Update on the Current Epidemiology of Obesity in the United States

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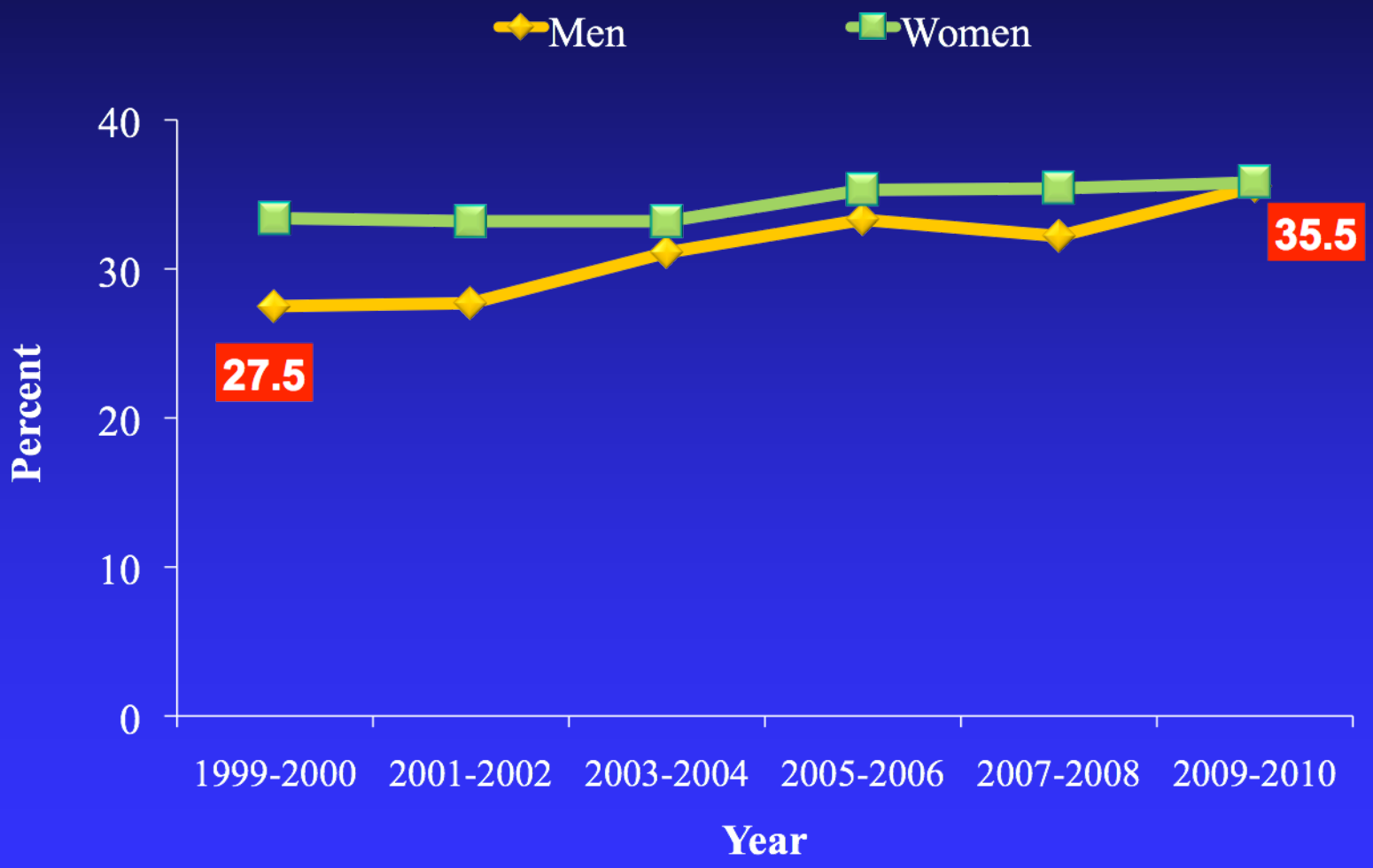
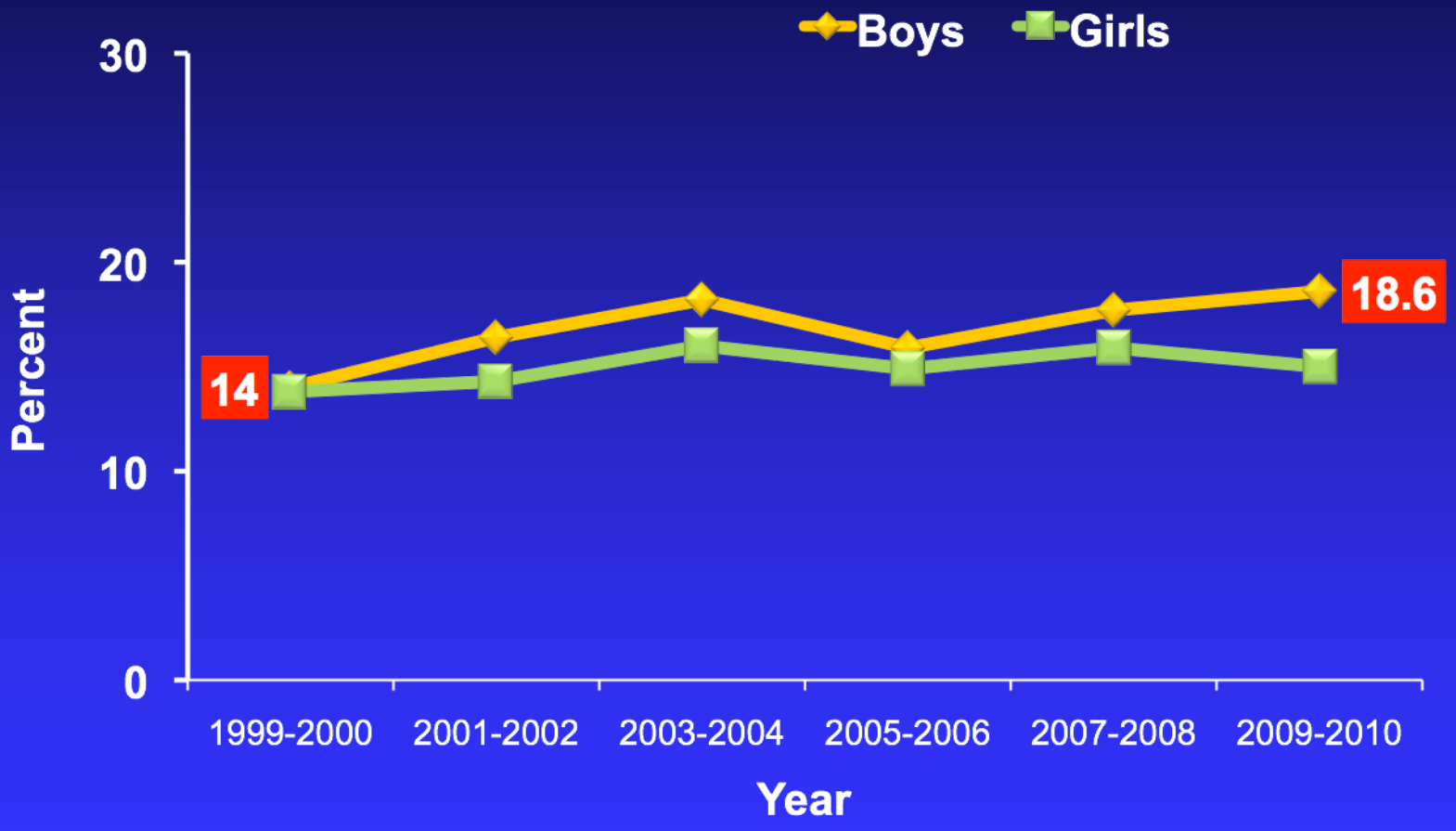
Obesity Trends in Adults over the Past 12 Years



