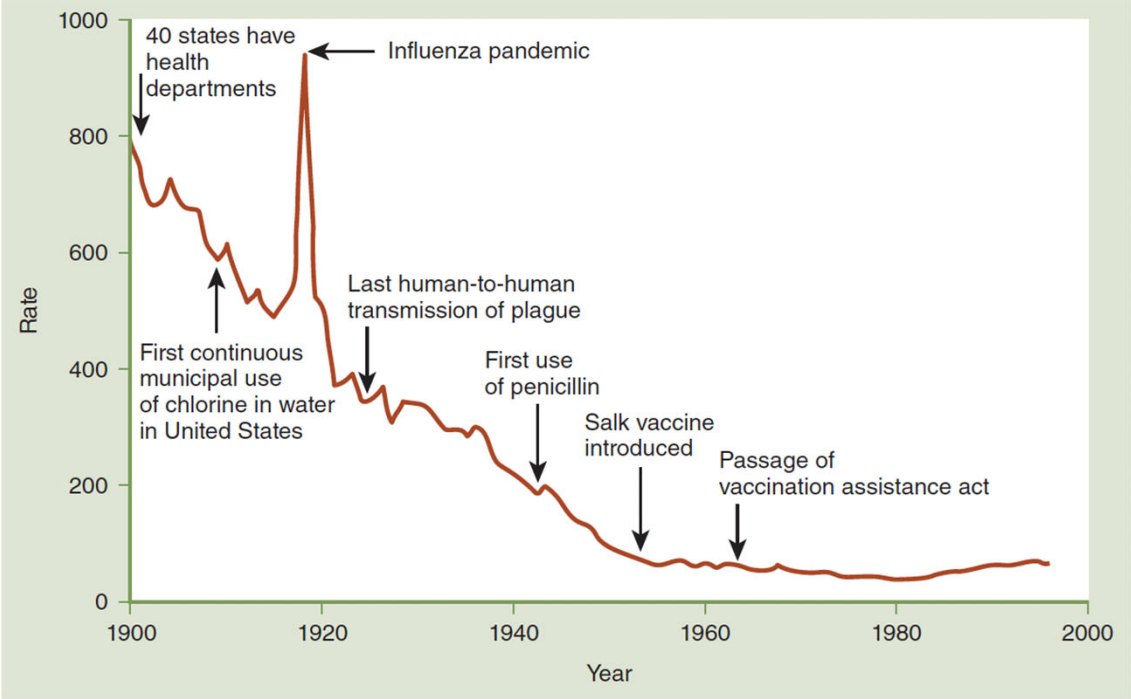
Cholera Deaths in Soho, London, 1854



Water Pumps in Soho, London, 1854

The pump's handle was removed as a preventative measure, and the outbreak was contained.

20th Century Decline in Death Due to Infectious Diseases



Why have infectious diseases declined?

- Public health measures such as clean water and sanitation (were the most important contributions)
- Vaccination
- Antimicrobials – penicillin not used for patients until the 1940s

JAMA. 1999;281(1):61-66.

Influenza Pandemic of 1918

- Infected 1/3 of the world's population (~500 million patients)
  - 20-50 million deaths (675,000 deaths in the US alone)
  - Struck many previously healthy, young people—a group normally resistant to this type of infectious illness
  - More U.S. soldiers died from the 1918 flu than were killed in battle during World War 1

- 1918 virus differed from other human and animal influenza viruses (no innate immunity)
  - Co-pathogenic with pneumonia bacteria including *Staphylococcus aureus*
  - Highest risk are infants, toddlers, elderly, pregnant women, chronic disease

"In one year, the average life expectancy in the United States dropped by 12 years!"

Eradication of Smallpox

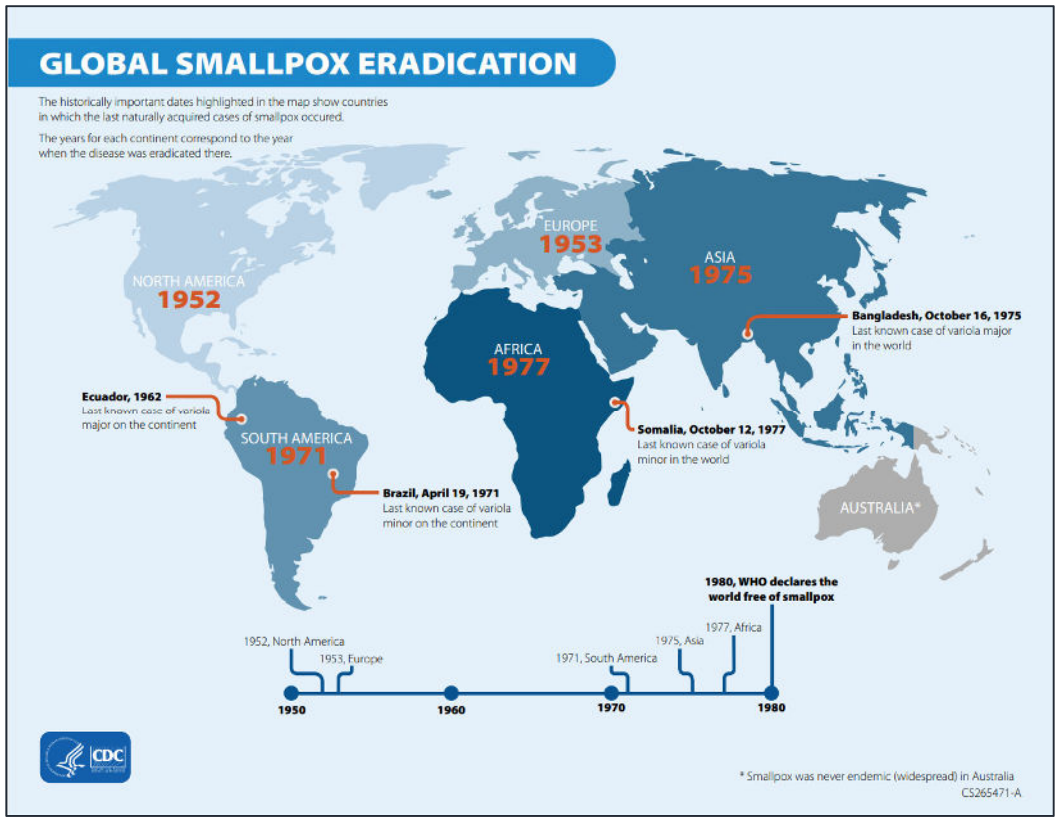
Borders do not contain infectious diseases!

Highlights from history

- **6th Century:** Increased trade with China and Korea brings smallpox to Japan.
- **7th Century:** Arab expansion spreads smallpox into northern Africa, Spain, and Portugal.
- **11th Century:** Crusades further spread smallpox in Europe.
- **15th Century:** Portugal occupies part of western Africa, bringing smallpox.
- **16th Century:** European settlers and the African slave trade import smallpox into the Caribbean and Central and South America.
- **17th Century:** European settlers bring smallpox to North America.
- **18th Century:** Explorers from Great Britain bring smallpox to Australia.

https://www.cdc.gov/smallpox/about/history.html

Eradication of Smallpox Infections

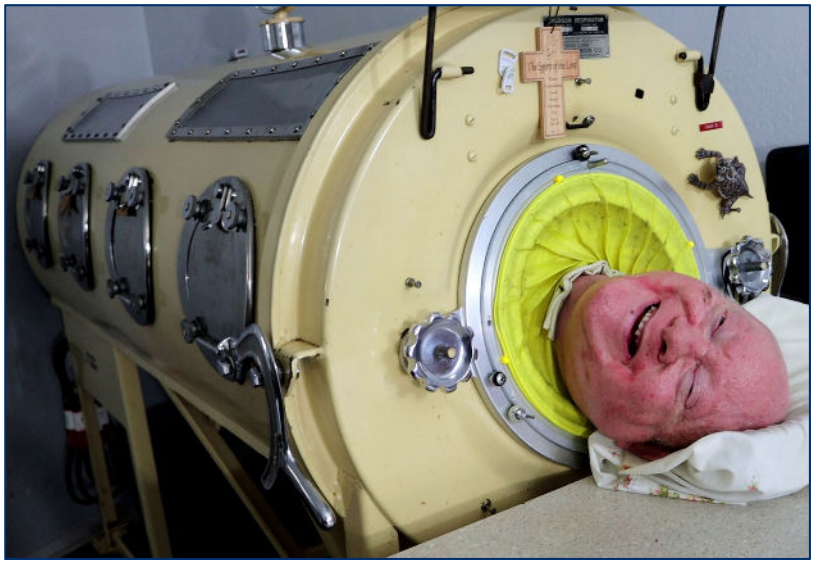


Three-year-old Rahima Banu with her mother in Bangladesh. Rahima was the last known person to have had naturally acquired smallpox in the world.

