#### **Building Healthier Communities**

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James M. Galloway, MD

has no financial relationships to disclose or conflicts of interest related to this presentation.

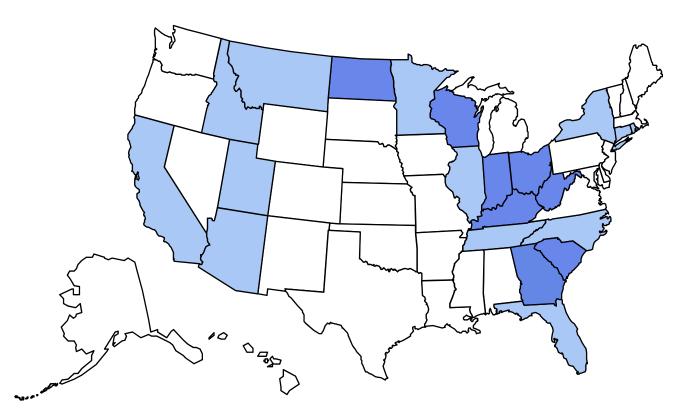
#### The Current Situation

- The United States has the highest GNP in the world
- The US spends nearly half of all health care dollars spent in the world
- □ Life expectancy in the US is one of the lowest of industrialized countries, behind Jordan and Slovenia
- Infant mortality?
  - We are 31<sup>st</sup>!
  - Cuba, Slovenia and Estonia do better!

#### The Current Situation

Physical activity, nutrition, and smoking are the three most important areas to target to improve the health of our nation.

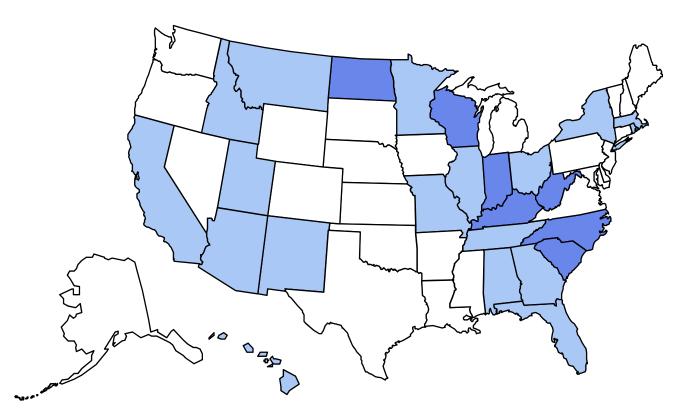
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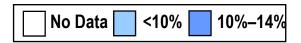






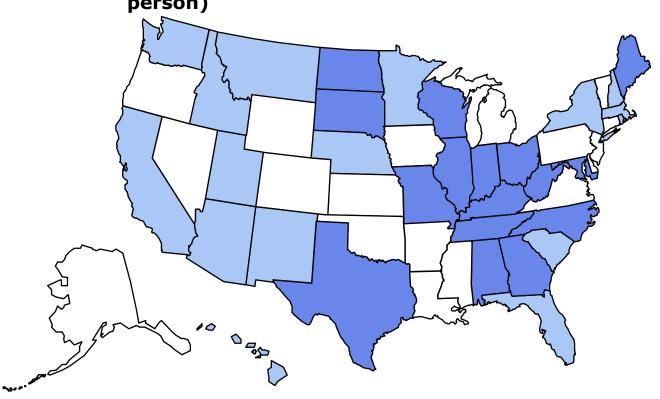
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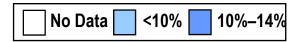






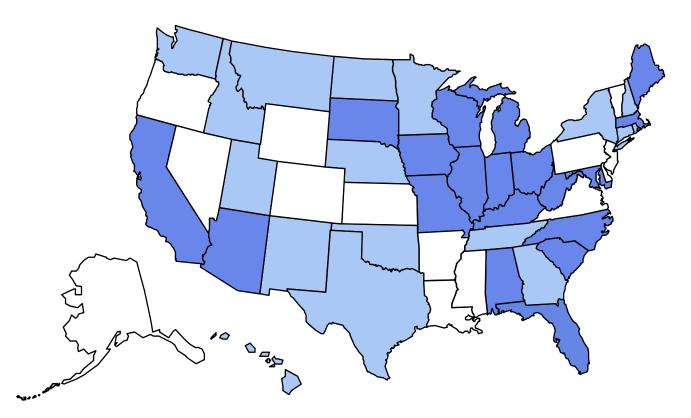
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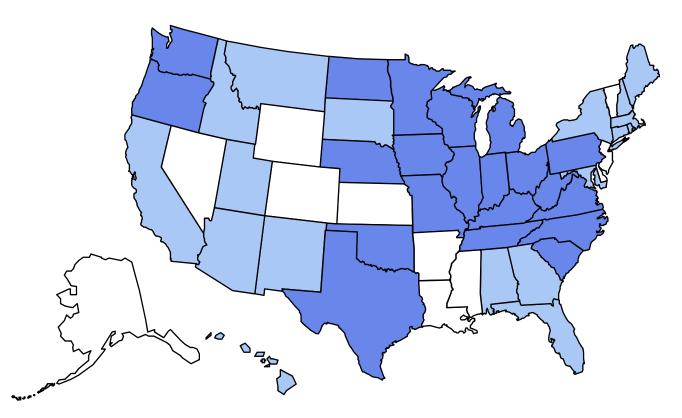
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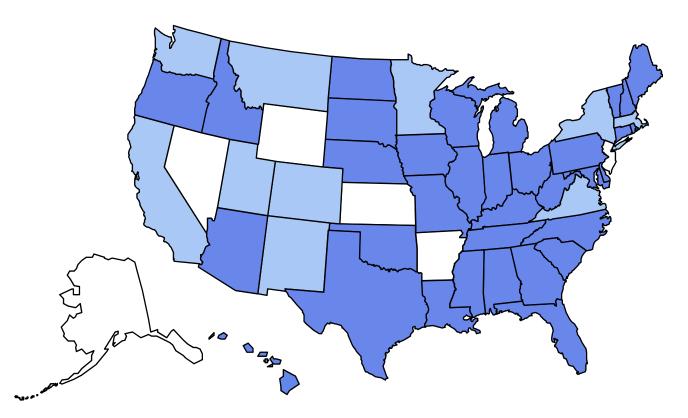
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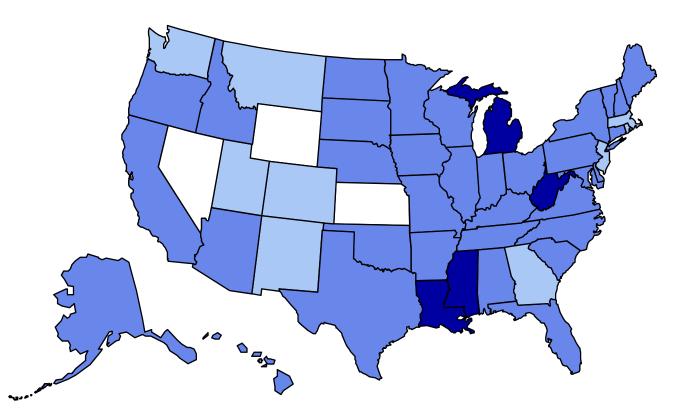
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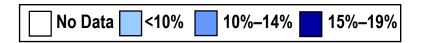






