

Is Policy Failing Our Kids?

a focus on schools and health

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This Presentation will focus on:

- The Role of Schools in improving health outcomes of young people— *No Child Left Behind*
- The role of school based physical education in reducing obesity— *School Physical Education Policy*

Essential Components of *NCLB*

- Increased accountability for student performance
- States must establish sanctions and rewards for school level student performance
- Annual reading and math assessment for all 3rd through 8th graders and at least once in high school.

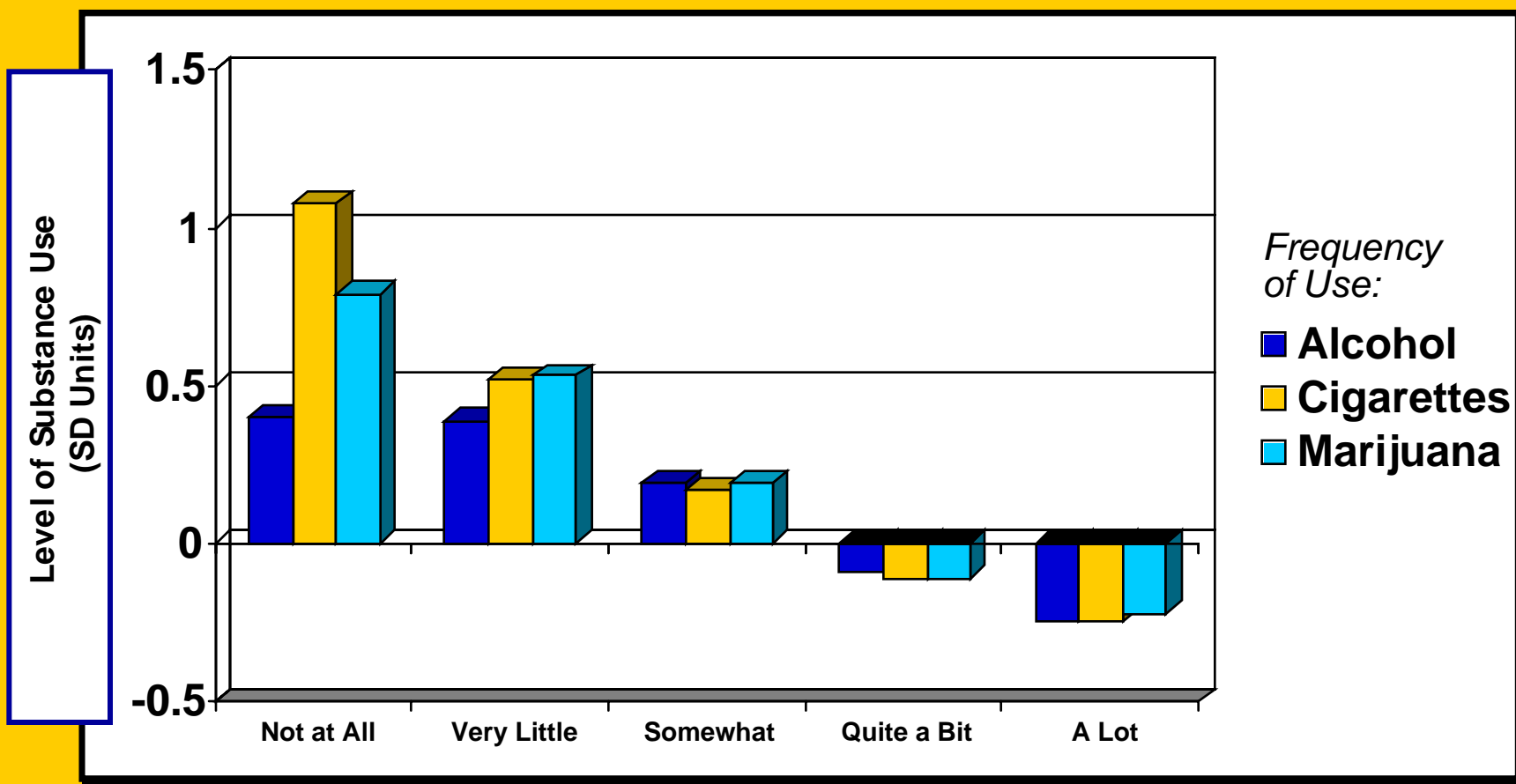
Essential Components of *NCLB*

- Academic advancement will be predicated on successful passing of national examinations
 - not opt out for special education
 - no language option but English
- Schools that fail to meet *Adequate Yearly Progress* will first get assistance then after 3 years students can transfer out.

Schools have many functions beyond acquisition of reading and math. The *school climate* impacts not only educational but health outcomes as well.

Substance Use

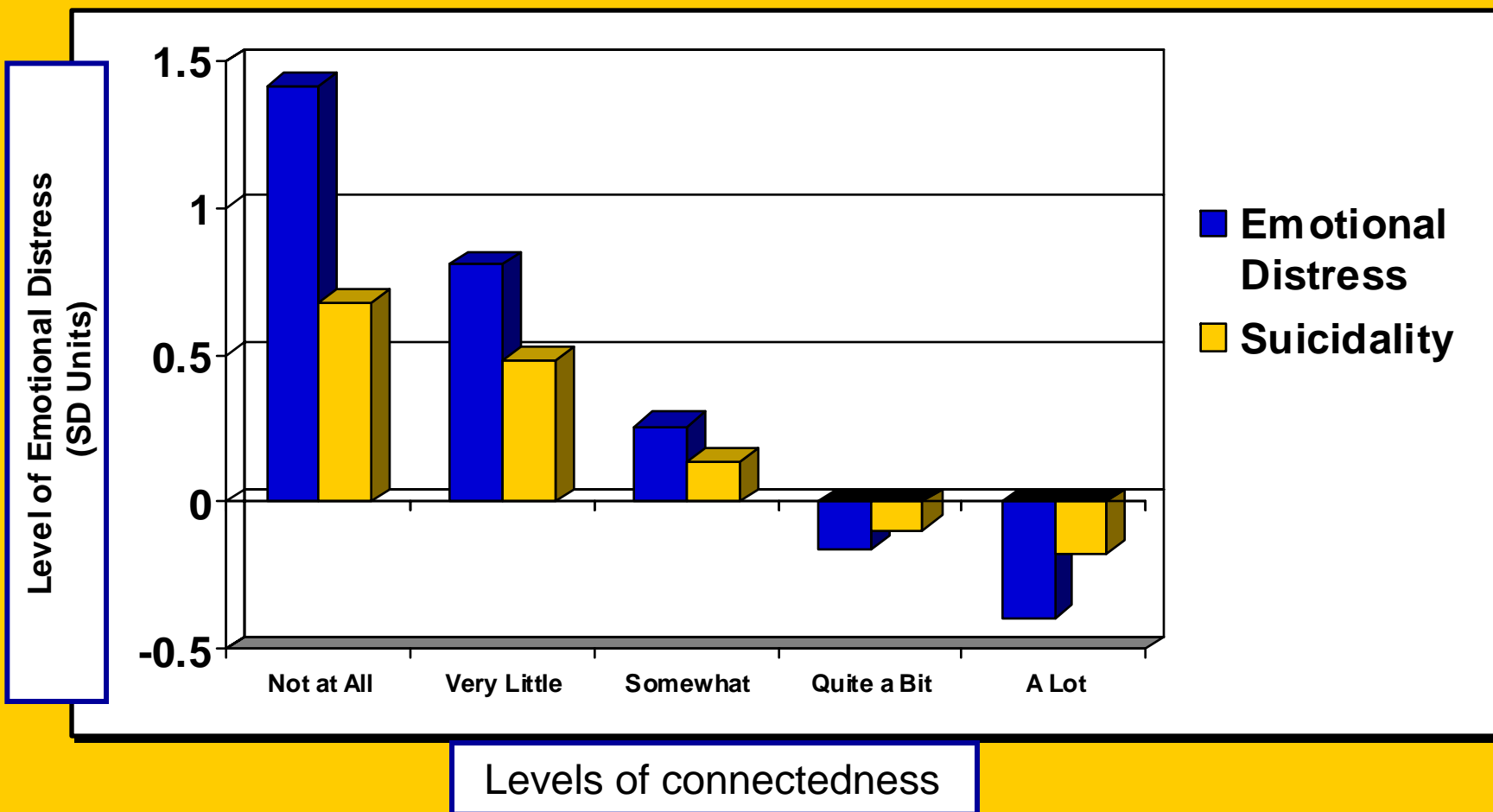
Students who feel connected to school are less likely to use substances