Fryar CD et al. 2012, NCHS data brief

Obesity Trends in 2-19 yo over the Past 12 Years



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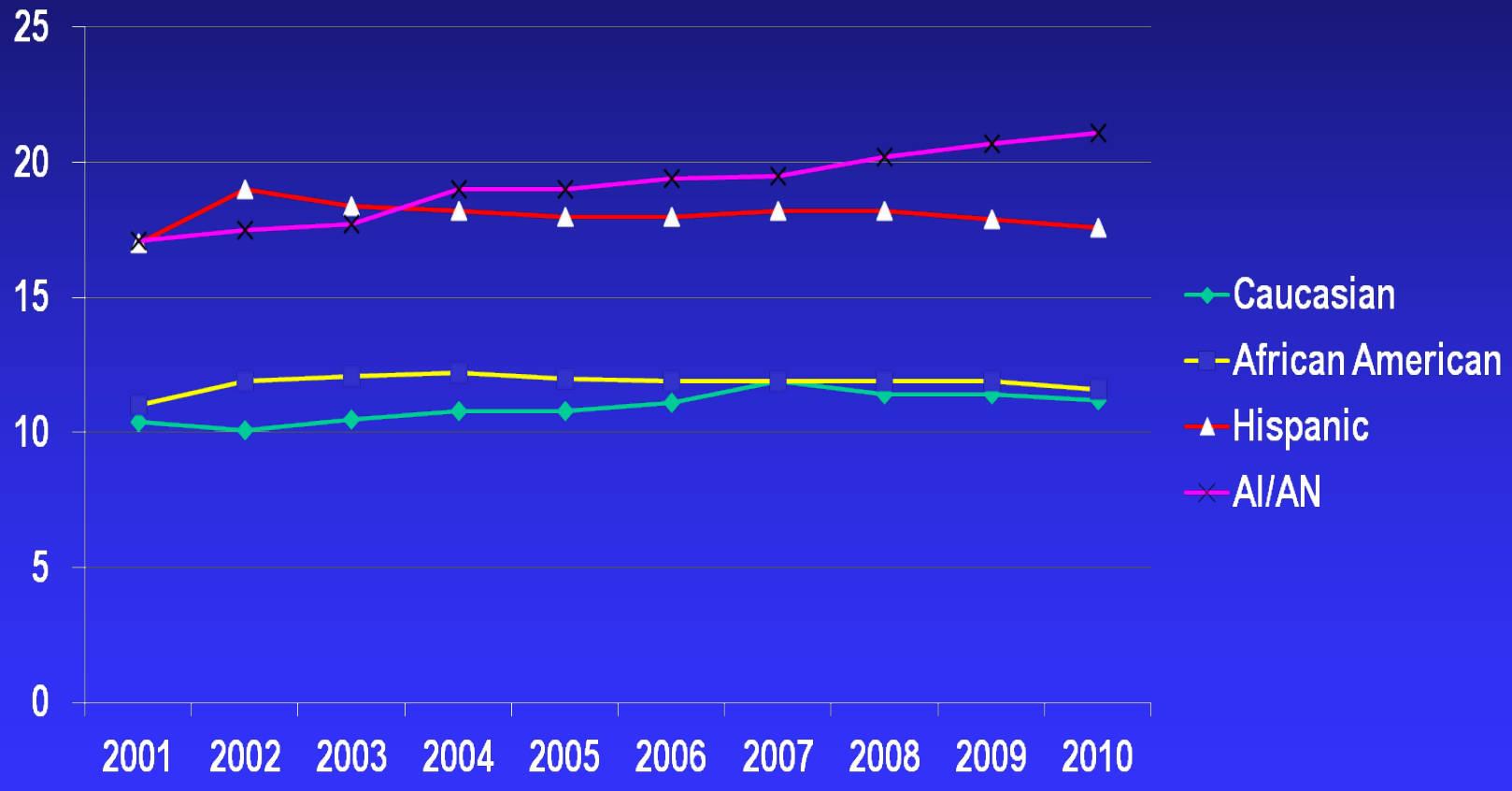
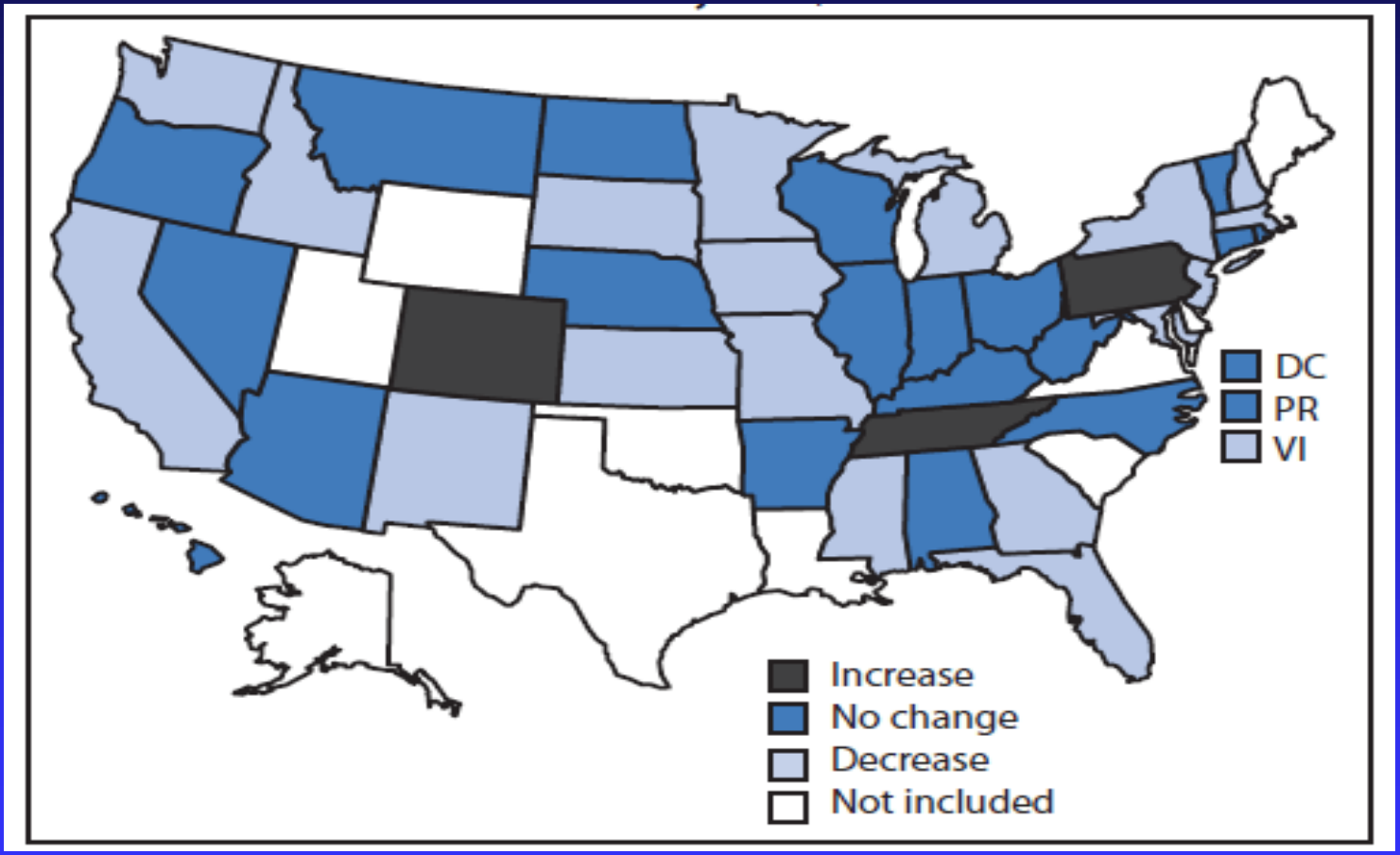
Obesity Trends in Children 2-5yo
Pediatric Nutrition Surveillance System

