



Confronting the Challenge of Youth Overweight in Maine

Maine Center for Public Health

Maine Harvard Prevention Research Center

April 2009

Goals of This Presentation

- What's the problem?
 - Review facts & data about child & adult obesity in US and Maine
- Why?
 - Understand how we got here
- How?
 - Think about how we can address this challenge
- What now?
 - Identify 2-3 steps we can each take – starting now!



The Problem

Changes in Child Health



- Great strides in child health in US over past century – improvements in...
 - Infectious diseases, immunizations
 - Poverty, nutrition
 - Teen pregnancy
 - Injury prevention, seatbelts
 - Oral health, fluoridation
 - Tobacco prevention and control

At least, up 'til now...



- Increases in youth overweight/obesity threaten health of current generation
- Because of obesity and overweight, our youth may be the first generation in America to not live as long as their parents!

Obesity in the U.S.



- Overall in US, rates of obesity in US have risen...
 - 75% in past 10 yrs
 - nearly 100% in past 20 yrs!
- In **children**, rates of overweight/obesity doubled in 20 years
- In **teens**, rates of overweight/obesity tripled in 20 years
- Currently in US *self-reported* data indicate that 61% of adults are overweight or obese; *direct measurements* indicate that **two-thirds** of adults are overweight or obese

Defining the Terms



$$\text{Body Mass Index (BMI)} = \frac{\text{Weight (in pounds)}}{\text{height squared (in inches)}} \times 703$$

BMI Categories for ADULTS:

Underweight: < 18.5

Healthy Weight: 18.5—24.9

Overweight: 25 to 29.9

Obese: ≥ 30

Morbidly Obese: ≥ 40

Defining the Terms



- CDC's growth charts: BMI percent-for-age & gender charts (www.cdc.gov, National Center for Health Statistics)

YOUTH (2-20 yrs old): BMI percentile for age/gender

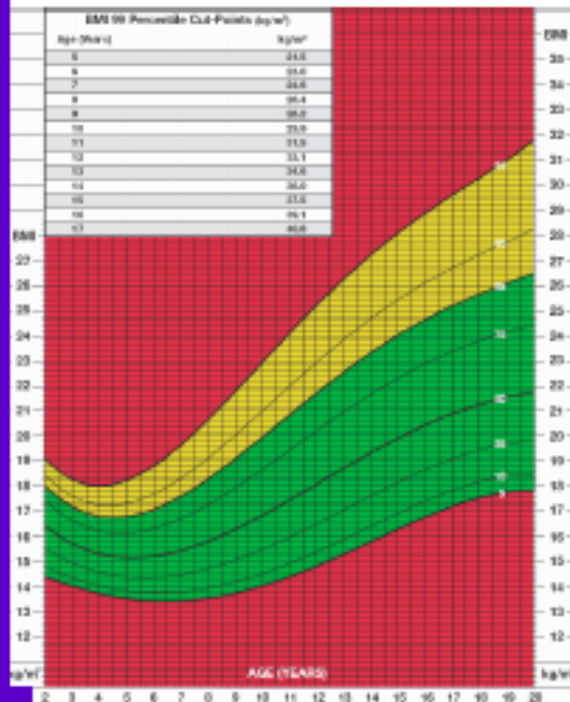
- **Underweight: less 5th %'ile**
 - **Healthy Weight: 5 - 84th %'ile**
 - **Overweight: 85th - 94th %'ile**
 - **Obese: \geq 95th %'ile**
- BMI-for-age above 95th percentile more likely to have factors for cardiovascular disease and become overweight adults

BMI % for age / gender



BMI Assessment in Children

Girls



Body Mass Index (BMI) in children is:

- Determined using height, weight, age, and sex. Girls and boys differ in their body fat and BMI changes as they grow. It is important to look at and track BMI each year.
- A screening tool. A high BMI does not always mean a child is overweight. For example, a very muscular youth can have a high BMI. Your provider can best determine if your child has a weight problem.
- Recommended for all children at least once a year by the American Academy of Pediatrics, a national group that sets standards for children's healthcare.

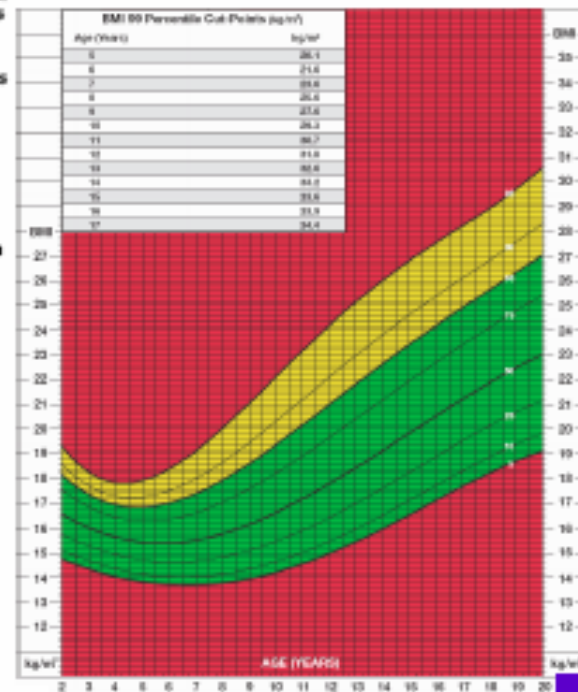
Body Mass Index (BMI) assessment does not:

- Use calipers or cause pain
- Measure fat
- Compare children or adolescents to each other

Body Mass Index (BMI) can help tell you:

- If your child is underweight, at a healthy weight, overweight or obese.
- If your child is growing and developing in a healthy way.

Boys



Calculating BMI



BMI Calculators / Info:

www.cdc.gov/growthcharts/

www.medscape.com/viewprogram/2640

www.kidsnutrition.org/bodycomp/bmiz2.html

- plots BMI on % for age/sex graph

The Changing Picture of Obesity in the US



- Examine CDC data on self-reported rates of obesity in adults
- Watch trend from 1985-2007
- Colors represent percent of population in state who are obese
- Light blue color is “good” – darker blue, tan, and red are BAD!! (higher rates of obesity)

Source of the Data



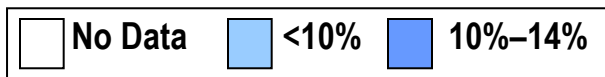
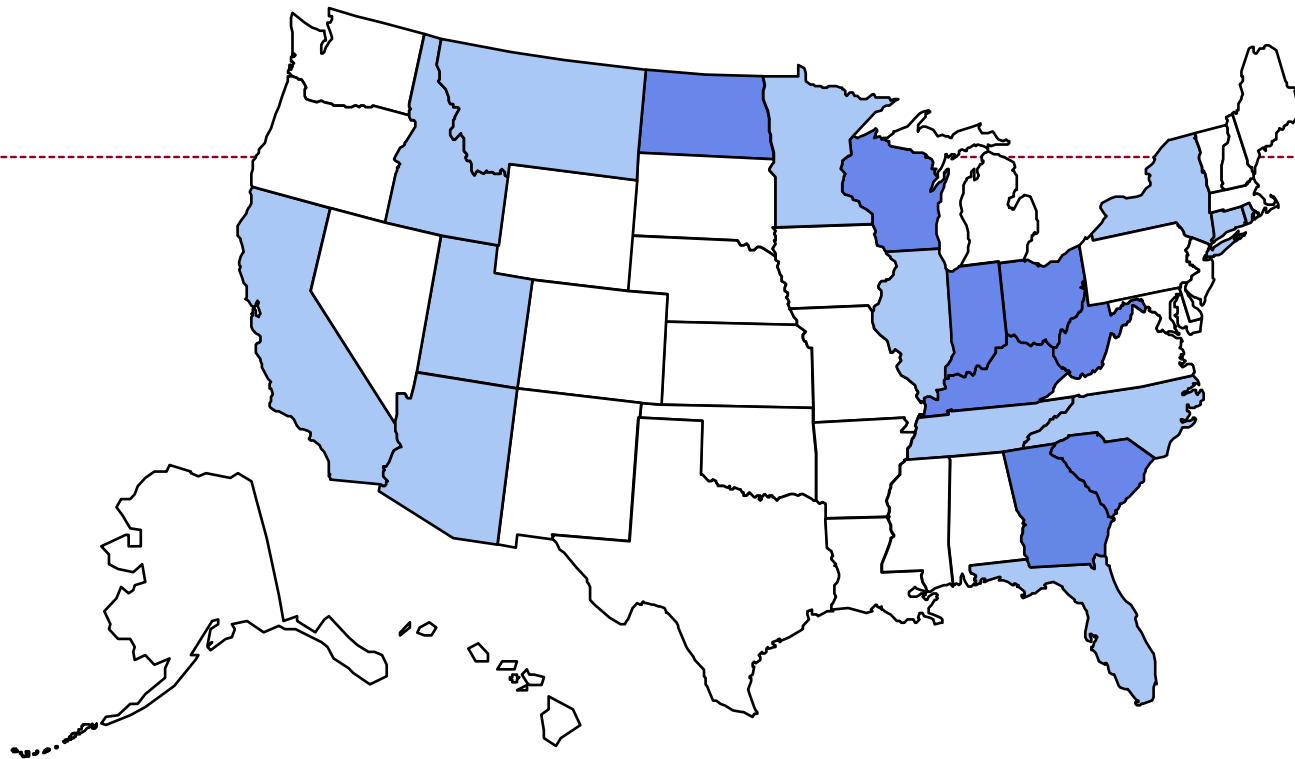
- The data shown in these maps were collected through CDC's Behavioral Risk Factor Surveillance System (BRFSS). Each year, state health departments use standard procedures to collect data through a series of monthly telephone interviews with U.S. adults.
- Prevalence estimates generated for the maps may vary slightly from those generated for the states by BRFSS (<http://aps.nccd.cdc.gov/brfss>) as slightly different analytic methods are used.



Obesity Trends* Among U.S. Adults

BRFSS, 1985

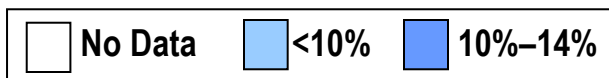
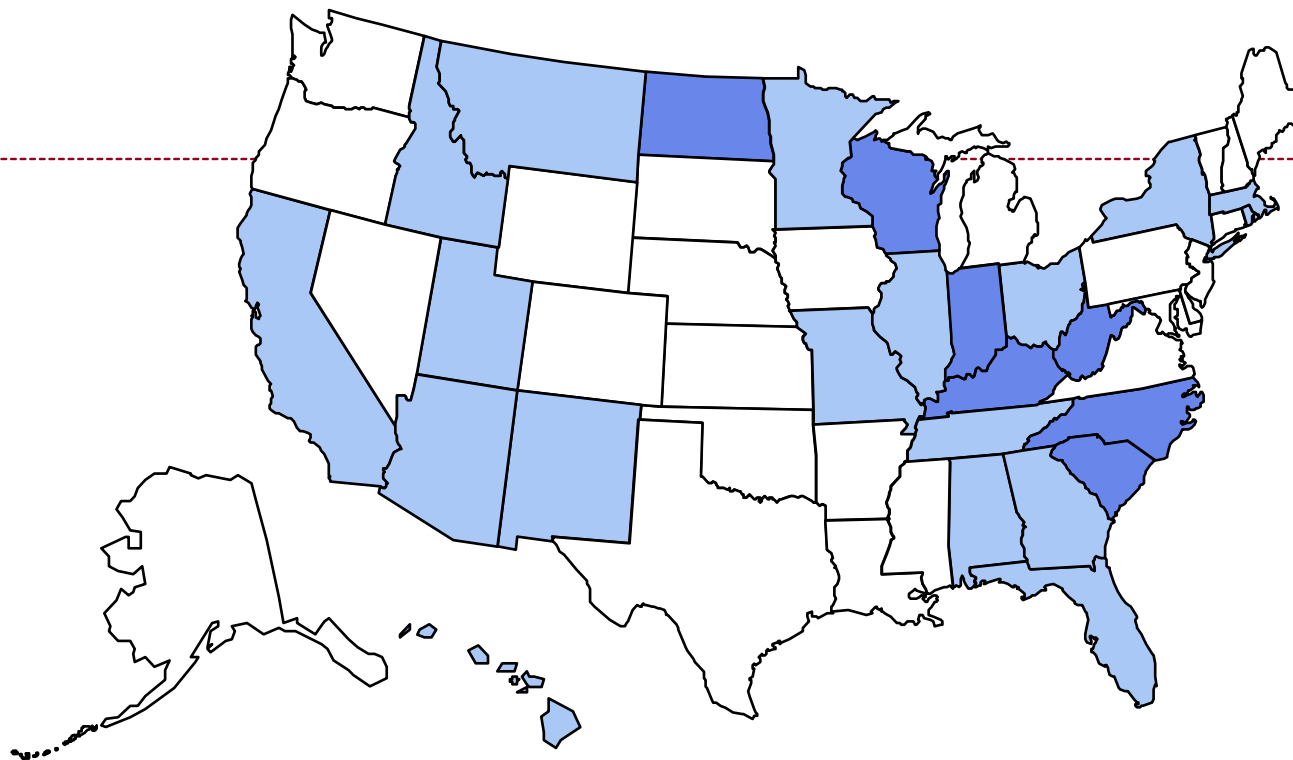
(*BMI ≥ 30 , or ~ 30 lbs. overweight for 5' 4" person)



Obesity Trends* Among U.S. Adults

BRFSS, 1986

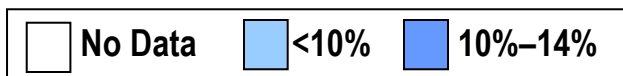
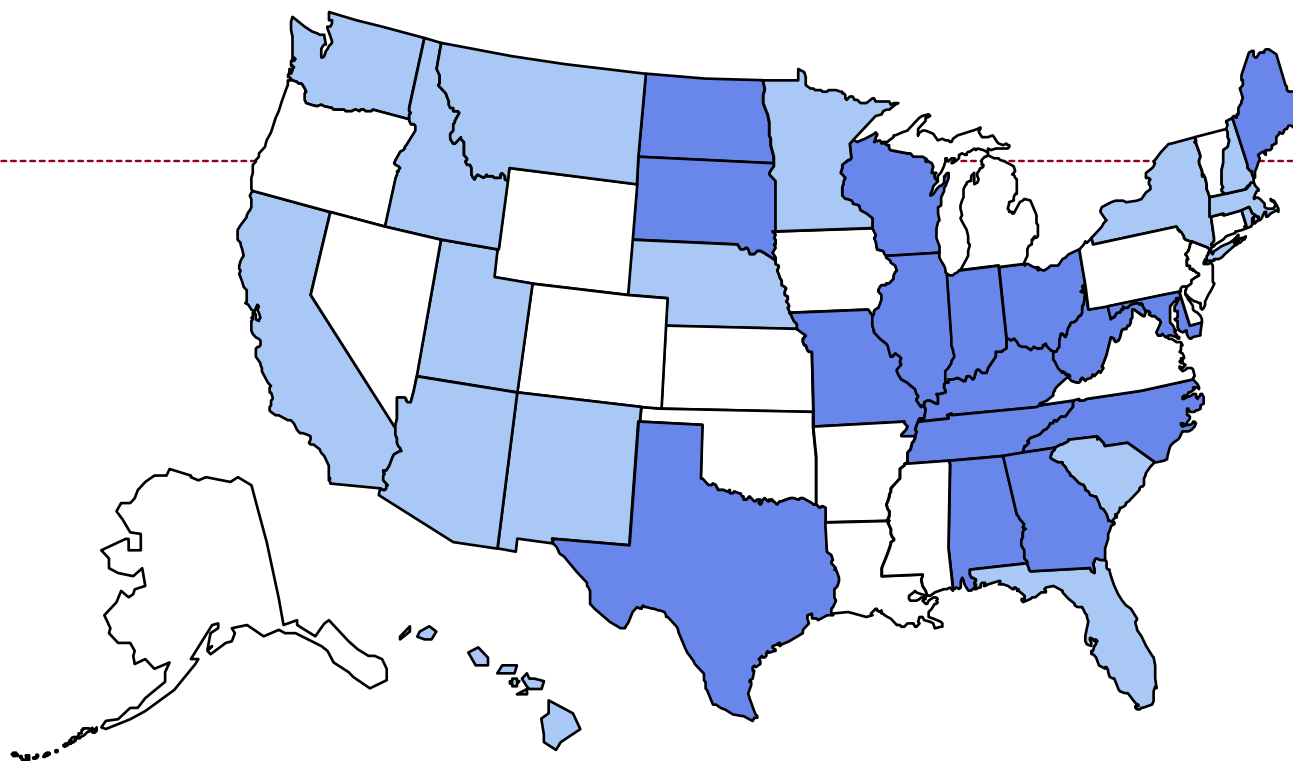
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Obesity Trends* Among U.S. Adults

BRFSS, 1987

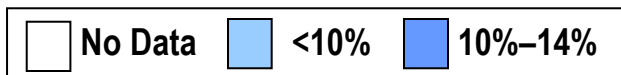
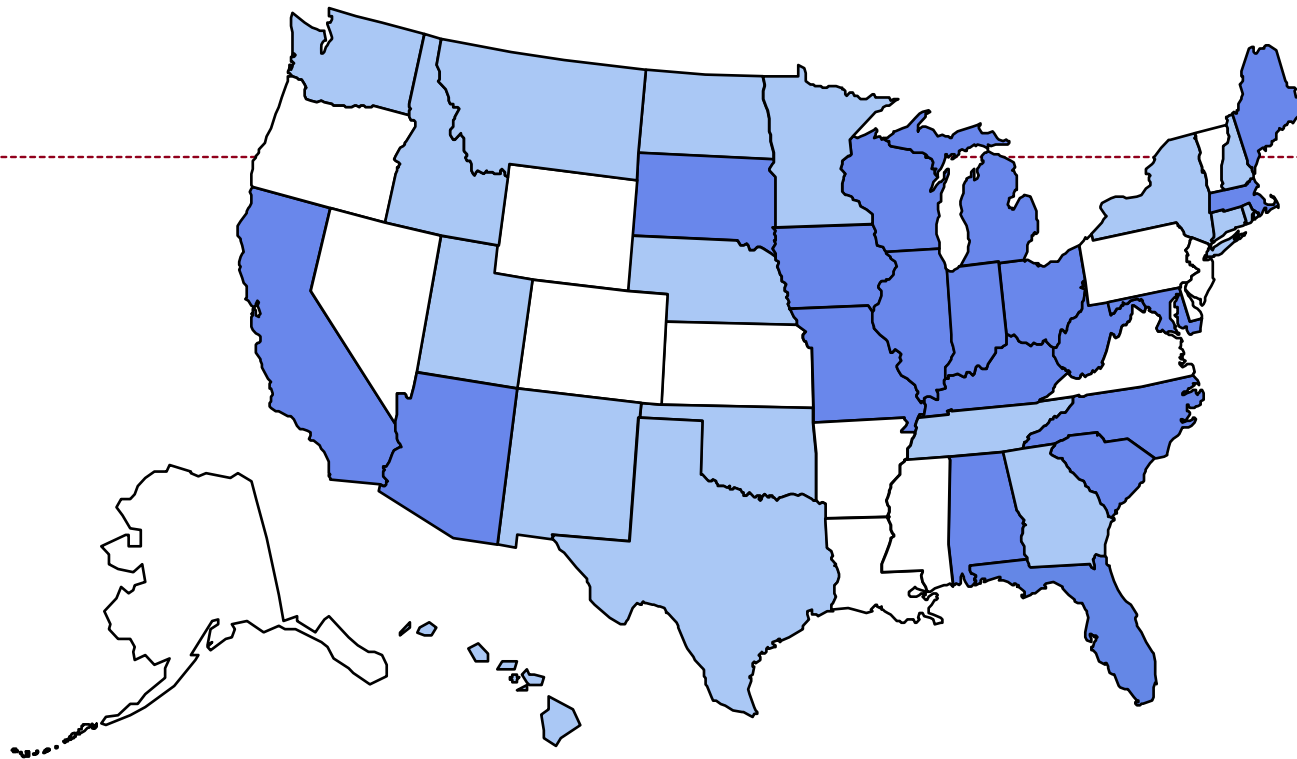
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Obesity Trends* Among U.S. Adults

BRFSS, 1988

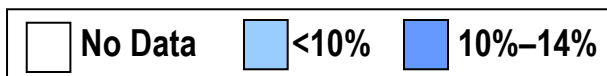
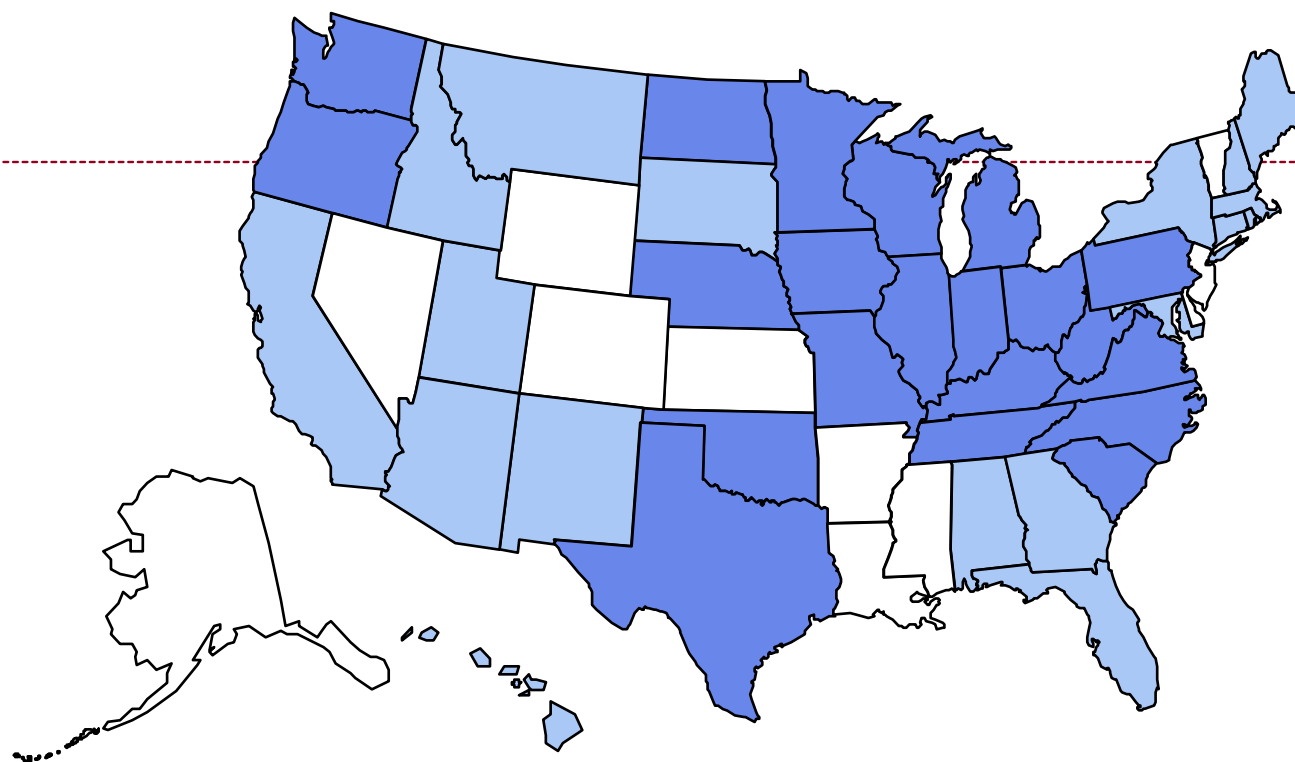
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Obesity Trends* Among U.S. Adults

