

***Public Health 101: Understanding the Importance of Public Health**

**Mohammad Shahbazi, Interim Dean
School of Public Health
Jackson State University**

Presented to:

**The Mississippi Tobacco-Free Coalition (MTFC) Quarterly Training
Mississippi State Department of Health
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Learning Objectives

At the end of this session, you will be able to

- ❑ Define health and public health
- ❑ Describe the roles and responsibilities of public health
- ❑ Describe main difference between medicine and public health
- ❑ Describe the 3 core functions and 10 essential services of public health
- ❑ List three levels of government agencies responsible for public health
- ❑ Understand complex nature of public health work and need for inter- and intra- agencies collaborations

Key Questions We'll Discuss

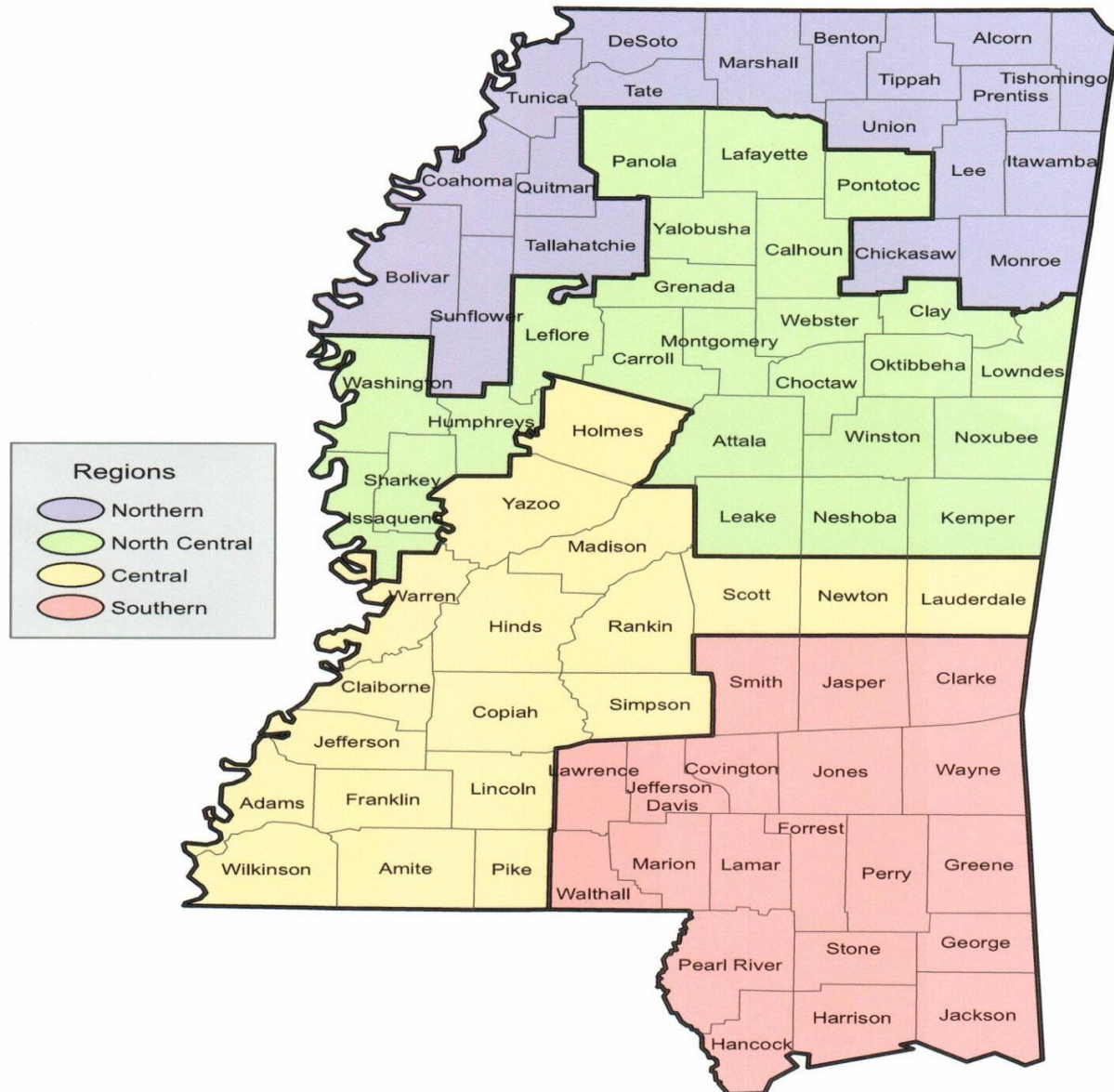
- ❑ What is health?
- ❑ What is public health? Why is it important?
- ❑ What is a medical doctor and a public health person?
- ❑ What are the 3 core functions of public health?
- ❑ What are 10 essential services of public health , and how do they impact the public's health?
- ❑ How is public health structured in the United States to deliver these core functions and services?
- ❑ Who or what organizations are responsible for keeping us/population healthy?
- ❑ What other groups are important?

Talked about the first school of public health in Mississippi, various degrees it offers and how it can work with coalition such as The Mississippi Tobacco-Free Coalition to address health related matters.