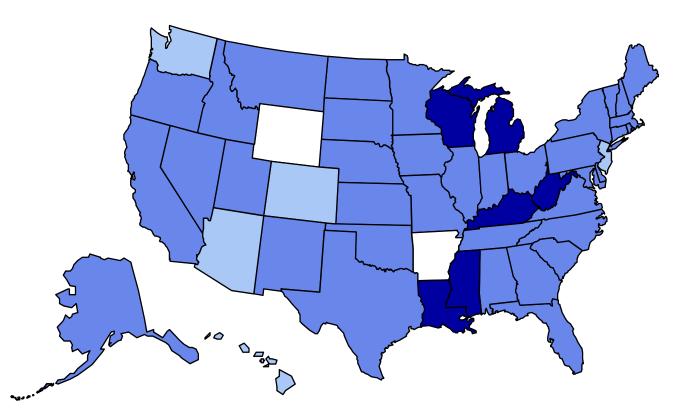
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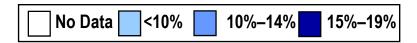






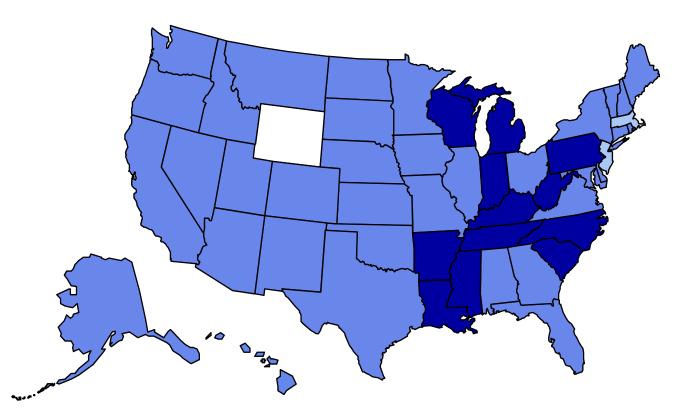
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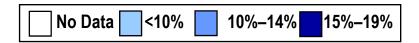






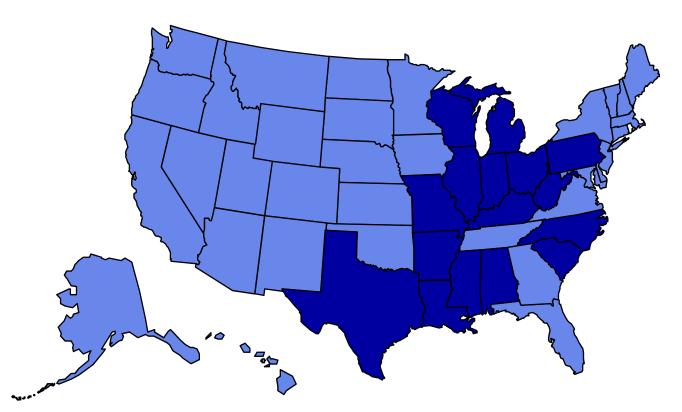
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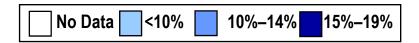