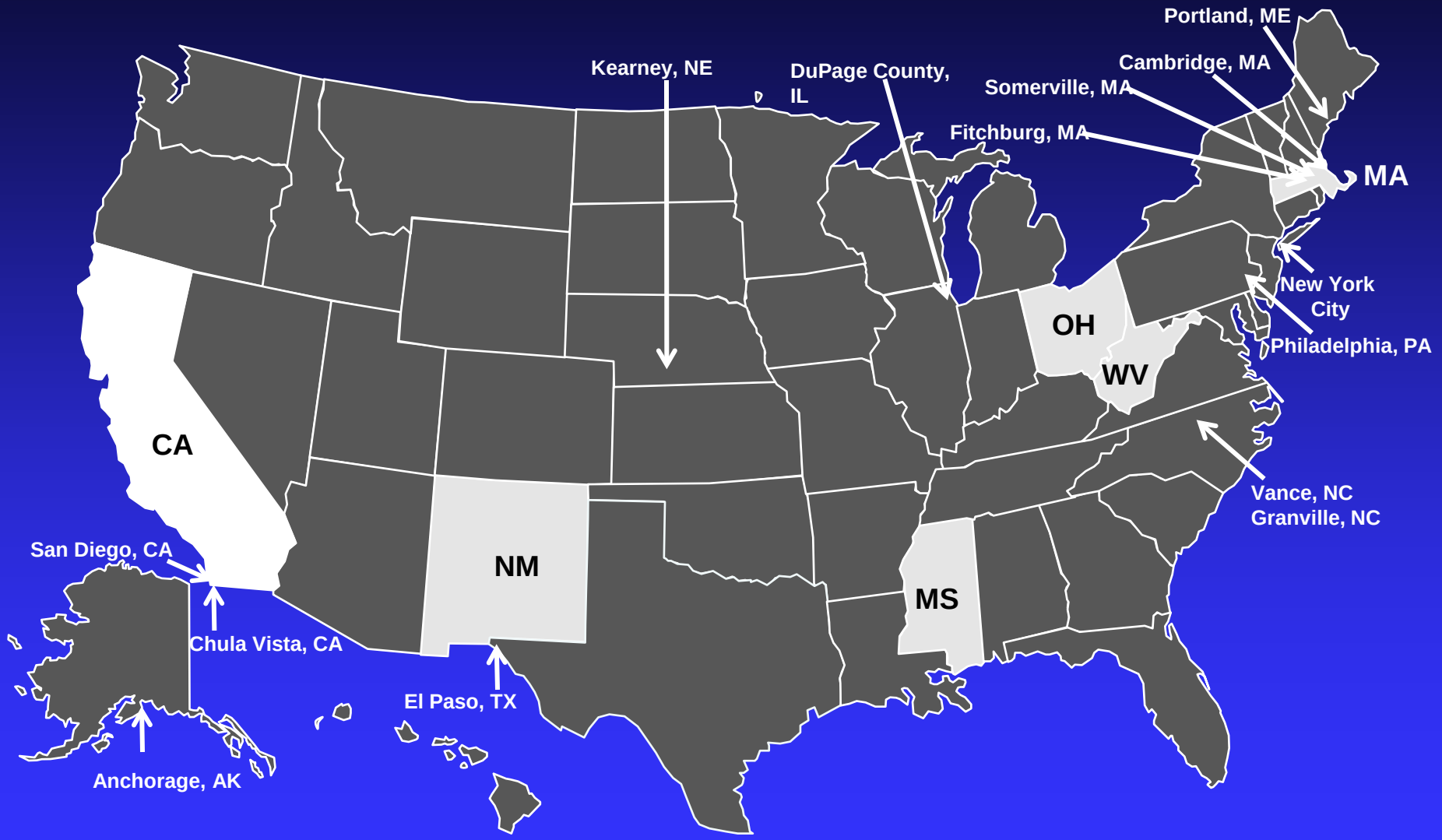


Changes in Obesity Prevalence from 2008 to 2011 among Low-income Preschool-aged children — Pediatric Nutrition Surveillance System

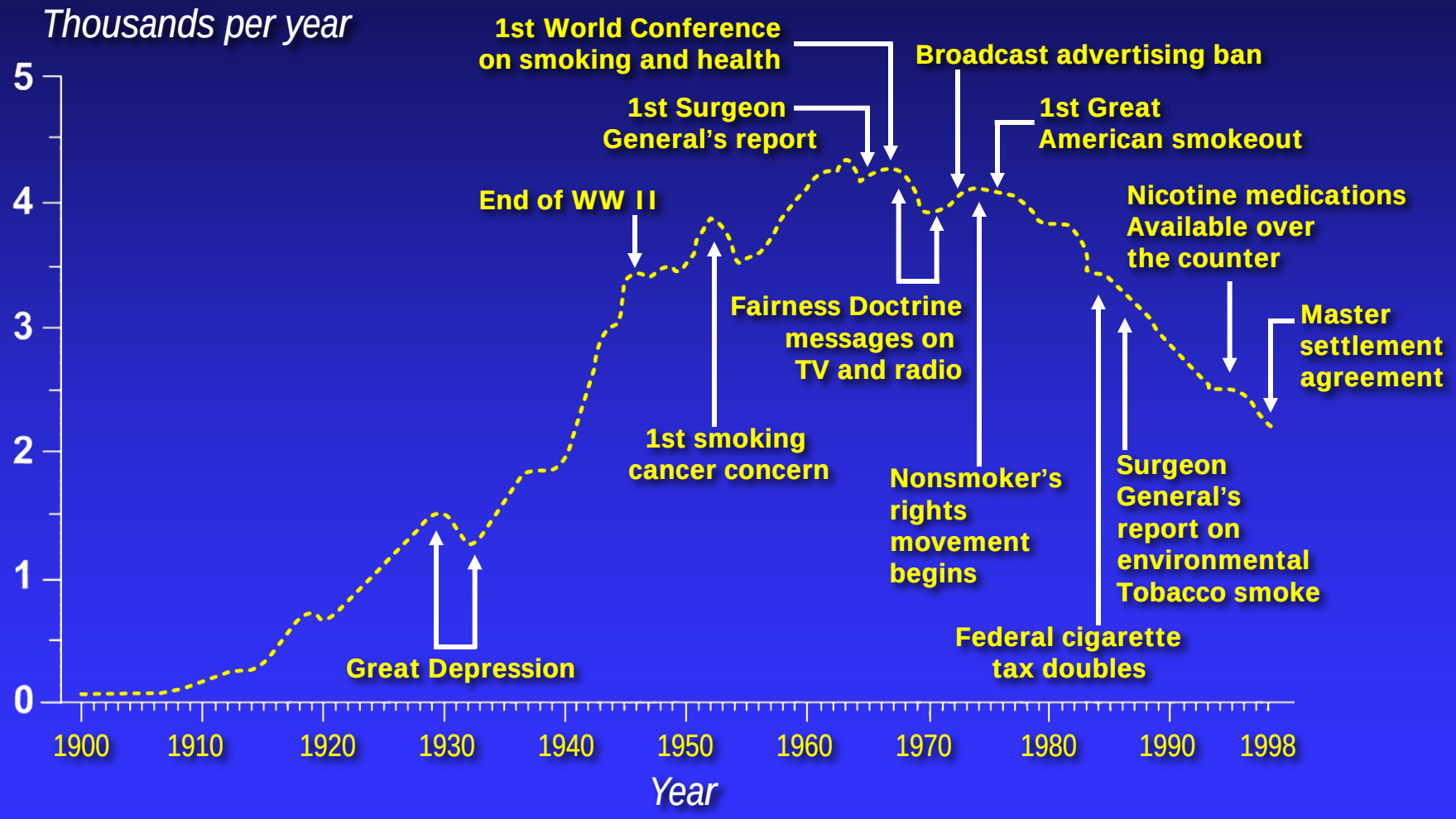


Annual decreases and increases in obesity are statistically significant at $p<0.05$.