Levels of connectedness

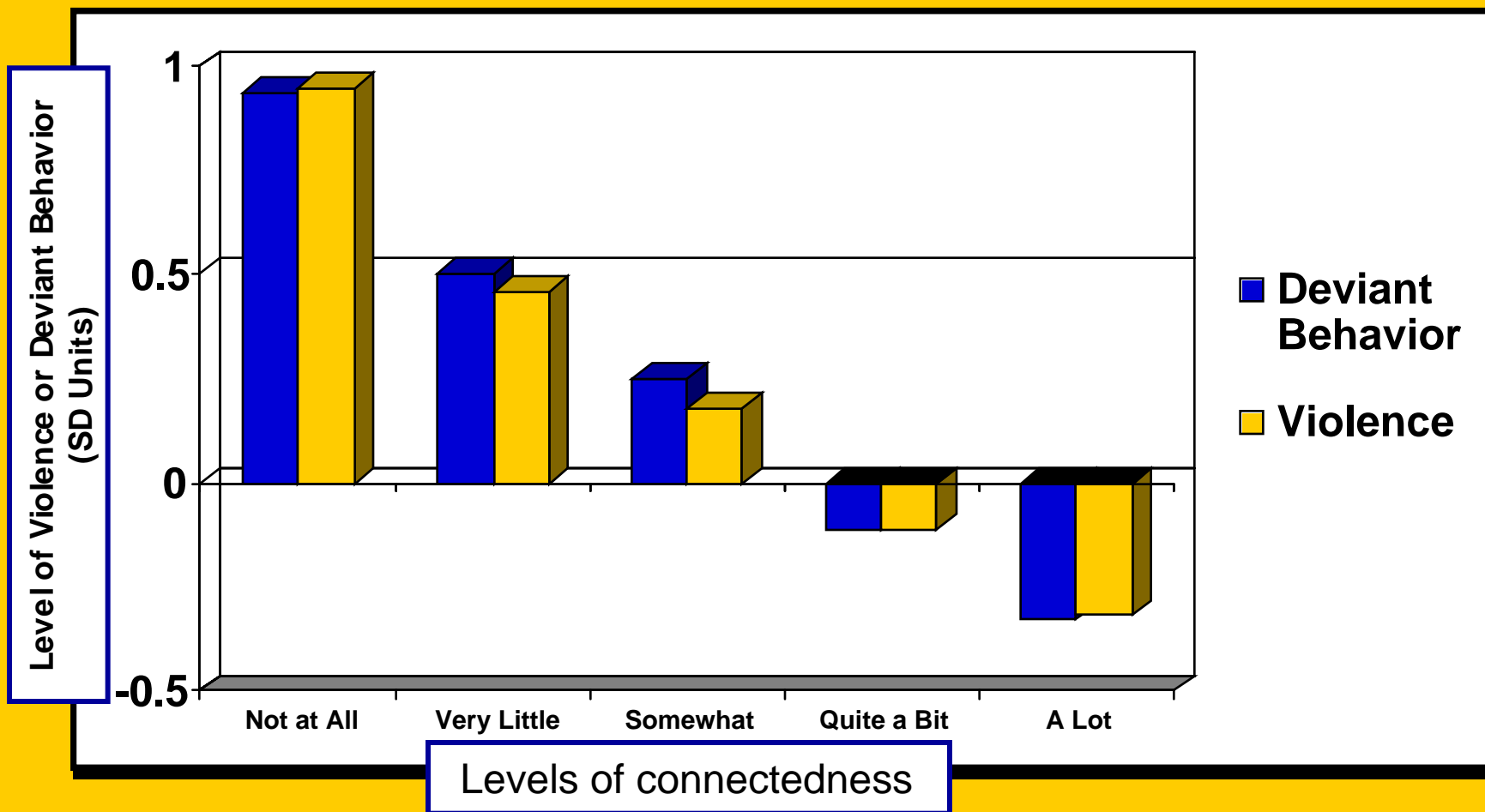
Emotional Distress

Students who feel connected to school experience less emotional distress



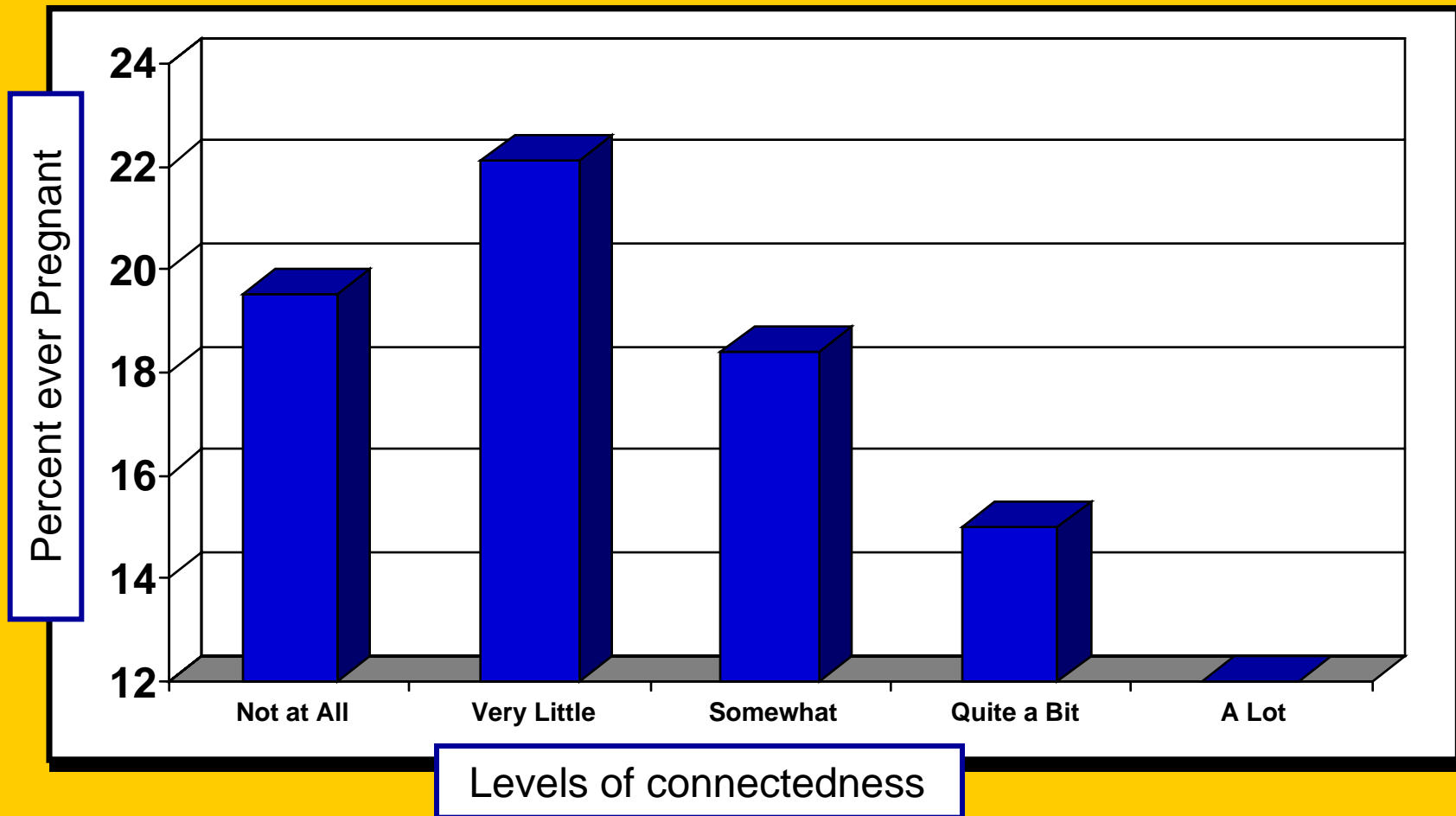
Violence or Deviant Behavior

Students who feel connected to school engage in less violent or deviant behavior



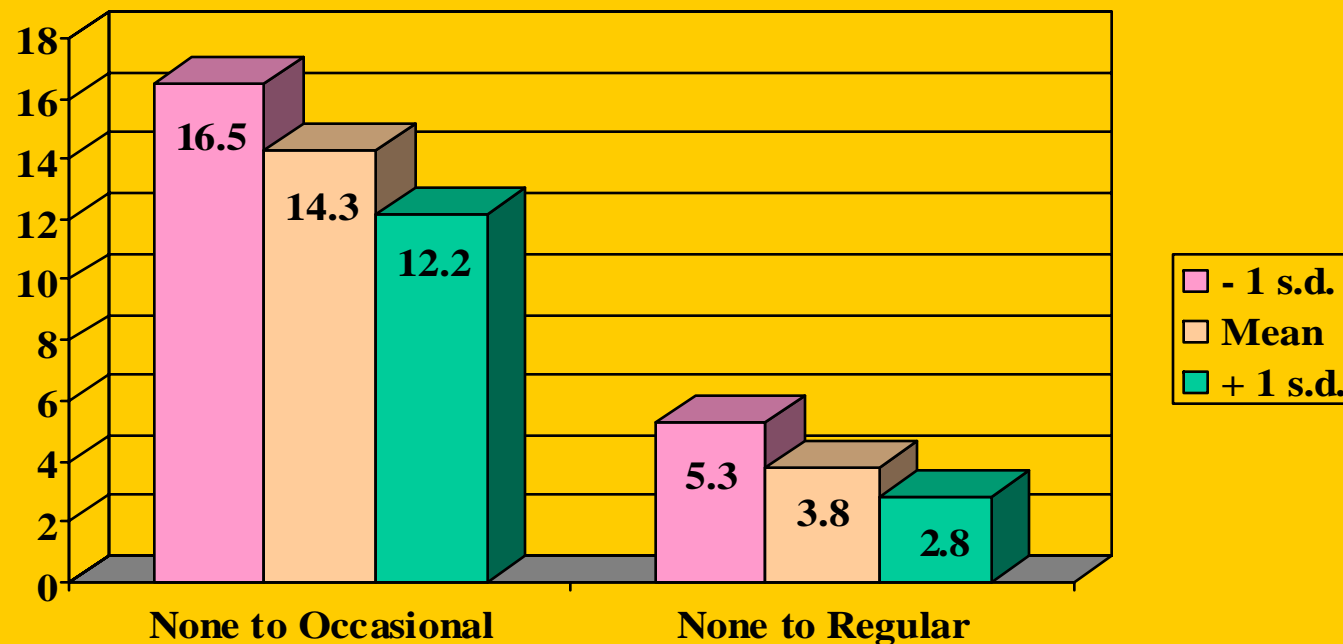
Pregnancy

Students who feel connected to school are less likely to become pregnant



