

Healthy and Ready to Learn:

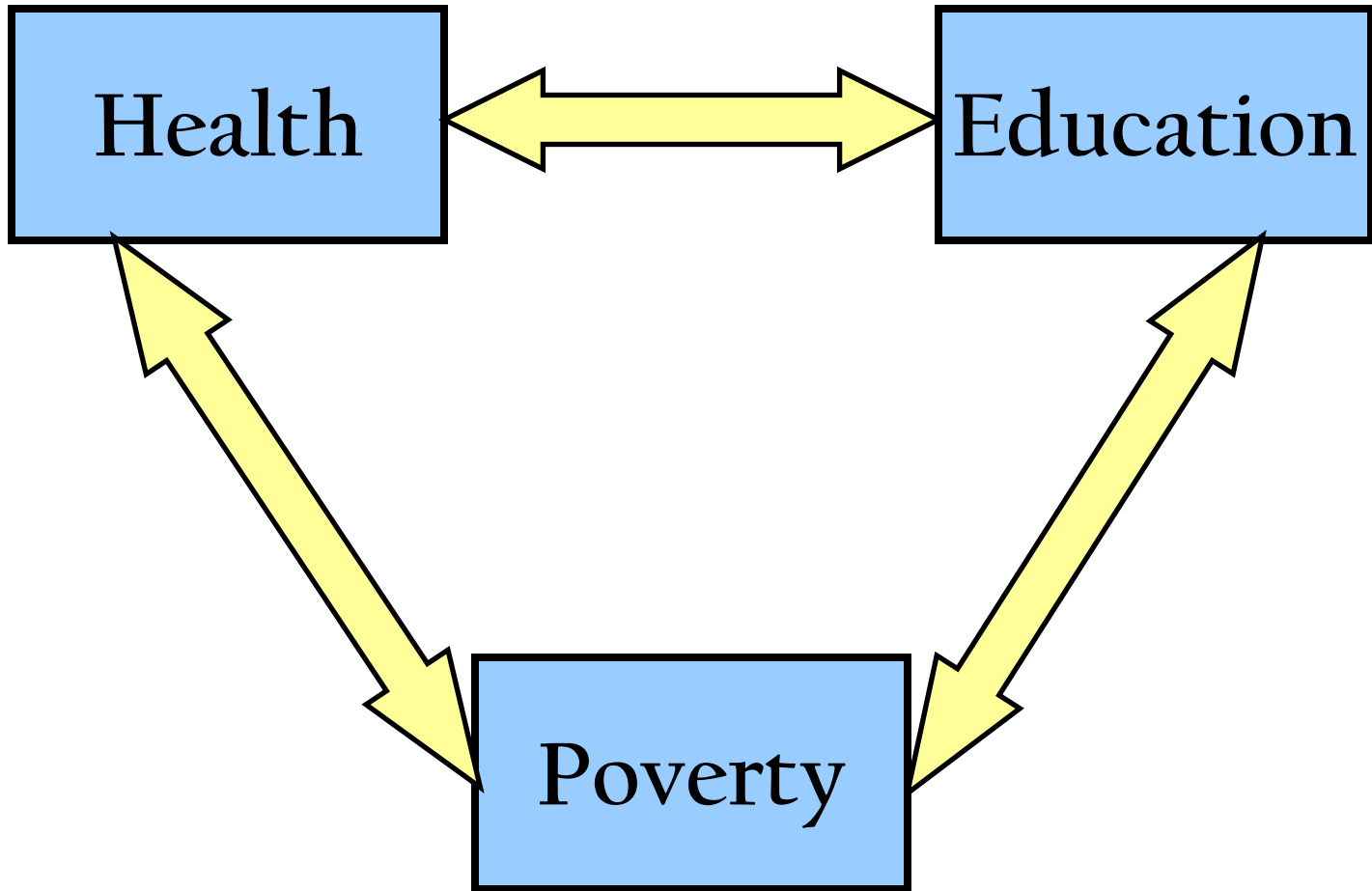
*Reducing Health Barriers that Contribute to the
Achievement Gap among Low-income Minority Youth*

Charles E. Basch

Strategies to Close the Educational Achievement Gap

- ▶ Standards and accountability
- ▶ Revising school financing
- ▶ Teacher preparation
- ▶ Rigorous curricula
- ▶ Charter schools
- ▶ **Reducing health barriers to learning**

Reciprocal Relationships



Healthier Students are Better Learners

1: Health Factors that Affect Educational Outcomes

- Prevalence and Disparities
- Causal Pathways

2: Effective and Efficient School Health Programs

- How Schools Can Influence the Health of Youth
- How We Need to Help

Criteria for Selecting Strategic Priorities

- Extent of health disparities
- Causal effects on educational outcomes
- Feasibility and effectiveness of school-based programs and policies

7 Priority, Educationally Relevant Health Factors

- 1) Vision
- 2) Asthma
- 3) Teen pregnancy
- 4) Aggression and violence
- 5) Physical activity
- 6) Breakfast
- 7) ADHD

Healthier Students are Better Learners

1: Health Factors that Affect Educational Outcomes

- **Prevalence and Disparities**
- Causal Pathways
- What Schools Can Do

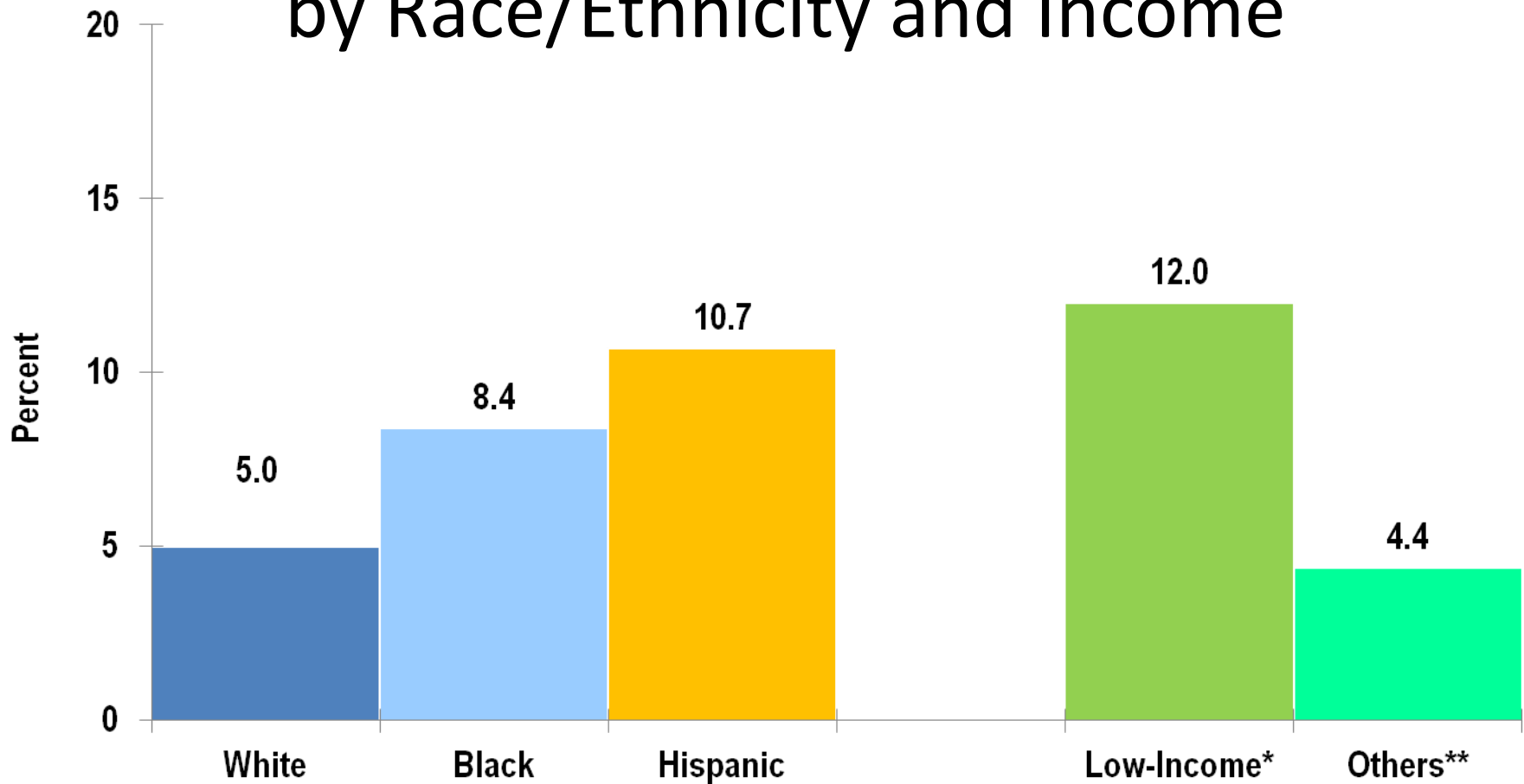
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High Prevalence