BRFSS, 1989

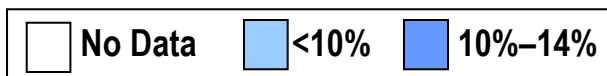
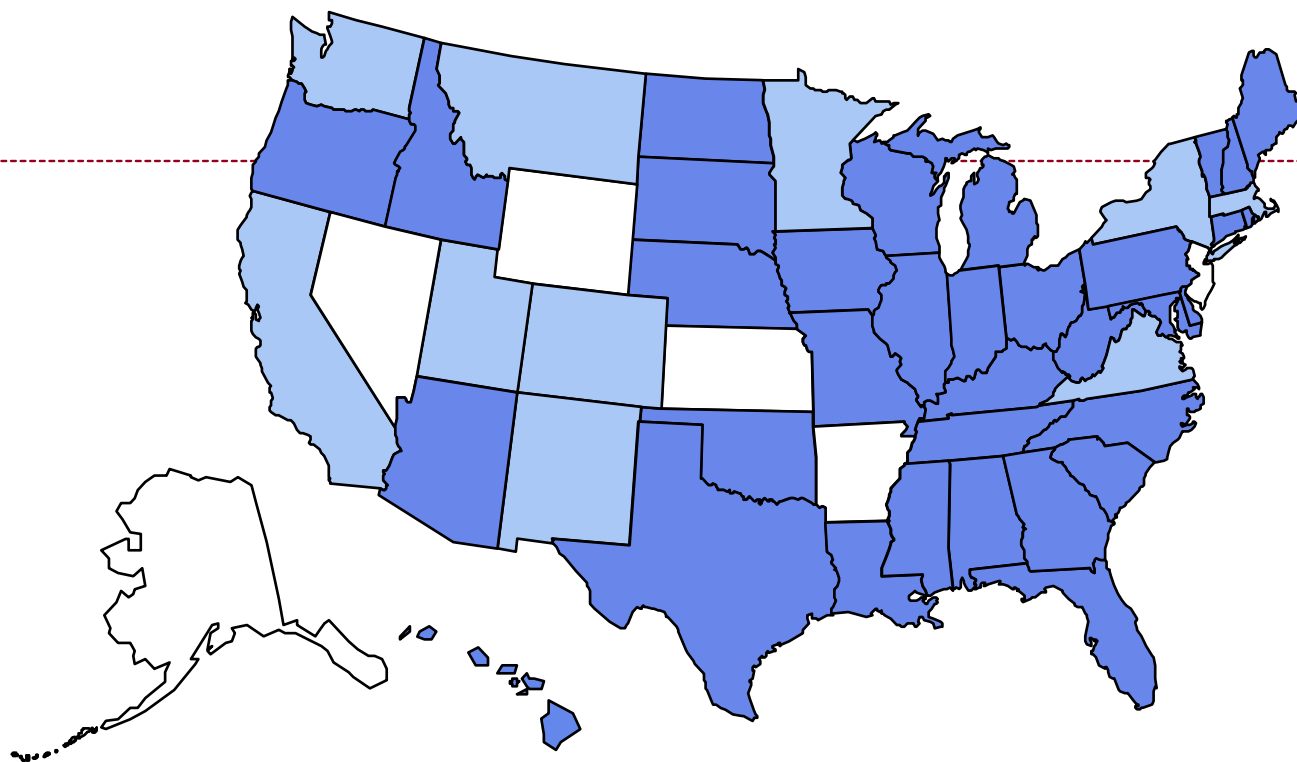
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Obesity Trends* Among U.S. Adults

BRFSS, 1990

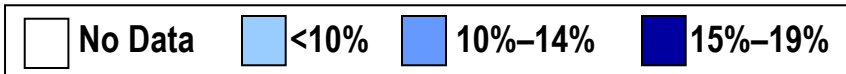
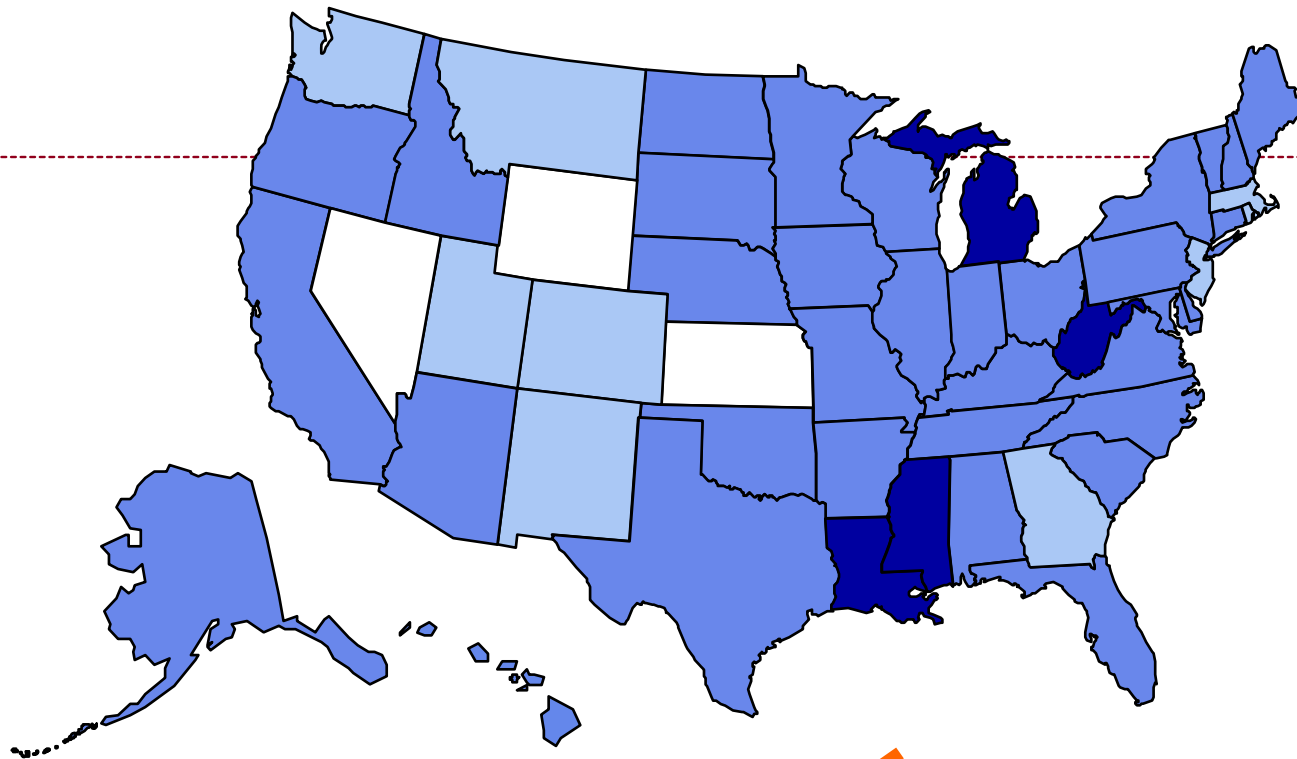
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Obesity Trends* Among U.S. Adults

BRFSS, 1991

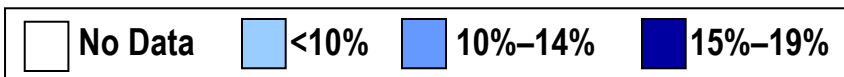
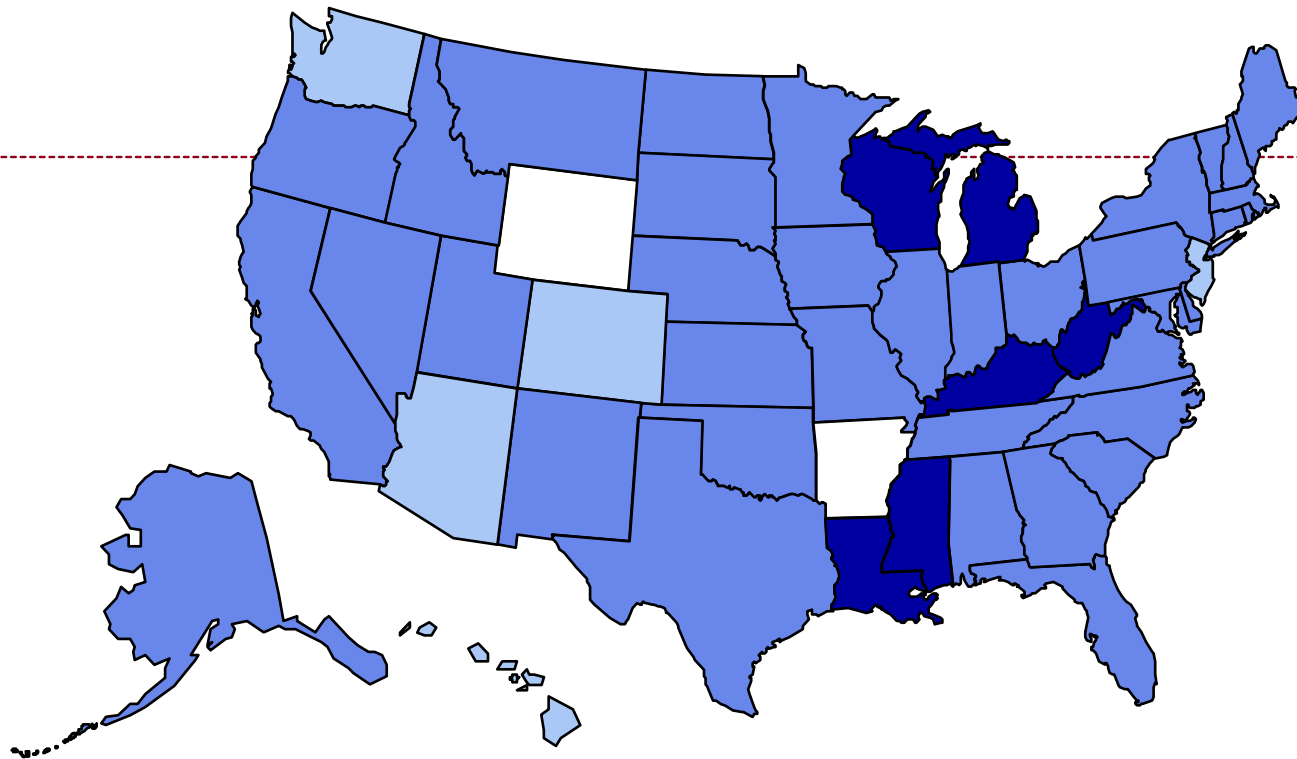
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Obesity Trends* Among U.S. Adults

BRFSS, 1992

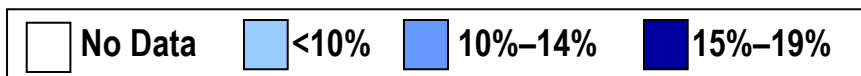
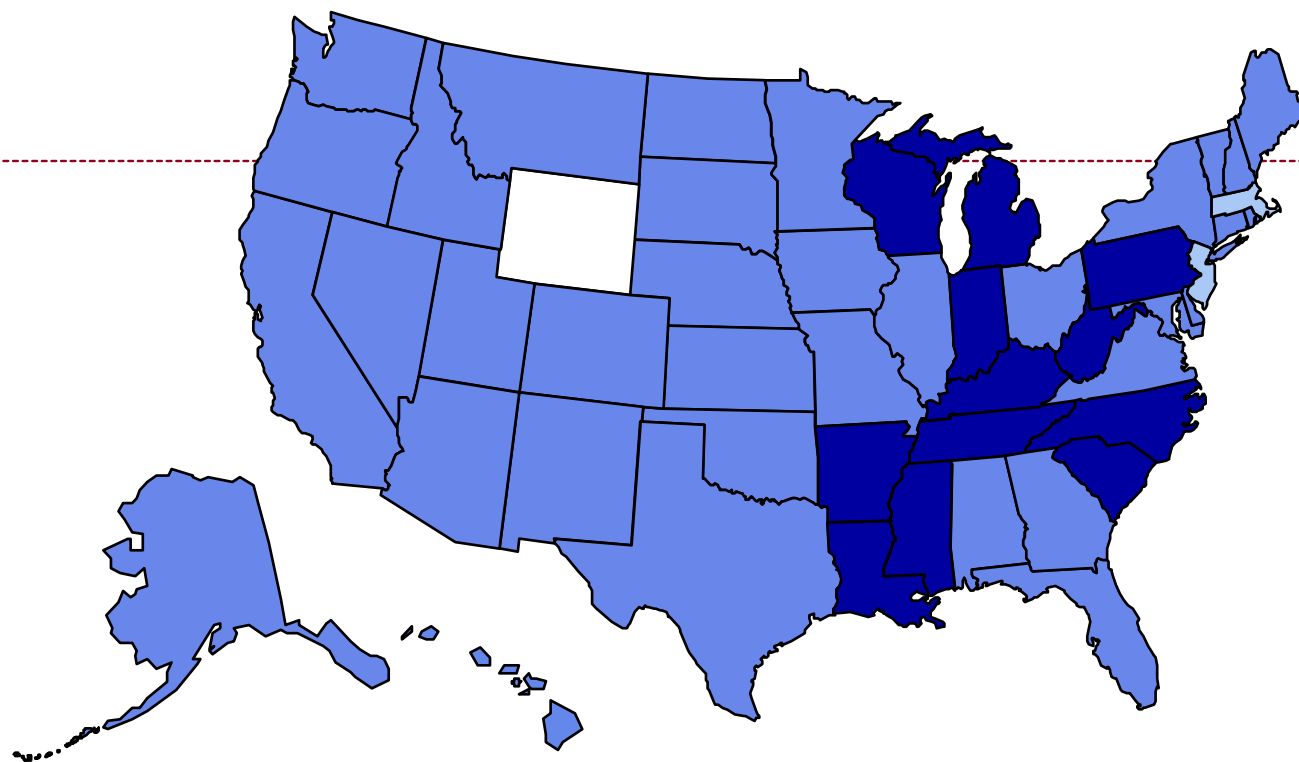
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Obesity Trends* Among U.S. Adults

BRFSS, 1993

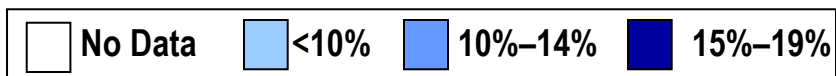
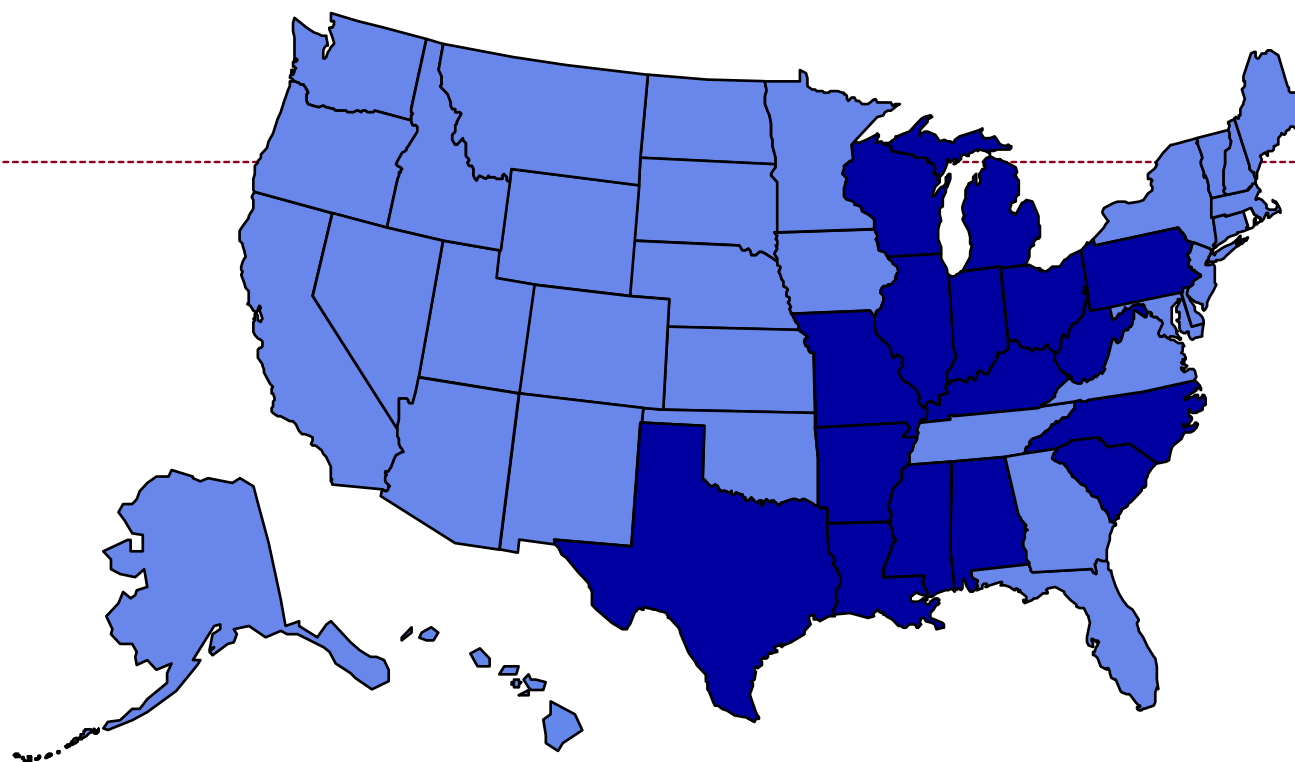
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Obesity Trends* Among U.S. Adults

BRFSS, 1994

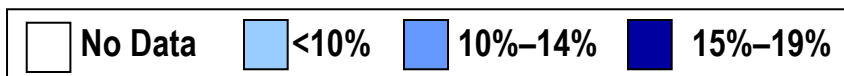
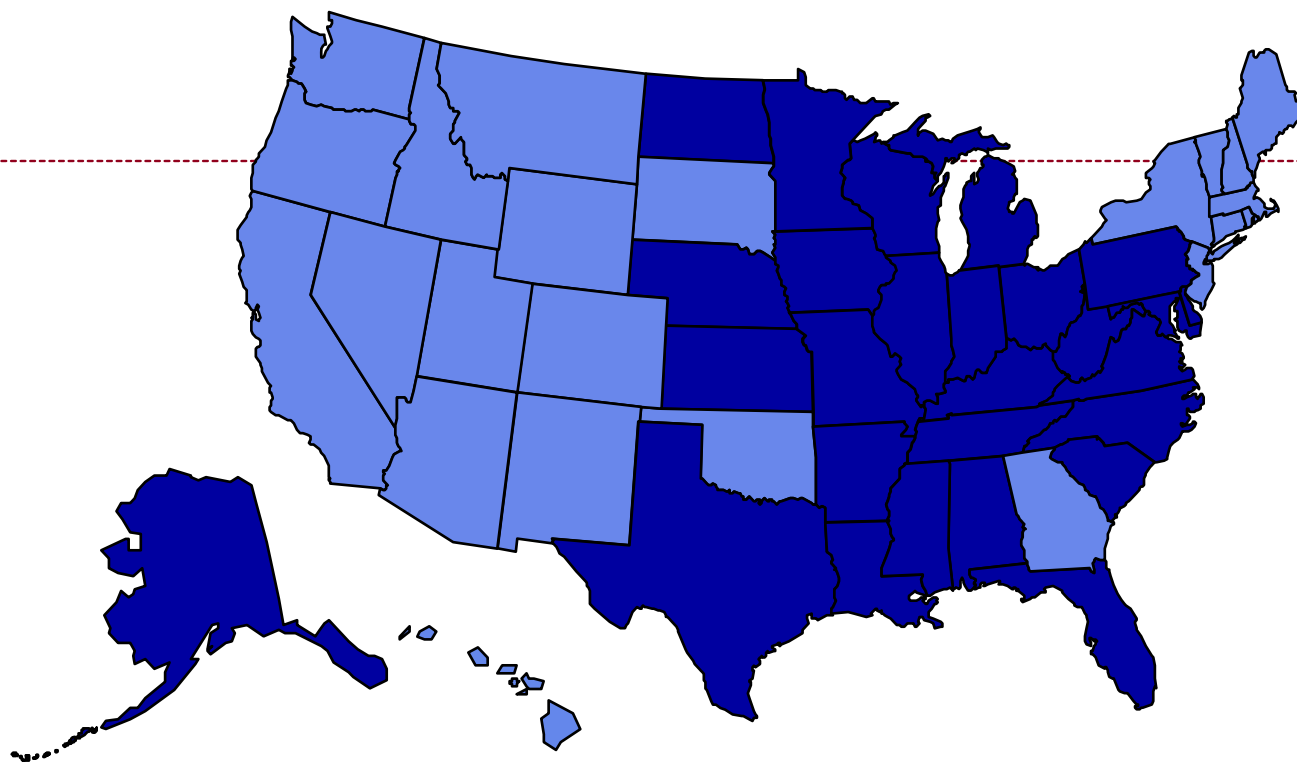
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Obesity Trends* Among U.S. Adults