Initiated Cigarette Use

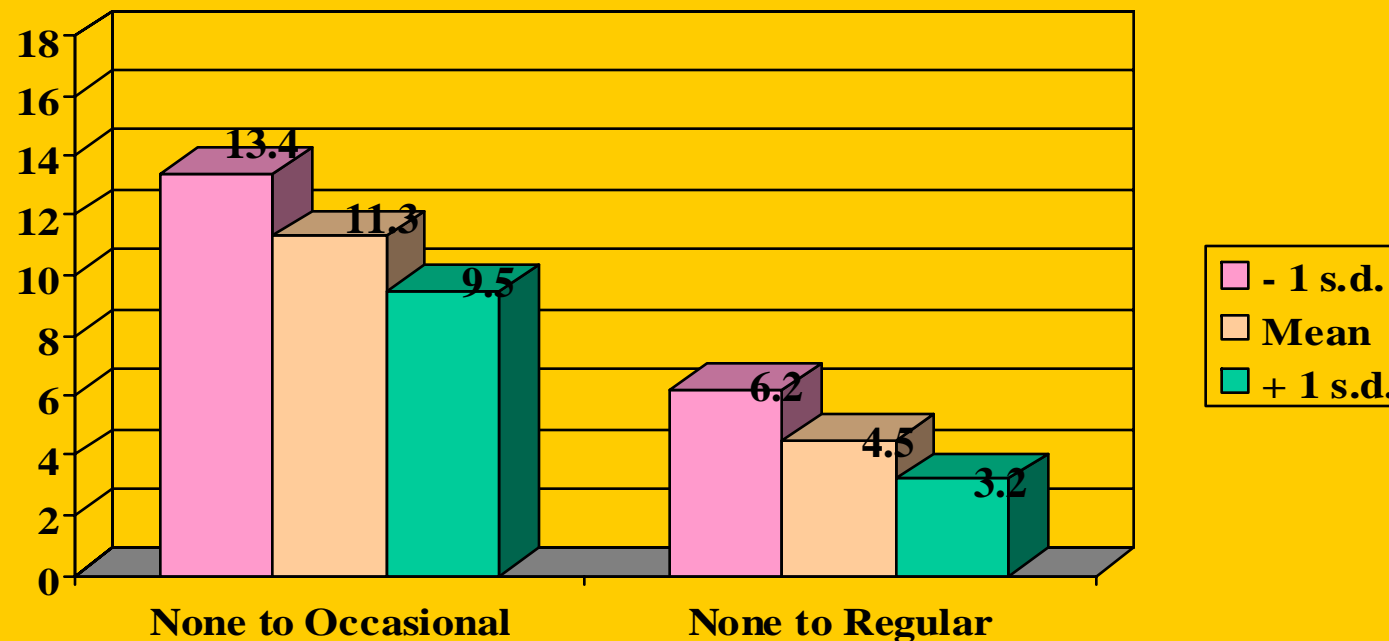
Predicted Percent at Three Levels of Teacher Support



Multinomial logit models adjusted for social belonging, race/ethnicity, income, gender, family structure, emotional distress, relationship with parents, hx of peer suicide, hx of family suicide (McNeely, C. and Falsi, C. 2004)

Initiated Getting Drunk

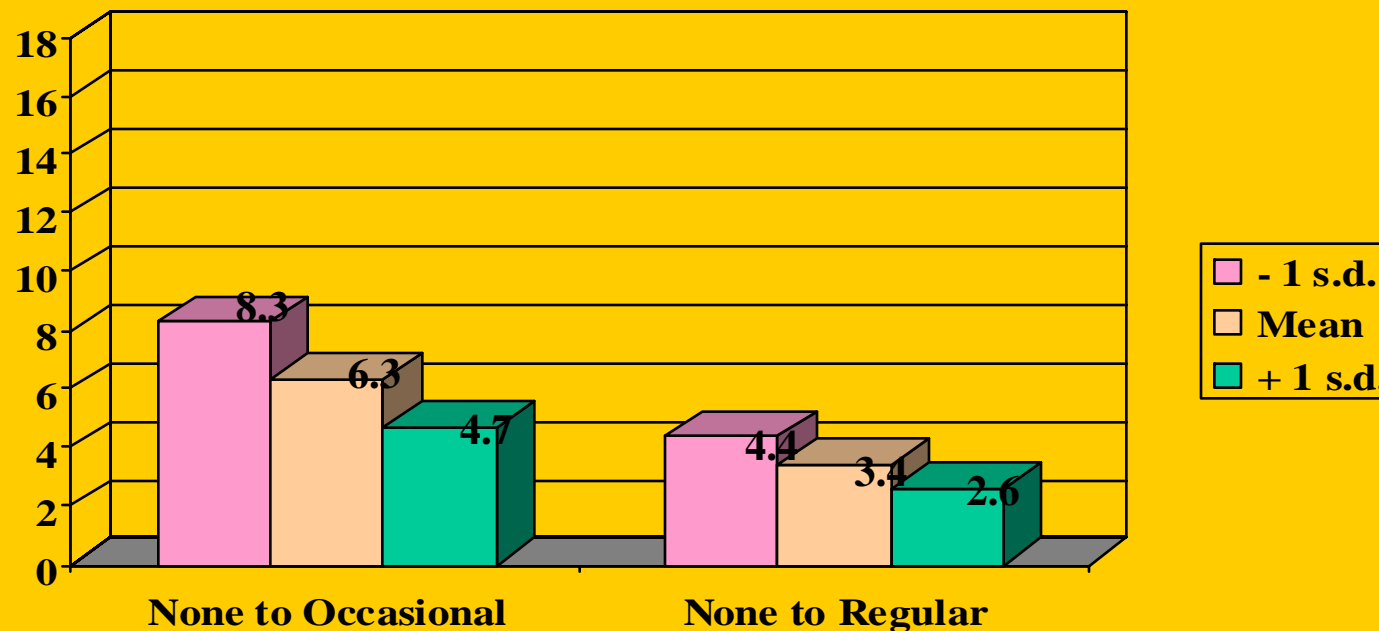
Predicted Percent Three Levels of Teacher Support