She was isolated at home with house guards posted 24 hours a day until she was no longer infectious. A house-to-house vaccination campaign within a 1.5-mile radius of her home began immediately.

https://www.cdc.gov/smallpox/about/history.html

Poliomyelitis

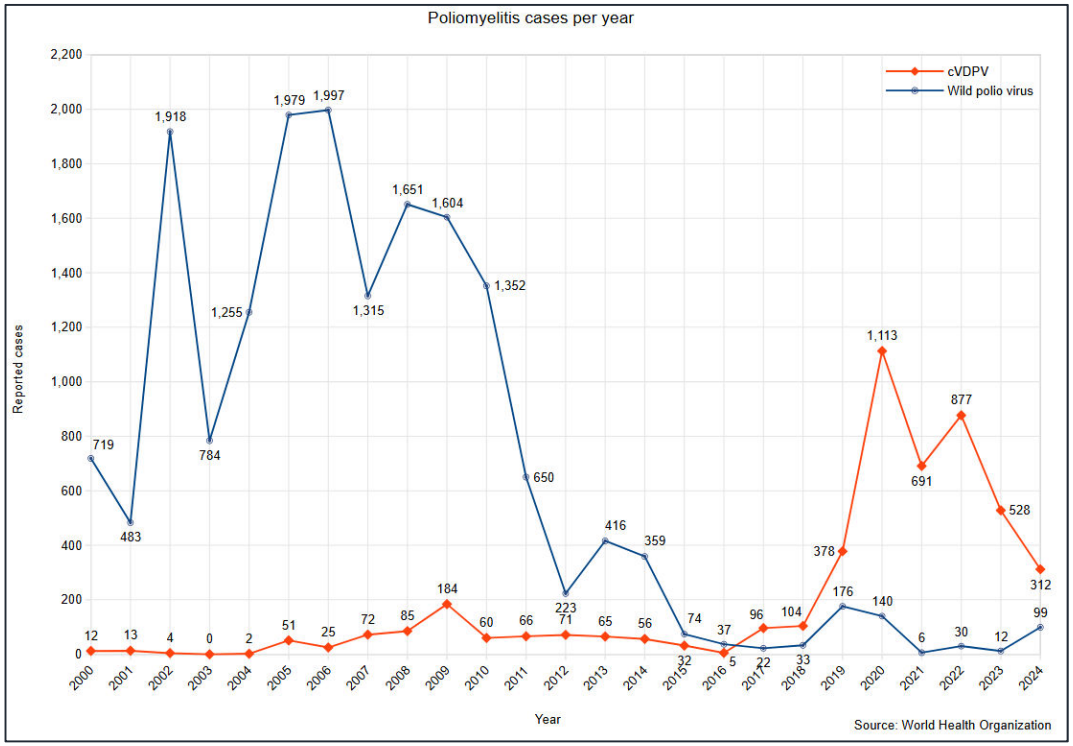


"The Man in the Iron Lung", passed away March 11, 2024. After surviving polio as a child, he lived over 70 years inside of an iron lung.

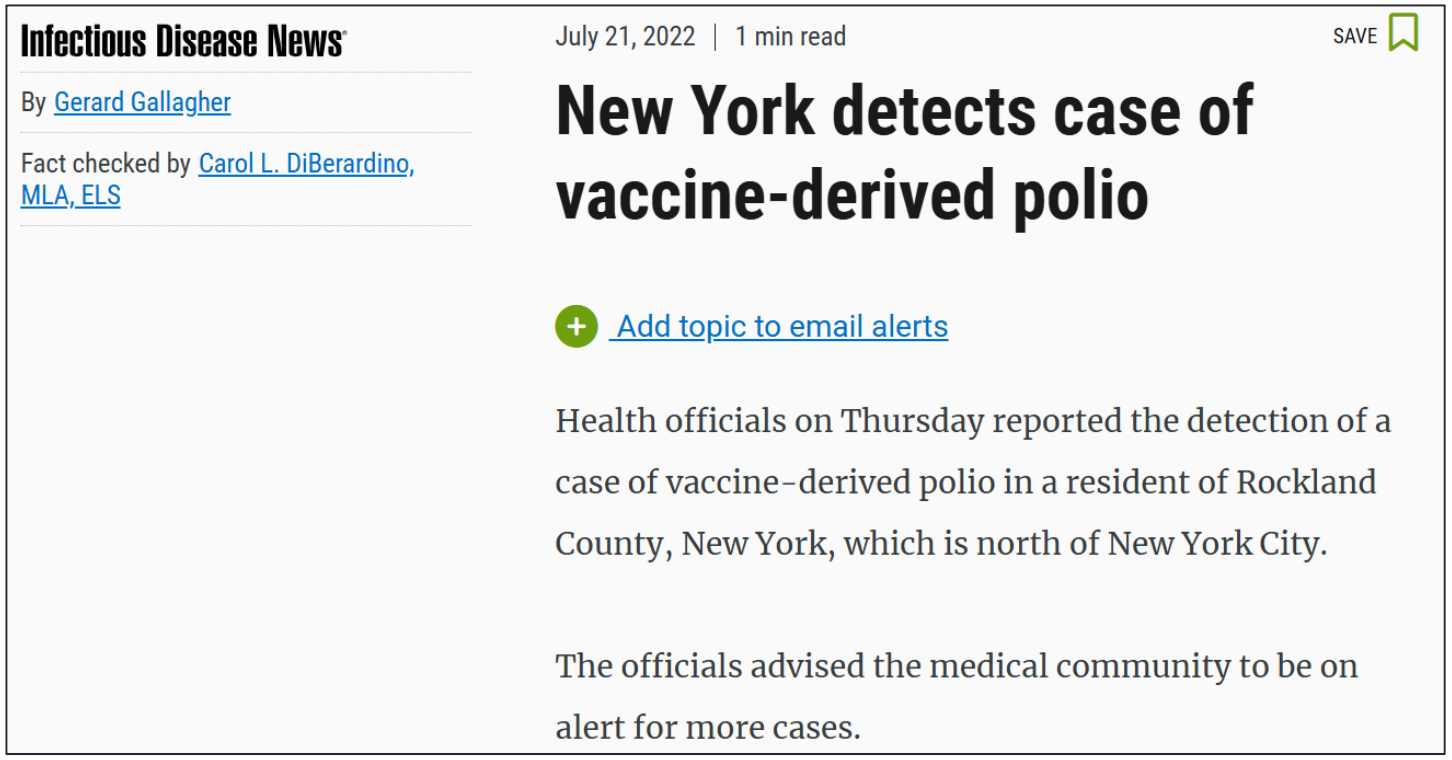
Progress towards Eradication of Polio

As long as wild poliovirus remains in Afghanistan and Pakistan, all countries are at risk of wild poliovirus being imported.

In some other countries, poliovirus variants (also known as vaccine-derived poliovirus) present an additional challenge. Variant poliovirus outbreaks emerge when not enough children are vaccinated against polio.



New York Case of Vaccine-derived Polio



Infectious Disease News

By Gerard Gallagher

Fact checked by Carol L. DiBerardino, MLA, ELS

July 21, 2022 | 1 min read

SAVE

New York detects case of vaccine-derived polio

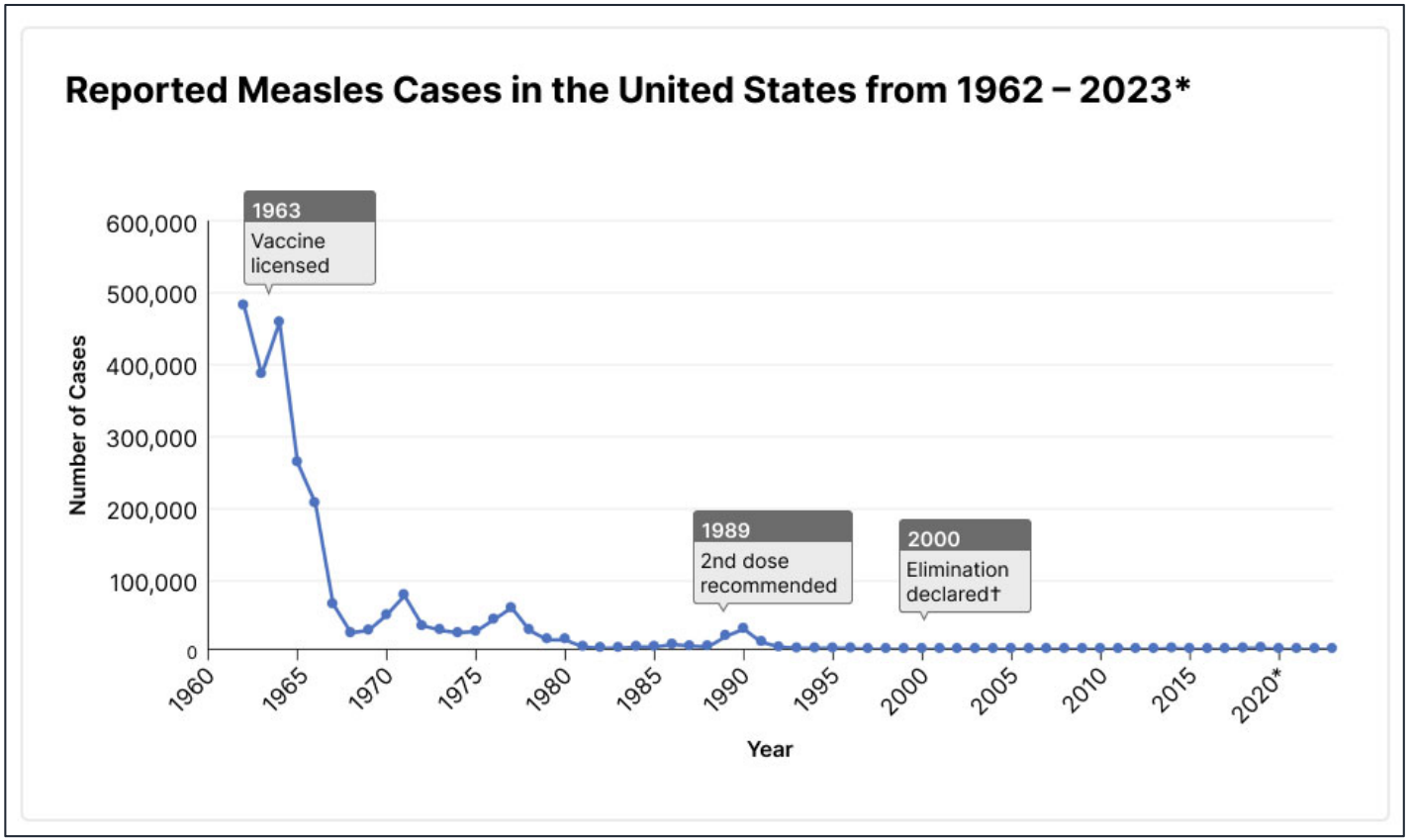
Add topic to email alerts

Health officials on Thursday reported the detection of a case of vaccine-derived polio in a resident of Rockland County, New York, which is north of New York City.