BRFSS, 1995

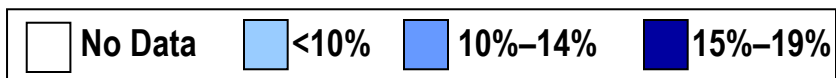
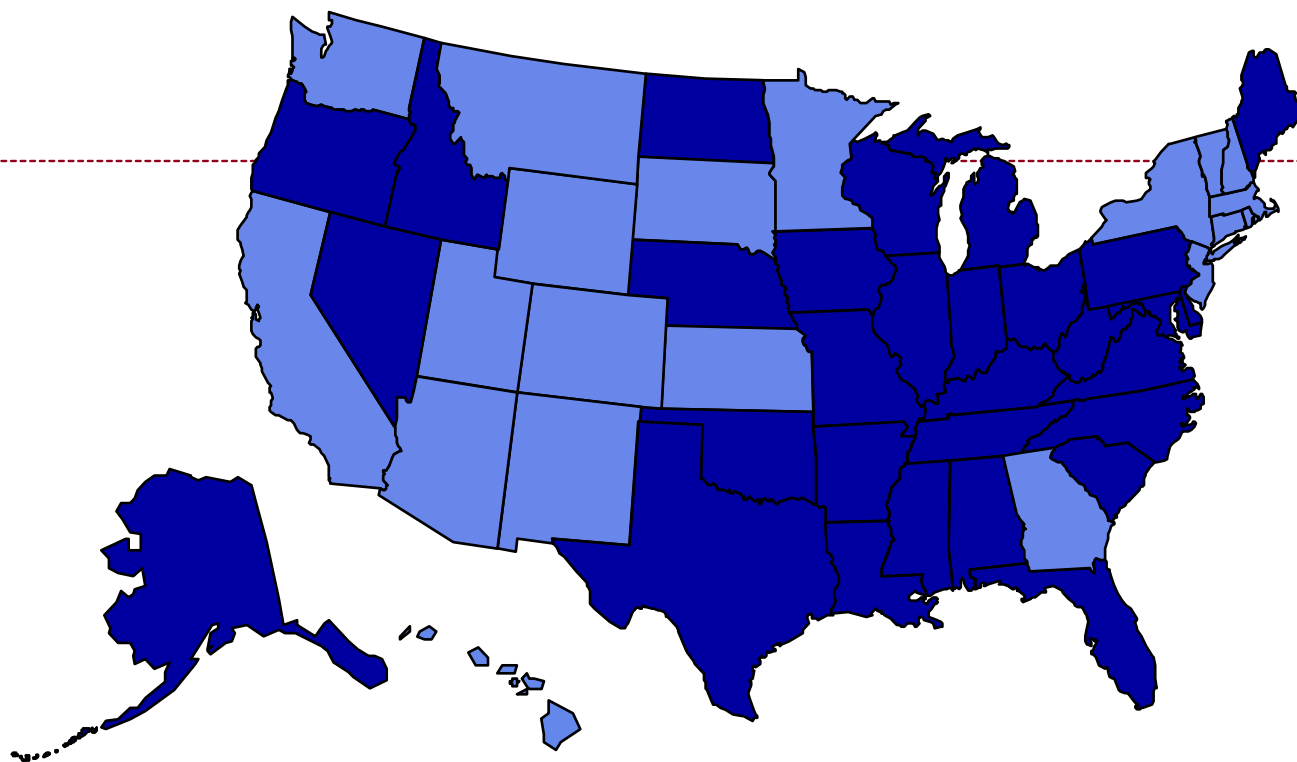
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Obesity Trends* Among U.S. Adults

BRFSS, 1996

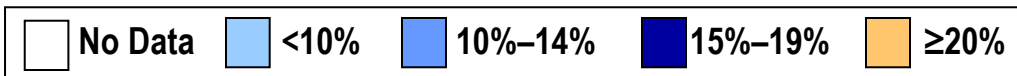
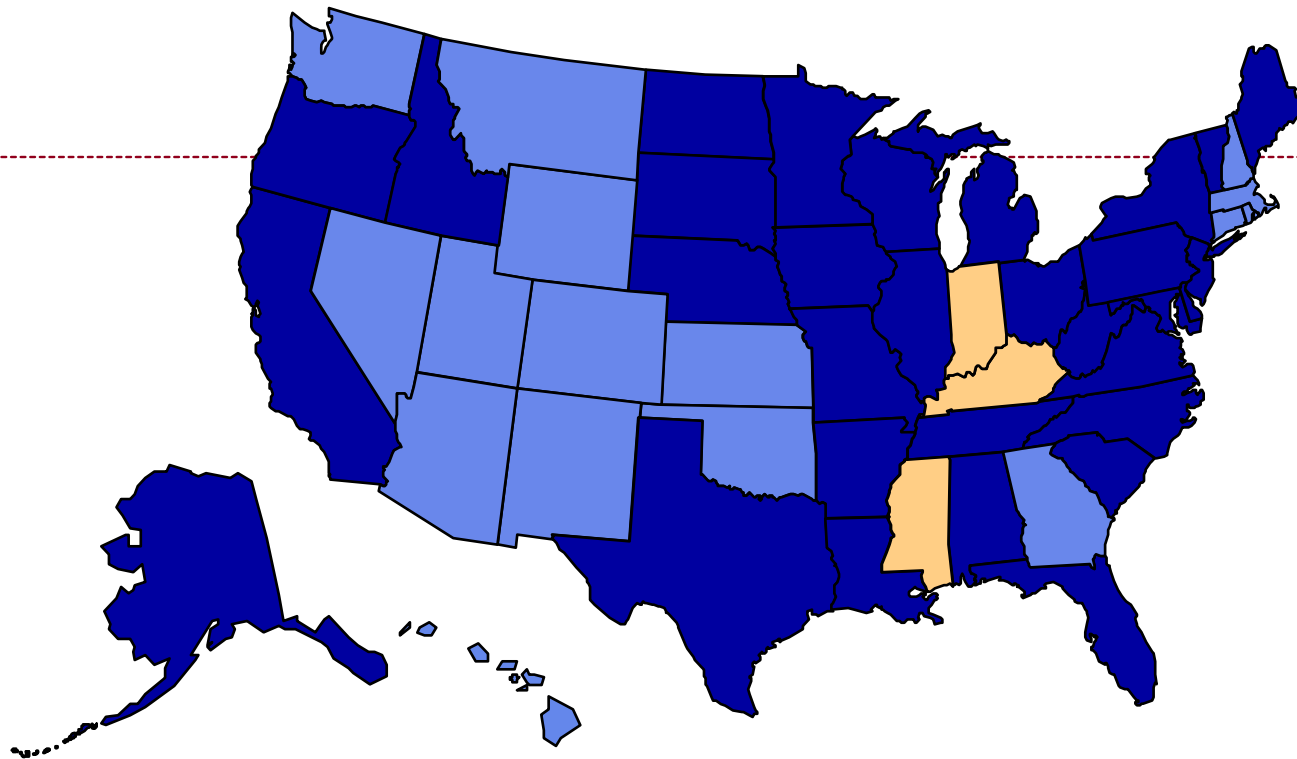
(*BMI ≥ 30 , or ~ 30 lbs. overweight for 5' 4" person)



Obesity Trends* Among U.S. Adults

BRFSS, 1997

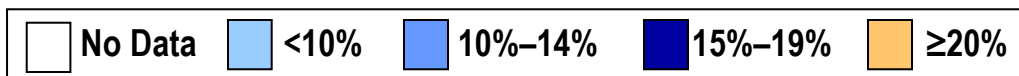
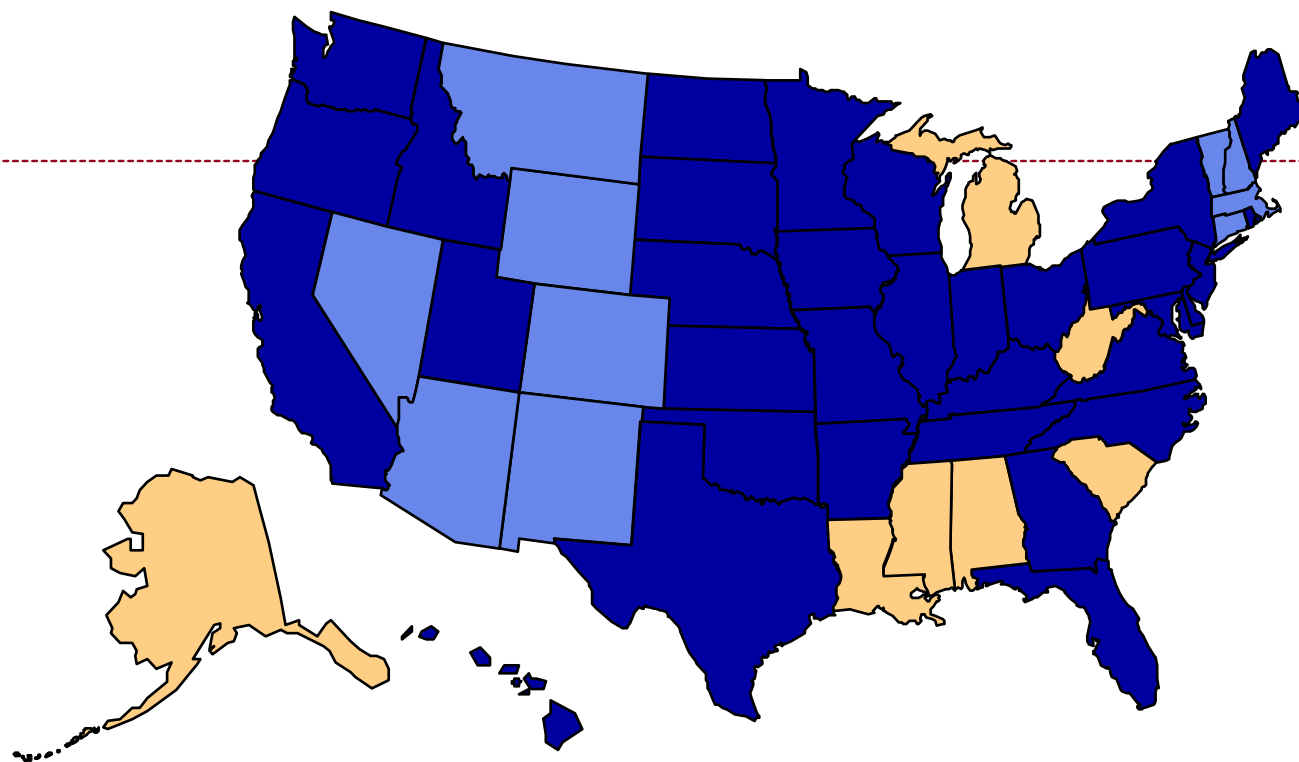
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Obesity Trends* Among U.S. Adults

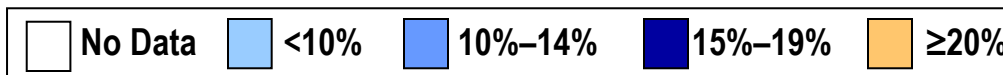
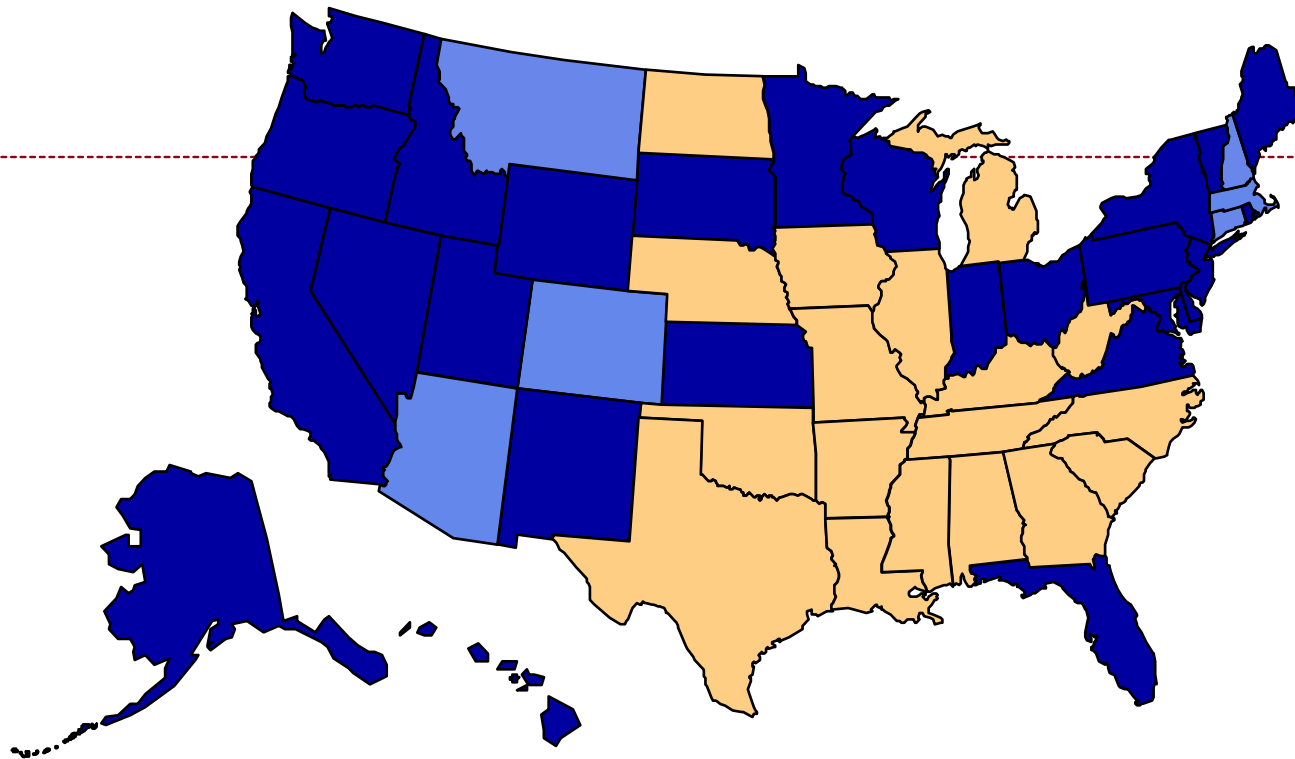
BRFSS, 1998

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



BRFSS, 1999

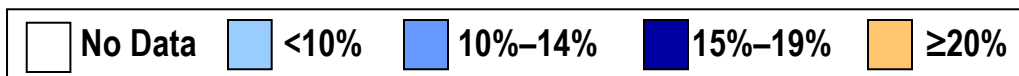
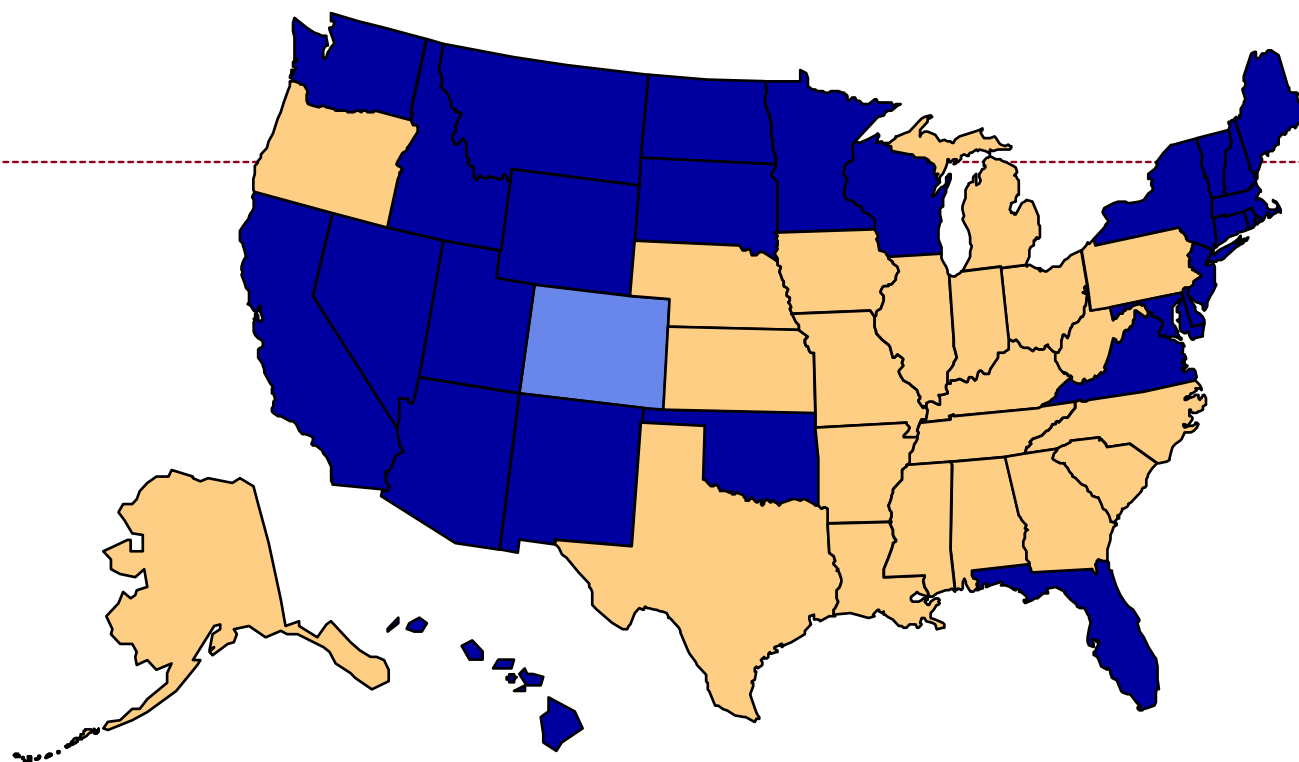
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Obesity Trends* Among U.S. Adults

BRFSS, 2000

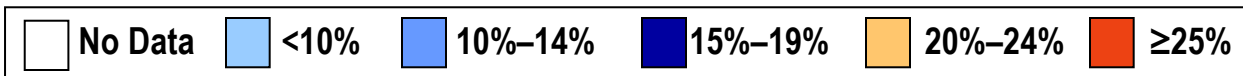
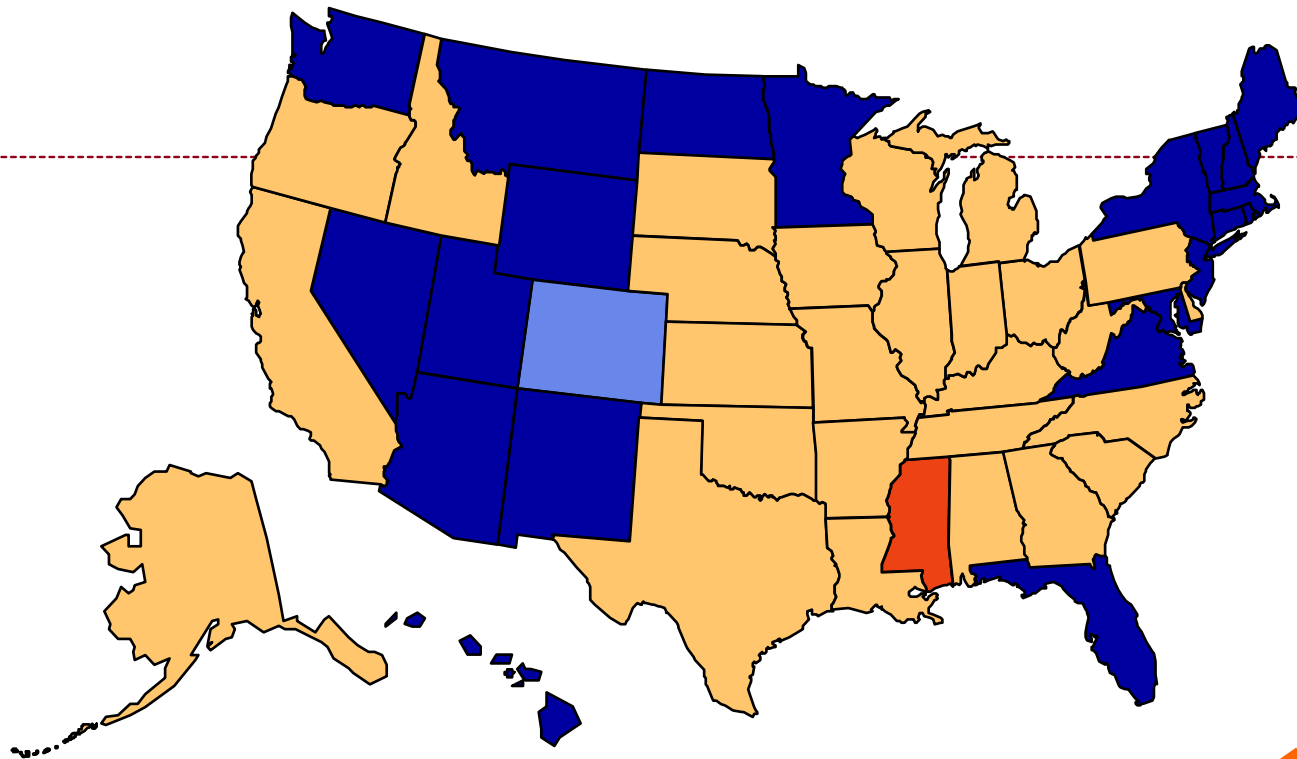
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Obesity Trends* Among U.S. Adults

