

# Building Healthier Communities:

## Obesity and Opportunities for Resolution



**James M. Galloway, MD, FACP, FACC, FAHA**

Assistant U.S. Surgeon General

Rear Admiral, U.S. Public Health Service

Regional Health Administrator, Region V

Adjunct Professor, Cardiology, Northwestern University

# 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!

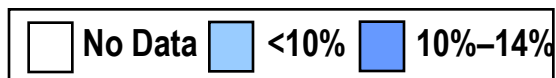
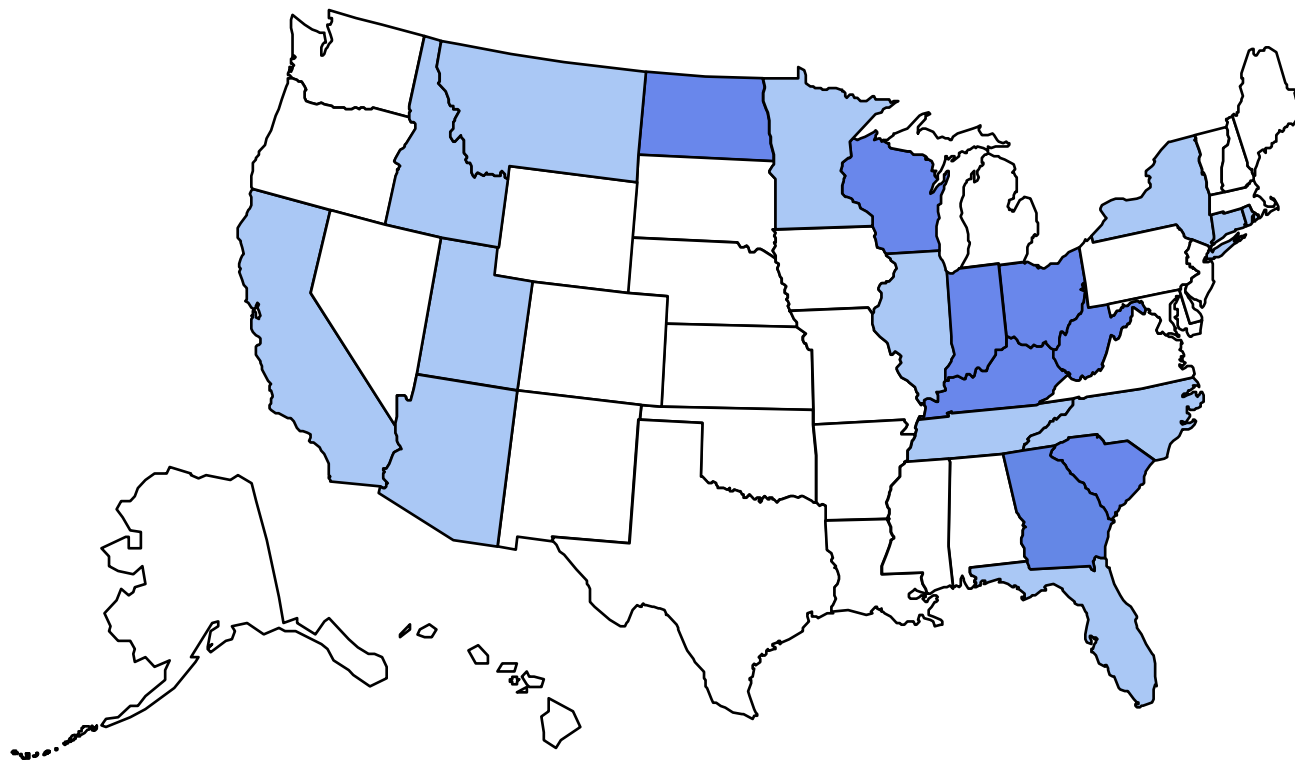
# The Current Situation

---

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

## Obesity Trends\* Among U.S. Adults BRFSS, 1985

(\*BMI  $\geq 30$ , or  $\sim 30$  lbs. overweight for 5' 4" person)

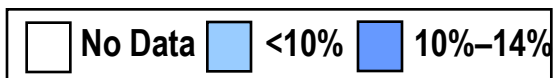
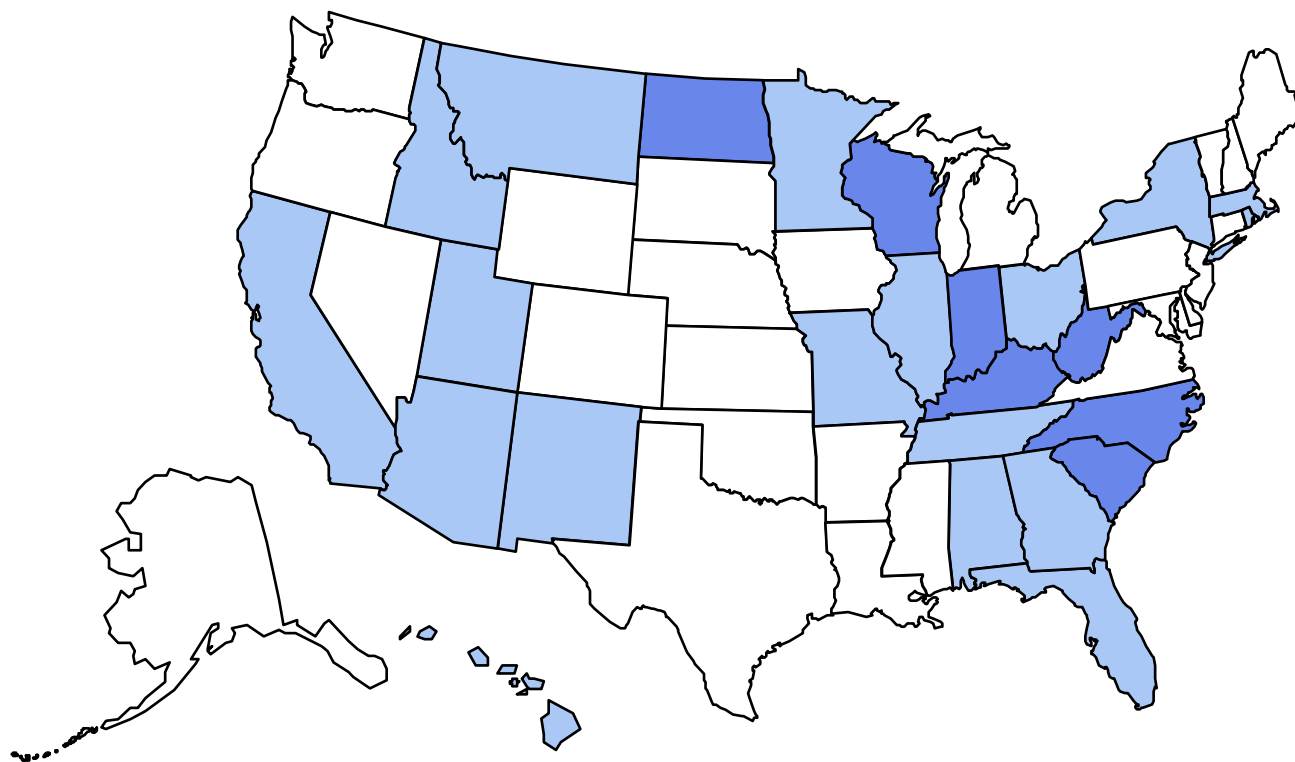


Source: CDC Behavioral Risk Factor Surveillance System.

# Obesity Trends\* Among U.S. Adults

## BRFSS, 1986

(\*BMI  $\geq 30$ , or  $\sim 30$  lbs. overweight for 5' 4" person)

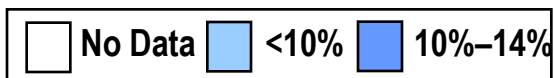
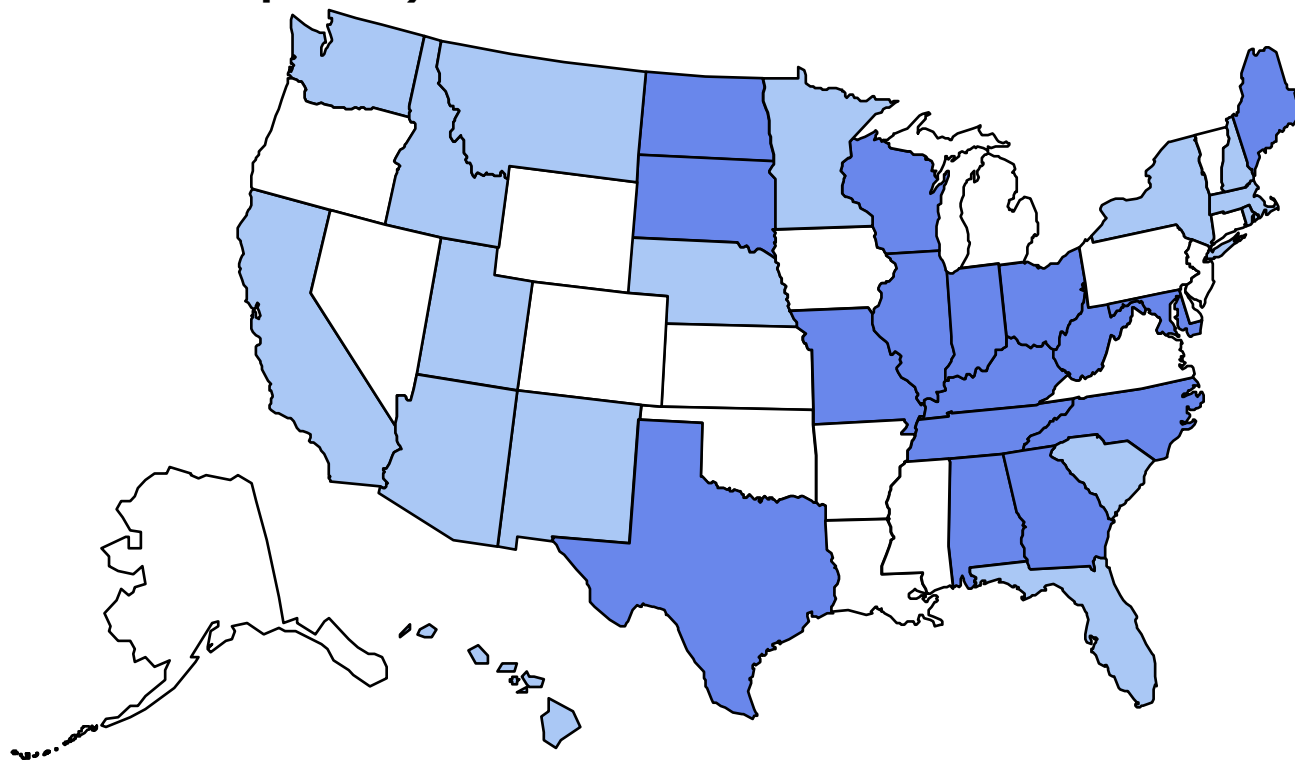


Source: CDC Behavioral Risk Factor Surveillance System.

# Obesity Trends\* Among U.S. Adults

## BRFSS, 1987

(\*BMI  $\geq 30$ , or  $\sim 30$  lbs. overweight for 5' 4" person)

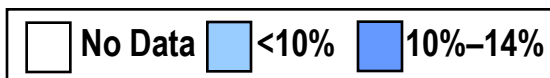
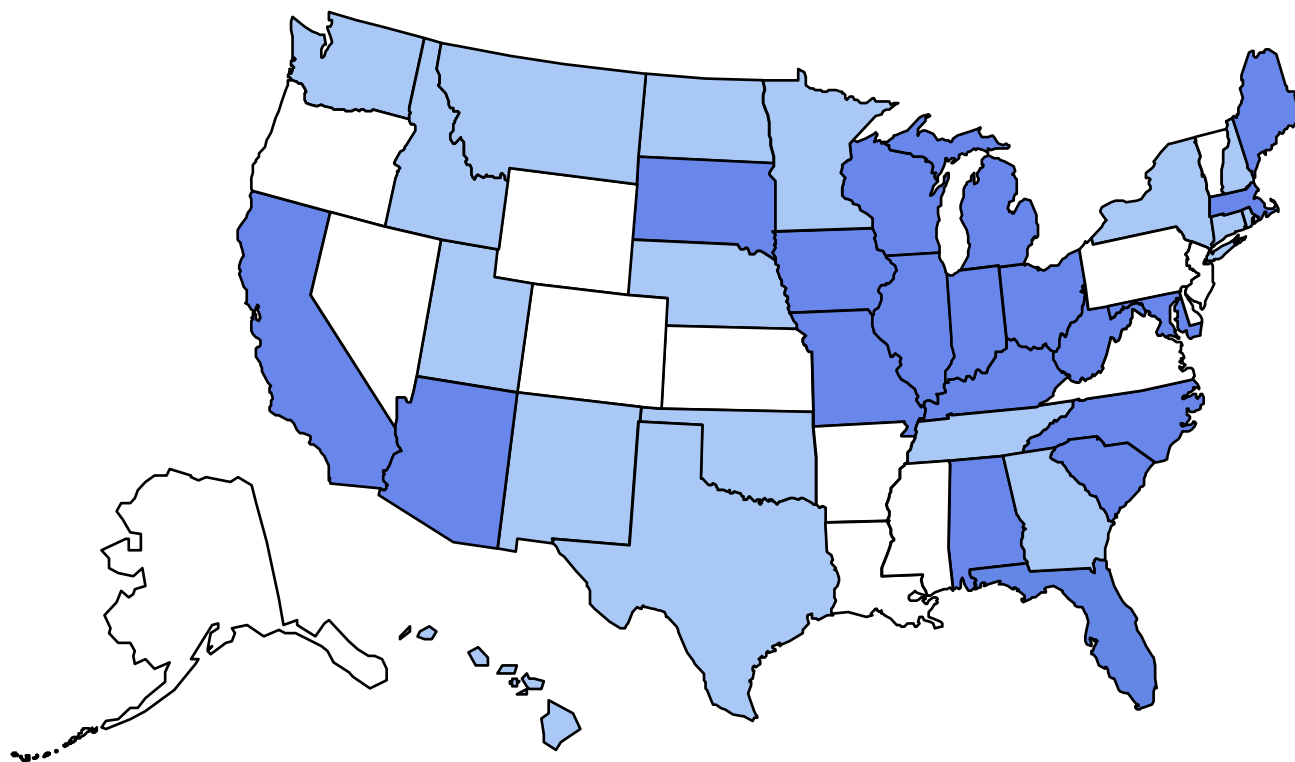


Source: CDC Behavioral Risk Factor Surveillance System.