- Visual problems: ~20% of youth
- Asthma: ~14% of youth <18
- Teen pregnancy: 1 in 3 teens
- Violence: 28% of adolescents bullied at school
- Physical activity: ~2 in 3 don't get enough
- Breakfast: ~20% of youth skip it
- Hyperactivity: ~8% of youth 6–17 diagnosed

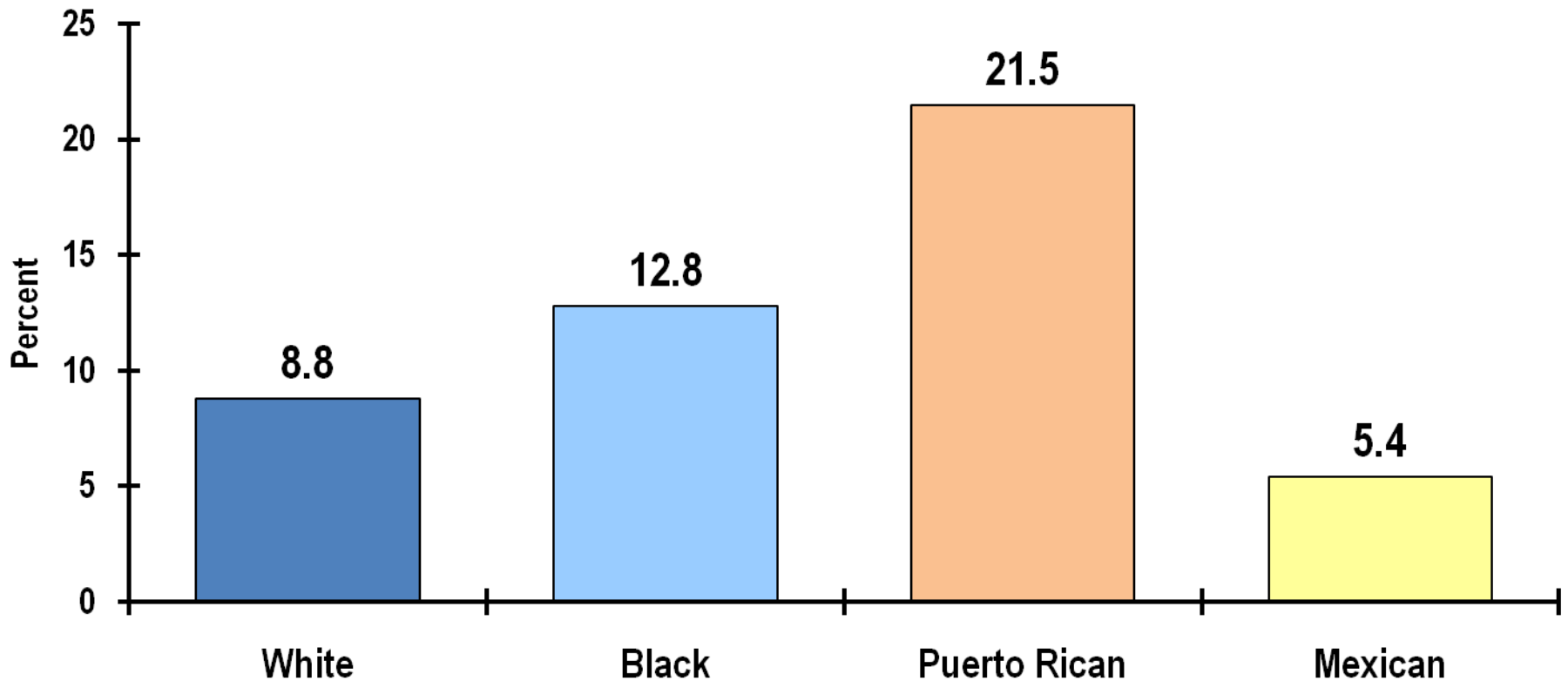
Rates of Visual Impairment in US Among Persons Age 12 and Above, by Race/Ethnicity and Income



