

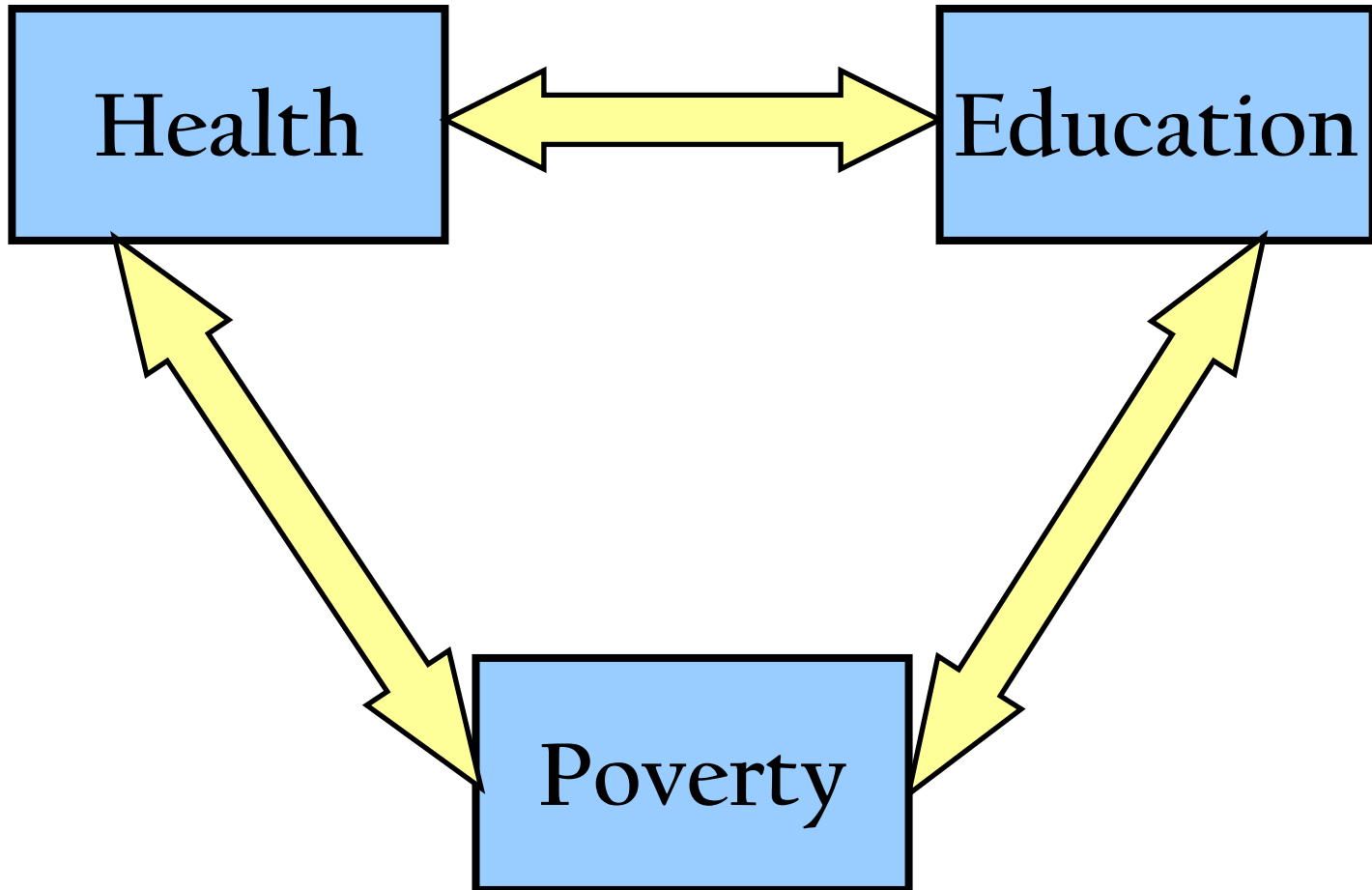
Why are Healthier Students are Better Learners?