# Obesity Trends\* Among U.S. Adults

## BRFSS, 1988

(\*BMI  $\geq 30$ , or  $\sim 30$  lbs. overweight for 5' 4" person)

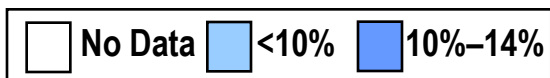
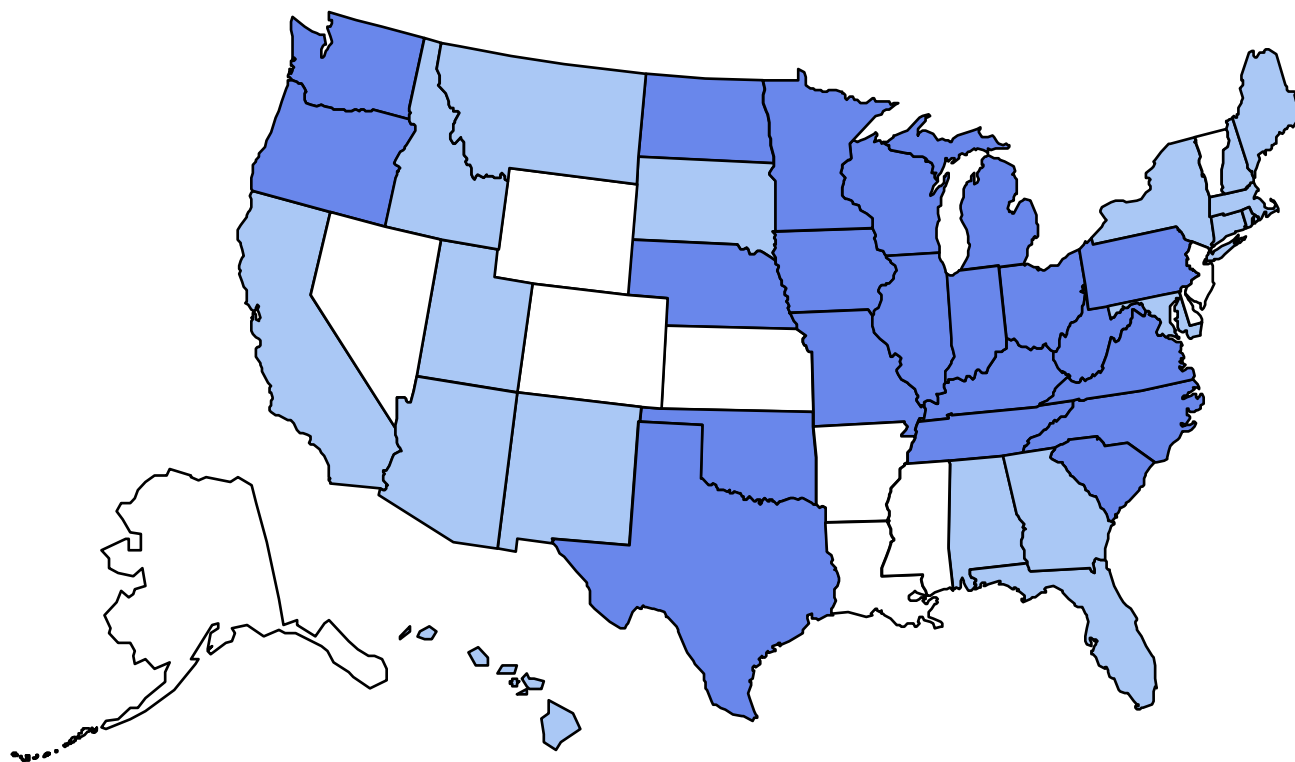


Source: CDC Behavioral Risk Factor Surveillance System.

# Obesity Trends\* Among U.S. Adults

## BRFSS, 1989

(\*BMI  $\geq 30$ , or  $\sim 30$  lbs. overweight for 5' 4" person)



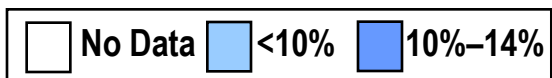
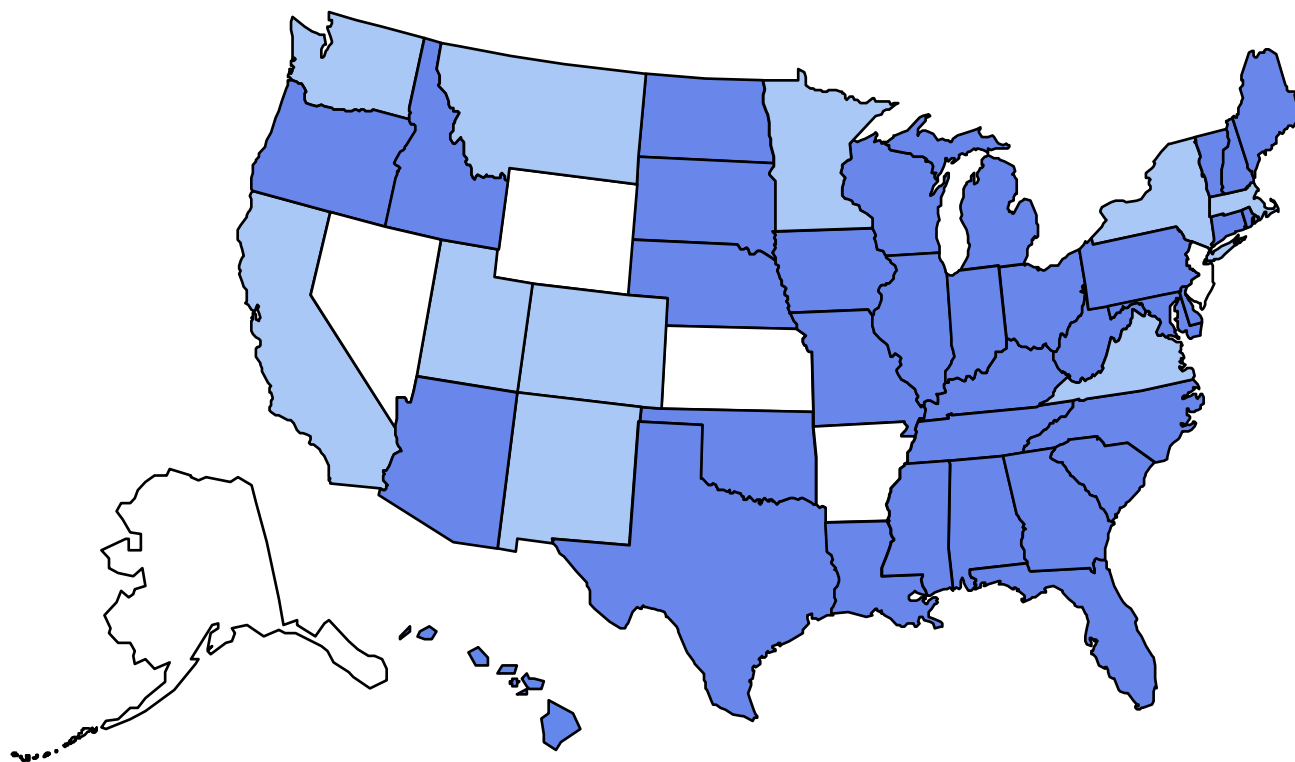
Source: CDC Behavioral Risk Factor Surveillance System.



# Obesity Trends\* Among U.S. Adults

## BRFSS, 1990

(\*BMI  $\geq 30$ , or  $\sim 30$  lbs. overweight for 5' 4" person)

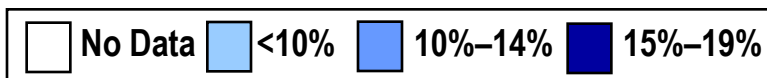
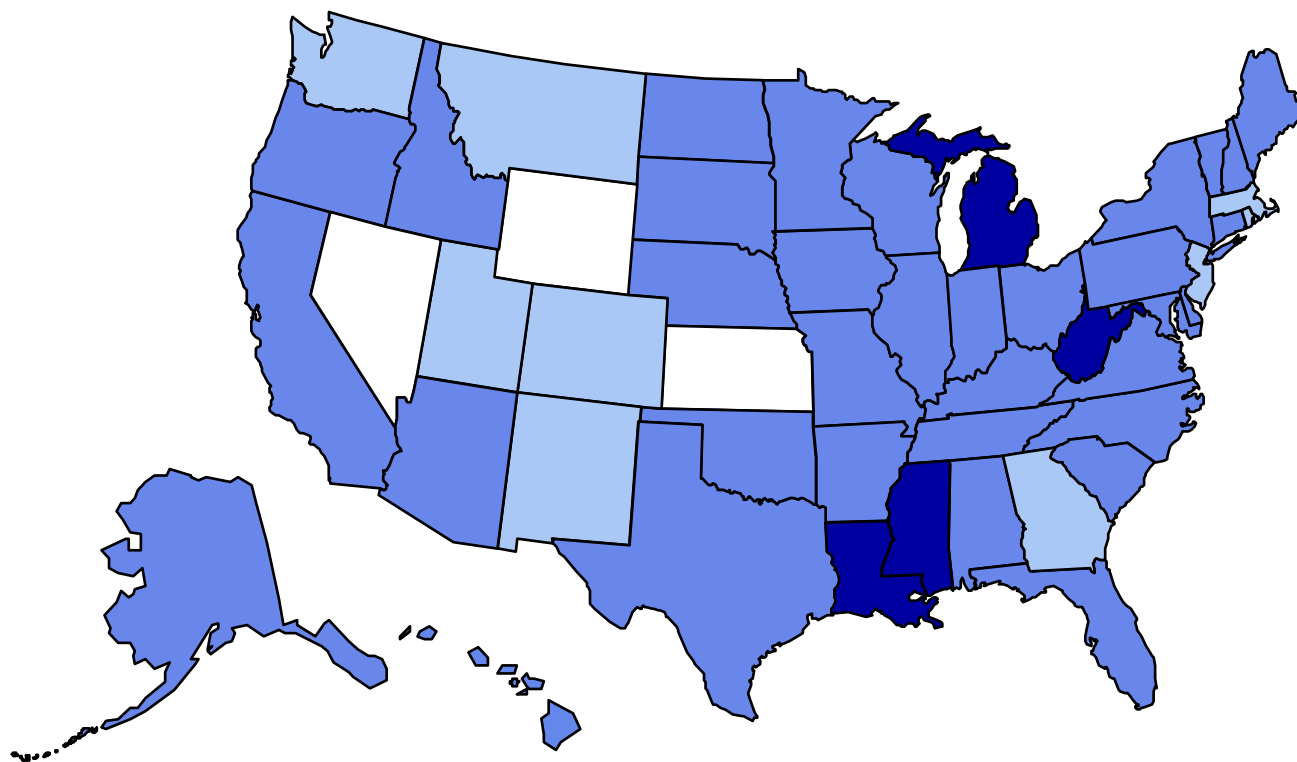


Source: CDC Behavioral Risk Factor Surveillance System.

# Obesity Trends\* Among U.S. Adults

## BRFSS, 1991

(\*BMI  $\geq 30$ , or  $\sim 30$  lbs. overweight for 5' 4" person)

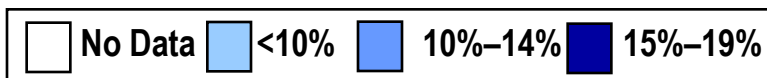
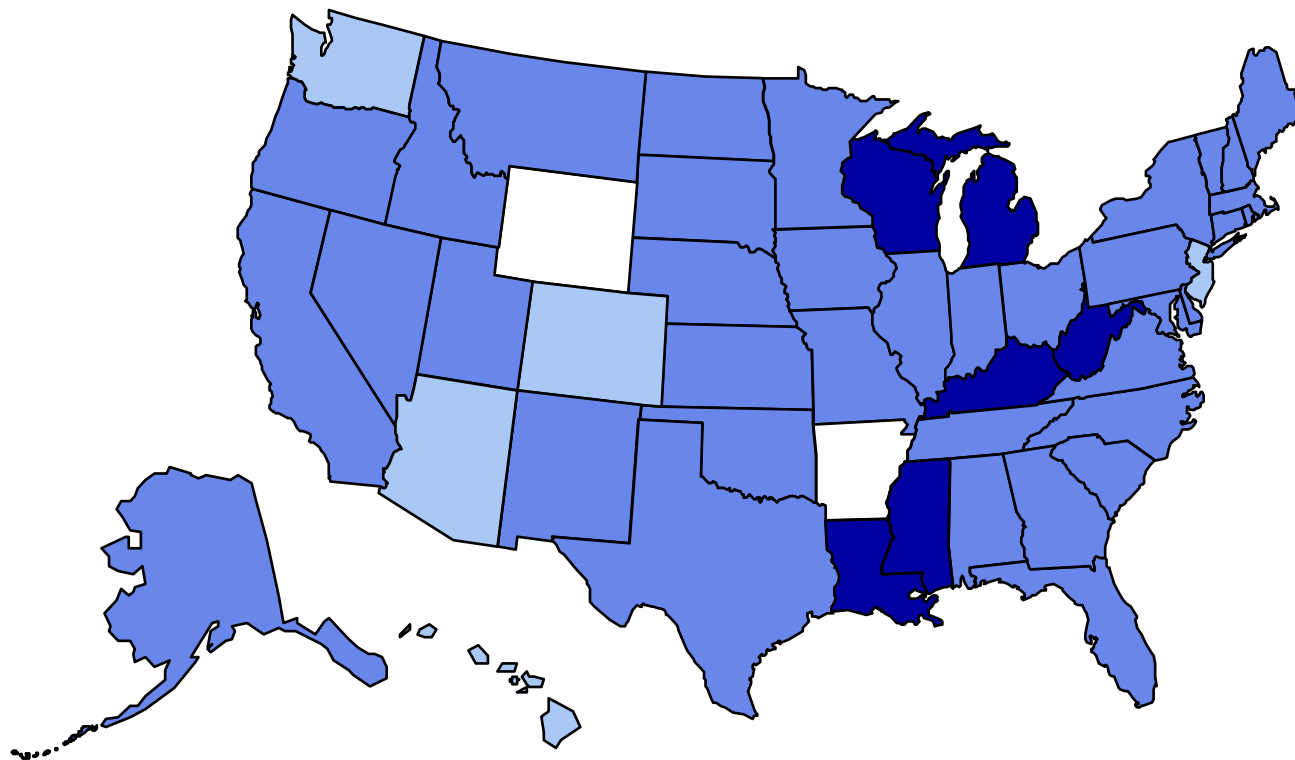


Source: CDC Behavioral Risk Factor Surveillance System.