Multinomial logit models adjusted for social belonging, race/ethnicity, income, gender, family structure, emotional distress, relationship with parents, hx of peer suicide, hx of family suicide (McNeely and Falsi, 2004)

Initiated Marijuana Use

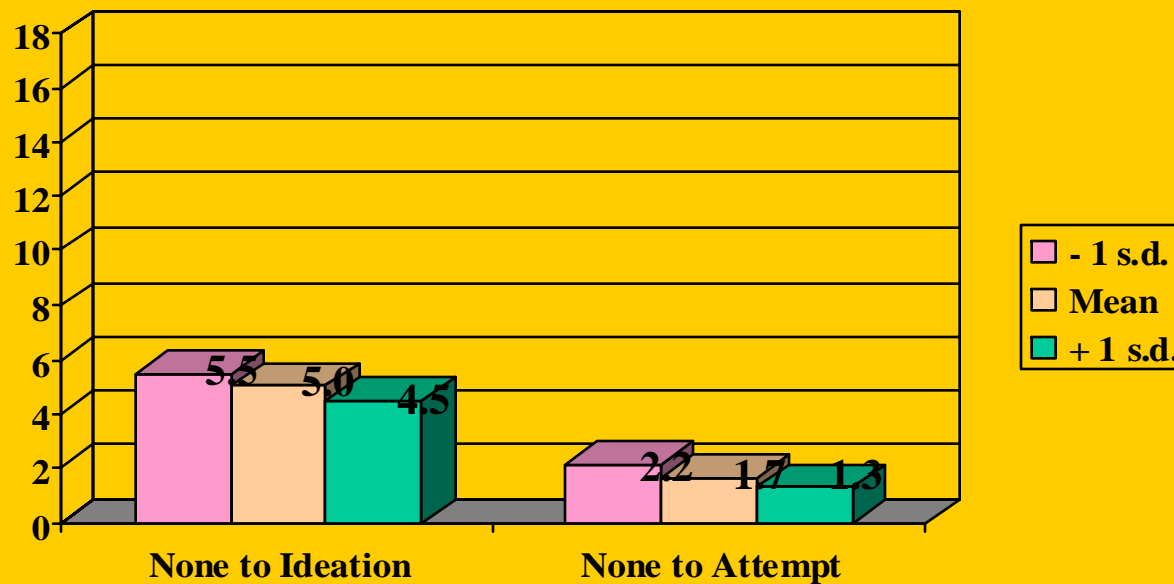
Predicted Percent at Three Levels of Teacher Support



Multinomial logit models adjusted for social belonging, race/ethnicity, income, gender, family structure, emotional distress, relationship with parents, hx of peer suicide, hx of family suicide (McNeely and Falsi, 2004)

Seriously Considered or Attempted Suicide

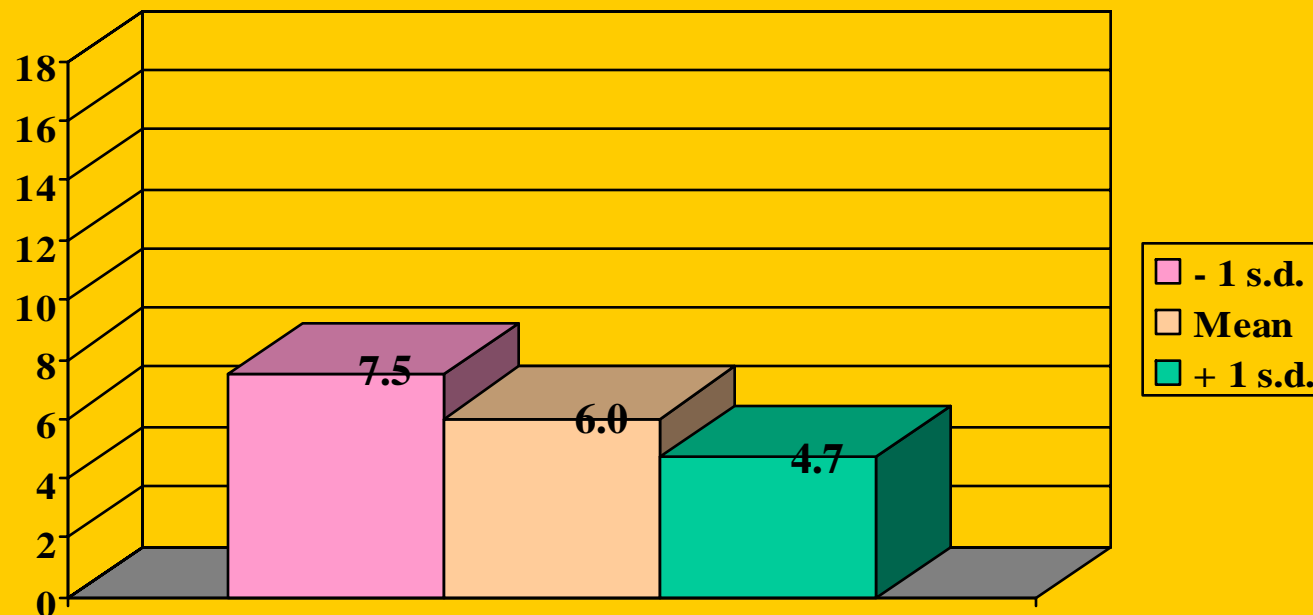
Predicted Percent at Three Levels of Teacher Support



Multinomial logit models adjusted for social belonging, race/ethnicity, income, gender, family structure, emotional distress, relationship with parents, hx of peer suicide, hx of family suicide (McNeely and Falsi, 2004)

Initiated Violence

Predicted Percent at Three Levels of Teacher Support



Multinomial logit models adjusted for social belonging, race/ethnicity, income, gender, family structure, emotional distress, relationship with parents, hx of peer suicide, hx of family suicide (McNeely and Falsi, 2004)

How does NCLB impact school climate and engagement?

There is a disincentive to retain

- Poorer performing students
- Students with emotional problems
- Students with behavioral problems
- Students for whom English is a second language

Essentially, those who are most likely to benefit from the non-academic components of school are most disadvantaged by *NCLB*

How does NCLB impact school climate and engagement?