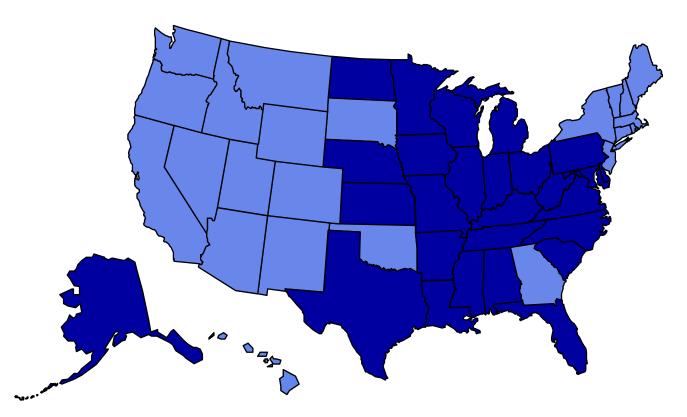
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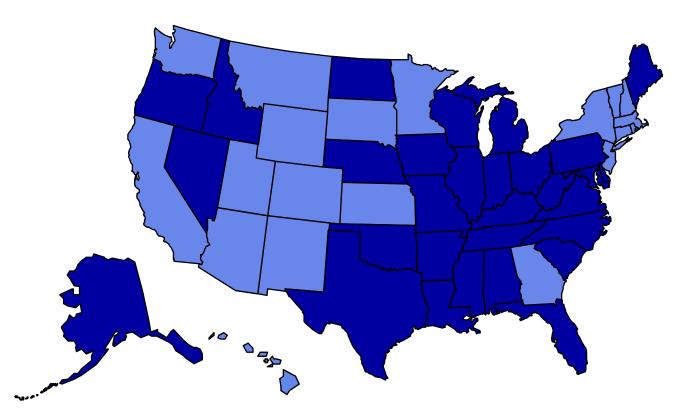
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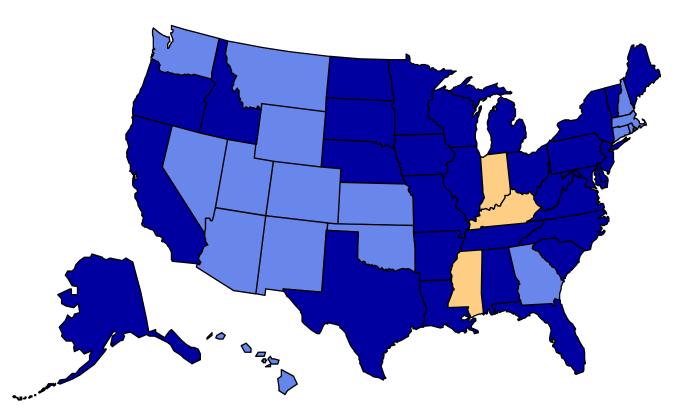
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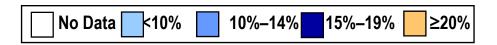






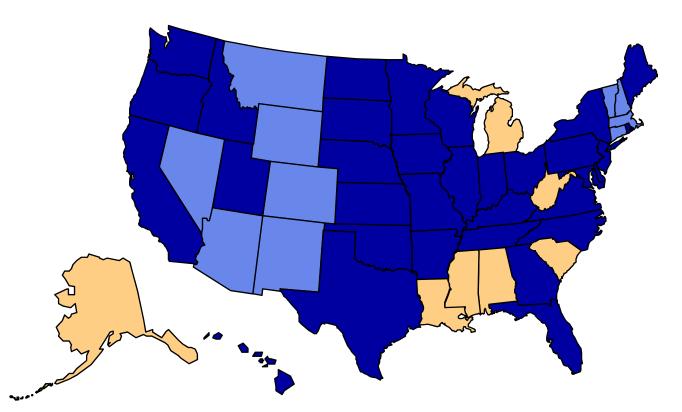
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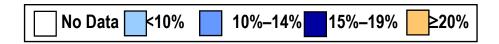






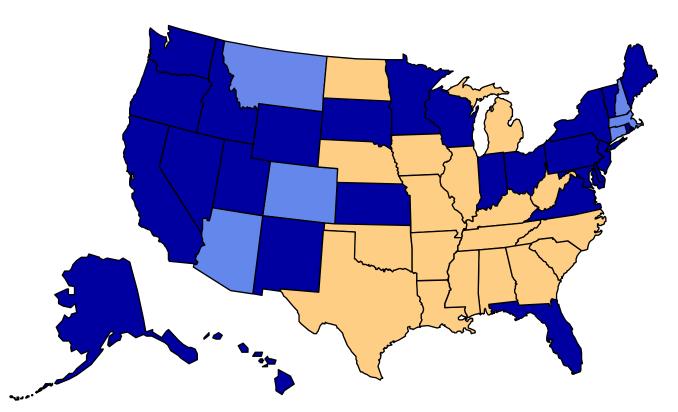
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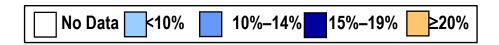






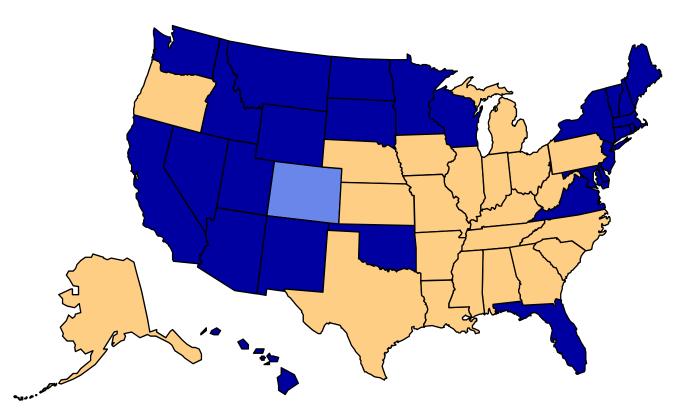
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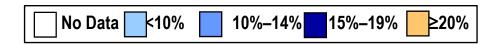






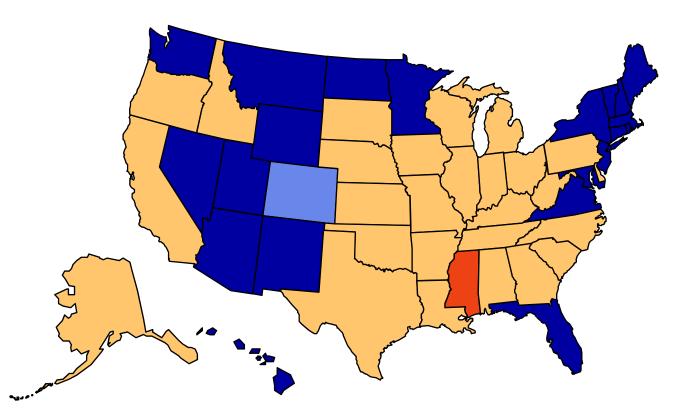
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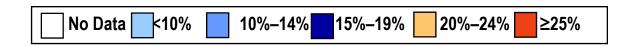