# Obesity Trends\* Among U.S. Adults

## BRFSS, 1992

(\*BMI  $\geq 30$ , or  $\sim 30$  lbs. overweight for 5' 4" person)

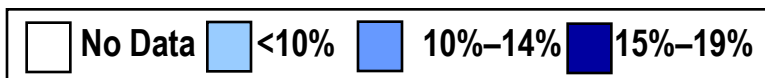
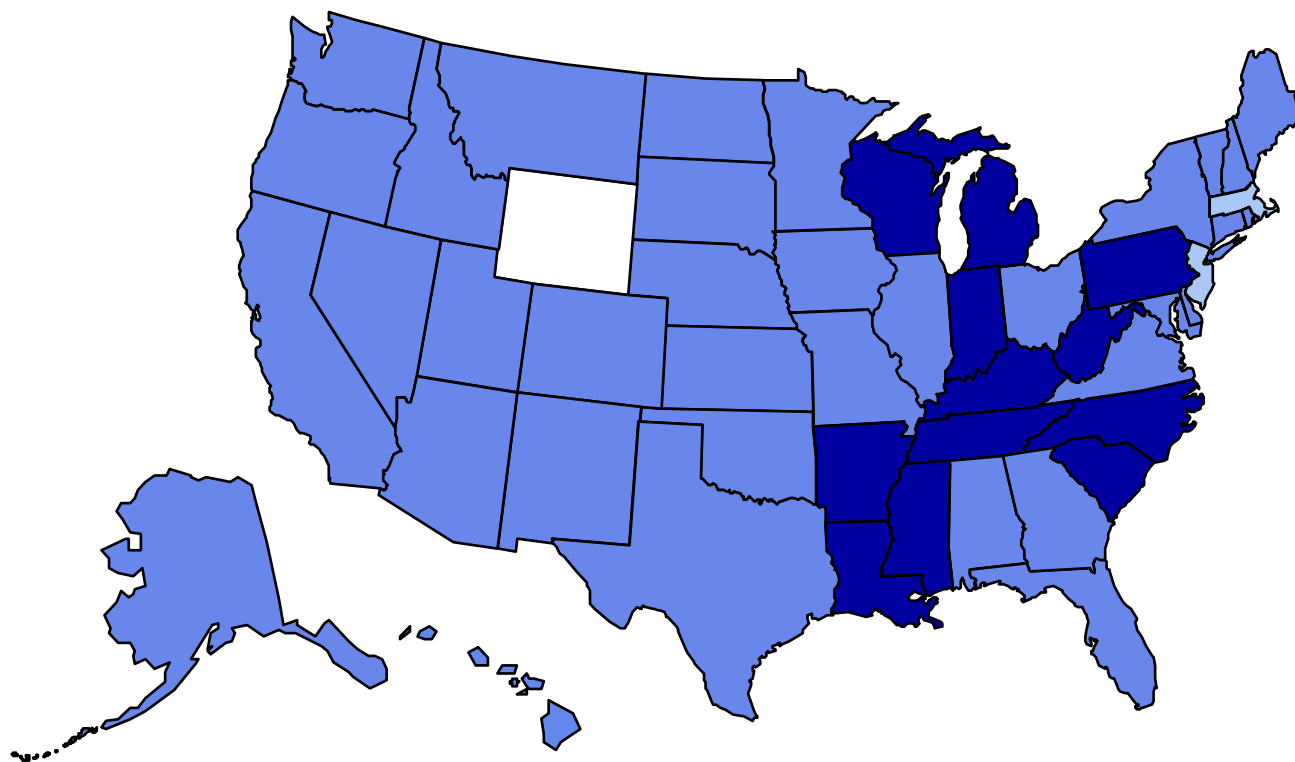


Source: CDC Behavioral Risk Factor Surveillance System.

# Obesity Trends\* Among U.S. Adults

## BRFSS, 1993

(\*BMI  $\geq 30$ , or  $\sim 30$  lbs. overweight for 5' 4" person)

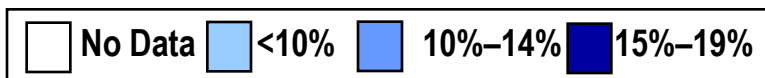
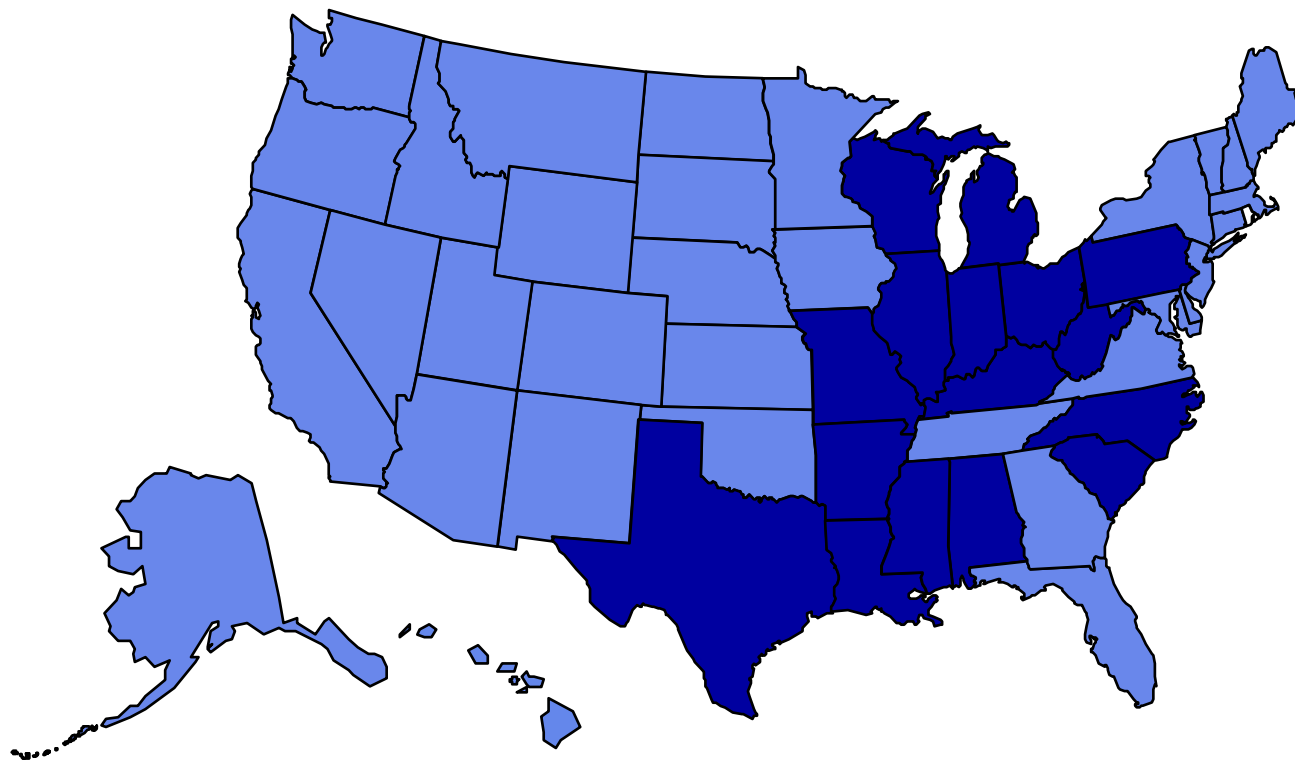


Source: CDC Behavioral Risk Factor Surveillance System.

# Obesity Trends\* Among U.S. Adults

## BRFSS, 1994

(\*BMI  $\geq 30$ , or  $\sim 30$  lbs. overweight for 5' 4" person)

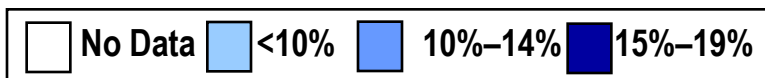
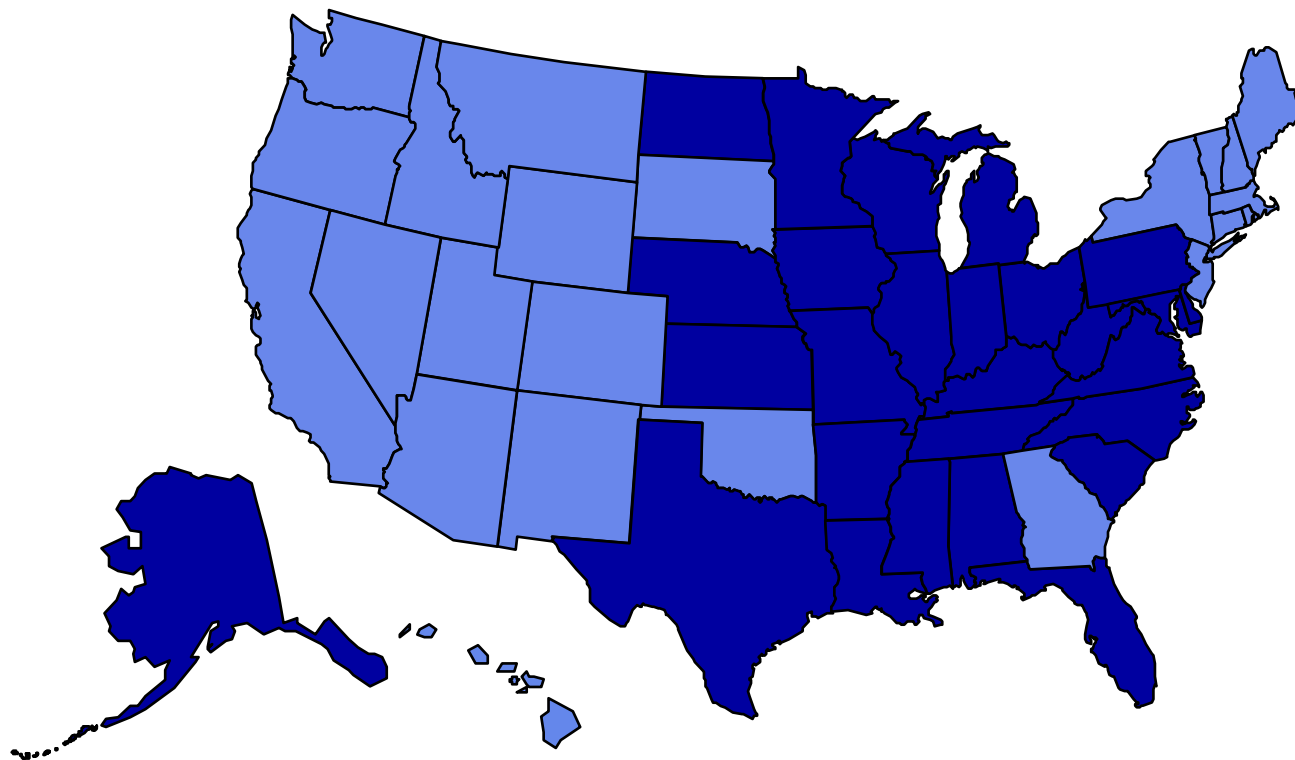


Source: CDC Behavioral Risk Factor Surveillance System.

# Obesity Trends\* Among U.S. Adults

## BRFSS, 1995

(\*BMI  $\geq 30$ , or  $\sim 30$  lbs. overweight for 5' 4" person)

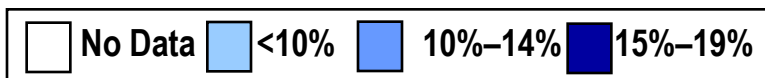
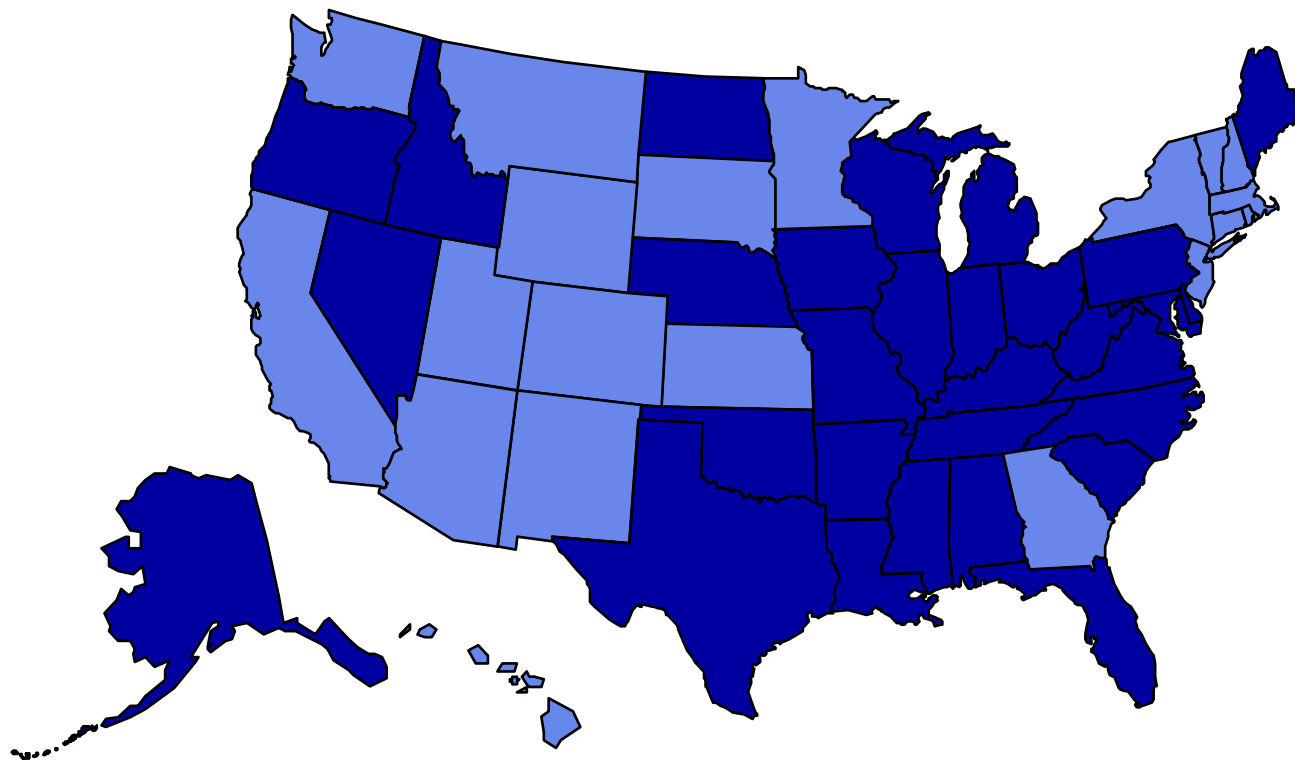


Source: CDC Behavioral Risk Factor Surveillance System.

