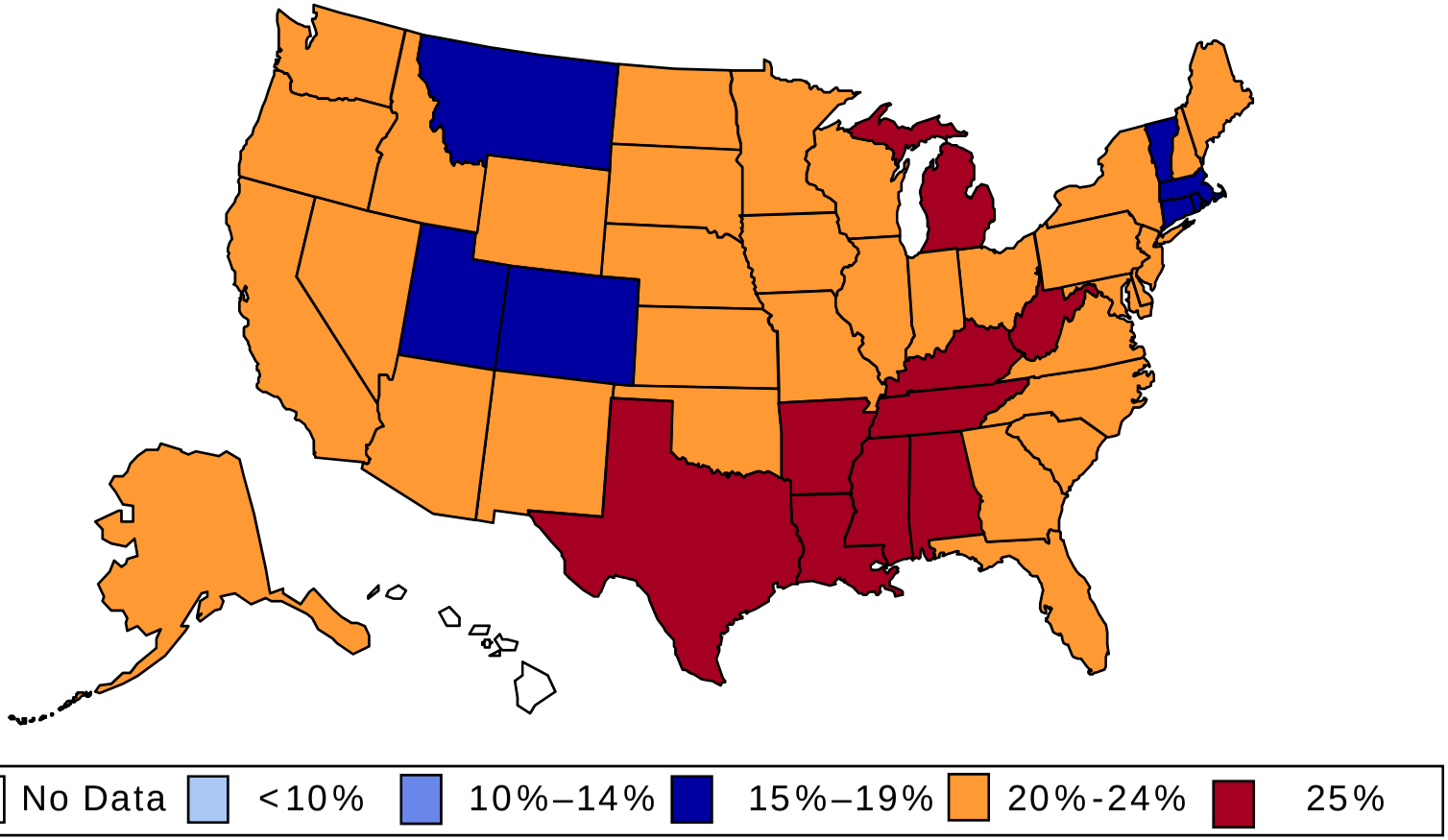
Obesity Trends Among U.S. Adults

BRFSS, 2004



Obesity Trends Among U.S. Adults

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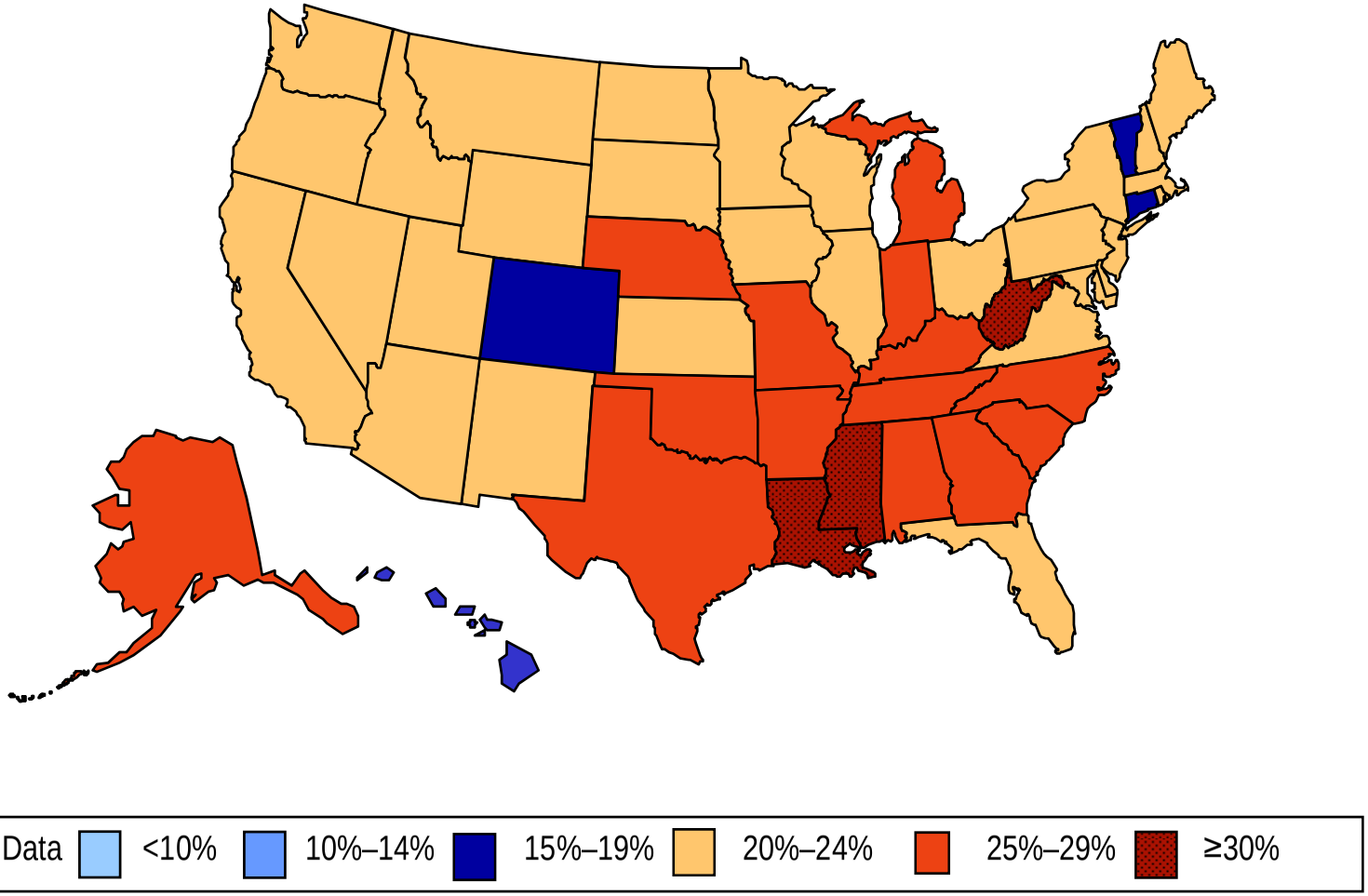