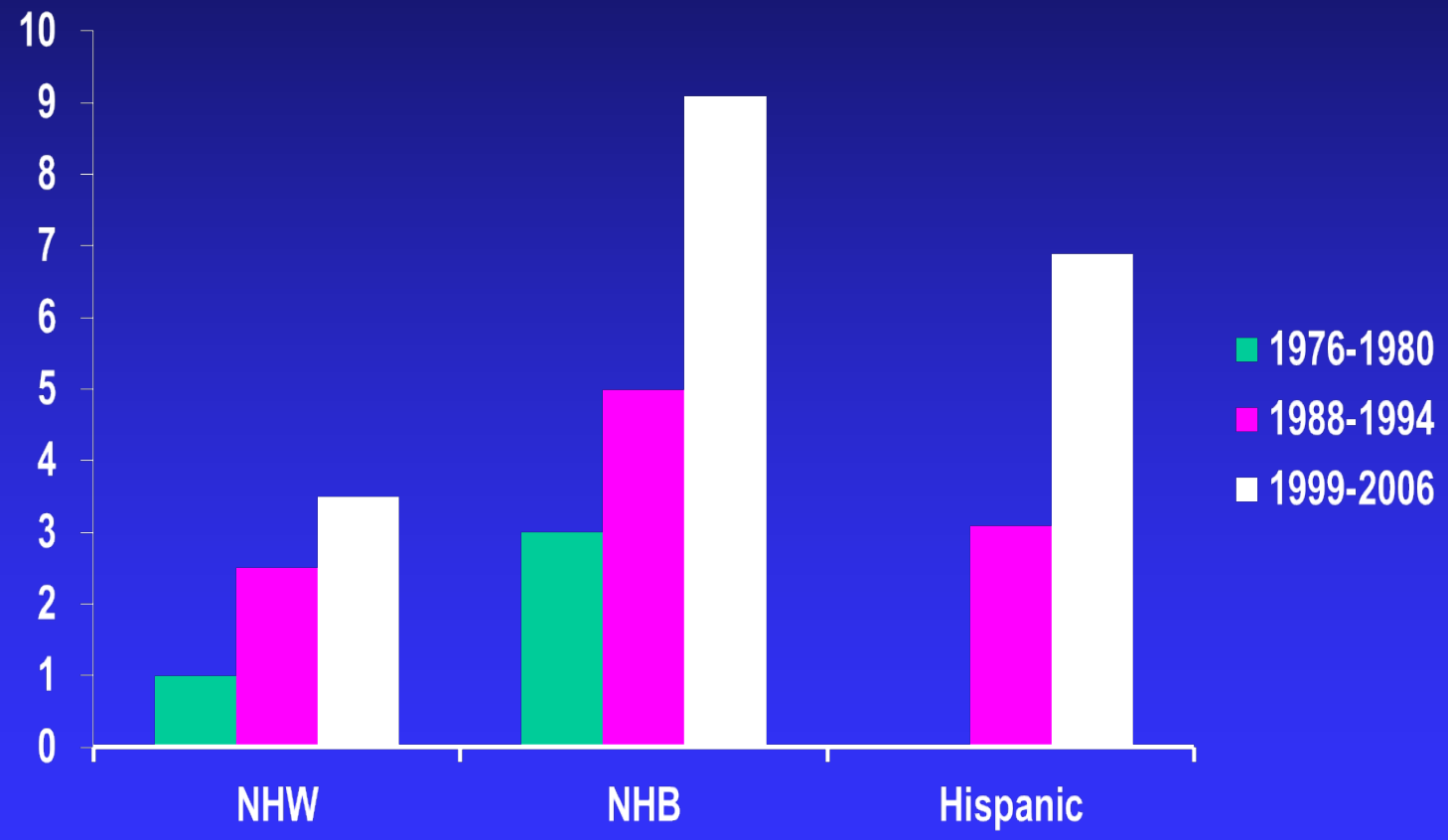
States and Communities Reporting Decreases in the Prevalence of Childhood Obesity



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



