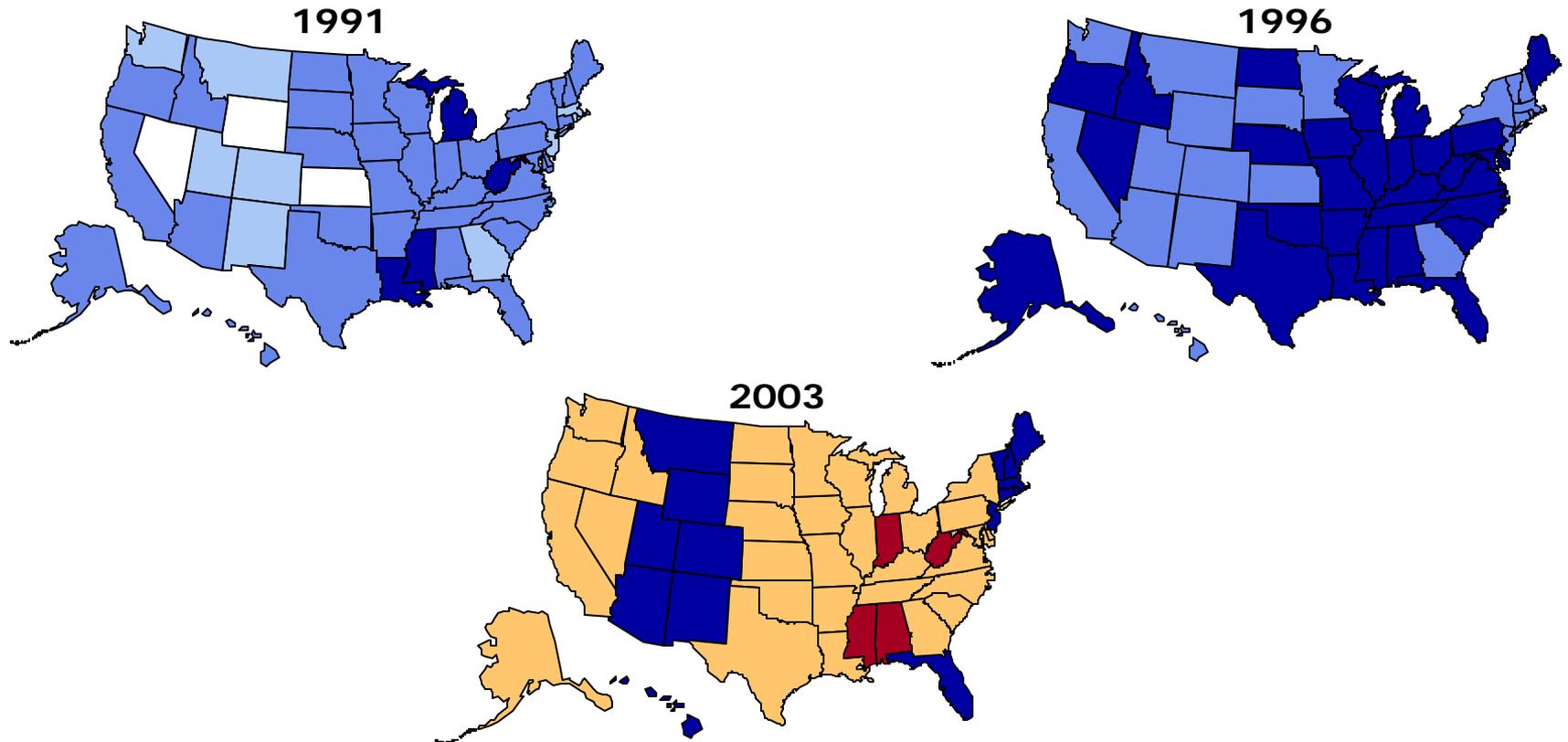

Overweight/Obesity & Physical Inactivity

**Healthy Kansans 2010
Steering Committee Meeting
April 22, 2005**

Obesity Trends* Among U.S. Adults

BRFSS, 1991, 1996, 2003

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



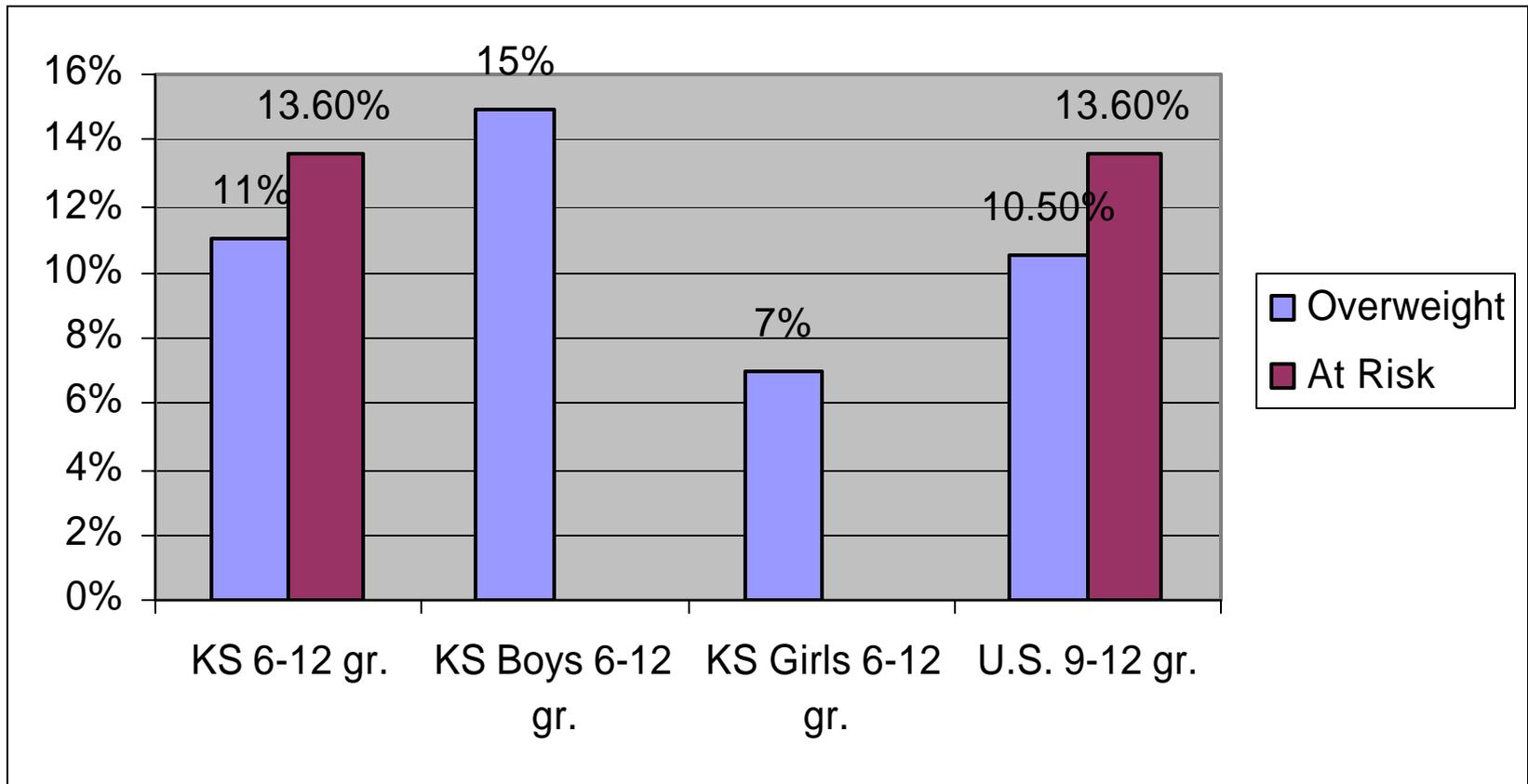
□ No Data □ <10% □ 10%–14% □ 15%–19% □ 20%–24% □ =25%