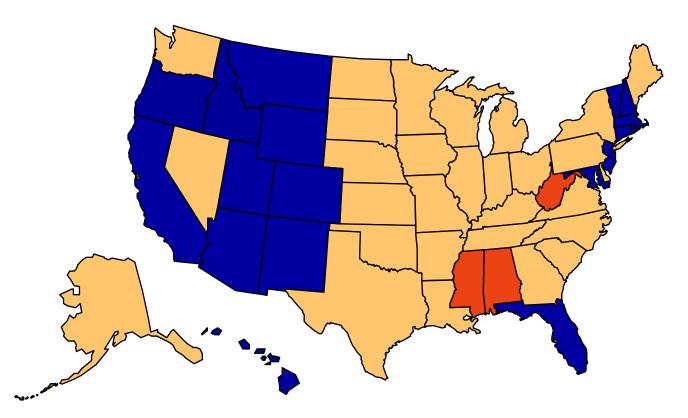
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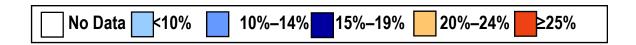






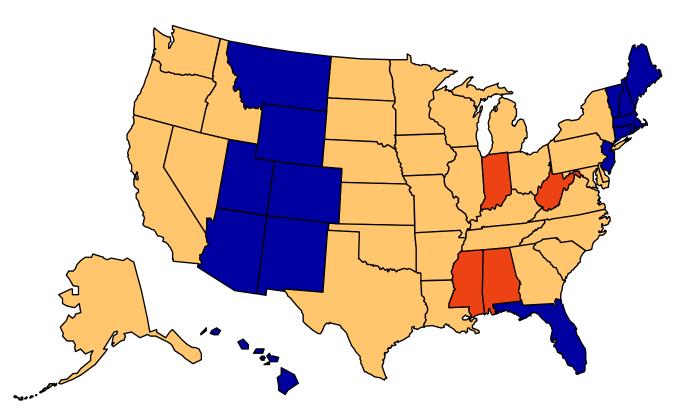
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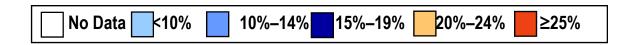






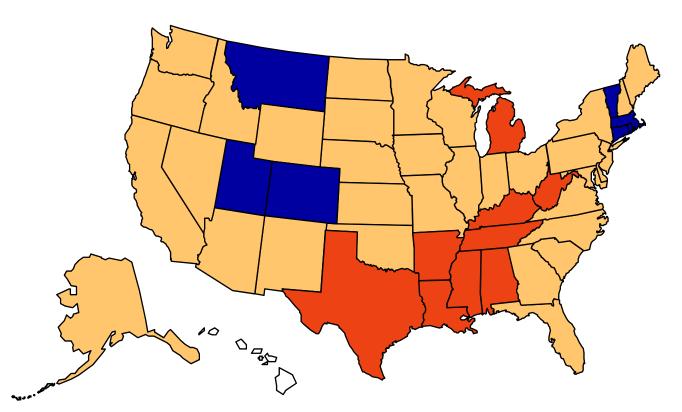
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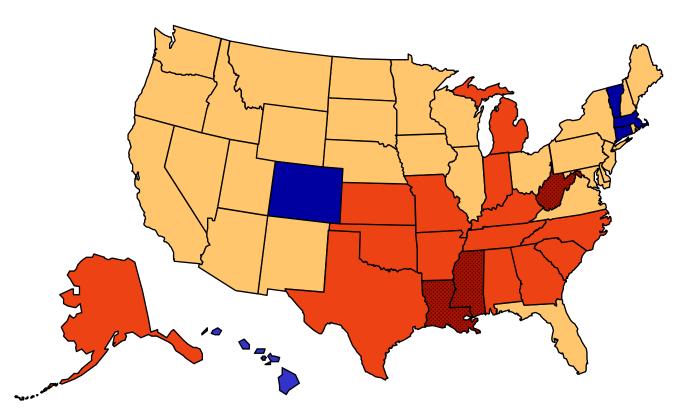
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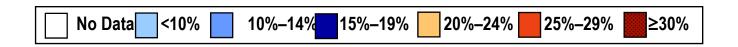






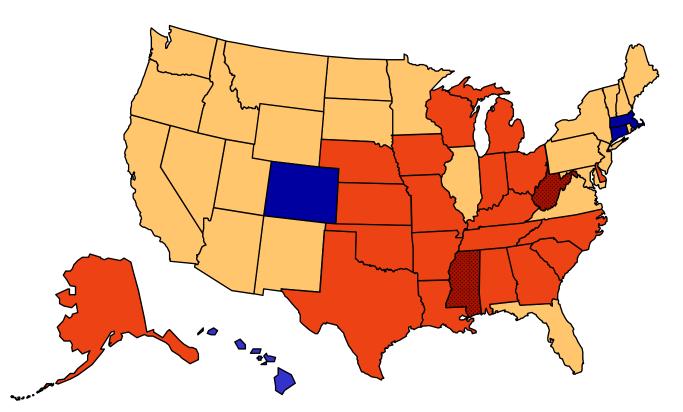
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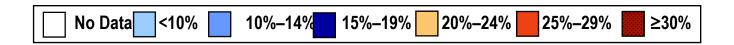