Changes in the Prevalence of Severe Obesity (120% of the 95th %tile) in Girls 1976-2006



Wang et al. Int J Pediatr Obesity 2010; on line

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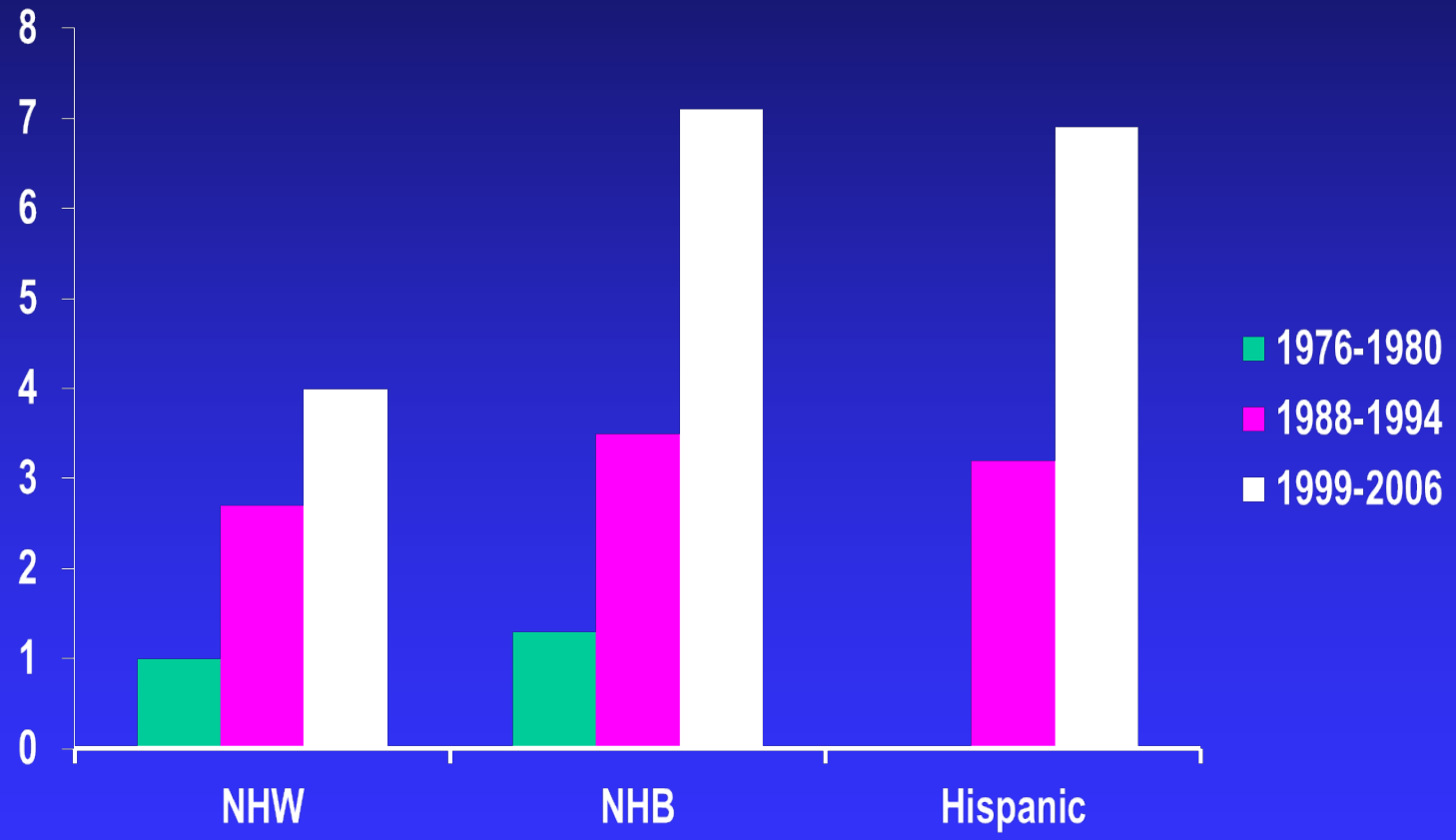