Obesity Trends Among U.S. Adults

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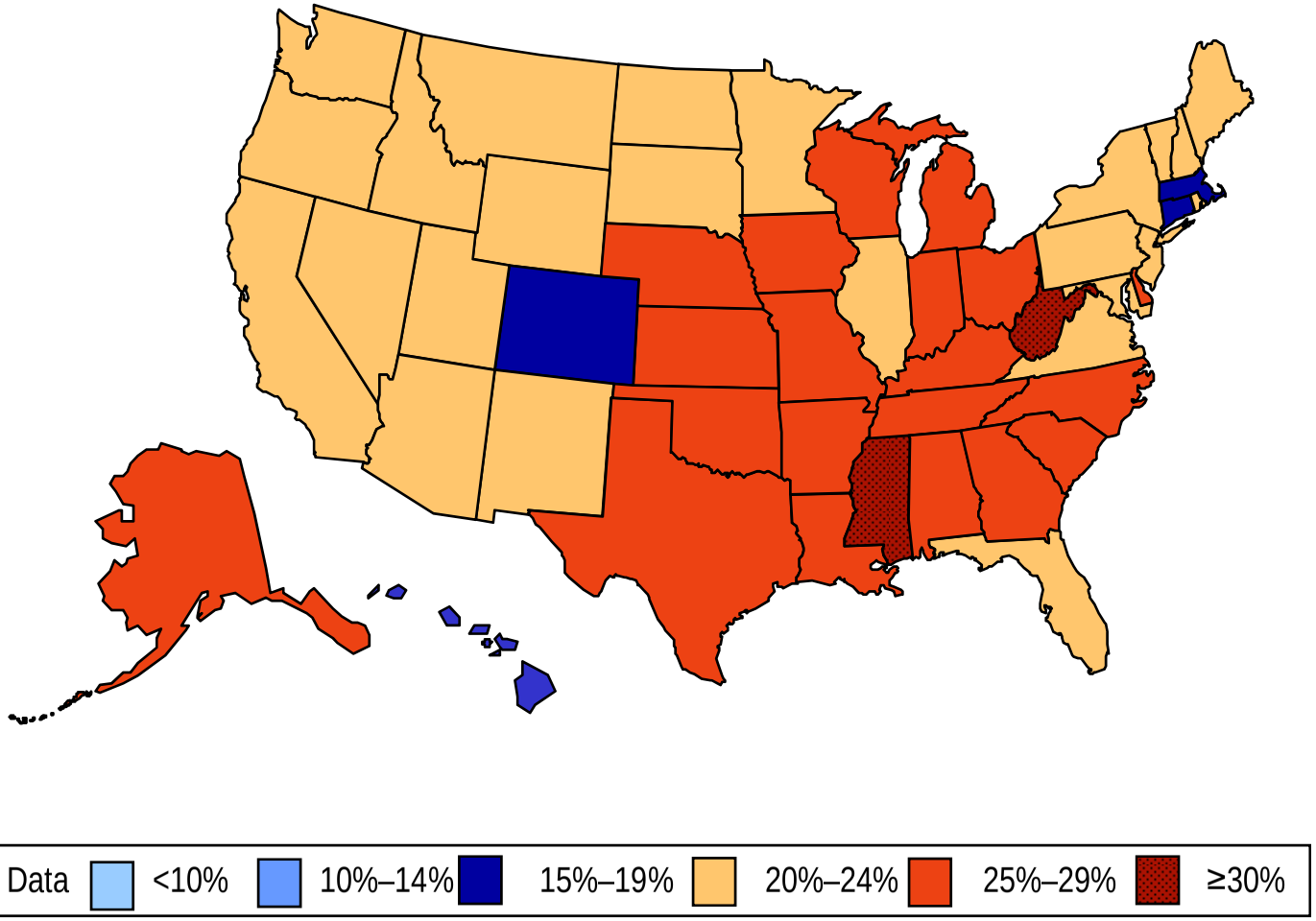
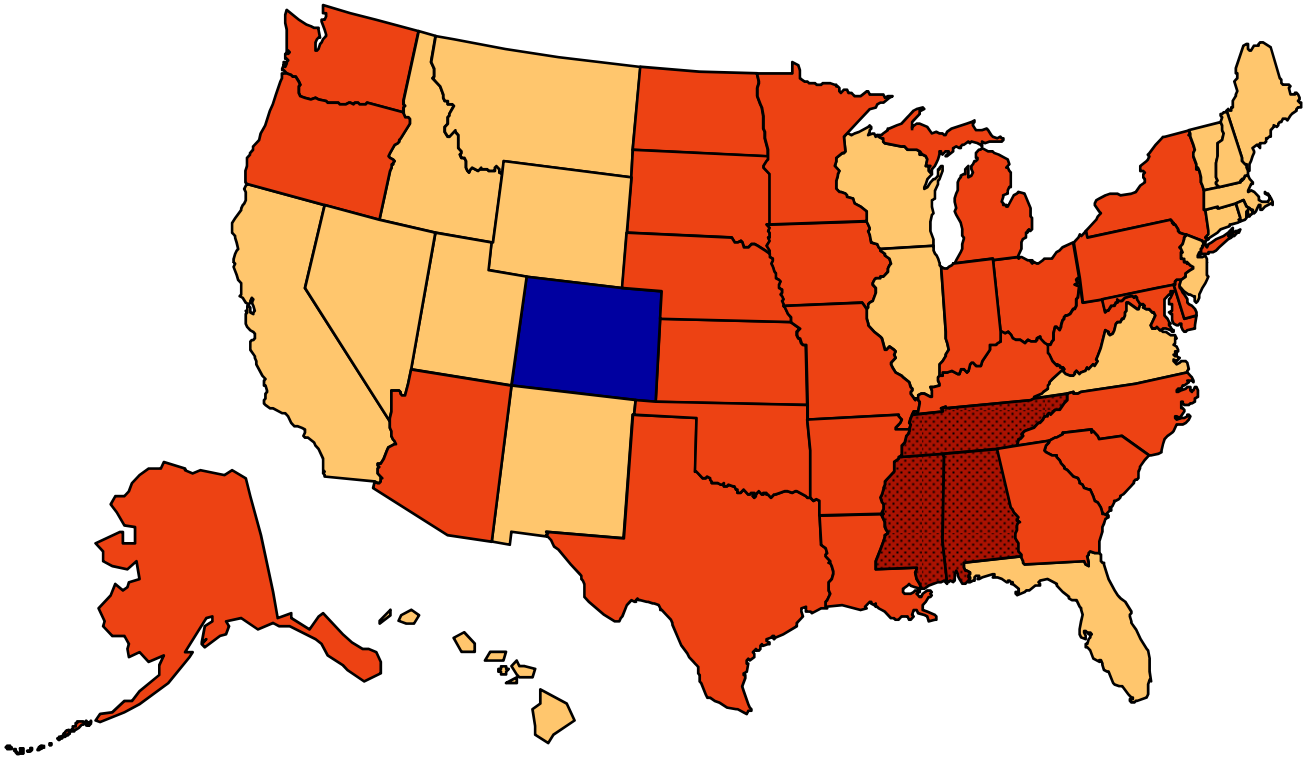