The officials advised the medical community to be on alert for more cases.

https://www.healio.com/news/infectious-disease/20220721/new-york-detects-case-of-vaccinederived-polio?gad_source=5&gad_campaignid=20379183835&gclid=EIaIQobChMI9r2V052ujQMVHy3UAR1pDCpGEAAYAiAAEgLgVvD_BwE

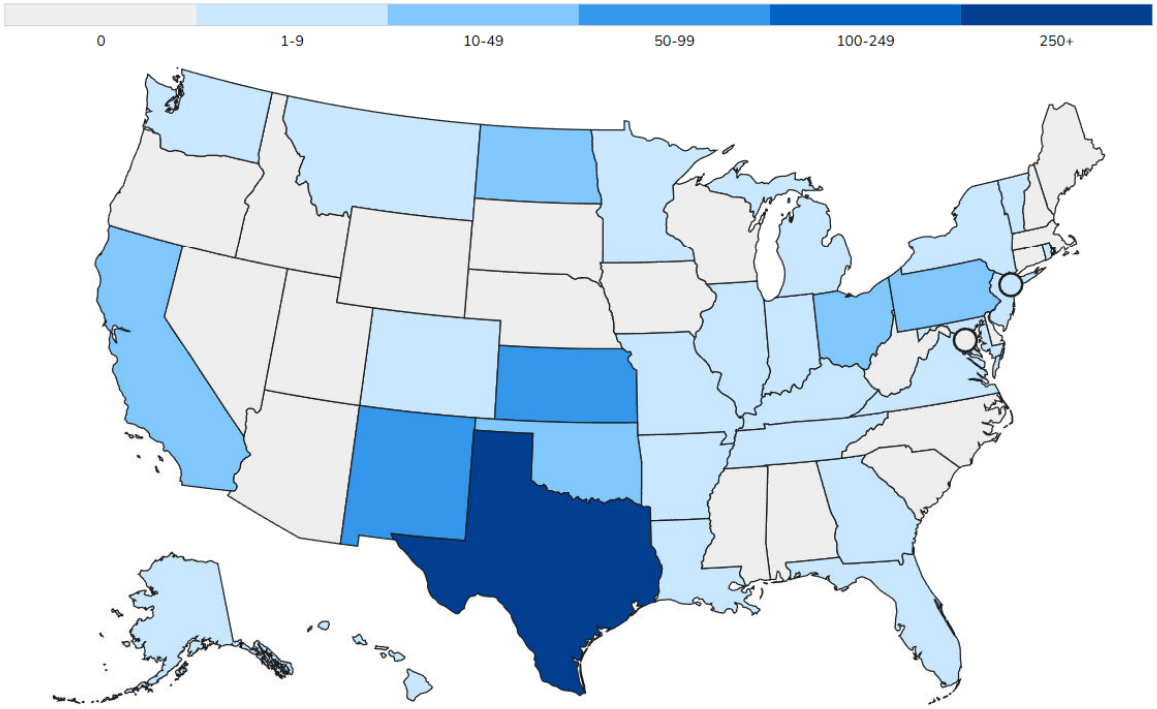
Measles – We nearly had Herd Immunity



Map of measles cases in 2024 & 2025

as of May 15, 2025

2025 2024



Measles in the US – 2025 (so far)

U.S. Cases in 2025

Total cases

1024

Age
Under 5 years: **303 (30%)**
5-19 years: **388 (38%)**
20+ years: **325 (32%)**
Age unknown: **8 (1%)**

Vaccination Status
Unvaccinated or Unknown: **96%**
One MMR dose: **1%**
Two MMR doses: **2%**

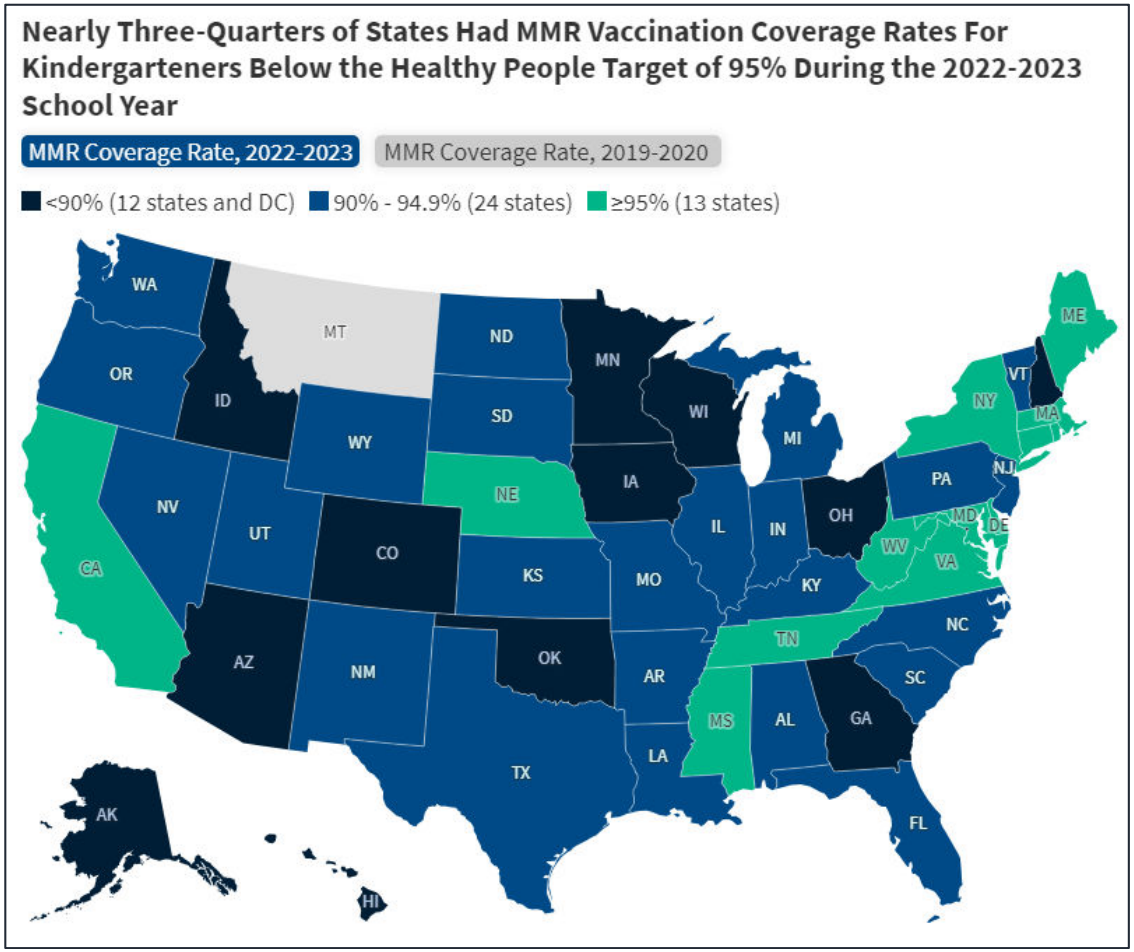
U.S. Hospitalizations in 2025

13%

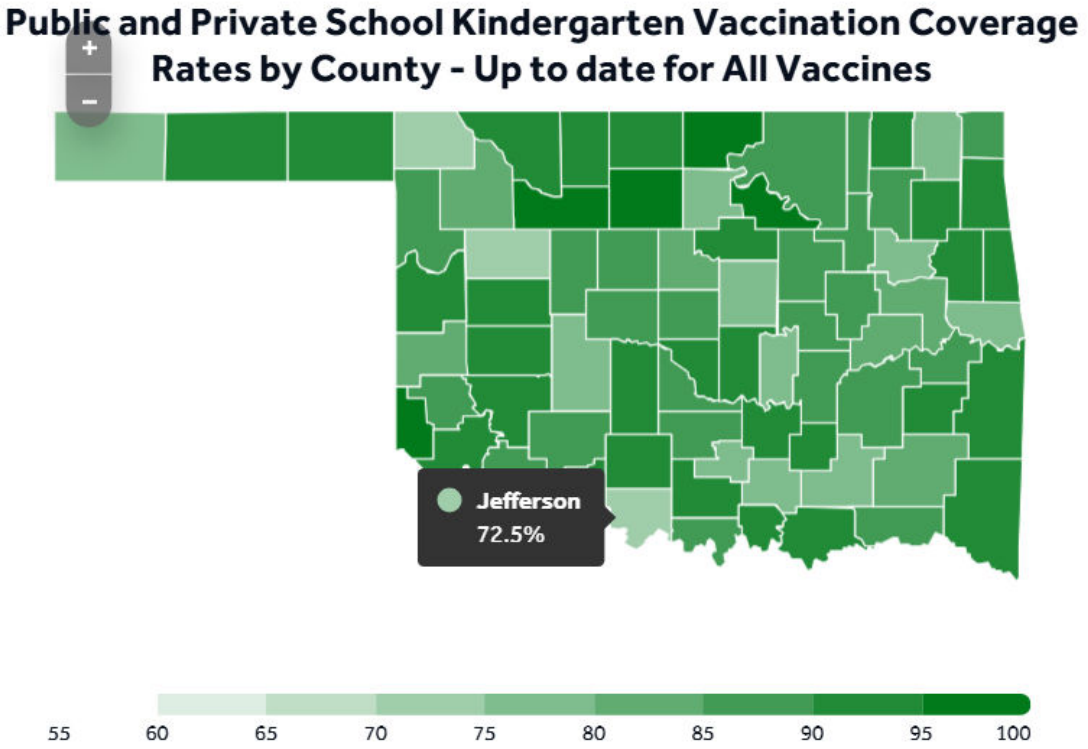
13% of cases hospitalized (128 of 1024).