Kansas Childhood Overweight and Obesity Statistics

- **In 1999-2000, 15% of 6-19 year old children & teens were overweight.**
- **Over 10% of pre-school-aged children (ages 2 - 5) are overweight (up from 7% in 1994).**
- **Another 15% of children and teens are considered at risk for becoming overweight**
- **Childhood obesity has increased 36% in the past 20 years**

Source: Kansas Department of Health & Environment

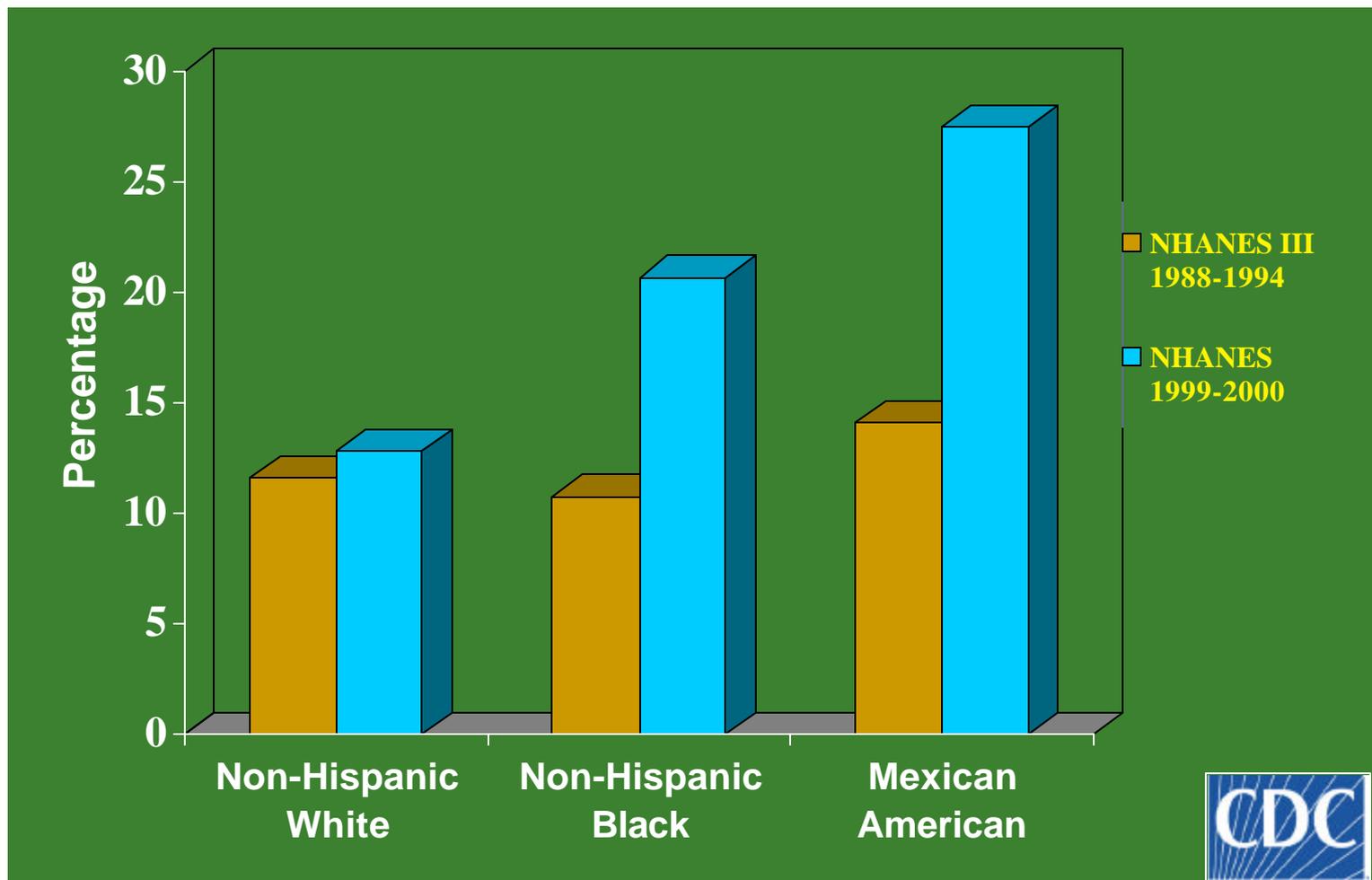
Youth Obesity in Kansas



Source: 2002-2003 Kansas Youth Tobacco Survey

Kansas Department of Health & Environment

Overweight Prevalence by Race/Ethnicity for Adolescent Boys Aged 12 - 19 Years



Impact of Childhood Overweight (BMI \geq 95th percentile) on Adult Obesity (BMI \geq 30)

- **25% obese adults were overweight children**
- **Onset of overweight \leq 8y predicts more severe obesity in adulthood (BMI = 41.7 vs 34.0)**
- **CVD risk factors reflect adult BMI**