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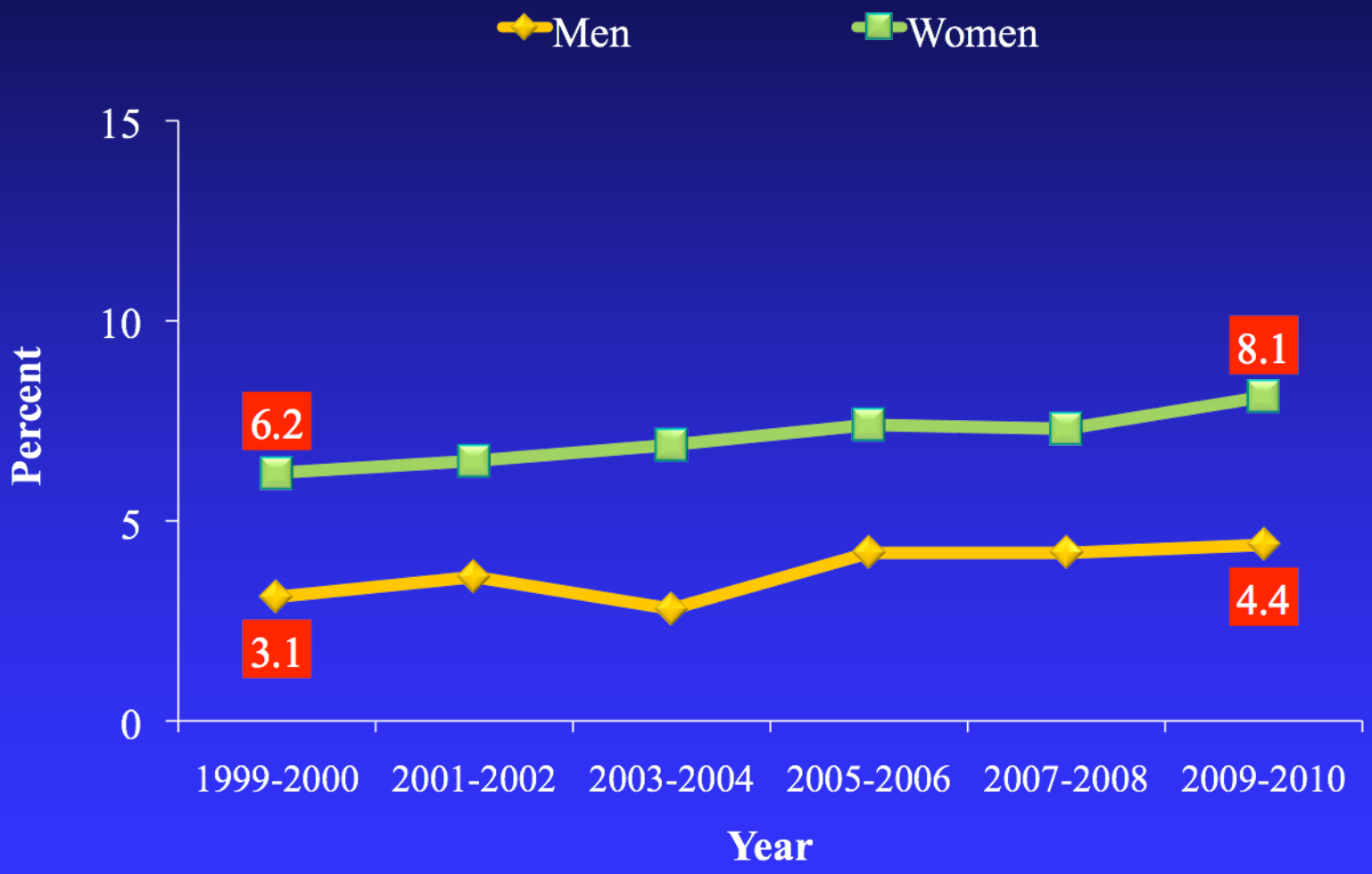
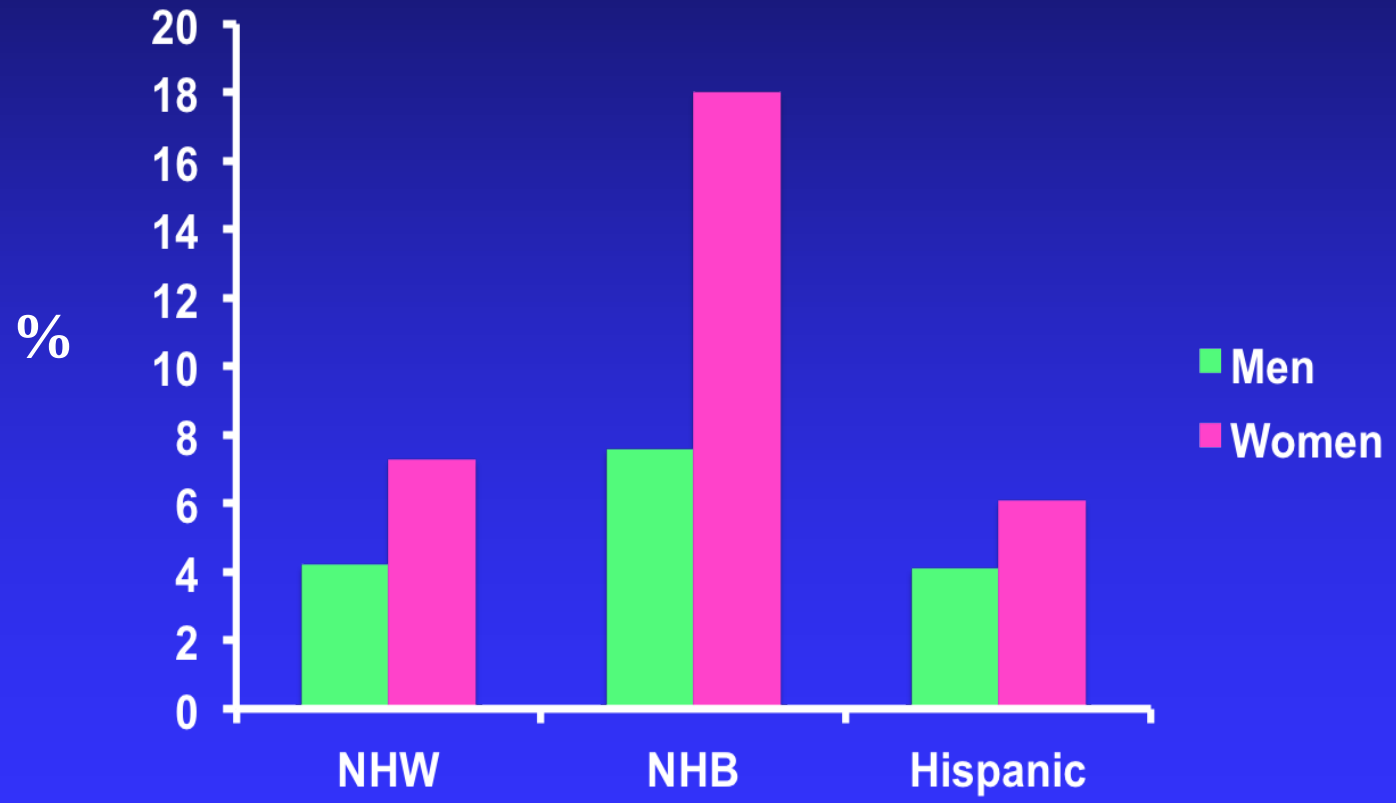
Severe Obesity Trends in Adults