The focus on standardized testing

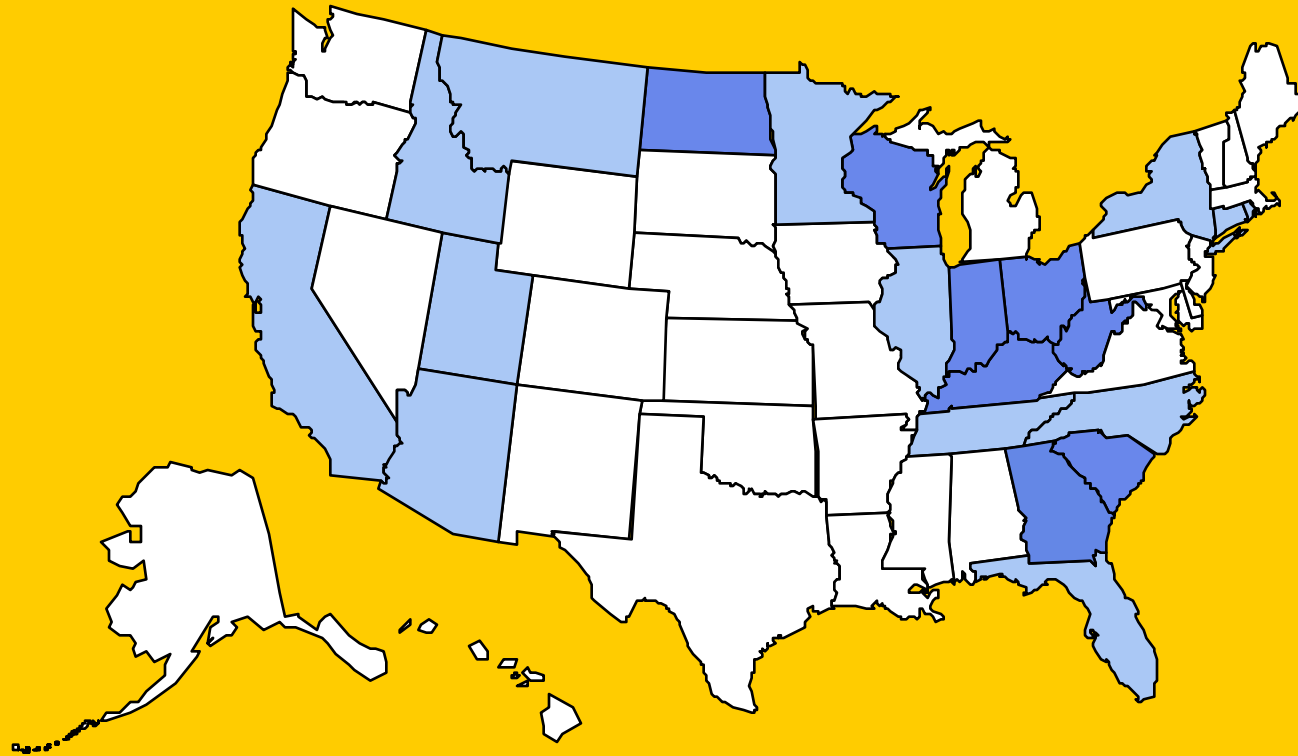
- Reduces customizing a curriculum
- Diminishes investment in enrichment programs (e.g., visual arts, music and physical education)
- Diminishes the attention paid to the non-academic components of education
- Diminishes attention to the interpersonal aspects of teacher-student relationships

Physical Education: What is the role of Schools?

Obesity Trends* Among U.S. Adults

BRFSS, 1985

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



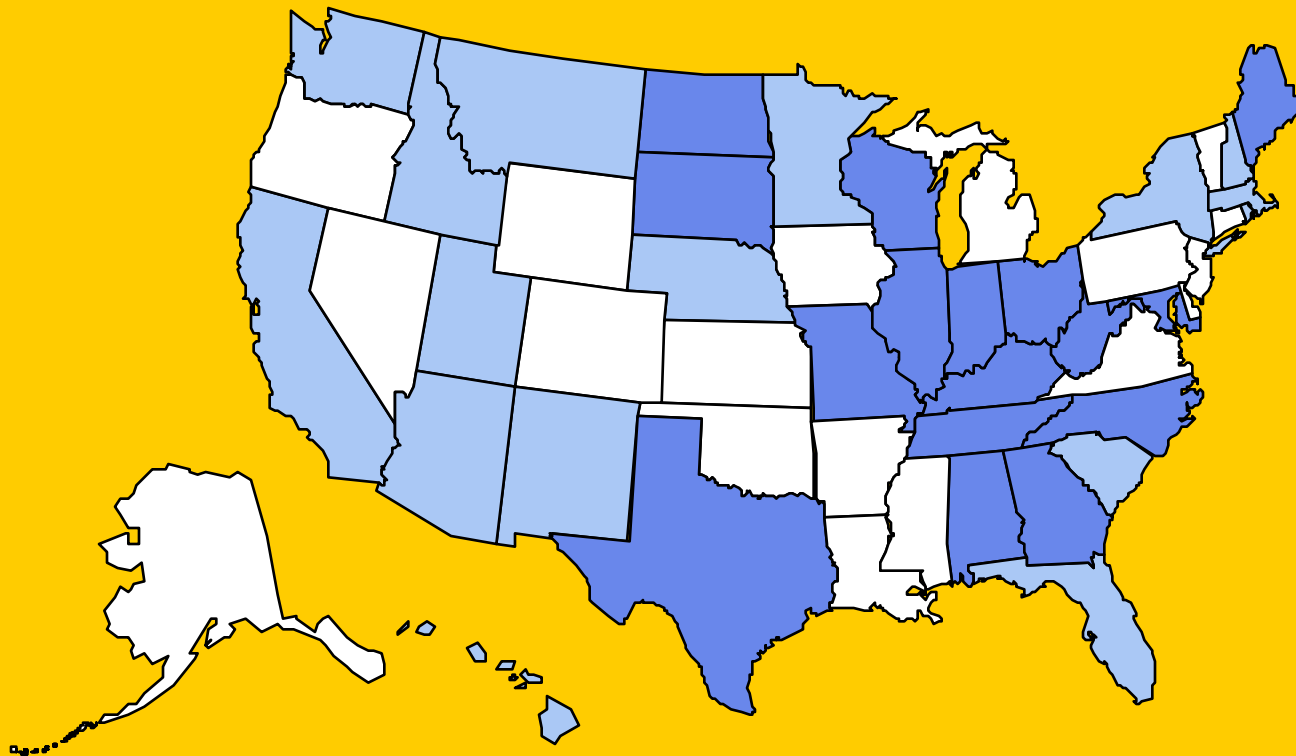
□ No Data ■ <10% ■ 10%-14%

Source: Mokdad A H, et al. *J Am Med Assoc* 1999;282:16, 2001;286:10.

Obesity Trends* Among U.S. Adults

BRFSS, 1987

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



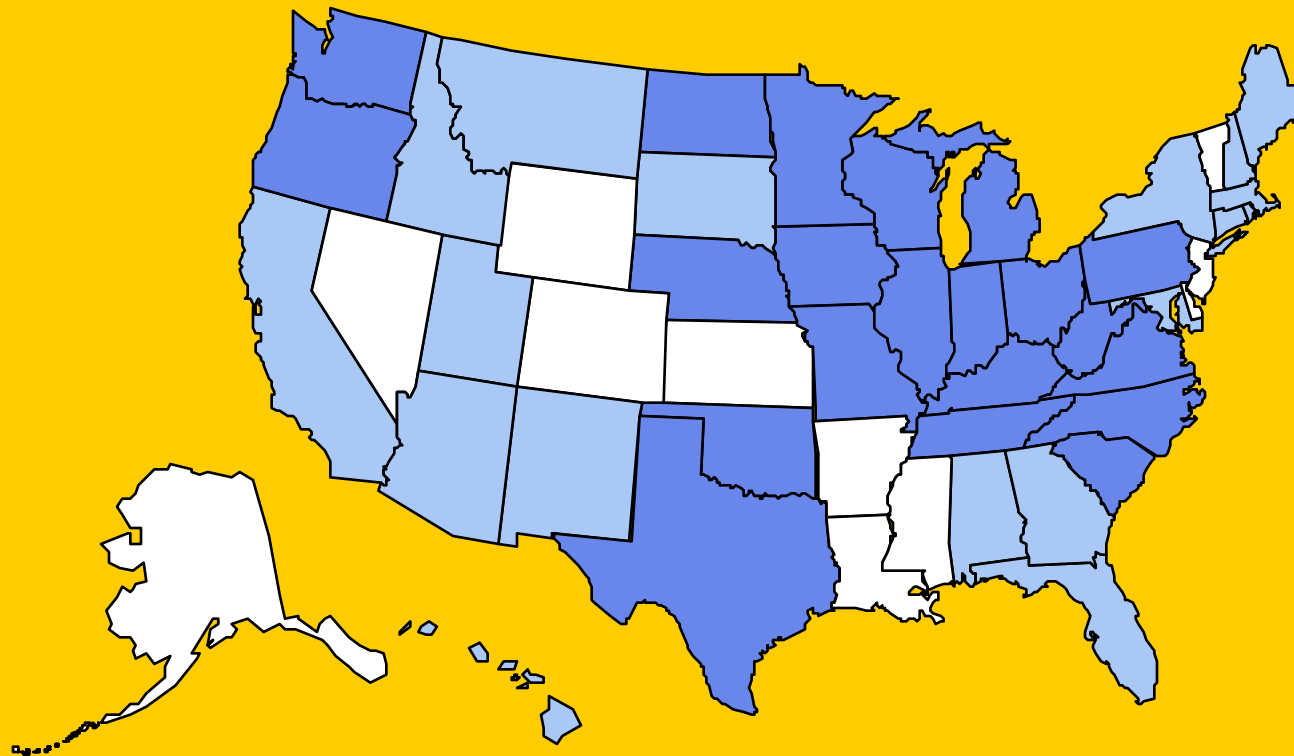
Legend: No Data <10% 10%-14%

Source: Mokdad A H, et al. *J Am Med Assoc* 1999;282:16, 2001;286:10.

