Safe Routes to School

Setting the Context:
Safety, Health, & Transportation

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This is a story of the Good, the Bad, and the Ugly.

Fewer kids are biking and walking. More parents are driving.

2001:
15% walked

1969:
48% walked

(EPA, 2003)

Travel to school can be up to 25% of morning traffic

(Parisi Associates, 2003)

The consequences of *this*…

…instead of *this* can be alarming.

Obesity is the tip of the iceberg; other chronic conditions are on the rise . . .

Today's children may be the first generation to have a shorter life expectancy than their parents have.

Promoting safe walking and bicycling is an ideal strategy to increase physical activity.

Safe Routes to School Programs

History of Safe Routes to School

Many child pedestrian fatalities in Denmark, 1970s

Denmark reduced casualties by more than 80%

Caught on in UK and Canada in the 1990's; Bronx, NY in 1997

Benefits of SR2S programs

- Reduce the number of children hit by cars
- Reduce congestion around schools
- Improve children's health
- Reduce air pollution
- Can lead to cost savings for schools (reduce need for "hazard" busing)
- Others: increase child's sense of freedom, help establish lifetime habits, teach pedestrian skills

The Ugly:

Today's barriers to walking and bicycling

How did we get here?

1. School siting issues
2. Individual barriers to walking to school
3. Community issues

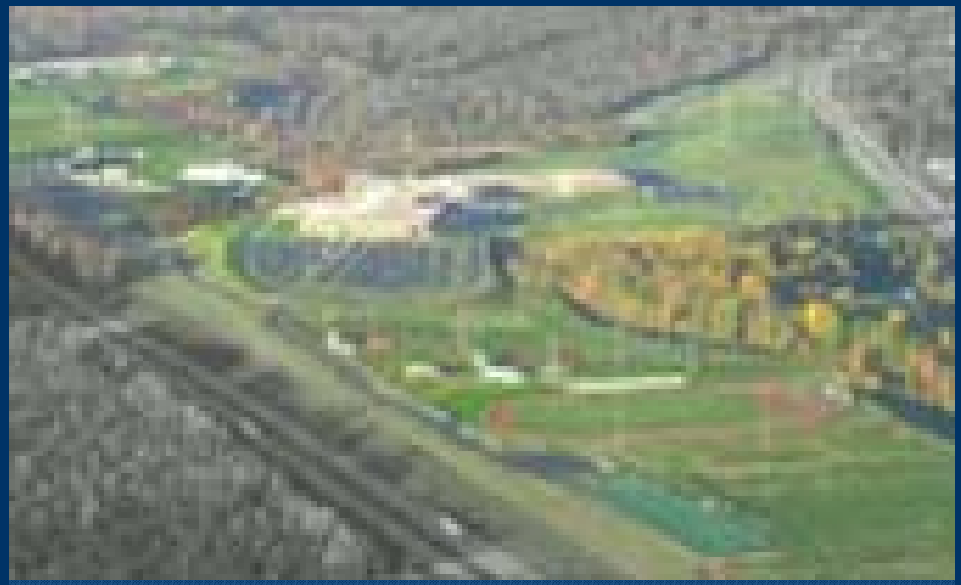
1. School siting issues: a generation ago

- **Small (average of 127 students)**
- **Located in community centers**
- **1/2 of kids walked or biked to school**

(EPA, 2003)

1. School siting issues: today

- Mega-schools (average 653 students)
- 40% of high schools have attendance of 1500+ students
- Schools located on 10 to 30+ acres fringe land
- Lowest-cost construction



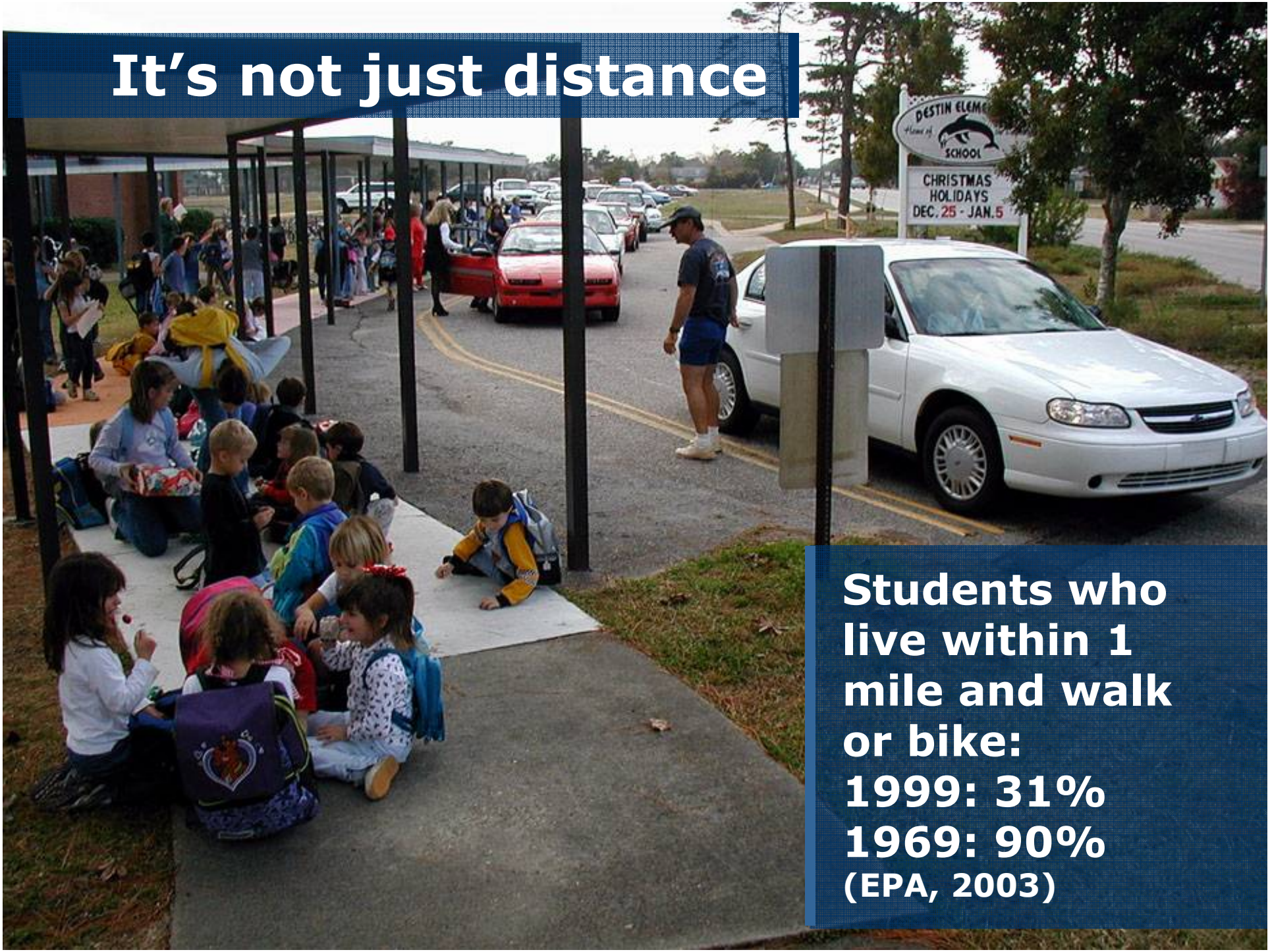
(U.S. Department of Education, 2002)

School consolidation has lengthened the trip between home and school

In 2001, less than 15% of kids walk or bike to school

(EPA, 2003)

It's not just distance



Students who live within 1 mile and walk or bike:
1999: 31%
1969: 90%
(EPA, 2003)

2. Individual barriers to walking and bicycling to school

Long distances	55%
Traffic danger	40%
Adverse weather	24%
Fear of crime danger	18%

(CDC, 2002)

Traffic danger

Community conditions make it hard to walk or bike

Adverse weather

Is this barrier reflective of changed social norms?

Fear of crime danger

Identify perceptions and realities—both are important to address

Some low probability events provoke the greatest fears

Communities are finding ways to safeguard against these fears

3. Difficult community issues

- Traffic flow problems
- Abandoned buildings
- Illegal behaviors

The Bad:

Unintended consequences
of less walking and bicycling

- to the environment
- to our health

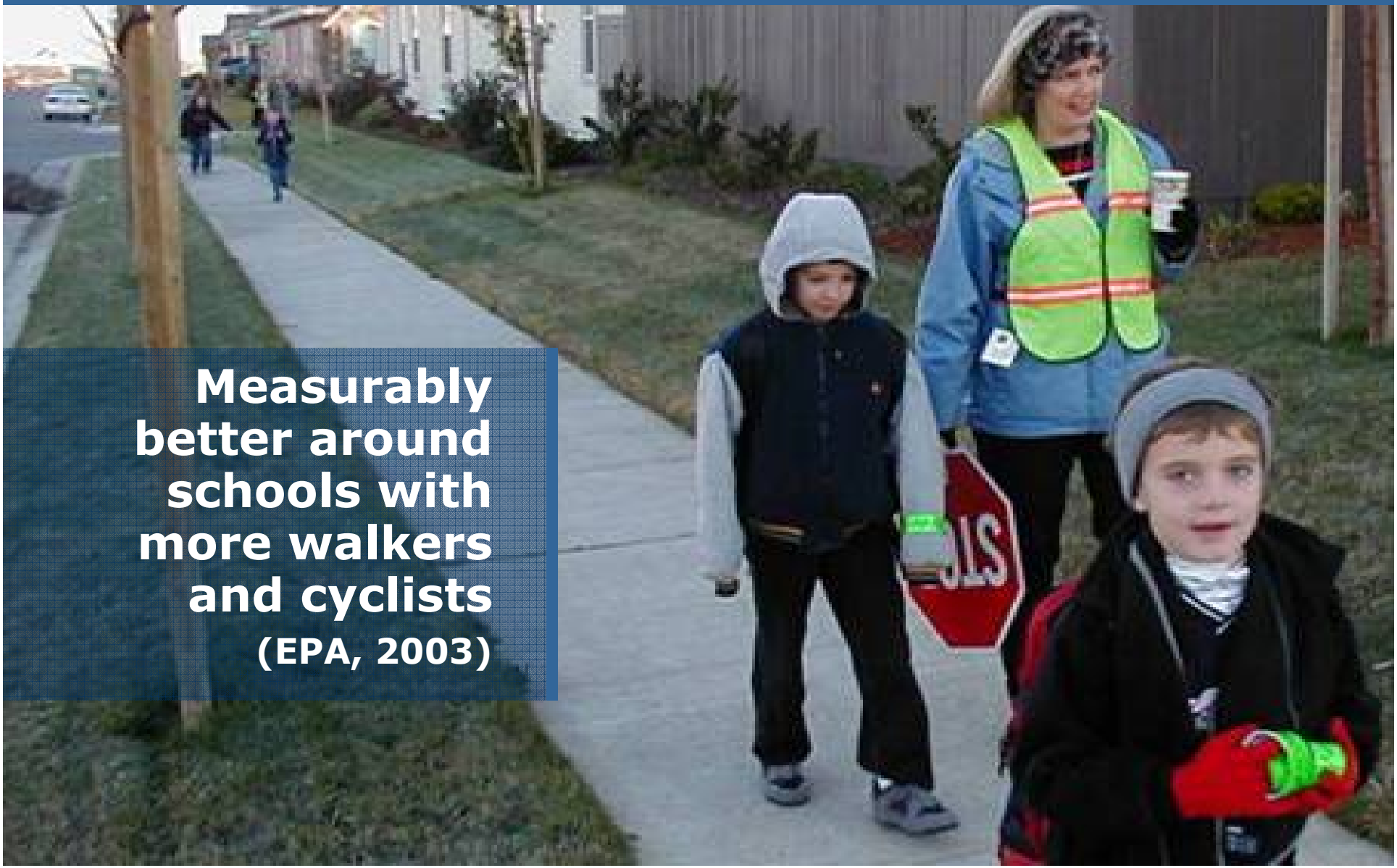
1996 Summer Olympic Games banned single occupant cars in downtown Atlanta

Results of the ban

- Morning traffic – down 22%
- Peak ozone – down 28%
- Asthma-related events for kids – down 42%

(*Journal of the American Medical Association* [*JAMA*], 2001)

Air quality



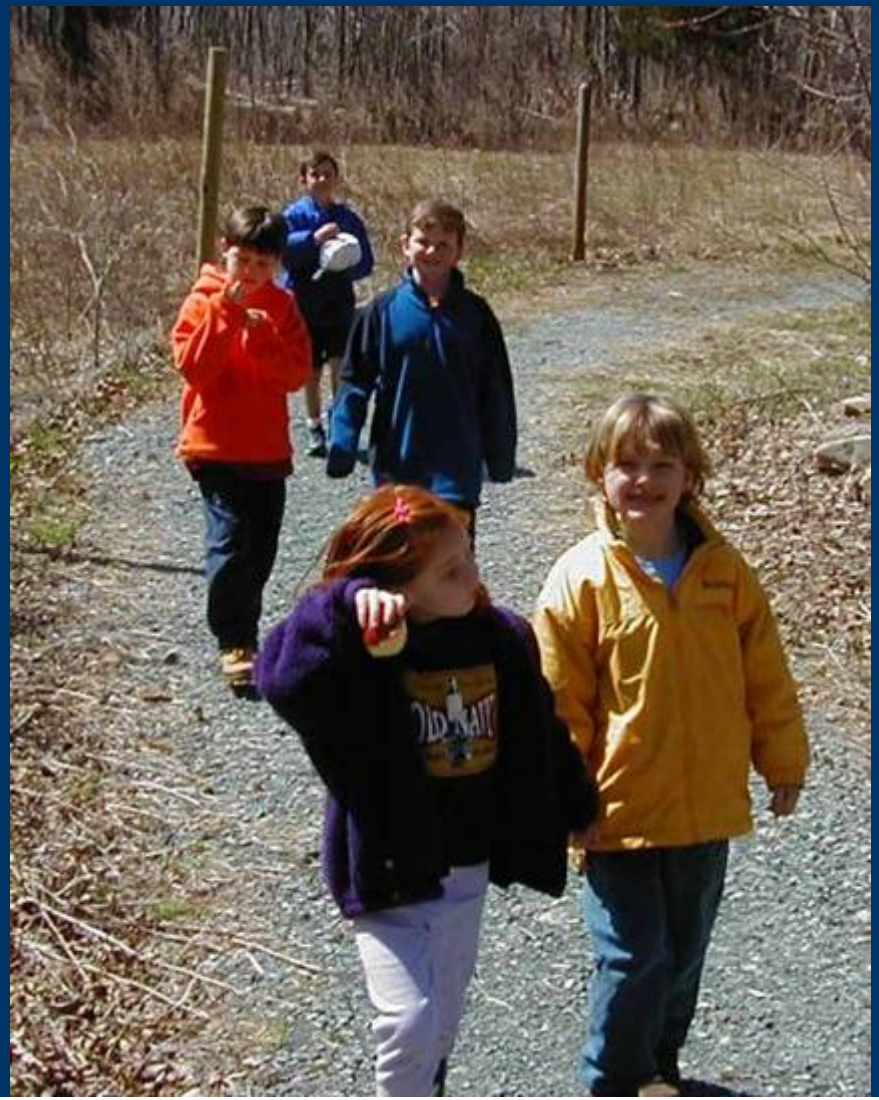
Measurably better around schools with more walkers and cyclists
(EPA, 2003)