Measured BMI Categories of NHANES Respondents 1960-2000

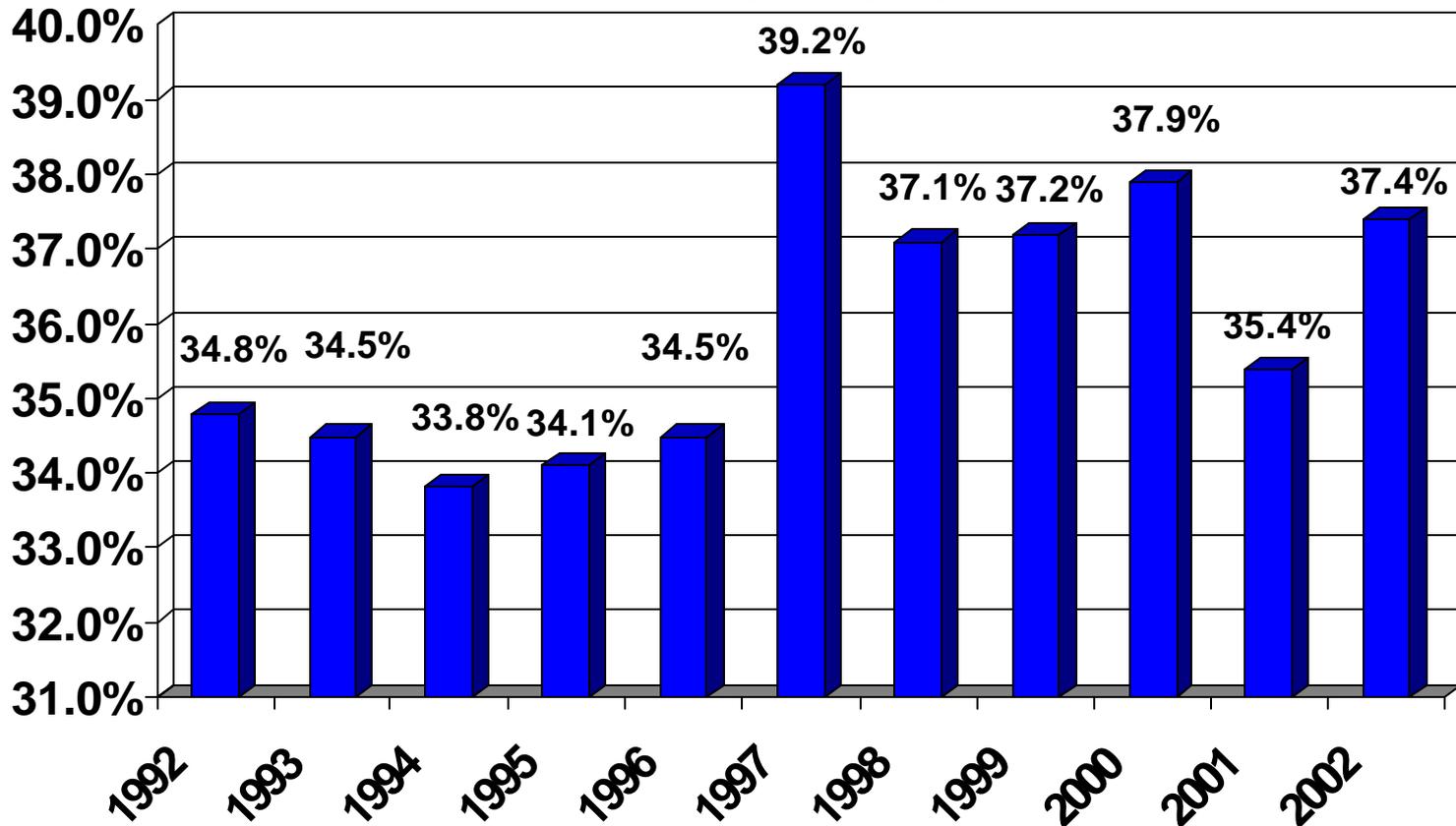
	NHES 1960-1962	NHANES I 1971-1975	NHANES II 1976-1980	NHANES III 1988-1994	NHANES III 1999-2000
<25	52.1%	53.4%	54.0%	45.4%	36.3%
25-29	33.3%	32.3%	31.5%	32.1%	33.3%
>=30	14.6%	14.3%	14.5%	22.5%	30.4%

Abbreviations: NHANES, National Health and Nutrition Examination Survey; NHES, National Health Examination Survey

*Estimates are weighted to be representative of the US noninstitutionalized population aged 20 to 74 years.

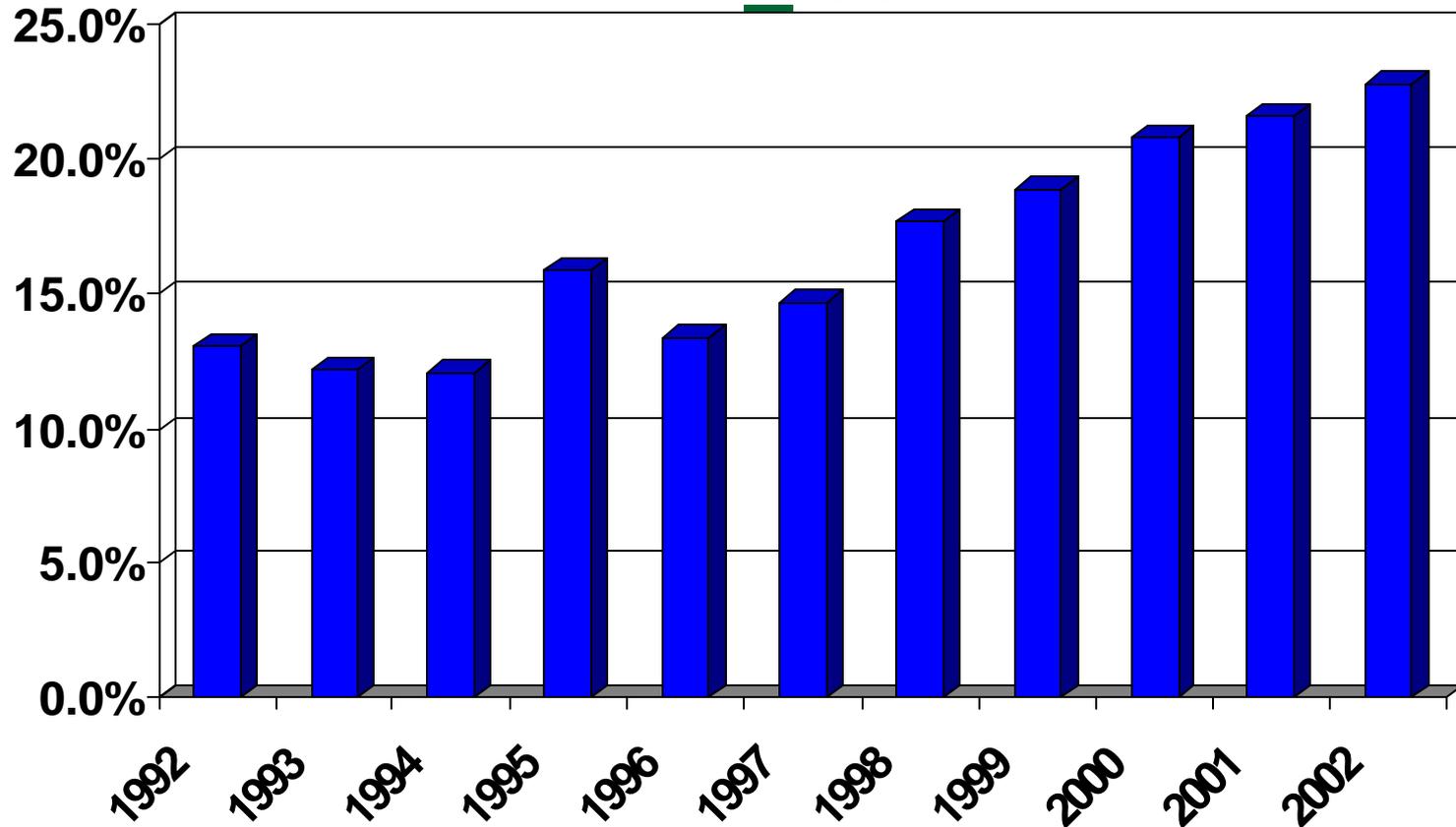
**Body mass index (BMI) was calculated as weight in kilograms divided by the square of height in meters.