BRFSS, 2001

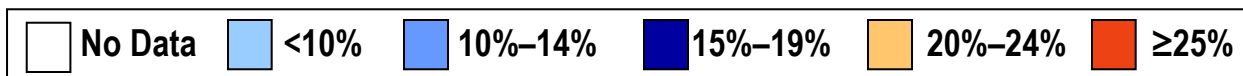
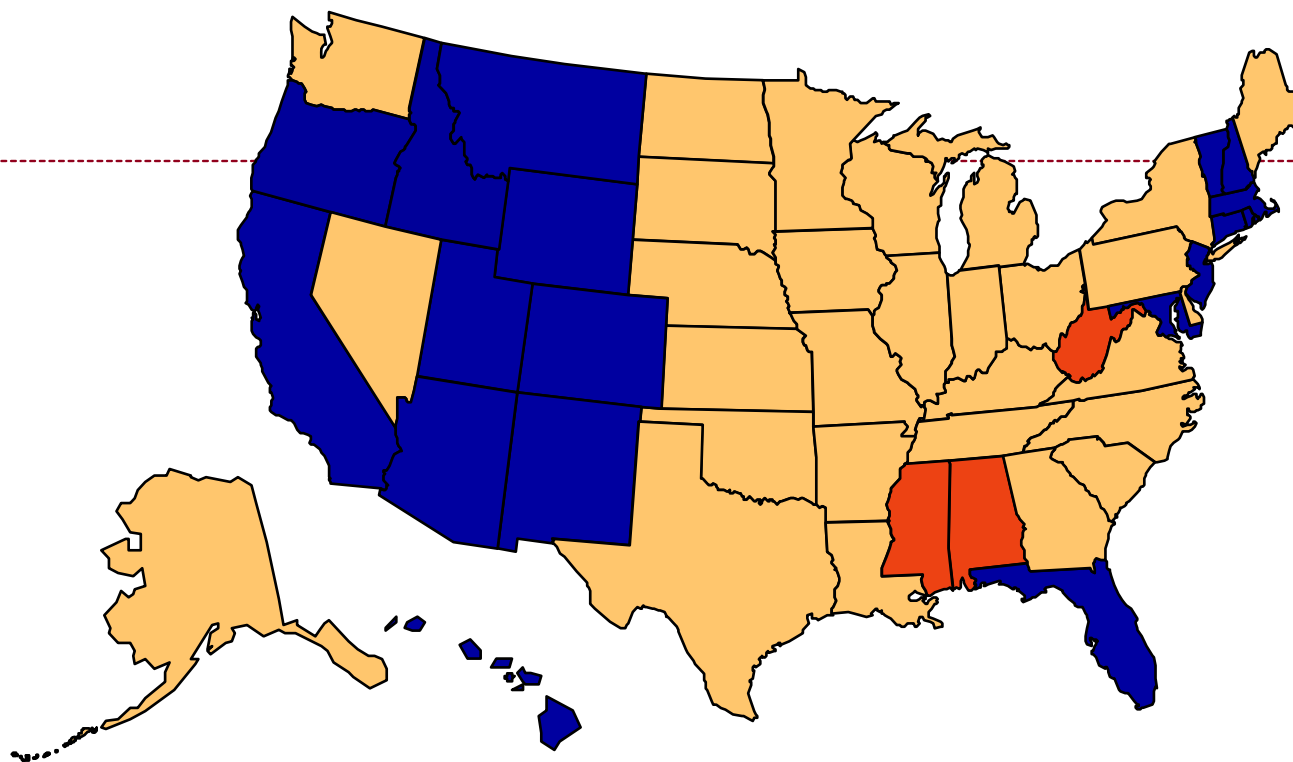
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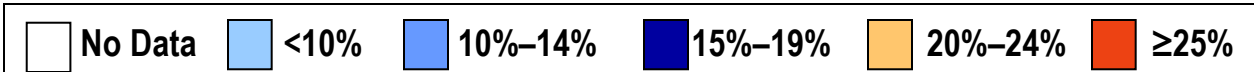
Obesity Trends* Among U.S. Adults

BRFSS, 2002

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



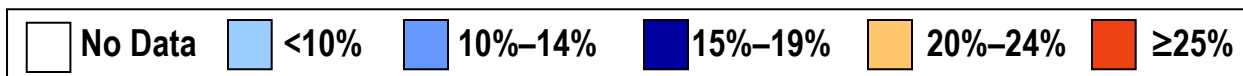
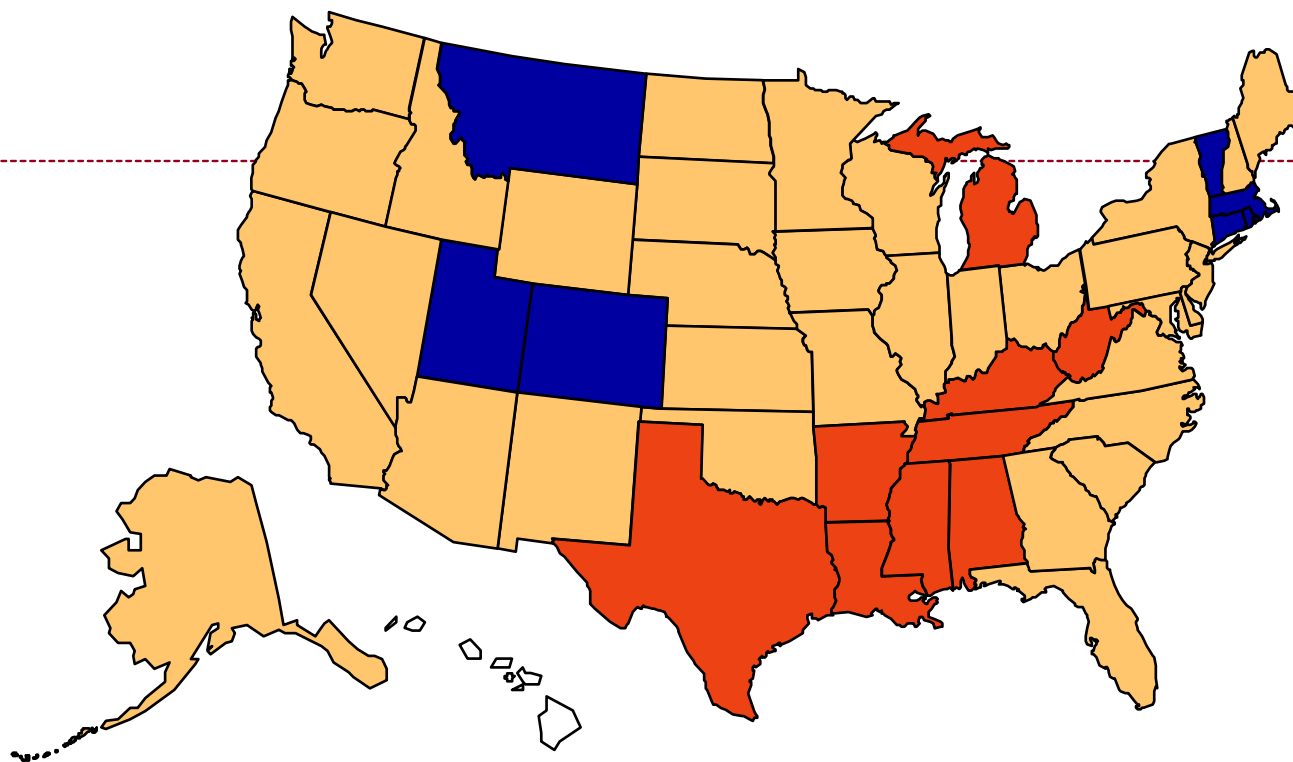
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Obesity Trends* Among U.S. Adults

BRFSS, 2004

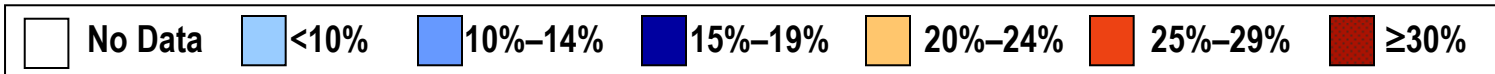
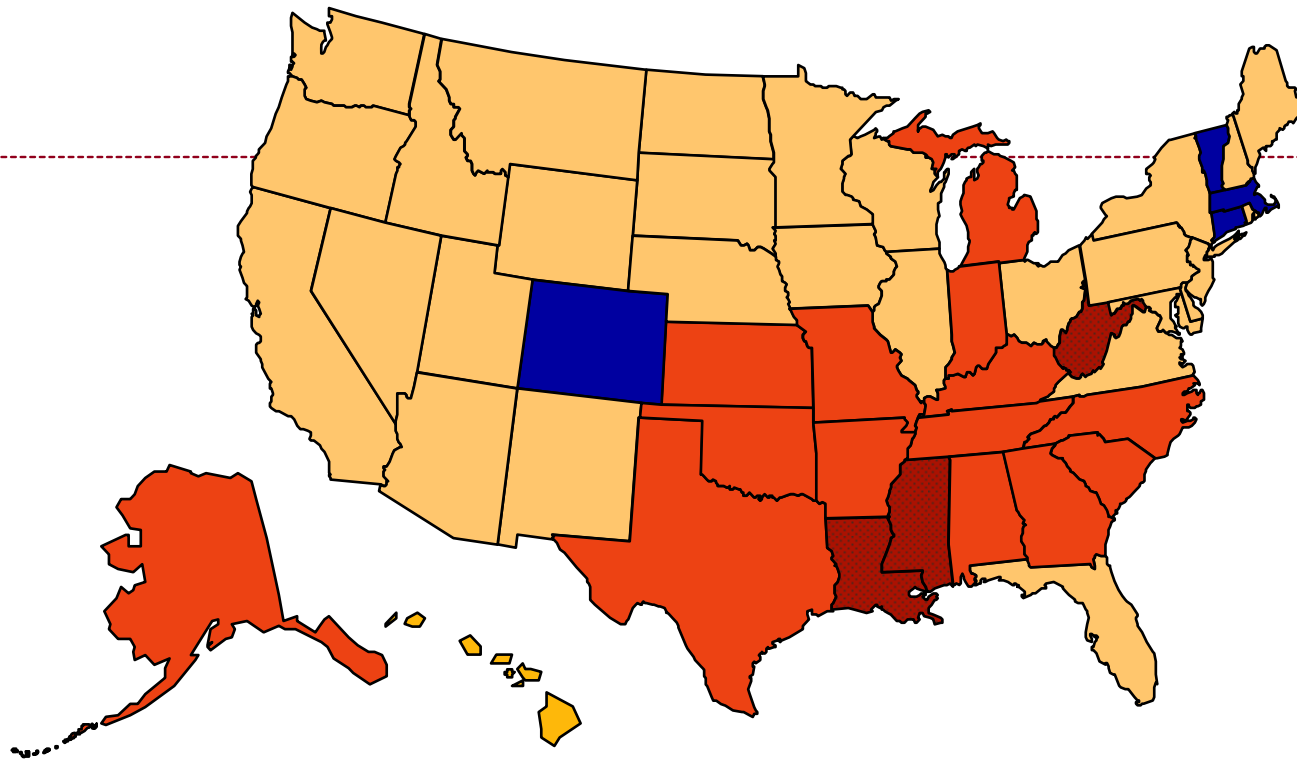
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Obesity Trends* Among U.S. Adults

BRFSS, 2005

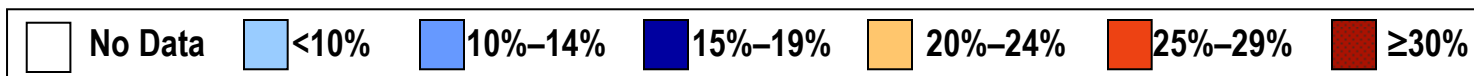
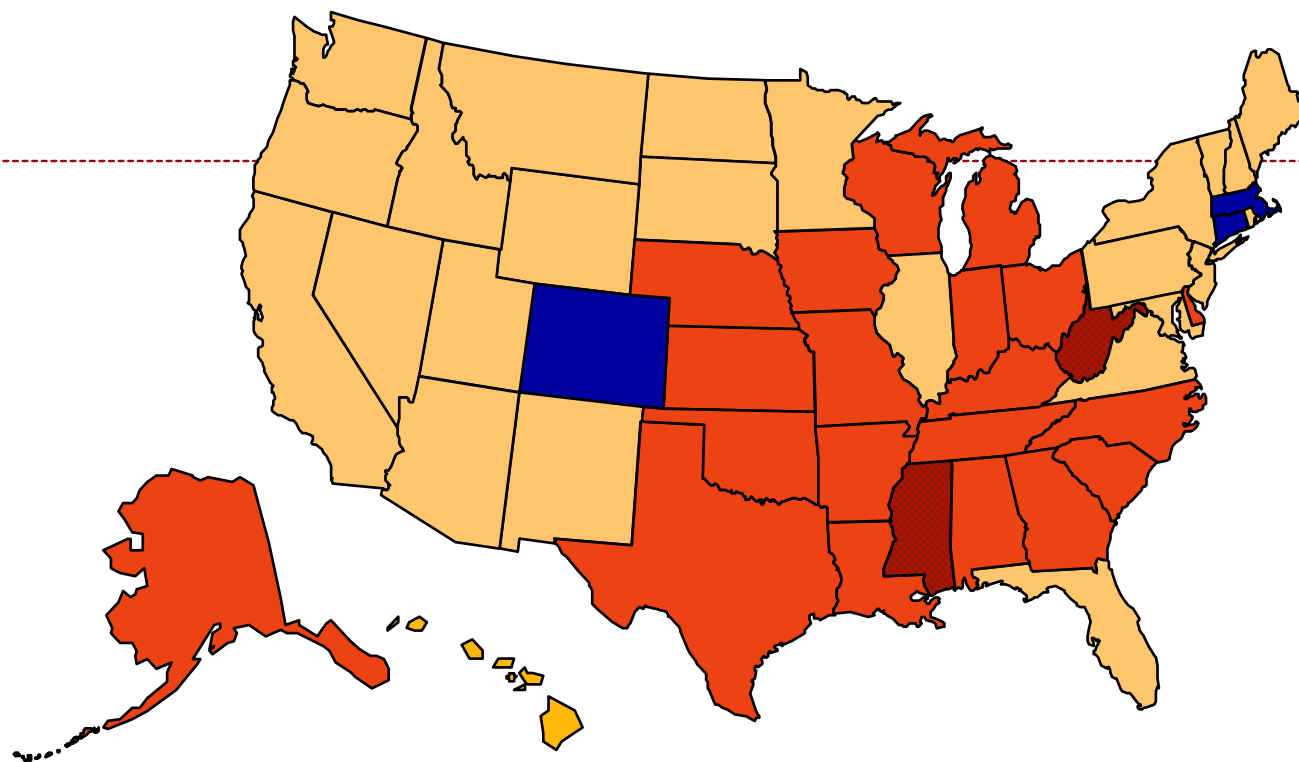
(*BMI ≥ 30 , or ~ 30 lbs. overweight for 5' 4" person)



Obesity Trends* Among U.S. Adults

BRFSS, 2006

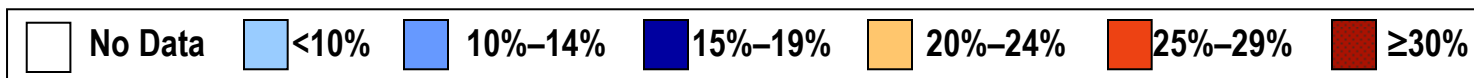
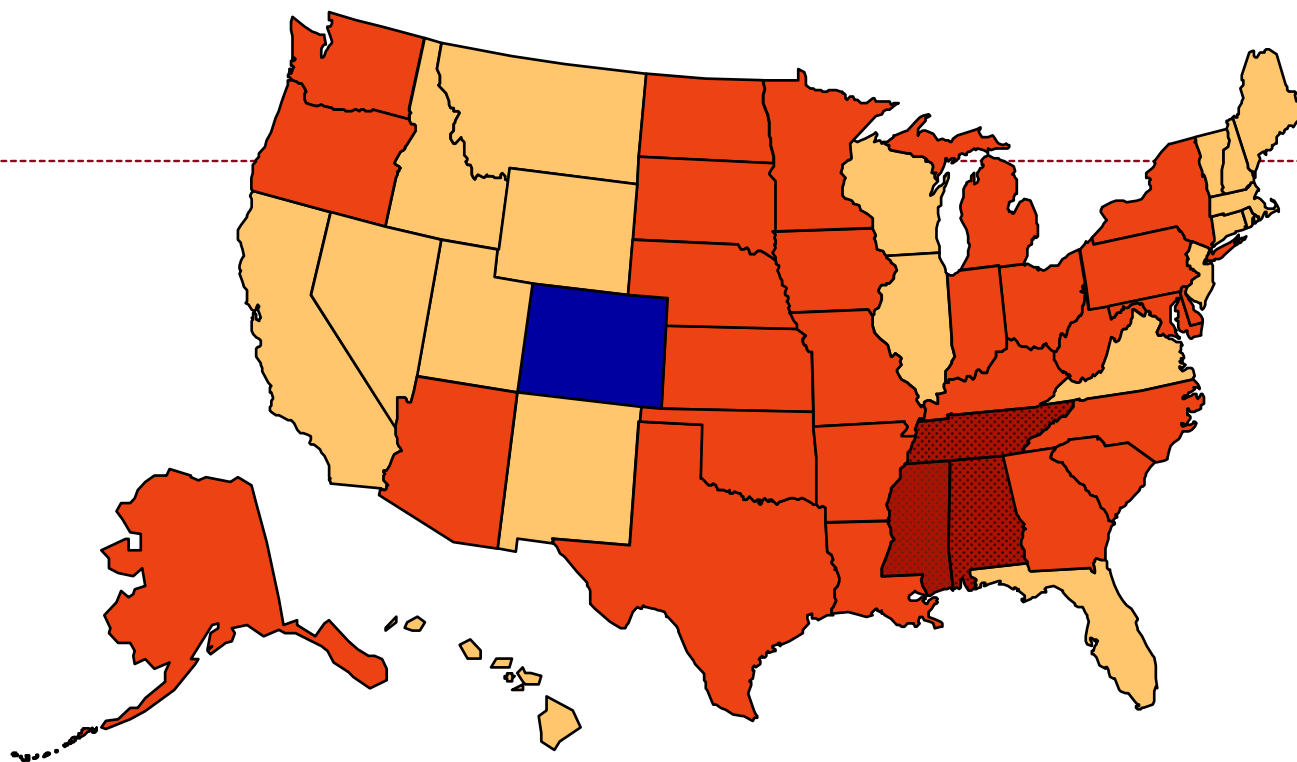
(*BMI ≥ 30 , or ~ 30 lbs. overweight for 5' 4" person)



Obesity Trends* Among U.S. Adults

BRFSS, 2007

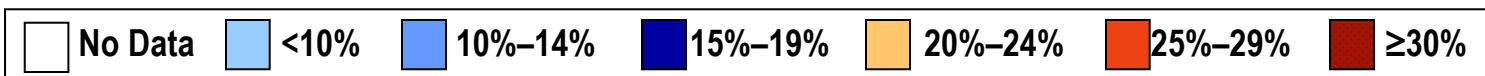
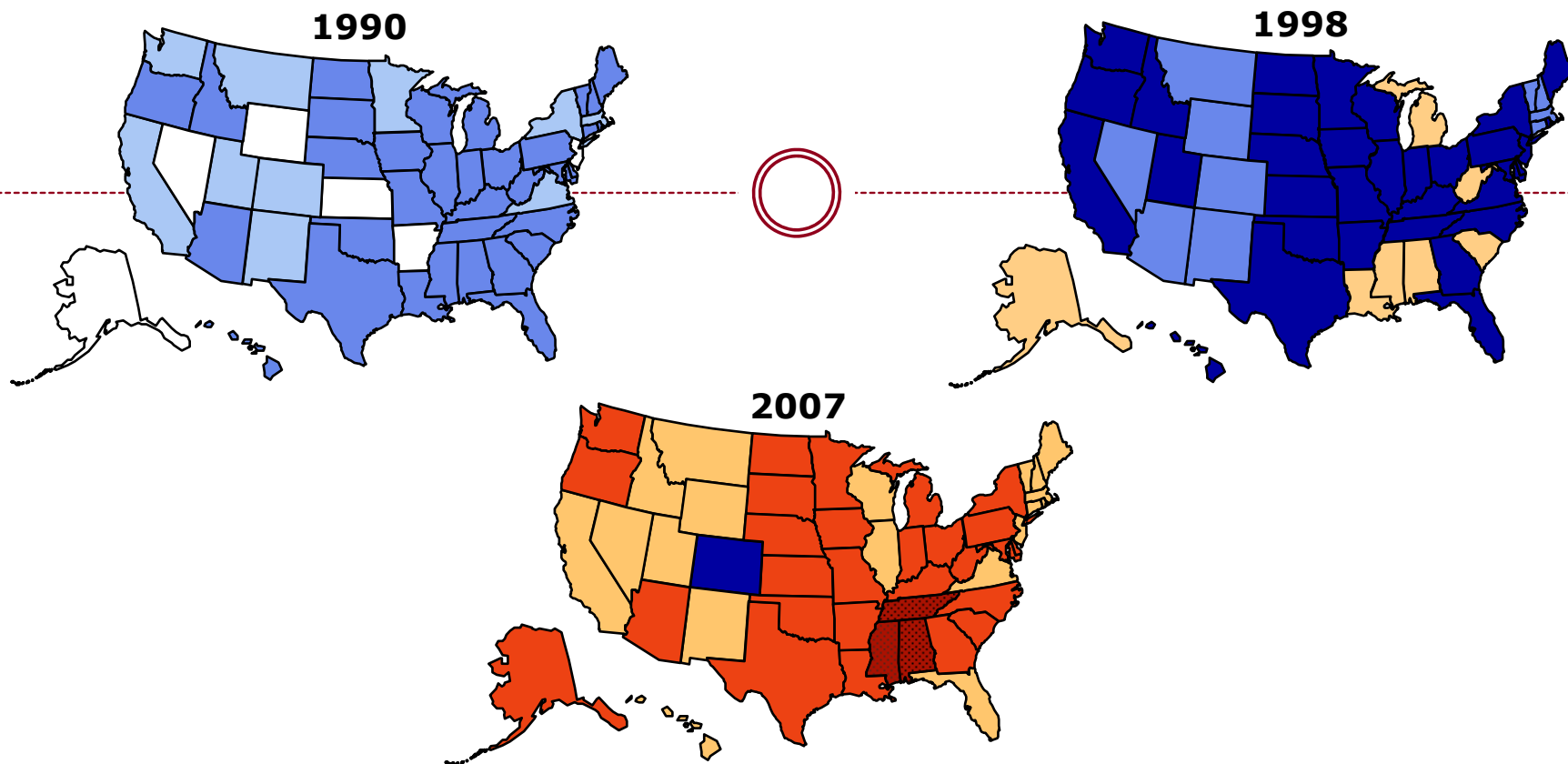
(*BMI ≥ 30 , or ~ 30 lbs. overweight for 5' 4" person)



Obesity Trends* Among U.S. Adults

BRFSS, 1990, 1998, 2007

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



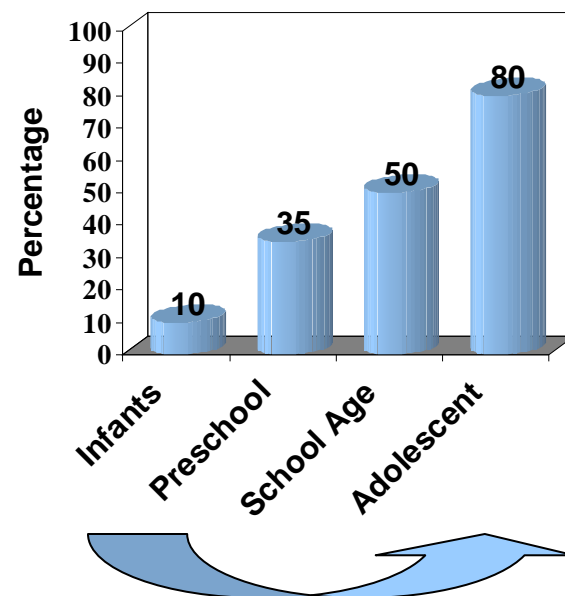
The Maine Face of Obesity

An Enormous Challenge!