THE FIRST School of Public Health in Mississippi



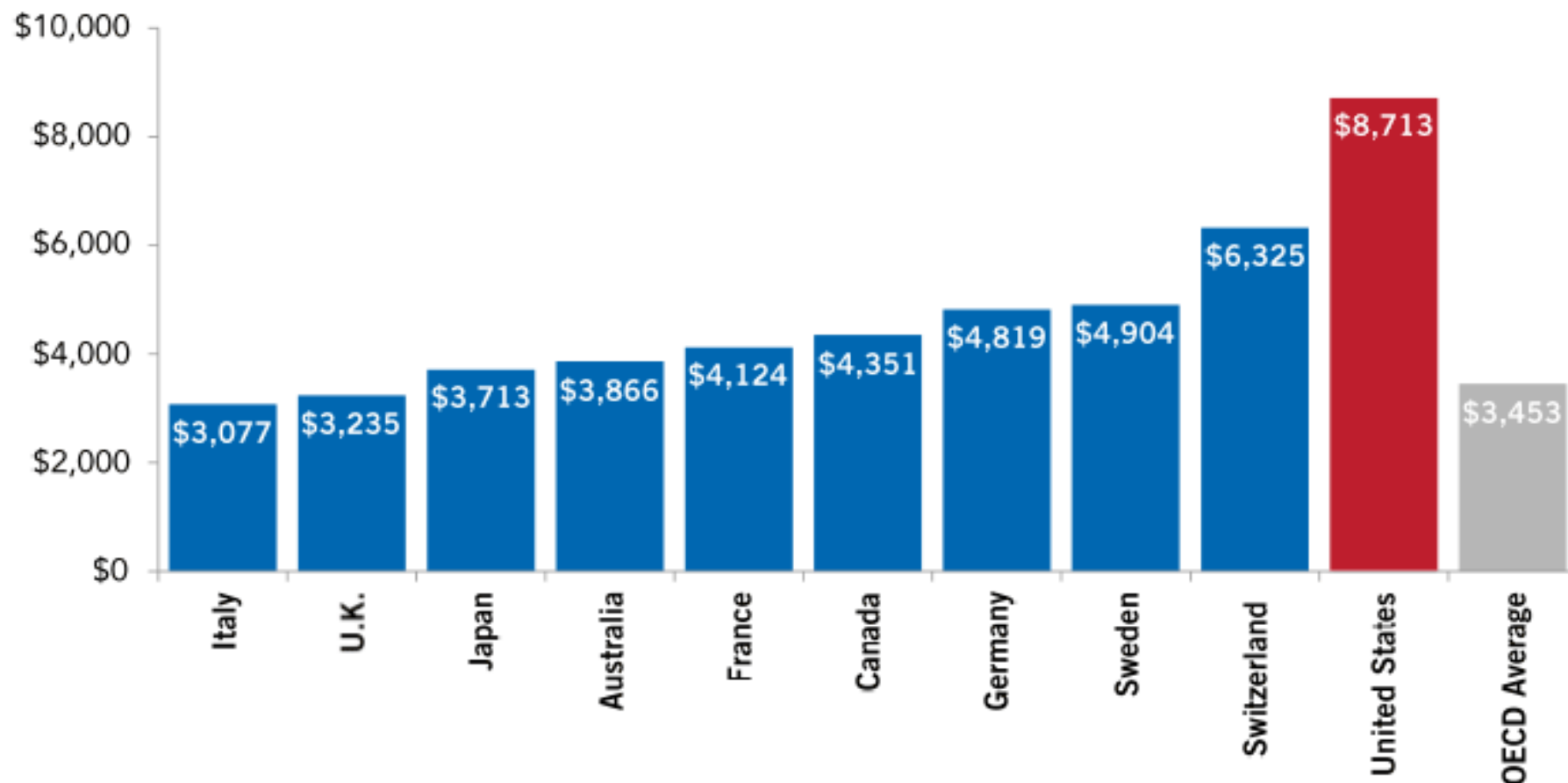
Mississippi Tobacco- Free Coalitions by Region



Talked about health status in Mississippi and discussed the overall health situation in the USA by showing the following slides. Concluding that there has been too much emphasis on diagnosis and treatment in our healthcare systems. There is a need to shift the focus from this treatment approach to more preventive approach and that the School of Public Health at Jackson State University is interested in leading not only this essential effort, but it is indeed working on a model with this focus as its core. That is establishing and promoting a model that would focus on preventive approached.

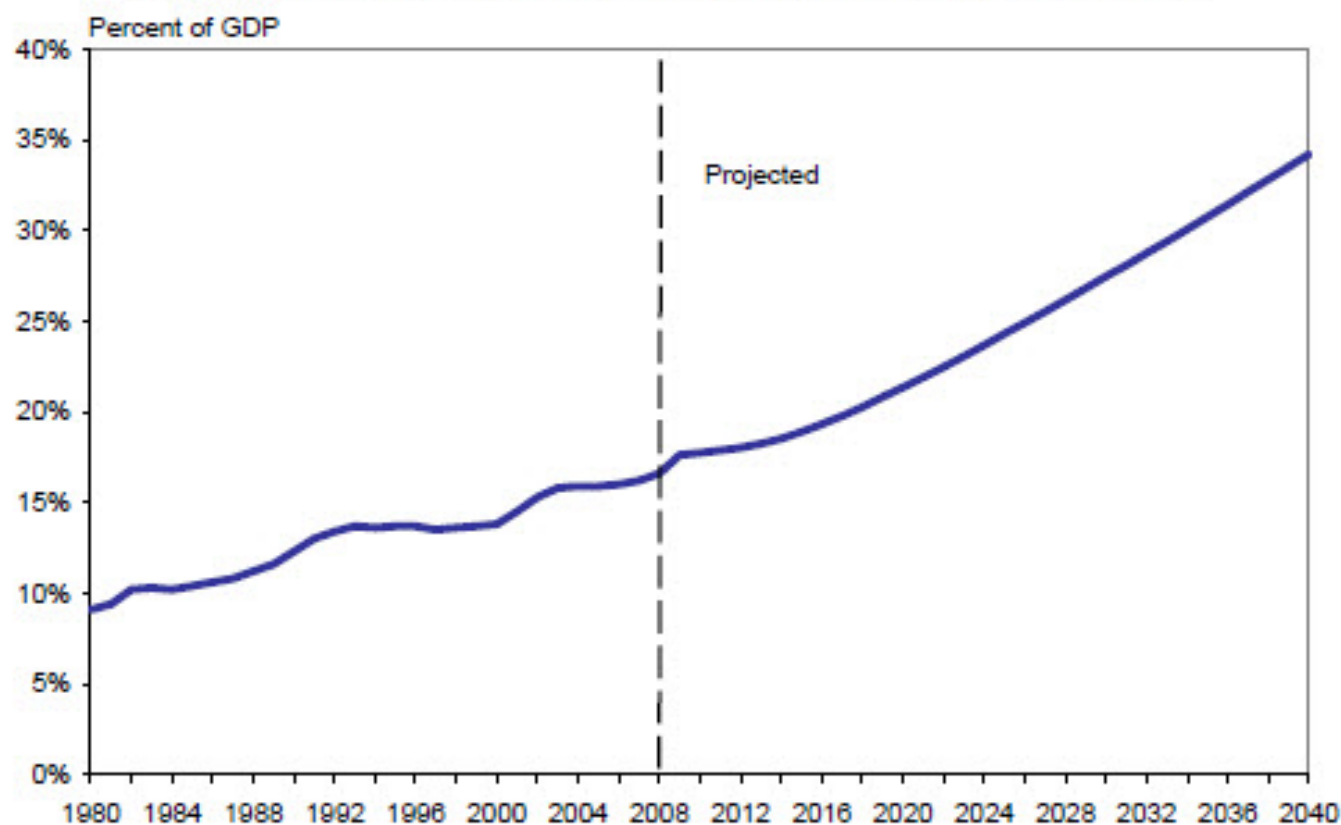
United States per capita healthcare spending is more than twice the average of other developed countries

HEALTHCARE COSTS PER CAPITA (DOLLARS)



SOURCE: Organization for Economic Cooperation and Development, *OECD Health Statistics 2015*, November 2015. Compiled by PGPF.
NOTE: Data are for 2013 or latest available. Chart uses purchasing power parities to convert data into U.S. dollars.