Fryar CD et al. 2012, NCHS data brief

Prevalence of Severe Obesity (BMI ≥ 40) among Adults. NHANES 2009-2010



Flegal KM et al. JAMA 2012;307:491

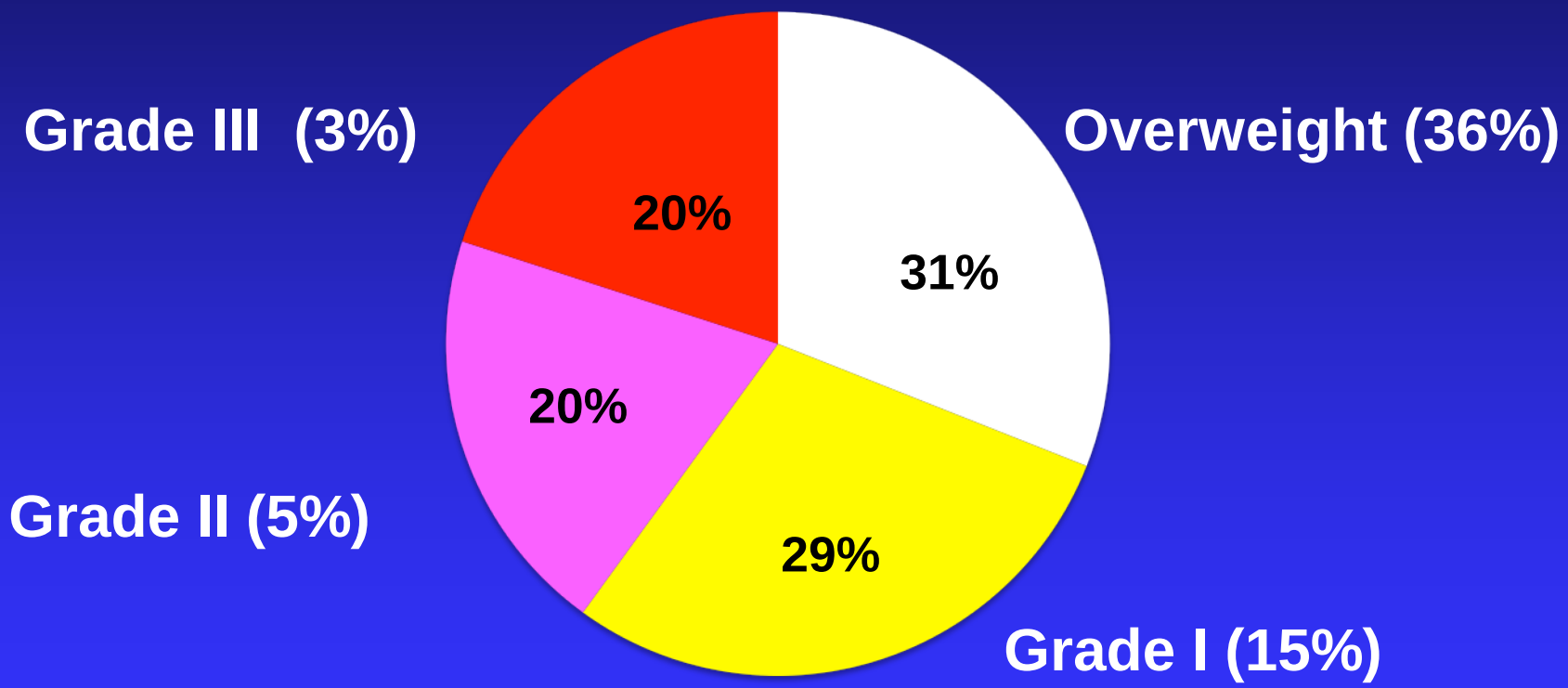
Costs of Obesity – 1998 vs 2008

	1998	2008
Total costs	$78.5 B/y	$147 B/y
Medical costs	6.5%	9.1%

Medicare and Medicaid accounted for 42% of these costs

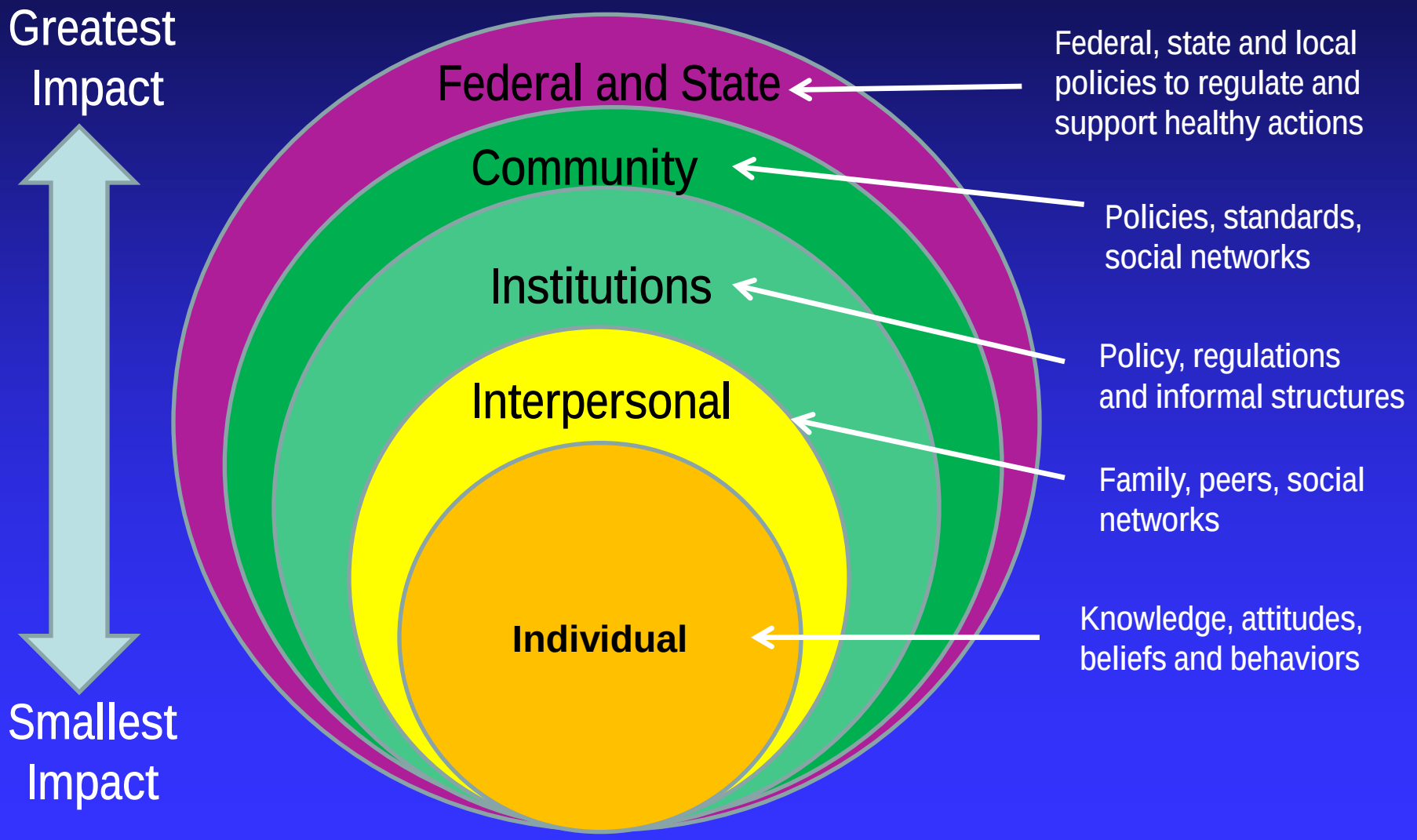
Finkelstein et al. Health Affairs 2009; 28:w822

Percentage of Costs Attributable to Overweight and Obesity (2000 MEPS Sample)



Arterburn DE et al. Int J Obesity 2005;29:334

Social Ecological Model



Energy Deficits Necessary to Achieve the HP 2010 Goal (Prevalence = 5%) by 2020

Age	HP2010
2-5 yo	33 Kcal/d
6-11 yo	149 Kcal/d
12-19 yo	177 Kcal/d

Wang YC et al. Am J Prev Med 2012; 42:437

Principal Targets for Obesity Prevention and Control

- Pregnancy: pre-pregnant weight, weight gain, diabetes, smoking
- Sleep
- Reduce energy intake
  - Decrease high energy dense foods
  - Increase low energy dense foods
  - Reduce sugar drinks
  - Decrease television time
- Breastfeeding
- Increase daily physical activity