*Income below poverty level; **Income $\geq 2X$ poverty level

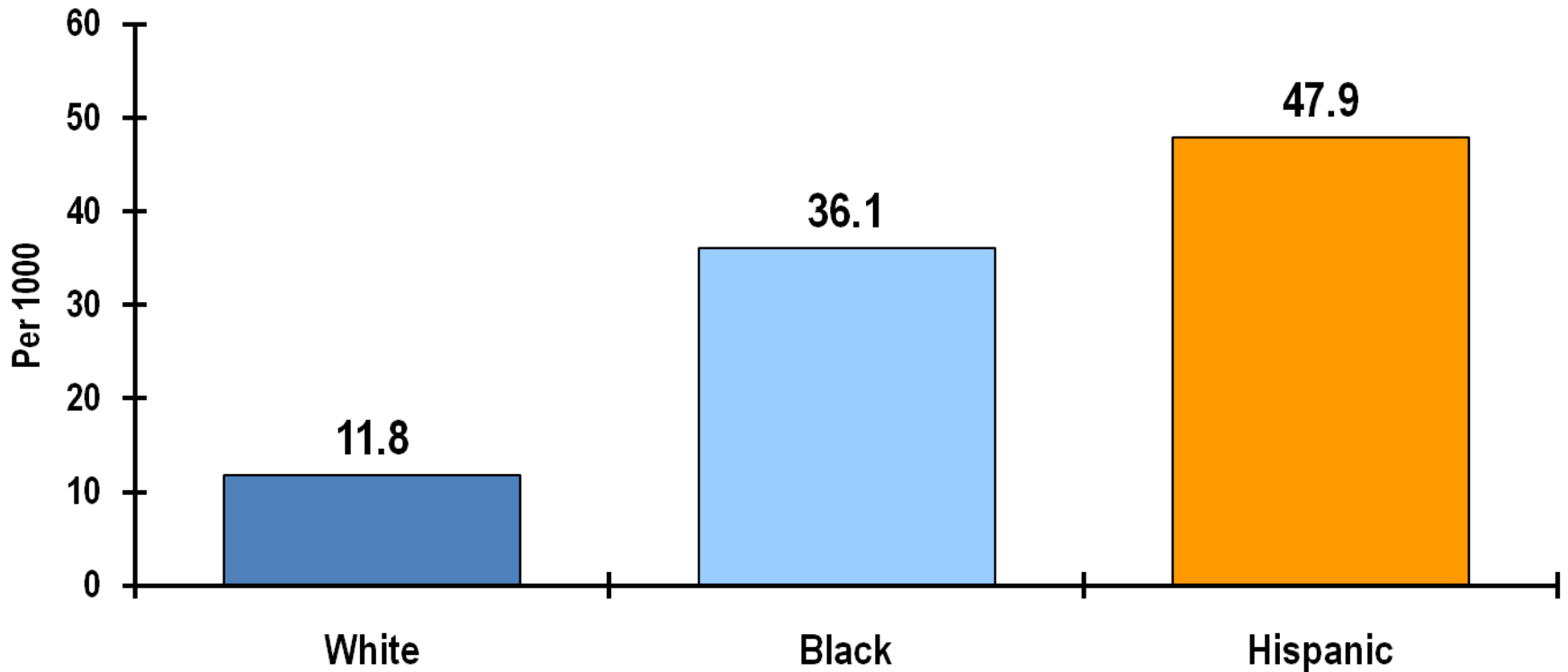
Source: NHANES 1999-2002

Asthma Prevalence for Youth in US, Ages 5-14, by Race/Ethnicity

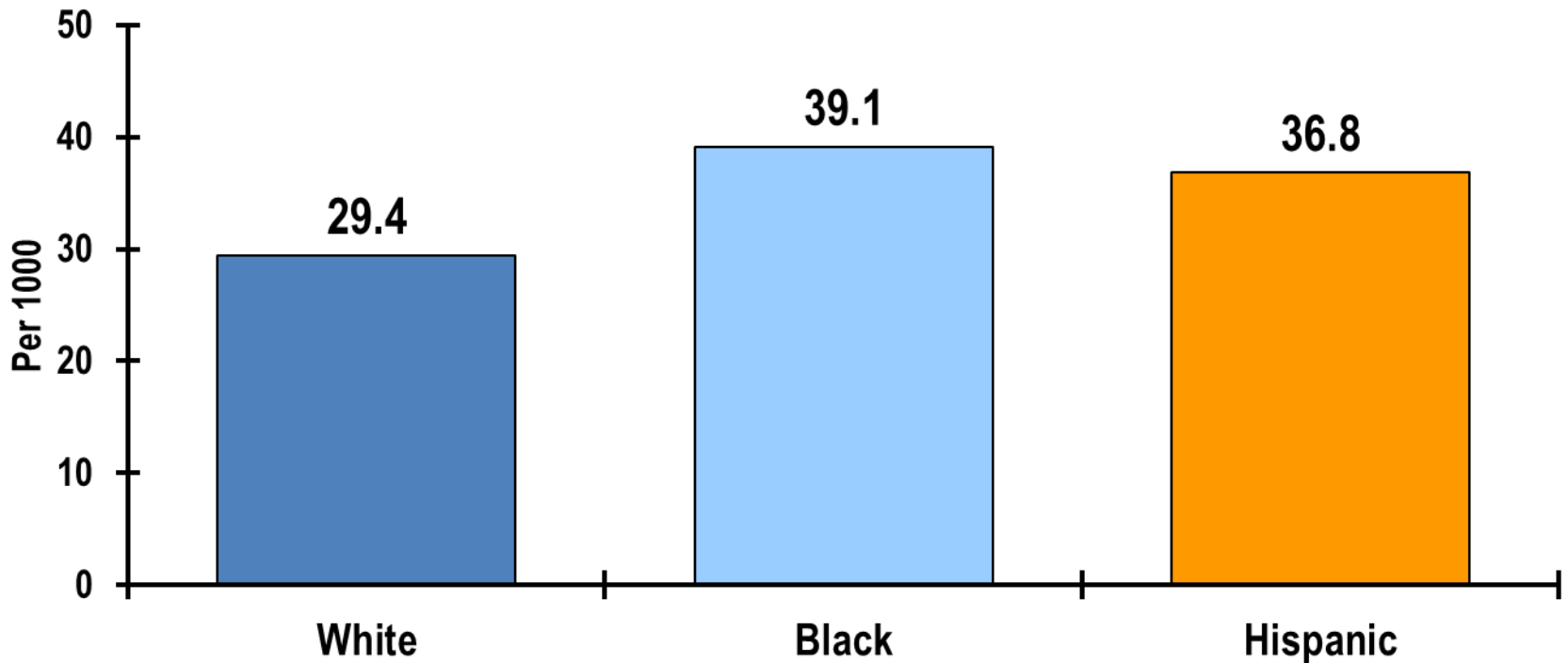


Source: National Center for Health Statistics, 2001-2003 data

Birth Rates Per 1,000 Among 15-17 Year Olds in US, by Race/Ethnicity



Percentage of High School Students in US Who Were in a Physical Fight*, by Race/Ethnicity**