National Health Expenditures as a Share of GDP, 1980-2040

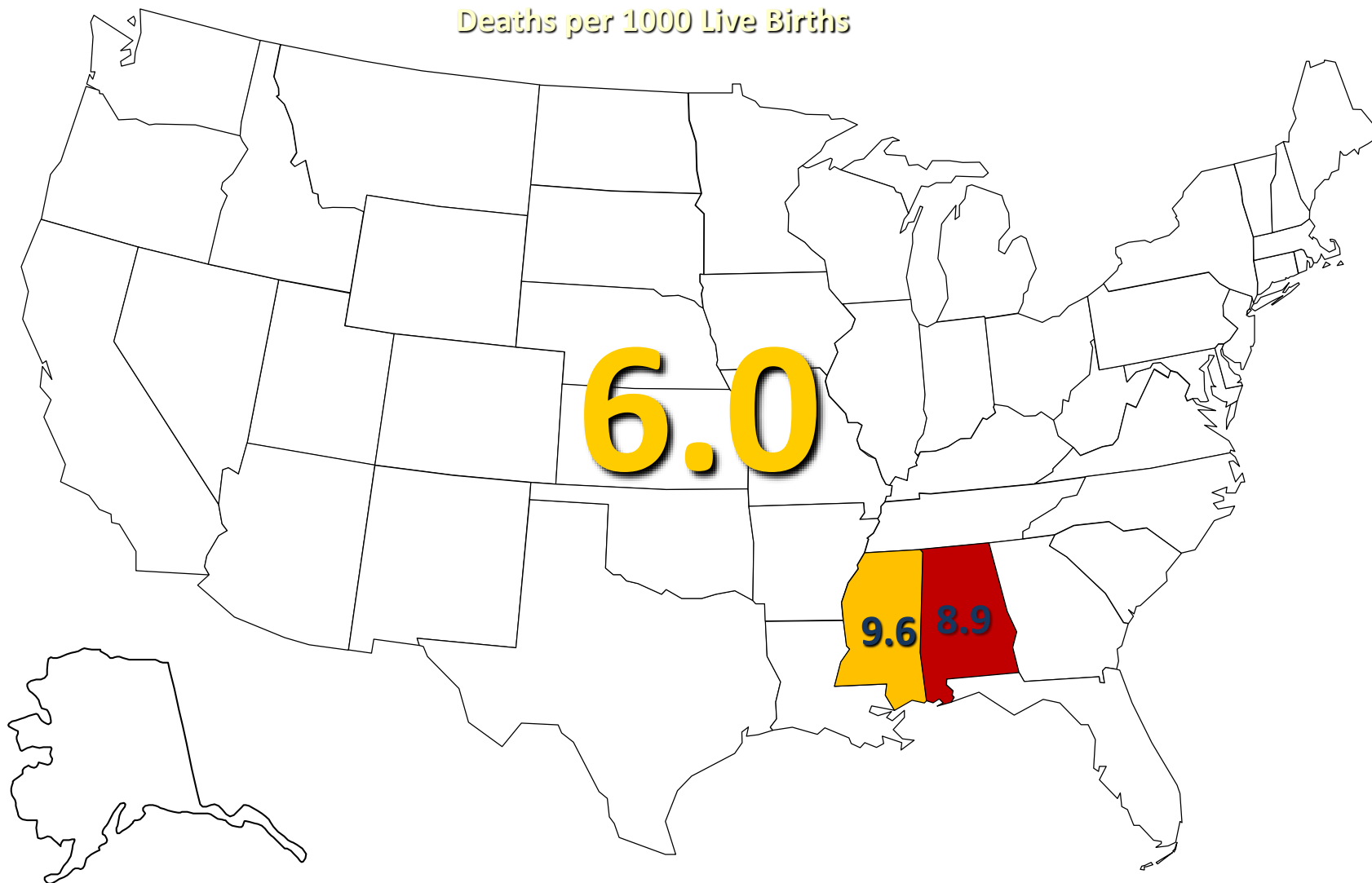


Source: CEA calculations.



Infant Mortality, 2013

Deaths per 1000 Live Births



Source: Matthews, TJ, M.S., et. al. [Infant Mortality Statistics from the 2013 Period Linked Birth/Infant Death Data Set](#). Division of Vital Statistics, CDC. *National Vital Statistics Report* 64 (9), August 6, 2015.

Health Status in Mississippi

- ✓ High rates of obesity
- ✓ High rates of diabetes
- ✓ High rates of infant mortality
- ✓ High rates of stroke
- ✓ Chronic disease
- ✓ Poor nutrition
- ✓ Reduced life expectancy

Search for a Model

School of Public Health is interested in coming up with a health care model that would benefit all Mississippians and beyond.



Now back to the main presentation
What is health, what is public health, etc

Health is...



...a dynamic state of complete **physical, mental, spiritual, and social well-being** and not merely the absence of disease or infirmity.*

and...



Public health is “What we as a society do **collectively to assure the conditions** in which people can be healthy.”**

Public Health

- ❑ Prevents epidemics and the spread of disease
- ❑ Protects against environmental hazards
- ❑ Prevents injuries
- ❑ Promotes and encourages healthy behaviors
- ❑ Responds to disasters and assists communities in recovery
- ❑ Assures the quality and accessibility of health services

Recent Health/PH Threats/Events in US

- ❑ Hurricane Sandy in 2012 (NJ and NY)
- ❑ Salmonella in peanut butter in 2011
- ❑ H1N1 epidemic in 2009
- ❑ Hurricane Katrina in 2005 (New Orleans, LA & Mississippi)
- ❑ 9/11 attacks on the US in 2001 (New York City)



These events required responses from more than one geographical area and more than one agency, increasing collaboration and cooperation.