Percent of Age Group Hospitalized
Under 5 years: **23% (69 of 303)**
5-19 years: **9% (33 of 388)**
20+ years: **8% (25 of 325)**
Age unknown: **13% (1 of 8)**

3 deaths reported in 2025

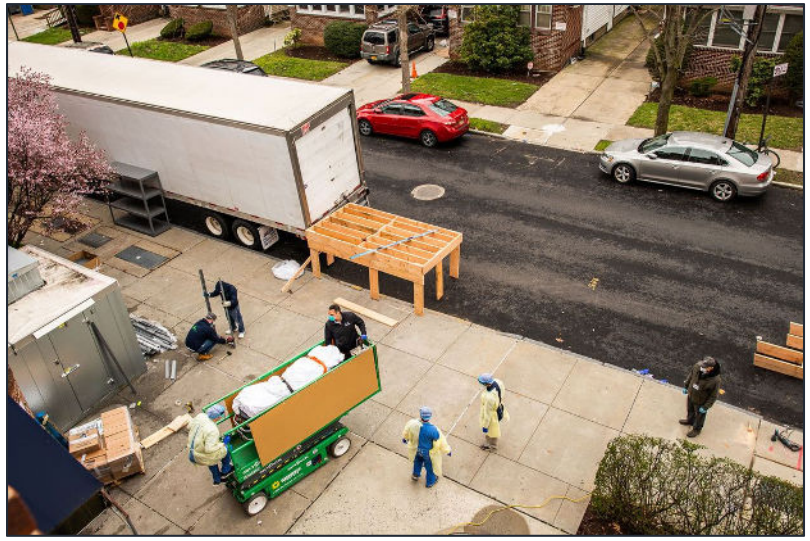

Nearly Three-Quarters of States Had MMR Vaccination Coverage Rates For Kindergarteners Below the Healthy People Target of 95% During the 2022-2023 School Year
MMR Coverage Rate, 2022-2023
MMR Coverage Rate, 2019-2020
<90% (12 states and DC)
90% - 94.9% (24 states)
≥95% (13 states)
WA
OR
CA
ID
NV
MT
WY
UT
AZ
CO
NM
ND
SD
NE
KS
OK
TX
MN
IA
MO
AR
LA
WI
IL
MS
MI
IN
KY
TN
AL
OH
WV
GA
FL
SC
NC
VA
PA
NY
MD
DE
NJ
VT
ME
MA
AK
HI

Measles Vaccination rates by County



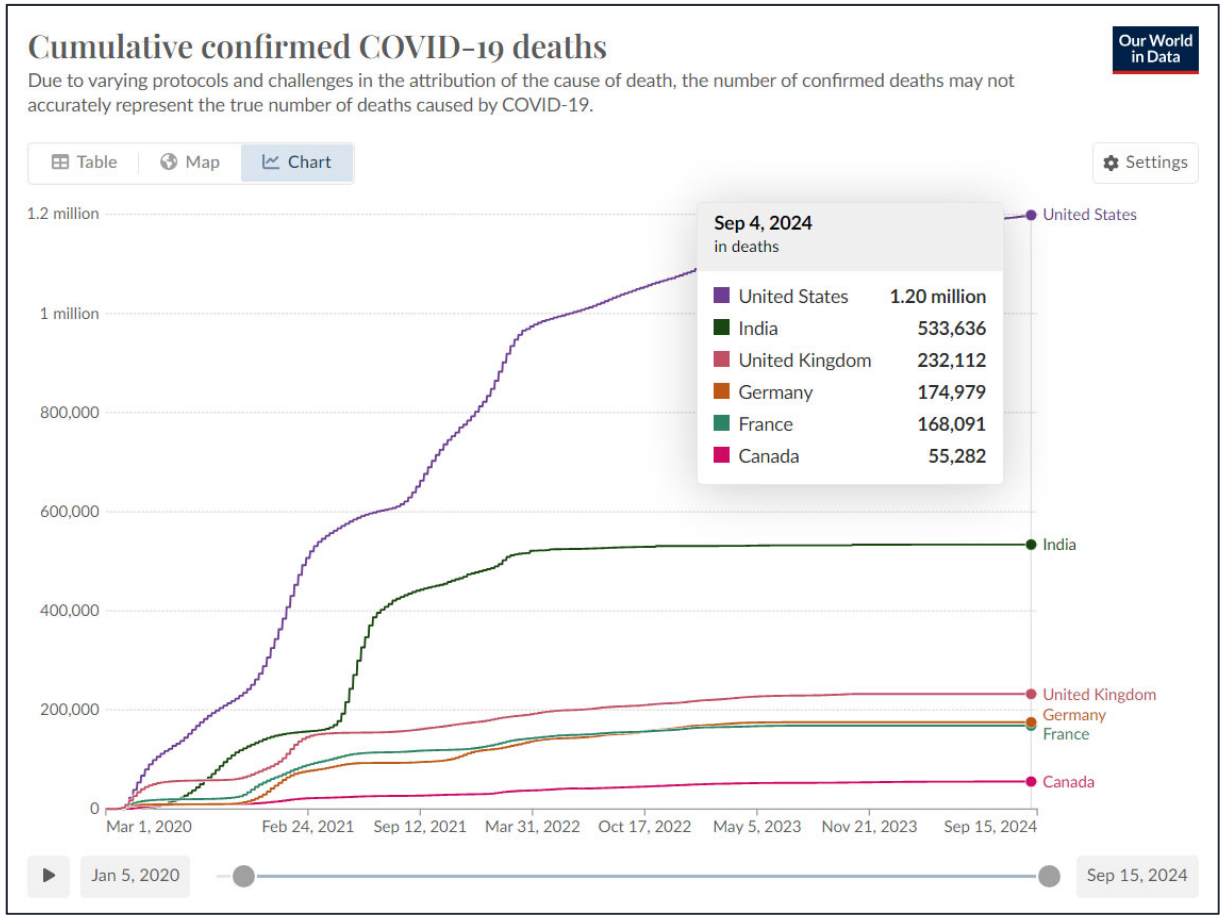
https://www.koco.com/article/measles-oklahoma-map-vaccination-rates/64153400

COVID-19 Myth – this is just a bad flu….



In Oklahoma, every ICU bed in the state was filled!

When is the last time you heard of hospitals using refrigerated trucks for bodies, or ICUs overflowing with limited numbers of ventilators….. from the flu?



United States:

- **6,909,932 hospitalizations**
- **1,200,000 Deaths**

Oklahoma:

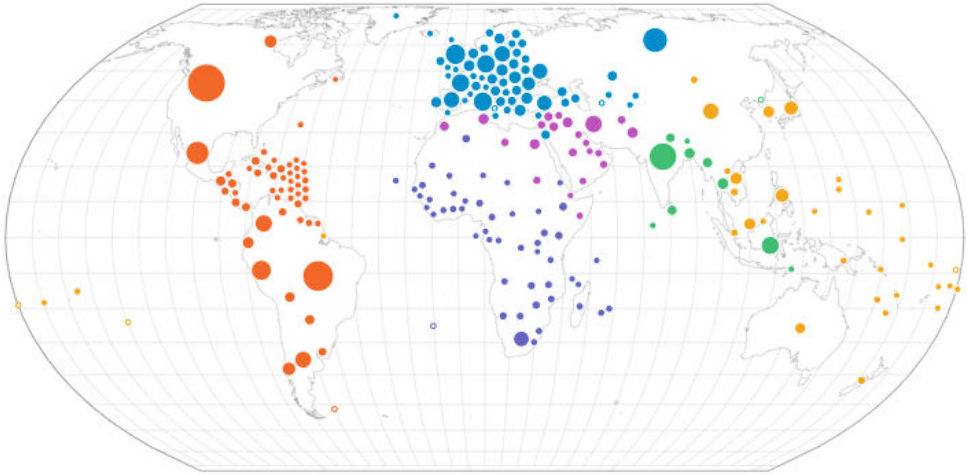
- **116,999 hospitalizations**
- **20,354 deaths**

US and OK data as of March 30, 2024, from the CDC.
https://covid.cdc.gov/covid-data-tracker

COVID Worldwide

Number of COVID-19 deaths reported to WHO (cumulative total)

World



7,042,222

Reported COVID-19 deaths

24 March 2024

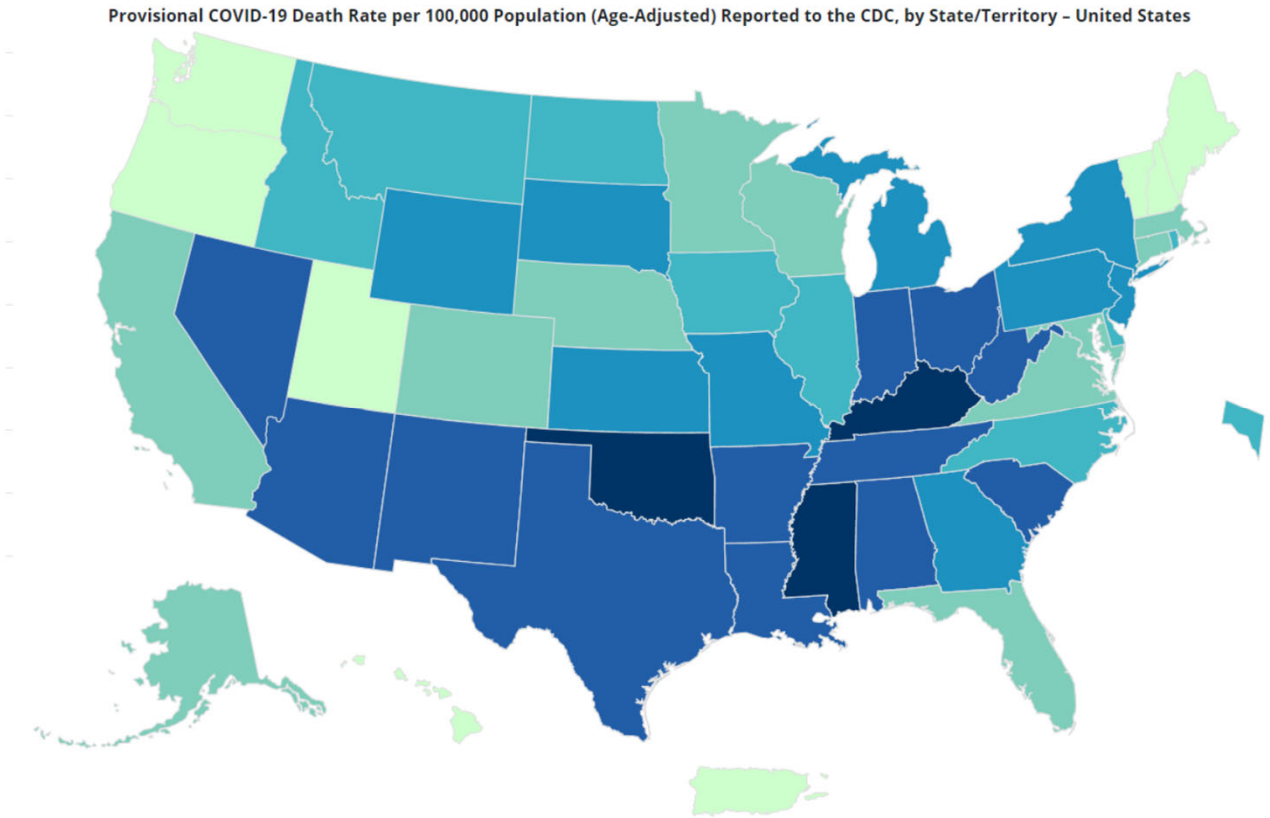
Number of COVID-19 deaths reported to WHO (cumulative total)

World

Country	Deaths
United States of America	1.2m
Brazil	702.1k
India	533.5k
Show 228 more	
Saint Helena	0

https://data.who.int/dashboards/covid19/deaths?n=c

COVID Deaths by State



Oklahoma had the second highest death rate in the nation due to COVID-19!