Obesity Trends* Among U.S. Adults

BRFSS, 1989

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



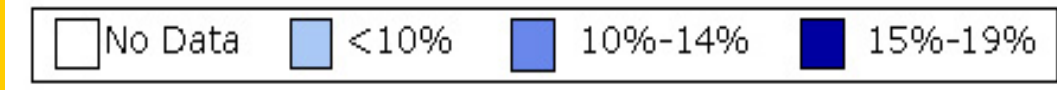
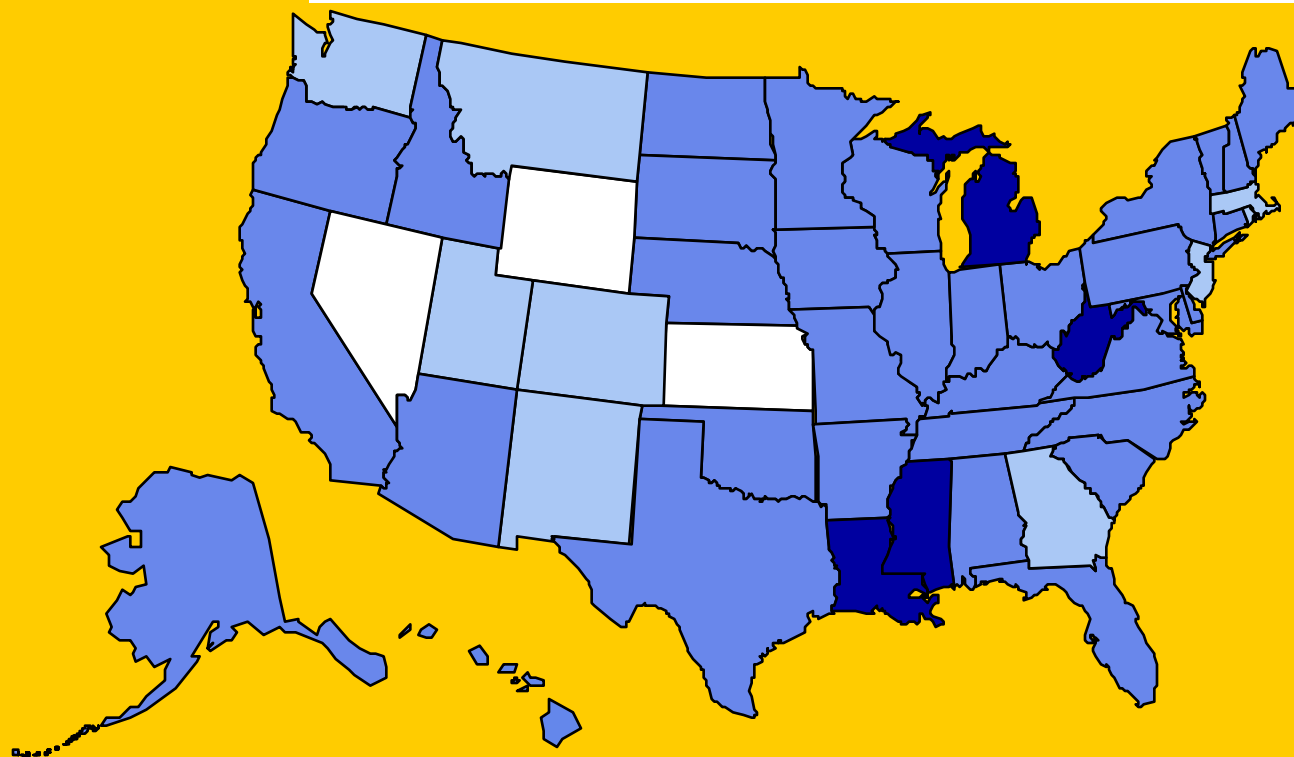
□ No Data ■ <10% ■ 10%-14%

Source: Mokdad A H, et al. *J Am Med Assoc* 1999;282:16, 2001;286:10.

Obesity Trends* Among U.S. Adults

BRFSS, 1991

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

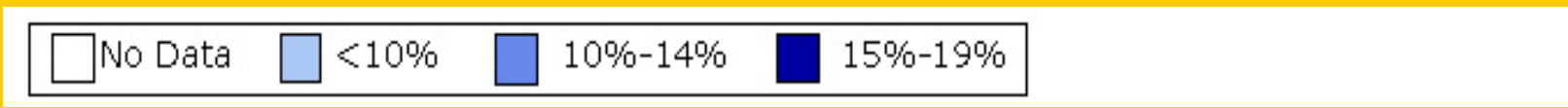
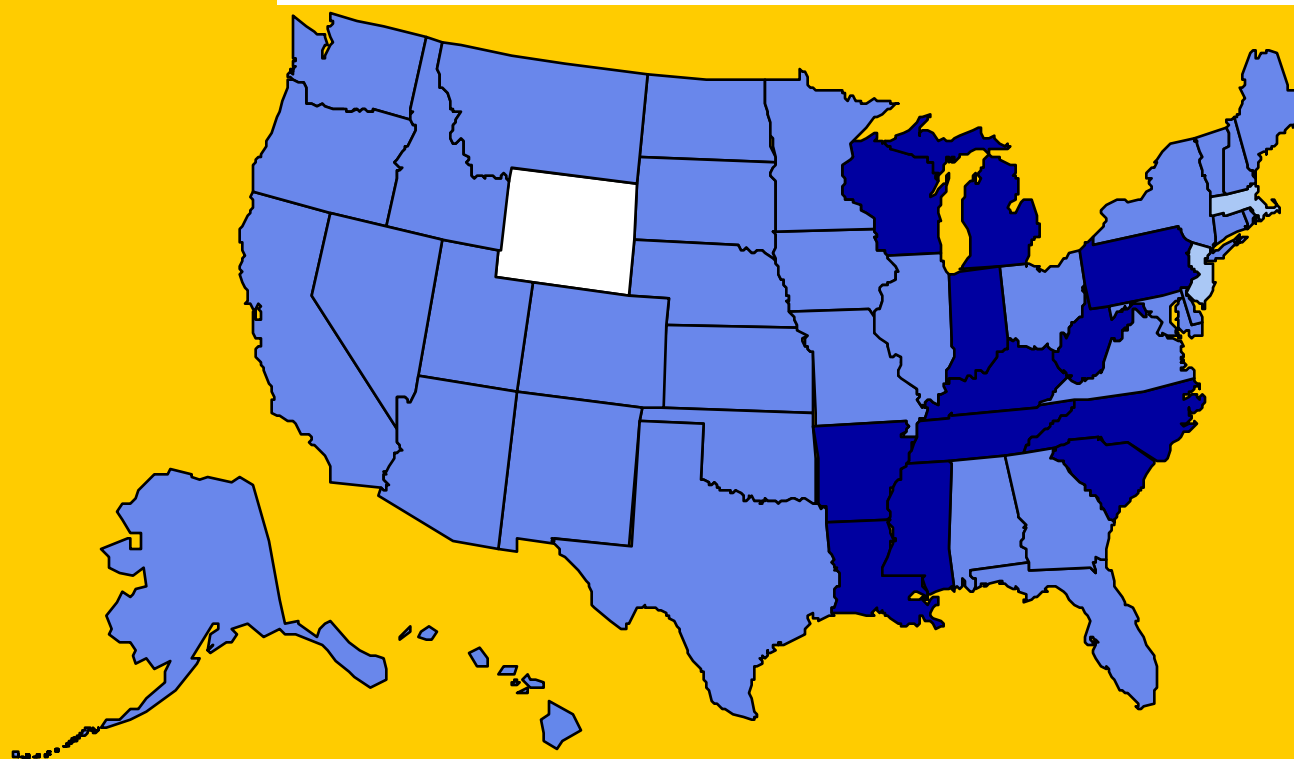


Source: Mokdad A H, et al. *J Am Med Assoc* 1999;282:16, 2001;286:10.