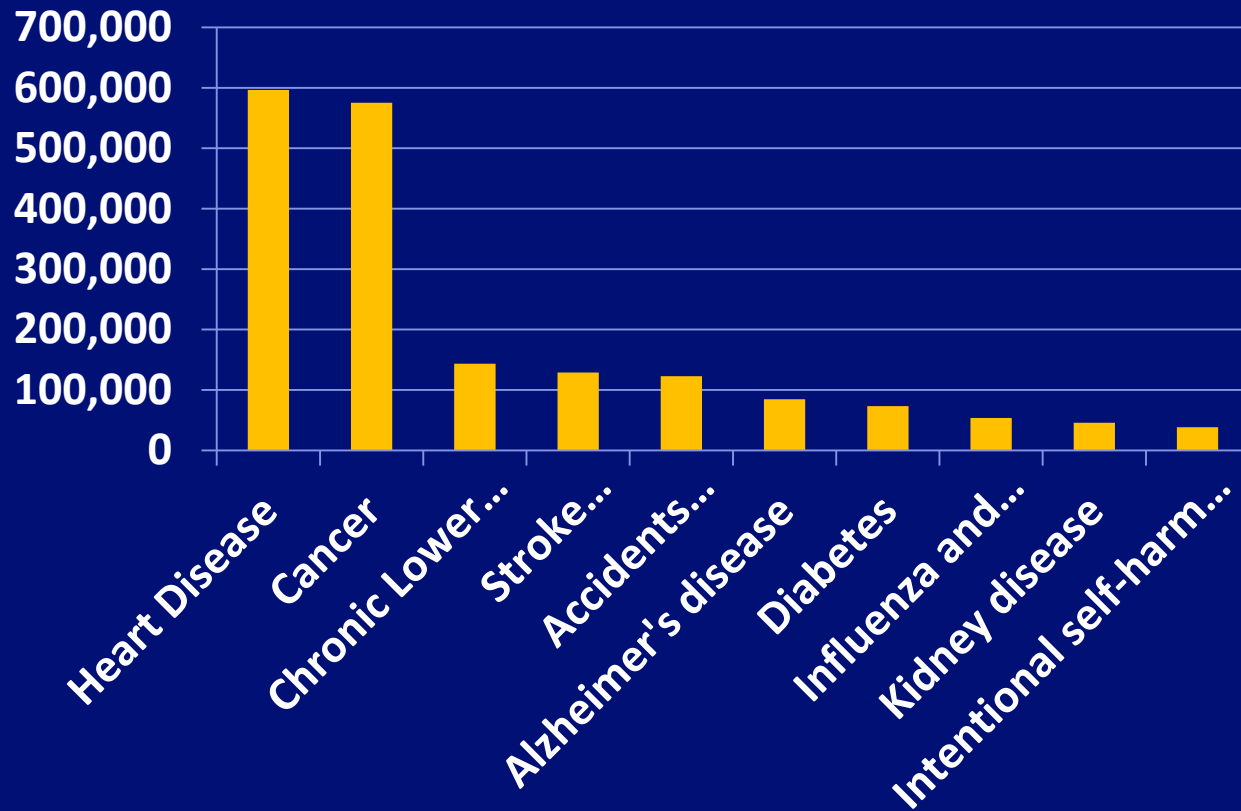
Hurricane Katrina, 2005

- ❑ Second-strongest hurricane ever recorded in the US
- ❑ Devastated Louisiana and Mississippi (Gulf Coast)
- ❑ Storm surge of 20 feet
- ❑ Greatest number of deaths were in New Orleans; 80% of the city was flooded
- ❑ About \$75 billion in physical damages
- ❑ Economic impact in Louisiana and Mississippi >\$110 billion
- ❑ Costliest hurricane in US history
- ❑ Affected about 90,000 square miles



NASA Photo

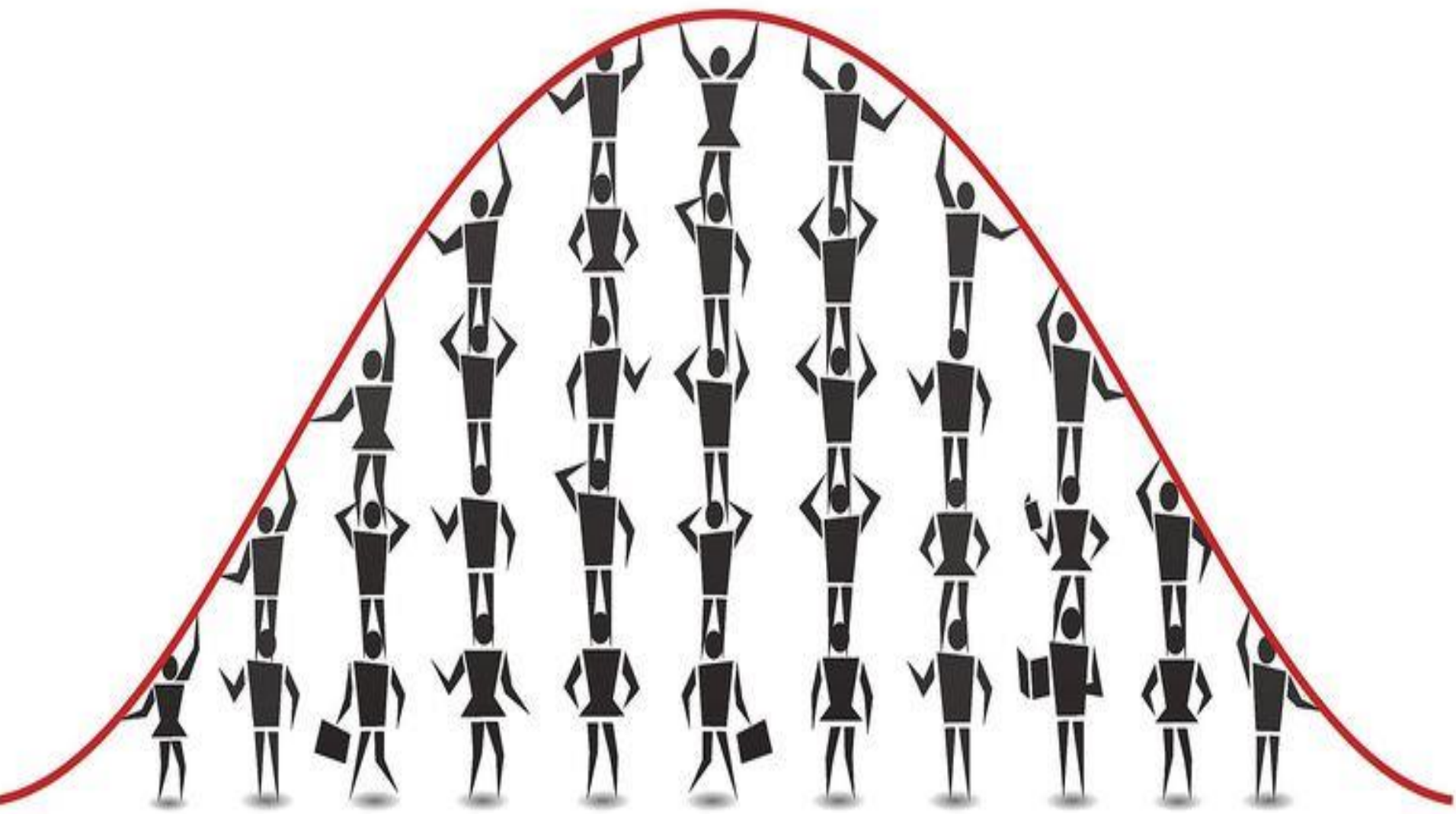
Top 10 Causes of Death in the US



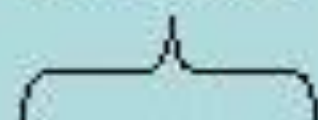
Source: *National Vital Statistics Reports*, Vol. 61, No. 6, October 10, 2012.

We need to know that we can not change everybody's behavior and or health out comes.