# Obesity Trends\* Among U.S. Adults

## BRFSS, 1996

(\*BMI  $\geq 30$ , or  $\sim 30$  lbs. overweight for 5' 4" person)

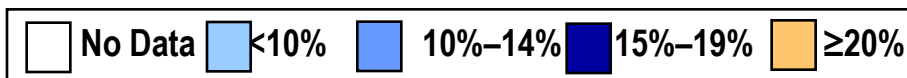
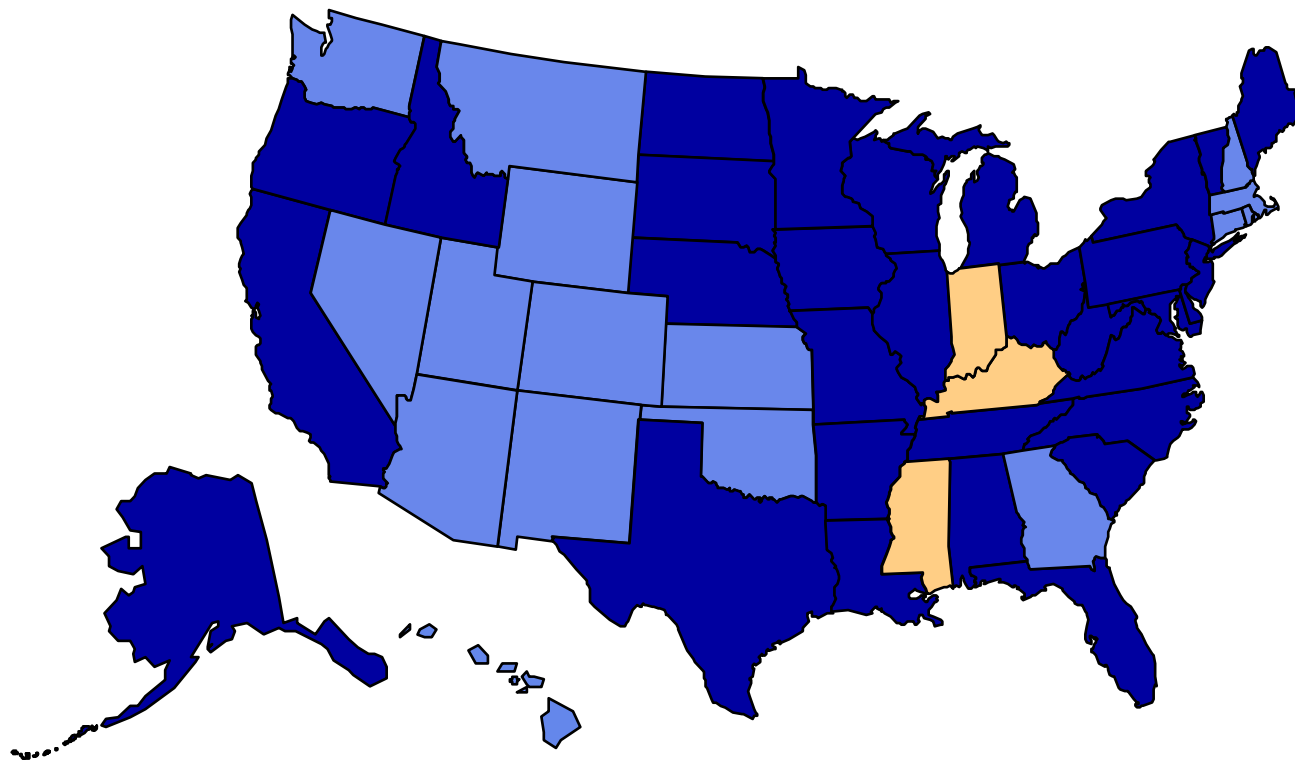


Source: CDC Behavioral Risk Factor Surveillance System.

# Obesity Trends\* Among U.S. Adults

## BRFSS, 1997

(\*BMI  $\geq 30$ , or  $\sim 30$  lbs. overweight for 5' 4" person)



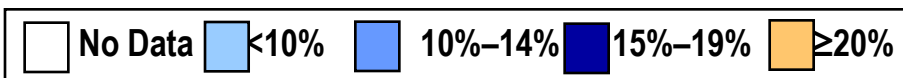
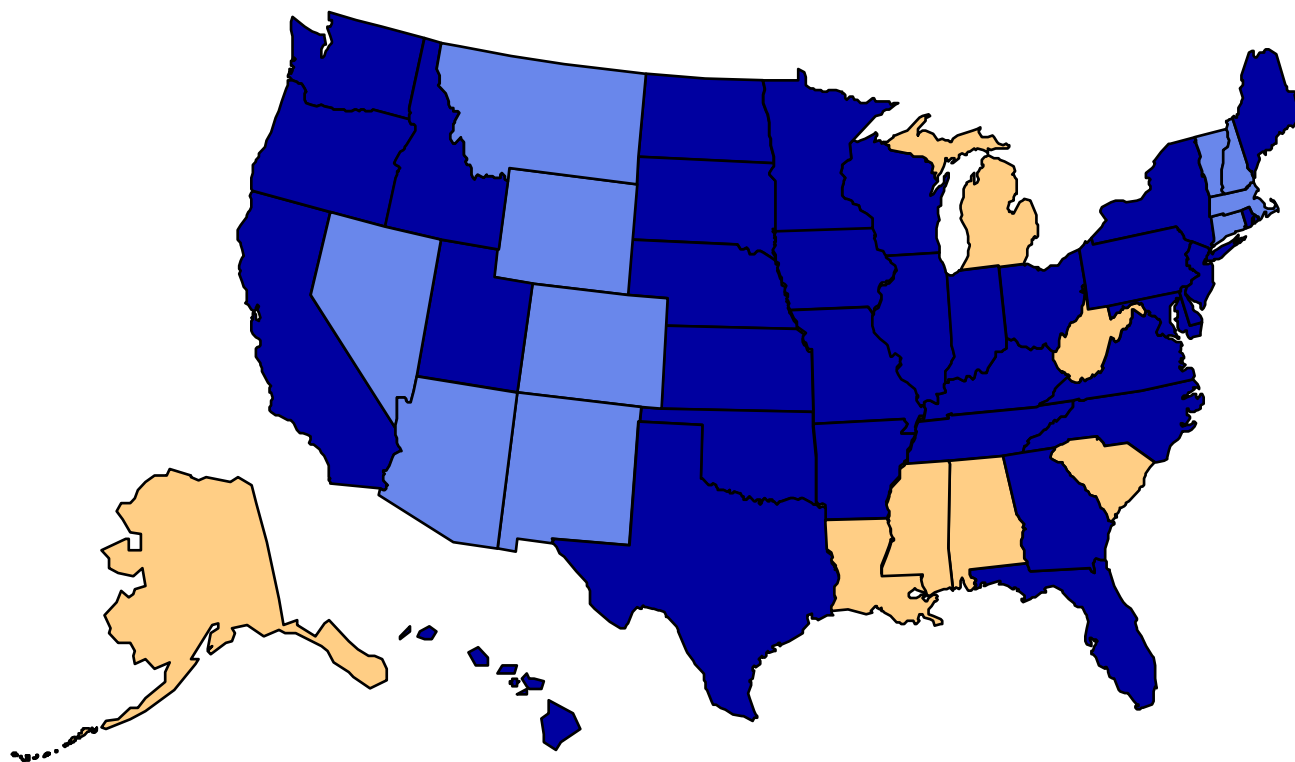
Source: CDC Behavioral Risk Factor Surveillance System.



# Obesity Trends\* Among U.S. Adults

## BRFSS, 1998

(\*BMI  $\geq 30$ , or  $\sim 30$  lbs. overweight for 5' 4" person)

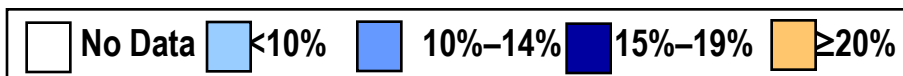
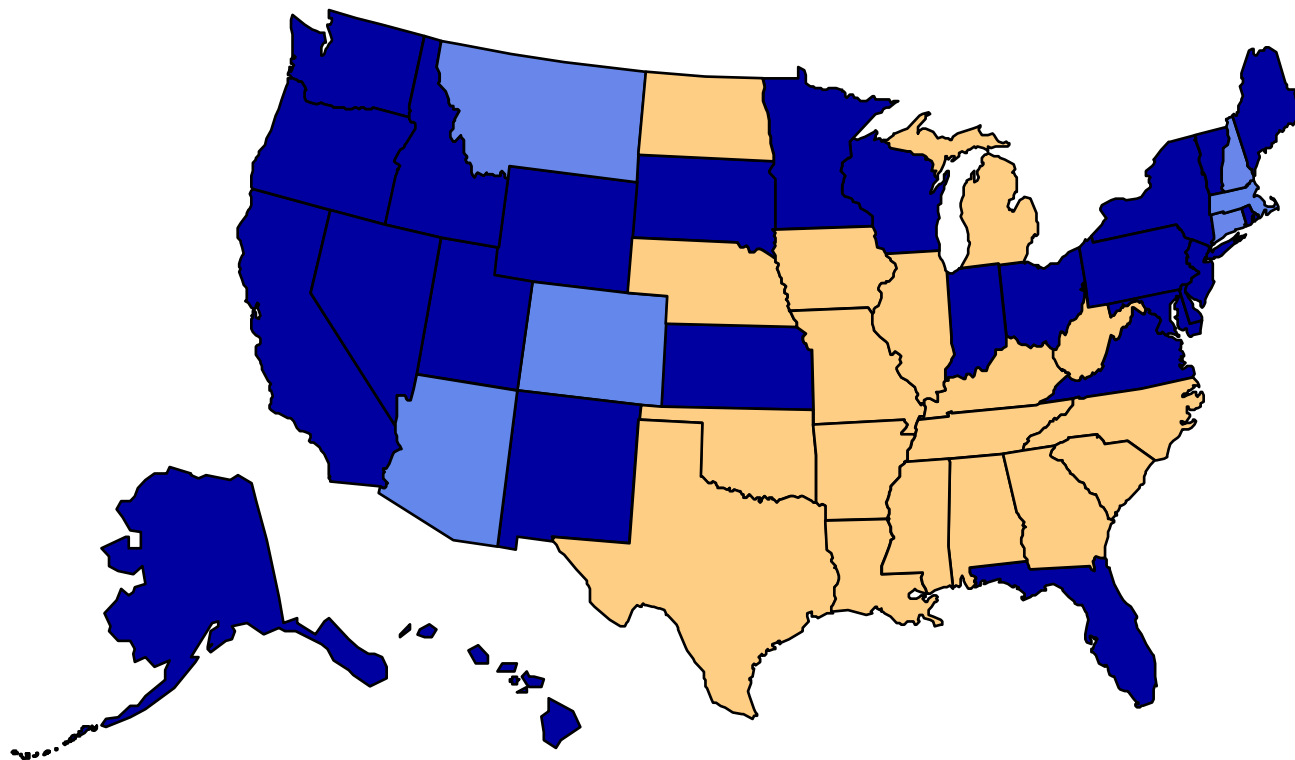


Source: CDC Behavioral Risk Factor Surveillance System.

# Obesity Trends\* Among U.S. Adults

## BRFSS, 1999

(\*BMI  $\geq 30$ , or  $\sim 30$  lbs. overweight for 5' 4" person)

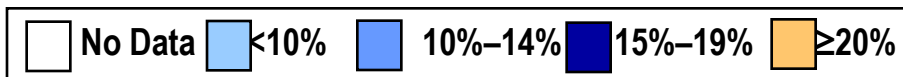
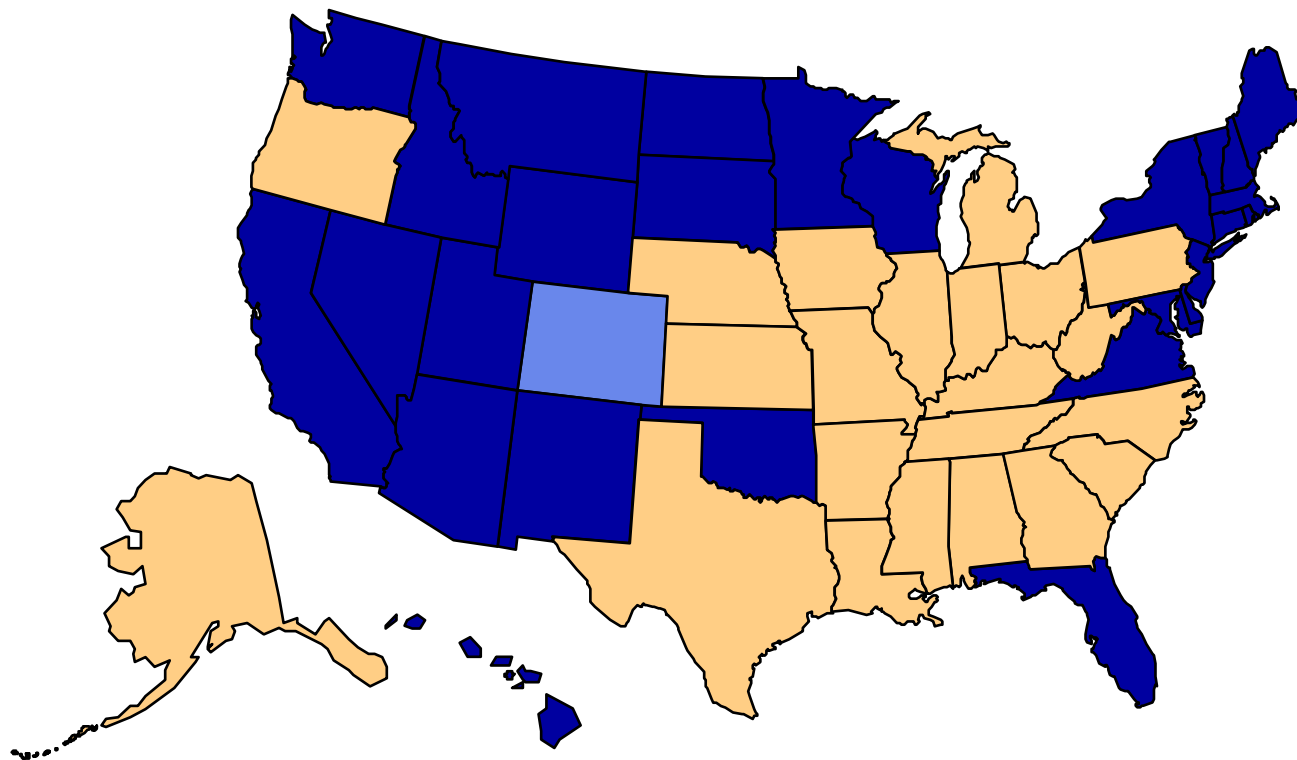


Source: CDC Behavioral Risk Factor Surveillance System.