Physical activity
Most kids aren't getting the exercise they need

Physical activity recommendation for children:

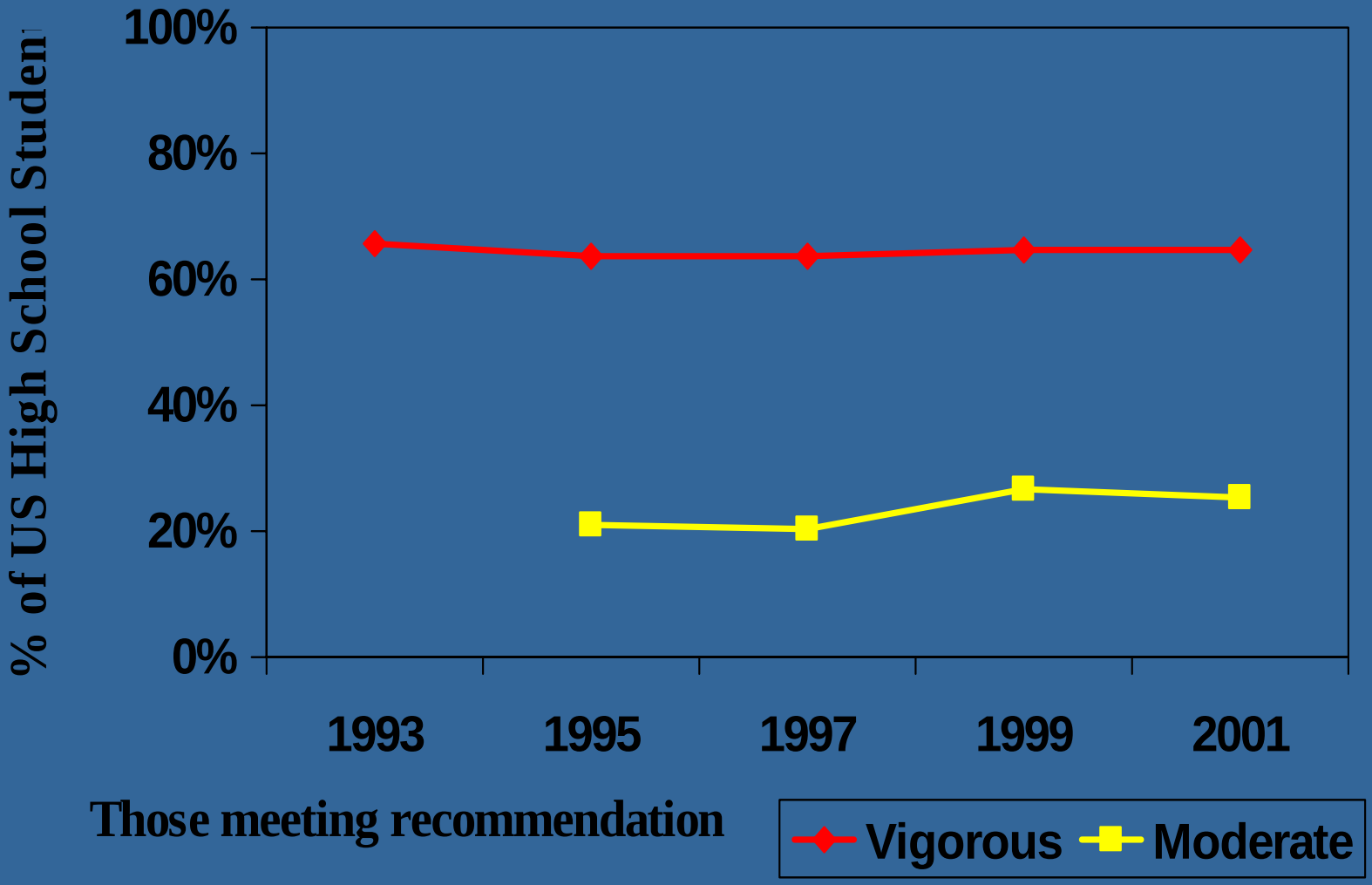
(US Depts. of Health and Human Services and Agriculture, 2005)

At least 60 minutes of physical activity on most, preferably all, days of the week.

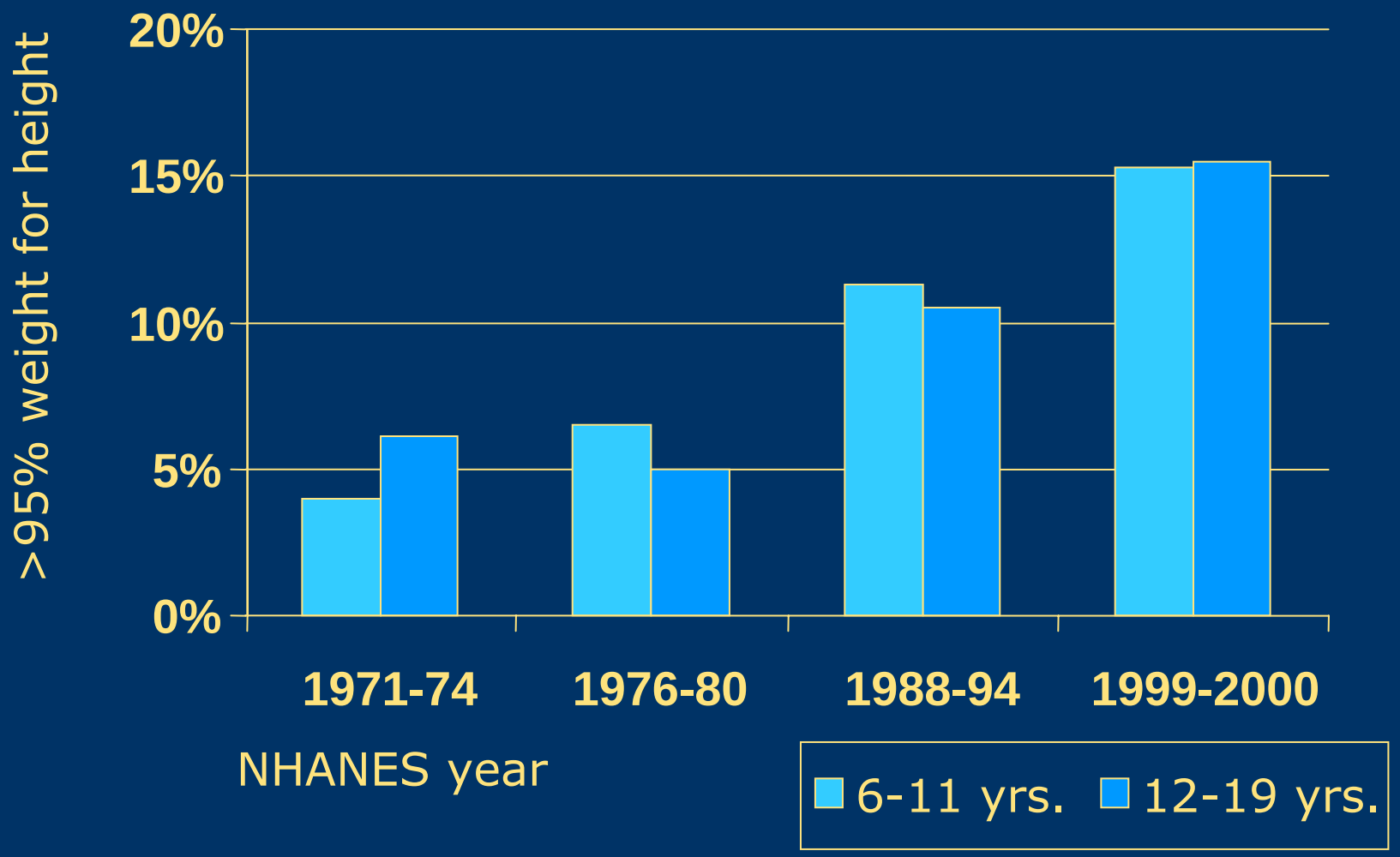


US Youth Physical Activity Rates

(CDC: Youth Risk Behavior Survey)



U.S. youth overweight rates



(National Health and Nutrition Examination Survey, JAMA, 2004)

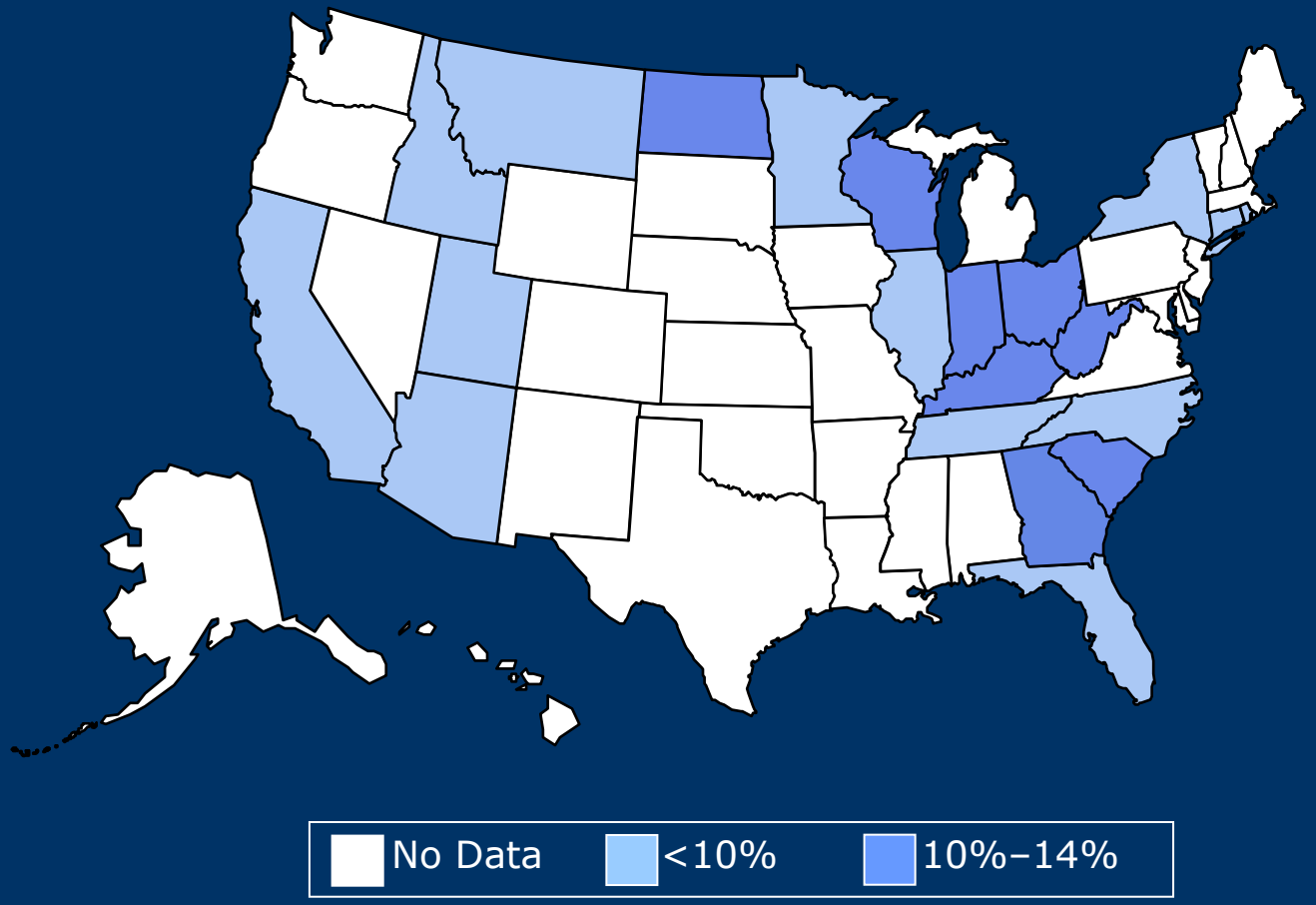
Overweight children have an increased risk of…

- Type 2 Diabetes
- Low self esteem
- Aggravated existing asthma
- Sleep apnea
- Decreased physical functioning
- Many other negative emotional & physical effects

(American Academy of Pediatrics, 2005)

Obesity Trends Among U.S. Adults: 1985

(*BMI ≥30, or ~ 30 lbs overweight for 5’ 4” woman)



(Behavioral Risk Factor Surveillance System, CDC, 2004)