BRFSS Trends Data: Kansas Adult Percent Overweight By BMI BMI 25-29.9



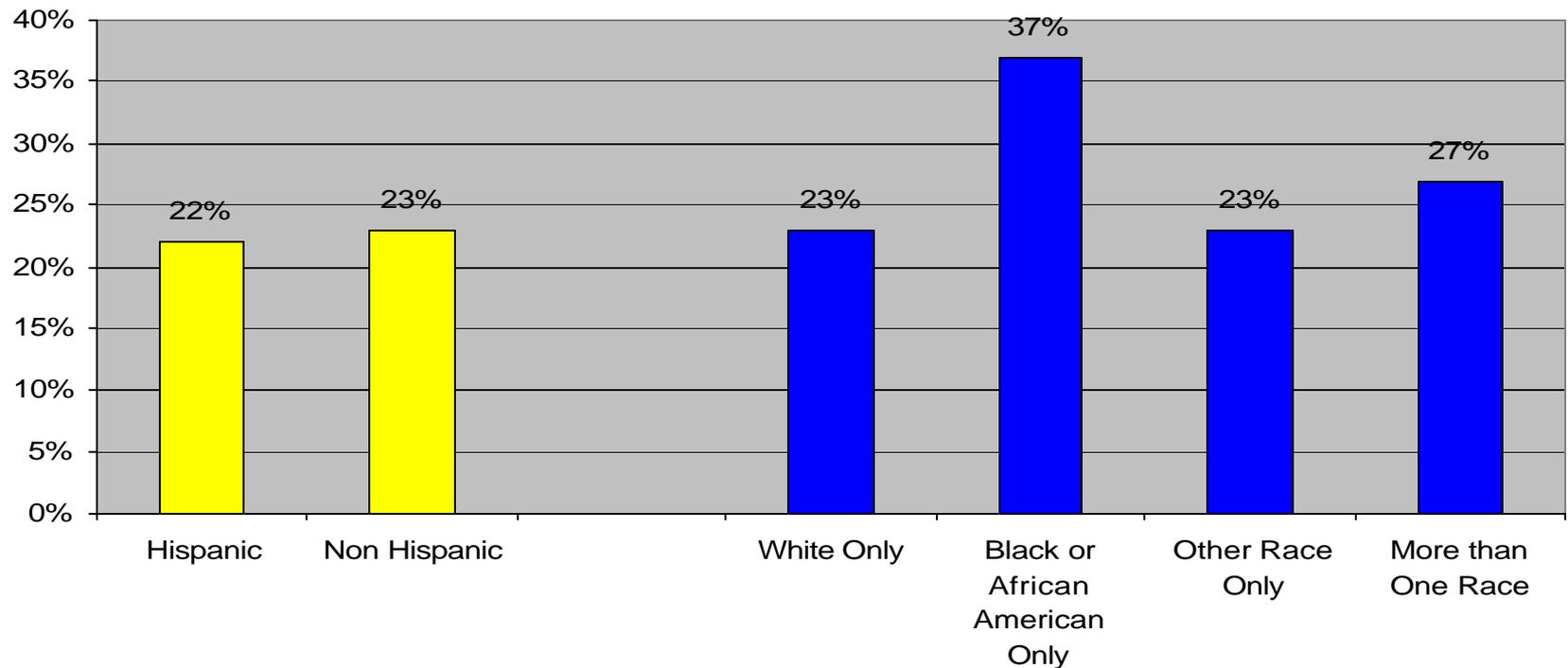
Source: Kansas Department of Health & Environment
Behavioral Risk Factor Surveillance System

BRFSS Trends Data: Kansas Adult Percent Obese: By BMI BMI \geq 30



Percentage of Kansas Adults Who Are Obese by Ethnicity and Race

Percentage of Adults Who Are Obese by Ethnicity and Race,
2004 BRFSS



Healthy People 2010 Objectives

- 19-3c: Reduce the proportion of children and adolescents who are overweight or obese.
- 19-2: Reduce the proportion of adults who are obese.



Why Objectives to Reduce Overweight & Obesity Make Sense

Age- and Sex-Adjusted Prevalence of US Adults Aged 20 to 74 Years Reporting Cholesterol and Blood Pressure Medication Use						
Medication Use by BMI Group	NHES 1960-1962	NHANES I 1971-1975	NHANES II 1976-1980	NHANES III 1988-1994	NHANES III 1999-2000	Total Change (95% Confidence Interval)
Cholesterol:						
<25				2.2 5	4.0%	1.8% (0.4-3.2)
25-29.9				3.3%	9.1%	5.8% (3.6-8.0)
>=30				3.5%	9.2%	5.7% (3.9-7.5)
Overall				3.0%	7.4%	4.4% (3.2-5.6)
Blood Pressure						
<25	4.7%	5.6%	6.8%	5.9%	8.2%	3.5% (1.1-5.9)
25-29.9	6.0%	8.6%	11.8%	11.8%	16.7%	10.7% (7.9-13.5)
>=30	11.4%	14.2%	18.9%	19.9%	27.6%	16.2% (12.1-20.2)
Overall	6.7%	8.7%	11.3%	11.2%	15.5%	8.8% (6.6-11.0)
Abbreviations: NHANES, National Health and Nutrition Examination Survey; NHES, National Health Examination Survey. *All prevalence estimates are age- and sex-adjusted percentages. Denominators vary for cholesterol medication use (n=17918) and blood pressure medication use (n=49794). ** Body mass index (BMI) was calculated as weight in kilograms divided by the square of height in meters. Source: JAMA, April 20, 2005- Volume 293, no. 15						

Why Objectives to Reduce Overweight & Obesity Make Sense

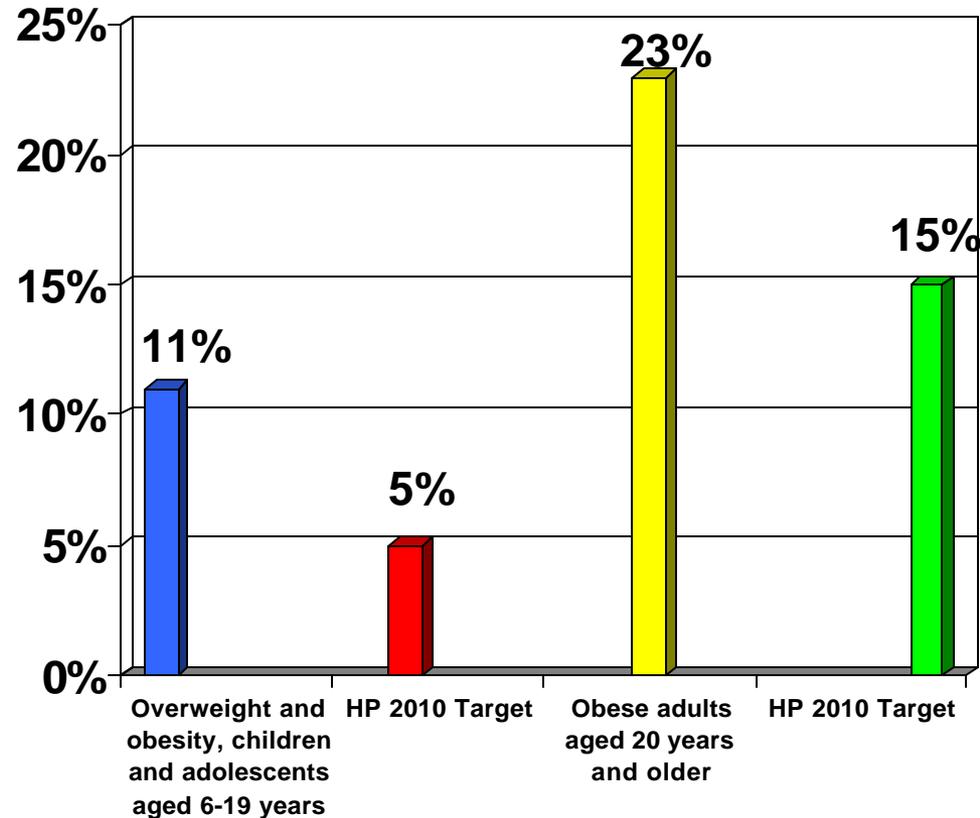
Age- and Sex-Adjusted Trends in Cardiovascular Risk Factors in the US Population Aged 20 to 74 years					
	NHES	NHANES I	NHANES II	NHANES III	NHANES III
Risk Factors by BMI Group	1960-1962	1971-1975	1976-1980	1988-1994	1999-2000
High total Cholesterol Level (≥ 240 mg/dl)					
< 25	27.1	22.3	22.1	13.8	15.2
25.0-29.9	39.2	33.1	31.2	23.3	18.7
≥ 30	38.9	33.1	31.5	23	17.9
Overall	33.6	28.2	27.2	19	17
High Blood Pressure (systolic ≥ 140 mm Hg or Diastolic ≥ 90 mm HG)					
<25	24.8	27.7	20.9	10.5	10.5
25.0-29.9	31.8	32	27.6	15	14.9
≥ 30	41.6	46.5	35.6	22.3	23.7
Overall	30.8	33.1	26.3	14.8	14.9
Diagnosed Diabetes					
<25	1.5	2.6	2.4	2.1	2.8
25.0-29.9	1.6	2.8	2.8	4.6	4.2
≥ 30	2.9	5.9	5.9	9	10.1
Overall	1.8	3.4	3.4	4.6	5

Abbreviations: NHANES, National Health and Nutrition Examination Survey; NHES, National Health Examination Survey.