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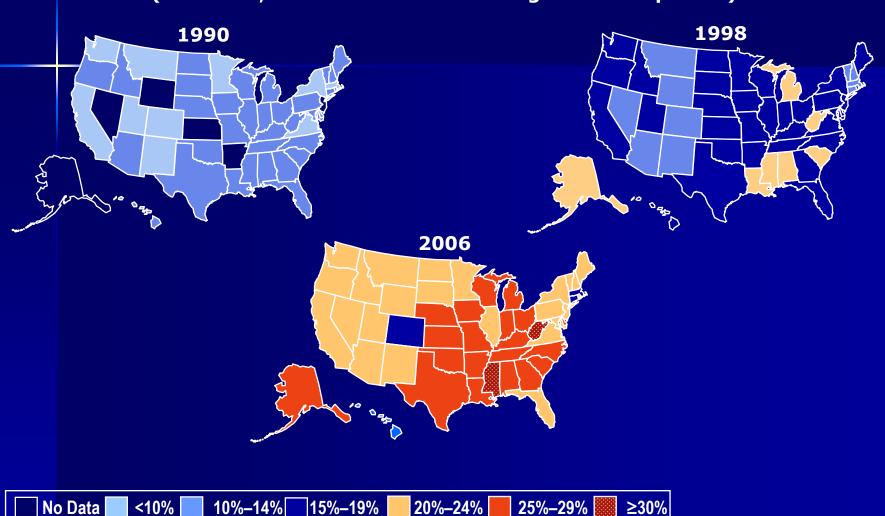






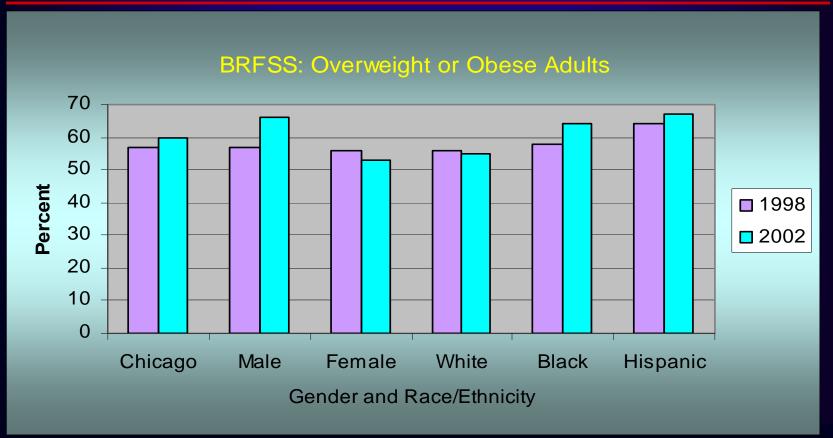
### Obesity Trends\* Among U.S. Adults BRFSS, 1990, 1998, 2006

(\*BMI ≥30, or about 30 lbs. overweight for 5'4" person)



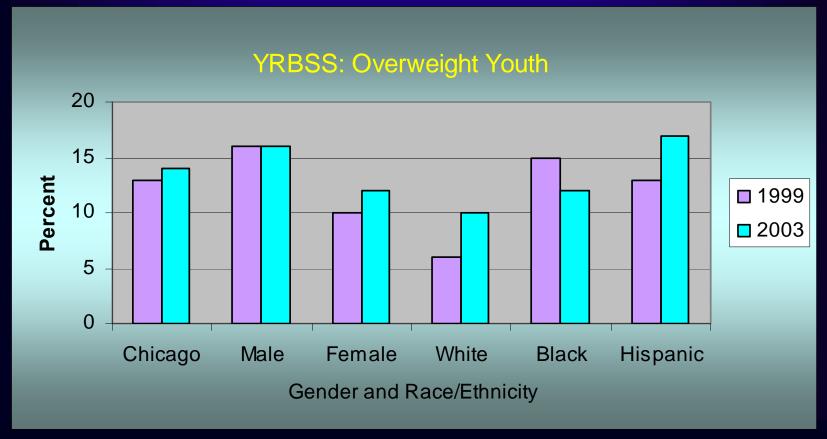


#### Building a **Healthier** Community



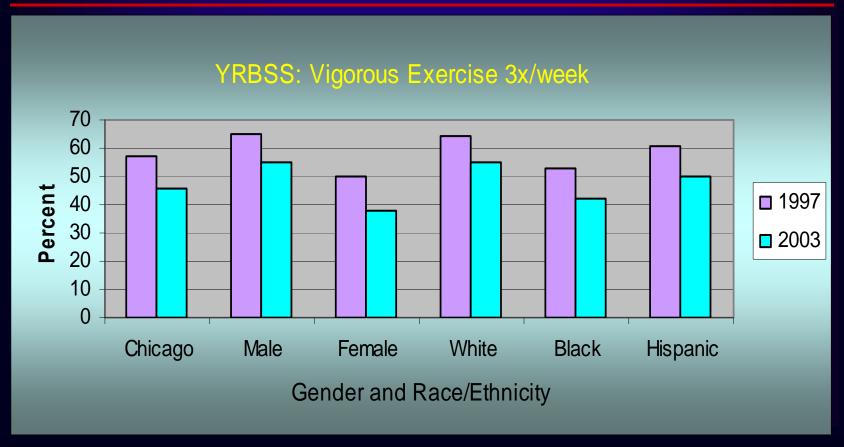


#### Building a **Healthier** Community





#### Building a **Healthier** Community



#### Results

Table 1: Percentage of Adolescents and Adults Meeting MyPyramid Recommendations

	Adolescents 12-18 (n = 1667)			≥19 Years = 2005)	Women ≥19 Years (n = 1904)	
	Percent Consuming	Median Cups (% Meeting Req.)	Percent Consuming	Median Cups (% Meeting Req.)	Percent Consuming	Median Cups (% Meeting Req.)
Fruits and Vegetables	99.9	1.74 (0.9)	99.8	2.47 ( <mark>2.2</mark> )	99.8	2.16 <b>(3.5)</b>
Fruits	89.2	0.51 (6.2)	86.4	0.6 (8.6)	91.7	0.61 (12.3)
Whole Fruits	45.4	0.49 (N/A)	53.8	0.59 (N/A)	62.0	0.62 (N/A)
100% Fruit Juice	40.3	0.54 (N/A)	34.0	0.50 (N/A)	38.2	0.41 (N/A)
Vegetables	98.5	1.21 (5.8)	99.3	1.77 (14.7)	99.6	1.42 (18.6)
Vegetables without fried potatoes	98.0	0.72 (2.2)	99.1	1.39 (9.0)	99.2	1.19 (13.4)

<sup>\*</sup>Daily recommendations for adolescents and adults range from 1.5 to 2.5 cups of fruits and from 2.0 to 4.0 cups of vegetables (depending on daily caloric requirement).