# Obesity Trends\* Among U.S. Adults

## BRFSS, 2000

(\*BMI  $\geq 30$ , or  $\sim 30$  lbs. overweight for 5' 4" person)

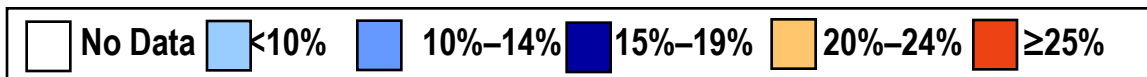
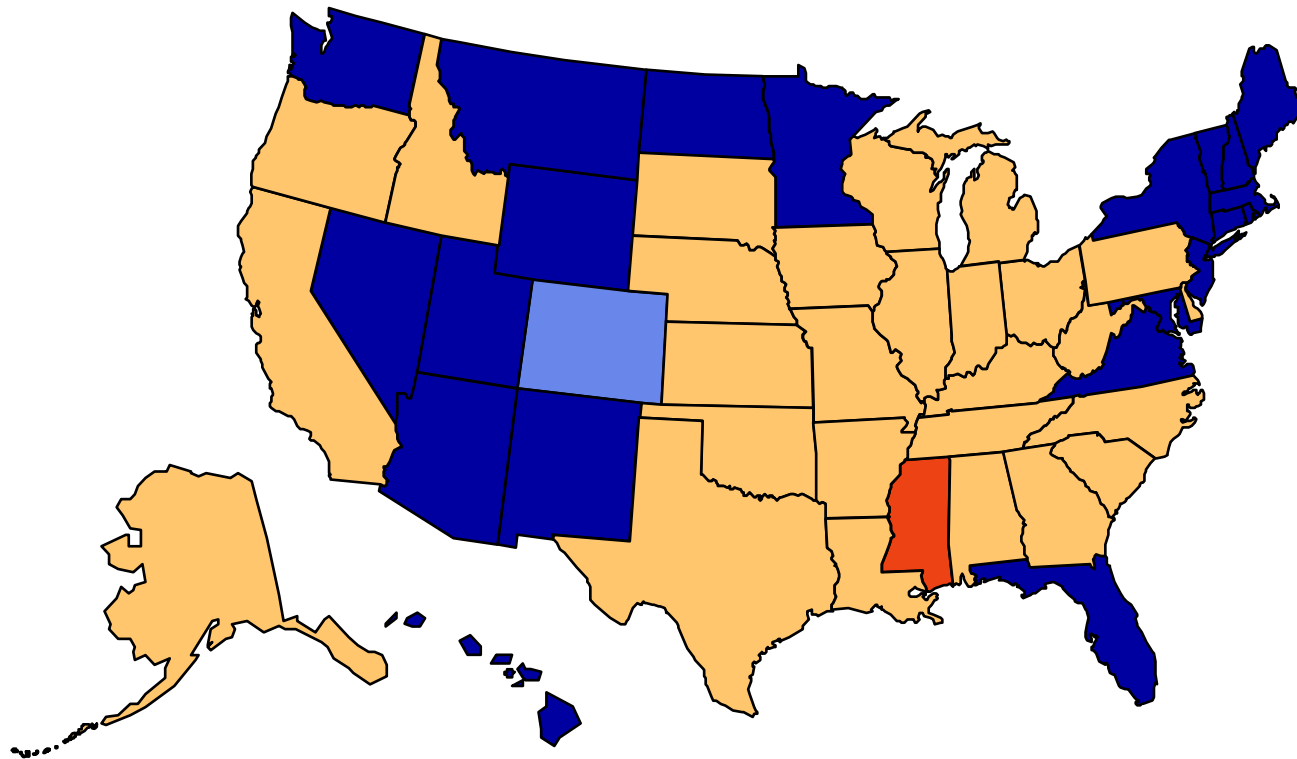


Source: CDC Behavioral Risk Factor Surveillance System.

# Obesity Trends\* Among U.S. Adults

## BRFSS, 2001

(\*BMI  $\geq 30$ , or  $\sim 30$  lbs. overweight for 5' 4" person)

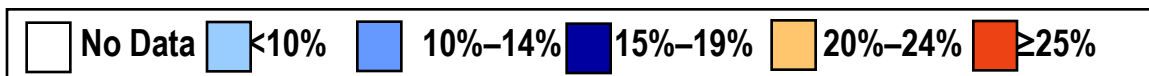
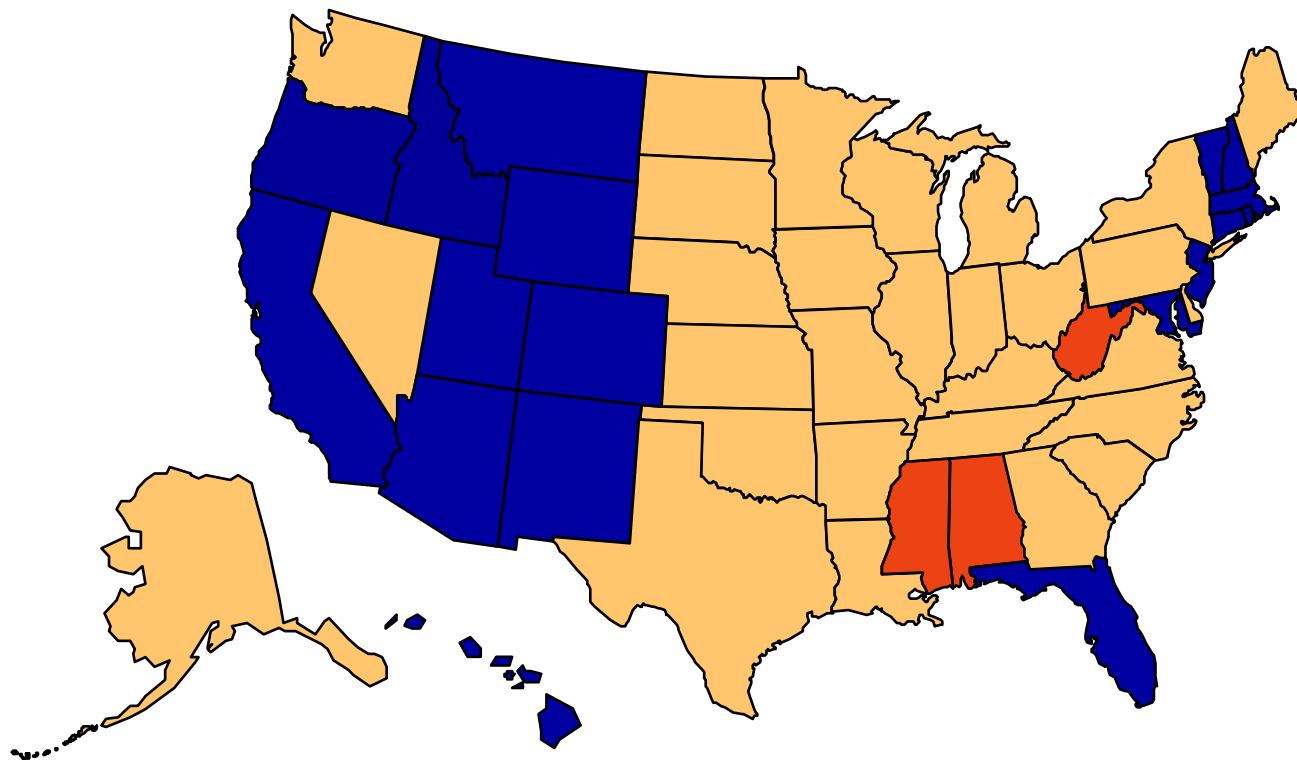


Source: CDC Behavioral Risk Factor Surveillance System.

# Obesity Trends\* Among U.S. Adults

## BRFSS, 2002

(\*BMI  $\geq 30$ , or  $\sim 30$  lbs. overweight for 5' 4" person)

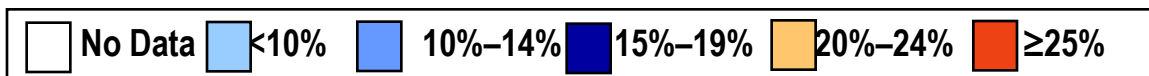
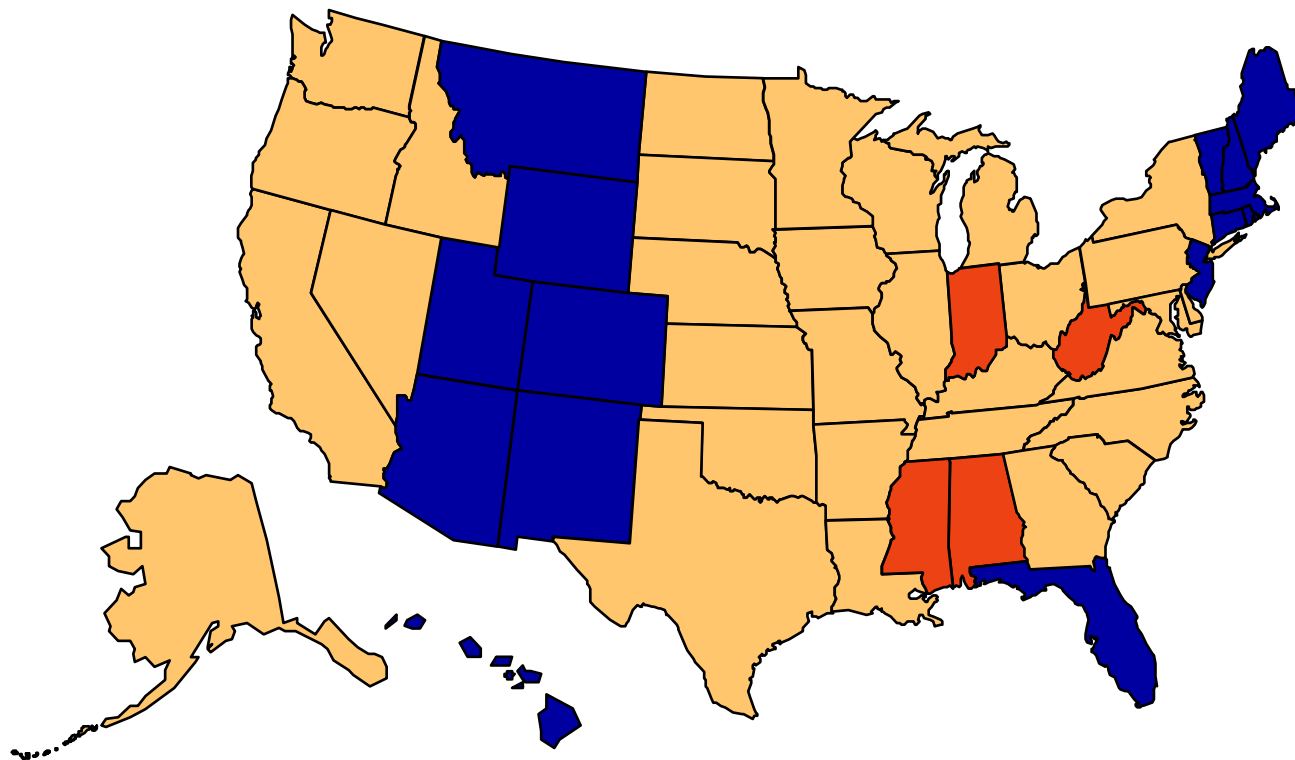


Source: CDC Behavioral Risk Factor Surveillance System.

# Obesity Trends\* Among U.S. Adults

## BRFSS, 2003

(\*BMI  $\geq 30$ , or  $\sim 30$  lbs. overweight for 5' 4" person)

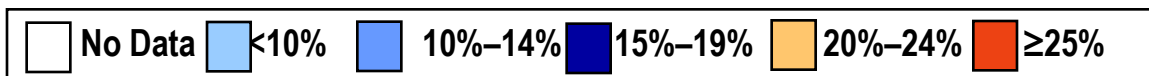
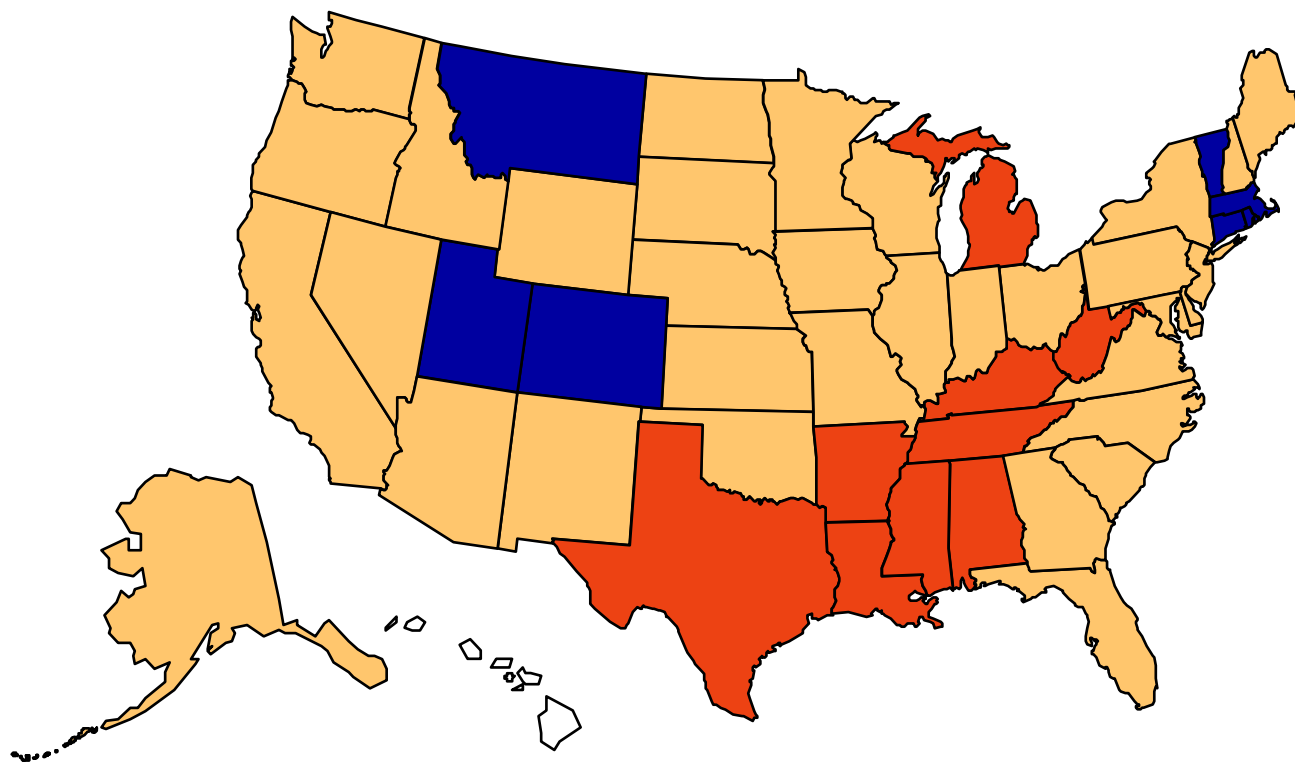


Source: CDC Behavioral Risk Factor Surveillance System.