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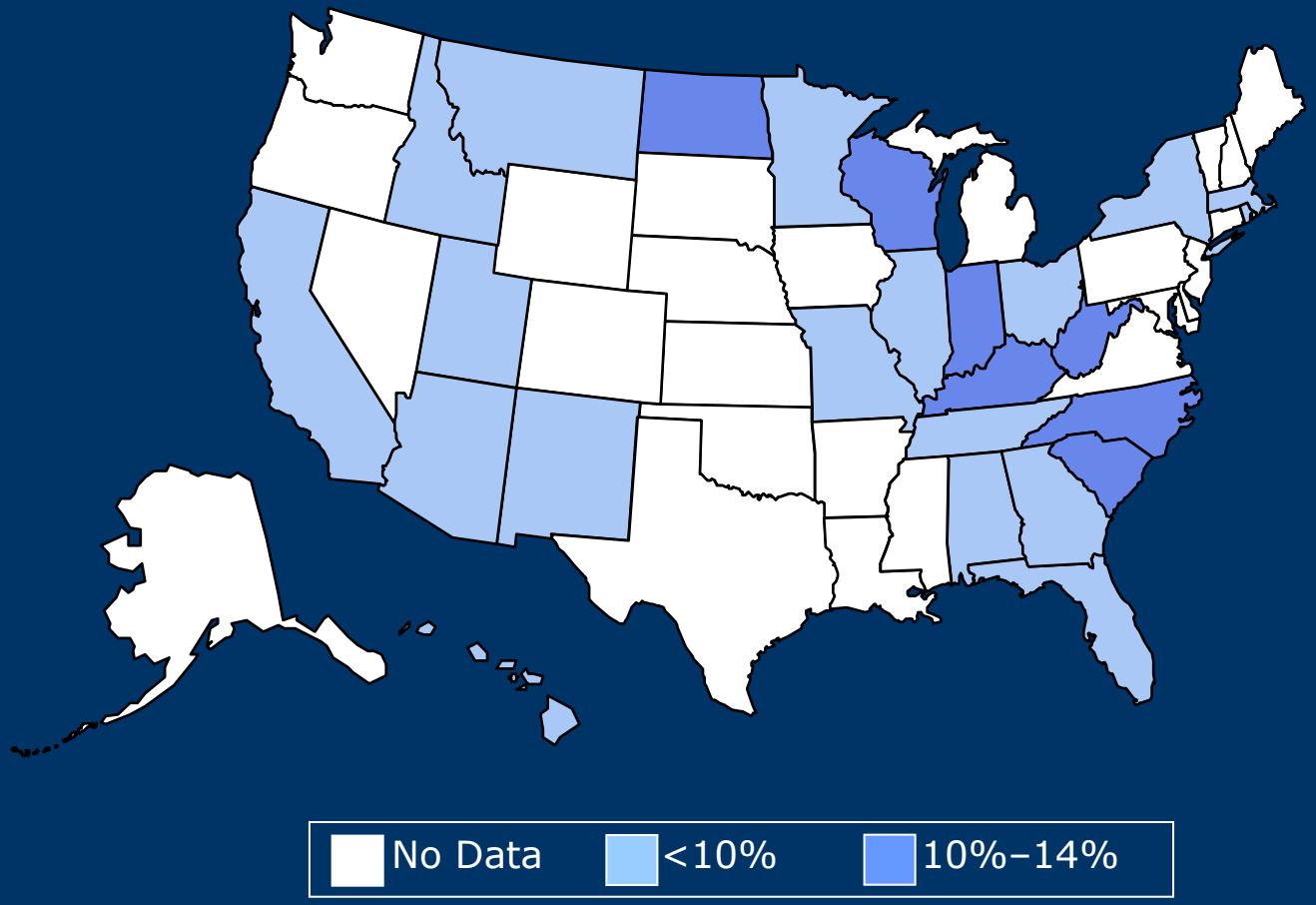

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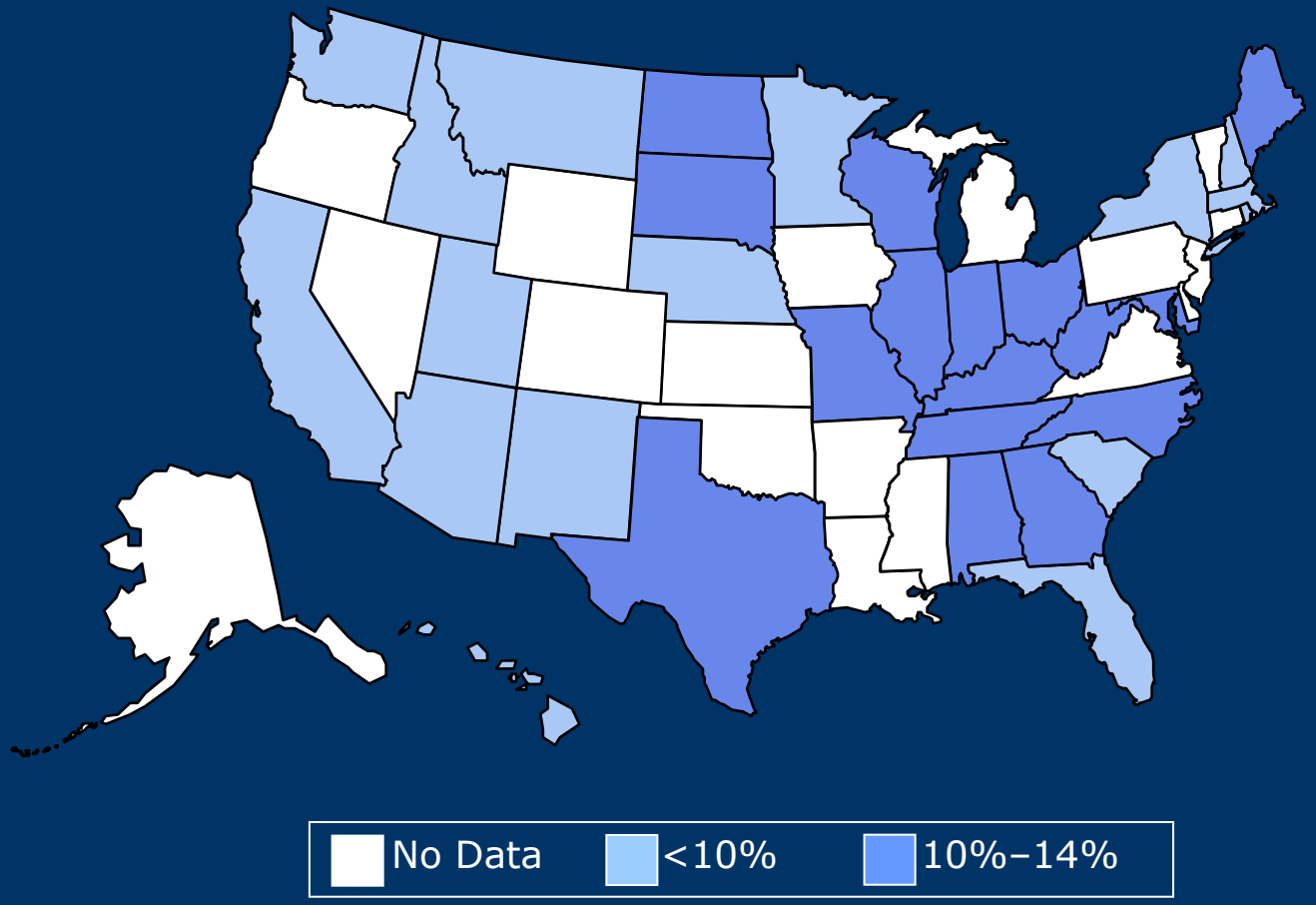

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Obesity Trends Among U.S. Adults: 1988

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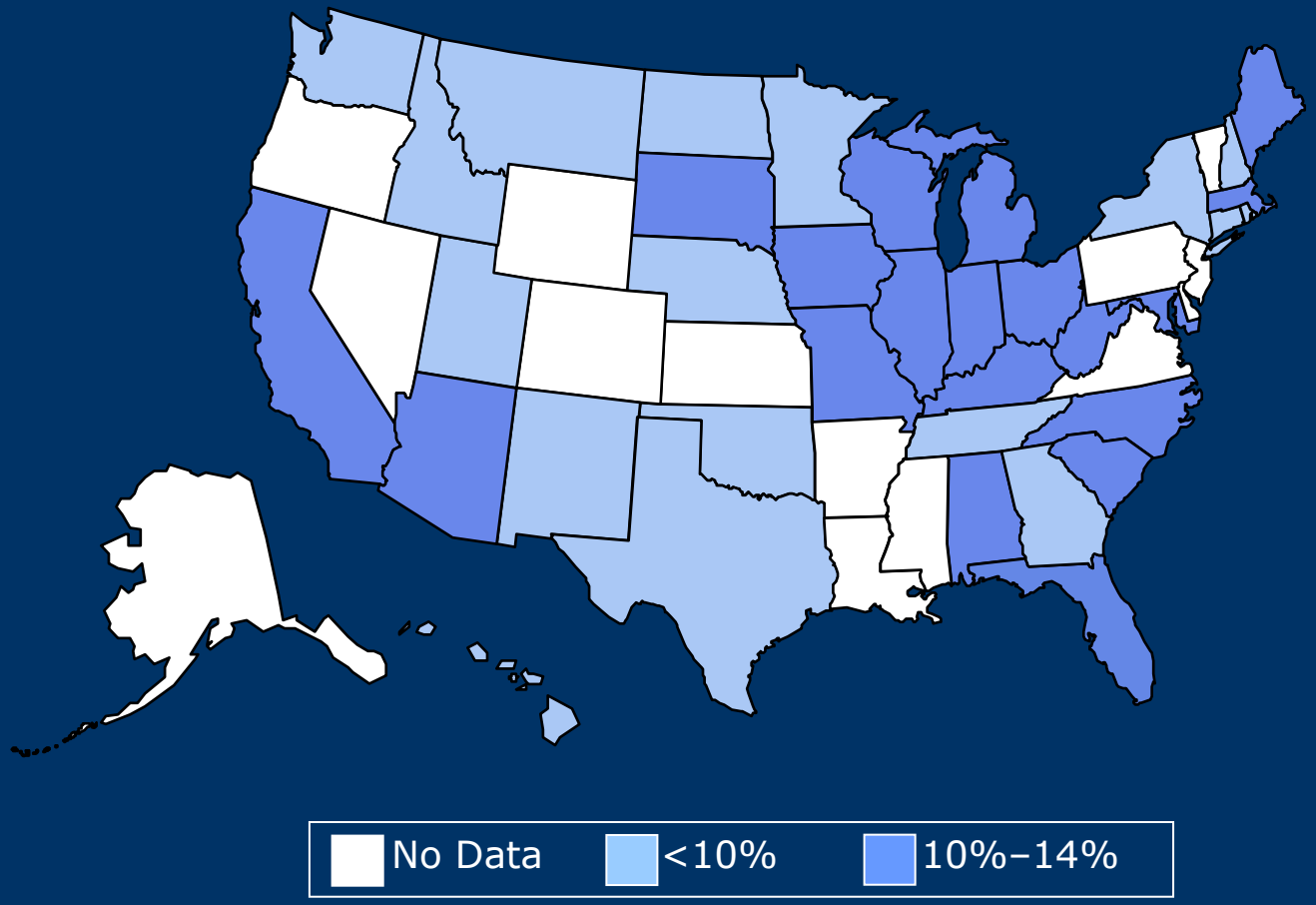

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Obesity Trends Among U.S. Adults: 1989

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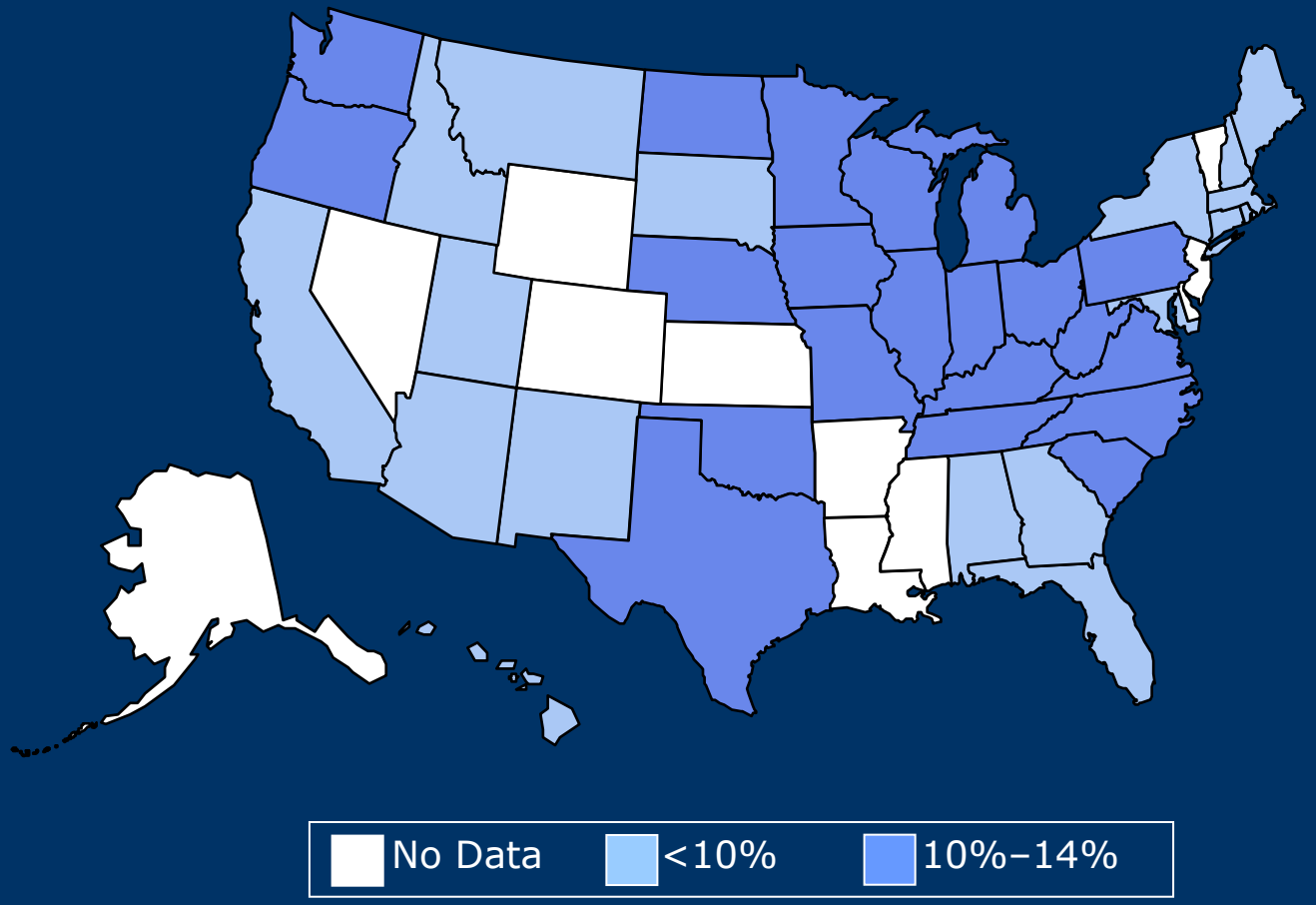