Based on data from the 2003 – 2004 NHANES Survey; This is a modified table from: Kimmons, J. et al. "Fruit and Vegetable Intake Among Adolescents and Adults in the United States: Percentage Meeting Individualized Recommendations." Medscape J Med. 2009;11(1):26

#### The Current Situation

- The Washington Post reports that the width of a standard movie seat used to be 19 inches....
  - It is now 23 inches...

□ Journal of Pediatrics, 2006, reported that 1 percent of all American infants and children – more than 283,000 children – are too big to fit in a car seat....

#### The Current Situation

Table 2. Actual Causes of Death in the United States in 1990 and 2000	Table 2. Ad	tual Causes	of Death	in the	United	States in	1990	and 2000
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Actual Cause	No. (%) in 1990*	No. (%) in 2000					
Tobacco	400 000 (19)	435 000 (18.1)					
Poor diet and physical inactivity	300 000 (14)	400 000 (16.6)					
Alcohol consumption	100 000 (5)	85 000 (3.5)					
Microbial agents	90 000 (4)	75 000 (3.1)					
Toxic agents	60 000 (3)	55 000 (2.3)					
Motor vehicle	25 000 (1)	43 000 (1.8)					
Firearms	35 000 (2)	29 000 (1.2)					
Sexual behavior	30 000 (1)	20 000 (0.8)					
Illicit drug use	20 000 (<1)	17 000 (0.7)					
Total	<b>1 060 000</b> (50)	<b>1159 000</b> (48.2)					
*Data are from McGinnis and Foege.1 The per	centages are for all deaths.						

# One VITAL Aspect of the Public Health Solution:

#### The Funding of Prevention

We MUST invest in disease prevention to ensure that healthcare coverage is as cost-effective as possible.

- □ The Partnership for Prevention has identified a series of clinical preventive measures that, if fully adopted by 90 percent of the population, could save 100,000 lives a year.
- □ Trust for America's Health (TFAH), in collaboration with The New York Academy of Medicine, has identified a series of community level disease prevention programs for improving rates of physical activity, nutrition, and smoking cessation that could dramatically reduce the prevalence and/or severity of the most expensive chronic diseases in the U.S. today.

#### The Funding of Prevention

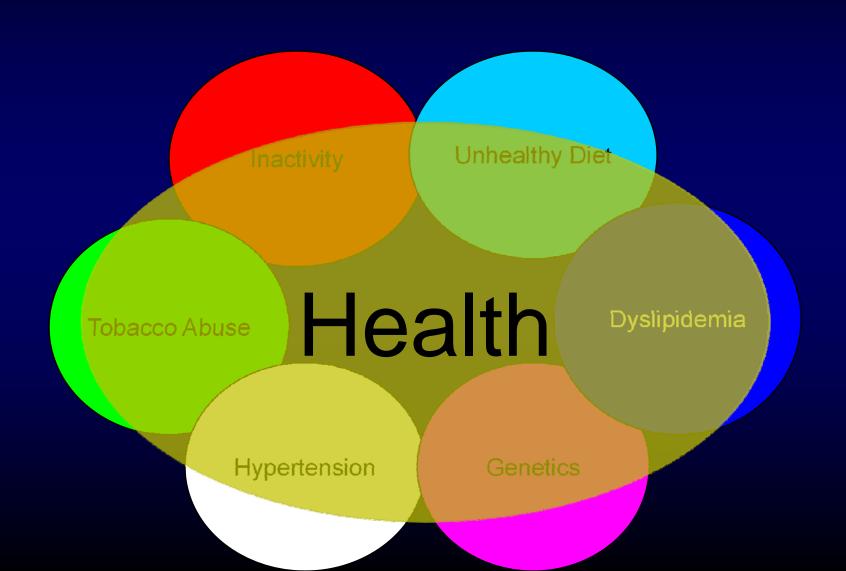
Based on an economic model developed by the Urban Institute, TFAH found that:

- □ an investment of \$10 per person per year in effective programs to improve physical activity, good nutrition, and prevent smoking could result in savings of more than \$16 billion in health care costs annually within five years.
- □ This is a return of \$5.60 for every \$1 spent.

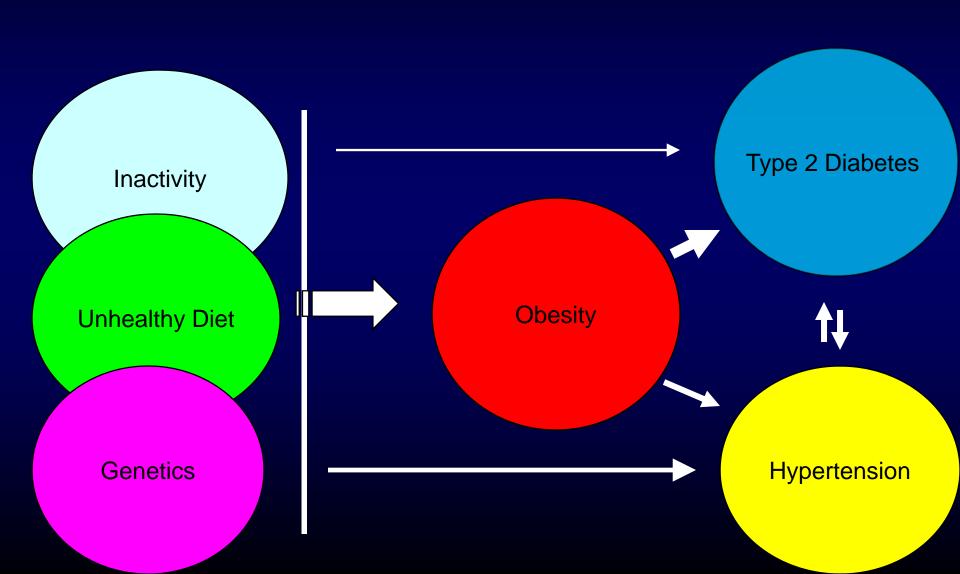
#### The Optimal Federal Role

Provide effective prevention interventions, universal access and quality coverage to all Americans.