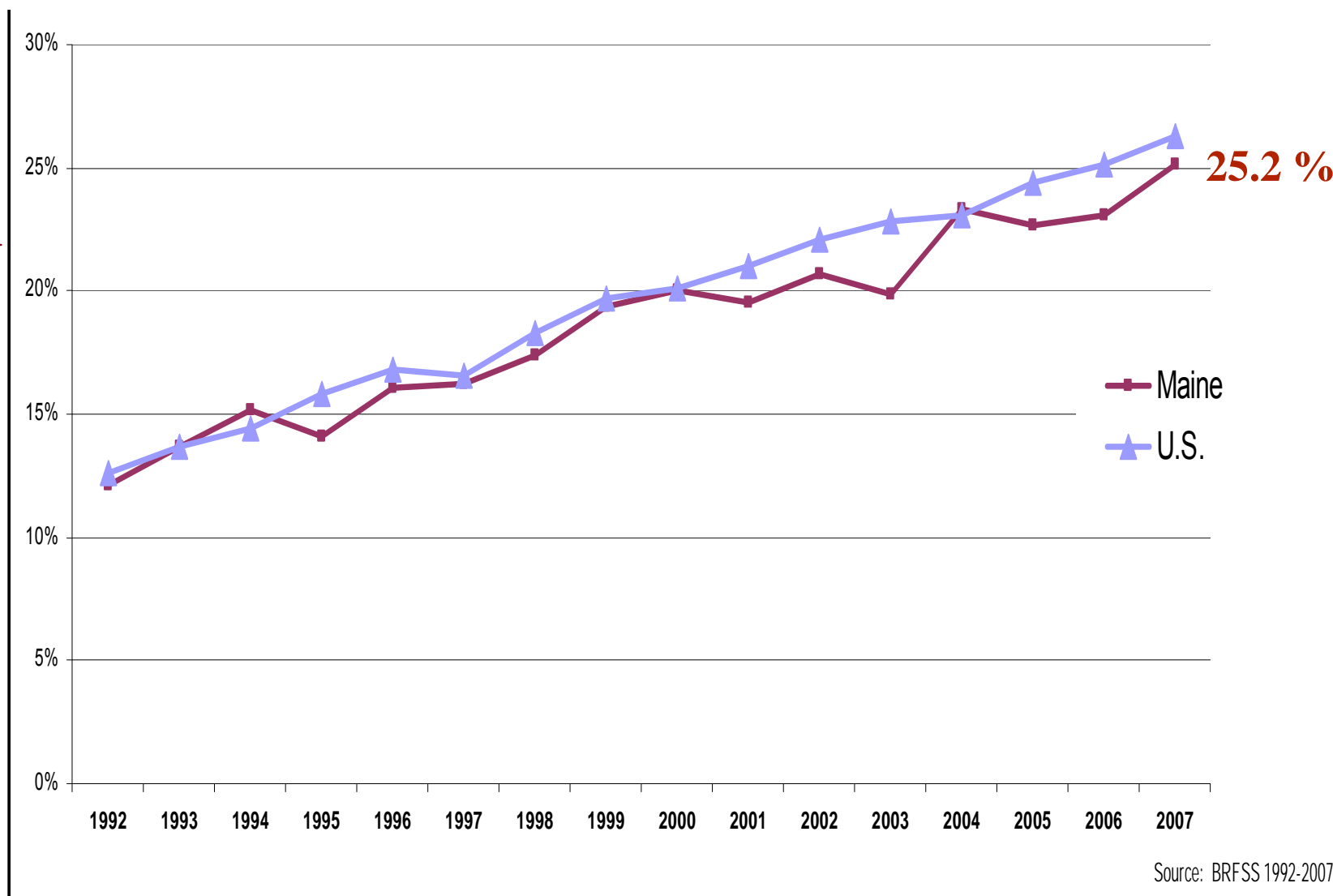
- Overweight or Obese
 - 2 out of 3 [63%] Maine adults &
 - 1 out of 3 [33%] of Maine kindergarten students.
- Prevalence of youth overweight has tripled in the last decade
- Hugely Costly
 - \$2.1 billion of annual health care costs attributed to obesity in 2003

Chenoweth & Associates March 2006

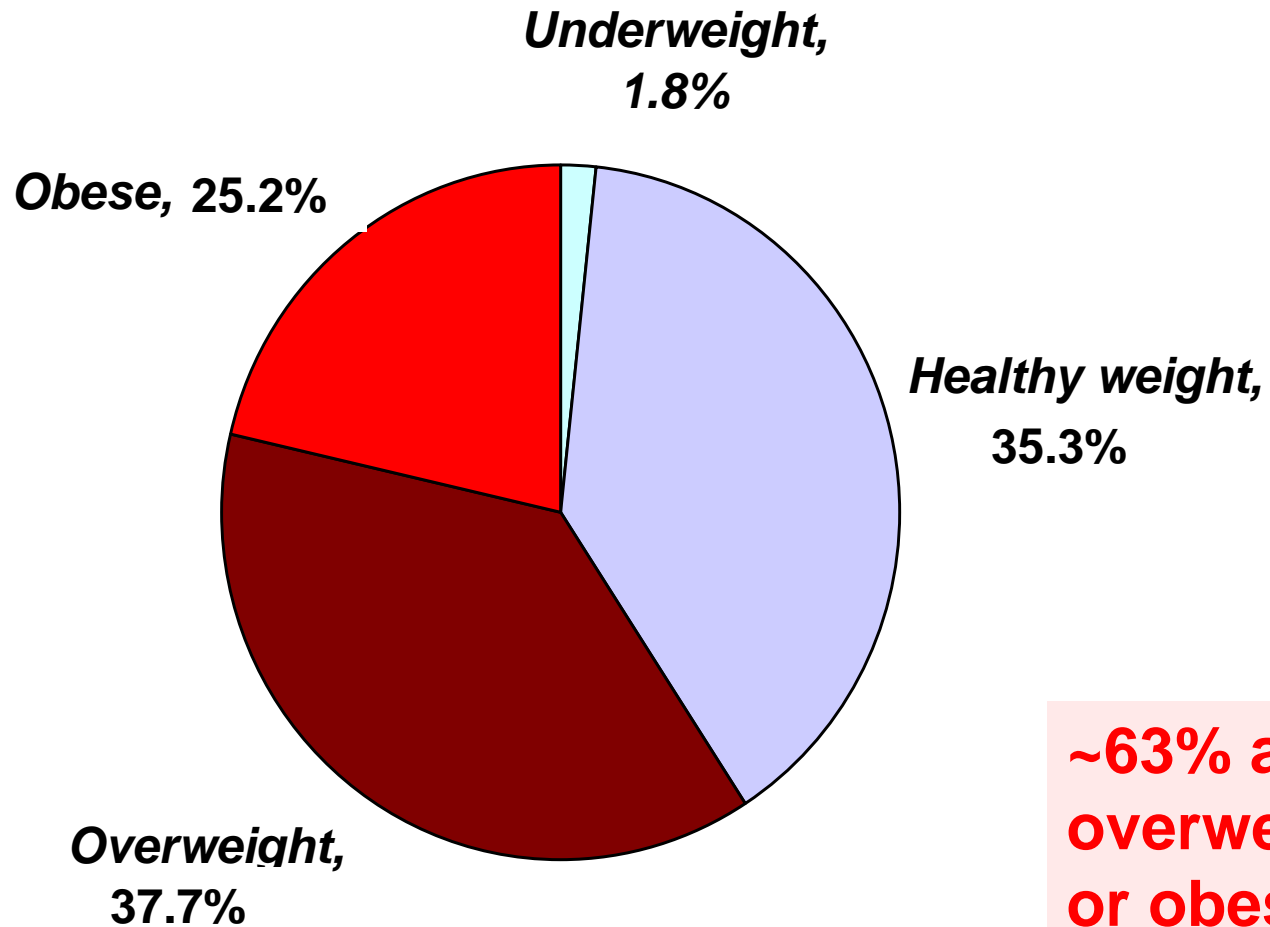
% Overweight Children who Become Obese Adults



Prevalence of Obesity (> BMI 30) Maine - US



Weight status of Maine Adults



Changes in Child Health



*Great improvements in child health made
in US & Maine over past century!*

- Infectious diseases, immunizations
- Poverty, nutrition
- Teen pregnancy
- Injury prevention, seatbelts
- Oral health, fluoridation of public water supply
- Tobacco prevention and control
- Infant mortality

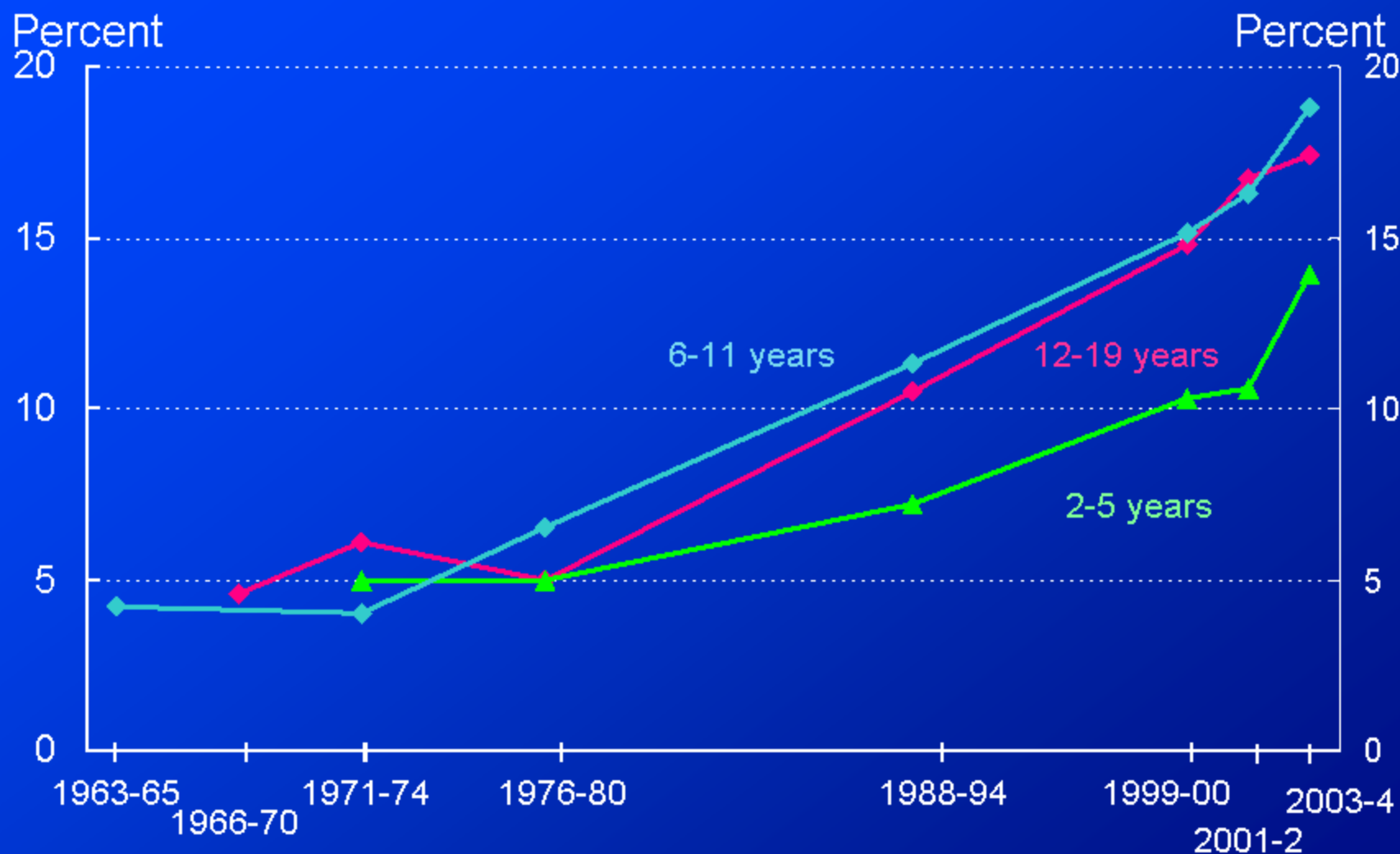
But now...



- **Increases in youth overweight threaten health of current generation**
- **Because of obesity and overweight, our youth may be the first generation in America to not live as long as their parents' generation!**

Source: NEJM

Trends in Child and Adolescent Obesity - US



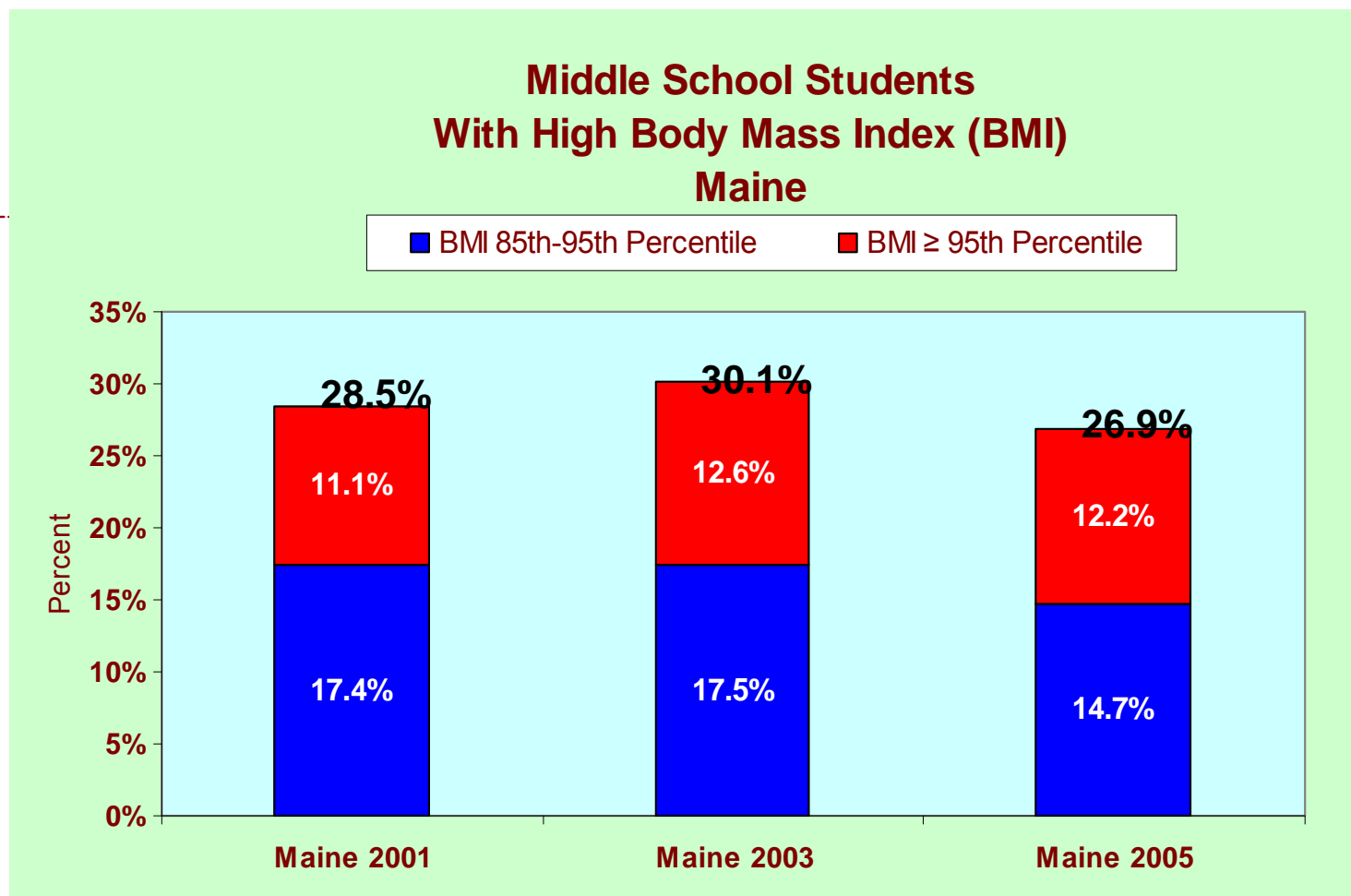
Note: Overweight is defined as BMI \geq gender- and weight-specific 95th percentile from the 2000 CDC Growth Charts.
Source: National Health Examination Surveys II (ages 6-11) and III (ages 12-17), National Health and Nutrition Examination Surveys I, II, III and 1999-2004, NCHS, CDC.

Maine Child Health Survey



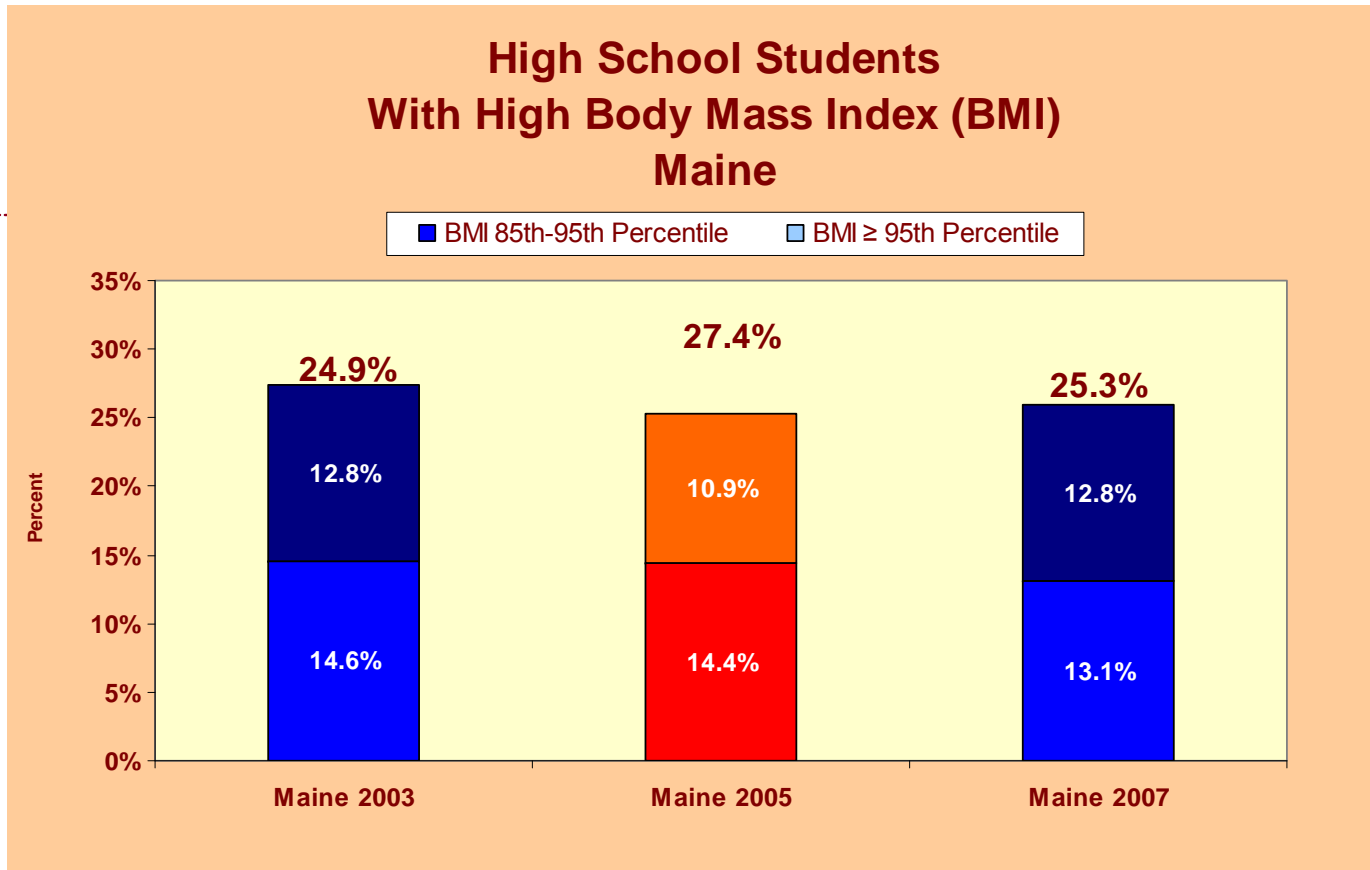
- 2003 and 2004 Survey (direct measurement of BMI)
- Entering **kindergarten**
 - 18% - BMIs 85-94%tile or overweight
 - 15% - BMIs greater than 95%tile or obese
 - **33% overweight or obese!**
- **Since the 1960s and 1970s childhood obesity has tripled!**

Overweight and Obesity in Maine Middle School Students



YRBS – self reported survey data

Overweight and Obesity in High School Students



Source: Maine Department of Education, Maine YRBS 2001-2003.