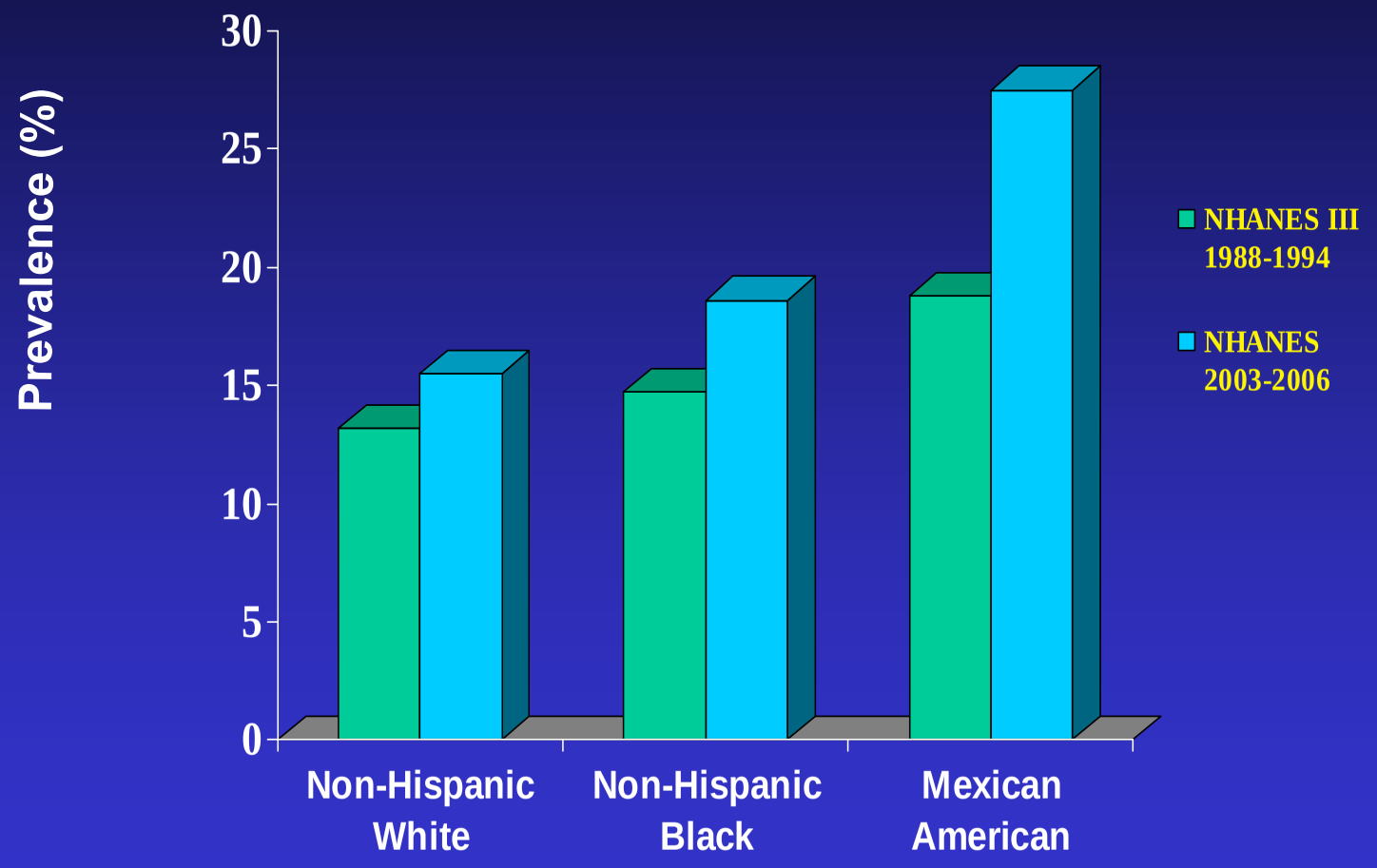
Obesity Trends* Among U.S. Adults

BRFSS, 2007



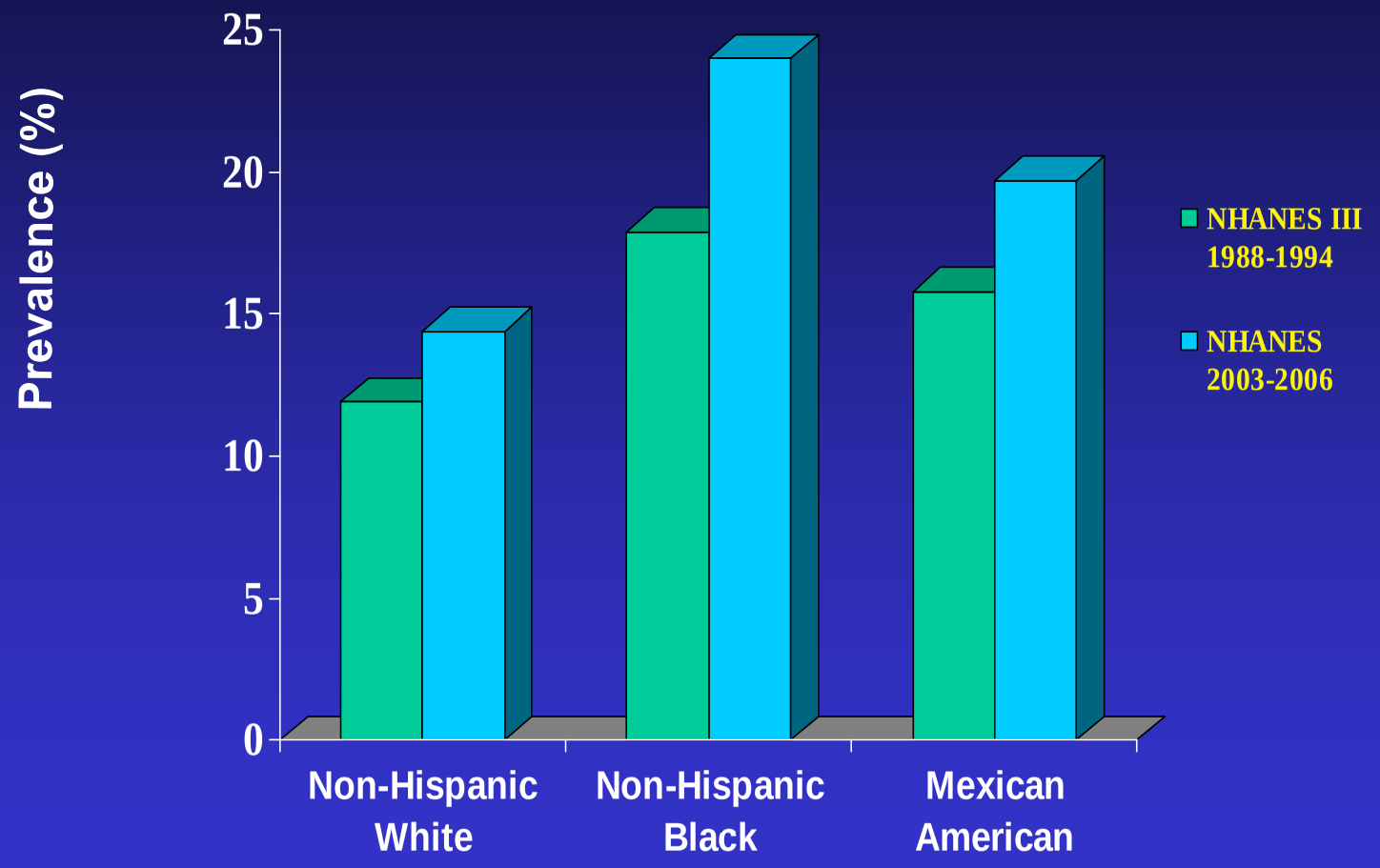
No Data | <10% | 10%–14% | 15%–19% | 20%–24% | 25%–29% | ≥30%

Overweight Prevalence by Race/Ethnicity for Boys Aged 6 - 11 Years



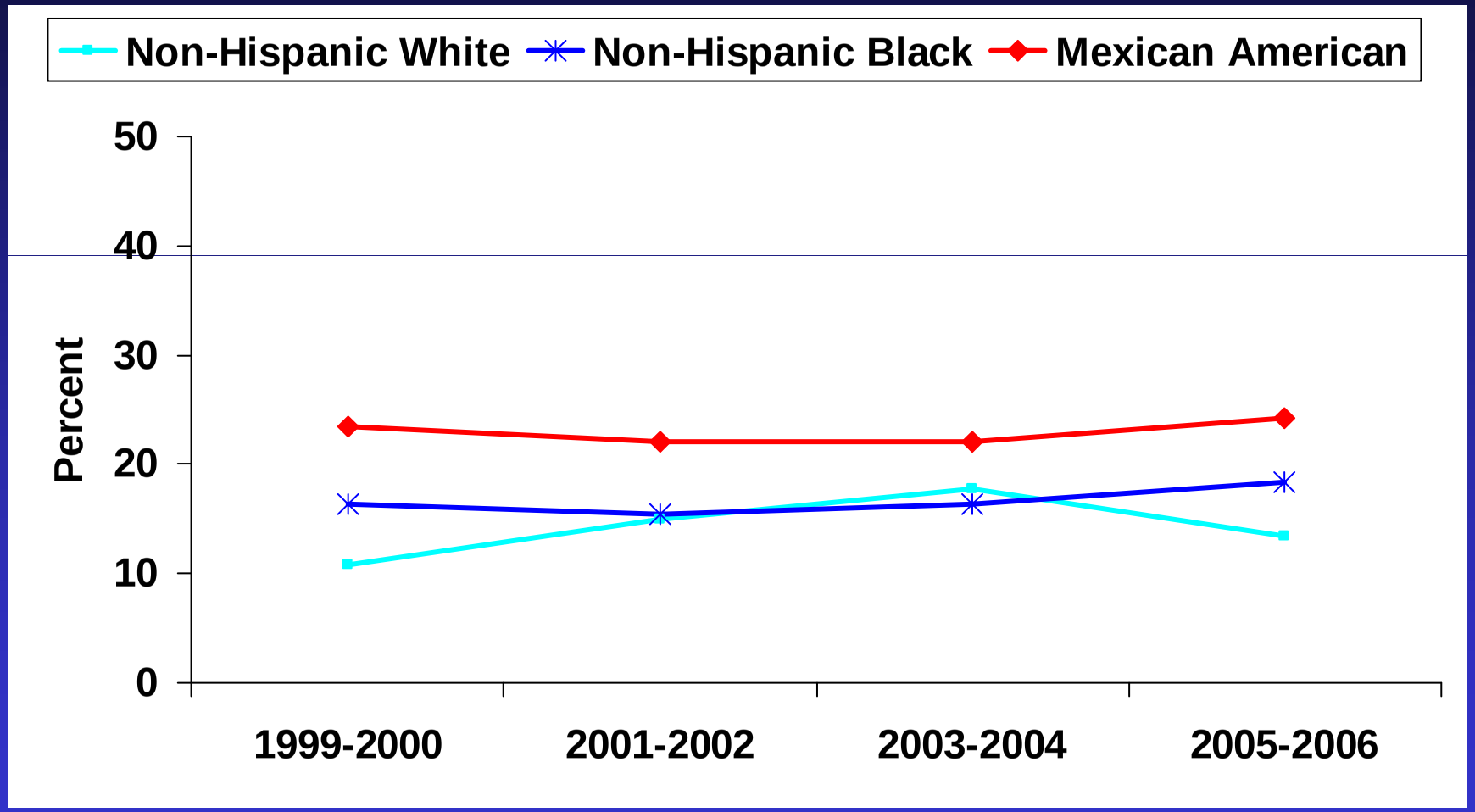
Source: Ogden CL et al.*JAMA. 2008;299:2401-5; MMWR* 1997; 46:199-202