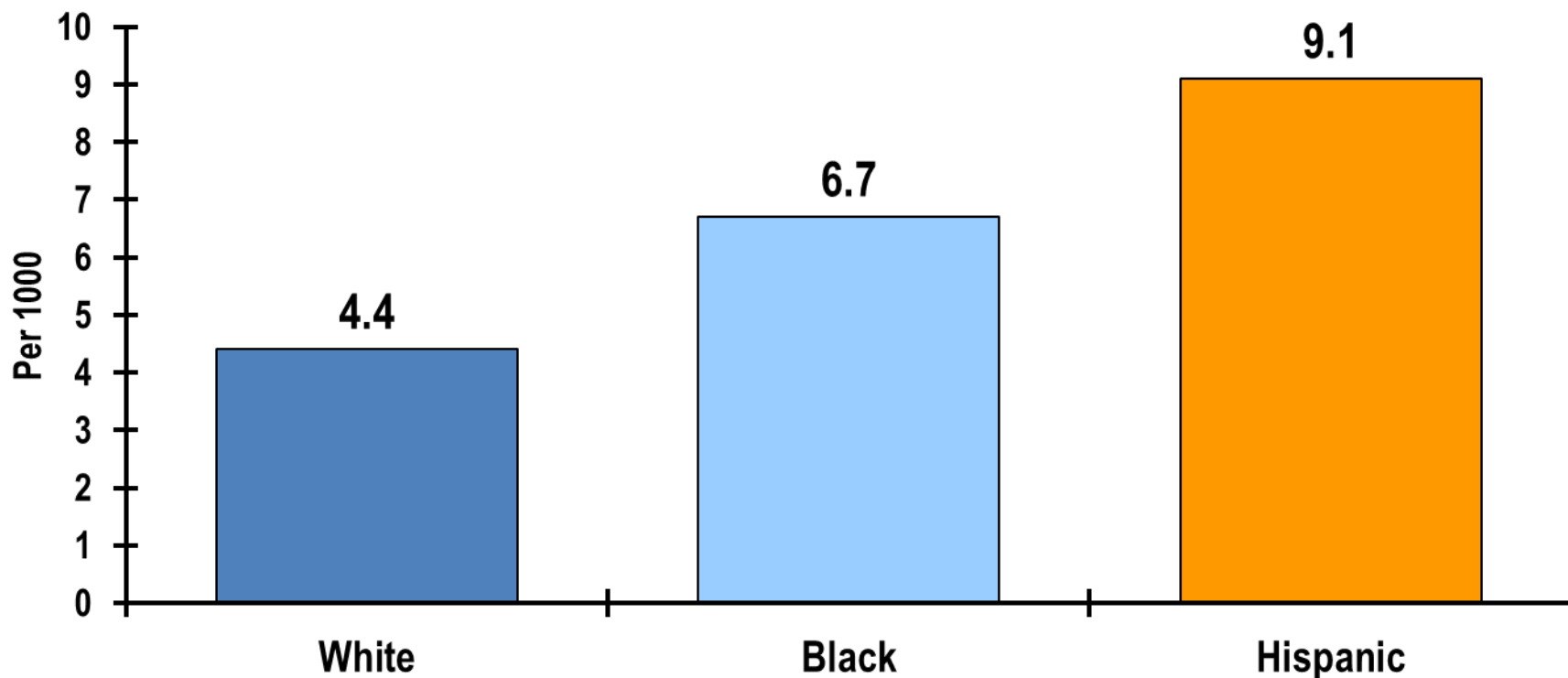


*One or more times during the 12 months before the survey.

** B, H > W

Source: CDC, National Youth Risk Behavior Survey, 2011

Percentage of High School Students in US Who Did Not Go to School Because They Felt Unsafe at School or On Their Way To or From School*, by Race/Ethnicity**

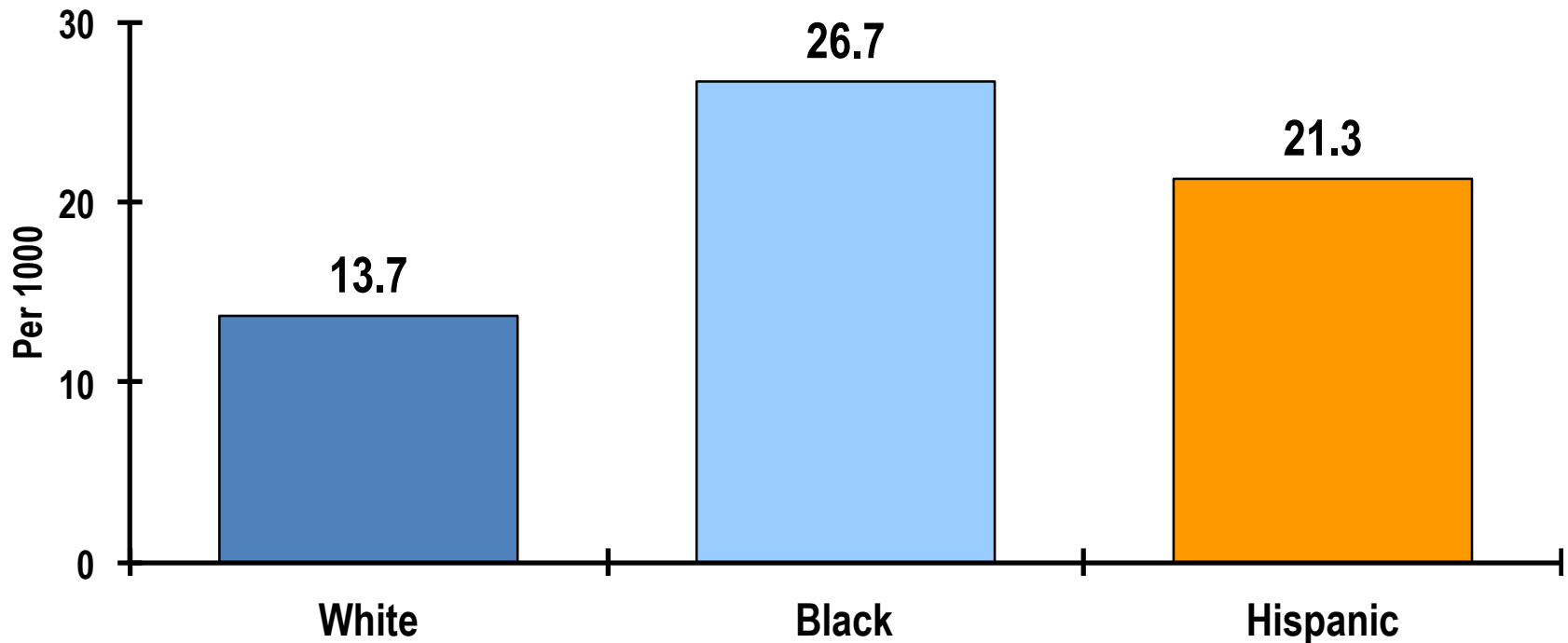


* On at least 1 day during the 30 days before the survey.

** H > B > W

Source: CDC, National Youth Risk Behavior Survey, 2011

Percentage of Female High School Students in US Who Did Not Participate in Physical Activity*, by Race/Ethnicity**