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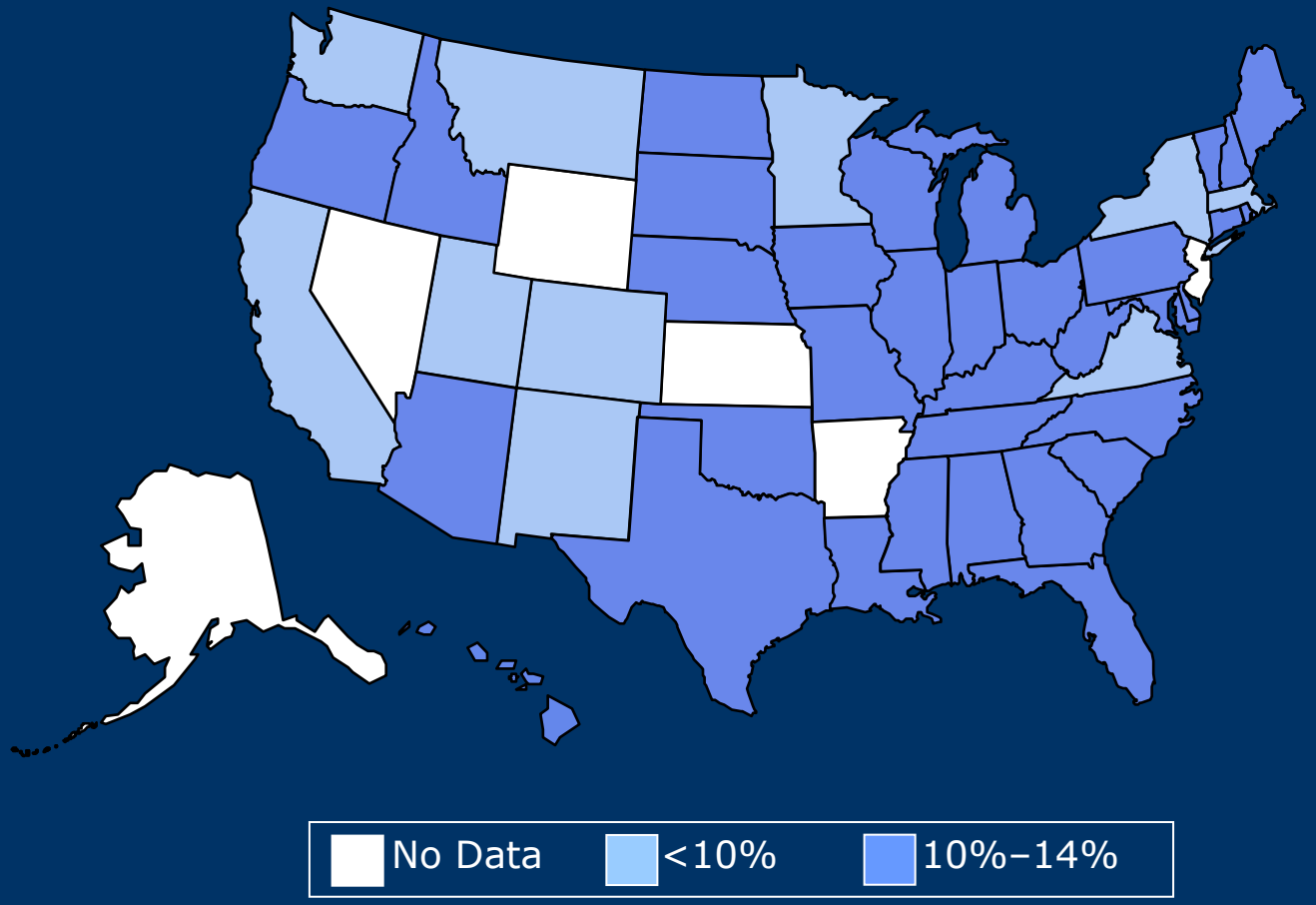

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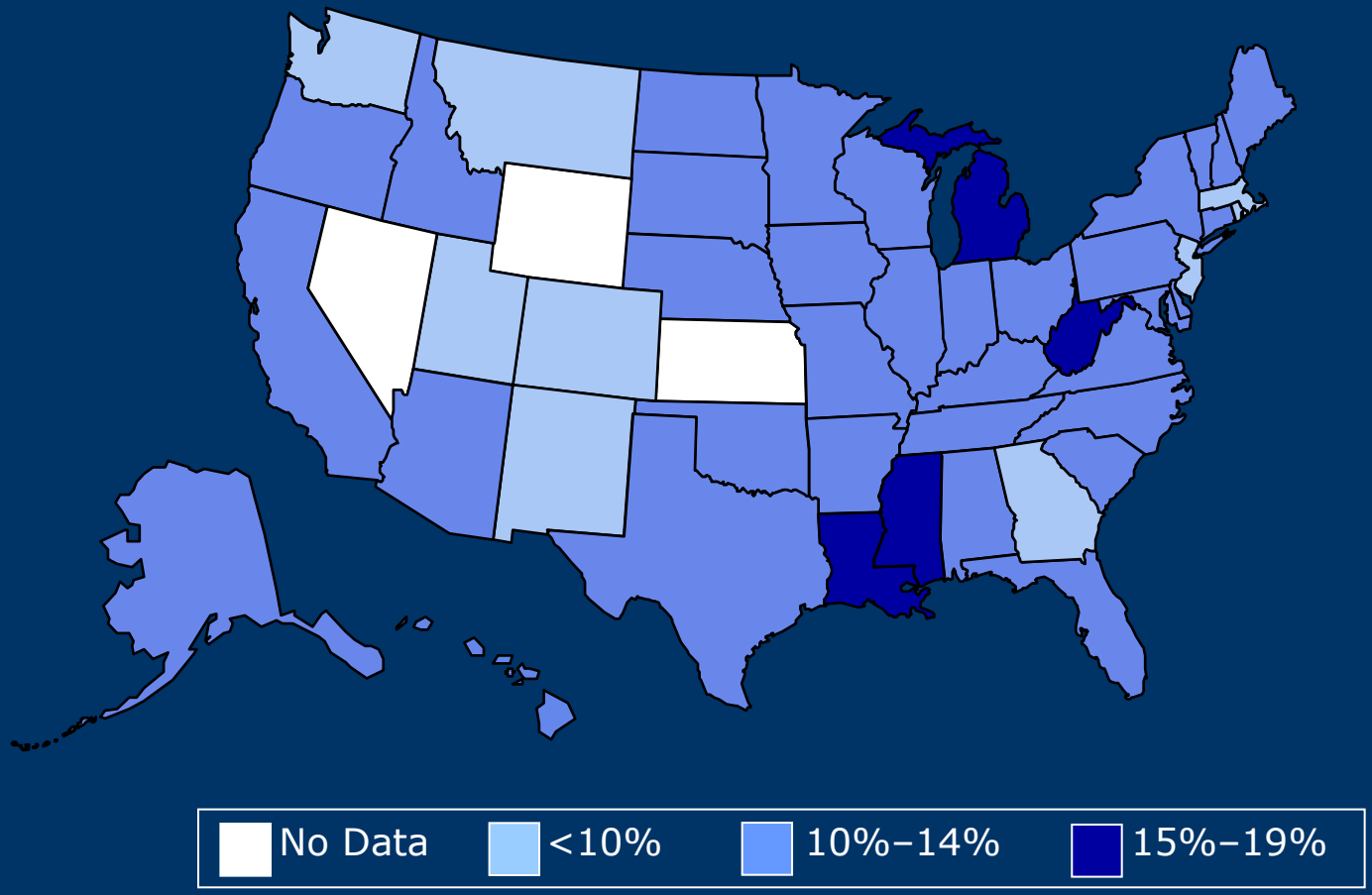

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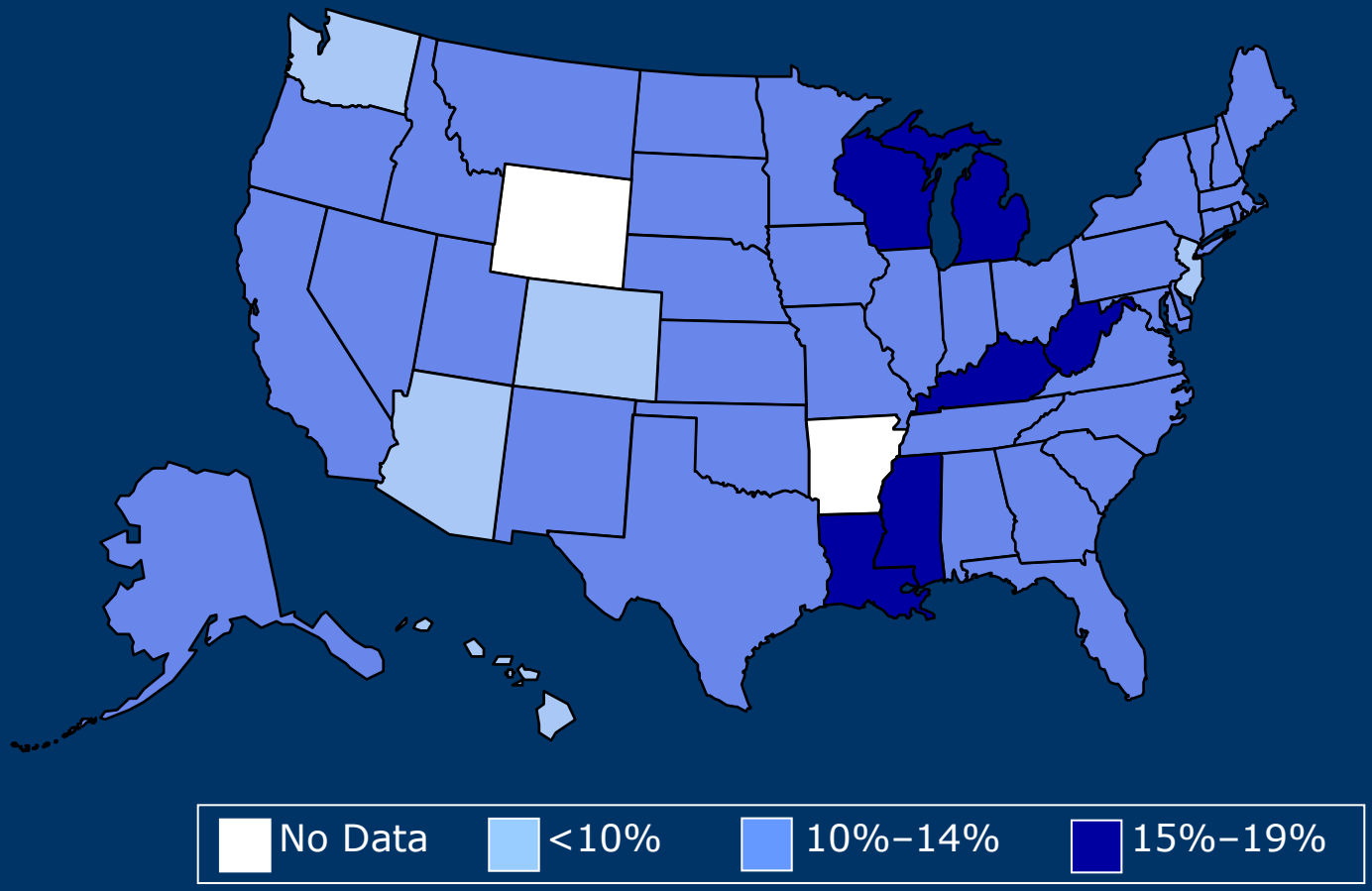

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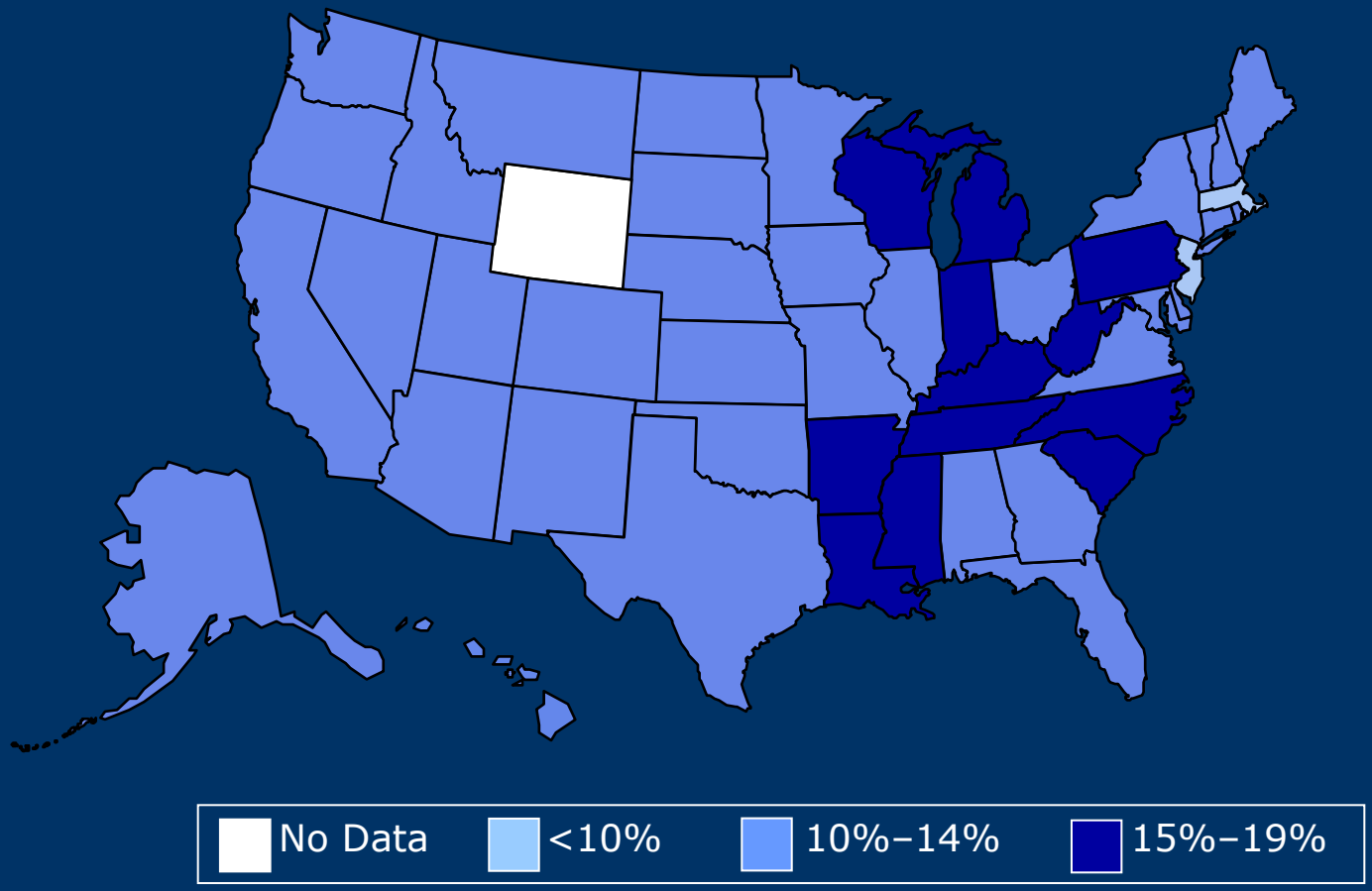