Overweight Prevalence by Race/Ethnicity for Girls Aged 6 - 11 Years



Source: Ogden CL et al. *JAMA. 2008;299:2401-5;* ;*MMWR.* 1997:46:199-202.

Changes in Obesity Prevalence by Race/ethnicity, Boys 2-19 Years



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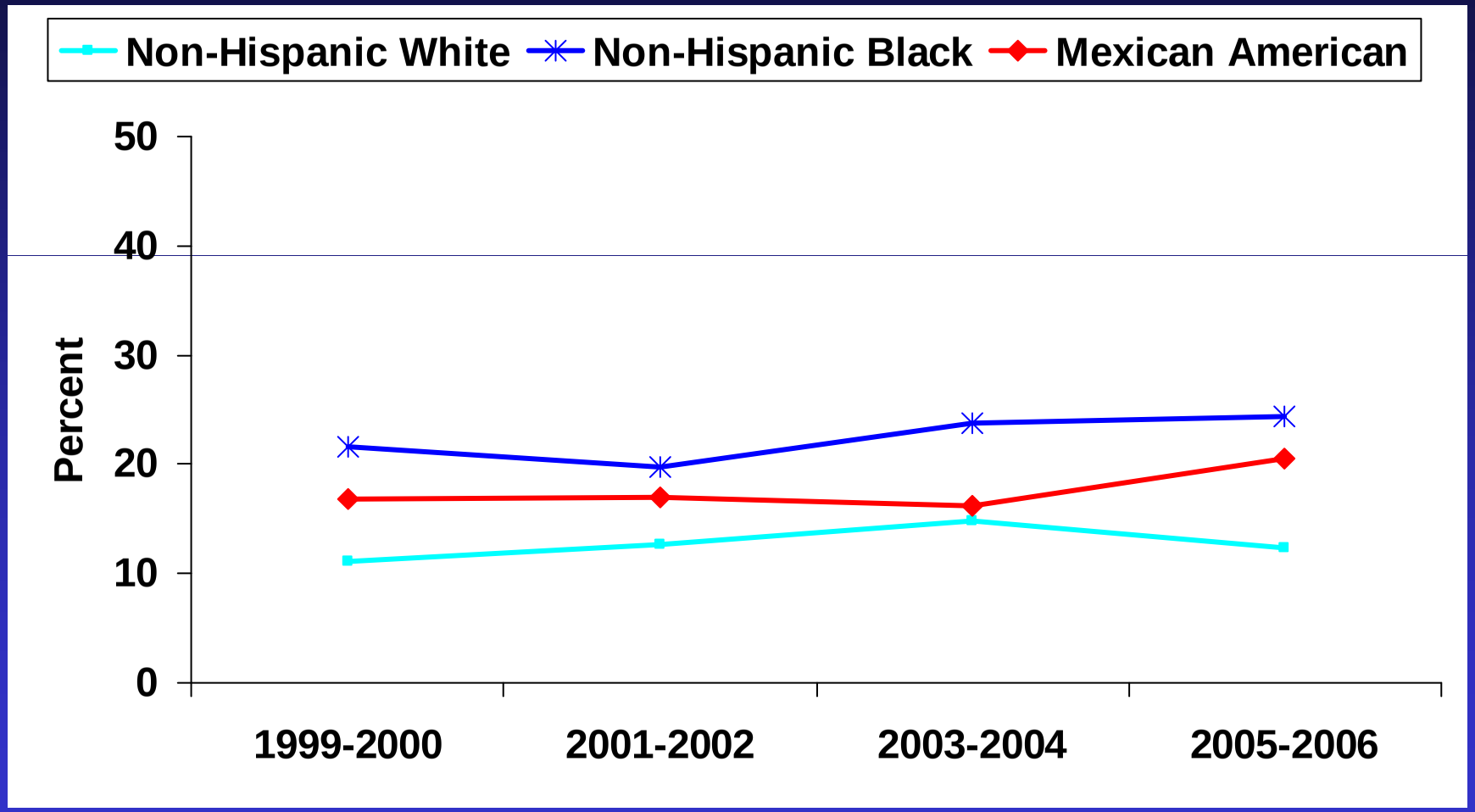
Changes in Obesity Prevalence by Race/ethnicity, Girls 2-19 Years