Deaths per 100,000 population:

- **Mississippi – 447**
- **Oklahoma – 444.1**
- **West Virginia – 394**

https://covid.cdc.gov/covid-data-tracker/#maps_deaths-rate-total

Operation Warp Speed was a United States government initiative, running from May 15, 2020, to February 24, 2021, focused on accelerating the development, manufacturing, and distribution of COVID-19 vaccines, therapeutics, and diagnostics. It was a public-private partnership designed to speed up the process of getting vaccines to the American public.

Global COVID vaccination saved 2.4 million lives in first 8 months, study estimates

Mary Van Beusekom, MS, *October 31, 2023*

Topics: COVID-19

SHARE

The COVID-19 vaccination campaign in 141 countries averted 2.4 million excess deaths by August 2021 and would have saved another 670,000 more lives had vaccines been distributed equitably, estimates a **working paper** from University of Southern California (USC) and Brown University researchers.

The National Bureau of Economic Research circulated the non–peer-reviewed working paper for discussion and comment this week. The researchers estimated the real-world effectiveness of the global COVID-19 vaccine rollout on all-cause death rates, including both the direct and indirect effects of the pandemic.

"Within eight months, over 2 billion people were vaccinated globally, making it the largest public health campaign in history," the study authors wrote.

"To the best of our knowledge, this is the first study that estimates the effect of COVID-19 vaccines on the global all-cause mortality

USAID / Flickr cc

https://www.cidrap.umn.edu/covid-19/global-covid-vaccination-saved-24-million-lives-first-8-months-study-estimates

Journal of Paediatrics and Child Health

RACP Specialists. Together

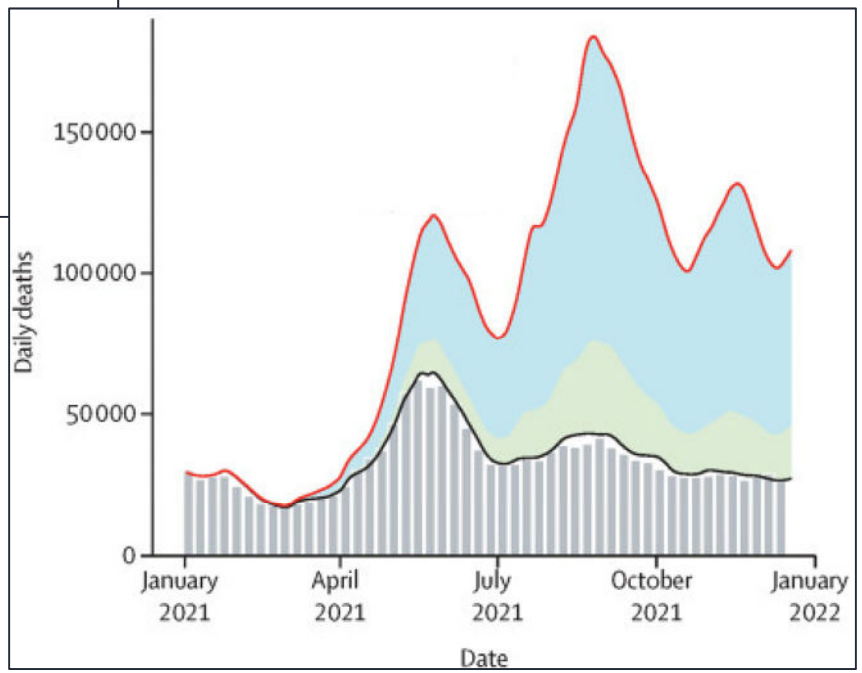
Heads Up | Free Access

Lives saved by COVID-19 vaccines

First published: 20 September 2022 | https://doi.org/10.1111/jpc.16213 | Citations: 1

edited by Craig Mellis (craig.mellis@sydney.edu.au)

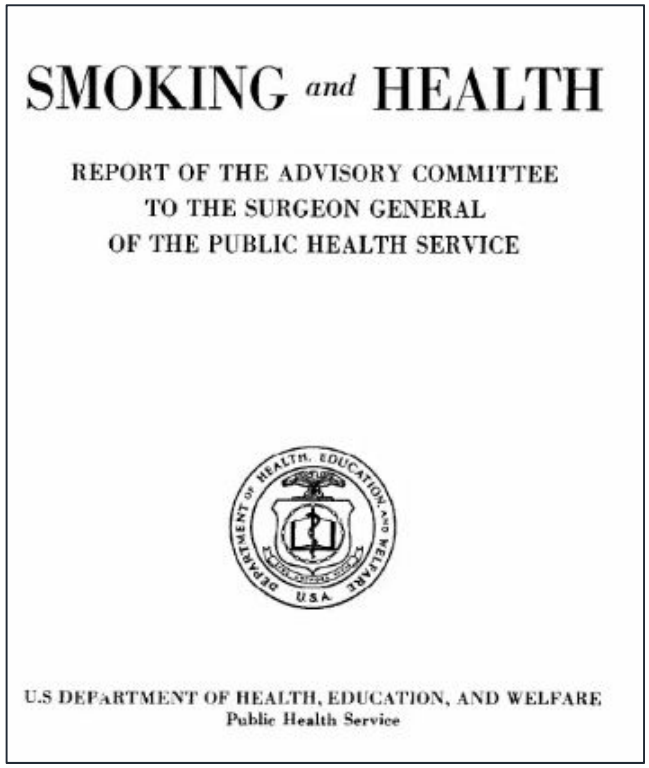
Based on reported COVID-19 deaths, vaccinations prevented an estimated 14.4 million deaths from COVID-19 in a year. However, if excess deaths were used, this estimate rose to 19.8 million, equating to a global reduction of 63% in total deaths (19.8 million of 31.4 million) during the first year of COVID-19 vaccination.



Median number of daily COVID-19 deaths based on excess mortality estimates (grey vertical bars) in the first year of vaccination and modelled numbers of deaths averted. (), Excess mortality data; (), model fit to excess mortality; (), model fit without vaccines; (), deaths averted by vaccines (direct); (), deaths averted by vaccines (indirect).

The COVID-19 pandemic was a stark reminder of how swiftly viruses can travel across continents, affecting industries, economies, and societies worldwide.

Smoking and Health



SMOKING *and* HEALTH

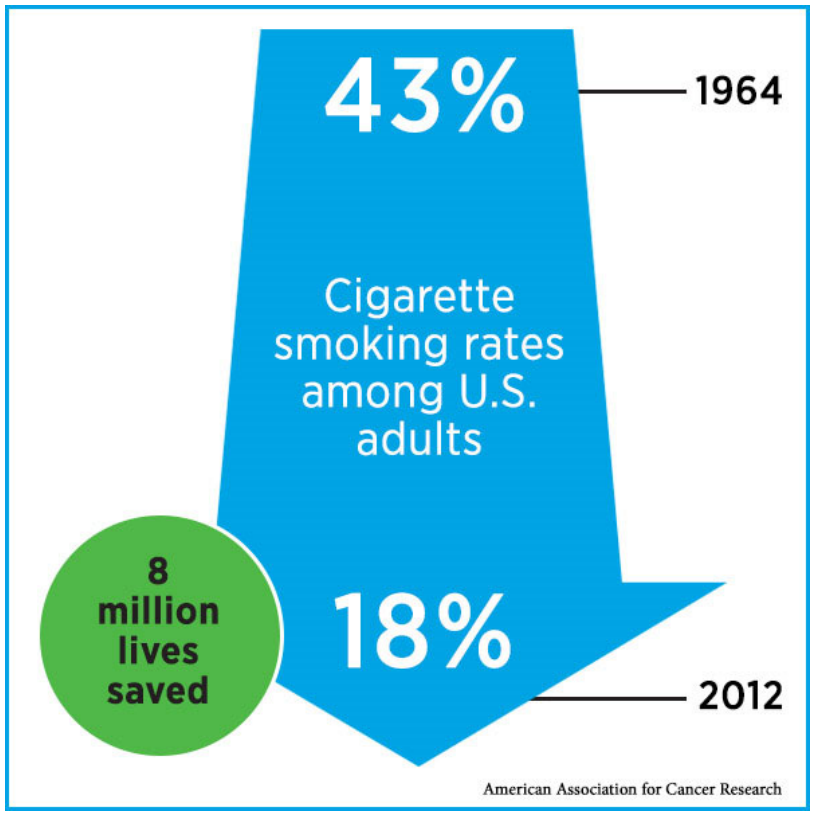
REPORT OF THE ADVISORY COMMITTEE
TO THE SURGEON GENERAL
OF THE PUBLIC HEALTH SERVICE

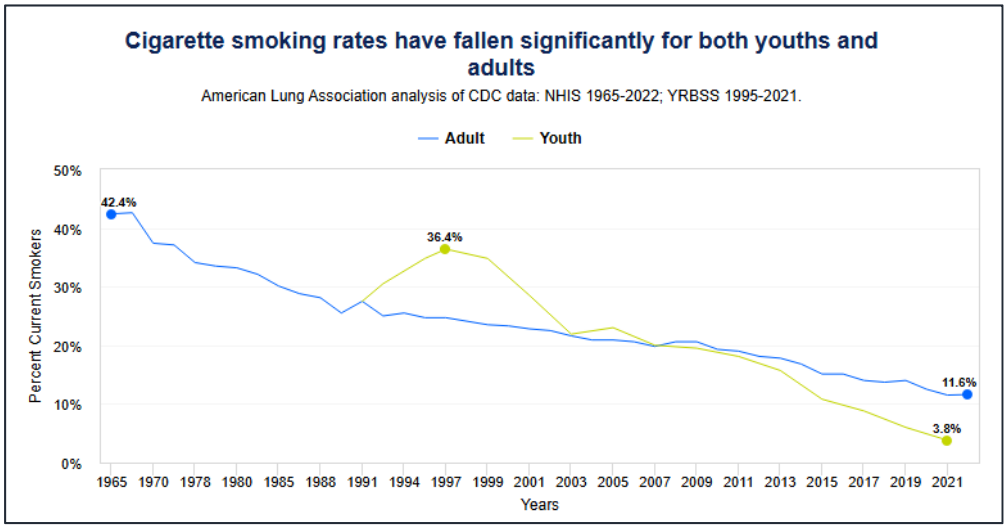
U.S DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Public Health Service