Best Strategies for Reducing Calories*

Foods

- **Apply CA stds to competitive foods – 78 Kcal/d**
- **Eliminate SDs or switch from whole to low fat milk in Early Care and Education Centers – 80 Kcal/d**
- **Decrease fast food consumption – 125 – 310 Kcal/d**

***Wang YC et al. Am J Prev Med 2013;45(2):e3**

Best Strategies for Increasing Physical Activity (Minutes MVPA/d)*

Physical activity

- **Mandatory PE – 23’ MVPA**
- **Classroom activity breaks – 19’ MVPA**
- **Walk/bike to school 16’ MVPA**

***Bassett DR et al. Am J Prev Med 2013;44:108**

Cost Benefit of Four Policy Interventions – Childhood Obesity Interventions- Cost Effectiveness (CHOICES)

Intervention	Reach ($x10^6$)	Total Cost Million US$	BMI Unit Decrease	Cost/unit BMI Decrease (2 - 19yo)
SD Excise Tax	287	$147	0.19	$6.44
Active PE in School (5-11 yo)	16.6	$54.7	0.02	$191.00
TV Advertising Change (2-19 yo)	74	$0.8	0.13	$0.08
Early Care and Education Policy	3.2	$6.4	0.42	$6.07

Settings for the Prevention and Treatment of Obesity

- Early care & education
- Schools
- Work Sites
- Health care
- Communities and states
- Federal government
- Business and industry