- ❑ I use bell curve's normal distribution property to demonstrate that if public health can make impact on 68% of population then we can say our accomplishment is good.
- ❑ Count the number of people with the bell curve. Calculate 68% of this population.
- ❑ The calculated figure will fall within two standard of deviation from the mean – bell cure normal distribution property.



one standard deviation



68% of data

95% of data

99.7% of data

-3

-2

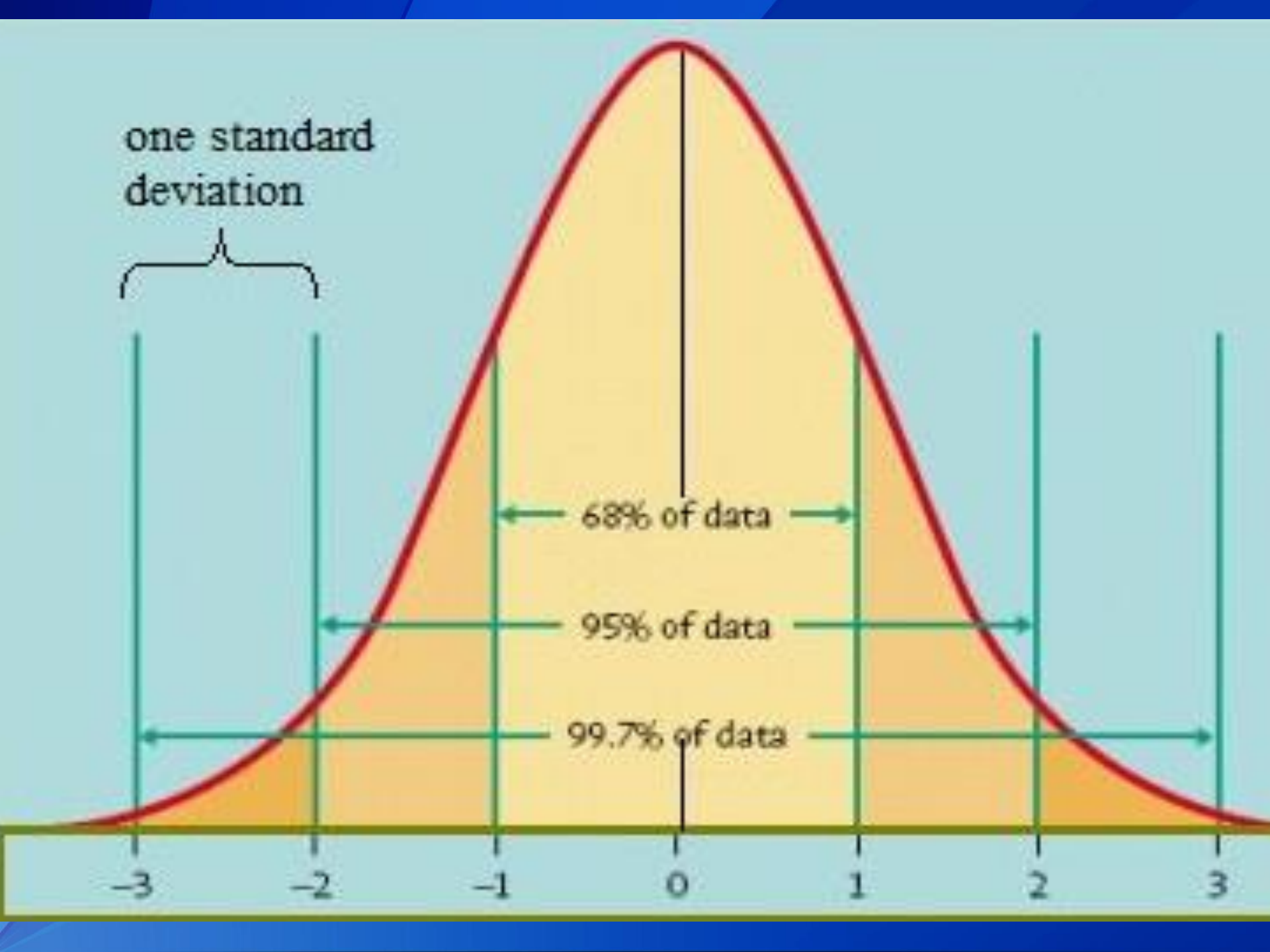
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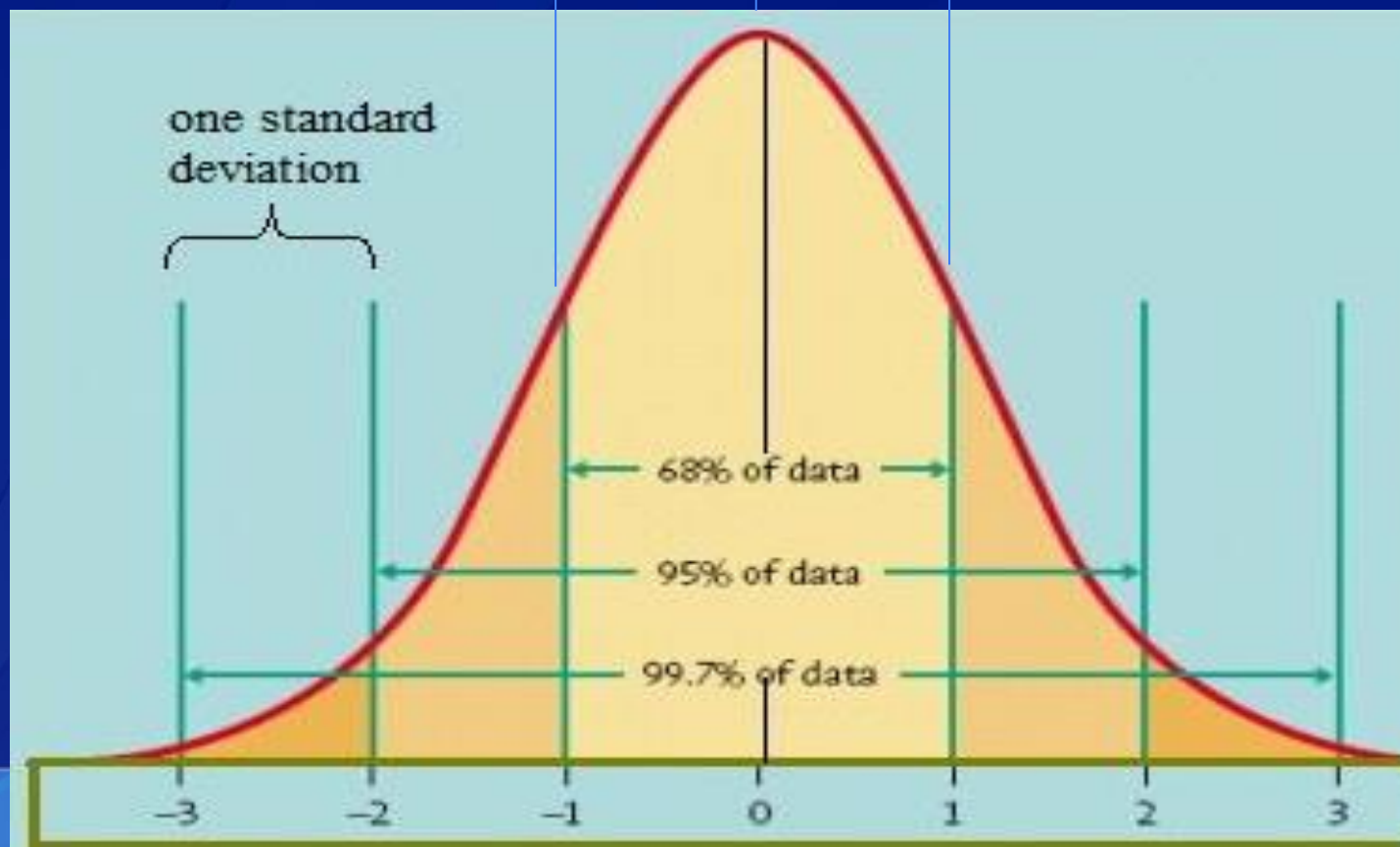
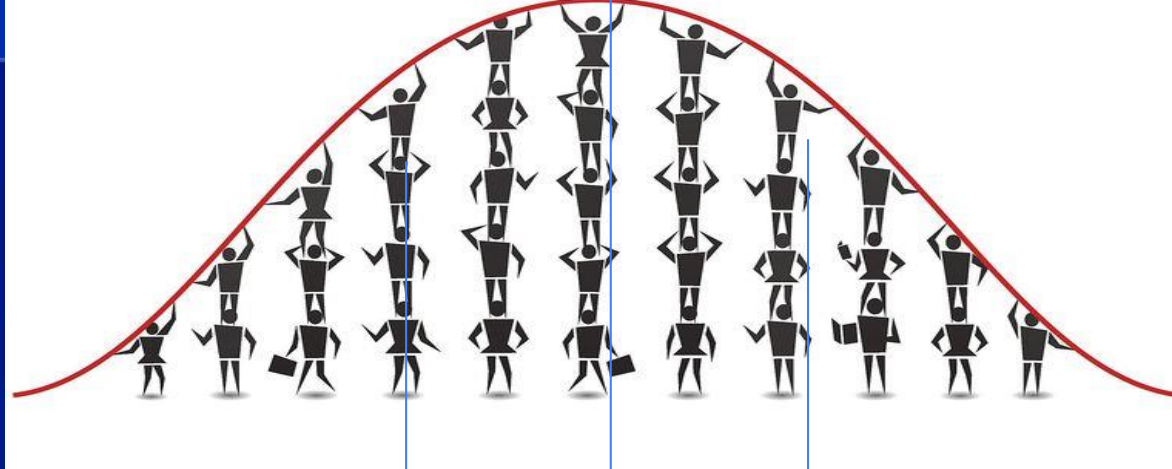
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What does medicine do?