## Building A Healthier Community



### Building A Healthier Community

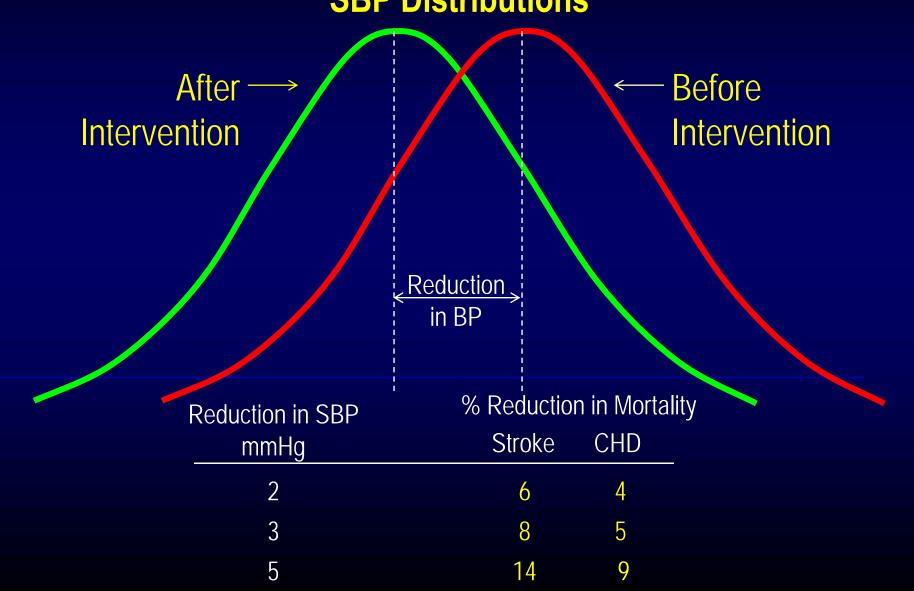




#### Building a **Healthier** Community

LIFESTYLE MODIFICATION RECOMMENDATIONS		
MODIFICATION	RECOMMENDATION	Avg. SBP Reduction Ranget
Weight reduction	Maintain normal body weight (body mass index 18.5–24.9 kg/m²).	5–20 mmHg/10 kg
DASH eating plan	Adopt a diet rich in fruits, vegetables, and lowfat dairy products with reduced content of saturated and total fat.	8–14 mmHg
Dietary sodium reduction	Reduce dietary sodium intake to <100 mmol per day (2.4 g sodi- um or 6 g sodium chloride).	2–8 mmHg
Aerobic physical activity	Regular aerobic physical activi- ty (e.g., brisk walking) at least 30 minutes per day, most days of the week.	4–9 mmHg
Moderation of alcohol consumption	Men: limit to ≤2 drinks* per day. Women and lighter weight per- sons: limit to ≤1 drink* per day.	2–4 mmHg

## Population-Based Strategy SBP Distributions



"It is unreasonable to expect that people will change their behavior easily when so many forces in the social, cultural, and physical environment conspire against such change"

Institute of Medicine, 2003

#### The Social Ecological Model

"The aim must be to establish a health promoting environment in the social space in which persons make significant health decisions.

The struggle is for the relevant space that various forces, some unconcerned with health and some actually detrimental to it, have thus far too loosely preempted.

Social ecology for health means deliberately occupying more of that social space and using it in the interest of health."

#### The Social Ecological Model

- The Social Ecological Model cuts across disciplinary lenses and integrates multiple perspectives and theories.
- □ This framework recognizes that behavior is affected by multiple levels of influence, including interpersonal factors, interpersonal processes, institutional factors, community factors, environmental factors, social factors and public policy.







http://www.healthierchicago.org



#### **GOAL**

To improve the health of Chicago's residents and employees through the integration of existing and new public health, medicine and community health promotion activities



#### **VISION**

Integrated, effective and sustained community-wide partnerships for health promotion that can be replicated nationwide

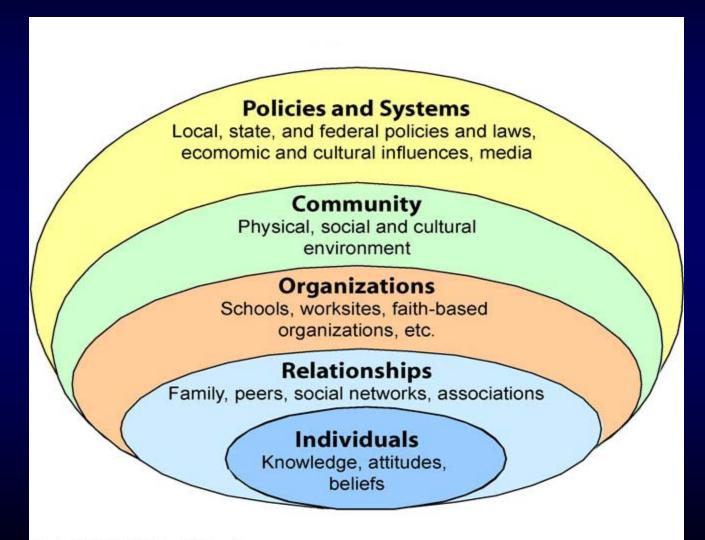


#### Our Objectives:

Promote, coordinate and track the adoption of optimal programs, practices, policies, and supportive environments throughout the health care organizations, worksites, schools, and neighborhoods of Chicago.