# Obesity Trends\* Among U.S. Adults

## BRFSS, 2004

(\*BMI  $\geq 30$ , or  $\sim 30$  lbs. overweight for 5' 4" person)

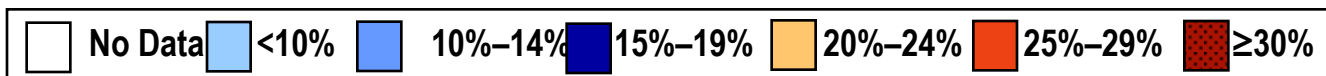
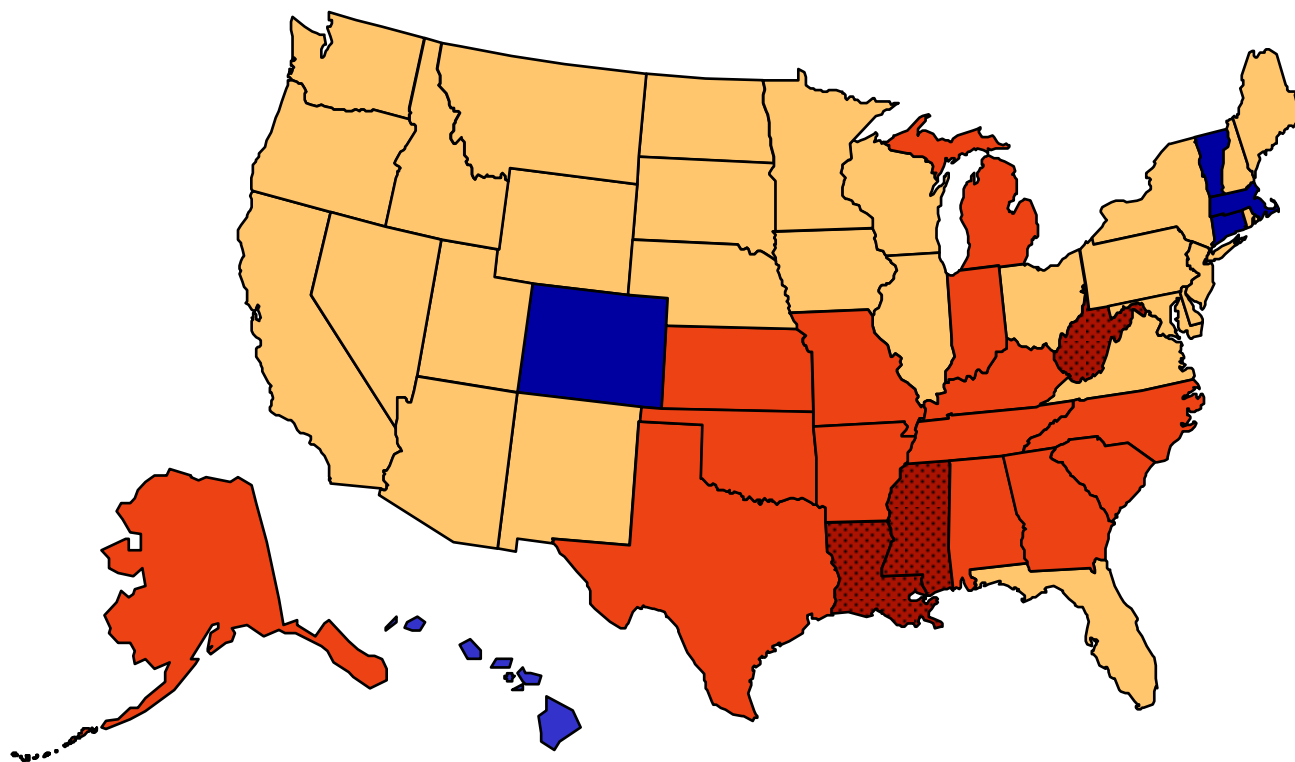


Source: Behavioral Risk Factor Surveillance System, CDC.

# Obesity Trends\* Among U.S. Adults

## BRFSS, 2005

(\*BMI  $\geq 30$ , or  $\sim 30$  lbs. overweight for 5' 4" person)



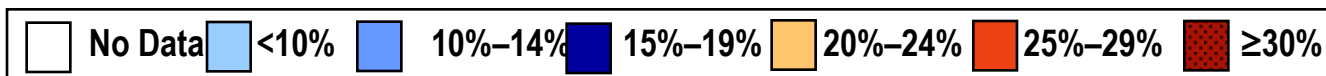
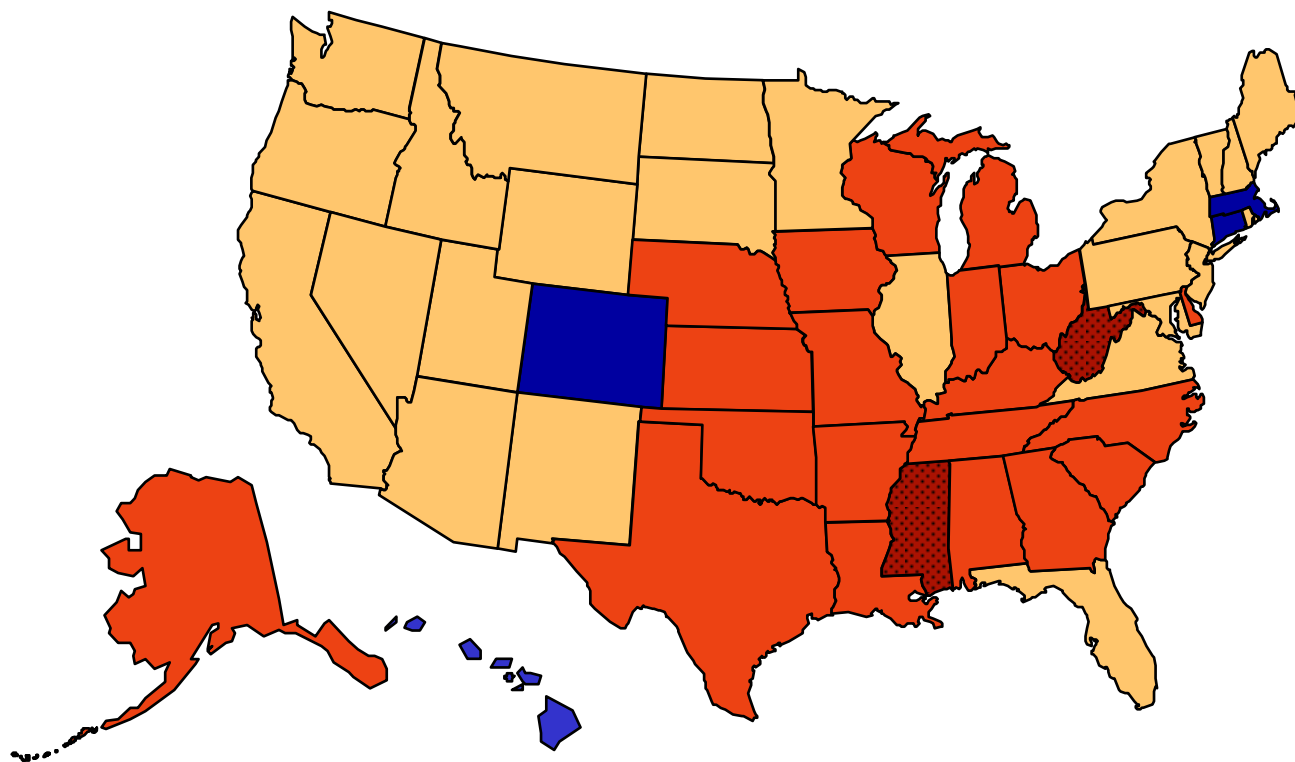
Source: Behavioral Risk Factor Surveillance System, CDC.



# Obesity Trends\* Among U.S. Adults

## BRFSS, 2006

(\*BMI  $\geq 30$ , or  $\sim 30$  lbs. overweight for 5' 4" person)

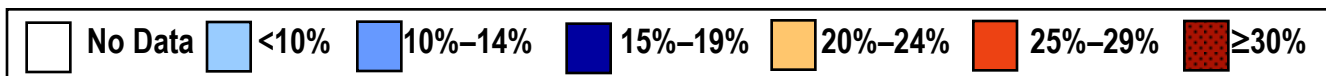
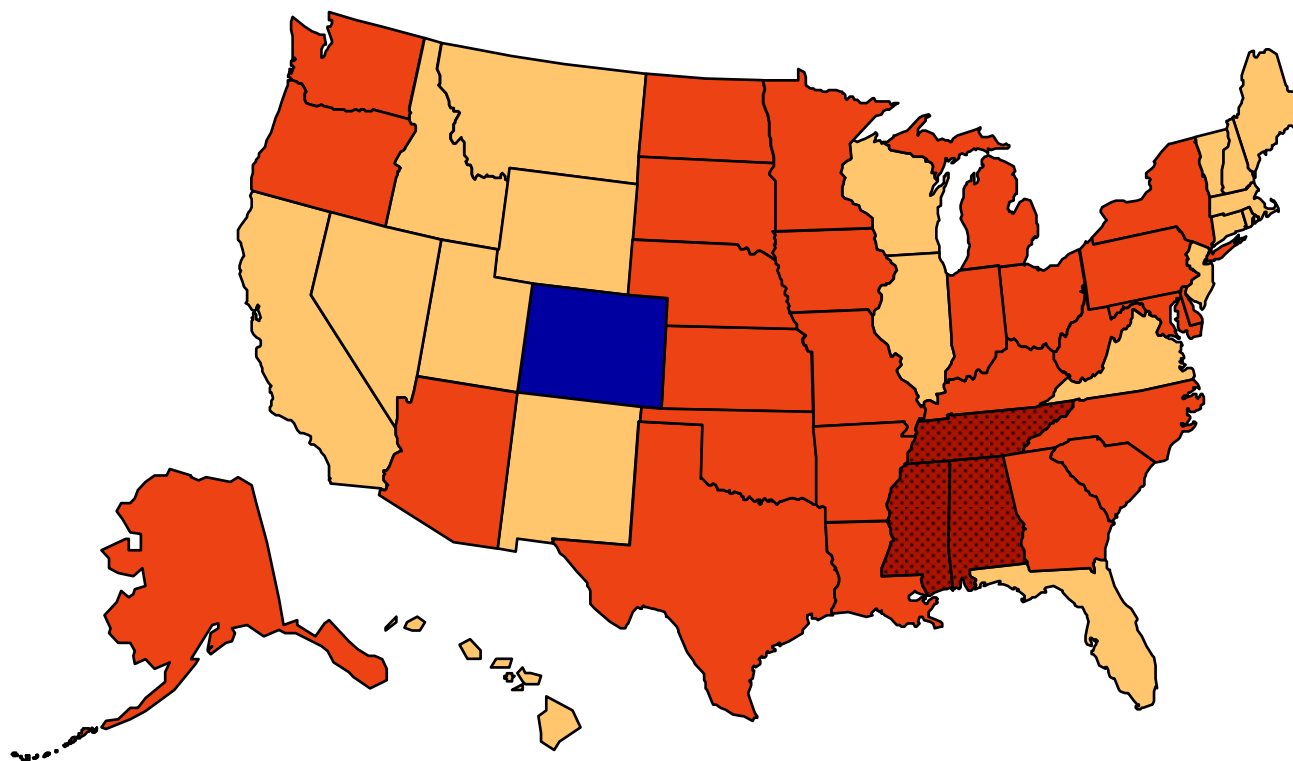


Source: Behavioral Risk Factor Surveillance System, CDC.

# Obesity Trends\* Among U.S. Adults

## BRFSS, 2007

(\*BMI  $\geq 30$ , or  $\sim 30$  lbs. overweight for 5' 4" person)

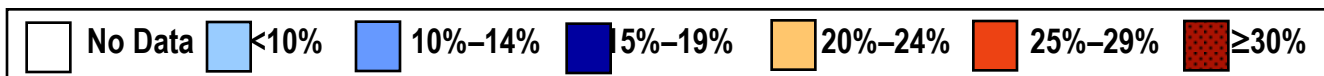
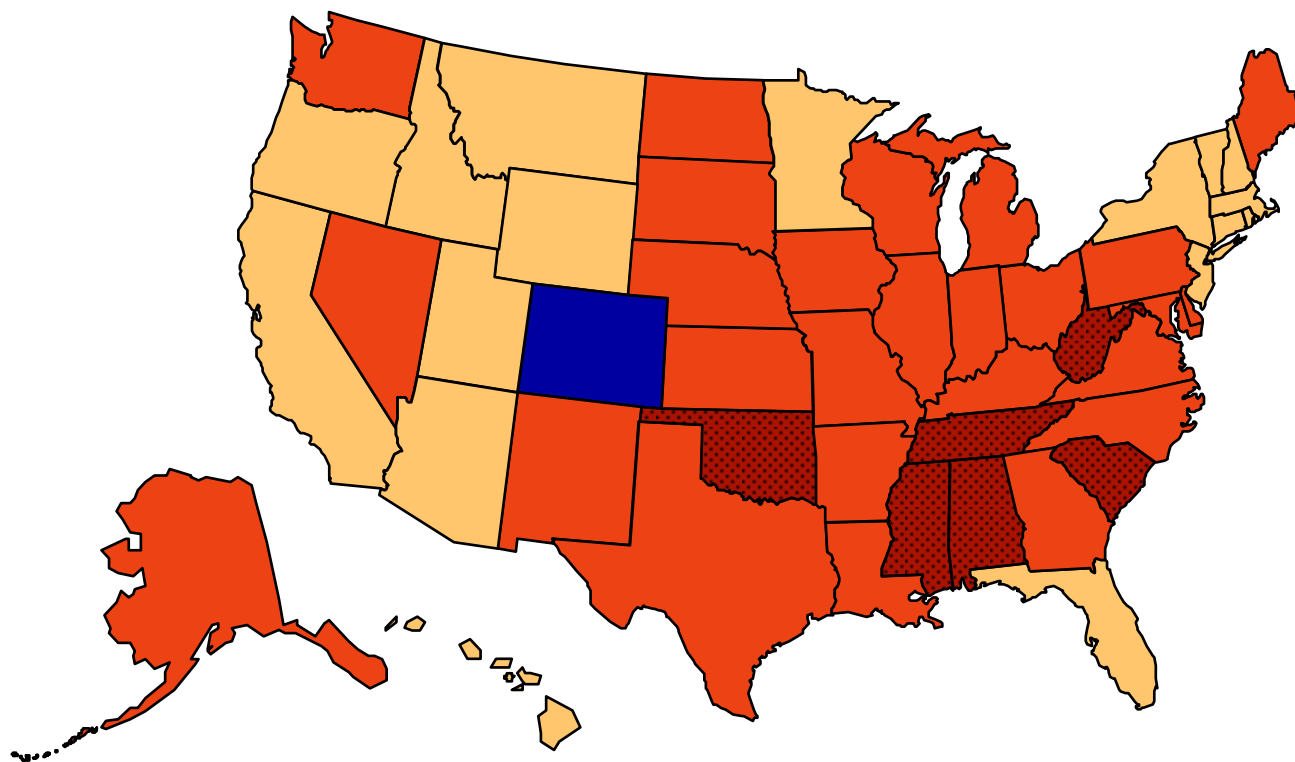


Source: Behavioral Risk Factor Surveillance System, CDC.