Saves lives one at a time



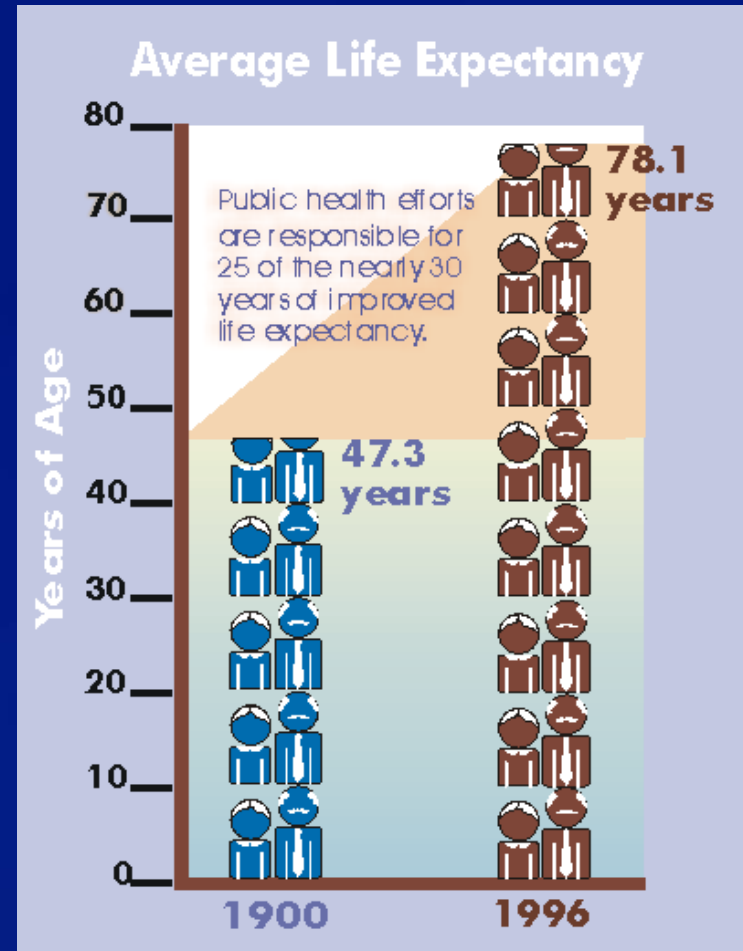
What does public health do?

Saves lives millions at a time



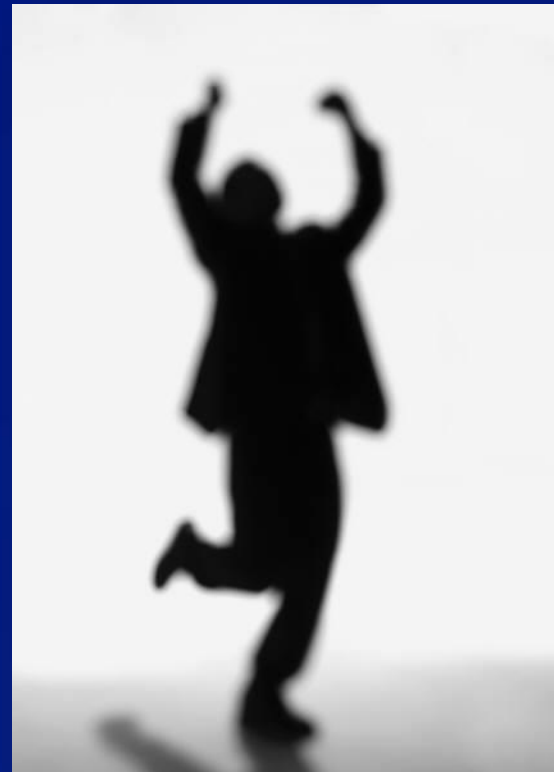
Average Life Expectancy

*Thanks to
public health
for the extra 25
years of life!*



Ten Great US Public Health Achievements (1900–1999)

- ❑ Vaccinations
- ❑ Safer workplace
- ❑ Safer and healthier food
- ❑ Motor vehicle safety
- ❑ Control of infectious diseases
- ❑ Decline in deaths from coronary heart disease and stroke
- ❑ Family planning
- ❑ **Recognition of tobacco use as a health hazard**
- ❑ Healthier mothers and babies
- ❑ Fluoridation of drinking water



How Has Public Health Extended Life Expectancy?