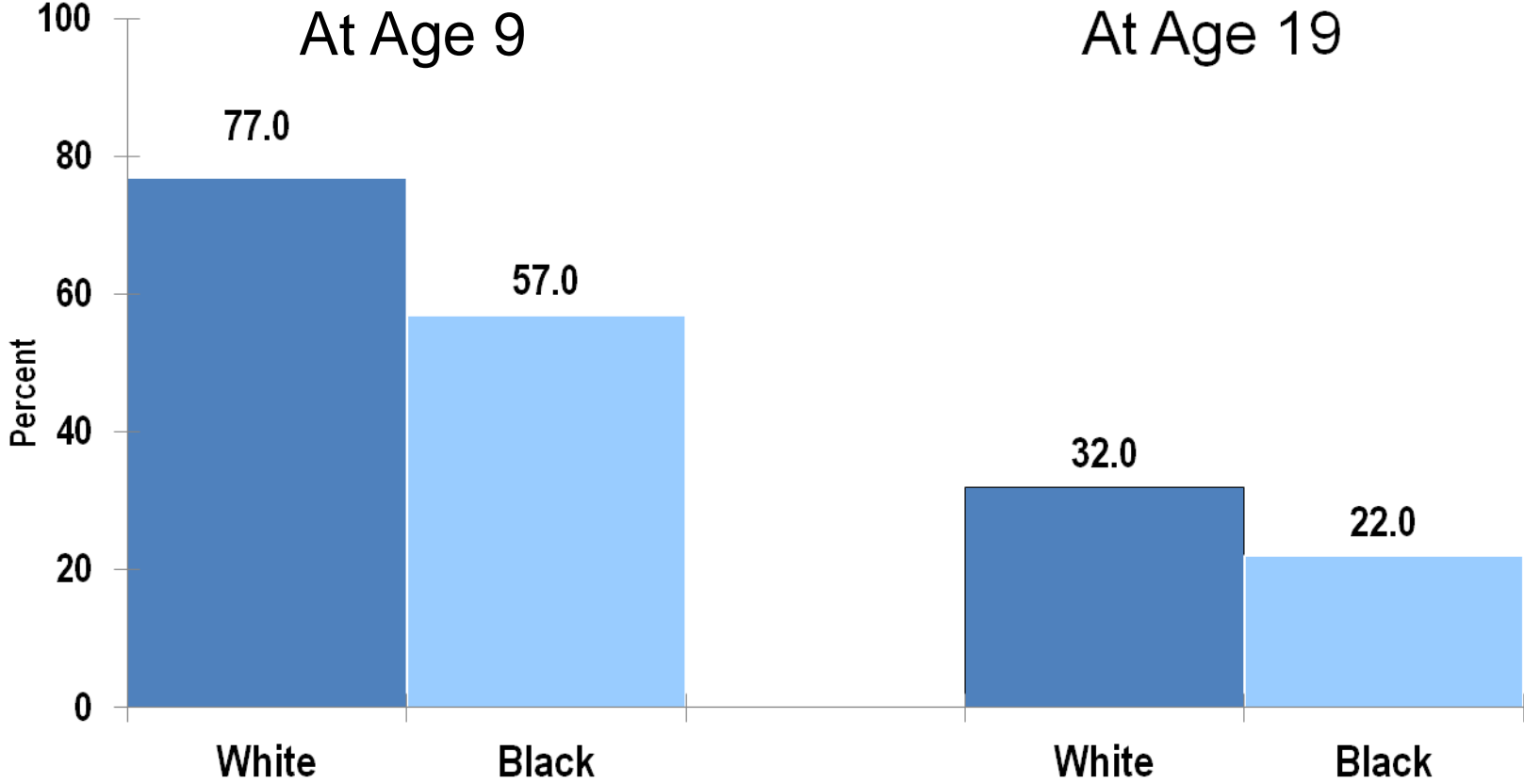


* Did not participate in 60 or more minutes of any kind of physical activity that increased their heart rate and made them breathe hard some of the time on at least 1 day during the 7 days before the survey.

** B > H > W

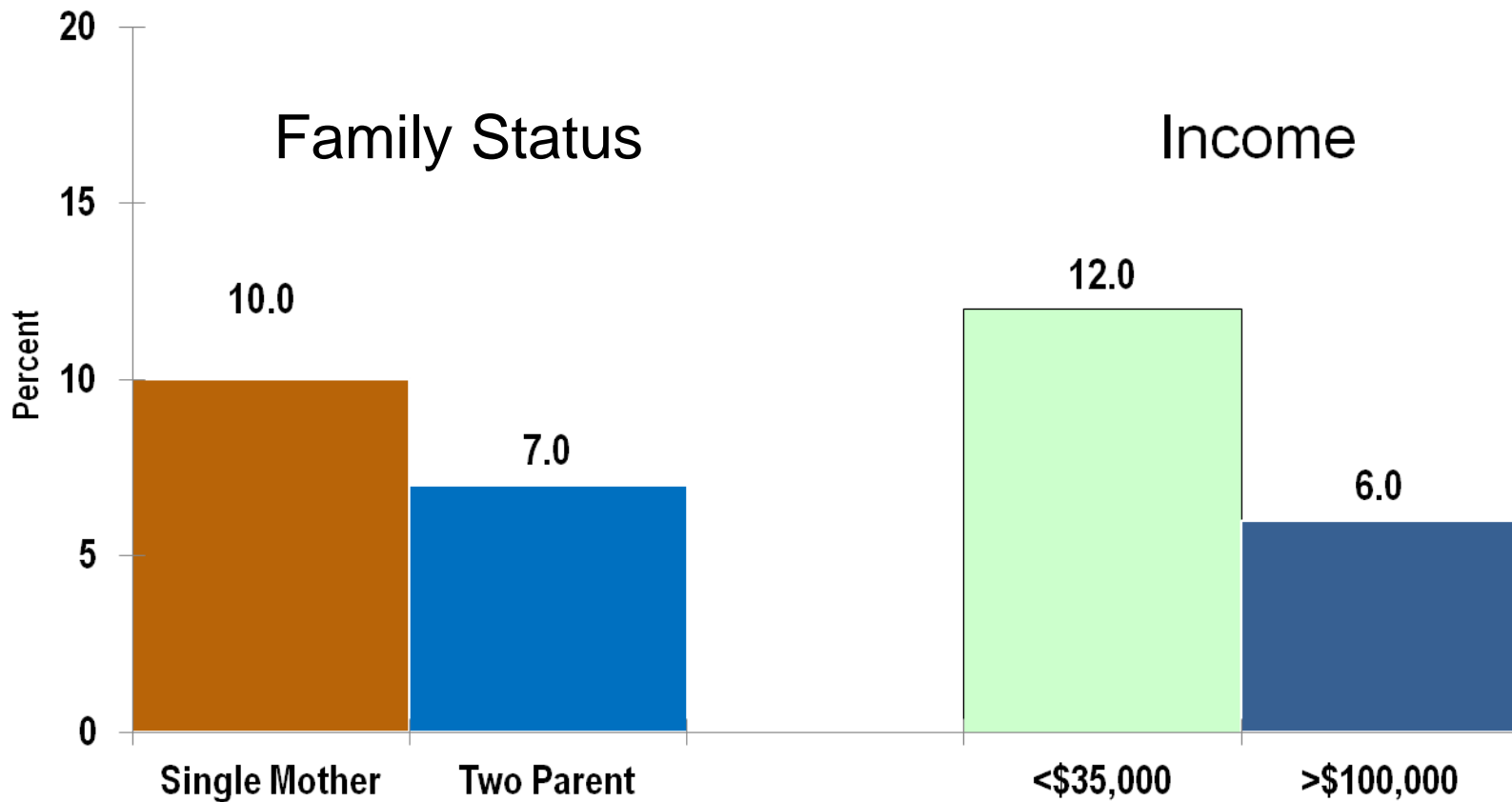
Source: CDC, National Youth Risk Behavior Survey, 2011

Percentage of White and Black Girls Who Consumed Breakfast on All 3 Days Assessed



Source: NHLBI, Longitudinal Growth and Health Survey; n = 1166 white and 1213 black girls