YRBS – self reported survey data

Maine High School Student Behaviors



- 94% do not attend daily physical education classes
- 24% watch three or more hours of TV per day on an average school day
- 21% used a computer for fun or video games for three hours or more per day
- 74% of students indicated that they drank soda at least once in the past week. 20% drank a can, bottle or glass of soda one or more times per day

(Maine Youth Risk Factor Behavior Survey)

Childhood Overweight Negatively Impacts Mental Health



- Severely overweight kids have much higher rates of school absenteeism (mean 4d/mo; median 1d/mo)
- Severely overweight children & adolescents have more than a 5-fold increased risk of reporting a low health-related quality of life and is similar to the quality of life described by children diagnosed with cancer
- Perceptions of being overweight among middle school youth were significantly associated with suicidal thoughts and actions

Schwimmer et al. Health-related quality of life of severely obese children and adolescents. JAMA. 2003;289:1813-1819. & Whetstone et al 2007

Other Studies Show



- Youth with BMI% >85% had lower self esteem, lower grades, and more depressive symptoms
- Eating three regular meals daily and physical fitness positively correlated with academic performance
- Youth perception of overweight was associated with school-related stress and depression (boys and girls) and with academic performance (only in girls)

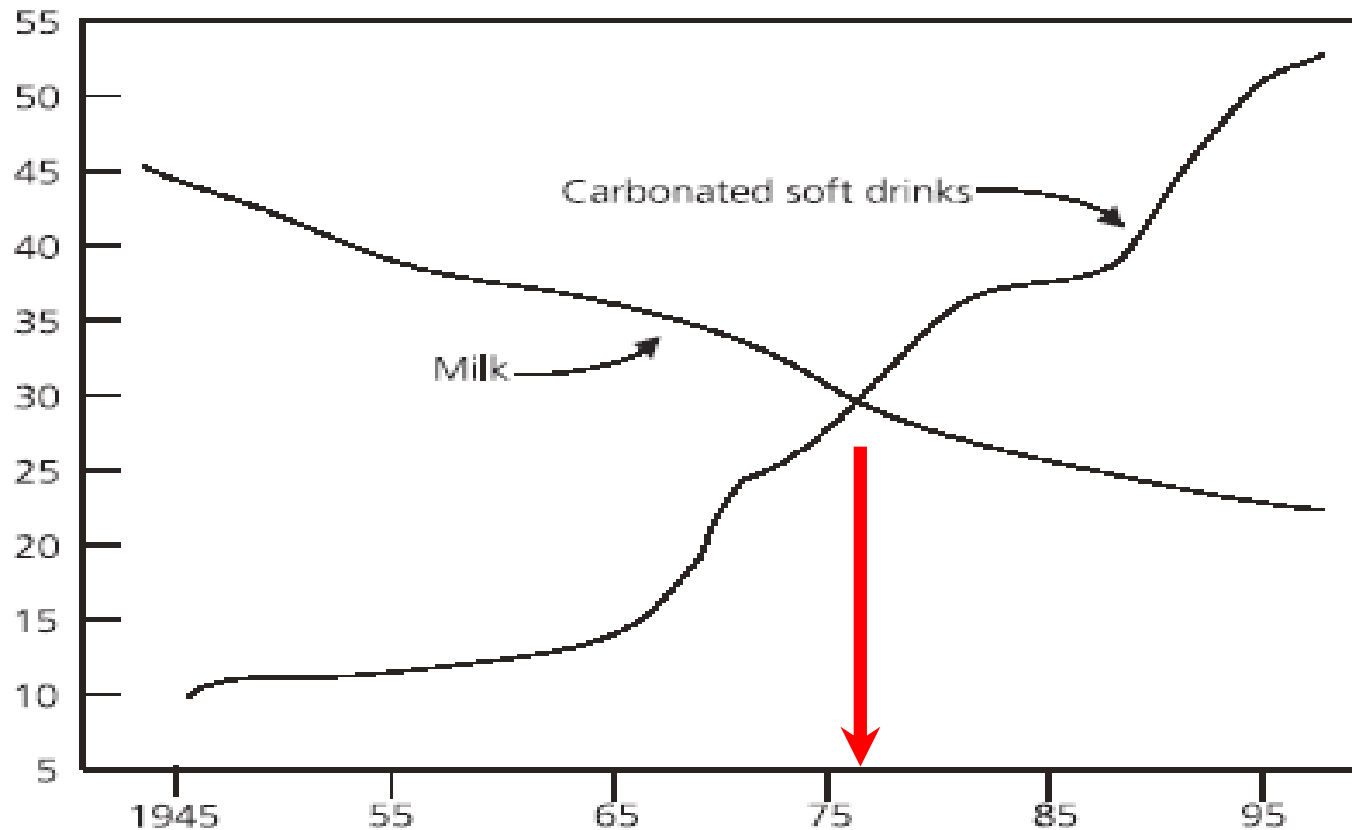
What About Soft Drinks?

- More than half of all US children (74% of boys, 65% of girls) drink soft drinks DAILY
- Over 80% of soft drinks (soda + juices) consumed are sugar-sweetened, not diet
- Children who drink at least 1 soft drink daily consume about 200 cal/day more than those who don't (*totals 10 pounds a year!*)
- For children aged 7-11, odds of becoming overweight increased 1.6X for each additional can of sugar-sweetened drink consumed per day

Soda Surpassed Milk a Long Time Ago

U.S. Soft Drink Consumption Compared To Milk, 1945–1995

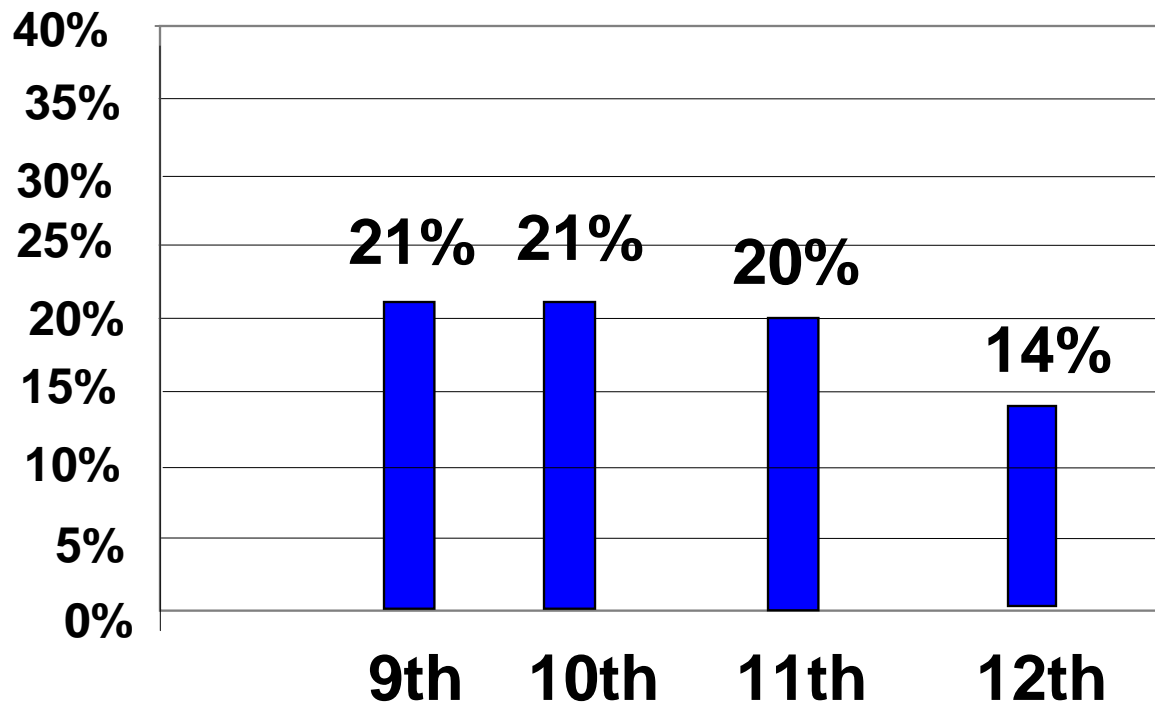
Gallons per capita



1947 is the first year for which data is
Source: USDA/Economic Research Ser

Obesity on the rise

Fruit & Vegetable Consumption



***Source: YRBS, 2005**

Percent of Maine Youth who consume at least 5 servings of fruits and vegetables per day is low!

* CANINE CONSTITUTIONAL

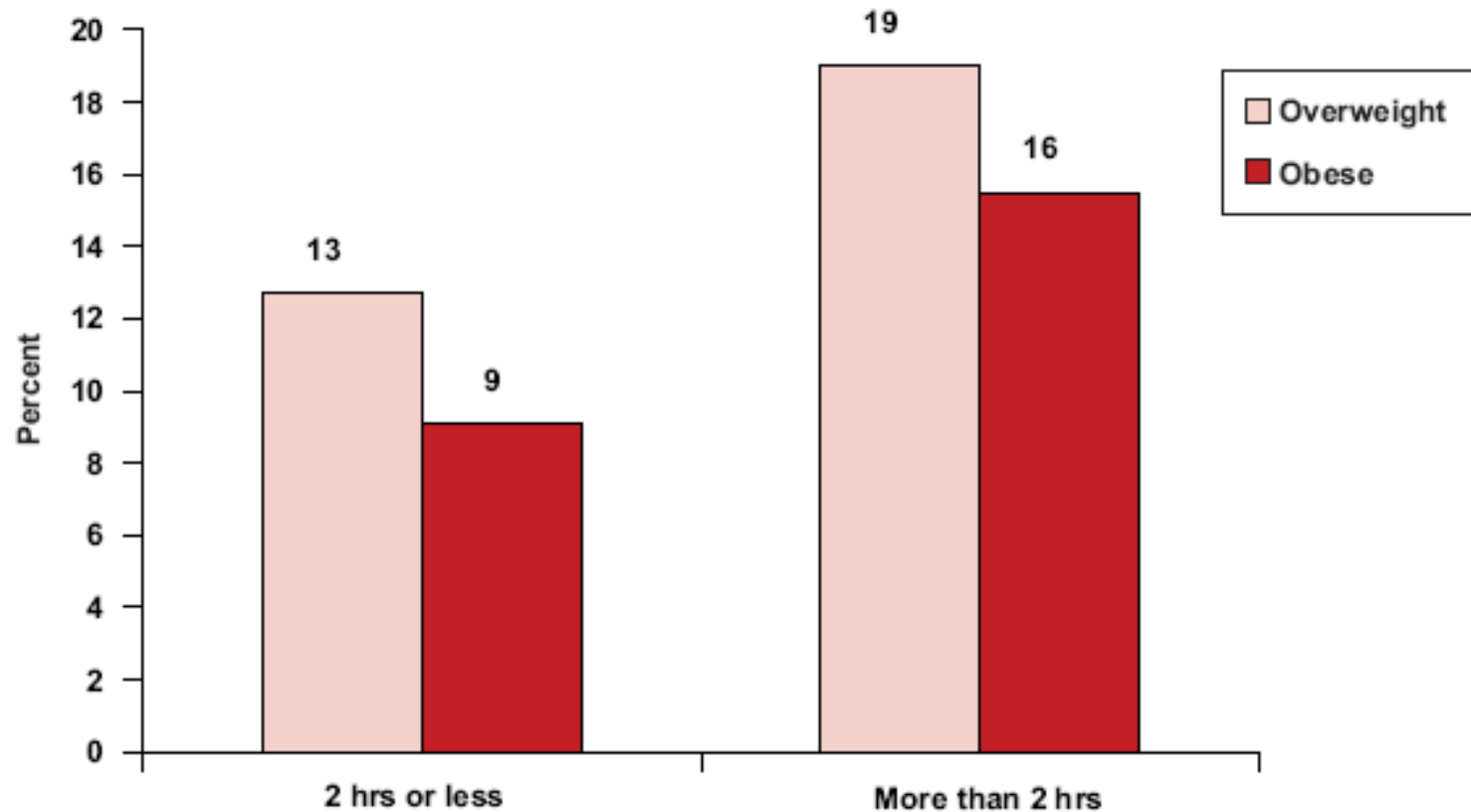


Tom Rensell/Dispatch

A brisk walk in the park keeps Mary B in shape between dog shows. His owner, Columbus resident Cathy Stumbo, got up early to give her 3-year-old Doberman his regular workout. They typically log 15 miles in Berliners Park.

Parental modeling doesn't always help

TV & Overweight in Maine

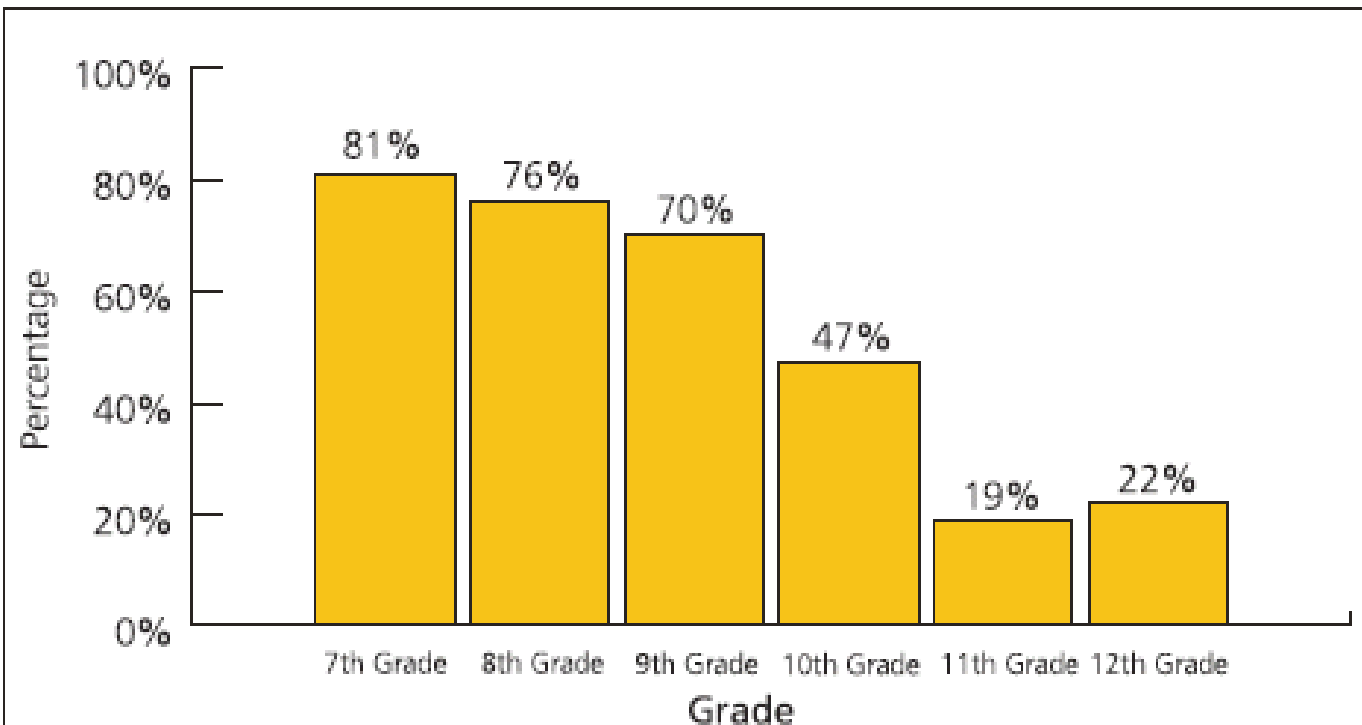


Source: High School YRBS, 2005.

Percent of Maine high school students who are overweight and obese, by level of TV viewing

Declines in Middle School and High School Physical Education by Grade

Percentage Of Maine Middle And High School Students Who Attended Physical Education Class On One Or More Days During An Average School Week By Grade, 2003

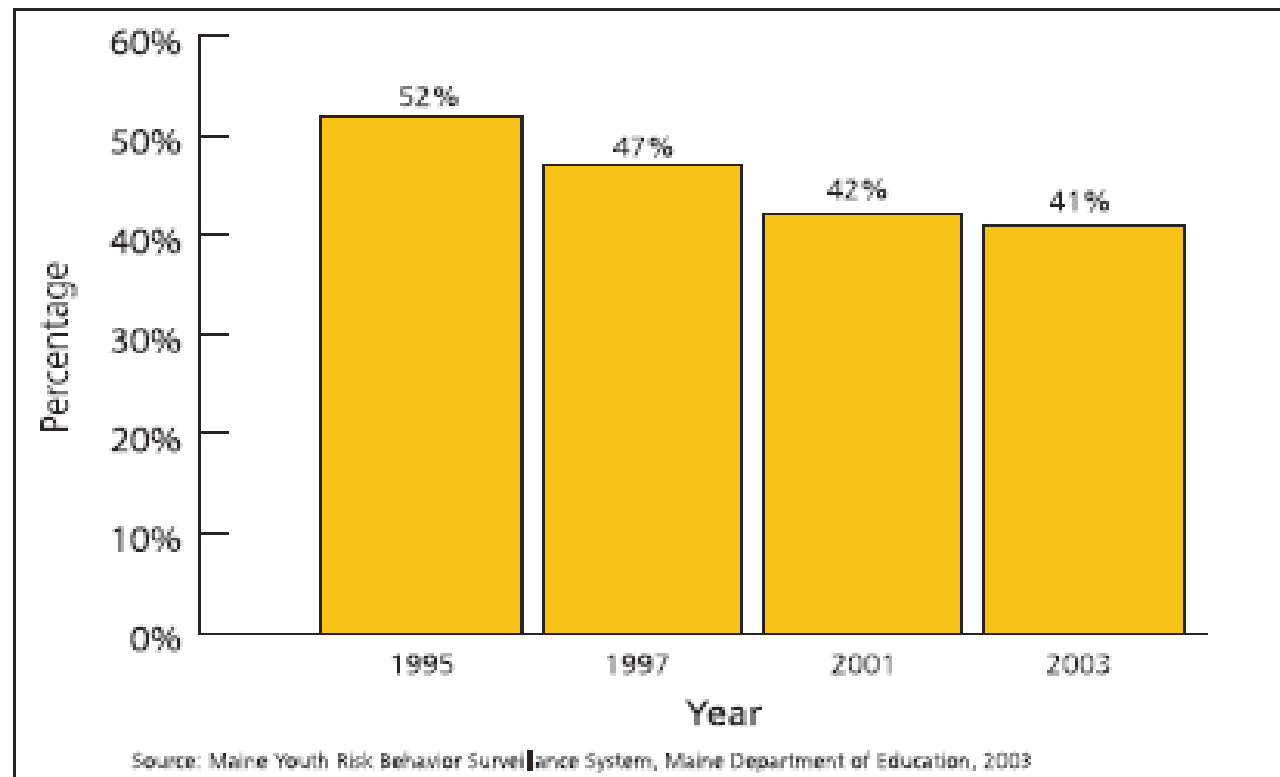


Source: Maine Youth Risk Behavior Surveillance System, Maine Department of Education, 2003

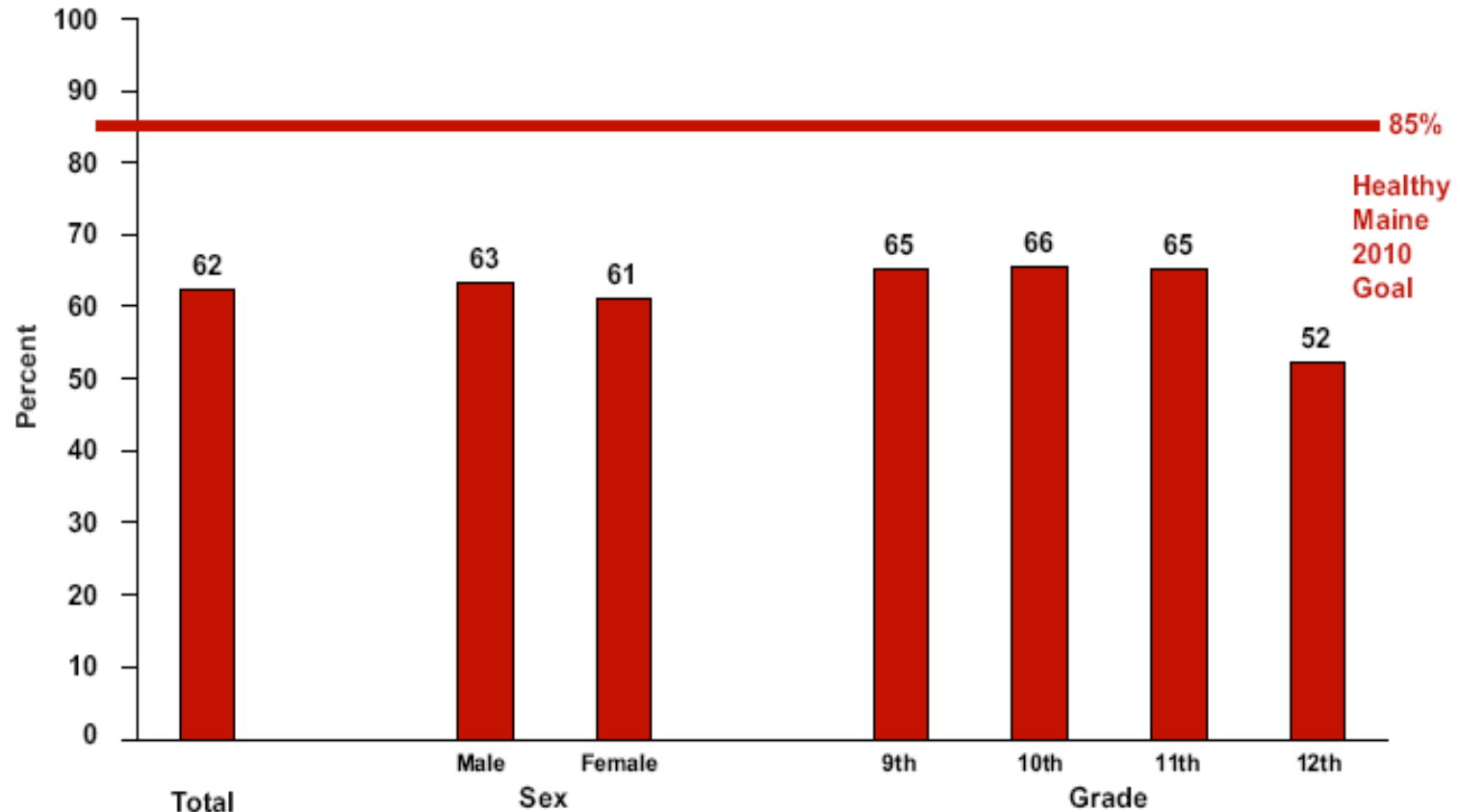
Time in PE class is also way below national standards

Declines in High School Physical Education Over Time

Proportion Of Maine High School Students Who Attended Physical Education Class On One Or More Days During An Average School Week, 1995–2003



Physical Activity



Source: High School YRBS, 2005

Percent of Maine high school students participating in vigorous physical activity on 3 or more days per week, by sex and grade.