Obesity Trends* Among U.S. Adults

BRFSS, 1993

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

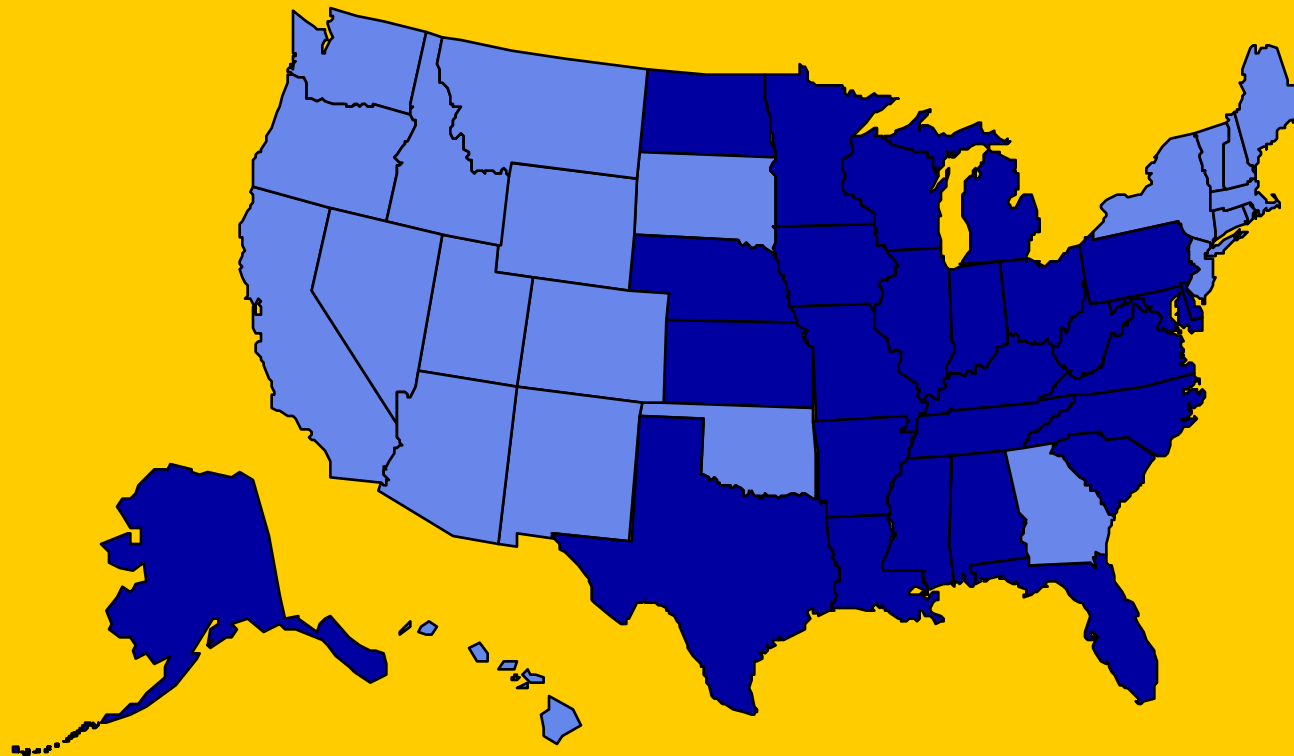


Source: Mokdad A H, et al. *J Am Med Assoc* 1999;282:16, 2001;286:10.

Obesity Trends* Among U.S. Adults

BRFSS, 1995

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



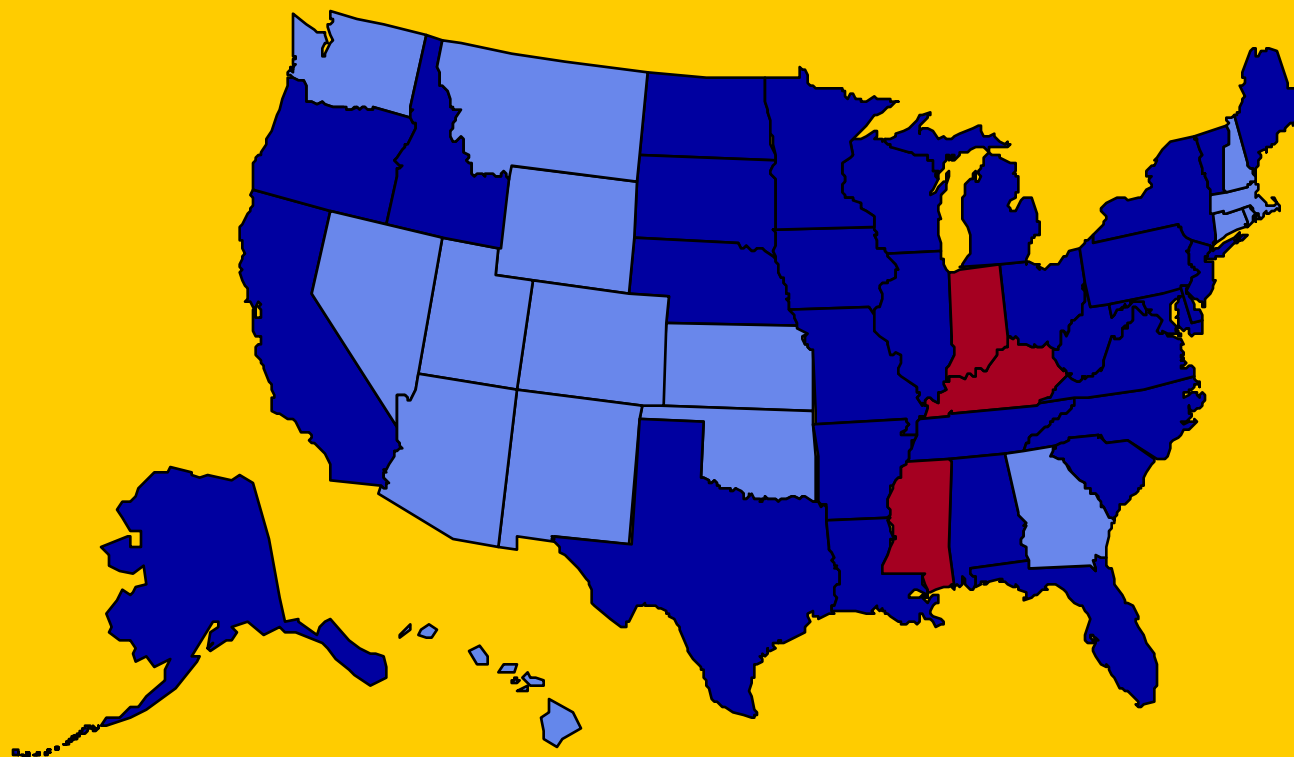
Legend: No Data <10% 10%-14% 15%-19%

Source: Mokdad A H, et al. *J Am Med Assoc* 1999;282:16, 2001;286:10.