Prevalence of ADHD Among 3-17 Year Olds in US, by Family Status and Income



Source: National Health Interview Survey, 2008

Healthier Students are Better Learners

1: Health Factors that Affect Educational Outcomes

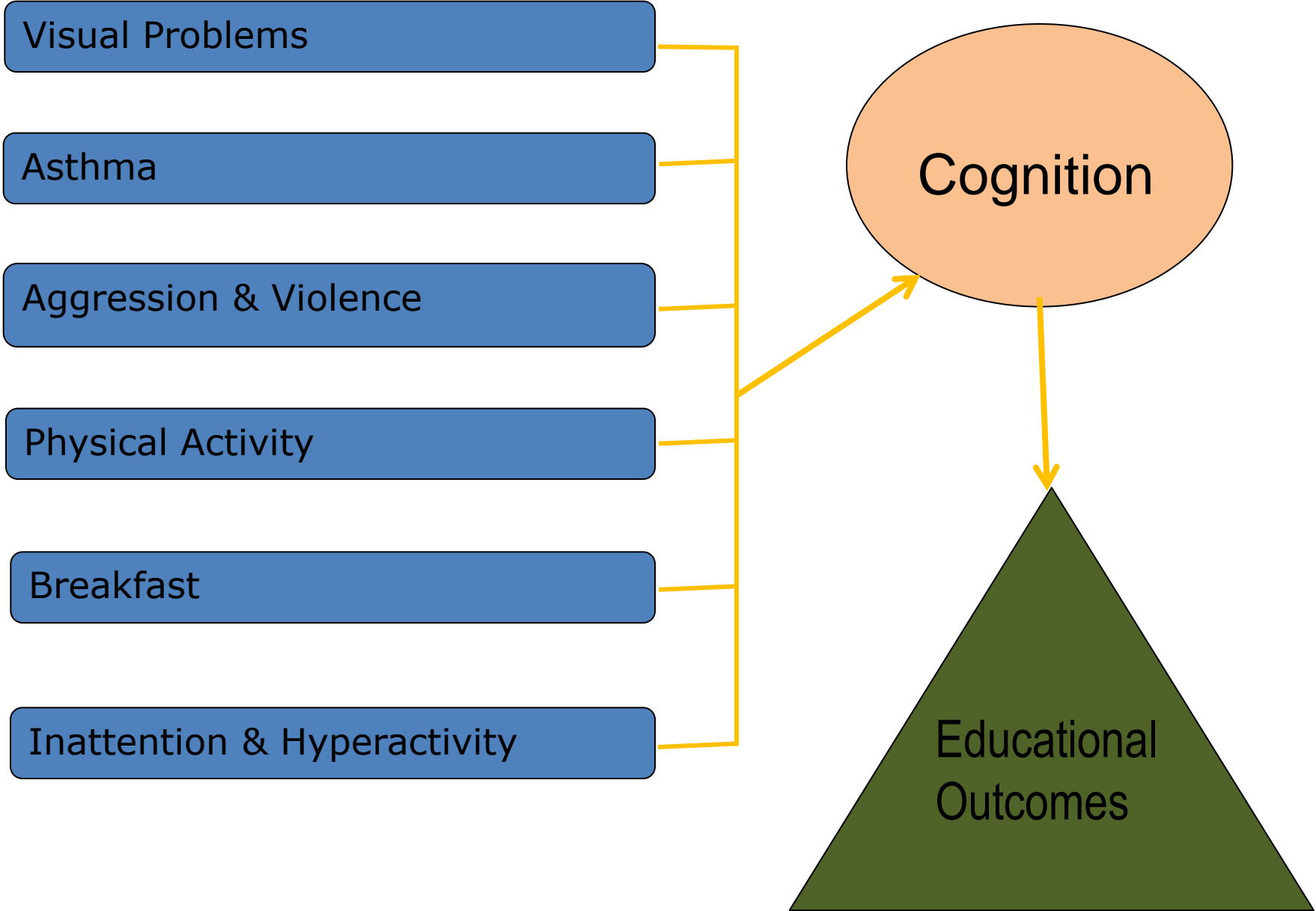
- Prevalence and Disparities
- **Causal Pathways**

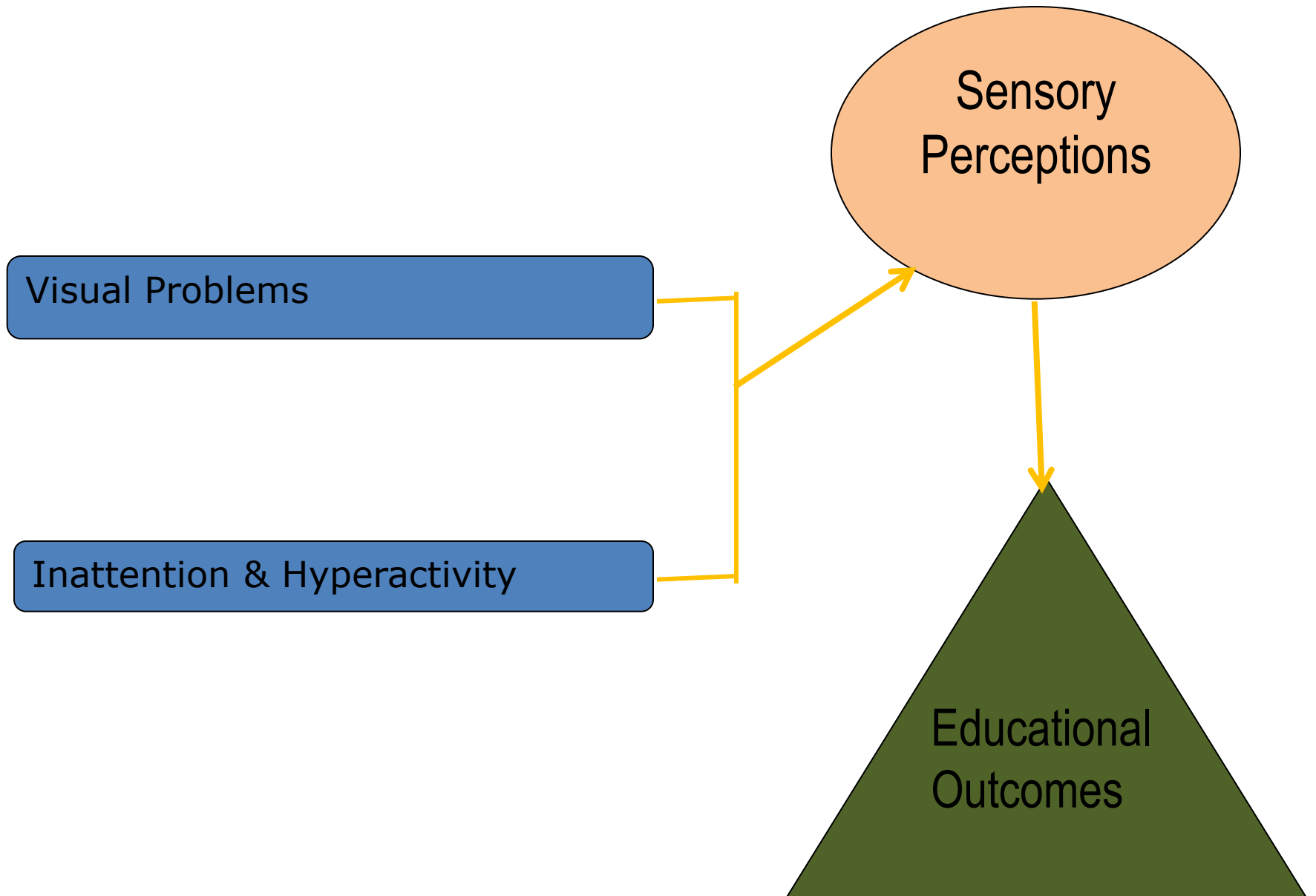
2: Effective and Efficient School Health Programs