Charles E. Basch

Strategies to Close the Educational Achievement Gap

- ▶ Standards and accountability
- ▶ Revising school financing
- ▶ Teacher preparation
- ▶ Rigorous curricula
- ▶ Charter schools
- ▶ **Reducing educationally relevant health disparities**

Reciprocal Relationships



Healthier Students are Better Learners

Focus is on ...

- Urban minority youth from low-income families
- School-age youth
- Health problems that can be feasibly and effectively addressed by schools

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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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 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**
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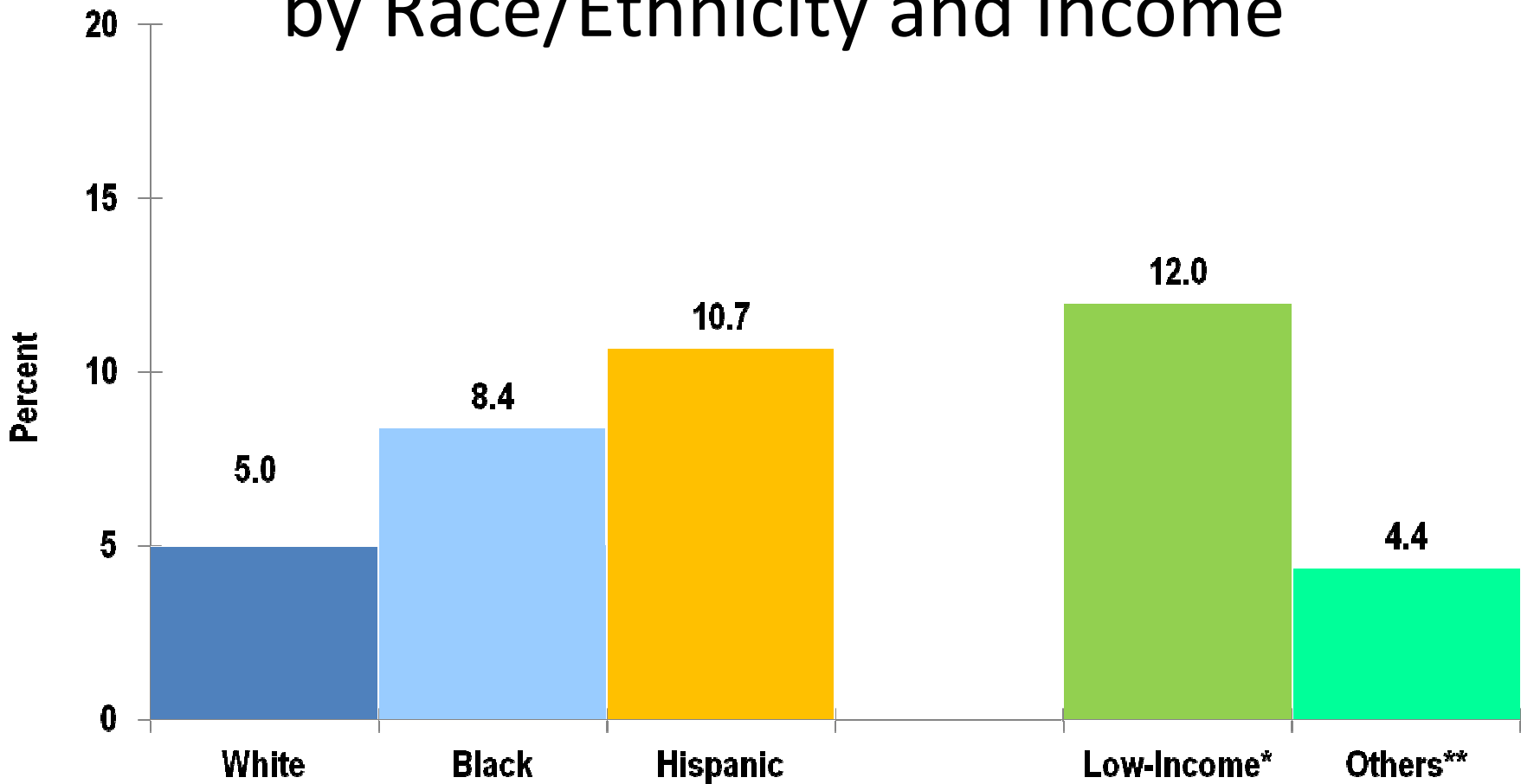
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High Prevalence