The foundation for public health lies within the 3 core functions defined by the IOM:

- ❑ Assessment
- ❑ Policy Development
- ❑ Assurance

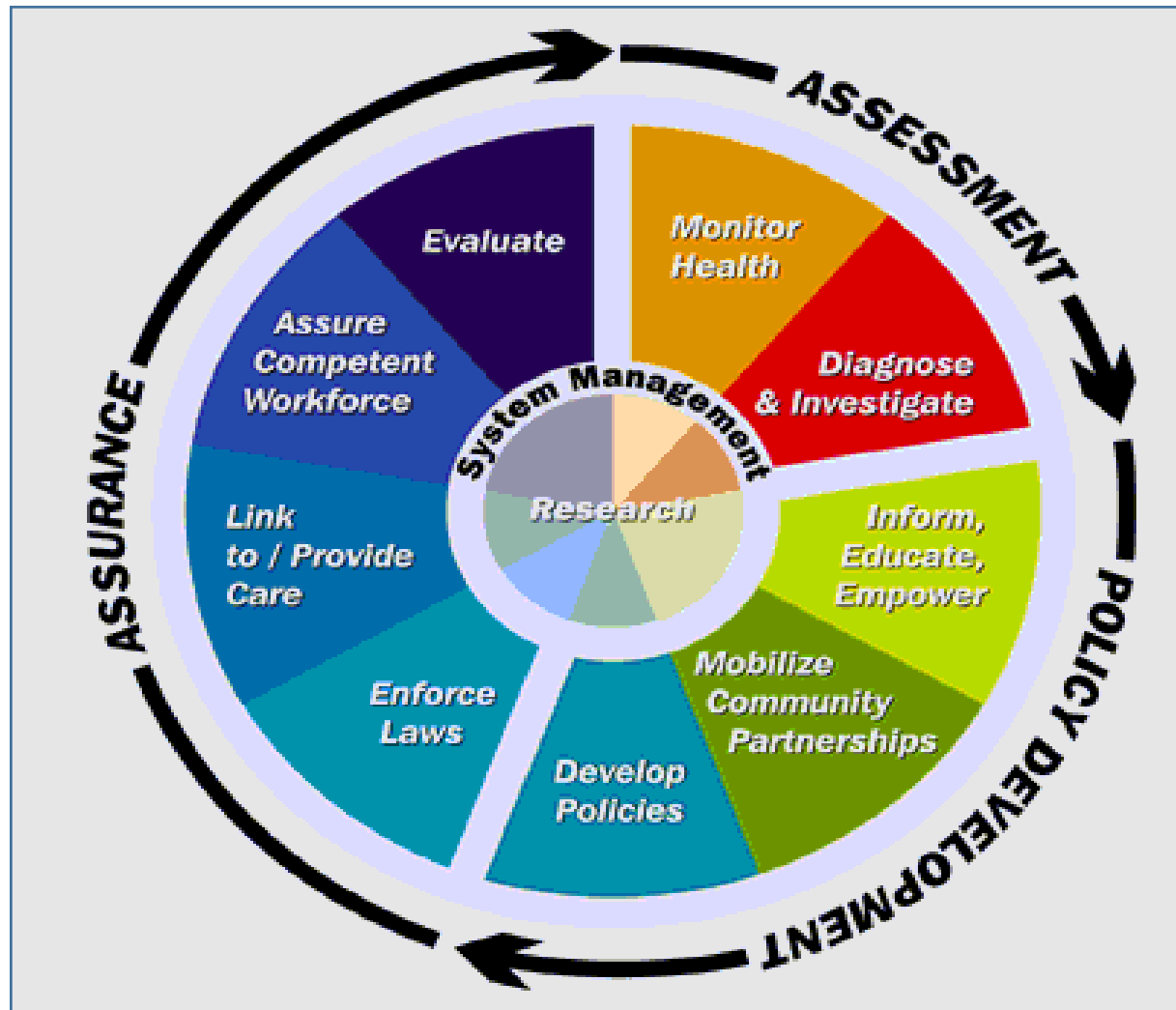
Public health is guided by the Ten Essential Public Health Services and is applied to every facet of public health (national → state → local and tribes and territories)

Source of core functions: Institute of Medicine. *The Future of Public Health*. 1988.

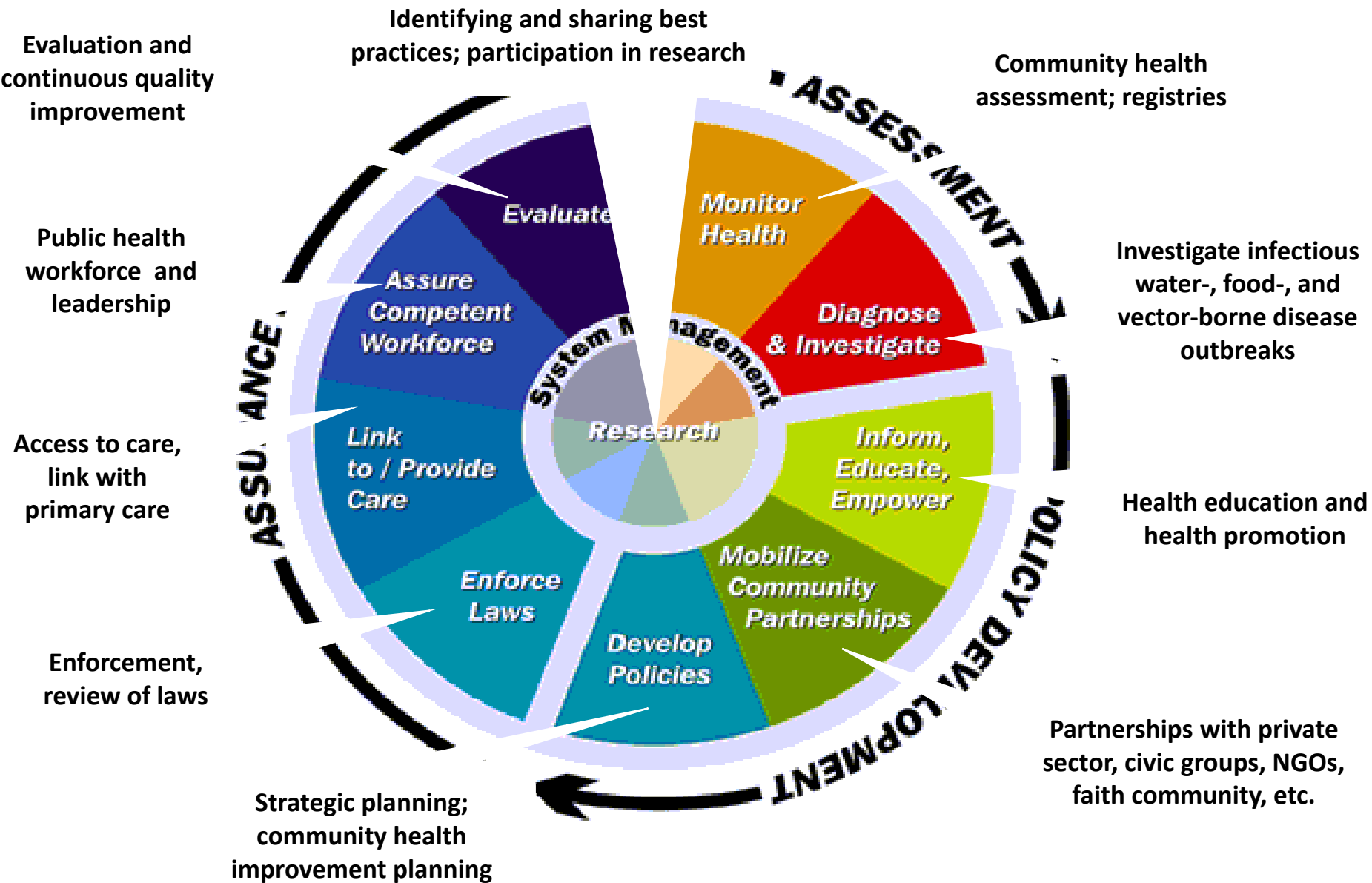
Source of Ten Essential Public Health Services: Core Public Health Functions Steering Committee, 1994