# Obesity Trends\* Among U.S. Adults

## BRFSS, 2008

(\*BMI  $\geq 30$ , or  $\sim 30$  lbs. overweight for 5' 4" person)



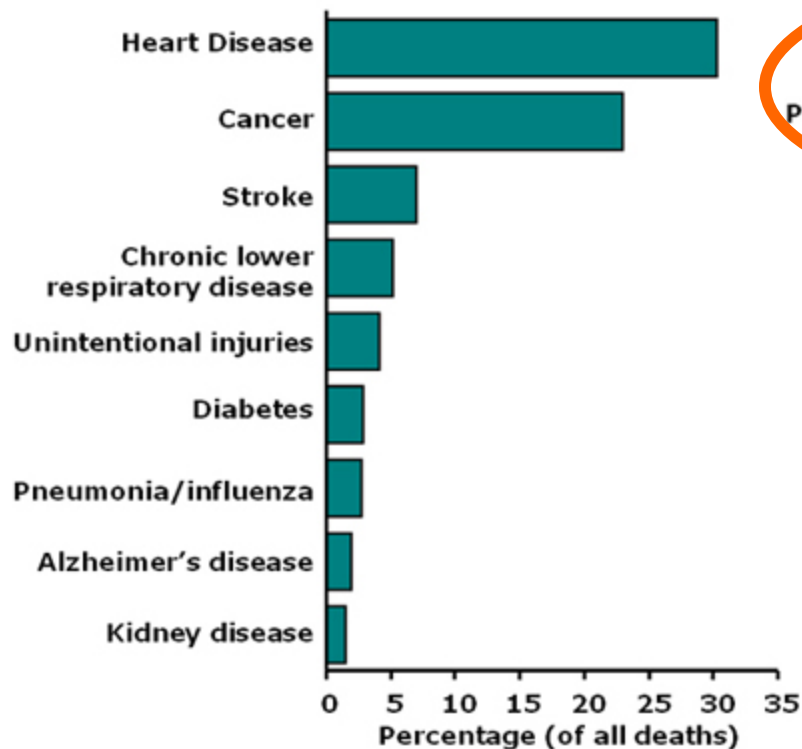
Source: Behavioral Risk Factor Surveillance System, CDC.

# The Current Situation

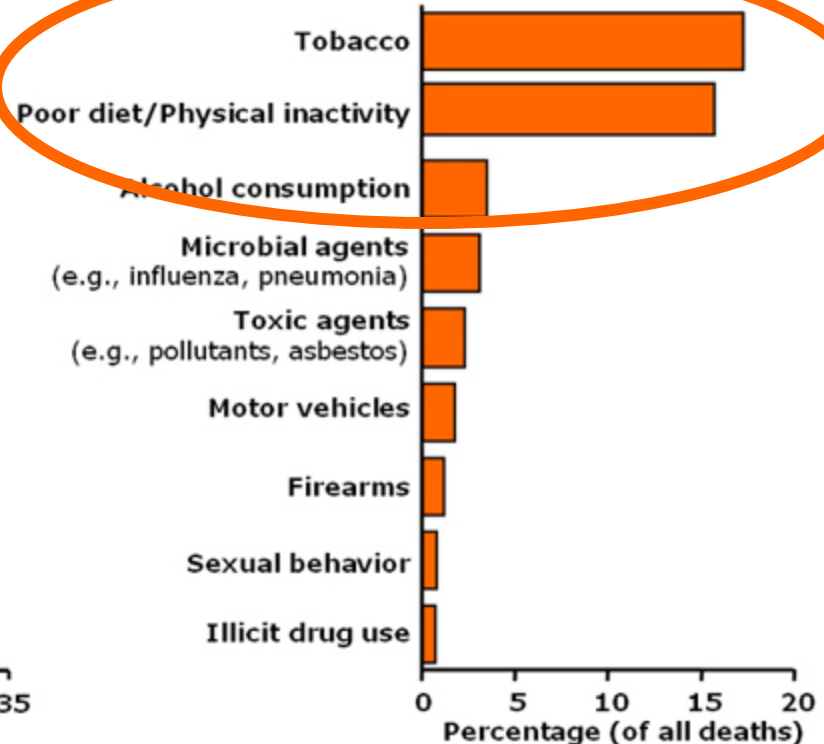
---

- ❑ 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....

### Leading Causes of Death\* United States, 2000



### Actual Causes of Death† United States, 2000



\* Miniño AM, Arias E, Kochanek KD, Murphy SL, Smith BL. Deaths: final data for 2000. National Vital Statistics Reports 2002; 50(15):1-120.

† Mokdad AH, Marks JS, Stroup DF, Gerberding JL. Actual causes of death in the United States, 2000. JAMA. 2004;291(10):1238-1246.

# The Current Situation

---

- ❑ Since 1970, the prevalence of obesity has doubled for preschool children
  - ❑ And tripled for school-aged children
- ❑ Currently, 37% of school aged children are obese or overweight.

Strauss RS, Pollack HA. JAMA, 2001;286:2845-8

Ogden et al JAMA 2006;295:1549-55

Margellos-Anast et al; Public Health Reports. 123;117-125

# The Current Situation

---

- ❑ With a focus on obesity alone, 19% of school aged children are obese.
  
- ❑ Disproportionate numbers nationally:
  - ❑ African Americans 22%
  - ❑ Mexican Americans 23%
  - ❑ Non-Hispanic white 18%

Ogden et al JAMA 2006;295:1549-55

Margellos-Anast et al; Public Health Reports. 123;117-125

# The Social Ecological Model

---

- ❑ School aged kids (age 8 – 18)
  - ❑ Total 6 hours a day of media
  - ❑ 3 hours daily TV
  
- ❑ Young Children (6 months to 6 years)
  - ❑ 1/3 have TV in their room

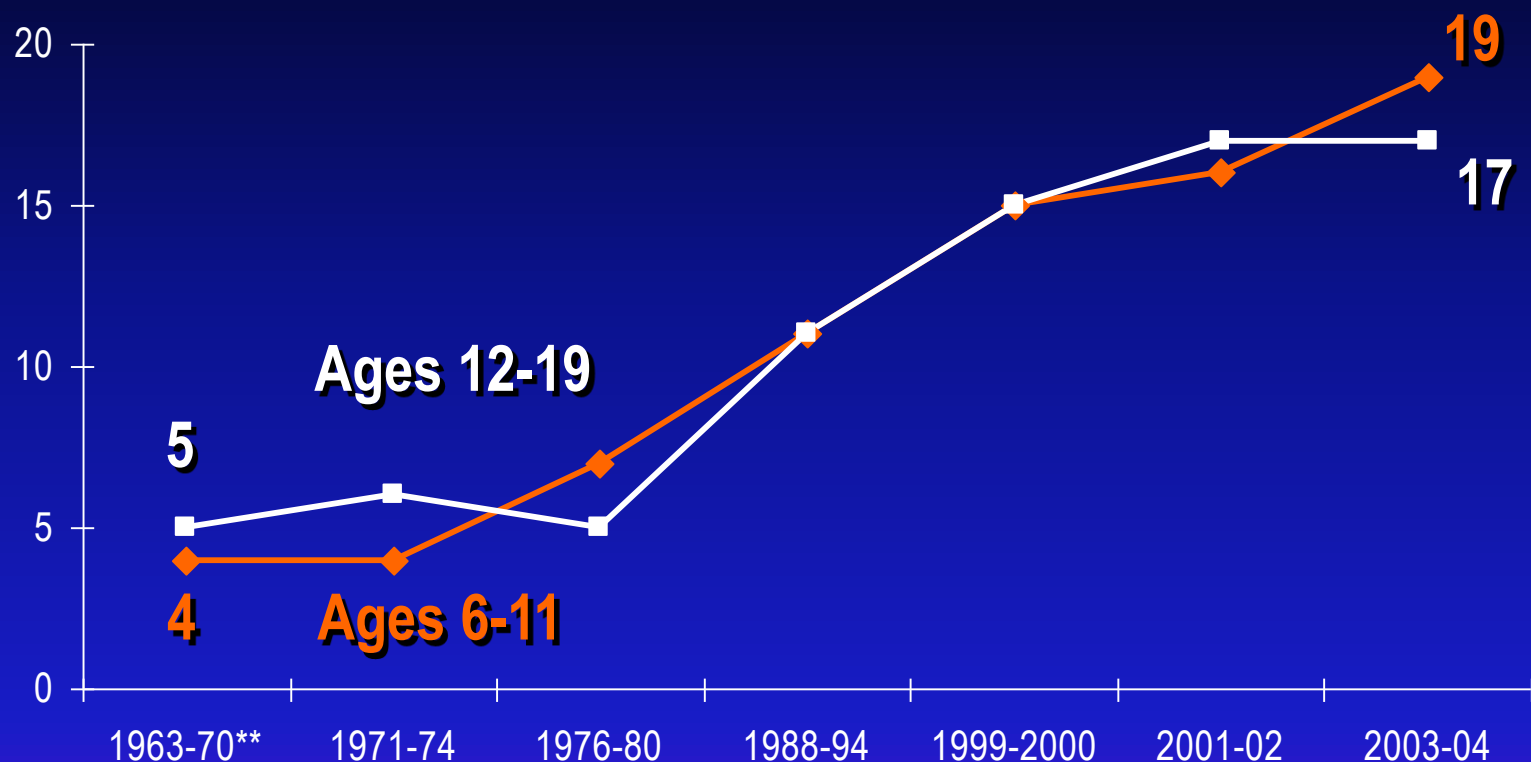


# Impact of Media Exposure on Children's Health

---

- Average weekly time spent:
  - With parents: 17 hours
  - At school: 30 hours
  - With media: 45 hours
  
- Media exposure directly and causally associated with negative health outcomes

# Overweight Children and Adolescents\*

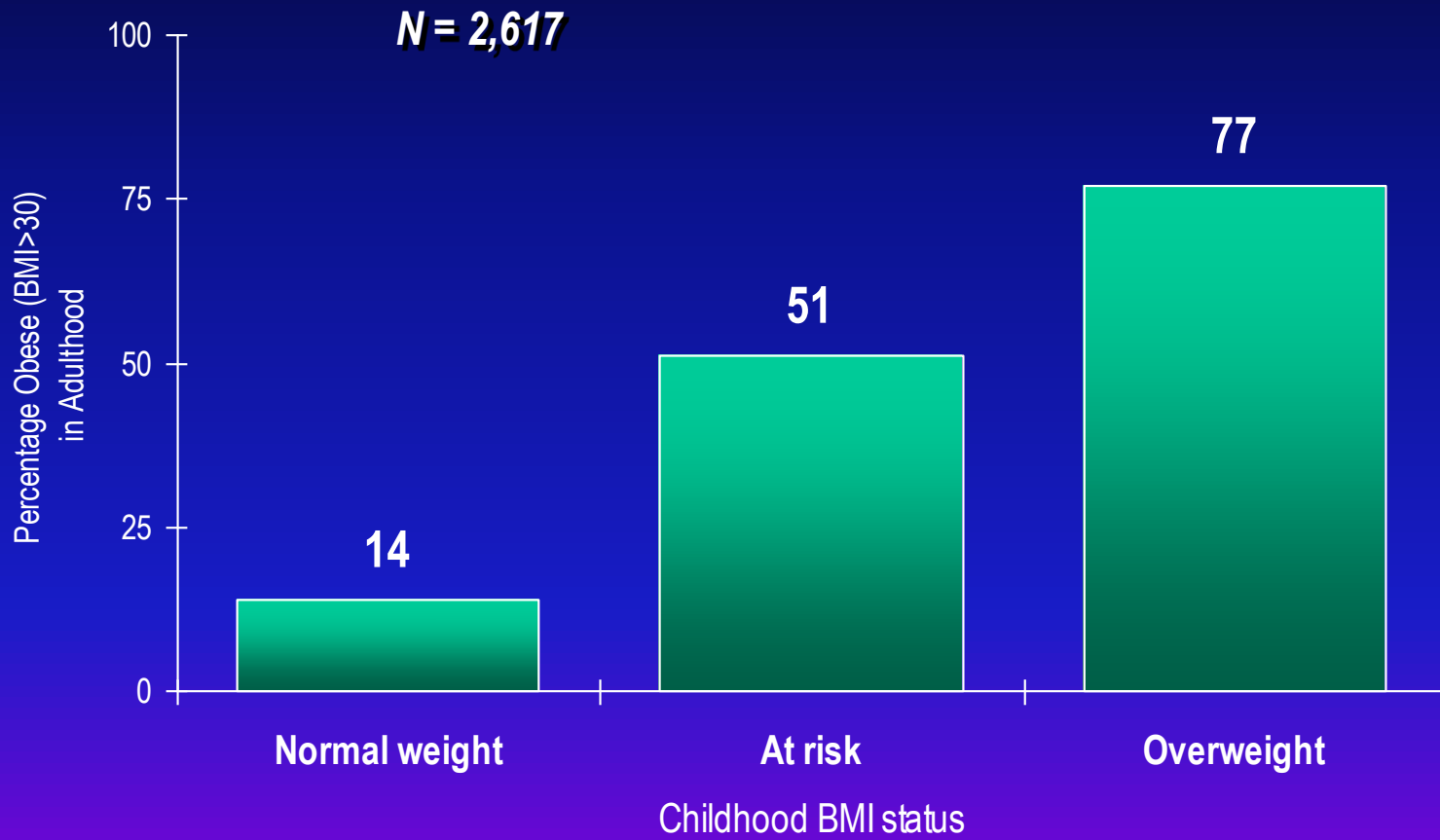


\* $\geq 95$ th percentile for BMI by age and sex based on 2000 CDC BMI-for-age growth charts.

\*\*1963-1970 data are from 1963-1965 for children 6-11 years of age and from 1966-1970 for adolescents 12-17 years of age.

National Center for Health Statistics.

# Association Between Body Mass Index (BMI) in Childhood and Adult Obesity

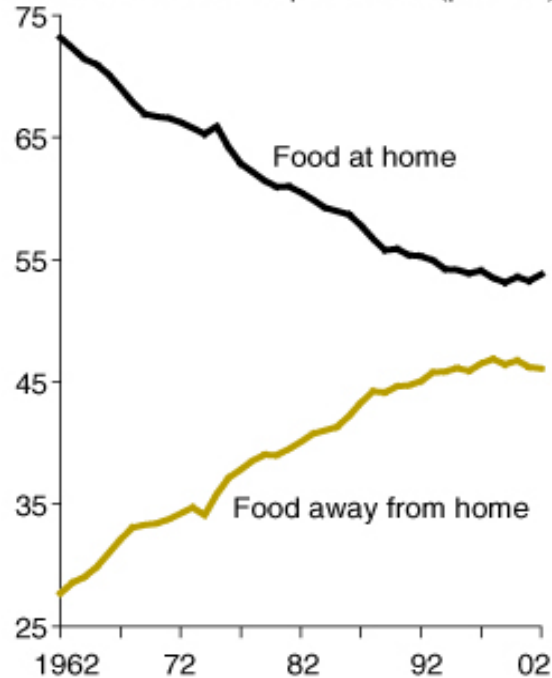


Sources: Freedman, D. S., et. al., *Pediatrics*, 2001; 108; 712-718.