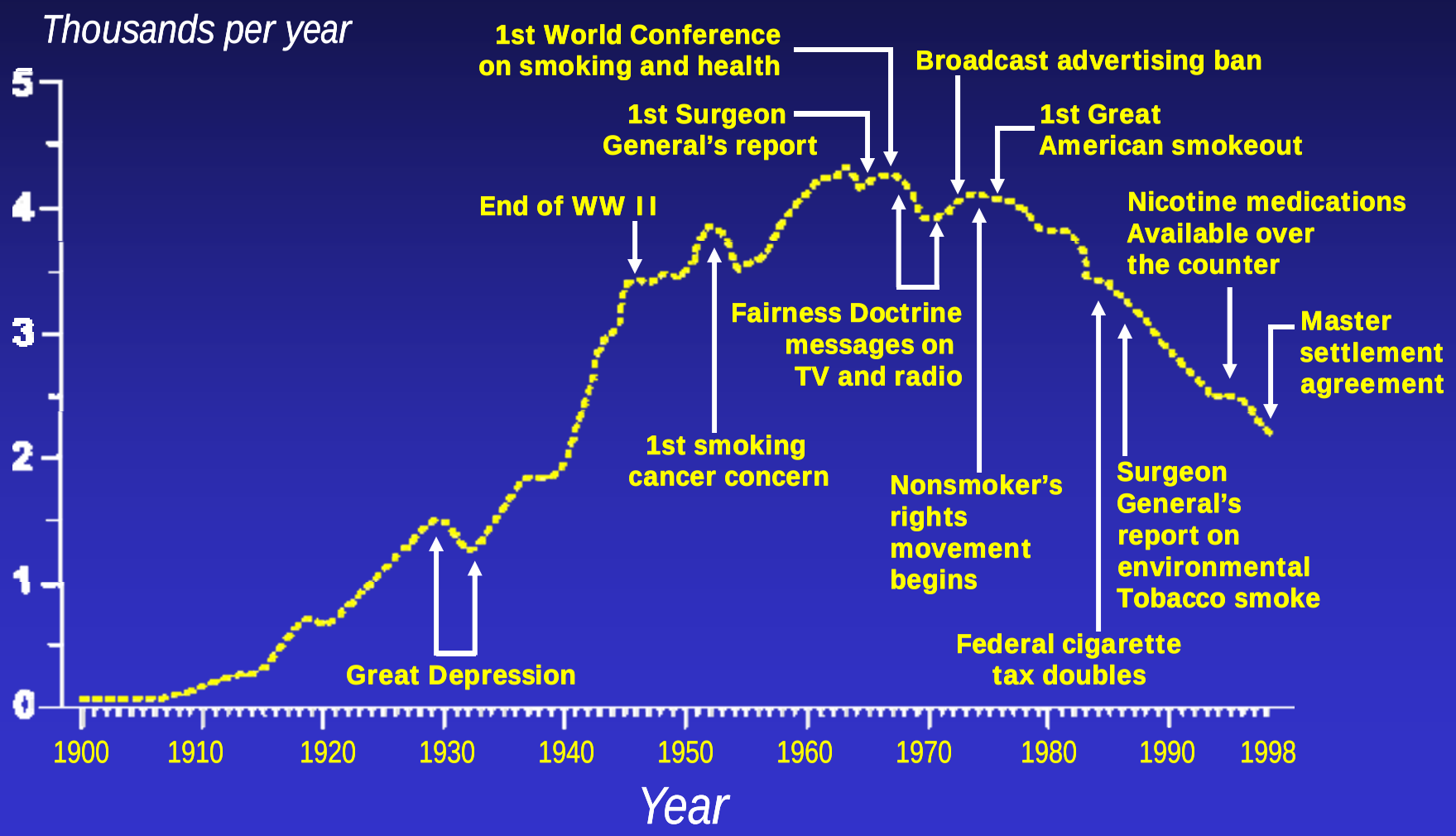


Ogden CL et al. JAMA 2008;299:2401

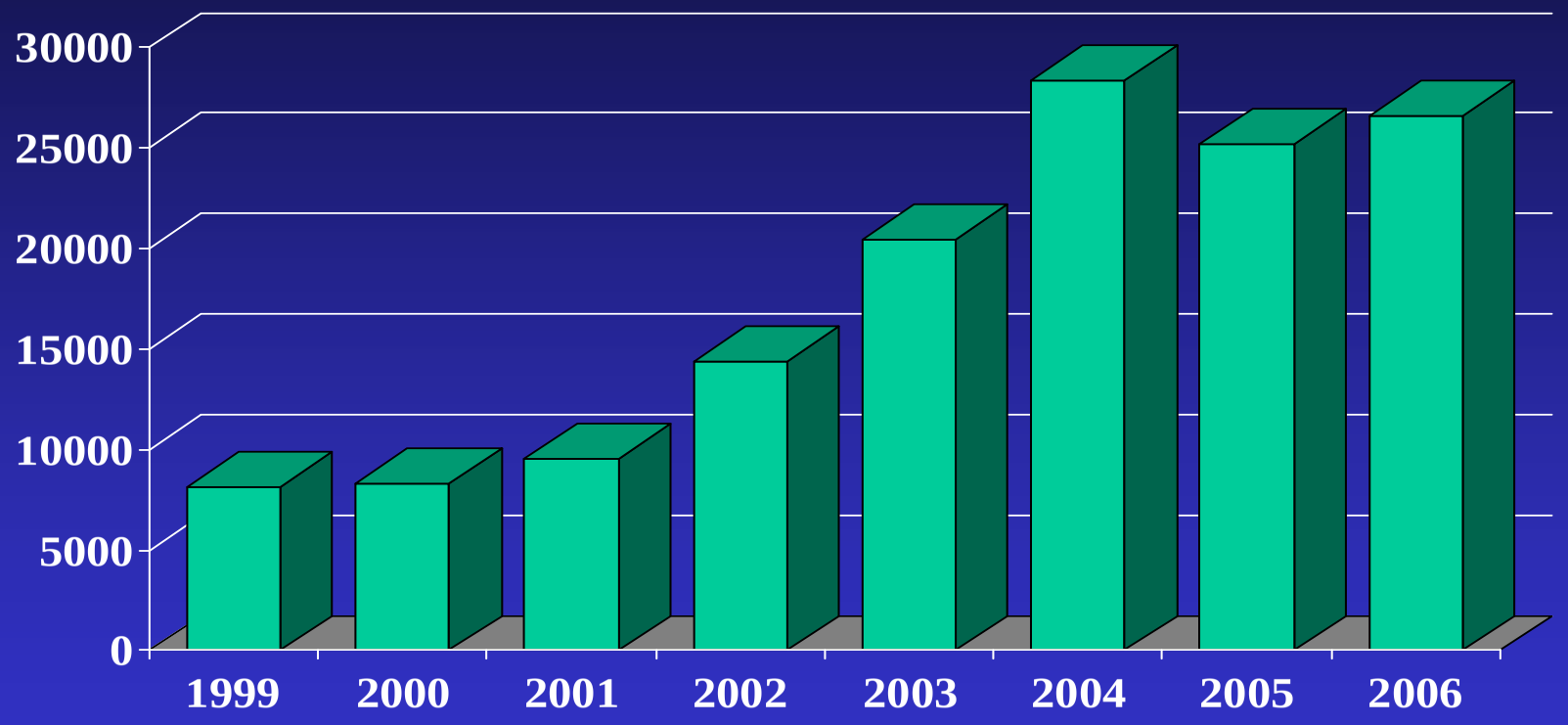
Other Data Sources Consistent with a Plateau in the Prevalence of Childhood Obesity

- YRBS 2007: no change from 2005-2007
- State data
  - Texas – 2000-02 to 2004-05 (elementary school)
  - Arkansas – 2003-04 to 2006-07 (all students)
- Preliminary longitudinal data from states
  - Maine
  - West Virginia

Annual Adult per Capita Cigarette Consumption and Major Smoking and Health Events – US 1900-1998

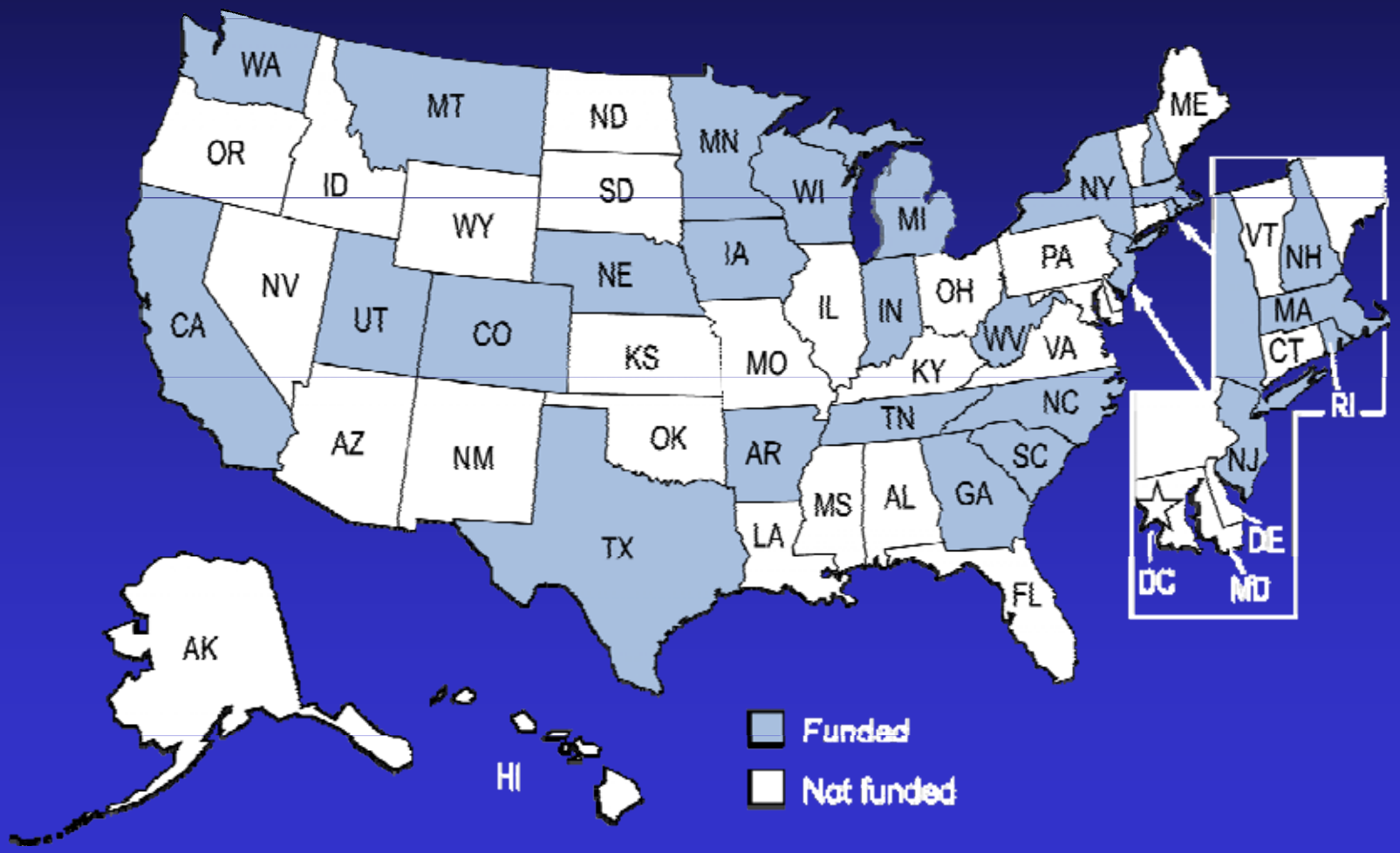


Trends in Obesity-Related Media Coverage in the United States



Note: Figures retrieved from Lexis-Nexis searches on "obesity or obese" in U.S. newspapers and newswires.