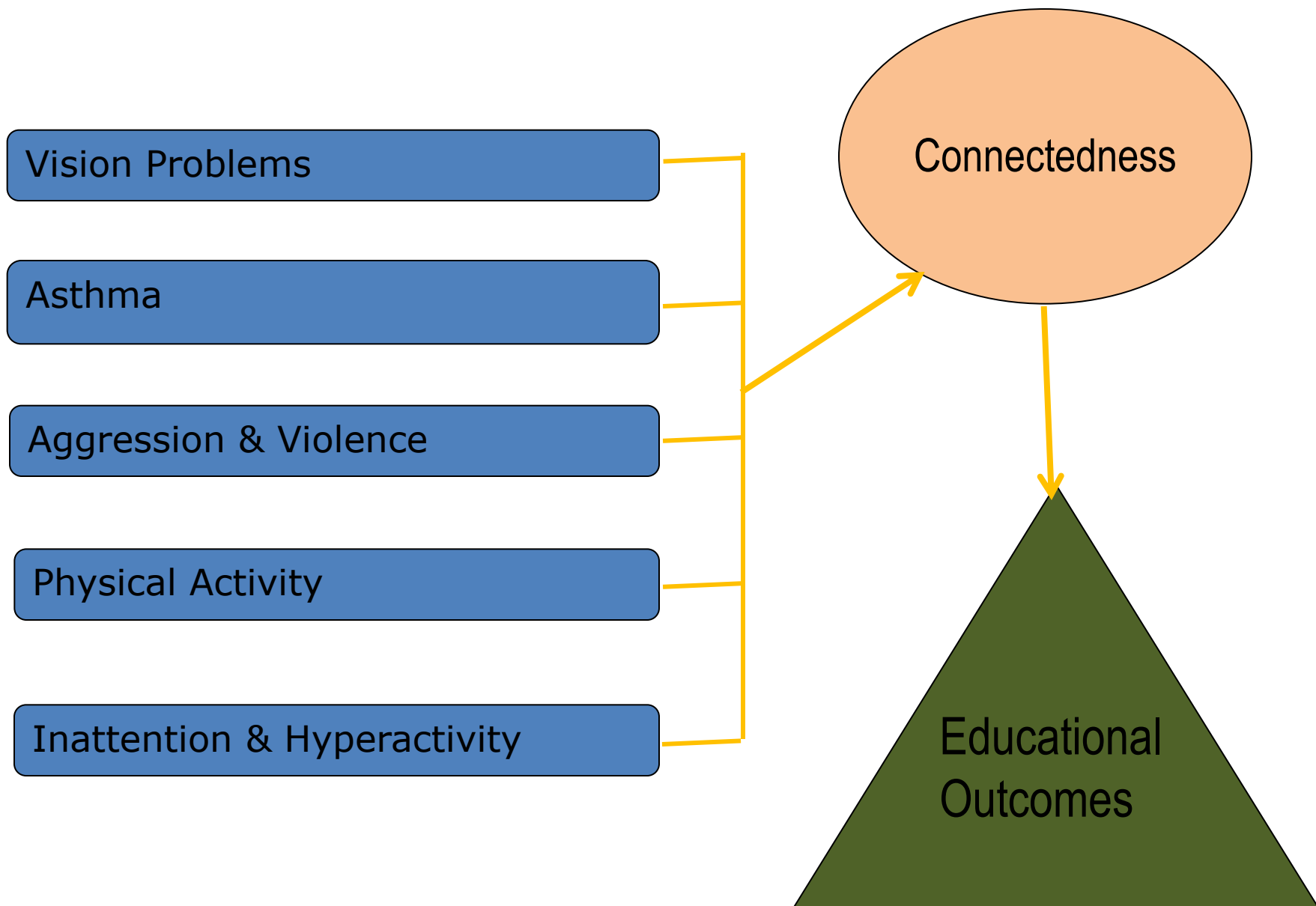
- How Schools Can Influence the Health of Youth
- How We Need to Help

Causal Pathways

- 1) cognition
- 2) sensory perceptions
- 3) school connectedness and engagement
- 4) absenteeism
- 5) temporary or permanent dropping out