WHY WORRY?

What Are the Health Risks of Overweight and Unfit?

The current generation of youth may be the first to live a shorter lifespan than their parents!



Health problems in childhood

Type 2 diabetes

Joint problems

High blood pressure

High cholesterol

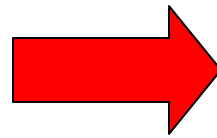
Asthma

Sleep apnea

Depression

Low self-esteem

Eating disorders



Potential increased risk as adult

Heart attack

Stroke

Cancer—{esophagus, colorectal, breast, endometrial & kidney}

Gallbladder disease

Kidney stones

Osteoarthritis

Pregnancy complications

Diabetes Rates up 60% in US over past 10 Years!



“Dramatic new evidence signals the unfolding of a diabetes epidemic in the United States. With obesity on the rise, we can expect the sharp increase in diabetes rates to continue. Unless these dangerous trends are halted, the impact on our nation’s health and medical care costs will be overwhelming.”

*-Jeffrey P. Koplan, MD, MPH
Director, CDC 1998-2002*

Quality of Life



- 58% of overweight children (even as young as 5 years old) have at least one additional risk factor for cardiovascular disease; 20% were found to have two or more risk factors
- Severely overweight children and adolescents have more than a 5-fold increased risk of reporting low health-related quality of life - risk similar to children diagnosed with cancer!

Schwimmer et al. Health-related quality of life of severely obese children and adolescents. JAMA. 2003;289:1813-1819.



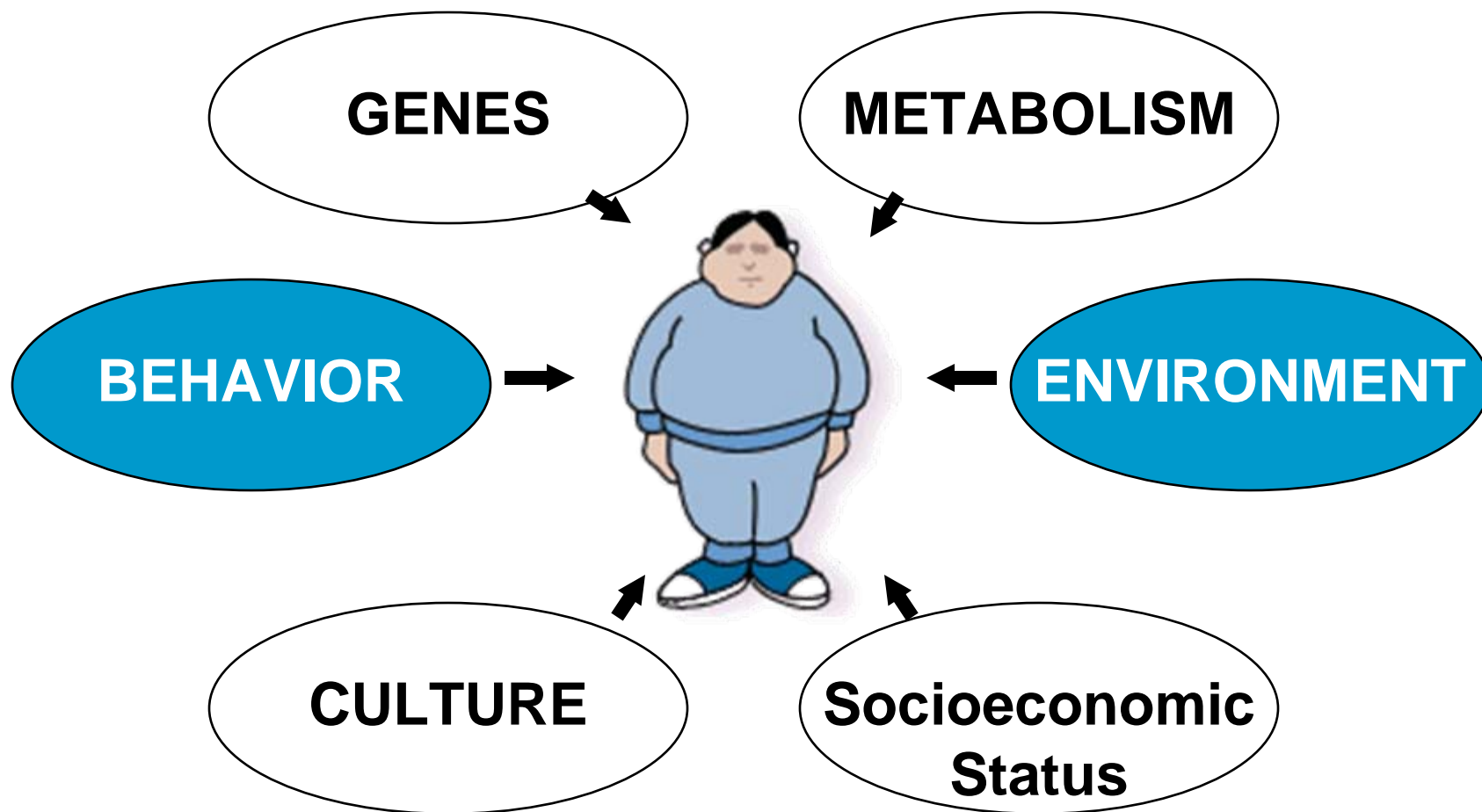
“The biggest problem we face in America is not terrorism. The biggest health problem we’re facing is obesity.”

Dr. Julie Gerberding

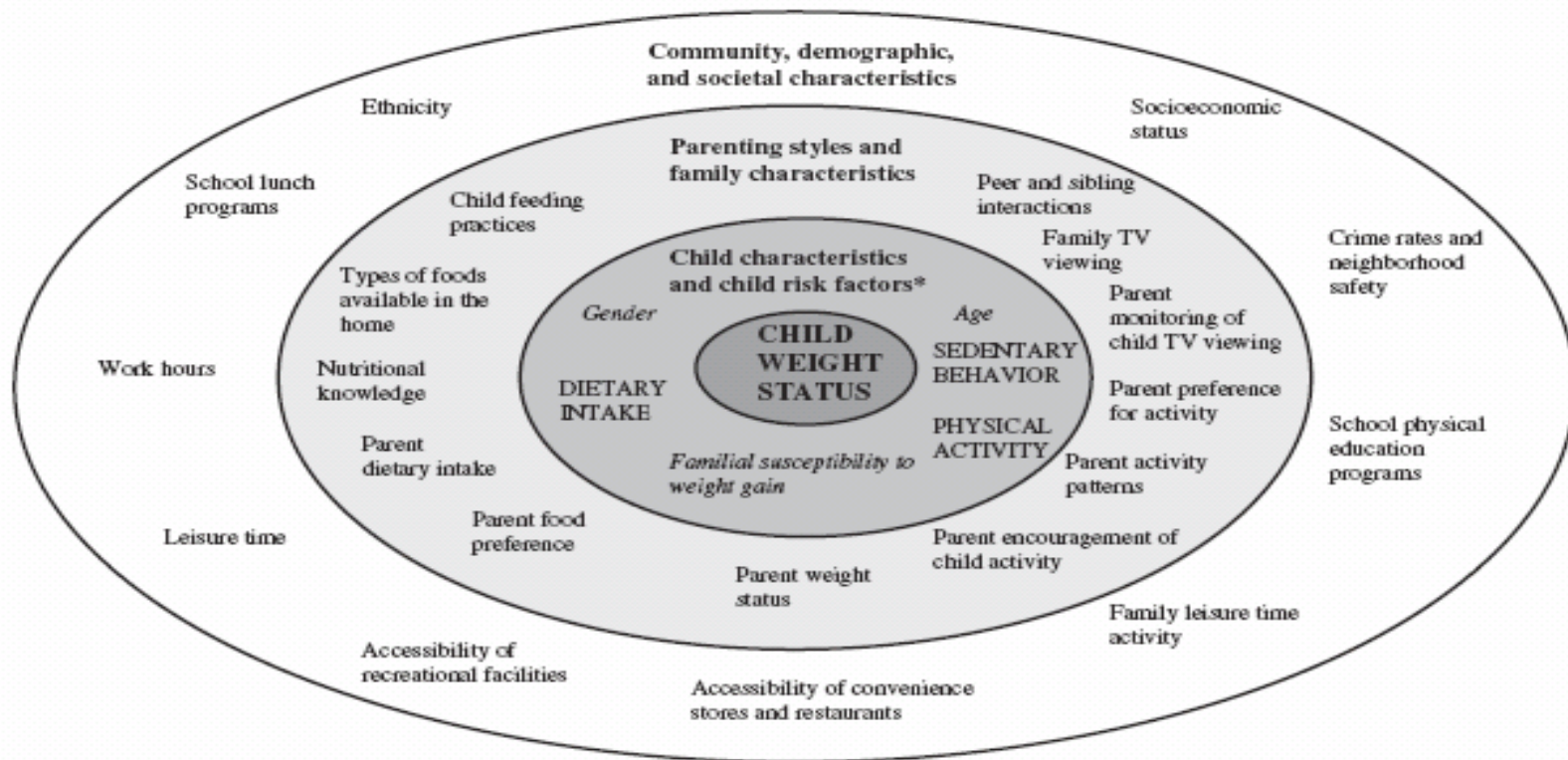
Head of the Centers for Disease Control & Prevention

WHY AN OBESITY EPIDEMIC?

Causes of Overweight & Obesity



ECOLOGICAL MODEL OF CHILDHOOD OBESITY



SOURCE: Davison and Birch (2001). Reprinted with permission from Blackwell Publishing. The original figure can be accessed at <http://www.blackwell-synergy.com/loi/obr>

The Bottom Line



ENERGY IN

EXCEEDS



ENERGY OUT

Too Much “Energy In”

- Portion size, portion size, portion size
- Readily available, cheap, high calorie foods
- Fast paced lives → fast (high calorie) food
- Soda, sugared drinks



Portion Distortion!!

BAGEL

20 Years Ago



140 calories
3-inch diameter

Today



How many calories
are in this bagel?

Portion Distortion!!

BAGEL

20 Years Ago



140 calories
3-inch diameter

Today



350 calories
6-inch diameter

Calorie Difference: 210 calories

Portion Distortion!!

FRENCH FRIES

20 Years Ago



210 Calories
2.4 ounces

Today



**How many calories are in
today's portion of fries?**



Portion Distortion!!

FRENCH FRIES

20 Years Ago



210 Calories

2.4 ounces

Today



610 Calories

6.9 ounces

Calorie Difference: 400 Calories

Portion Distortion!!

SODA

20 Years Ago



85 Calories
6.5 ounces

Today



**How many calories are
in today's portion?**

Portion Distortion!!

SODA

20 Years Ago



85 Calories
6.5 ounces

Today



250 Calories
20 ounces

Calorie Difference: 165 Calories

Portion Distortion!!

POPCORN

20 Years Ago



270 calories
5 cups

Today



How many calories
are in today's large
popcorn?



Portion Distortion!!

POPCORN

20 Years Ago



270 calories
5 cups

Today



630 calories
11 cups

Calorie Difference: 360 calories



US Consumers

More is “Better”



- Americans buy and eat “for value” – i.e.
 - “More is better”!
- Translated by marketers into...
 - Super size
 - Biggie fries
 - Real meal deals
 - Bigger portion sizes at home, restaurants, and schools!
- Super-combo meals can easily top 2000 calories –
Can total a full day’s calorie needs for many teens and adults!

What About the Soft Drinks?

- More than half of all US children(74% of boys, 65% of girls) drink soft drinks DAILY
- Over 80% of soft drinks (soda + juices) consumed are sugar-sweetened, not diet
- Children who drink at least 1 soft drink daily consume about 200 cal/day more than those who don't (*totals 10 pounds a year!*)
- For children aged 7-11, odds of becoming overweight increased 1.6X for each additional can of sugar-sweetened drink consumed per day

Not Enough “Energy Out”



- Decreased physical activity
 - Decreased daily activities
 - Reductions in spontaneous play, fewer unorganized sports
 - Increased “screen time”
- Increased sedentary lifestyle, changes in “built environment”
 - Suburban spread, lack of sidewalks, walking paths, safe walking routes
- Who walks to school?

How Screen-time Contributes to Overweight



- Uses up time for physical activity
- More calories consumed while TV is on (dinner and snacking)
- TV in bedroom has been associated with more viewing
- Food, drink advertisements on TV affect food choices made by children

In the Past 100 Years We've Moved From...



Walking	to	Cars, elevators
Farming	to	Grocery shopping/ Fast-food restaurants
Farming and maintaining a house	to	Cubicles and meetings
Daylong clothes-washing	to	Washing machines and dryers
Washing dishes	to	Dishwashers
Playing	to	Television and other screen times

Relatively Small Changes Can Have BIG Consequences



Excess Energy In + Fixed Energy Out

e.g. 2 cookies per day
= 200 excess calories/day

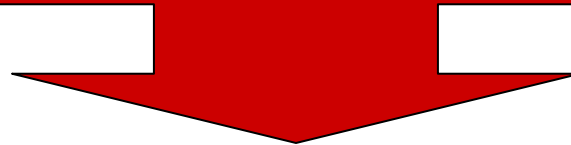
1400 excess calories per week
can equal as much as
= 20 lbs / year!

Relatively Small Changes Can Have BIG Consequences



Fixed Energy In + Less Energy Out

e.g. missing 30 mins/d of vigorous play
= 200 less calories/d burned



1400 excess calories per week

= 0.5 lbs/wk

= 25 lbs / year!

HOW TO START?

Solutions

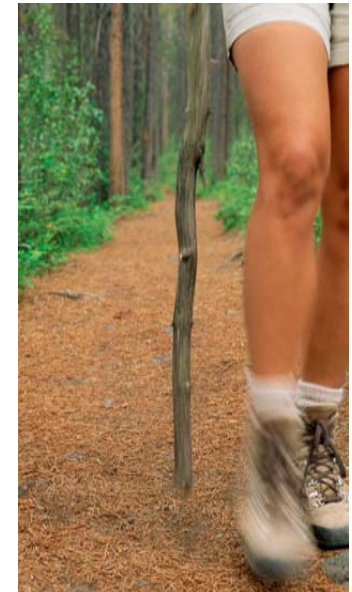


- Policy:
 - Environmental policy – need to restructure our communities!
 - Transportation policies
 - School policies
- Leadership
- Individual action: restructure our workday, school days, family life
- Educate, motivate, act!

State-level Activities



- Awareness and education (Maine CDC ad campaigns)
- Healthy Maine Partnerships
Communities Promoting Health
- Healthy Maine Walks
 - HealthyMainewalks.com
- Dept of Education – School Health Coordinators & Physicians / Schools Initiative
- Maine Physical Activity, Nutrition and Healthy Weight Program
- Maine Youth Overweight Collaborative



A MESSAGE TO EVERY MAINE PARENT

We're just getting started.

When it comes to giving you the facts about maintaining a healthy weight, we're just getting started.

And for good reason: Over half of Maine adults are obese or overweight, and nationally, the obesity rate for children has increased by 100% in just the last 20 years. With that comes heart disease, diabetes, high blood pressure and other serious health complications for our kids.

The only good news about childhood obesity is that it's preventable. That's why we launched Maine's Healthy Weight Awareness campaign, so Maine parents could know about the vast amounts of sugar and empty calories in soda that contribute to obesity and being overweight. We recommended you cut back on your soda consumption or switch to healthier beverages.

Fact is, drinking excessive amounts of soda is one of several factors contributing to an epidemic of unhealthy weight among youth. Excessive consumption of fast foods and

large portions are also to blame.

It gets worse: Our youth are less active than ever before, due mostly to excessive "screen" time—spending too much time before a television, a computer or playing video games.

When you consider all this, is it any surprise that obesity is an epidemic among children?

In the weeks ahead, we'll continue to give Maine parents more helpful information about keeping kids healthy and active.

Excessive "screen" time contributes to childhood obesity. Overweight children are more than twice as likely to have high blood pressure, high blood cholesterol or early heart disease.



THIS HEALTHY WEIGHT AWARENESS MESSAGE IS BROUGHT TO YOU BY

Healthy Maine Partnerships
Maine Cardiovascular Health Program
in collaboration with the Maine Nutrition Network
Bureau of Health, Department of Human Services



Healthy Maine Partnerships
The people dedicated to helping us live longer and healthier.

Bureau of Health, Department of Human Services



150 useless calories.

We may drink it like water, but a twelve ounce serving of cola can contain up to ten teaspoons of sugar and 150 empty calories. No wonder obesity is an epidemic among children.


This is not water.

Cut the calories.

A soda now and then is okay, but don't overdo it—cut back or switch to a healthier beverage.

THIS HEALTHY WEIGHT AWARENESS MESSAGE IS BROUGHT TO YOU BY
Healthy Maine Partnerships
 Bureau of Health, Department of Human Services

 **Healthy Maine Partnerships**
 The people dedicated to helping us live longer and healthier.
 Bureau of Health, Department of Human Services



These are athletic shoes.

Physical activity can be a flop.

Physical activity is a walk on the beach. A stroll around the yard. A trip around the block. And your heart will become stronger for it. In fact, anything you do—no matter how small—can begin to improve your health. It's that simple.

THIS HEALTHY WEIGHT AWARENESS MESSAGE IS BROUGHT TO YOU BY
Healthy Maine Partnerships
The people dedicated to helping us live longer and healthier.
 Bureau of Health, Department of Human Services
For more ways to get healthier in your community, go to www.healthymainewalks.org

A Comparison With Tobacco Strategies



Causes:

Mass marketing by the Tobacco Industry

Lack of knowledge about tobacco's effects

Smoke-filled places

Low prices of cigarettes

Easy access by youth

Lack of easily available treatment

Statewide Counter Strategies:

Statewide education through media

Educate the public about the issue

Implementing smoke-free policies

Raising tobacco excise taxes

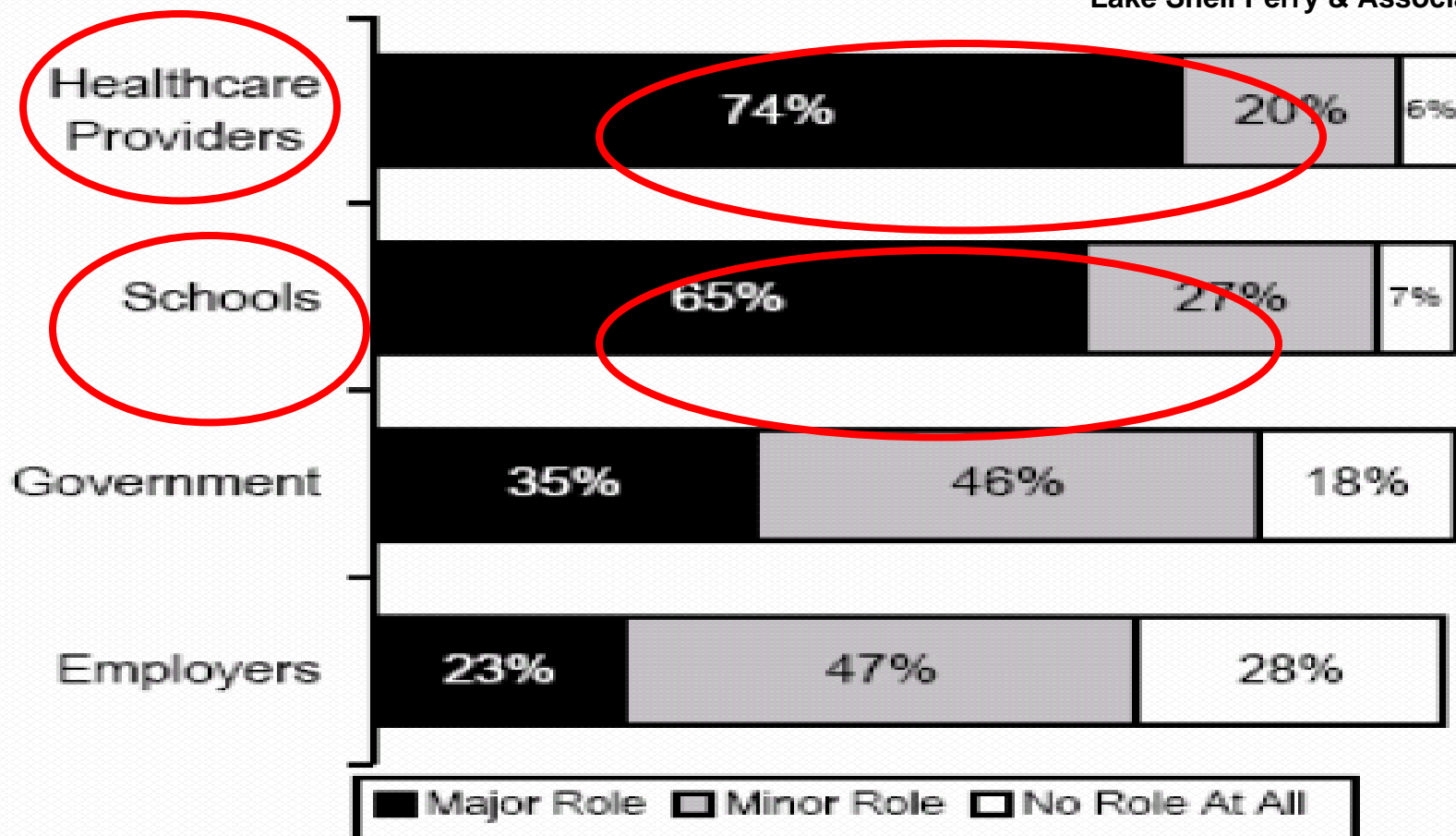
Enforcing youth access laws

Toll-free Help-Line and free pharmaceuticals

The public perceives healthcare providers & schools as key partners in addressing obesity