# Away-from-Home Food Consumption Has Doubled

## Americans are eating out more

Share of total food expenditures (percent)



Source: Food Consumption (Per Capita) Data System, USDA, Economic Research Service.

50% –  
40% –  
30% –  
20% –  
10% –  
0

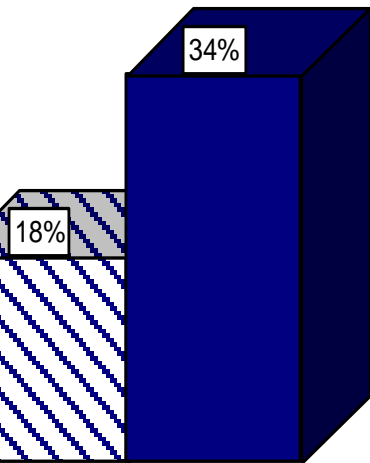
Calories Consumed



1978



1995



# Eating out linked to obesity



# Increasing Calories in Fast Food

**1977-1978**



**419**



**171**



**131**

---

**721**

**1994-1996**



**497**



**284**



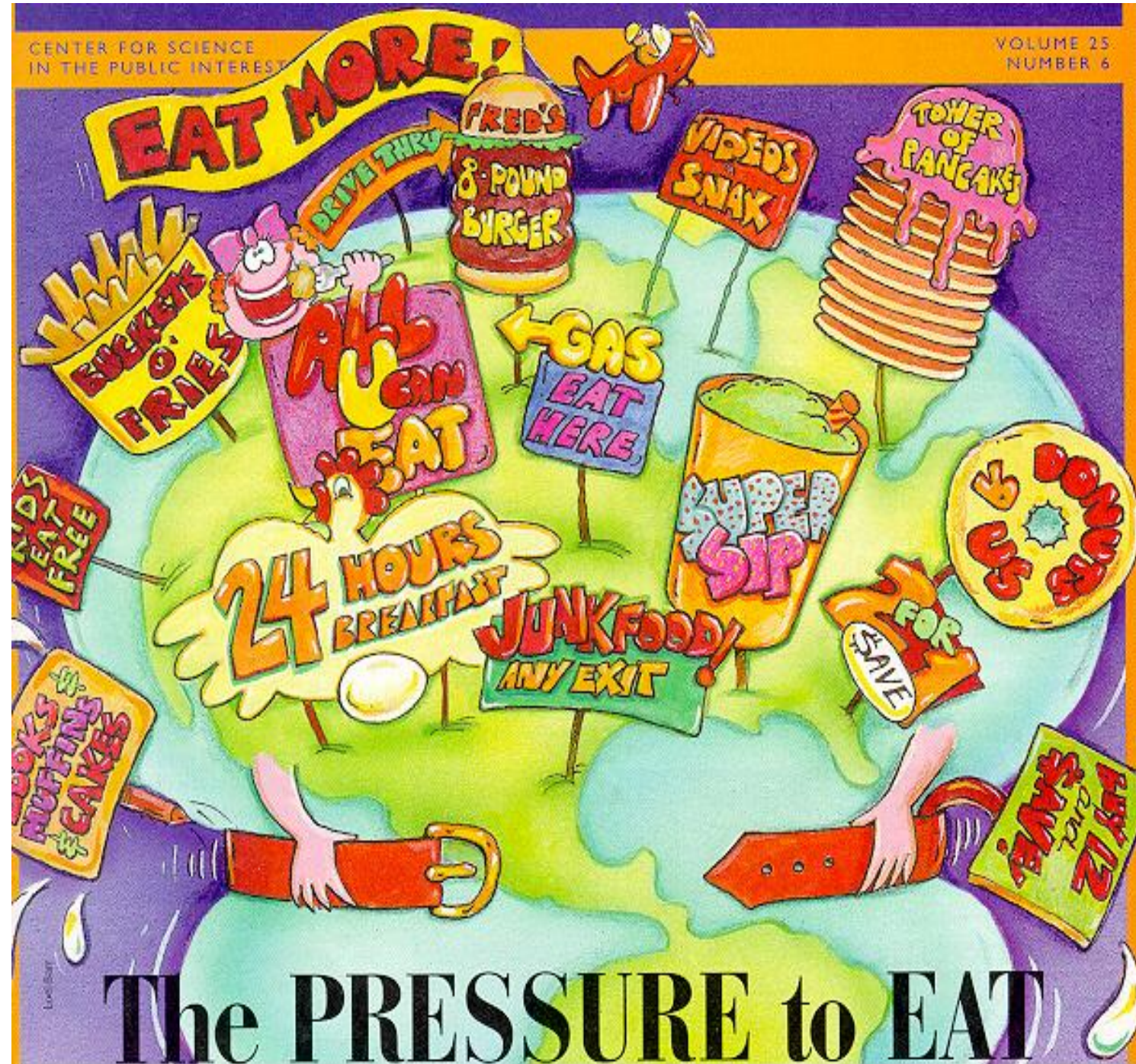
**191**

---

**972**

**Increase of 251  
calories (35%)**









**ALL AMERICAN FOOD™**

**Hurry!  
Limited time only!**



**Mushroom Onion  
Melts**



THE DESSERT EQUIVALENT  
TO PUNCHING THE  
SURGEON GENERAL  
RIGHT IN THE FACE.





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

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**...

“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.



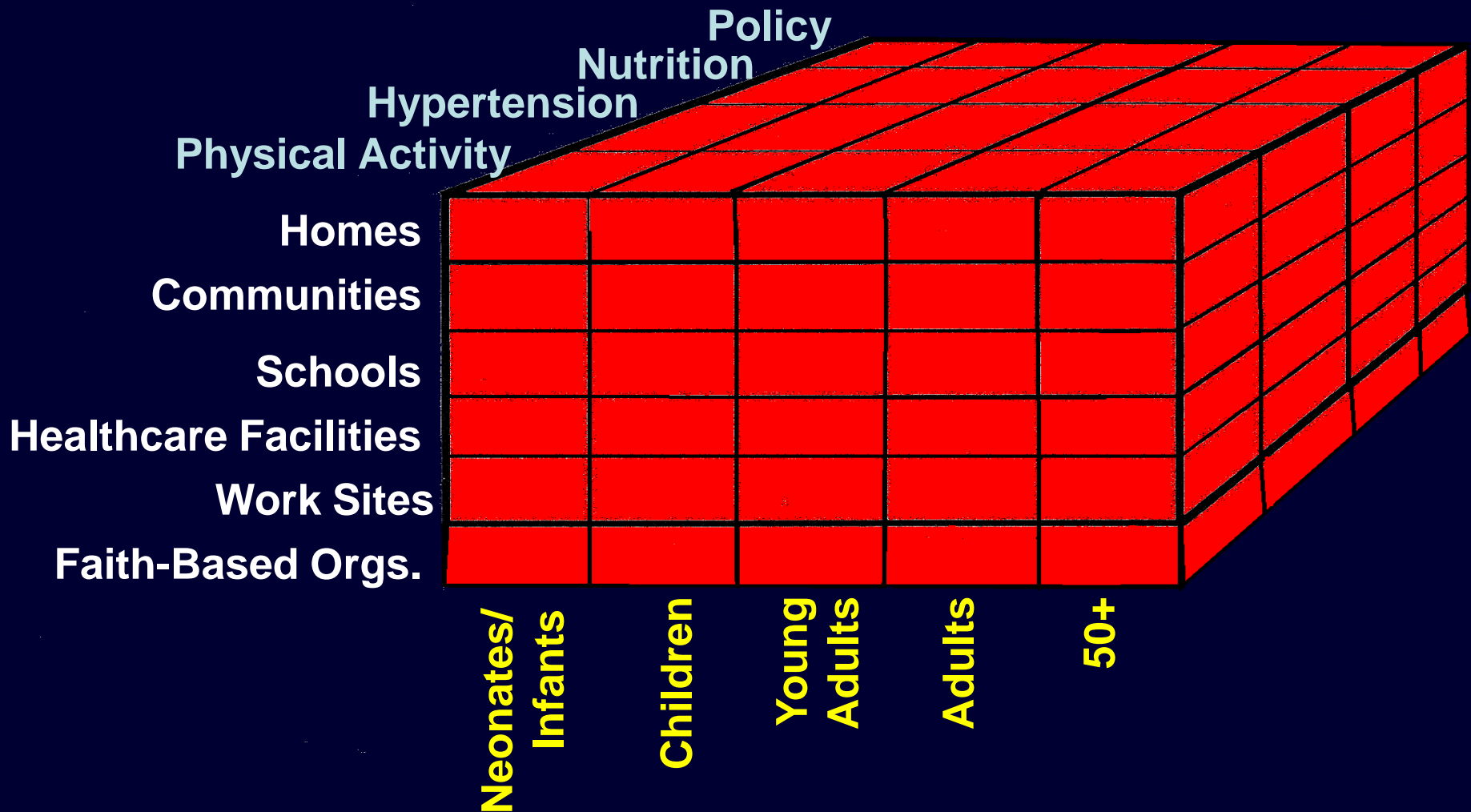
# Building a Healthier Chicago

**Individual interventions**





# *Building a Healthier Chicago*



Modified from Pearson TA et al. Scand J Public Health. 2001; 2.

# Recommendations

---

- ❑ Make Obesity Prevention and Control a High Priority of Health Reform
  - ❑ Access to preventive medical services
  - ❑ Establish a Public Health and Wellness Trust Fund for community programs
  - ❑ Promote proven programs that improve nutrition and physical activity.

# Recommendations

---

## ❑ Federal

- ❑ Clear and consistent Federal recommendations and national standards for nutrition and physical activity
- ❑ Examine policies and programs for obesity impact
- ❑ Revise school nutrition guidelines
- ❑ Eliminate junk food advertising to children
- ❑ Require menu labeling
- ❑ Re-examine subsidies for fruits and vegetables

# Recommendations

---

## □ State

- State obesity plans
- Examine state policies and programs for obesity impact
- Dedicated revenue for obesity prevention and control
- Evaluate snack taxes
- Require menu labeling

# Recommendations

---

## □ Local

- Local governments should use zoning laws to encourage healthy food providers to locate in food deserts
- Require menu labeling
- Encourage walkable, mixed use neighborhoods
- Encourage the use of transportation funds for mass transit and highway alternatives
- Modernize school-site construction so that schools can be within walking or biking distance

# Recommendations

---

- ALL

- Counter-marketing
- Use of social media
- Collaboration development

# Recommendations

---

## ❑ Sprout Growers and Colleagues

- ❑ Unfortunately, as we are all aware, sprouts have been implicated in numerous food-borne outbreaks
- ❑ As with any ready to eat food, sprout manufacturers must continue to search for the most prevention-based approaches to food safety
  - ❑ to ensure that our children have access to foods that are both nutrition and safe....
- ❑ **I strongly applaud your continued diligent and aggressive efforts in this area.**

# Recommendations

---

## ❑ Sprout Growers and Colleagues

- ❑ Use seeds produced under conditions suitable for human consumption with appropriate treatment
- ❑ Seed conditioning, storage and transportation that minimizes pathogenic contamination
- ❑ Sprout production contamination protections
- ❑ Statistically valid seed and sprout testing for pathogens



# **Solving the Problem of Childhood Obesity Within a Generation**

---

## **White House Task Force on Childhood Obesity Report to the President**

May, 2010



# Solving the Problem of Childhood Obesity Within a Generation

---

## □ Access to Healthy, Affordable Food

- Launch a multi-year, multi-agency Healthy Food Financing Initiative to **leverage private funds to increase the availability of affordable, healthy foods** in underserved urban and rural communities across the country

# **Solving the Problem of Childhood Obesity Within a Generation**

---

## **□ Access to Healthy, Affordable Food**

**□ Local governments should be encouraged to create incentives to attract supermarkets and grocery stores to underserved neighborhoods and improve transportation routes to healthy food retailers.**

# **Solving the Problem of Childhood Obesity Within a Generation**

---

## **□ Access to Healthy, Affordable Food**

**□ Food distributors should be encouraged to explore ways to use their existing distribution chains and systems to bring fresh and healthy foods into underserved communities**

# **Solving the Problem of Childhood Obesity Within a Generation**

---

## **□ Access to Healthy, Affordable Food**

**□ Encourage communities to promote efforts to provide fruits and vegetables in a variety of settings and encourage the establishment and use of direct-to-consumer marketing outlets such as farmers' markets and community supported agriculture subscriptions.**

# **Solving the Problem of Childhood Obesity Within a Generation**

---

## **□ Access to Healthy, Affordable Food**

- Encourage the establishment of regional, city, or county food policy councils to enhance comprehensive food system policy that improve health**

# Solving the Problem of Childhood Obesity Within a Generation

---

## □ Access to Healthy, Affordable Food

□ Encourage publicly and privately-managed facilities that serve children, such as hospitals, afterschool programs, recreation centers, and parks (including national parks) to **implement policies and practices, consistent with the Dietary Guidelines, to promote healthy foods and beverages** and reduce or eliminate the availability of calorie-dense, nutrient-poor foods

# **Solving the Problem of Childhood Obesity Within a Generation**

---

## **□ Access to Healthy, Affordable Food**

**□ Provide economic incentives to increase production of healthy foods** such as fruits, vegetables, and whole grains, as well as create greater access to local and healthy food for consumers



# **Solving the Problem of Childhood Obesity Within a Generation**

---

## **□ Access to Healthy, Affordable Food**

**□ Demonstrate and evaluate the effect of targeted subsidies on purchases of healthy food through nutrition assistance programs.**

# **Solving the Problem of Childhood Obesity Within a Generation**

---

## **□ Access to Healthy, Affordable Food**

- Analyze the effect of state and local sales taxes on less healthy, energy-dense foods

# **Solving the Problem of Childhood Obesity Within a Generation**

---

## **□ Access to Healthy, Affordable Food**

**□ The food, beverage, and restaurant industries should be encouraged to use their creativity and resources to develop or reformulate more healthful foods for children and young people**

# **Solving the Problem of Childhood Obesity Within a Generation**

---

## **□ Access to Healthy, Affordable Food**

**□ Increase participation rates in USDA nutrition assistance programs** through creative outreach and improved customer service, state adoption of improved policy options and technology systems, and effective practices to ensure ready access to nutrition assistance program benefits, especially for children.



# Building a Healthier Chicago

<http://www.healthierchicago.org>

# The Social Ecological Model

---

Together, 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.....”

“Somebody has to do it,

---

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

Jerry Garcia



# Building a Healthier Chicago

---

[james.galloway@hhs.gov](mailto:james.galloway@hhs.gov)

312-353-1358

[www.healthierchicago.org](http://www.healthierchicago.org)



# Building a Healthier Chicago

<http://www.healthierchicago.org>