** Body mass index (BMI) was calculated as weight in kilograms divided by the square of height in meters.

Source: JAMA, April 20, 2005- Volume 293, no. 15

2003 Obesity for All Ages Compared to HP2010 Targets



Source: Centers for Disease Control and Prevention, National Center for Health Statistics.

National Health and Nutrition Examination Survey. 1988-1994.

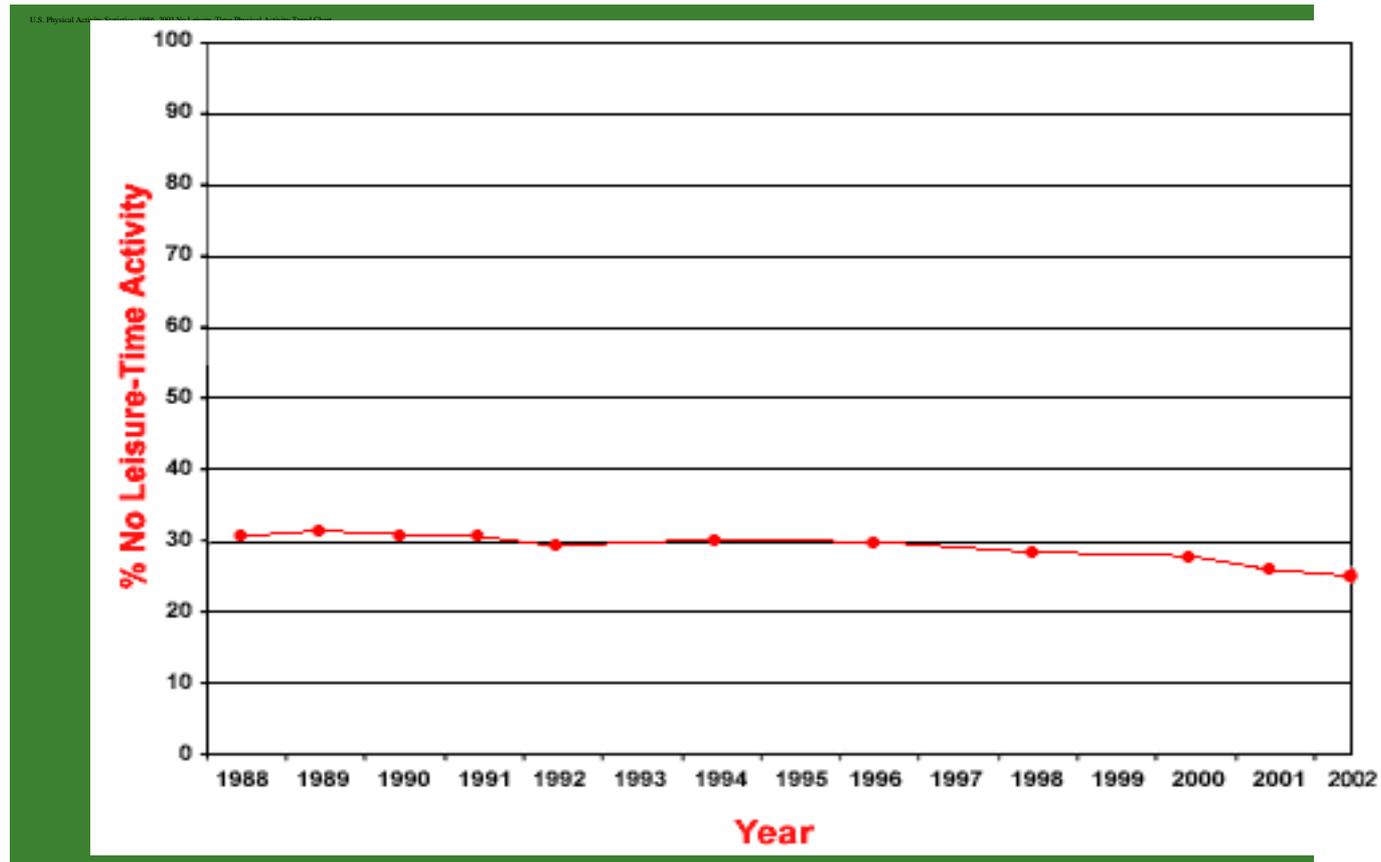
Why is Obesity/Overweight a Growing Problem?

- **Built Environment**
- **Policy**
- **Bias & Discrimination**
- **Individual Attitudes, Knowledge & Skills**

Who is at Highest Risk?

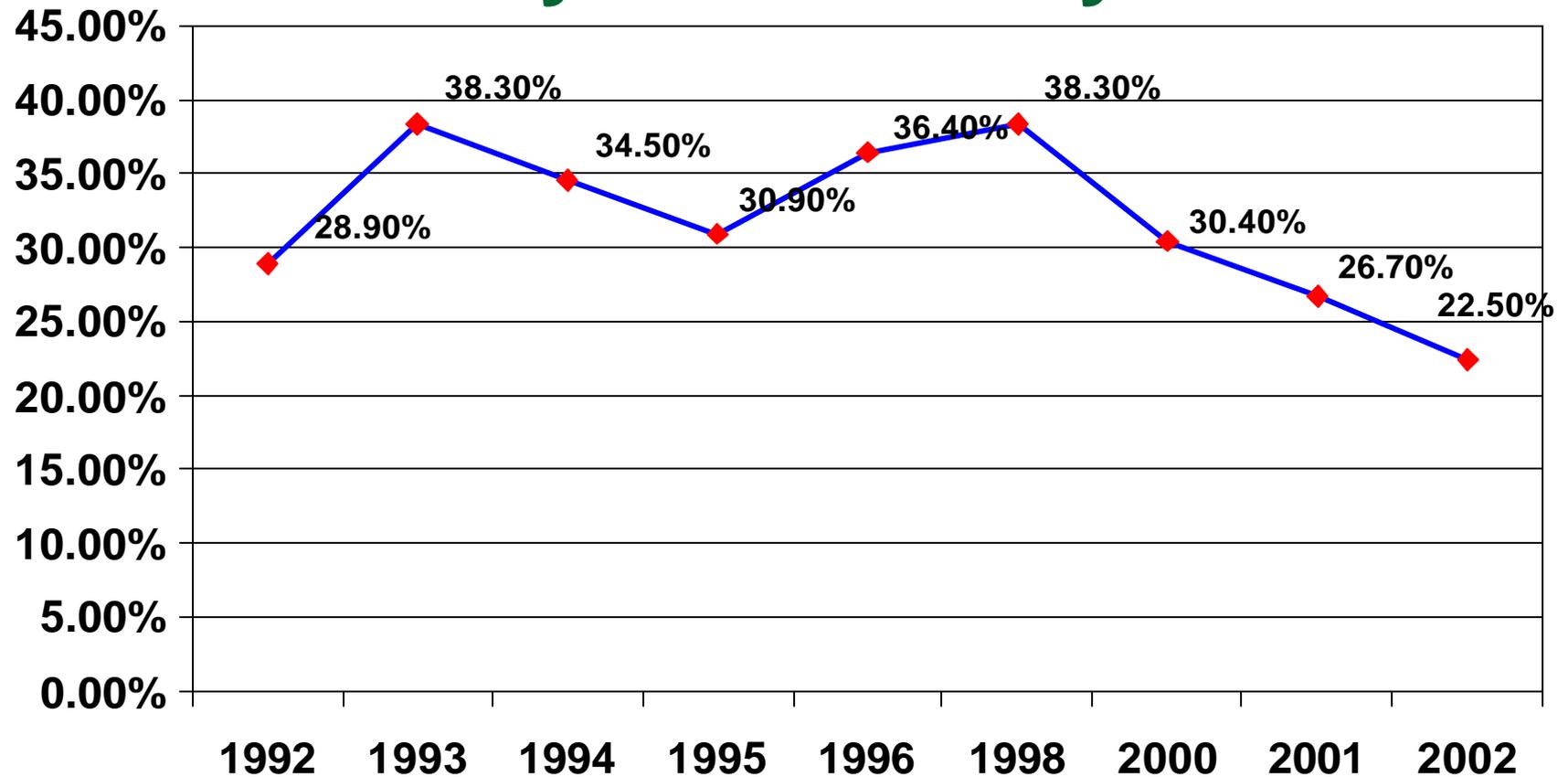
- **Children & Adolescents**
- **Low Income Women**
- **African American Women**
- **Mexican and African American Men**