State Programs in Nutrition, Physical Activity and Obesity



Overview of Efforts to Control Obesity

Problem definition

Strategy development

- Targets
- Strategies: policy and environmental change

Implementation

- Multi-sectoral
- Evaluation

Social movements

Average Daily Energy Gap (kcal/day)

	Excess Weight Gained (Lb)	Daily Energy Gap (kcal/day)
All Teens	10	110 -165
Overweight Teens	58	678 -1,017

Behavioral implications of 150 kcal:

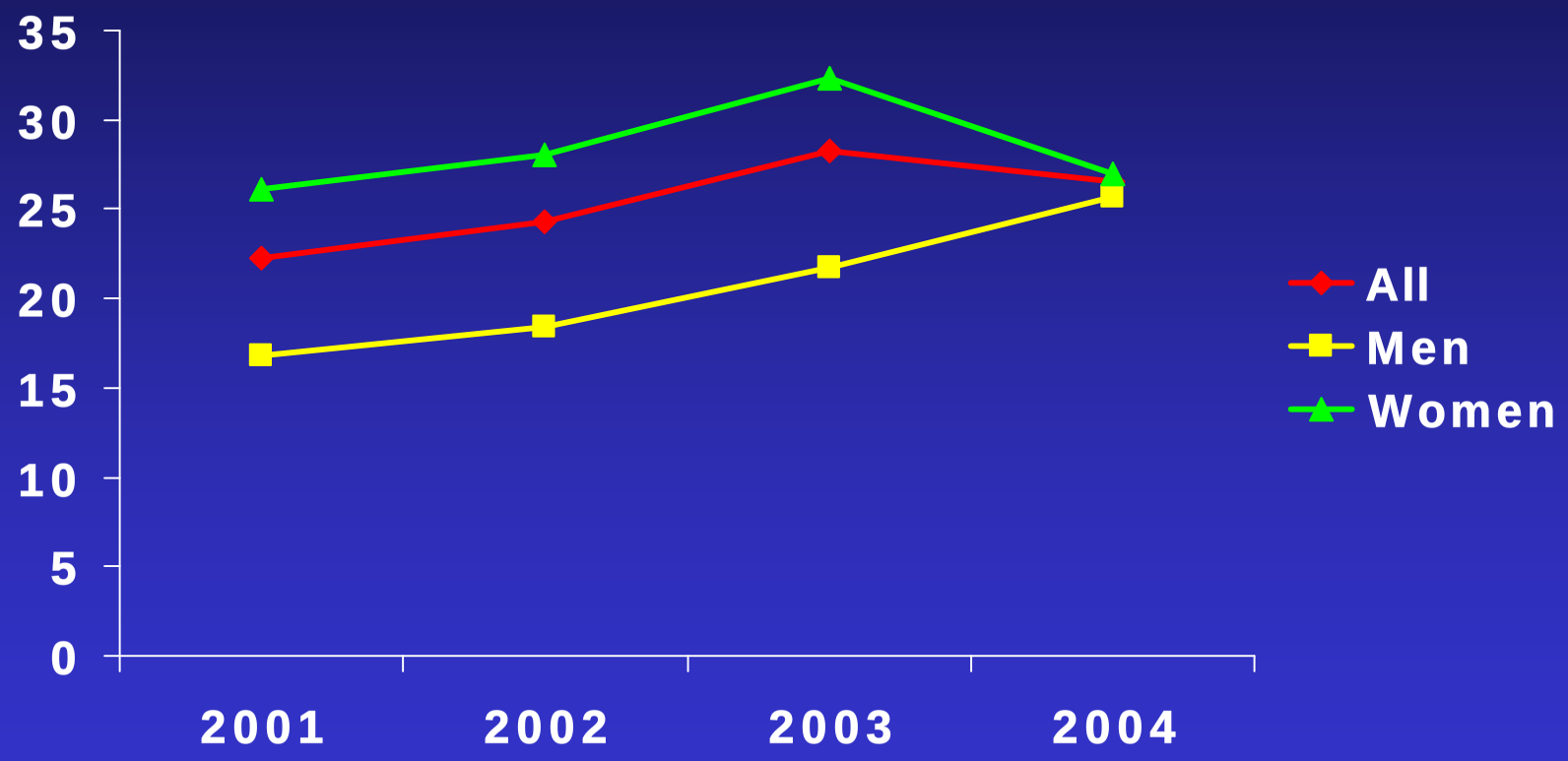
- Replacing 1 can of soda (12 oz) with water (140 kcal)
- Reducing TV watching by an hour (167 kcal/day)[1]
- Walking 1.9 hours instead of sitting (for a 30-kg boy)
- Increasing PE from 1 to 3 times/week (240 kcal)

Wang YC et al. Pediatrics 2006;118:e1721
Wiecha et al. 2006; Arch Pediatr Adolesc Med 160:436

Principal Targets

- Reduce energy intake
  - Decrease high and increase low E_D foods Increase
  - Increase fruit and vegetable intake
  - Reduce sugar-sweetened beverages
  - Decrease television time
- Breastfeeding
- Increase energy expenditure
  - Increase daily physical activity

Consumption of Five Fruits and Vegetables per Day
Charlotte, NC REACH 2010*



* African Americans only

Agreement between the Alliance for a Healthier Generation and the Soft Drink Companies

- Elementary schools
  - H_2O
  - 8 oz juice without added sweeteners
  - FF and LF regular and flavored milk
- Middle schools
  - Same standards, 10 oz portions
- High schools
  - No and low kcal drinks, light juices, sports drinks
  - 50% must be H_2O and no or low Kcal; 100Kcal/container

NYCDHMH, Amend Article 47, NYC Health Code; Applies to Group Day Care in NYC

Television, video and other visual viewing

- Cannot be used for children <2 yo
- Limited 60 minutes per day of educational programs or programs that actively engage child movement for children 2+ yo

60’ physical activity required

Eliminate sugar-sweetened beverages

Provide 1% or no-fat milk

Principal Targets

- Reduce energy intake
  - Decrease high and increase low E_D foods Increase
  - Increase fruit and vegetable intake
  - Reduce sugar-sweetened beverages
  - Decrease television time
- Breastfeeding
- Increase energy expenditure
  - Increase daily physical activity

Effective Interventions to Promote Physical Activity

- Informational
  - Community-wide education
  - Point of decision prompts
- Behavioral and social
  - School-based PE
  - Non-family social support
  - Individually adapted behavior change
- Environmental and policy
  - Enhanced access with outreach
  - Urban design and land use

MMWR
MORBIDITY AND MORTALITY WEEKLY REPORT

Recommendations and Reports

Increasing Physical Activity

A Report on Recommendations of the Task Force on Community Preventive Services

“To obtain more evidence-based practice we need more practice-based evidence”

Greeen L, Ottoson JM. In Hiss et al, From Clinical Trials to Community: the Science of Translating Diabetes and Obesity Research, NIH, 2004.