Vision Problems

Asthma

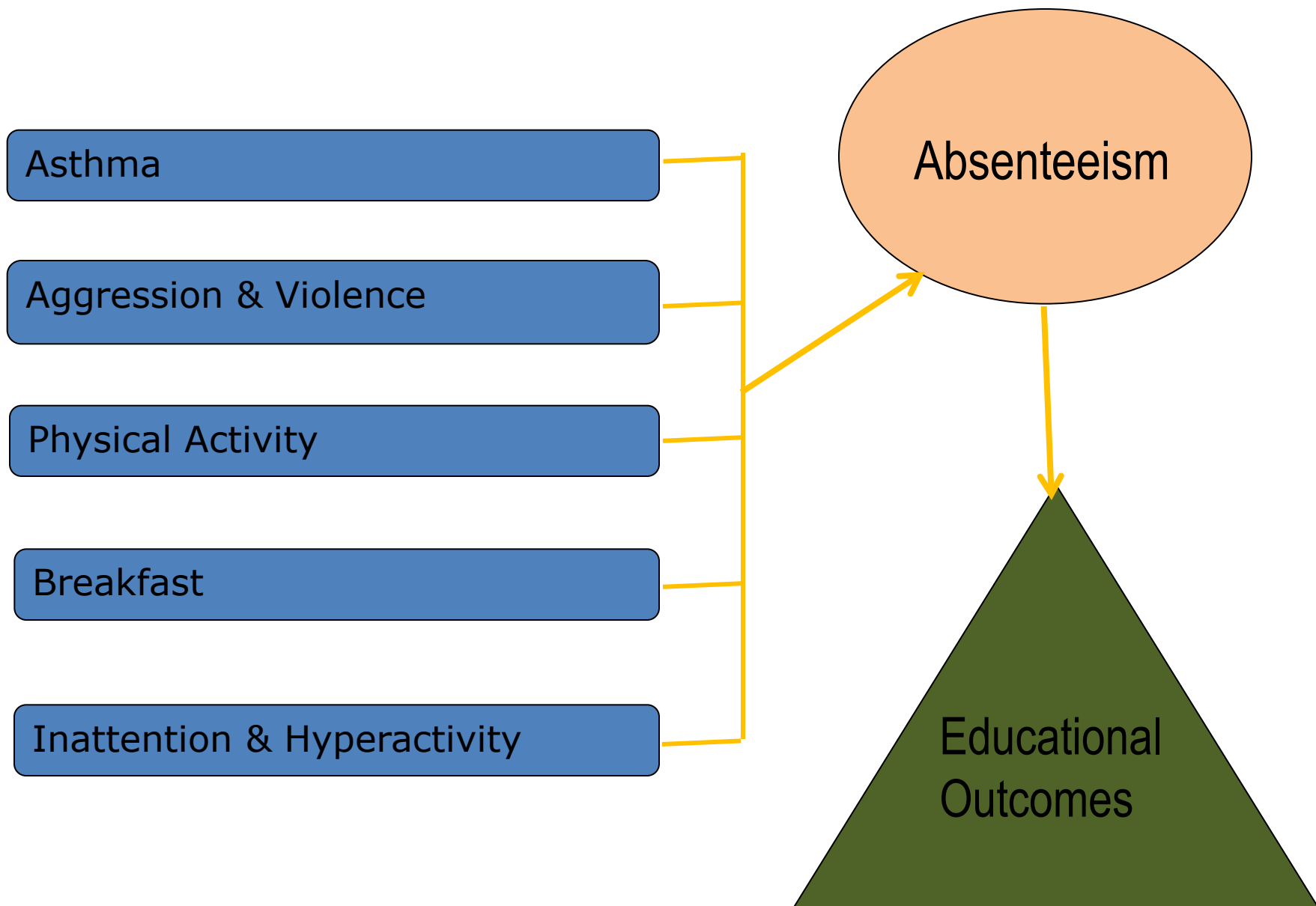
Aggression & Violence

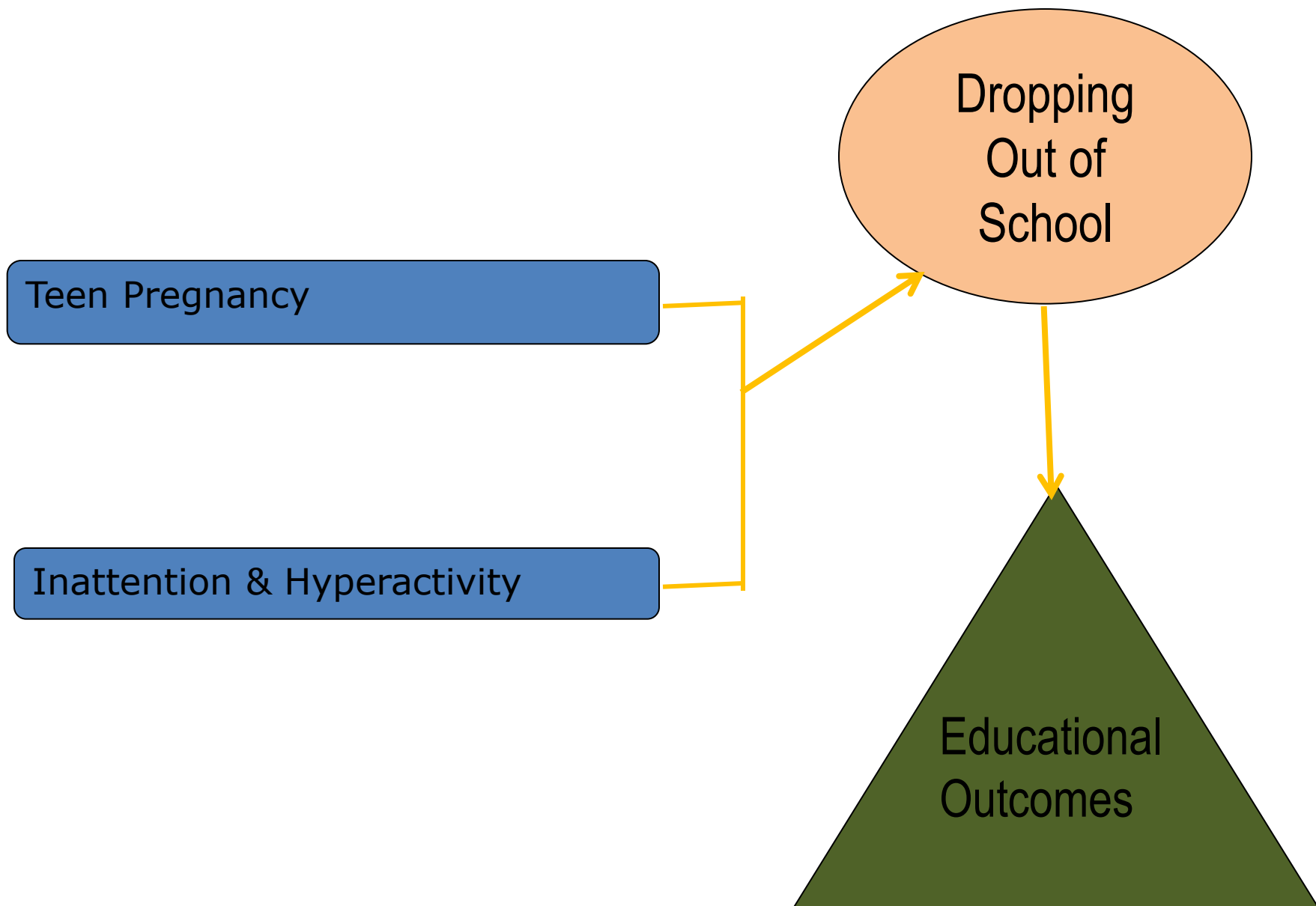
Physical Activity

Inattention & Hyperactivity

Connectedness

Educational
Outcomes





CONCLUSIONS

An Academic Imperative



If...



Synergistic Effects

- ▶ Youth experience multiple health barriers to learning (e.g., breakfast, physical activity, sleep) that produce additive and *synergistic effects*
- ▶ School health programs must, therefore, focus on *multiple* health barriers simultaneously
- ▶ In contrast, most evaluation research is reductionist

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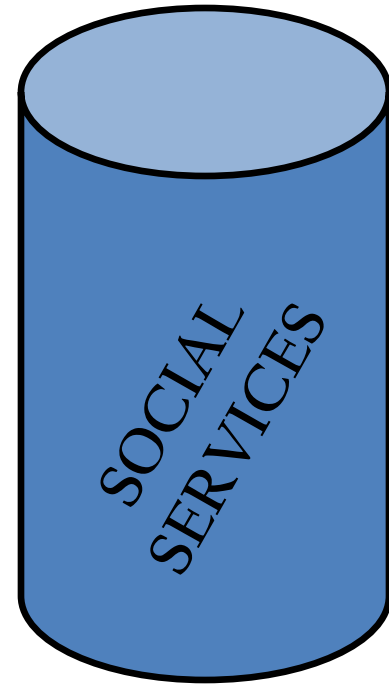
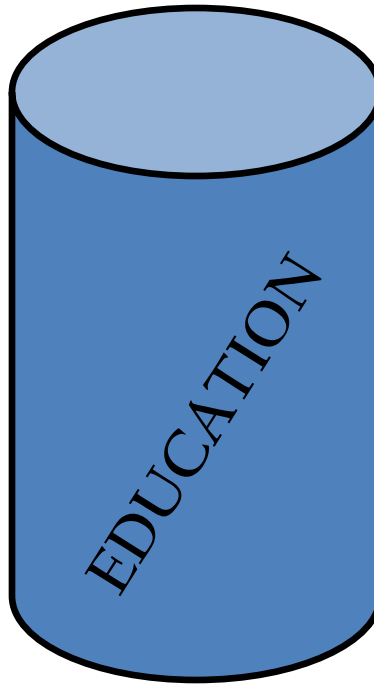
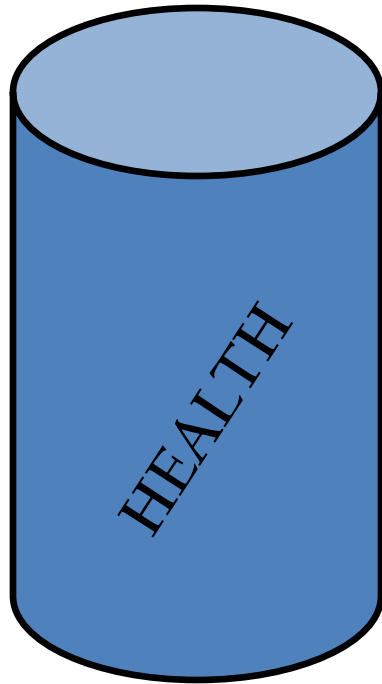
- **How Schools Can Influence the Health of Youth**
- How We Need to Help

Maximizing Returns on Investments of Social Resources

Effective and efficient school health programs are

- Strategically planned
- Rely on high quality (evidence-based) programs
- Are coordinated effectively

Our Children Are Ill Served by the Silo Approach



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Strategies for Supporting School Efforts to Reduce Health Barriers to Learning

- Policy mandates & accountability in a decentralized system
- Communication and family engagement
- Financial support and incentives
- Guidance, assistance and professional development
- Interagency collaboration & public—private partnerships
- Data systems and research
- Colleges of education & the next generation of personnel
- Reimbursement for health care delivery in schools