U.S. Physical Activity Statistics: 1986–2002 No Leisure-Time Physical Activity Trend Chart



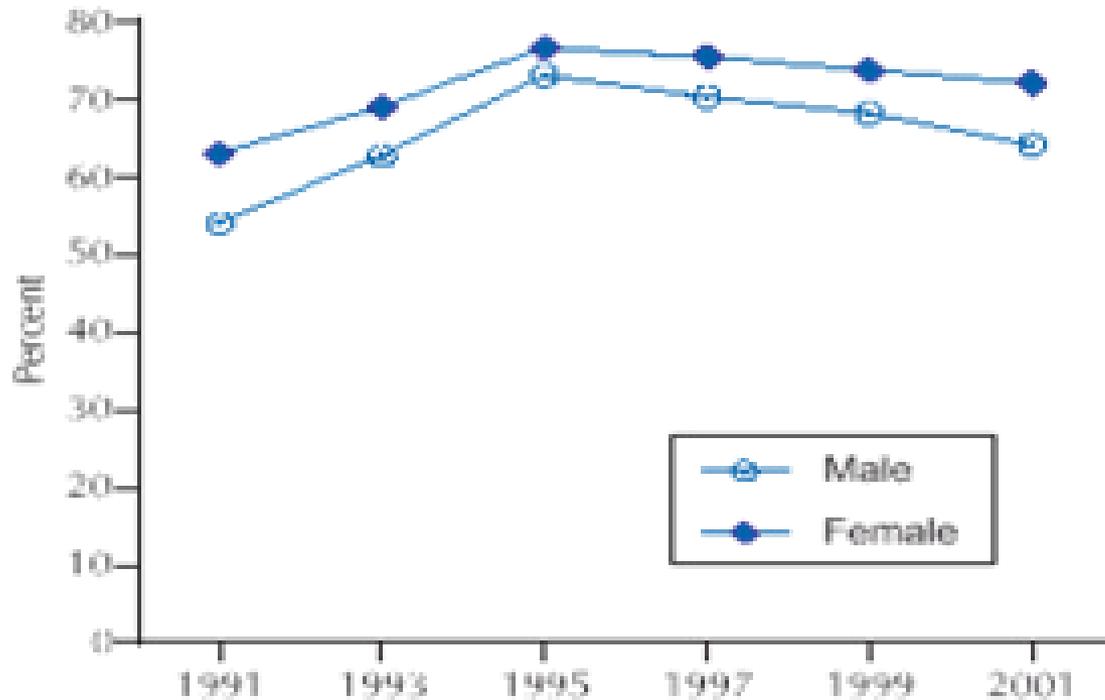
Content source: [Division of Nutrition and Physical Activity, National Center for Chronic Disease Prevention and Health Promotion](#)

BRFSS Trends Data: Kansas Adults With No Leisure Time Physical Activity



Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. Behavioral Risk Factor Surveillance System Trends Data: Kansas

Percentage of U.S. High School Students Who Did Not Attend Physical Education Classes Daily



YRBS National Surveys, 1991–2001

Centers for Disease Control & Prevention

Healthy People 2010 Goals

- **22-7: Increase the proportion of adolescents who engage in vigorous physical activity that promotes cardiorespiratory fitness 3 or more days per week for 20 or more minutes per occasion.**
- **22-2: Increase the proportion of adults who engage regularly, preferably daily, in moderate physical activity for at least 30 minutes per day.**

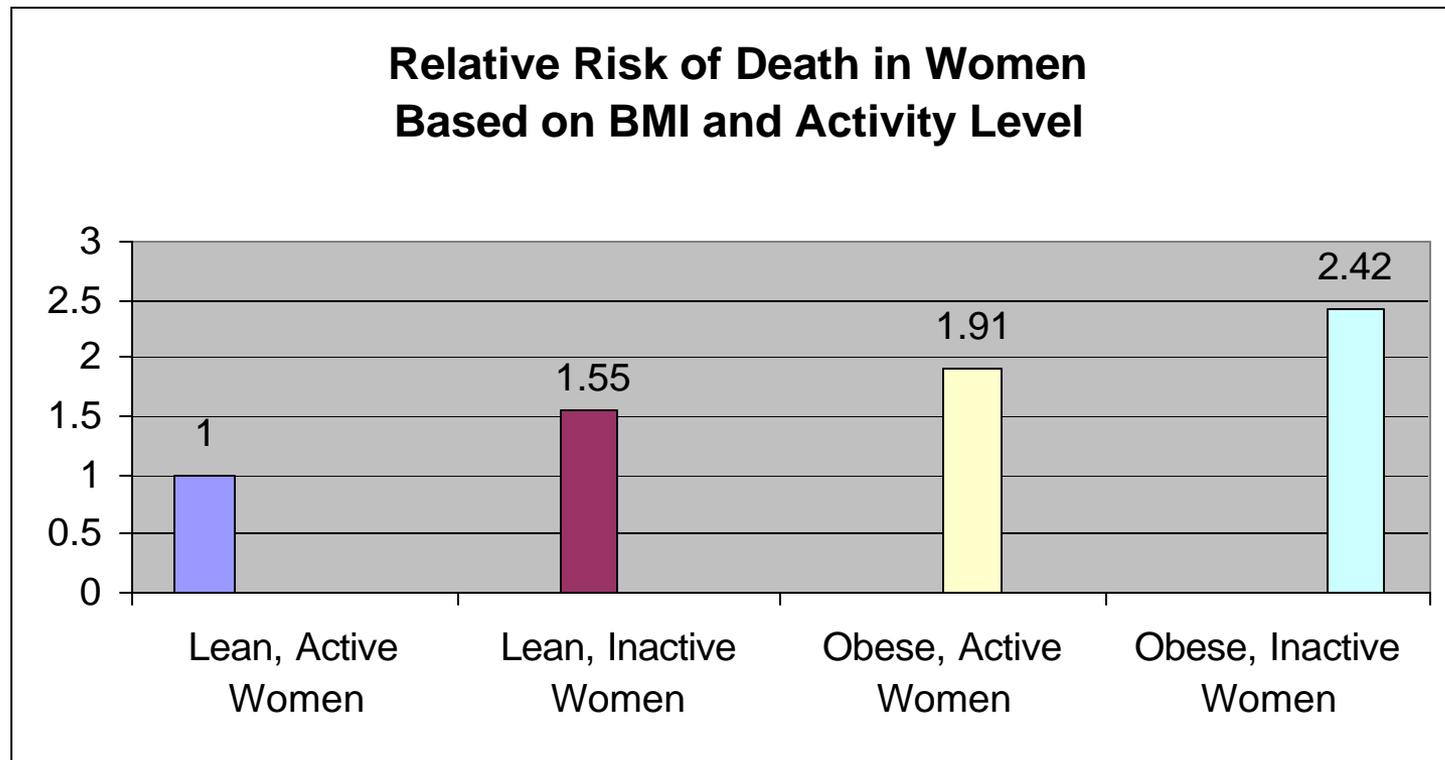
Why is Increase Physical Activity for Children & Youth?