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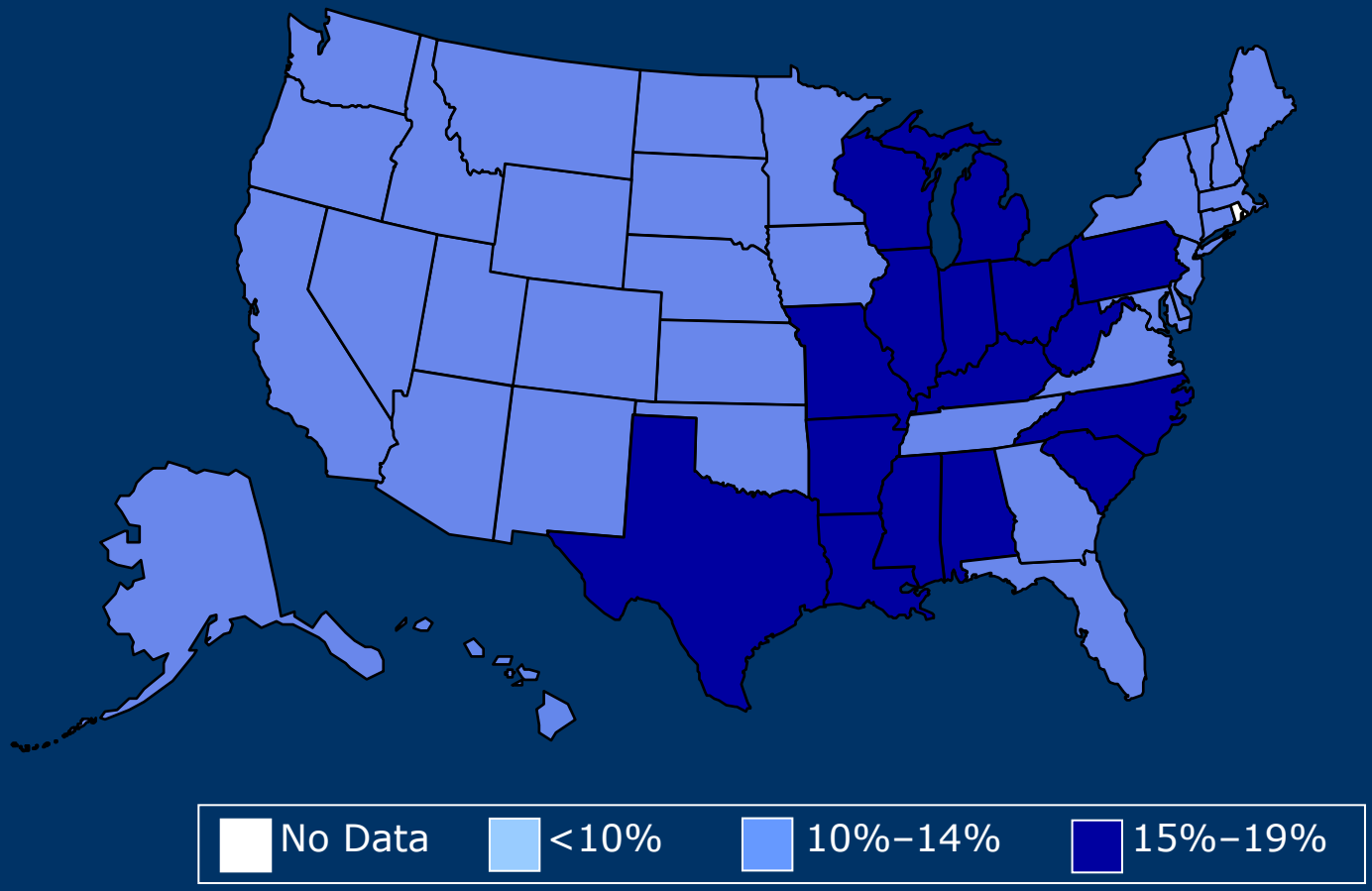

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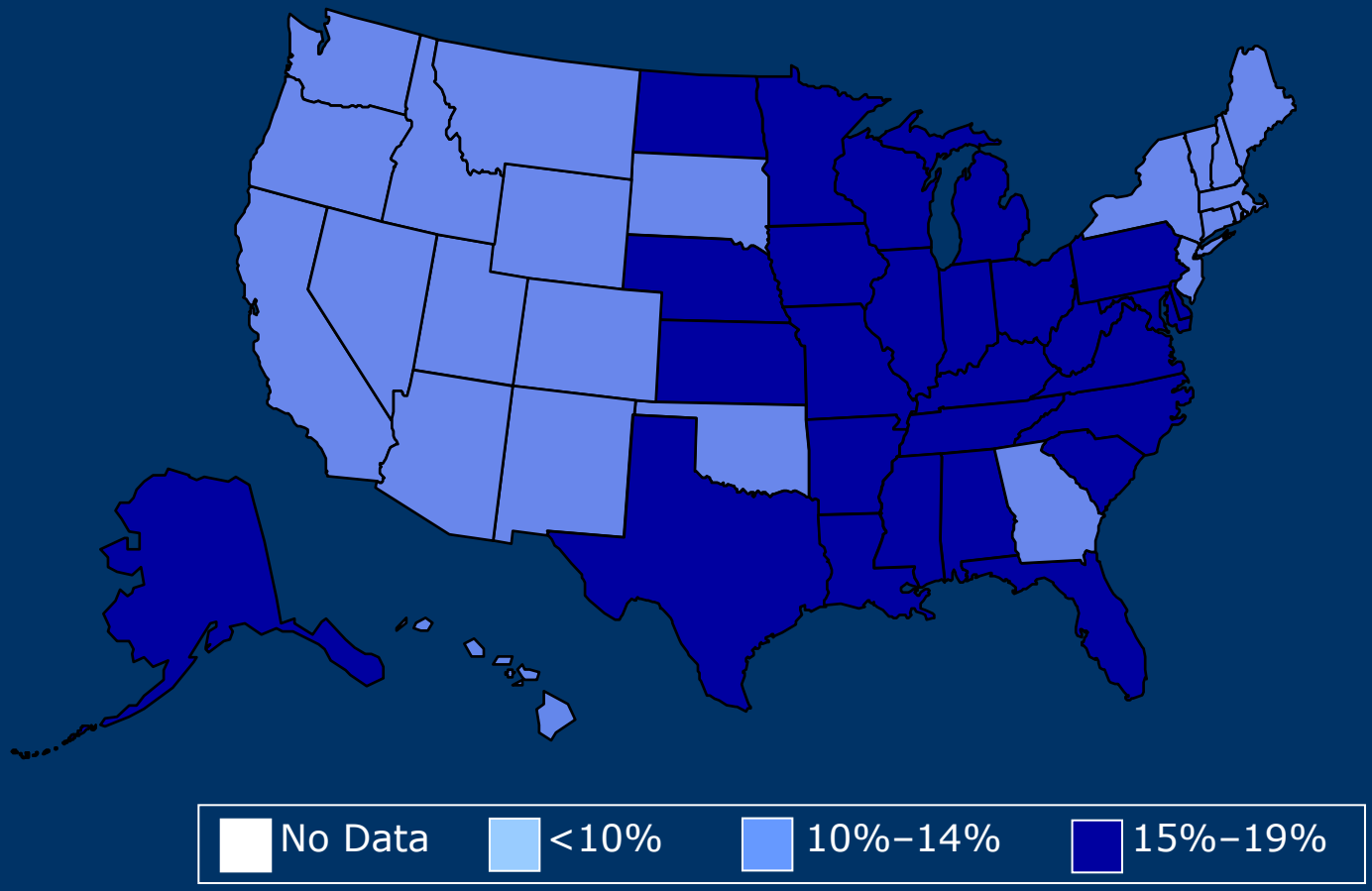

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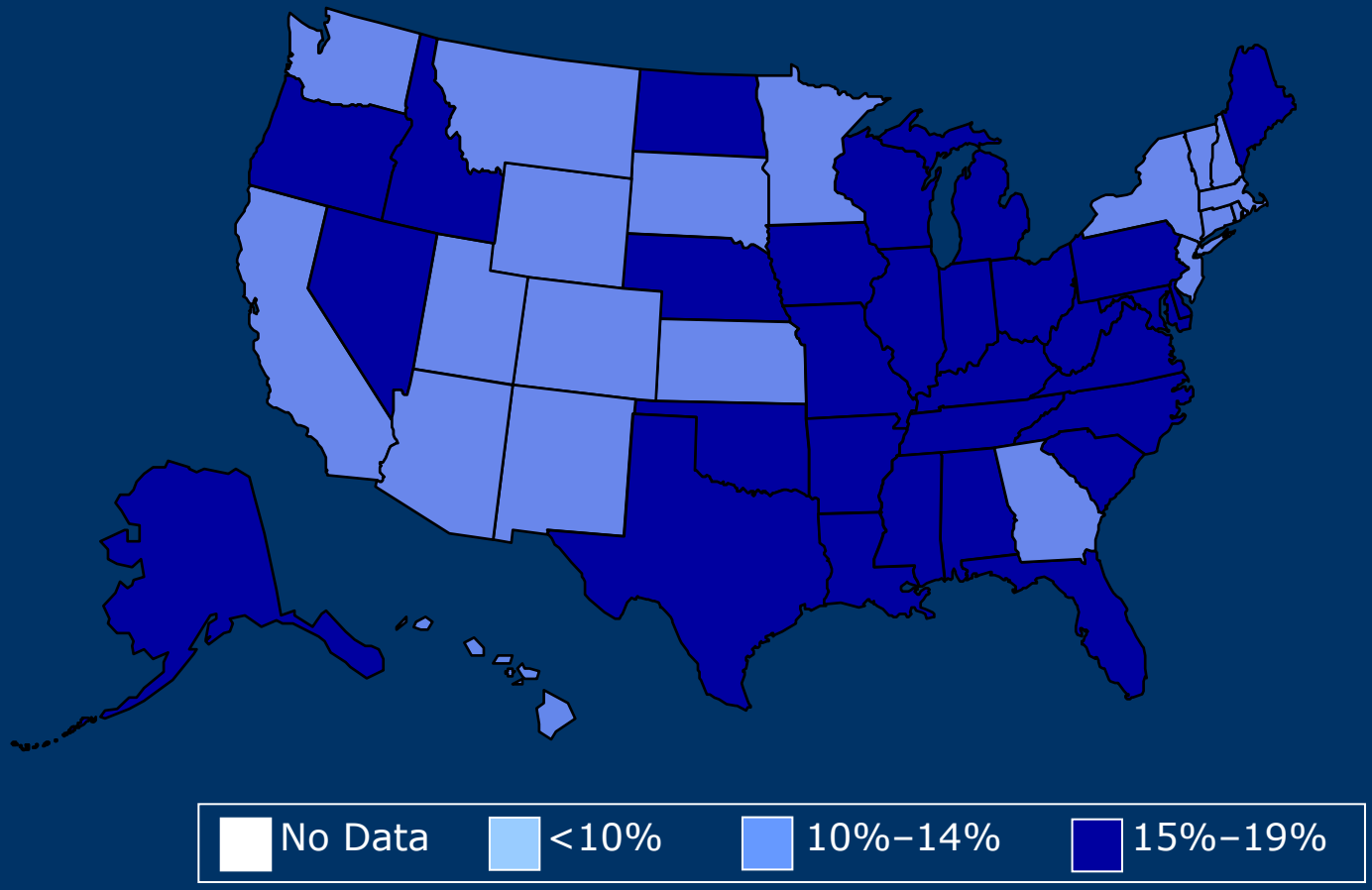

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Obesity Trends Among U.S. Adults: 1997