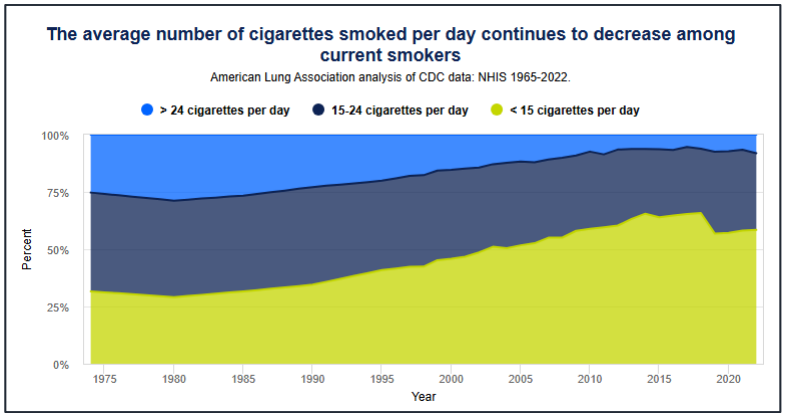
1964, Surgeon General Luther Terry
Based on more than 7,000 studies!

https://www.aacr.org/blog/2017/11/08/advances-in-tobacco-control/?gad_source=5&gad_campaignid=21152407190&gclid=EAIaIQobChMI6brnqq-ujQMVdlV_AB0-IS5aEAAYAiAAEgIqAvD_BwE

Tobacco Control







https://www.lung.org/research/trends-in-lung-disease/tobacco-trends-brief/overall-smoking-trends

The Evolving Landscape of Public Health

Substantial Shifts in Funding and Support

- Many training programs in public health have depended on funding to support research and student training
  - HRSA, NIH, CDC, USAID, EPA, NSF, USDA
  - Termination of many grants that addressed diversity, COVID, and other topics
  - Students reconsidering careers in public health
  - Funding not available to support doctoral training programs (schools reducing recruitment)

- Reduced federal infrastructure for disease surveillance, public health interventions, disease prevention

- Elimination of global health programs.


GENERAL MEDICINE

US Ends Funding for Thousands of Global Health Programs

March 3, 2025

KEY POINT

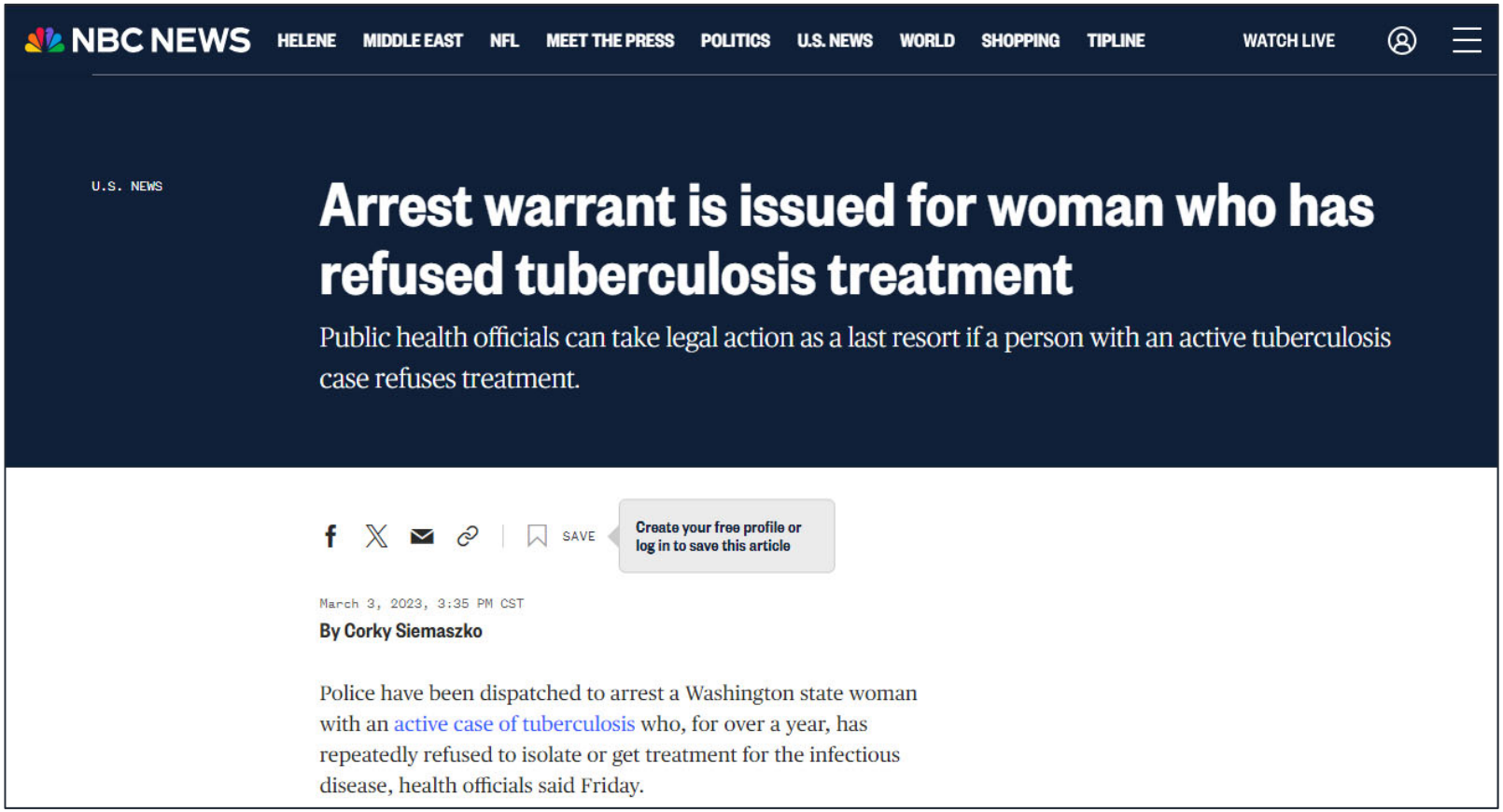
The emails informed health groups, refugee camps, tuberculosis clinics, and polio vaccination projects that their funding from the USAID had been terminated.

- Since 2004, the number of people on ART supported by the President's Emergency Plan for AIDS Relief (PEPFAR) has increased from 66,550 to more than 20 million.
- PEPFAR infrastructure in more than a dozen countries has also played a significant role in the global responses to COVID-19, Ebola and Zika.

Federal Law and Quarantine/Isolation

- Isolation and quarantine help protect the public by preventing exposure to people who have or may have a contagious disease.
  - Isolation separates sick people with a quarantinable communicable disease from people who are not sick.
  - Quarantine separates and restricts the movement of people who were exposed to a contagious disease to see if they become sick.

- In addition to serving as health functions, isolation and quarantine also are "police power" functions, derived from the right of the state to take action affecting individuals for the benefit of society.


NBC NEWS
HELENE
MIDDLE EAST
NFL
MEET THE PRESS
POLITICS
U.S. NEWS
WORLD
SHOPPING
TIPLINE
WATCH LIVE
U.S. NEWS
Arrest warrant is issued for woman who has refused tuberculosis treatment
Public health officials can take legal action as a last resort if a person with an active tuberculosis case refuses treatment.
SAVE
Create your free profile or log in to save this article
March 3, 2023, 3:35 PM CST
By Corky Siemaszko
Police have been dispatched to arrest a Washington state woman with an active case of tuberculosis who, for over a year, has repeatedly refused to isolate or get treatment for the infectious disease, health officials said Friday.

Doctrine of state “police power”

- Was adopted in early colonial America from firmly established English common law principles mandating the limitation of private rights when needed for the preservation of the common good.

Public health agencies are responsible for protecting and promoting the health of the public within a specific jurisdiction. State and territorial health officials are granted legal authorities to prevent and mitigate the spread of infectious disease and other health threats.

The public good versus individual rights……

OVERVIEW

The COVID-19 pandemic has brought the tension between individual rights and the public good to the forefront of the national discourse. Many pandemic response measures—such as stay-at-home orders, mandatory business closures or restrictions, and mask mandates—have evoked vocal opposition by individuals who feel these measures infringe on their freedom.

Backlash against public health…..

Threats to emergency powers:

- Recently, some states have moved to limit emergency powers and public health authority in response to perceived government overreach and outrage over handling of the pandemic. Such laws seek to prohibit mask wearing, ban the use of quarantine, block employer vaccine mandates, give legislatures unilateral power to stop public health actions, and more. These threats to emergency powers may compromise public health's ability to respond effectively to COVID-19, health equity and future public health threats.