- **Study of school-age youth in 34 countries:**
 - **Significant ($P < 0.05$) negative relationship between physical activity patterns and BMI classification in 29 of 33 countries (88%)**
 - **Significant ($P < 0.05$) positive relationship between television viewing time and BMI classification in 22 of 34 countries (65%)**

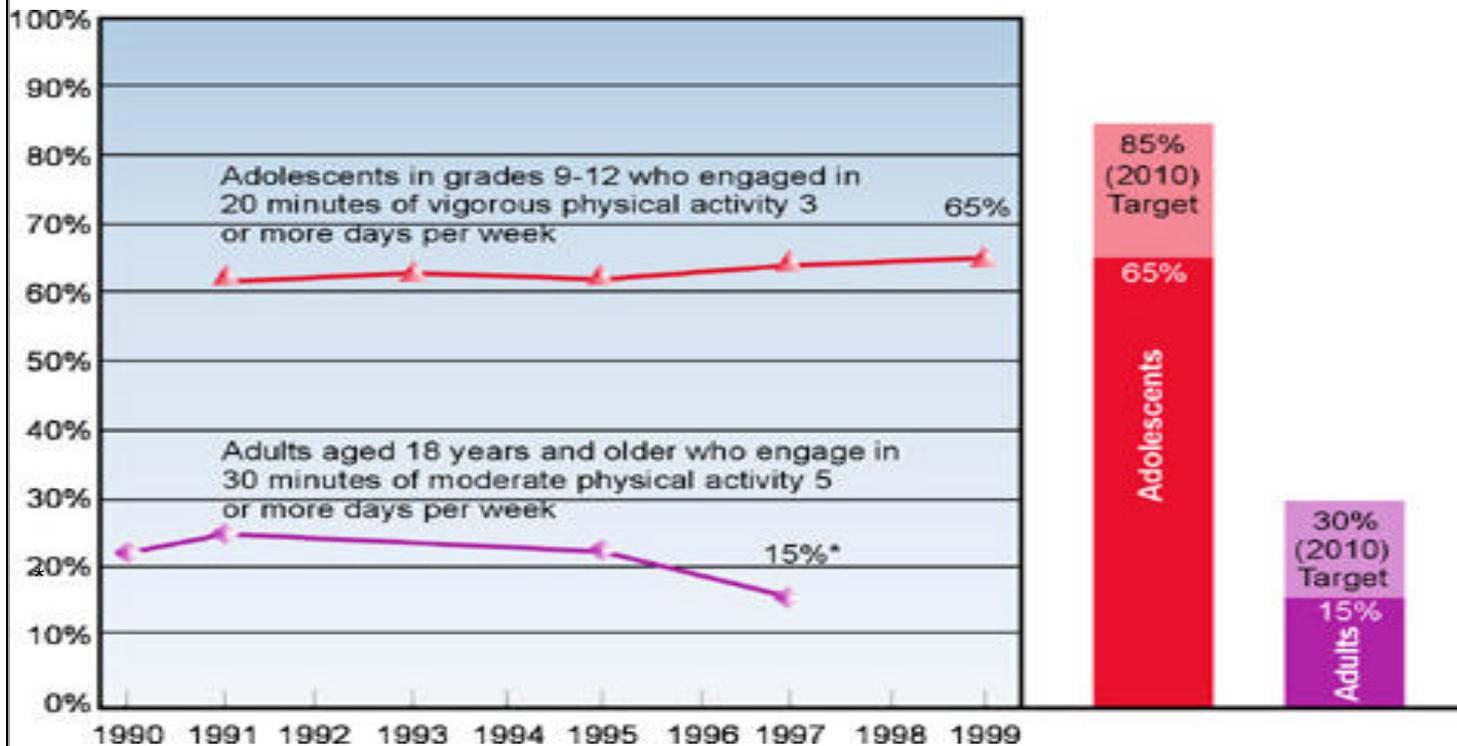
Why Increase Physical Activity for Children & Youth?

- **Study of school-age youth in 34 countries:**
 - **Likelihood of being overweight was significantly lower in dose-response manner with higher physical activity participation in 29 or 33 countries (88%)**

Why Increase Physical Activity for Adults?



Participation in regular physical activity, United States, 1990–99



Why is Physical inactivity a Growing Problem?

- **Built Environment**
- **Policies**
- **Time Constraints**



Who is at Greatest Risk?

- **Women**
- **Low income/low education**
- **African Americans & Hispanics**
- **People with disabilities**
- **Elderly**

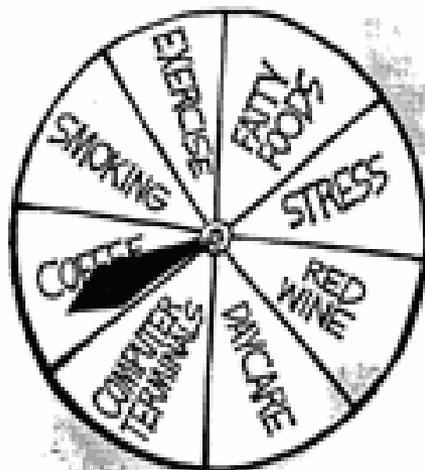
Recommendations for Addressing Physical Inactivity in Kansas Now?

- **The Community Guide to Preventive Services recommends community-wide campaigns using multiple media outlets to promote physical activity, conducted in collaboration with strategies of:**
 - **Social support networks,**
 - **Individual behavior change through knowledge & skill development, &**
 - **Environmental & policy change**

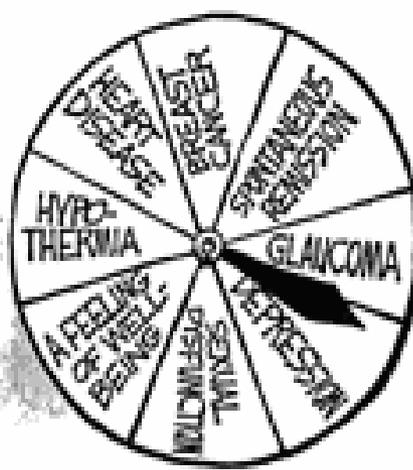
Today's Random Medical News

from the New England
Journal of
Panic-Inducing
Gobbledygook

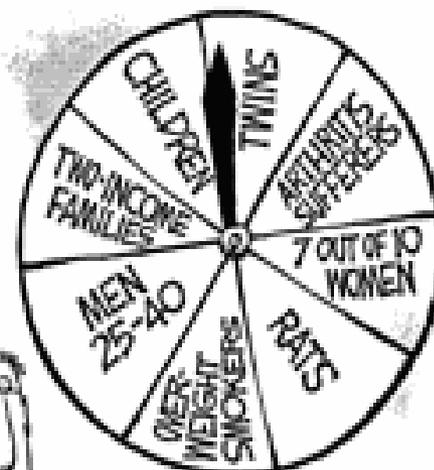
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TODAY...