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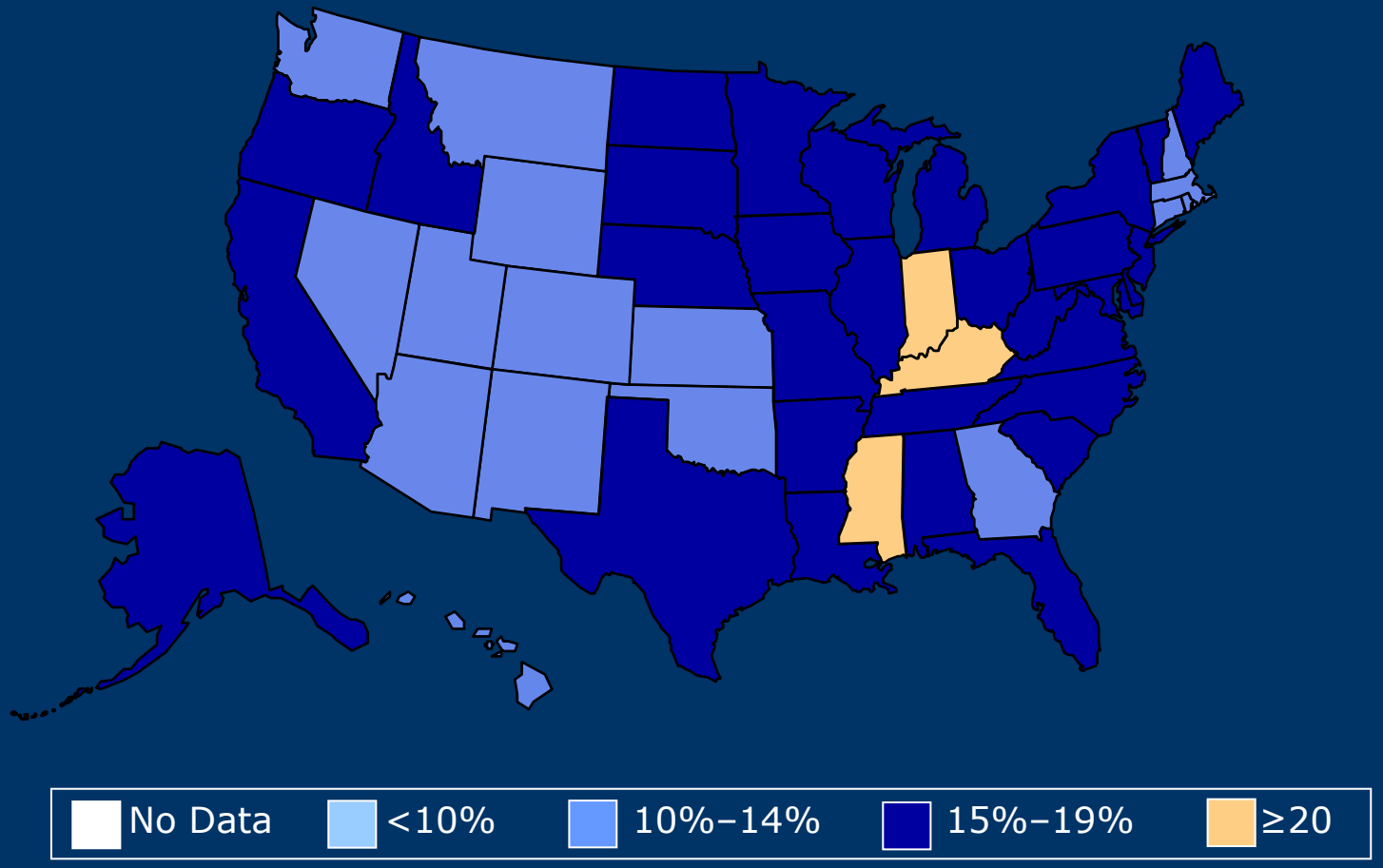

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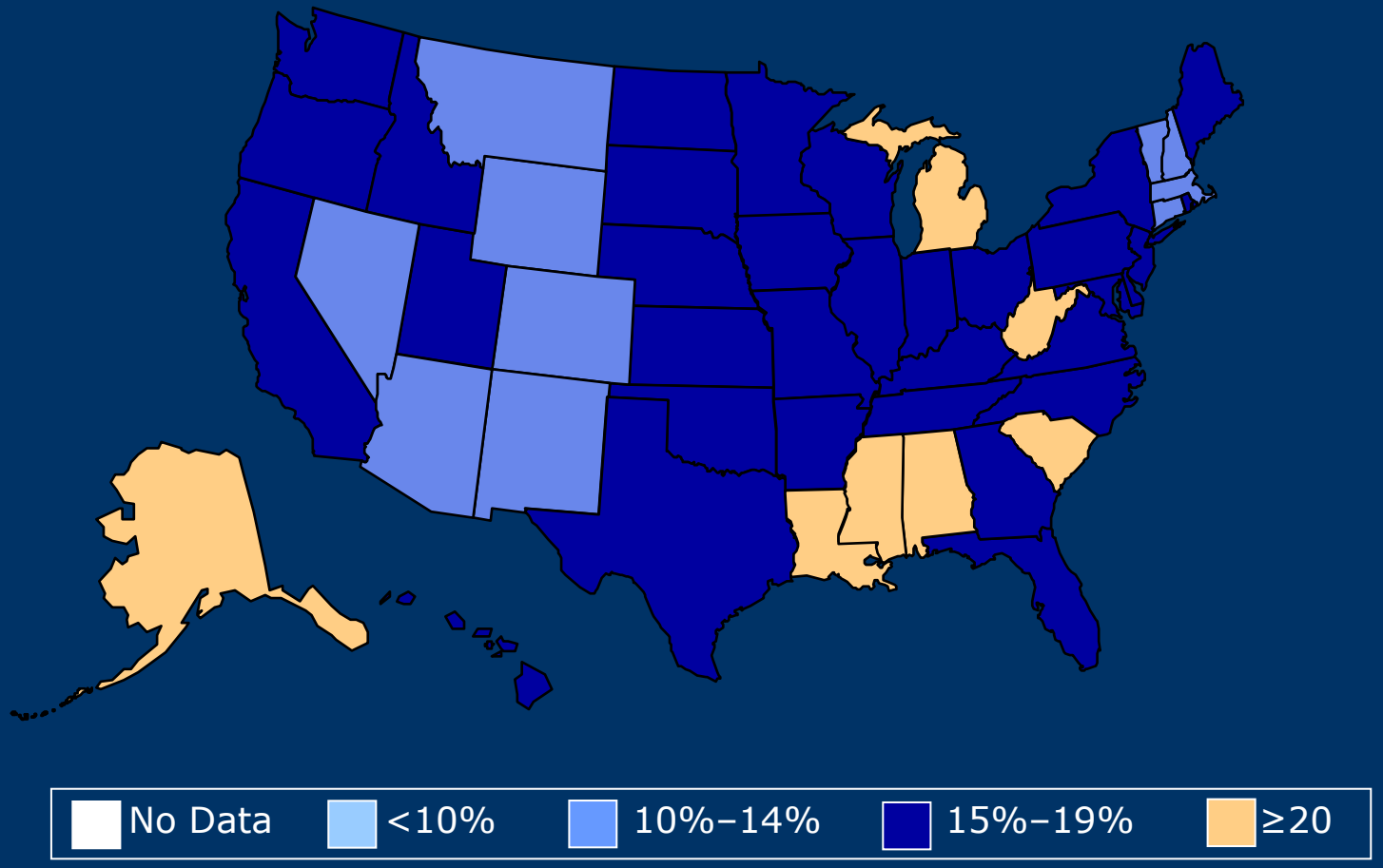

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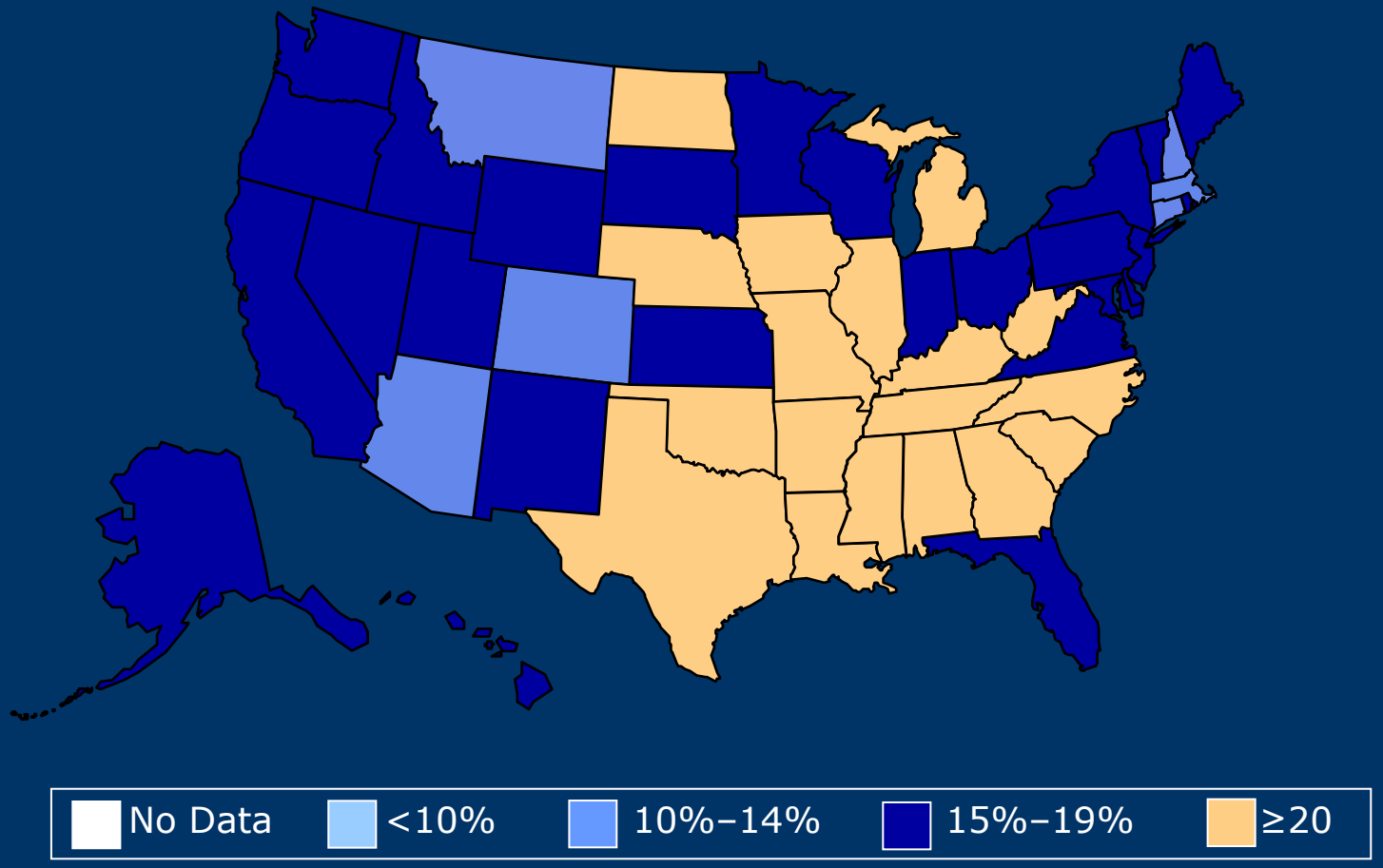

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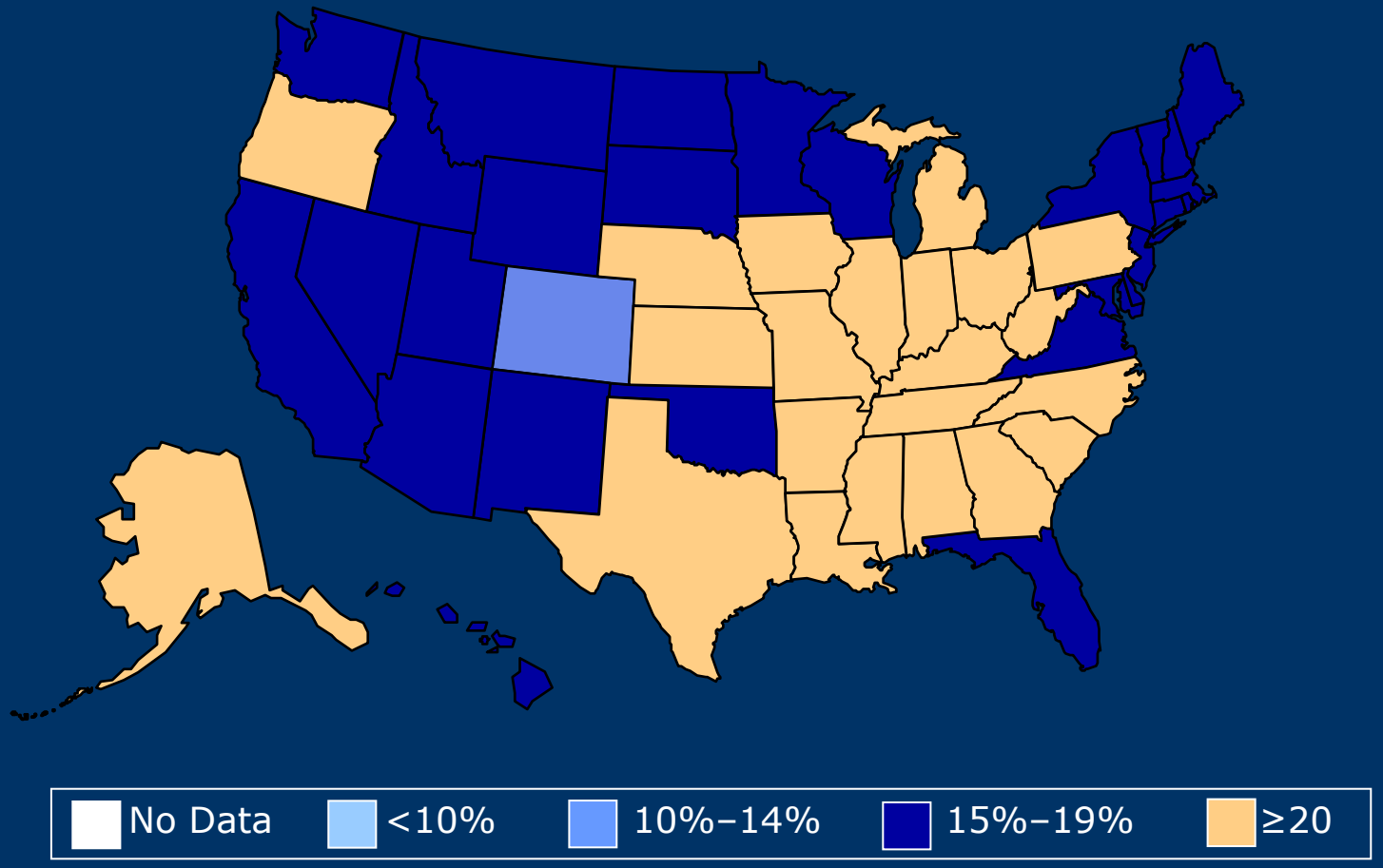