Overview of Efforts to Control Obesity

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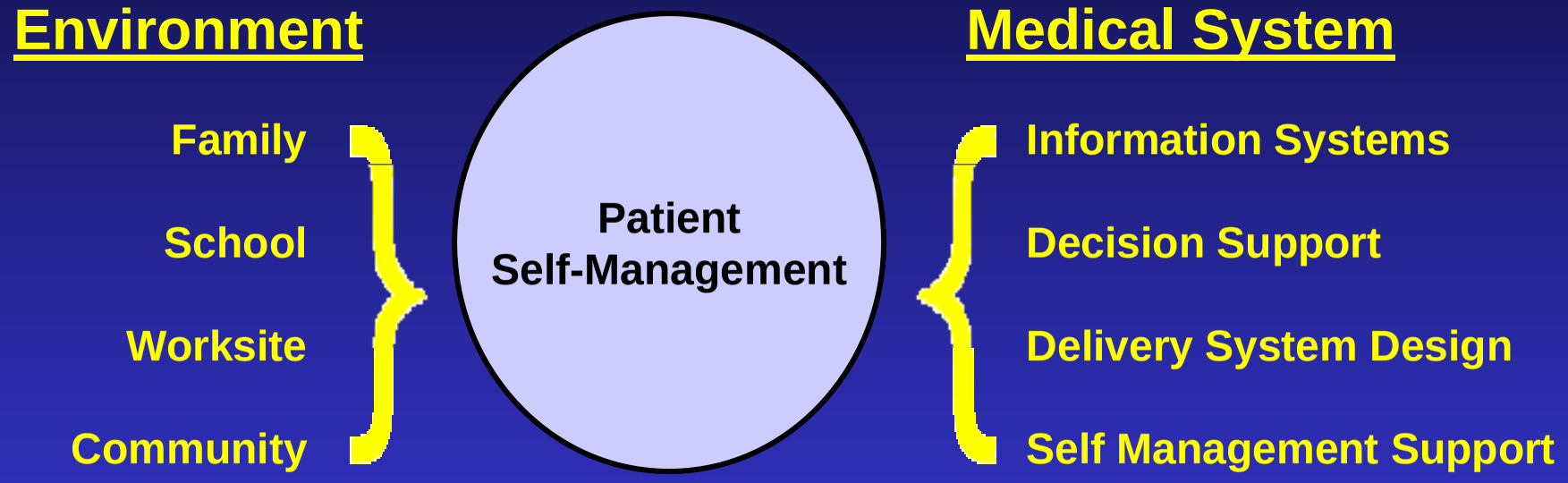
Social movements

Settings for the Prevention and Treatment of Obesity

- Medical Settings
- School
- Work Site
- Community

Chronic Care Model



keep ME healthy

5 2 1 0

POWER UP

What can YOU do to help keep kids healthy?

Follow the 5-2-1-0 countdown to good health!

5: Eat at least 5 servings of fruits & vegetables on most days

2: Limit screen time to 2 hours or less daily

1: Participate in at least 1 hour or more of physical activity every day

0: Avoid soda & sugar-sweetened drinks; limit fruit juice to half cup or less per day. Instead, encourage water and 3-4 servings/day of fat-free milk.

Keep ME Healthy is a joint initiative of the Maine Center for Public Health and the Maine Chapter of the American Academy of Pediatrics. Funded by a grant from the Maine Health Access Foundation.

MAINE CENTER for Public Health

Pediatric Initiatives

Expert committee recommendations

Maine and Massachusetts collaboratives

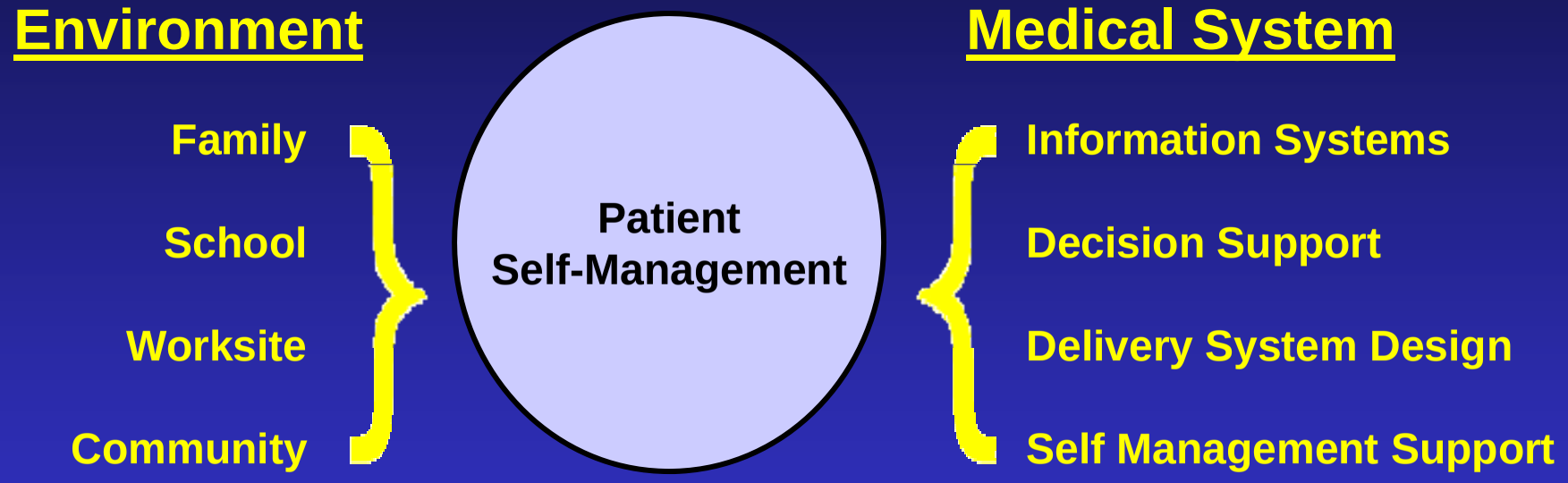
NICHQ Network (NICHQ.org)

NCQA – HEDIS measures

AHIP – pediatric focus

AAP priority – Jeanne Lindros

Chronic Care Model



What HEAL Looks Like in California

- KP's HEAL-CHI
  - Locations: Richmond, Santa Rosa, Modesto
  - Investment: $1.5M per site/5years
- Healthy Eating, Active Communities (HEAC)
  - Financial support
  - Health sector leadership
  - Work with local collaboratives
- Additional elements:
  - Farmers markets
  - Focused HEAL grants
  - Educational Theatre Programs

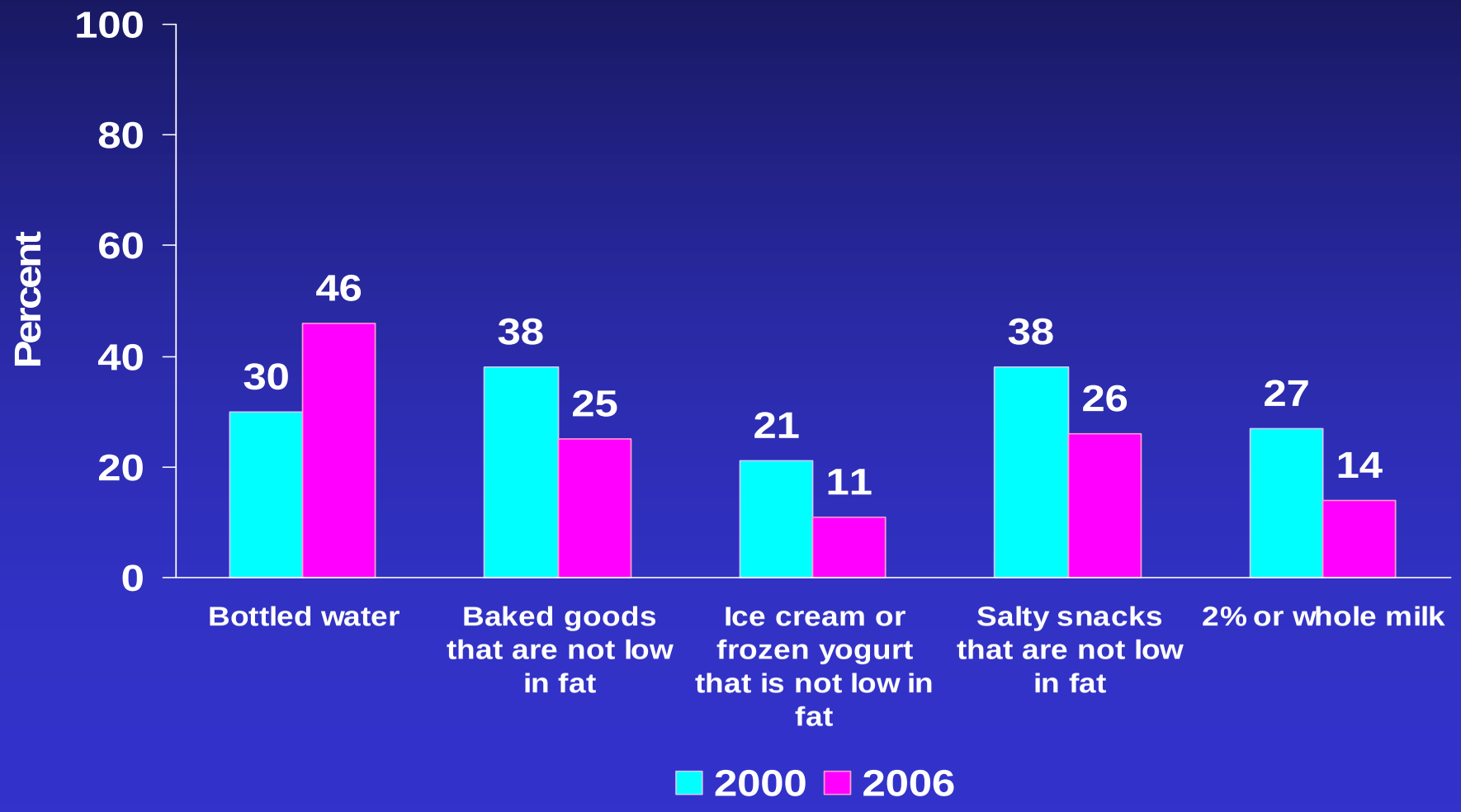
Settings for the Prevention and Treatment of Obesity