Obesity Trends* Among U.S. Adults

BRFSS, 1997

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

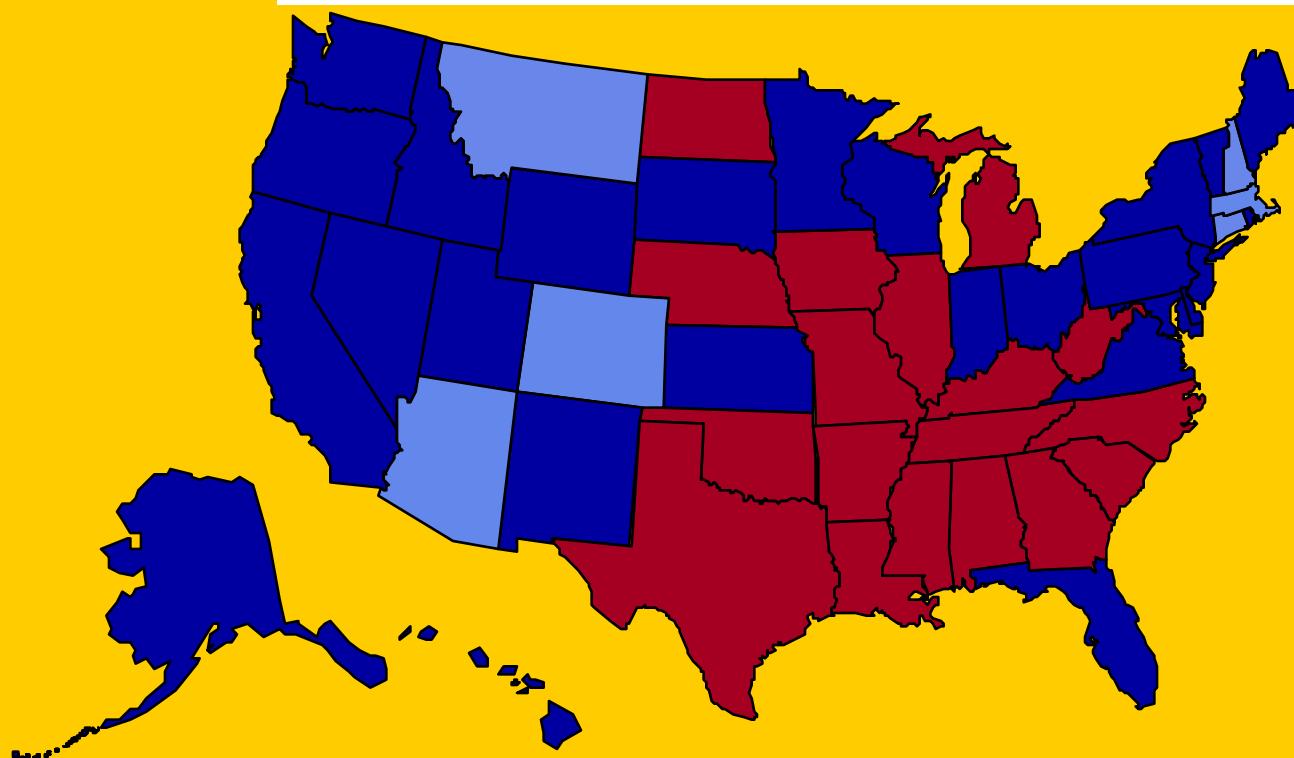


Source: Mokdad A H, et al. *J Am Med Assoc* 1999;282:16, 2001;286:10.

Obesity Trends* Among U.S. Adults

BRFSS, 1999

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



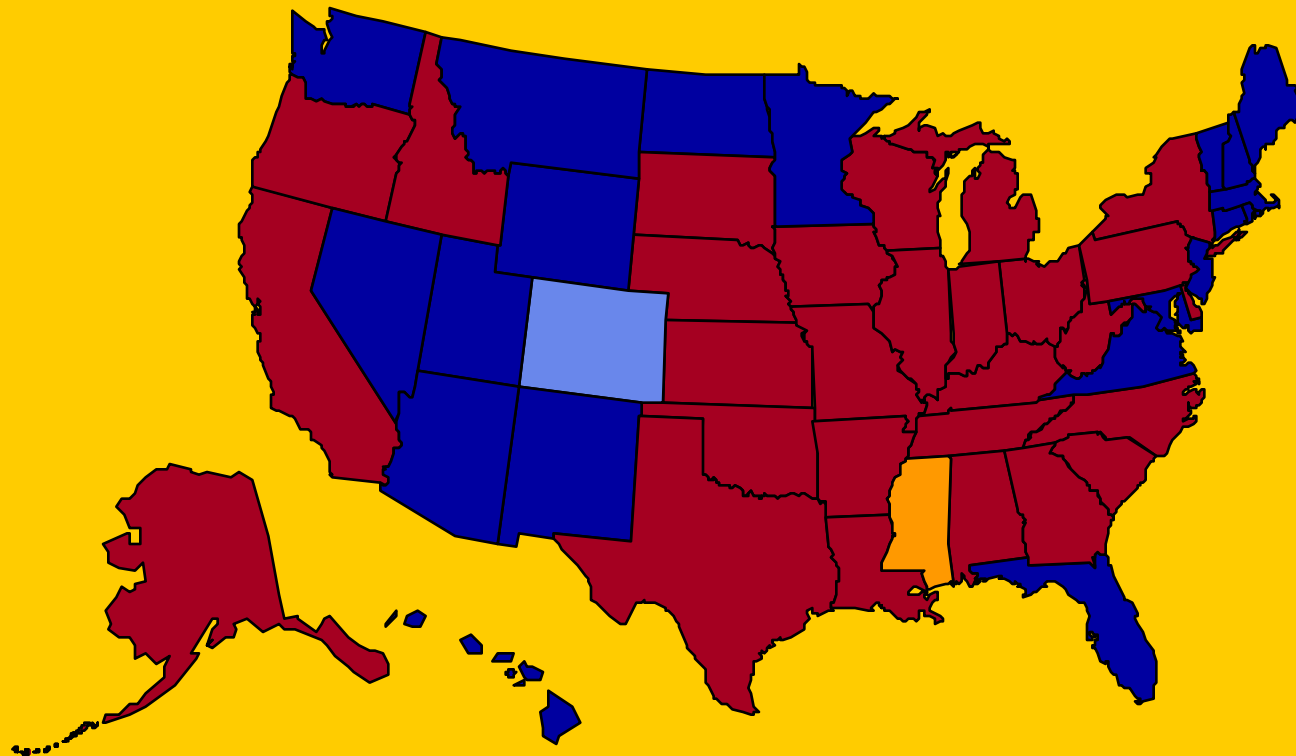
Legend: No Data <10% 10%-14% 15%-19% $\geq 20\%$

Source: Mokdad A H, et al. *J Am Med Assoc* 1999;282:16, 2001;286:10.

Obesity Trends* Among U.S. Adults

BRFSS, 2001

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



Legend: No Data, <10%, 10%-14%, 15%-19%, 20%-24%, $\geq 25\%$

Source: Mokdad A H, et al. *J Am Med Assoc* 1999;282:16, 2001;286:10.

Obesity

- Since 1980 overweight (BMI>25) has doubled for children and tripled for adolescents in the US
- Annual obesity-attributable US medical expenditures \$117 billion (2006)
- Recently, there has been a lot of state level policy activity to address this epidemic through school nutrition policy.

What are School districts doing to impact physical education? In 2006...

- 62.5% used fitness tests
- 62.2% evaluated student fitness
- 51.0% encouraged family involvement in physical activity
- 54.3% increased the amount of time students are physically active
- 57.0% required recess for elementary school children

Prevalence of Overweight at Time 0 and 5 years later (Time 1)

Overweight

BMI < 25

BMI > 25

Time 0	Time 1 BMI < 25	Time 1 BMI > 25
2404 (71.9%)	1549 (46.3%)	855 (25.6%)
941 (28.1%)	103 (3.1%)	838 (25.1%)

School based PE and the Odds of being overweight as adults

PE attendance days/week at Time 0	OR (95%CI) of <i>being</i> overweight at Time 1	OR of <i>becoming</i> overweight at Time 1	OR of <i>remaining</i> overweight at Time 1
None	1.00	1.00	1.00
1-4 days	0.97	0.89	1.47
All 5 days	0.78**	0.75**	1.33
Each additional day	0.95**	0.95**	1.07

Conclusions

- There appears to be a positive relationship between the number of days of PE in school and overweight as adult
- PE has more positive effect on maintaining normal weight than reducing overweight

Conclusions

- Less than two thirds of America's youth engage in vigorous physical activity 3 or more times per week for 20+minutes
- Physical activity outside of school decreased from elementary through high school
- Physical activity patterns established in adolescence carry over to adulthood
- PE in school appears to be an important tool in addressing the obesity epidemic

For a copy of this presentation or
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