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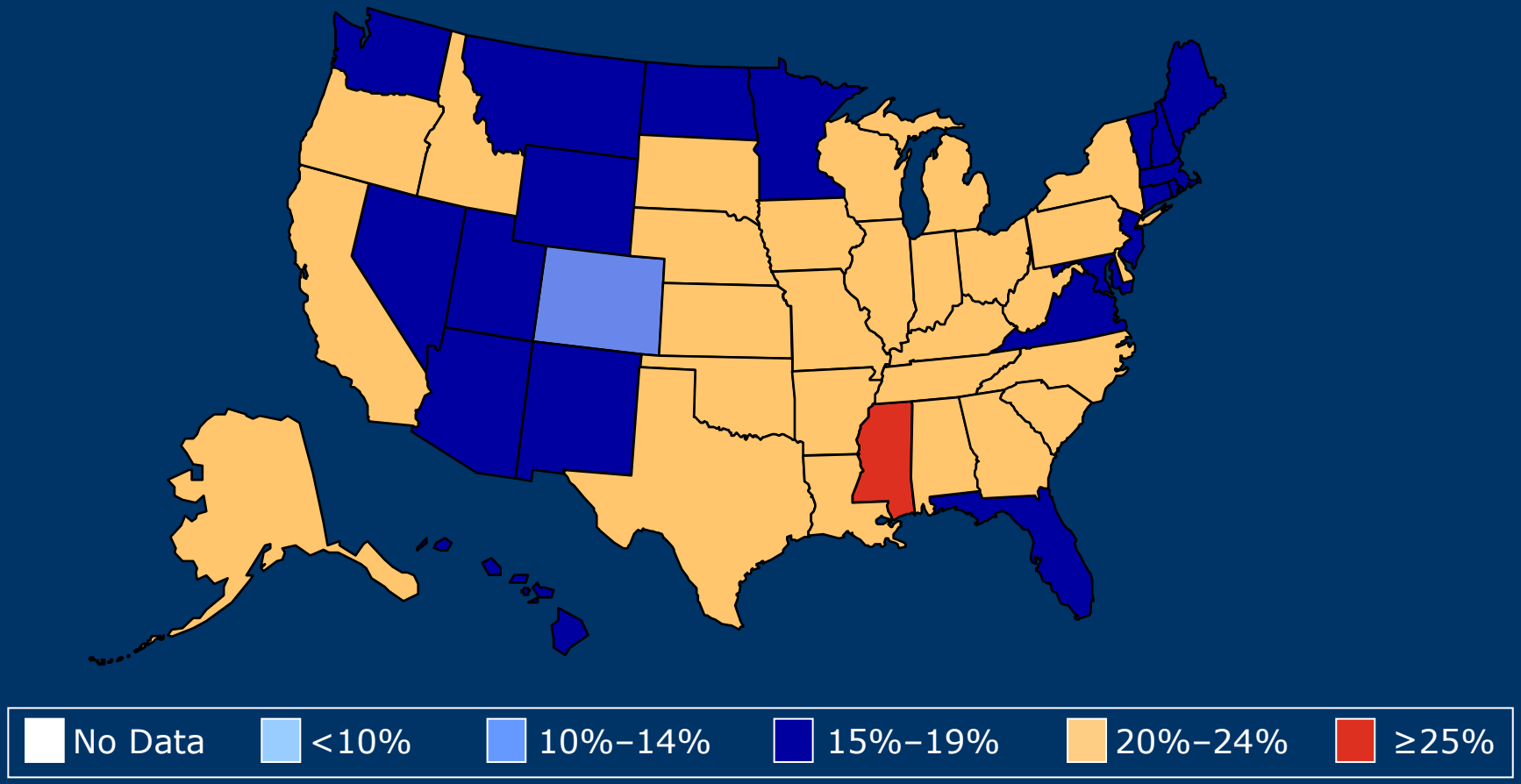

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Obesity Trends Among U.S. Adults: 2002

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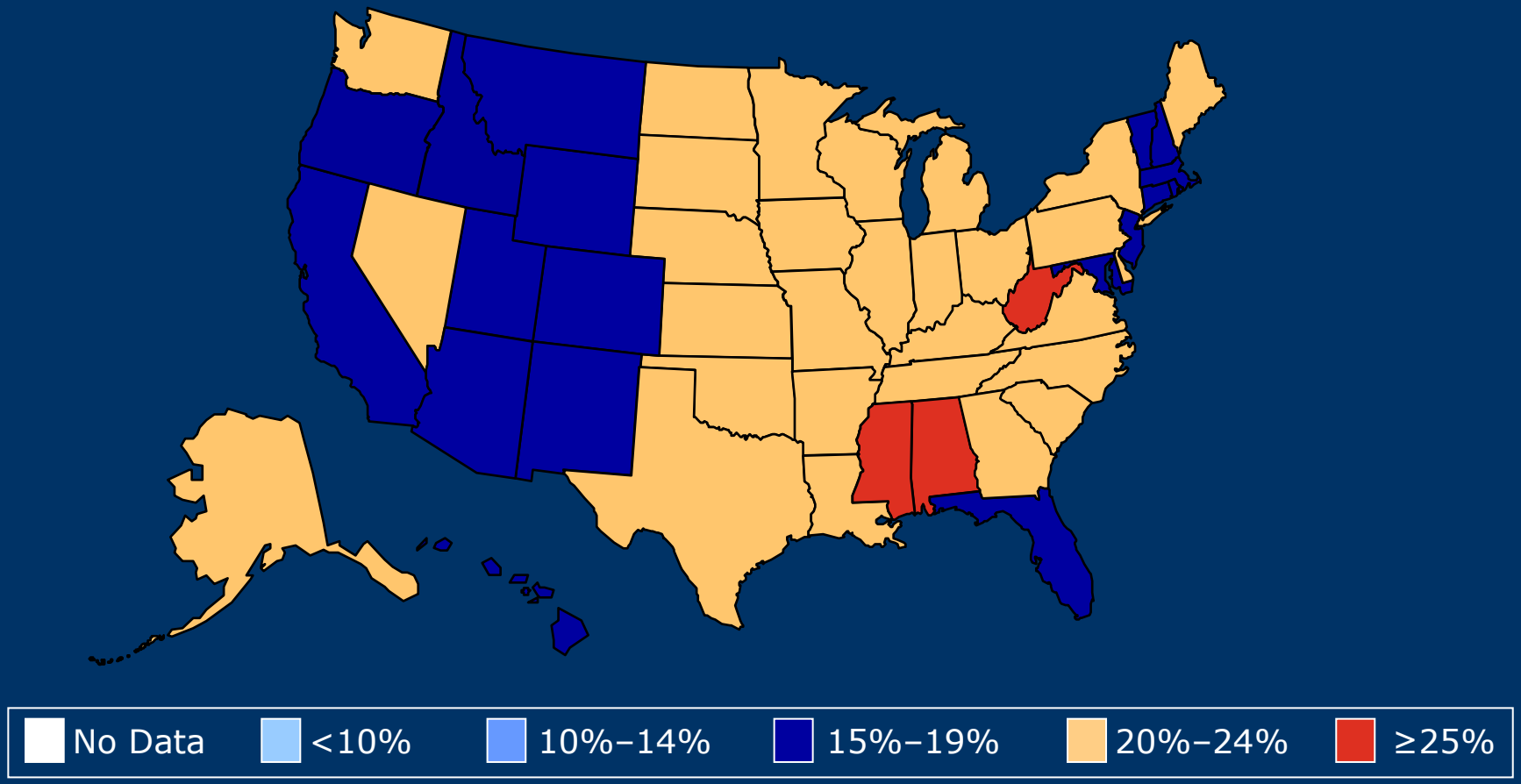

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Obesity Trends Among U.S. Adults: 2003

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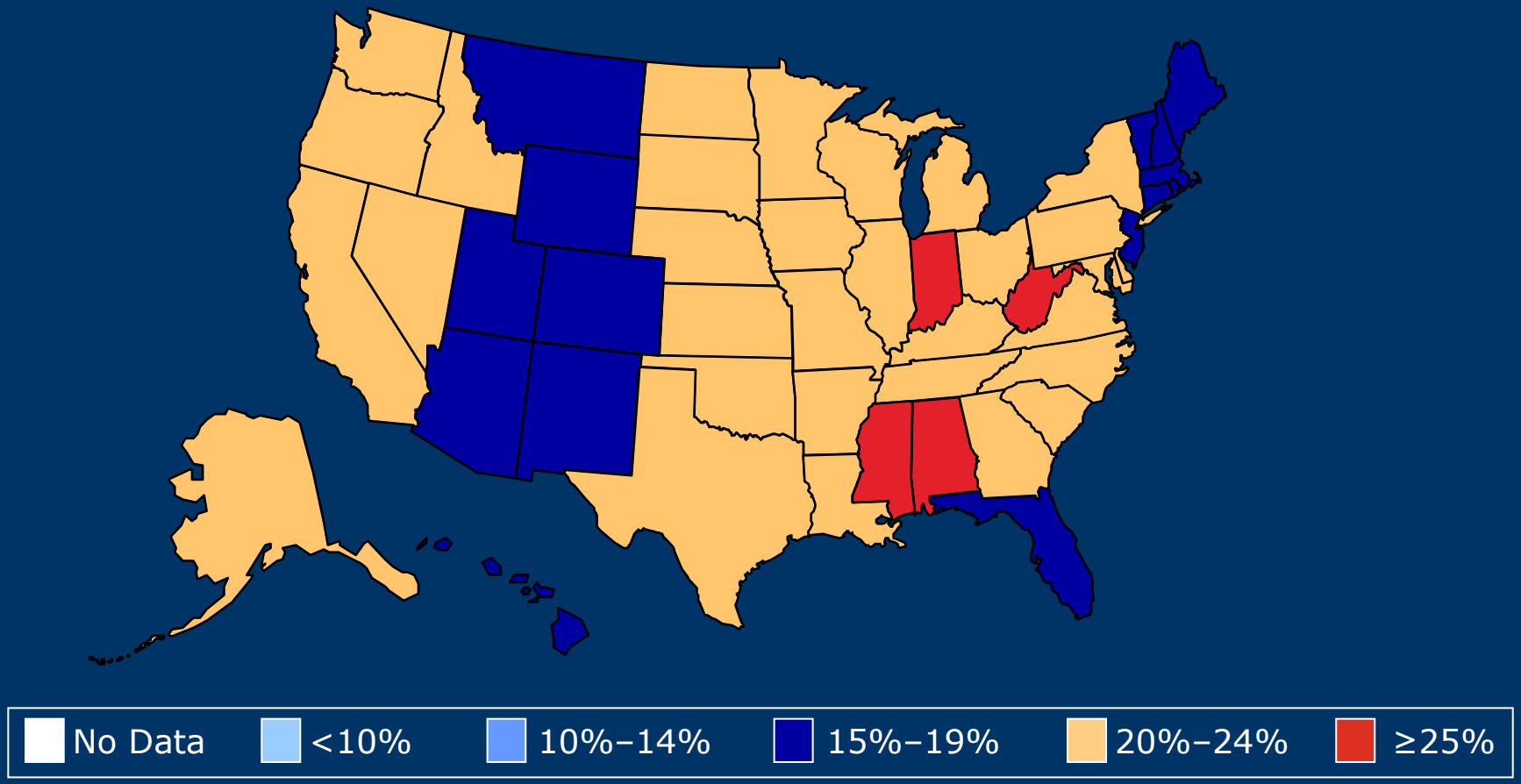
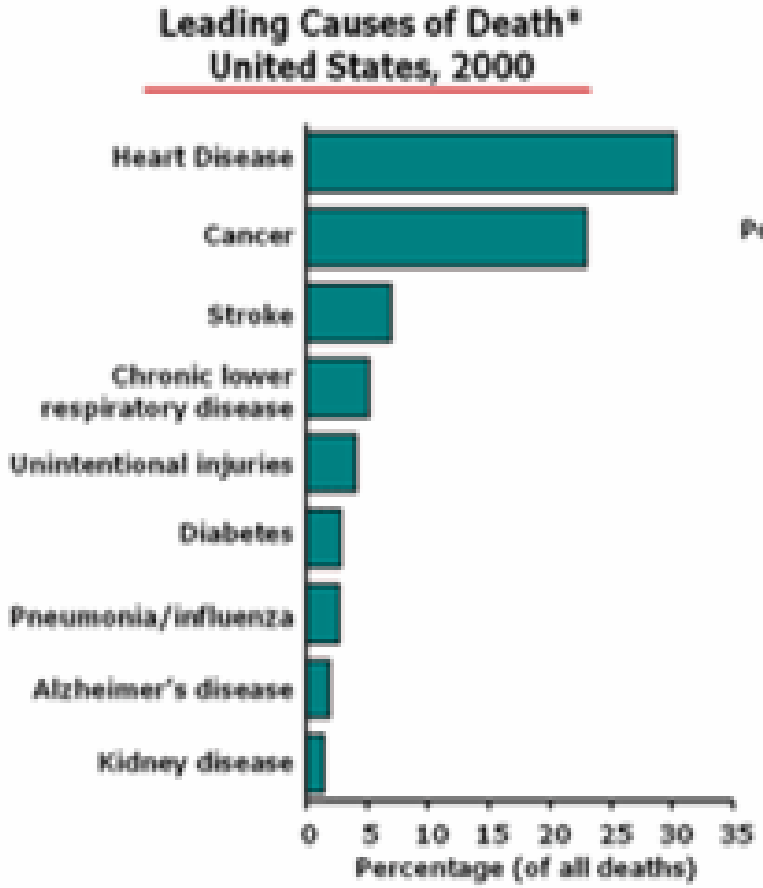


(Behavioral Risk Factor Surveillance System, CDC, 2004)