NEWS

Recommendations for Addressing Physical Inactivity in Kansas Now?

- **The Community Guide to Preventive Services recommends enhanced Physical Education Classes in schools to increase physical activity among youth, including:**
 - **Mandatory daily Physical Education**
 - **Making PE classes longer in length**
 - **Increasing duration & intensity of students' activity during PE classes**

Recommendations for Addressing Physical Inactivity in Kansas Now?

- **The Community Guide to Preventive Services recommends creating or improving access to places for physical activity, including:**
 - **Creating walking trails**
 - **Building exercise facilities**
 - **Providing increased access to existing facilities**

Current Statewide Efforts to Address Obesity and Physical Inactivity in Kansas

- **Kansas LEAN**
- **Coordinated School Health Initiative**
- **Healthy Congregations in Action**
- **Health foundations' initiatives to evaluate obesity &/or nutrition/physical activity**

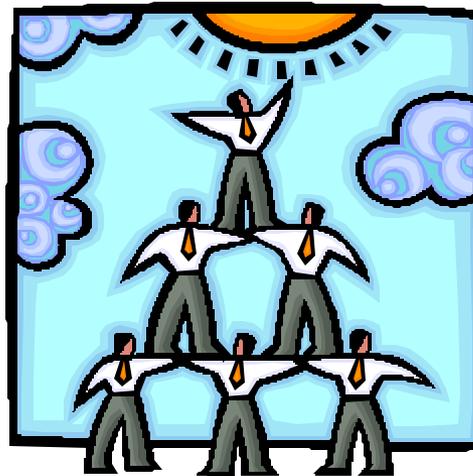


What Are Kansas' Assets for Improving These Health Issues?

- **Collaborative partnerships: Kansas LEAN, Kansas Nutrition Network, Wichita Wellness Coalition, etc.**
- **Academic Expertise & Resources: University of Kansas School of Medicine, University of Kansas, Kansas State University Community Health Institute, etc.**

What Are Kansas' Assets for Improving These Health Issues?

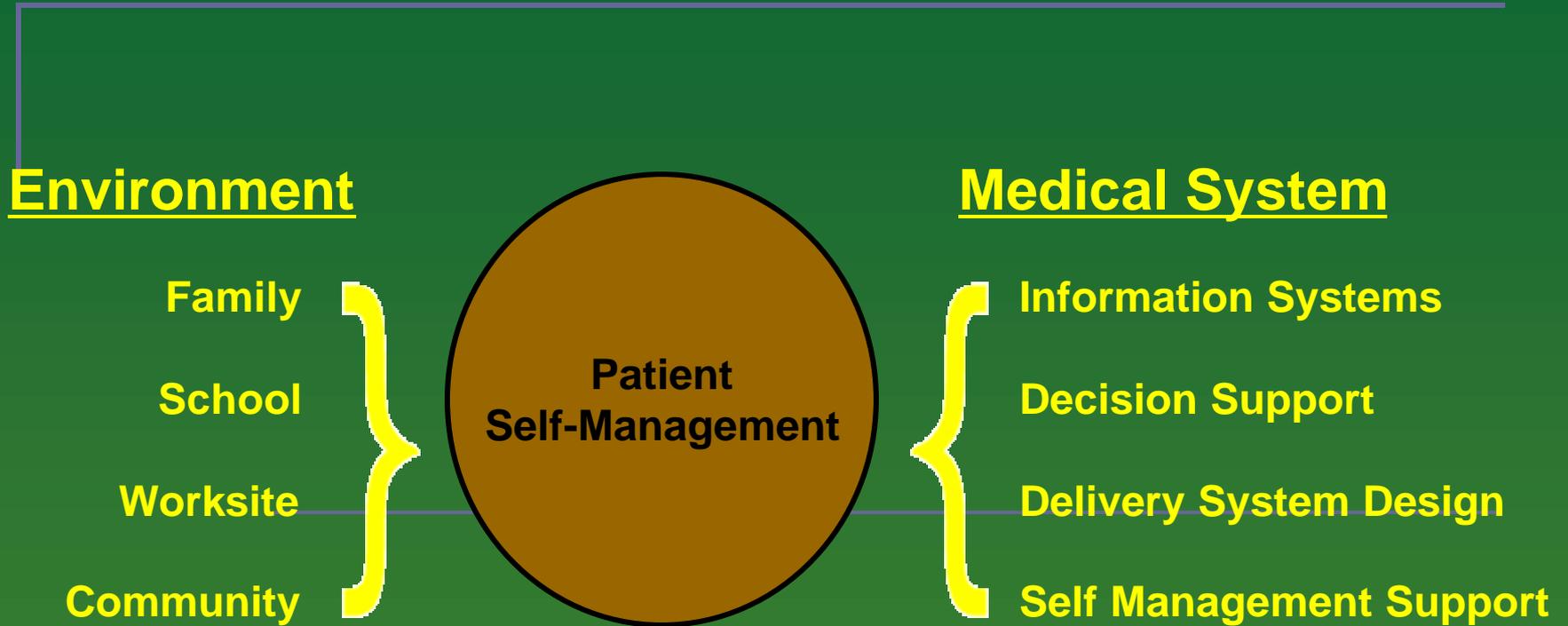
- **Health Foundations in Kansas**
- **State Health and Education Departments working in partnership**
- **Business coalitions focused on health**



What Are Barriers or Liabilities That Are Limiting Progress in Kansas?

- **Lack of YRBS or comparable youth data**
- **Lack of consistently reported data for ease of comparison**
- **Lack of health & physical education policy in schools**
- **Lack of skills among primary care practitioners in preventing &/or managing obesity**

Chronic Care Model



What Are Barriers or Liabilities That Are Limiting Progress in Kansas?

- **Lack of third party reimbursement for lifestyle management (prevention)**
- **Lack of third party reimbursement for weight loss management**
- **Health care system that limits time for prevention activities by practitioners**

Recommendations

- **Coordinated awareness & skills development campaigns to increase understanding of metabolic syndrome & to develop the skills individuals need to modify their environments and their behaviors, including:**
 - **Increasing physical activity**
 - **Decreasing television viewing time**



Recommendations

- **Policy changes to require ≥ 30 minutes daily Physical Education in schools at all levels**
- **Policy changes to limit competitive foods in schools, provide universal school meals & close campuses at mealtimes in all schools**



Recommendations

- **Incentive programs to encourage communities, work sites & schools to increase access to physical activity venues**
- **Incentive programs to encourage communities, work sites & schools to create and/or improve venues that encourage and support leisure time & transportation physical activity**

Recommendations

- **Medical school curriculum modifications to include skills in motivational interviewing & standardized patients with metabolic syndrome**



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