Essential Services of Public Health

- ❑ Monitor health status
- ❑ Diagnose and investigate
- ❑ Inform, educate, and empower
- ❑ Mobilize community partnerships
- ❑ Develop policies and plans
- ❑ Enforce laws and regulations
- ❑ Link people to needed services/assure care
- ❑ Assure a competent workforce
- ❑ Evaluate health services
- ❑ Research



Source of [Ten Essential Public Health Services](#): [Core Public Health Functions Steering Committee](#), 1994



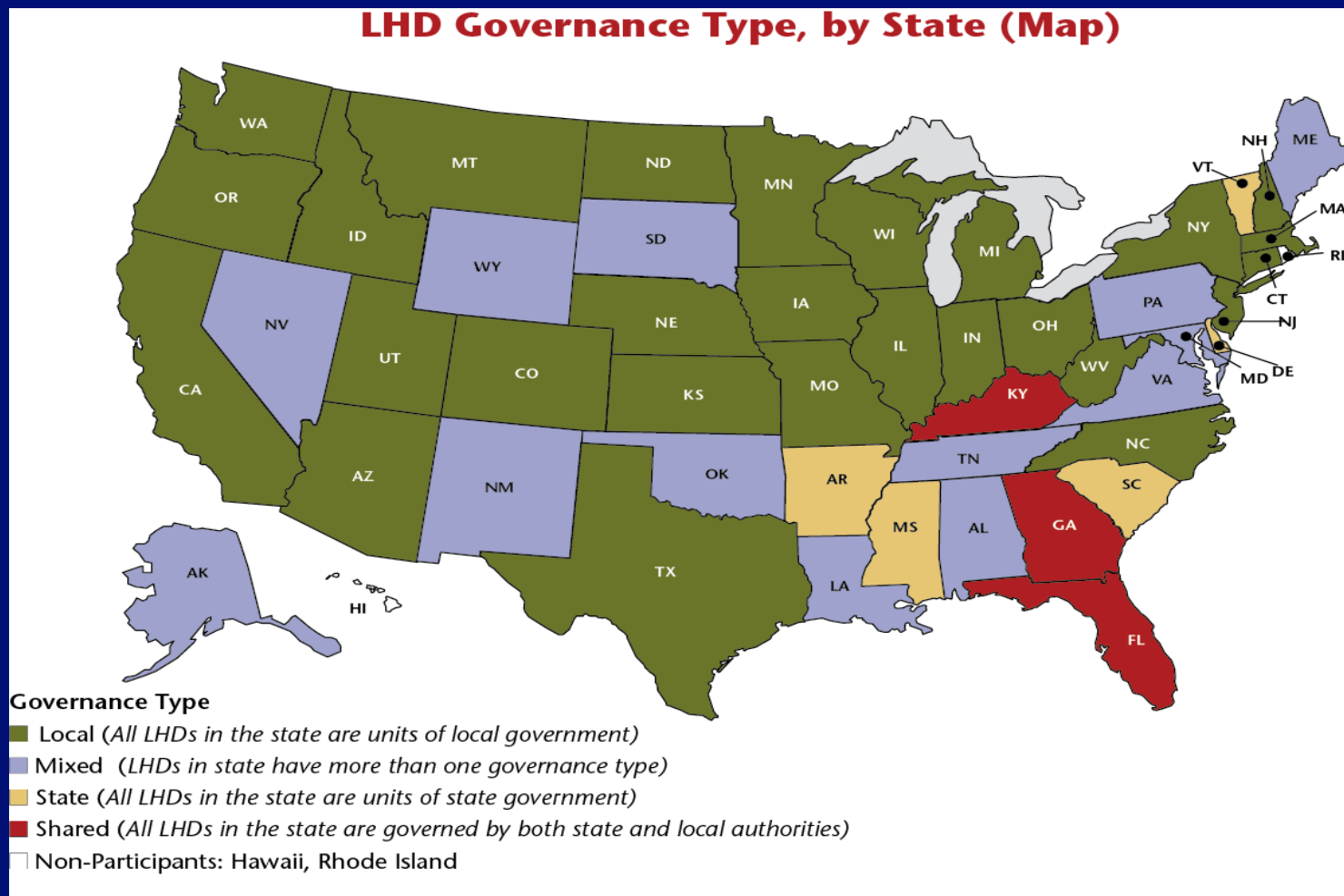
Structure of Public Health in the United States

- > Federal Public Health Responsibilities
Federal Public Health Responsibilities
- > State Roles
- > Local Health Departments

State and Local Health Department Governance Classification System

- ❑ Local/Decentralized—Local health departments are units led by local governments, which make most fiscal decisions.
- ❑ Mixed—Some local health departments are led by state government, and some are led by local government. No one arrangement predominates in the state.
- ❑ State/Centralized—All local health departments are units of state government, which makes most fiscal decisions.
- ❑ Shared—All local health departments are governed by both state and local authorities.

National Profile of Local Health Departments



Source: 2010 National Profile of Local Health Departments—NACCHO

*** Adapted from Centers for Disease Control and Prevention**

contact information:
mohammad.shahbazi@jsums.edu



Thank You!