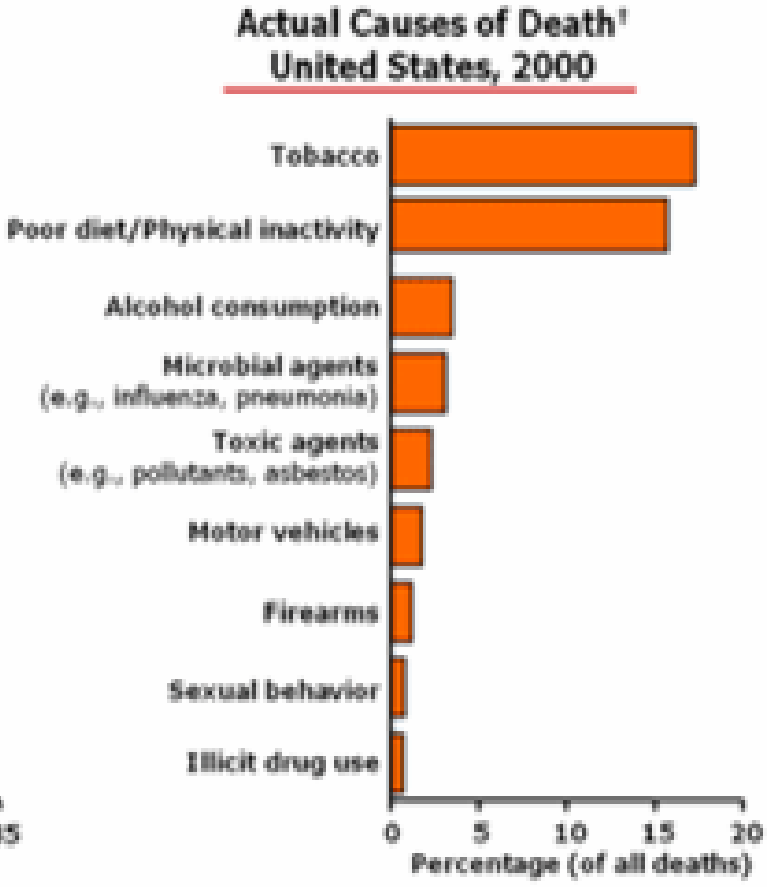
Poor diet and physical inactivity lead to…

Type of Illness



(*National Vital Statistics Reports*, 2002)

Type of Behavior



(*JAMA*, 2004)

The Good:

Communities are taking action on behalf of their kids

Safe Routes to School programs are part of the solution…

…to increase physical activity
…to improve unsafe walking and biking conditions
…to improve poor air quality by reducing vehicle emissions

Every school faces a different challenge

Steps in creating a SR2S Plan

- Bring together the right people
- Map the routes
- Identify existing issues
- Find the solutions
- Develop a SR2S Improvement Plan
- Fund the plan
- Act
- Evaluate and make changes if needed

Elements of Safe Routes to School programs

- Education
- Encouragement
- Enforcement
- Engineering

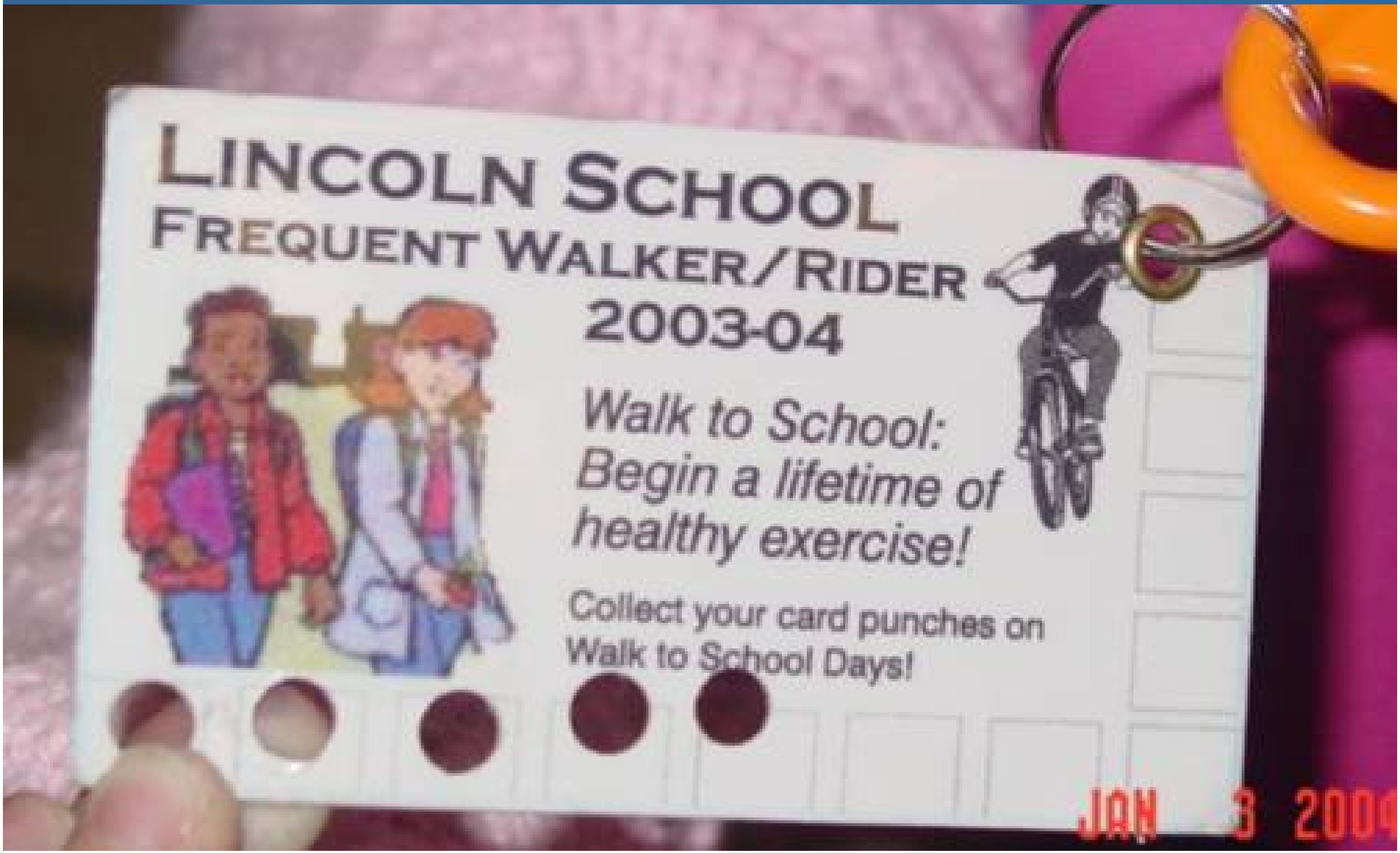
Education

- Teaches safety skills
- Creates safety awareness
- Fosters life-long safety habits
- Includes parents, neighbors and other drivers

Encouragement

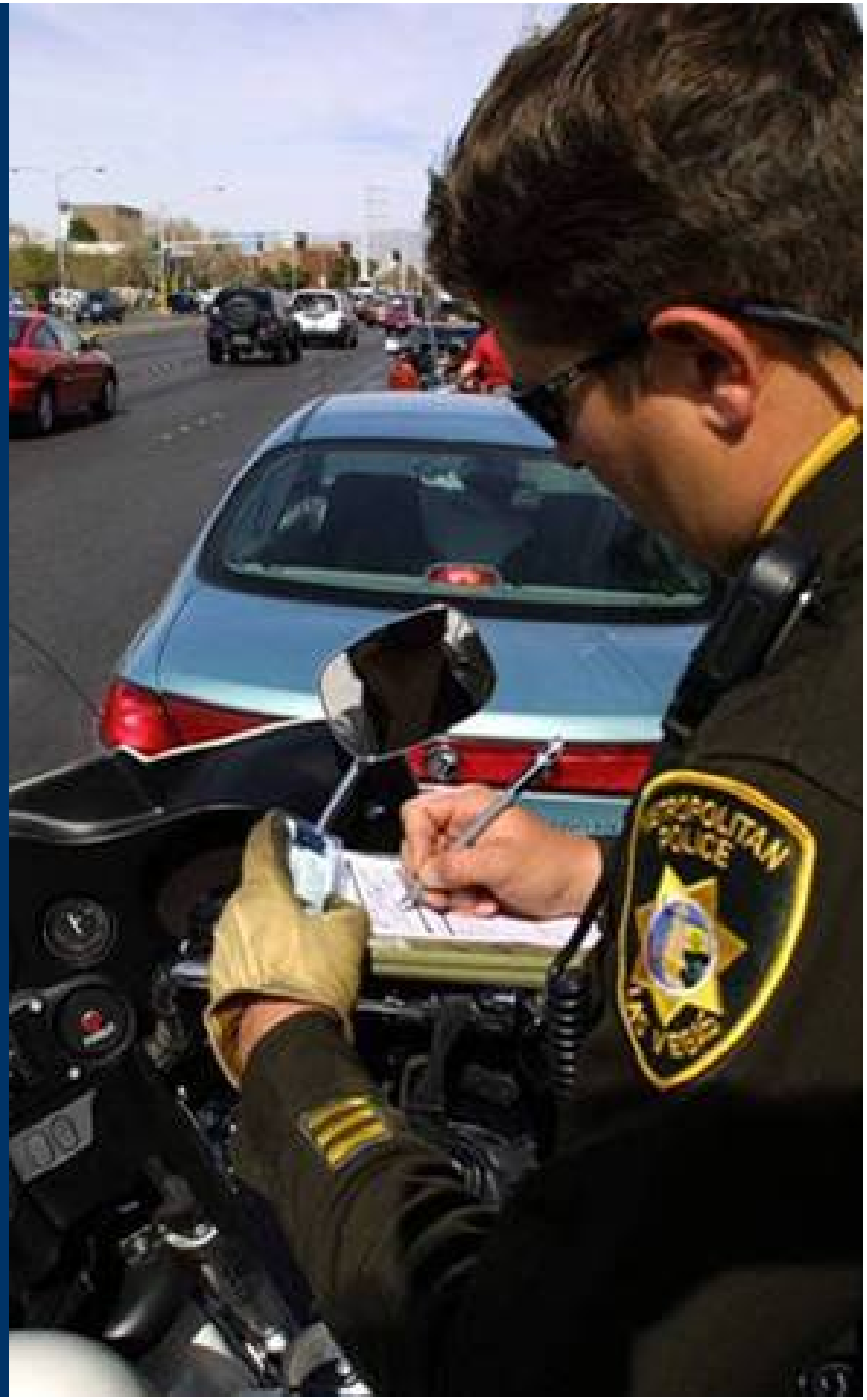
- Increases popularity of walking and biking
- Is an easy way to start SR2S programs
- Emphasizes fun of walking and biking

Encouragement



Enforcement

- Increases awareness of pedestrians and bicyclists
- Improves driver behavior
- Helps children follow traffic rules
- Decreases parent perceptions of danger



Engineering

Engineering

- Creates safer settings for walking and biking
- Can influence the way people behave

The time is right

- Growing enrollment
- Old existing facilities
- Demand for new and renovated facilities
- Opportunity to make important decisions for the future

(*Digest of Education Statistics*, 2002)

Safe Routes to School legislative activities

- TEA 21 reauthorization
- State initiatives

State initiatives

- Shell programs
- State funding programs

The Very Good:
Community Success Stories

Success story: Marin County, CA encouragement programs

- Walk or Wheel Wednesdays
- Frequent Rider Mile Contests
- Walking school buses
- Fliers, posters, newsletters
- Media coverage
- Website

Marin County, CA, results

64% increase in the number of children walking to school

114% increase in the number of children biking to school

91% increase in carpooling

39% decrease in children transported to school by private car

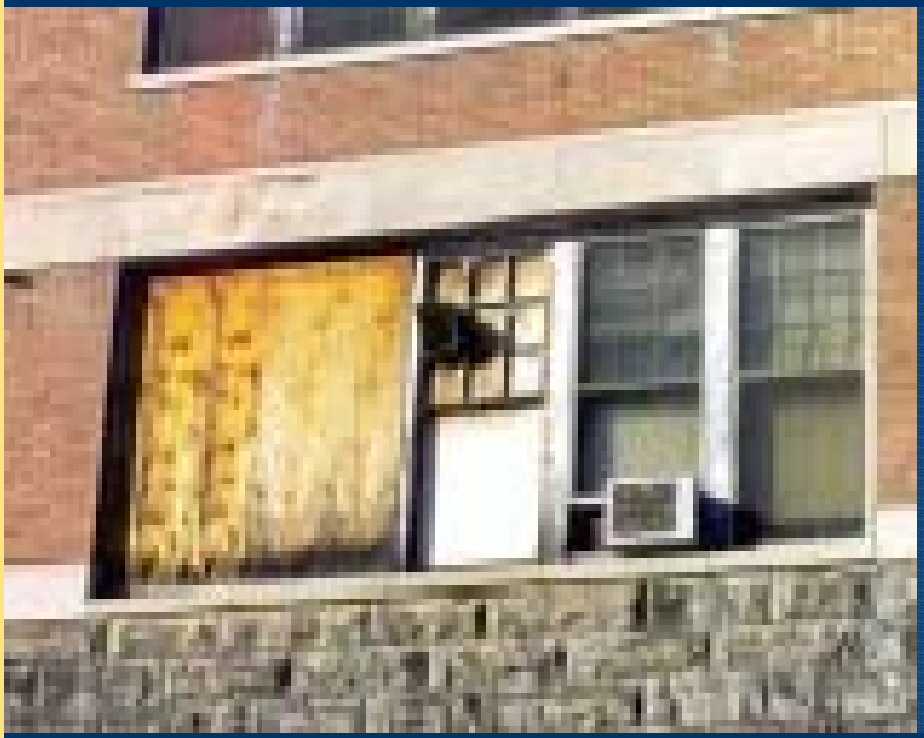
(*American Journal of Public Health*, 2003)

Success stories: Wisconsin and South Carolina rethinking neighborhood schools

Milwaukee's Neighborhood School Initiative

South Carolina eliminates acreage requirements

Success story: St. Paul, Minnesota, renovation and revitalization



Before: abandoned building in bad disrepair

After: renovated school includes YMCA and daycare center

Success story: Cleveland, Ohio safety programs

Engineering treatments such as:

- New and restored crosswalk markings and signs
- Citywide crosswalk signal and pushbutton installation

Safe Routes to School goals

- Where it's safe, get kids walking and biking
- Where it's not safe, make it safe

Goals of this course

- Know how to use SR2S to create change
- Identify the initial steps to make it happen


MARCH 16, 2015
www.time.com AOL Keyword: TIME
TIME
Obesity Epidemic Stemmed
Safe Routes to School, increased physical activity credited with success
Armstrong Seeks 17th-straight Tour de France Title