- Medical Settings
- School
- Work Site
- Community

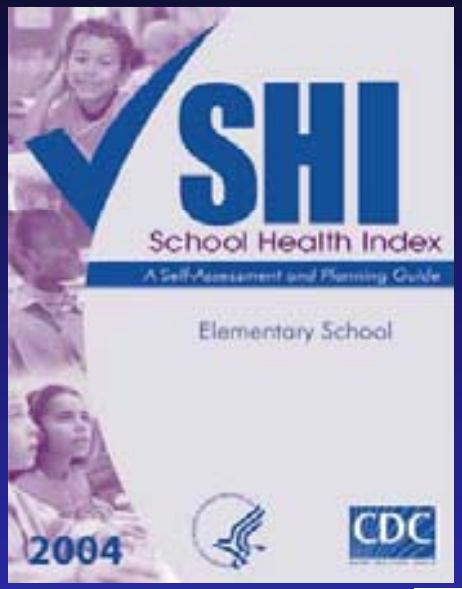
Priority Physical Activity and Nutrition Actions for Schools

- Coordinated school health program and school health council
- Assessment and planning (School Health Index)
- Quality health education
- Staff wellness programs
- Quality PE
- Additional opportunities for physical activity (e.g., recess, after school, walk to school)
- Healthy school nutrition environment

% of Schools in Which Students Could Purchase Selected Food and Beverages From Vending Machines, School Store, Canteen, or Snack Bar, 2000 and 2006

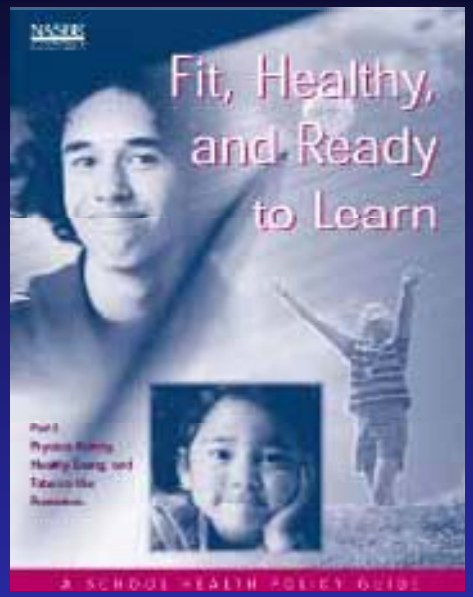


Research Application: School Health Tools



Self Assessment and Planning

Policy Guidance



Health Education Curriculum Selection or Development

Physical Education Curriculum Selection or Development

Settings for the Prevention and Treatment of Obesity

- Medical Settings
- School
- Work Site
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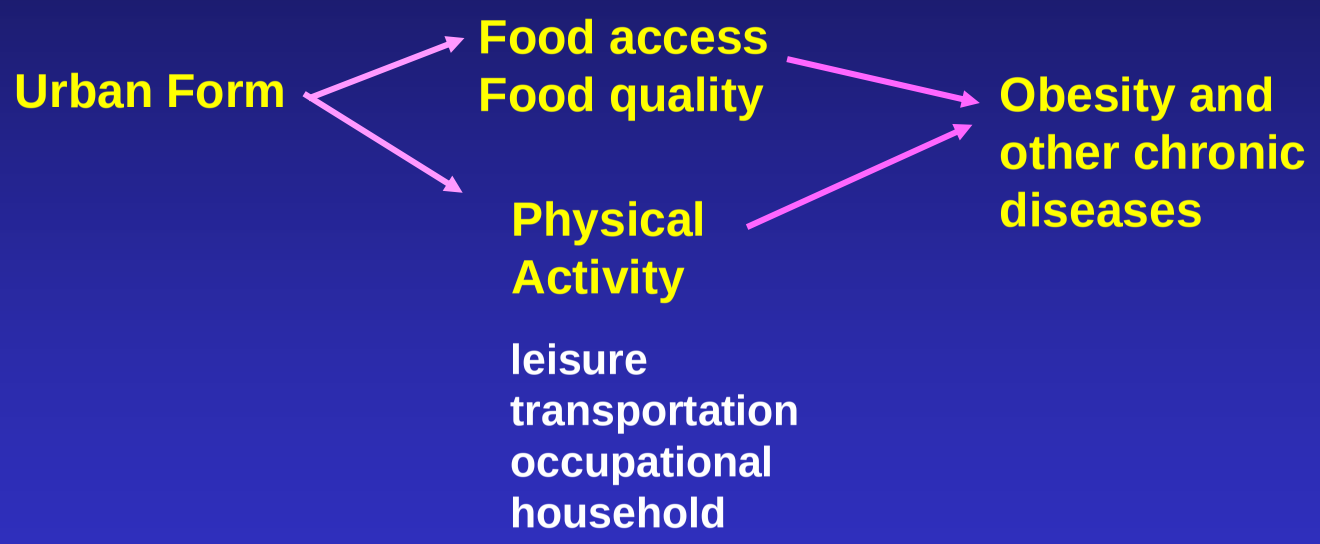
Potential Effect of Urban Form on Obesity and Other Chronic Diseases



Adapted from Ewing et al; Am J Health Prom 2003; 18:47

Arkansas Act 1220 (2003)

Universal BMI measurements in schools
CME courses for primary care providers
Child Health Advisory Committee
Local parent advisory committees
Limited vending machines access
Disclosure of contract information with beverage companies
30’ physical activity/day
Education for cafeteria workers

Changes in BMI in Arkansas

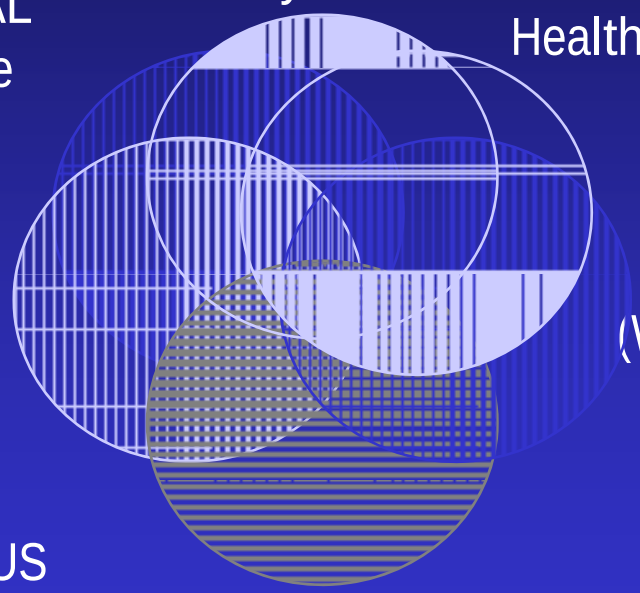
Category	Year 1 2003-4	Year 2 2004-5	Year 3 2005-6
Overweight	20.9%	20.8%	20.4%
At risk	17.2%	17.2%	17.1%
Healthy weight	60.1%	60.1%	60.6%
Underweight	1.8%	1.9%	1.9%
Total students	348,710	372,369	371,082

All available data for years 1 & 2, and all data received by 6/14/06 for year 3 analysis

Needs Identified at the CDC's Community Meeting

- Development of a national strategic plan
- Clearinghouse for obesity prevention and control programs
- Evidence-based and promising interventions
- Training in HEAL for policymakers
- Standardized evaluation tools
- Flexible comprehensive funding

A National Convergence Around Healthy Eating, Active Living?



Elements Common to Social Movements

Shared and personalized perception of a threat
Common frame
Grass roots commitment
Social network focused on collective action
Local nodes with dense social ties, linked to other groups with weak bridging ties (rapid diffusion of innovation)
Organizational structure