National Survey Results

Lake Snell Perry & Associates 2003

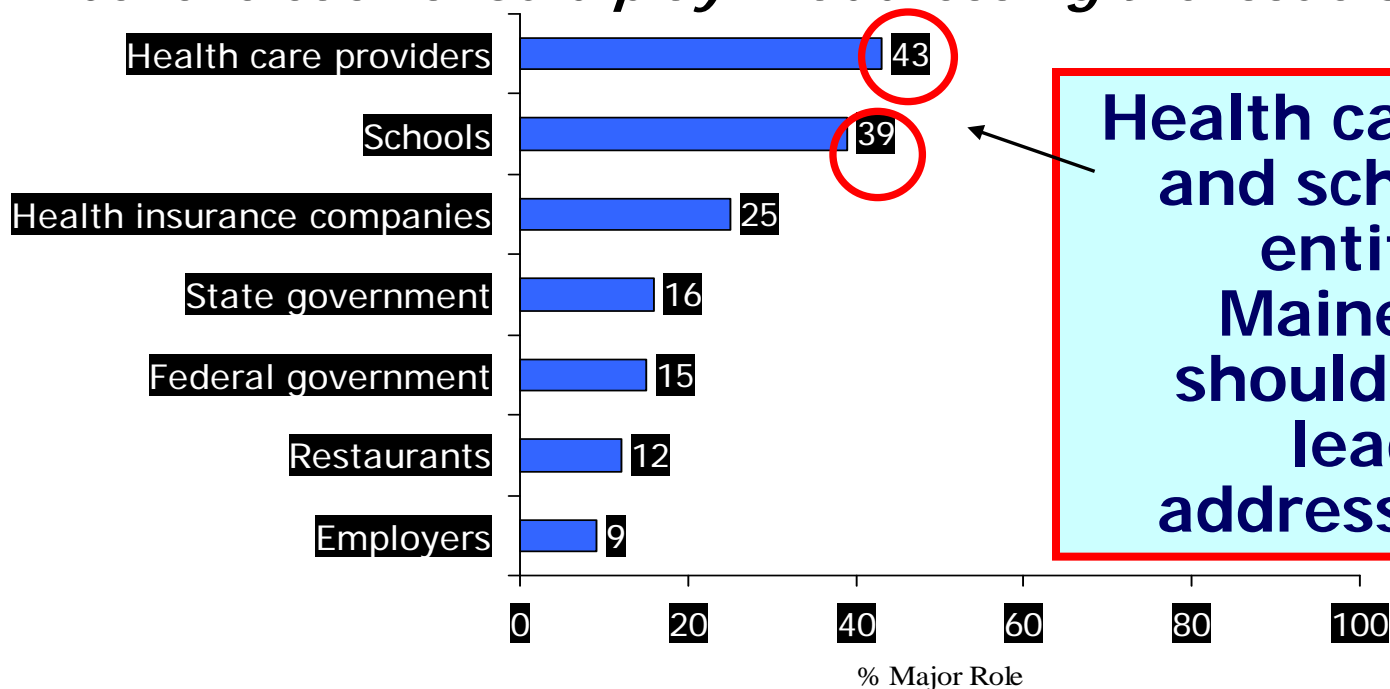


Public Perception in Maine Mirrors the Nation!



Source: Critical Insights Opinion Poll in Maine—October 2005

“Using a scale of 1 to 5, with 1 meaning “no role at all” and 5 meaning “a major role,” please tell me how much of a role you believe each should play in addressing the issue of obesity?”



**Health care providers
and schools are the
entities most
Mainers believe
should be taking a
lead role in
addressing obesity!**

What WE Can Do!



- ✓ **As a healthcare system**
- ✓ **As a school system**
- ✓ **As a community**
- ✓ **As parents, families, & individuals**

Maine Youth Overweight Collaborative [MYOC]

A program of the Maine Center for Public Health & Maine Harvard Prevention Research Center

www.mcph.org/Major_Activities/KeepMEHealthy.htm

Practices commit to making changes to improve care
e.g.

- Measure BMI % for age/gender on all children
- Use “5-2-1-0” Healthy Habits survey for all children 2-18yo on annual preventive care visit
- Use clinical guidelines to routinely evaluate overweight children for medical, psychological problems
- Develop skills to better support patients, families in making behavior changes for a healthy lifestyle

Healthy Lifestyle Behaviors That Work for Everyone!



EVERYDAY

- ⑤ Five or more fruits or vegetables
- ② Two hours or less of “recreational screen time”
- ① One hour or more of “moderate to vigorous” physical activity
- ① Drink less sugar—limit soda & sugar drinks

MYOC Healthy Habits Survey



Healthy Habits Survey [Age 10 and Older]

We are interested in the health and well-being of all our patients.
Please take a moment to answer the following questions.

Patient Name: _____ Age: _____ Today's Date: _____

How many servings of fruits or vegetables do you eat a day?
One serving is most easily identified as the size of your palm.

How many times a week do you eat dinner at the table with the family?

How many times a week do you eat breakfast?

How many times a week do you eat takeout or fast food?

How many hours a day do you watch TV, movies, DVD's or
sit and play video / computer games?

Do you have a TV in the room where you sleep?

☐ Yes ☐ No

Do you have a computer in the room where you sleep?

☐ Yes ☐ No

How many hours a day do you spend being physically active?
[faster breathing/heart rate or sweating]

How many 8 ounce servings of the following do you drink a day?

100% Juice _____ Fruit drinks or sports drink _____ Soda or punch _____ Water _____
Whole milk _____ Fat free or reduced fat milk _____

Based on your answers, is there ONE thing you would like to change now?

☐ Eat more fruits & vegetables.

☐ Drink less soda, juice, or punch.

☐ Spend less time watching TV, sitting & playing video/ computer games.

☐ Switch to skim or low-fat milk.

☐ Take the TV and or computer out of the bedroom.

☐ Drink more water.

☐ Be more physically active more often.

☐ Eat less fast food / takeout.

☐ Eat breakfast every day.

Please give the completed form to your clinician. Thank you.

Adapted from High Five for Kids in Massachusetts

Why should schools get involved?



- It is the place where children ages 5-18 spend most of their time except sleeping
- “Schools are not responsible for meeting every need of their students. But where the need directly affects learning, the school must meet the challenge. So it is with health.” (Carnegie Foundation, 1991)
- Research shows that healthy children do better in school.

As a School System



- Promote healthy food choices AND appropriate portion sizes in all foods offered in schools
- Advocate for adequate funding so schools do not rely on sales from soda, candy, other non-nutritious snacks
- Avoid marketing of soda, candy at school events, scoreboards, etc

Overweight Prevention in Schools



- Support salad bars and other low cost, prepackaged (fast!) healthy meal options
- Promote more physical education and physical activity for ALL ages
- Support more fun opportunities for physical activity – both team sports AND non-competitive activities
- Integrate health promotion into curriculum
- Link activities at school and home

Physical Educational Supports

Physical Activity & Healthy Eating



- Required as part of the Maine Learning Results in grades K-grade 12.
 - Teaches skills that promote lifelong physical activity such as personal goal setting
 - Develops positive attitudes towards a physically active lifestyle
- IN MAINE—Time for PE does not meet national NASPE guidelines: schools should strive for 225 minutes per week at middle & high schools levels and 150 minutes per week at elementary level.

Maine School-Related Nutritional Policy Strategies



- Maine DOE, Chapter 51 regulations supplement federal regulations pertaining to schools with National School Lunch Program. Changes in 2006 require that all foods sold in the food service program, vending machines etc. may NOT be foods of minimal nutritional value.
- The Maine Legislature passed the Commission to Study Public Health recommendation requiring schools to post nutritional information for food items sold in the cafeteria. (2005)
- Maine passed the nation's first state law prohibiting advertising of junk food on school grounds (2007)

Maine School Policy Strategies That Support Physical Activity



"Take Time" Program

- Fitness breaks in class
- Physical activity while students learn
- Structured recess
- SAUs have adopted policies that require 20 minutes of daily physical activity for all students K-8
- Individual schools require 10-20 minutes of all students in the school and additional classrooms get 10-20 minutes of daily PA



Take Time

2006-2007 Evaluation



What Teachers Said!

84% of teachers reported having noticed positive differences in their students as a result of Take Time!

- Of those teachers,
 - 68% said it increased students' ability to focus
 - 44% reported that students became more active on their own
 - 29% found a decreased need for discipline
 - 42% felt it decreased student stress level
- 76% of teachers felt that they benefited from “Take Time” and reported decreased stress levels, more energy throughout the day, increased ability to focus, increased fitness level and greater satisfaction with their work.

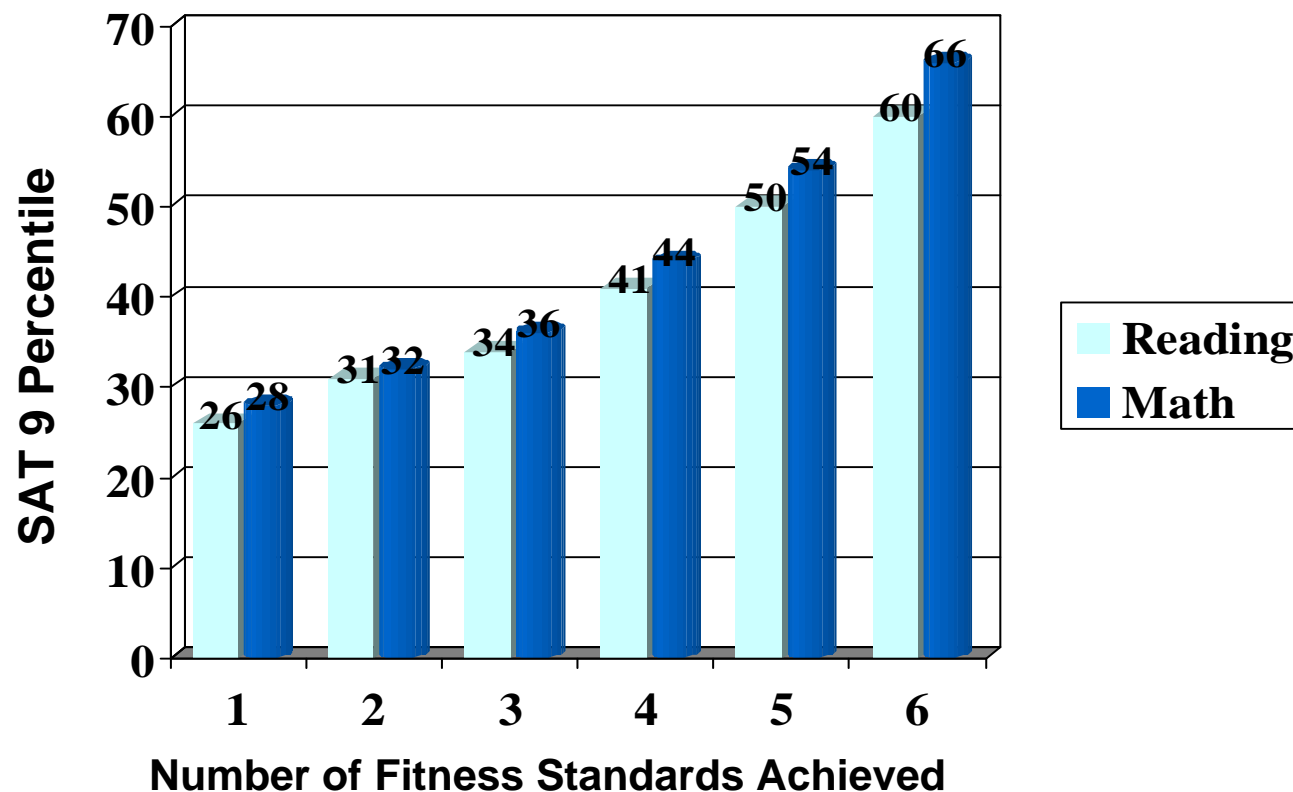
For more information contact Karen O'Rourke 207-629-9272 x 203 korourke@mcph.org

Fitness and Academic Performance



2001 Grade 7 SAT 9 and Physical Fitness

*The
greater
the
fitness,
the better
the SAT 9
Score*



California Department of Education 12/10/02
SAT 9 Examination Similar to MEA Tests

Local Environmental Strategies That Support Physical Activity



Safe Routes to School

- Grants from DOT help fund sidewalks etc. that make it safer to walk or bike to school.

Walking routes

- Ex: Schools open facilities to the community for walking

Video games

- Those that promote physical activity are popular.

Ex: Dance, Dance Revolution and Generation Fit

5 2 1 0 Goes To School

5210 Goes To School

- An easy and effective method of integrating increased physical activity and healthy eating into **ANY** school environment.
 - Clear consistent messages (5,2,1,0)
 - 10 key strategies for success
- Creates an environment of change **AND** can be used to compliment existing curricula.
- **Completely voluntary!** We support your needs with resources, guidance and technical assistance.
- A connection to local, state and national resources.

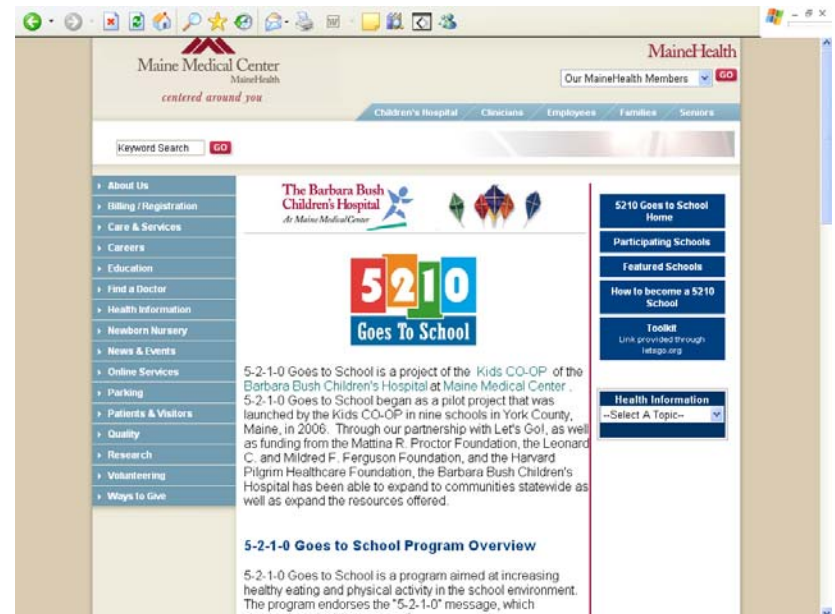
Where can you find 5210GTS?



www.letsgo.org



www.5210goestoschool.org



Working together—Healthcare & Schools CAN DO EVEN MORE!



- Opportunity to reach large numbers of youth
 - Students are attentive when they hear about health from physicians
- Many schools are ready to get involved
 - Concerned about health problems, especially those that interfere with learning
 - Interested in strategies that improve learning such as increased physical activity
- Schools can reinforce physician messages & help reach parents about healthy behaviors such as 5-2-1-0
- The public expects action from physicians and schools to address obesity

Role of Clinicians in Schools



As community leaders & advocates physicians can provide important support for school:

- Policy development
- Environmental change
- Education
- Clinical services that help to prevent and manage chronic conditions

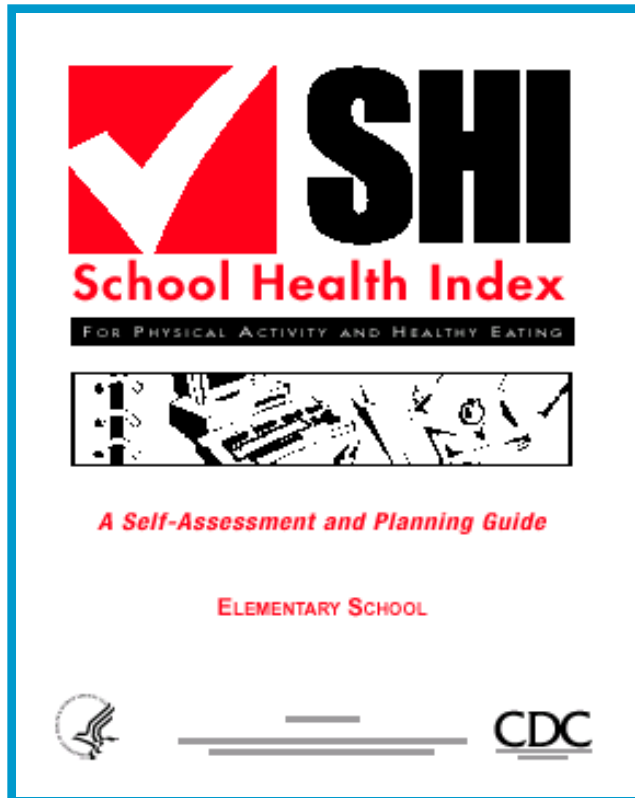
As a Community



- Advocate for pedestrian and bicycle friendly zoning, paths, and facilities
- Make healthy foods AND appropriate portion sizes available and affordable in schools, recreational settings, and parks
- Improve access to parks, walkways, and other recreational areas and programs for all ages
- Counteract unhealthy media messages
- Support local wellness programs and initiatives



Resources for Schools & Communities



- **CDC School Health Index**
www.cdc.gov/nccdphp/dash/SHI/index.htm
- **The Children and Weight: What Schools and Communities Can Do About It Resource Kit**
www.cnr.berkeley.edu/cwh
- **Guide to Community Preventive Services** www.thecommunityguide.org
- **CDC Physical Activity and Nutrition (PAN) Program**
www.cdc.gov/nccdphp/bb_nutrition/index.htm

As Parents, Families, & Individuals



- Take steps to live healthier lives
 - Be physically active every day
 - Make healthy food choices
- Be leaders and role models in our families, schools, and communities
- Support efforts around us that promote healthier living

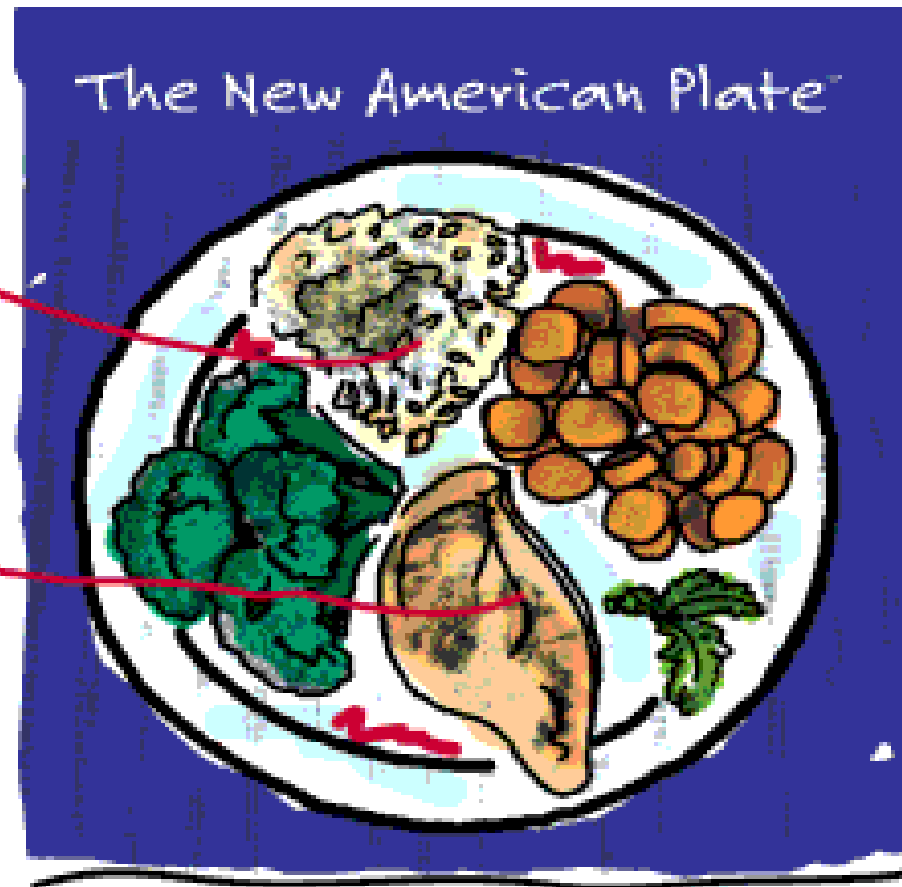
The New American Plate!

2/3 or more
vegetables, fruits,
whole grains and
beans

1/3 (or less)
animal protein



©2008 American Institute for Cancer Research
The New American Plate is a registered trademark of AICR.



Just 150 Calories!

- Small changes to diet- physical activity equation matter
- Examples of 150 calories:
 - 1 can (12oz) soda
 - ½ cupcake
 - ½ piece of pizza
 - 10 oz of apple juice
 - ½ glazed donut

Parents' Responsibilities



- Have pleasant family meals – prepare and eat more meals at home
- Buy and offer healthy foods for home
- Help children learn about appropriate portion sizes
- When eating out, avoid “all-you-can-eat buffets”, “supersized” meals, and other overeating “deals”

Parents' Responsibilities



- Be a role model for good eating and activity behaviors
- Avoid using food as a reward
- Set limits on TV and video games
- Be flexible and understanding
- Encourage healthy behaviors and show affection

Positive Family Attitudes



- Having extra weight is no one's fault
- Losing weight most likely to happen when taken on as a family commitment
- There's no such thing as good food or bad food
- Any activity is helpful, it doesn't have to be exercise
- There is no "right" weight or body shape

Childs' Responsibilities



- To eat as much or as little as they need among the food available
- To eat 3 meals a day with healthy snacks
- To make activity fun
- To try to be active every day
- To be responsible for TV and video game limits
- To do things that they are proud of
- To choose goals and areas to improve on

This PPT Brought to you by...



~ **Keep ME Healthy** ~

A partnership of the Maine Center for Public Health and
the Maine Harvard Prevention Research Center

**Building Systems Change &
Clinical—Community/School Partnerships
to Prevent, Identify & Treat Childhood Obesity**

http://www.mcph.org/Major_Activities/keepmehealthy.htm

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