COLUMBIA
MAILMAN SCHOOL OF PUBLIC HEALTH
Apply
Contact
Giving
About Us
Academics
Research
People
Become a Student
Info For
Fake News
SOCIAL MEDIA
Vaccine Misinformation Outpaces Efforts to Counter It

Vaccine mis-information and conspiracies

Morbidity and Mortality Weekly Report

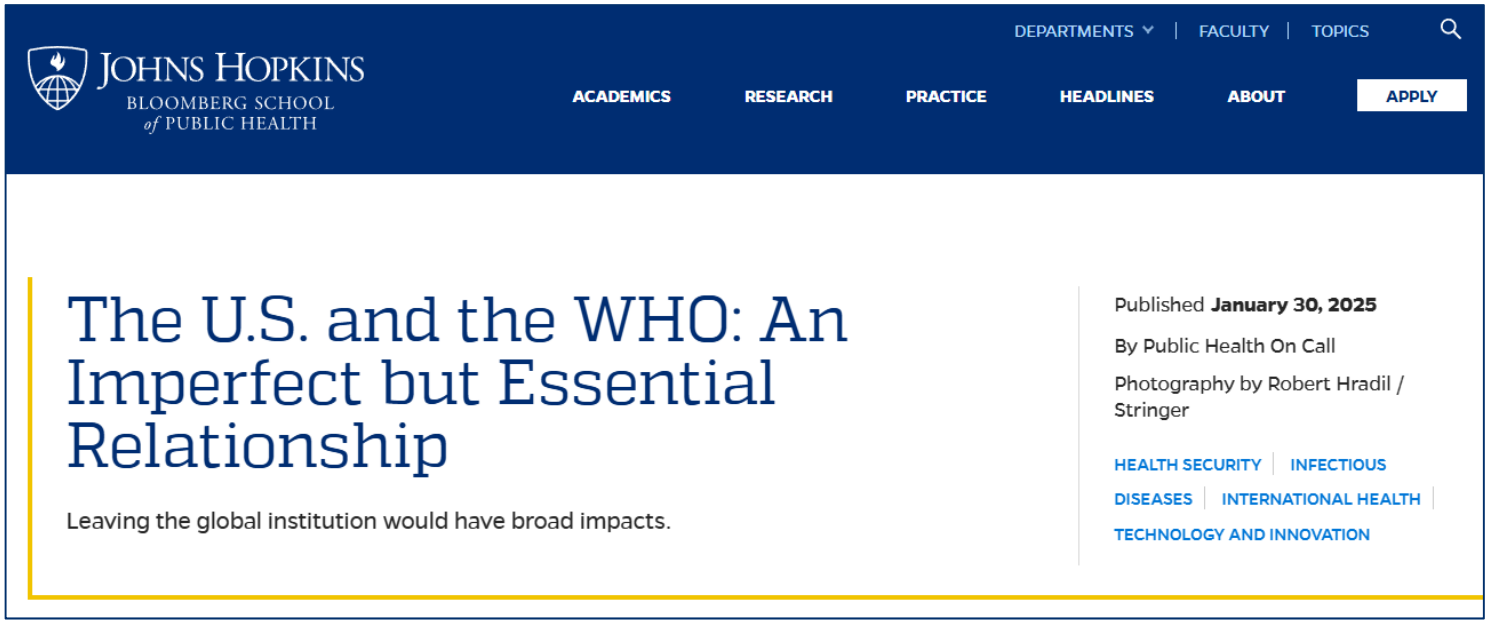
Decline in Vaccination Coverage by Age 24 Months and Vaccination Inequities Among Children Born in 2020 and 2021 — National Immunization Survey-Child, United States, 2021–2023

Holly A. Hill, MD, PhD[1]; David Yankey, PhD[1]; Laurie D. Elam-Evans, PhD[1]; Yi Mu, PhD[1]; Michael Chen, PhD[1]; Georgina Peacock, MD[1]; James A. Singleton, PhD[1]

Implications for Public Health Practice

Recent decreases in coverage with most of the ACIP-recommended childhood vaccines could lead to a resurgence of vaccine-preventable diseases such as measles, varicella, and rotavirus and their associated morbidity and mortality.

International cooperation, rapid response systems, and equitable access to medical resources is essential to mitigate the impact of global health crises.



https://publichealth.jhu.edu/2025/the-consequences-of-the-us-withdrawal-from-the-who

Do we really want a system in which whether or not we like you and you like us determines our ability to collaborate on something of global importance like a potential pandemic?

How can we improve?

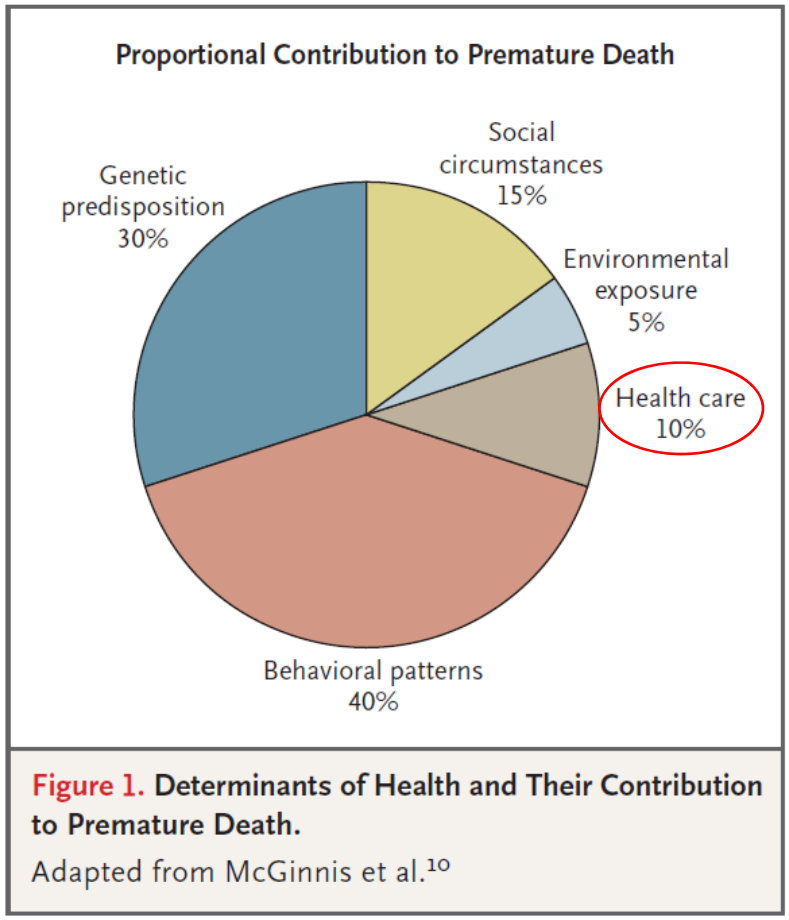


Figure 1. Determinants of Health and Their Contribution to Premature Death.

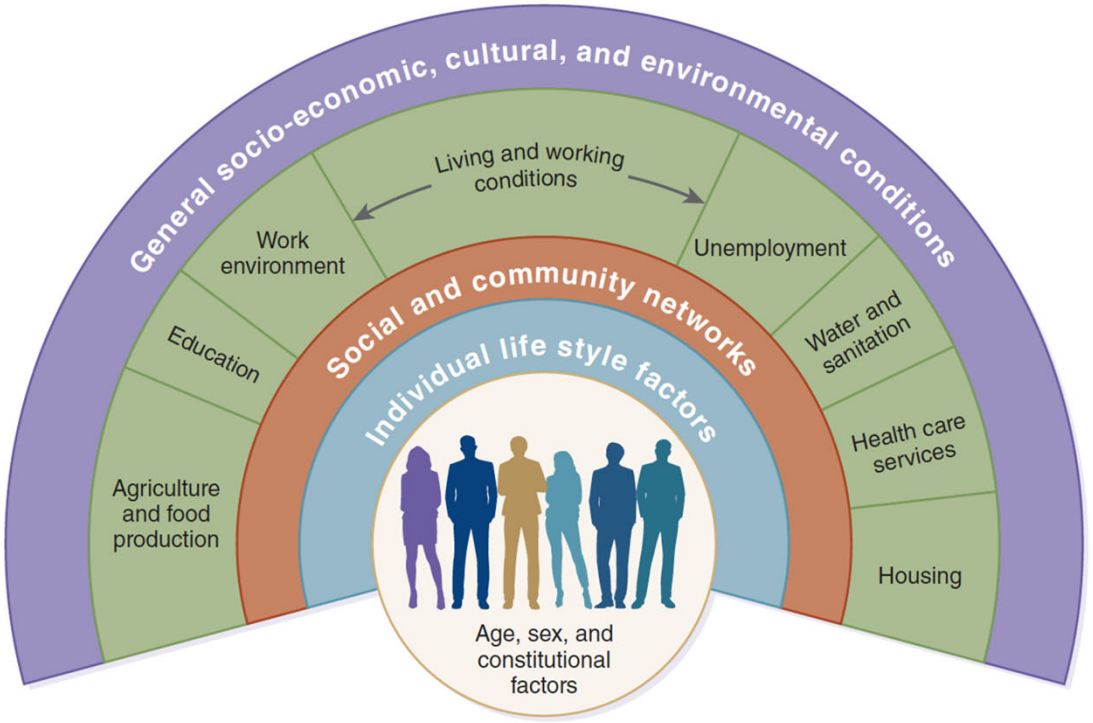
Adapted from McGinnis et al.[10]

"The United States spends more on health care than any other nation in the world, yet it ranks poorly on nearly every measure of health status. How can this be? What explains this apparent paradox?....."