- Our Objectives: (cont.)
  - Develop and maintain a system of interventions that complement and reinforce each other to maximize reach and effectiveness.
  - Build Synergy!



ermont Department of Health



- Partners (partial listing)
  - City of Chicago DPH
    - Parks and Recreation
    - Mayor's Fitness Council
  - American Medical Association
  - Midwest Business Group on Health
  - American Dietetic Association
  - American Heart Association
  - American Diabetes Association
  - Chicago Medical Society
  - CLOCC
  - Health & Medicine Policy Research Group
  - Chicagoland Chamber of Commerce

- Shaping America's Health
- CHEST Foundation
- Community Health Charities
- American College of Cardiology
- National Kidney Foundation of Illinois
- Metropolitan Chicago Healthcare Council
- American Cancer Society
- Alliance for a Healthier Generation
- American College of Sports Medicine
- Chicago BEARS
- University of Chicago
- UIC COPH & Institute for Health Research and Policy
- Northwestern University



#### Partners (partial listing)

- RUSH
- Butler University
- St. Xavier University
- The Public Health Institute
- YMCA
- Alliance
- Access Community Health Network
- Illinois Foundation for Healthcare Quality
- Erie Family Health Center
- Humana, Inc
- Rush Health Associates
- Blue Cross/Blue Shield
- Ad Council

- NBC
- Illinois Department of Public Health
- Illinois Medical Society
- JP Morgan Chase
- Proactive Partners
- Chicago Runs
- Aadman Total Wellness
- Waterton Residential
- Midwest Dairy Council
- Chicago Endurance Sports
- Takeda Pharmaceuticals
- Code Red
- Novartis



- Our Federal Partners:
  - Federal Occupational Health
    - Health Risk Appraisal
  - The President's Council on Physical Fitness
    - The President's Challenge
  - The Surgeon General's Initiative on Obesity



- Our Federal Partners (continued):
  - The Office of Health Promotion and Disease Prevention
    - Metrics from Healthy People 2010/2020
  - Centers For Disease Control and Prevention
  - The Office of Public Health and Science



- Our Federal Partners (continued):
  - U.S. Department of Agriculture
    - Food and Nutrition Service
  - Internal Revenue Service
  - Small Business Administration

#### **American Medical Association**

- Medical Outreach
  - Providers, hospitals and health programs
  - Physician Advisory Council
  - Healthy Lifestyle Implementation Programs
- Education/Initiatives with Chicago Medical Society
  - 13,000 Medical Students
  - Public Health Committee
  - Senior Physicians Committee

#### Chicago Department of Public Health

- Multiple Initiatives
  - Five to Thrive, HTN, RxChicago, etc.
- Community Health Centers
- City Employees
  - City wide
  - Police
  - Firefighters
- Mayors Council on Physical Fitness
- Parks and Recreation



#### The Federal Fitness Campaign

- Federal Executive Board
  - Department of Health and Human Services
  - Federal Occupational Health HRA model
  - FEMA/Homeland Security
  - Federal Aviation Administration
  - Centers for Medicare and Medicaid
  - Health Resources Service Administration
  - Agency for Families and Children



#### Our External Foci:

- Broadly, supporting our partners in:
  - Improved activity levels
  - Improved healthy eating
  - Prevention, detection and control of hypertension



Worksite Wellness – a MAJOR Component

- Experiences
- RUSH Worksite Wellness Initiatives
- Federal Work Site Wellness Program role out
- CDPH Work Site Wellness Program Expansion

#### Current Activities (a select few)

#### Conferences:

Community Town Hall (SAH)

Worksite Wellness (with MBGH)

Nutrition/Obesity (with NIH and many others)

**Upcoming Policy Conference** 

Upcoming Community Nutrition Conference – Eat well, Live well!

- Model BHC Healthy schools
- Model BHC Healthy residential high rises
- Model BHC Healthy office high rises
- Model BHC Healthy agencies
- Model BHC Healthy corporations
- Policy Development City Council & Aldermen
- Community Involvement- CDPH, FQHCs, others
- Data Generation/Evaluation/GIS Mapping

Multiple studies have revealed that it takes about 6 weeks of repeated behavior change to develop a habit...

## Unfortunately, will power only lasts about 5 weeks



"I do stay in shape. This is the shape I stay in."

The idea that individual health choices and personal behaviors are the most important determinants of chronic disease is an idea whose time has come and gone.

George Mensah, MD.

#### Individual choices are important...

However, it is unlikely that individually attempted changes in lifestyles and behaviors alone can avert the growing epidemic of chronic disease that we are witnessing.

#### **Environmental Change:**

Policies Practices Programs



Collaborative Partnership

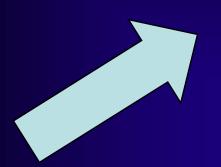






Changing Individual Behaviors

#### **Environmental Change:**



Policies
Practices
Programs



Collaborative Partnership

Healthy Chicago
Healthy Behavior
Less Illness & Death

Although partnerships have affected change in communitywide behavior, the strongest evidence shows that coalitions most effectively contribute to changes in programs, services and practices.

Butterfloss FD & Francisco VT. (2004) Health Promotion Practice 5(2):108-114. Roussos ST and Fawcett SB (2000) Annu Rev of Public Health 21:369-402.

#### The Social Ecological Model

We must

"ignite and build a social movement"

at private, public and policy levels in order to change broad scale social norms and create a social environment supportive of health.



# "Trying harder will not work,

## New systems will...."

Institute of Medicine

#### "Somebody has to do it,

# It's just amazing that it has to be us..."

Jerry Garcia





http://www.healthierchicago.org