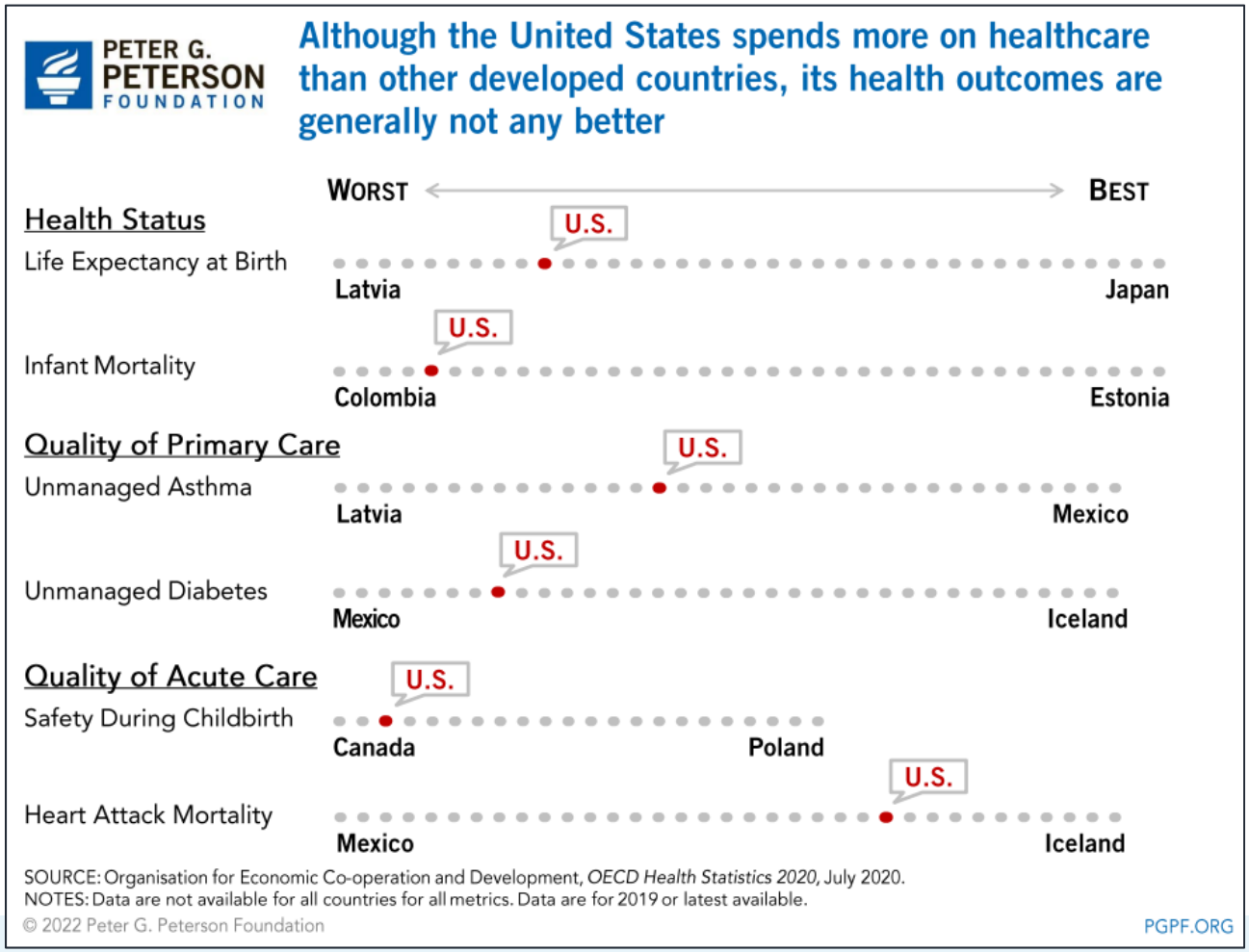
Schroeder SA. We can do better – Improving the health of the American people. *N Engl J Med*. 2007:1221-1228.

Public Health as a System

The **Social Ecological Model** of the Determinants of Health



Within the community:
https://www.preventioninstitute.org/sites/default/files/uploads/THRIVE%20overview%20and%20background.pdf


PETER G. PETERSON FOUNDATION
Although the United States spends more on healthcare than other developed countries, its health outcomes are generally not any better
WORST
BEST
Health Status
Life Expectancy at Birth
U.S.
Latvia
Japan
Infant Mortality
U.S.
Colombia
Estonia
Quality of Primary Care
Unmanaged Asthma
U.S.
Latvia
Mexico
Unmanaged Diabetes
U.S.
Mexico
Iceland
Quality of Acute Care
Safety During Childbirth
U.S.
Canada
Poland
Heart Attack Mortality
U.S.
Mexico
Iceland
SOURCE: Organisation for Economic Co-operation and Development, OECD Health Statistics 2020, July 2020.
NOTES: Data are not available for all countries for all metrics. Data are for 2019 or latest available.
© 2022 Peter G. Peterson Foundation
PGPF.ORG

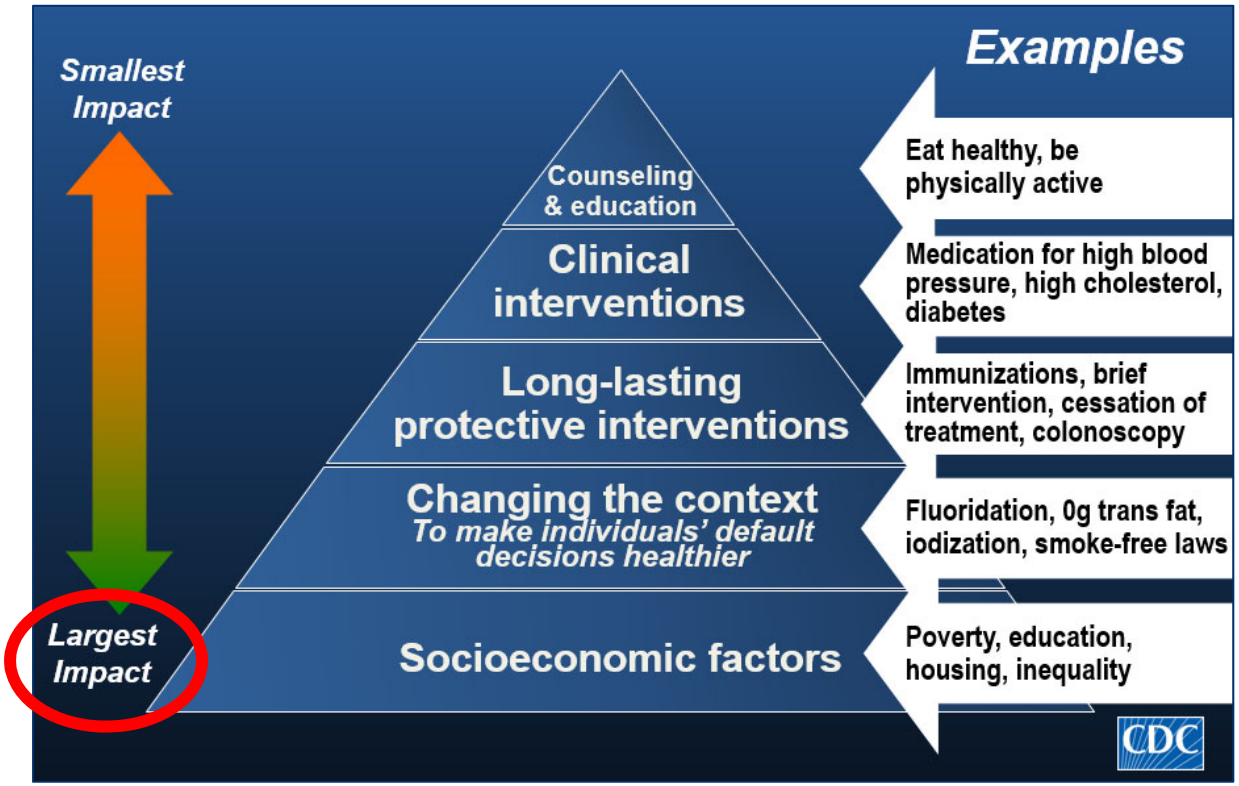
The U.S. Has the Lowest Life Expectancy Among Large, Wealthy Countries While Far Outspending Them on Health Care

Life expectancy (2021) and per capita healthcare spending (2021 or nearest year)

Country	Life expectancy	Health spending, per capita
United States	76.1	$12,318
United Kingdom	80.8	$5,387
Germany	80.9	$7,383
Austria	81.3	$6,693
Netherlands	81.5	$6,190
Belgium	81.9	$5,274
Comparable Country Average	82.4	$6,003
France	82.5	$5,468
Sweden	83.2	$6,262
Australia	83.4	$5,627
Switzerland	84.0	$7,179
Japan	84.5	$4,666

Peterson-KFF Health System Tracker

The Health Impact Pyramid



Equity in Healthcare -

- Consider two patients with high blood pressure at an office visit. Do they both have the same (aka equal) treatment plan? No, but they may have the same treatment goal!

  To achieve blood pressure control, the treatment is matched to the clinical scenario. One patient may be prescribed diet and exercise, and one may get maximal three drug therapy. The goal is a safe and healthy outcome for each individual (health equity).

  The conflation of health equity with DEI is ill informed, will harm patients and communities, threaten the broader goals of quality and safety, and pose ethical issues for the medical profession.

Published in final edited form as:
Am J Med Sci. 2014 August ; 348(2): 135–138. doi:10.1097/MAJ.0000000000000308.

Racial Differences in Hypertension: Implications for High Blood Pressure Management

Daniel T. Lackland, DrPH
Department of Neurosciences Harborview Office Tower, Suite 501 Medical University of South Carolina Charleston SC 29425 Lackland@musc.edu

The Journal of Infectious Diseases
MAJOR ARTICLE
Infectious Diseases Society of America
HIV Medicine Association
OXFORD

Sex Differences in Risk Factors for Incident Sepsis Hospitalizations: A Prospective Cohort Study Using the UK Biobank

Gary K. K. Low,[1,2,a] Katie Harris,[3,a] Mark Woodward,[3,4] and Kelly J. Thompson[1,3,5]

[1]Nepean Blue Mountains Local Health District, Allied Health, Research and Strategic Partnerships Directorate, Kingswood, New South Wales, Australia; [2]Sydney Medical School, Faculty of Medicine and Health, University of Sydney, Camperdown, New South Wales, Australia; [3]The George Institute for Global Health, Faculty of Medicine, University of New South Wales, Sydney, New South Wales, Australia; [4]The George Institute for Global Health, School of Public Health, Imperial College London, London, United Kingdom; and [5]Sydney Nursing School, Faculty of Nursing, University of Sydney, Camperdown, New South Wales, Australia

Summarizing

Public Health is not Just a Profession – it's a promise

- To advocate for the vulnerable;
- To challenge the status quo;
- To forge solutions where others see obstacles!

Public Health is about People!

Challenges for Public Health

- Our graduating professionals will face misinformation, policy barriers, and health equity concerns that seem insurmountable……but remember, every breakthrough in history began with a group of thinkers, doers, and leaders who refused to accept “impossible” as an answer.

- We must be the voice in the room where decisions are made!

- I asked our students to be the leaders that ensure that health is not a privilege but a fundamental right.

Key Points of My Presentation

What I want you to take home…….

- Most of the improvements in health outcomes and life expectancy in the past century are due to public health initiatives (not medical care).
- Health equity issues are a key drivers of health outcomes at both the individual patient level and for population health.
- In a global economy, diseases transcend borders, moving as freely as goods, services, and people.
- There will be another pandemic!