- 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

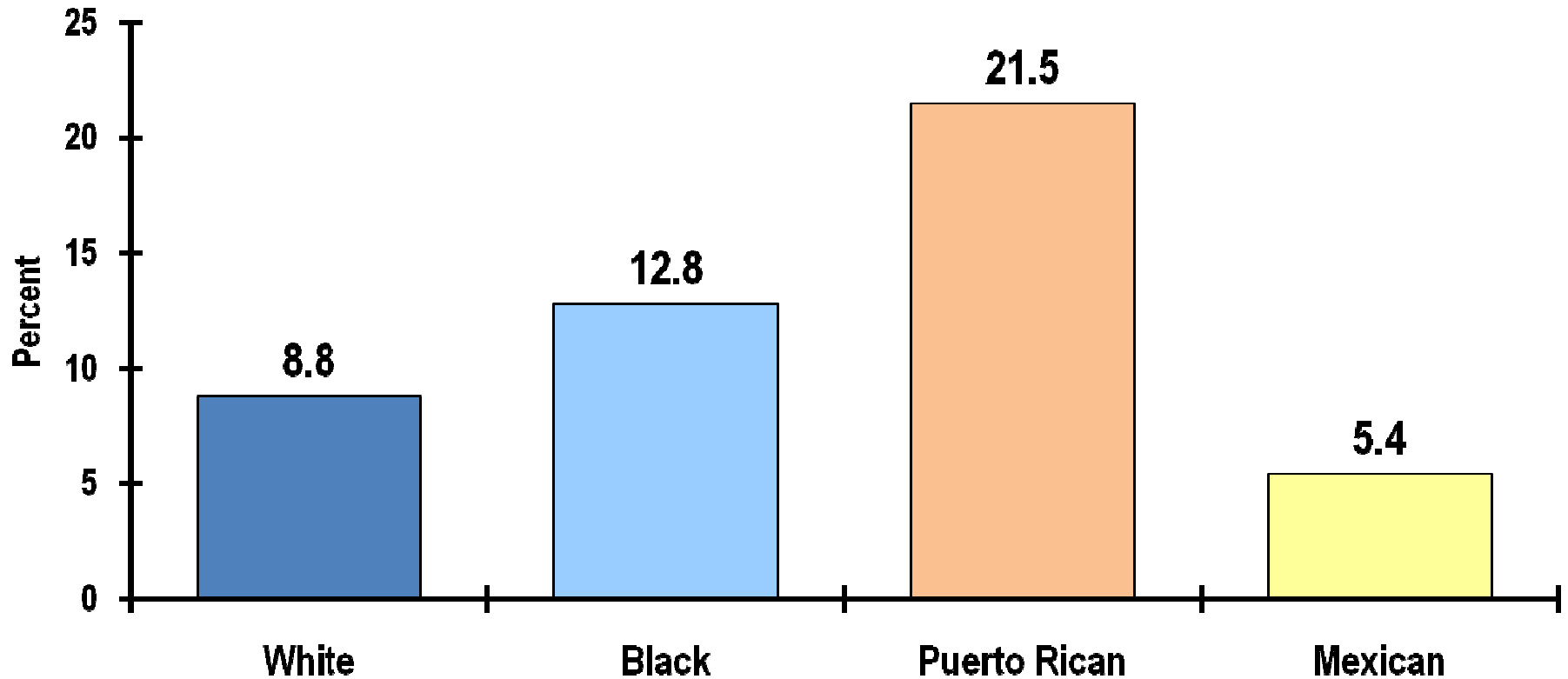
Rates of Visual Impairment in US Among Persons Age 12 and Above, by Race/Ethnicity and Income



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

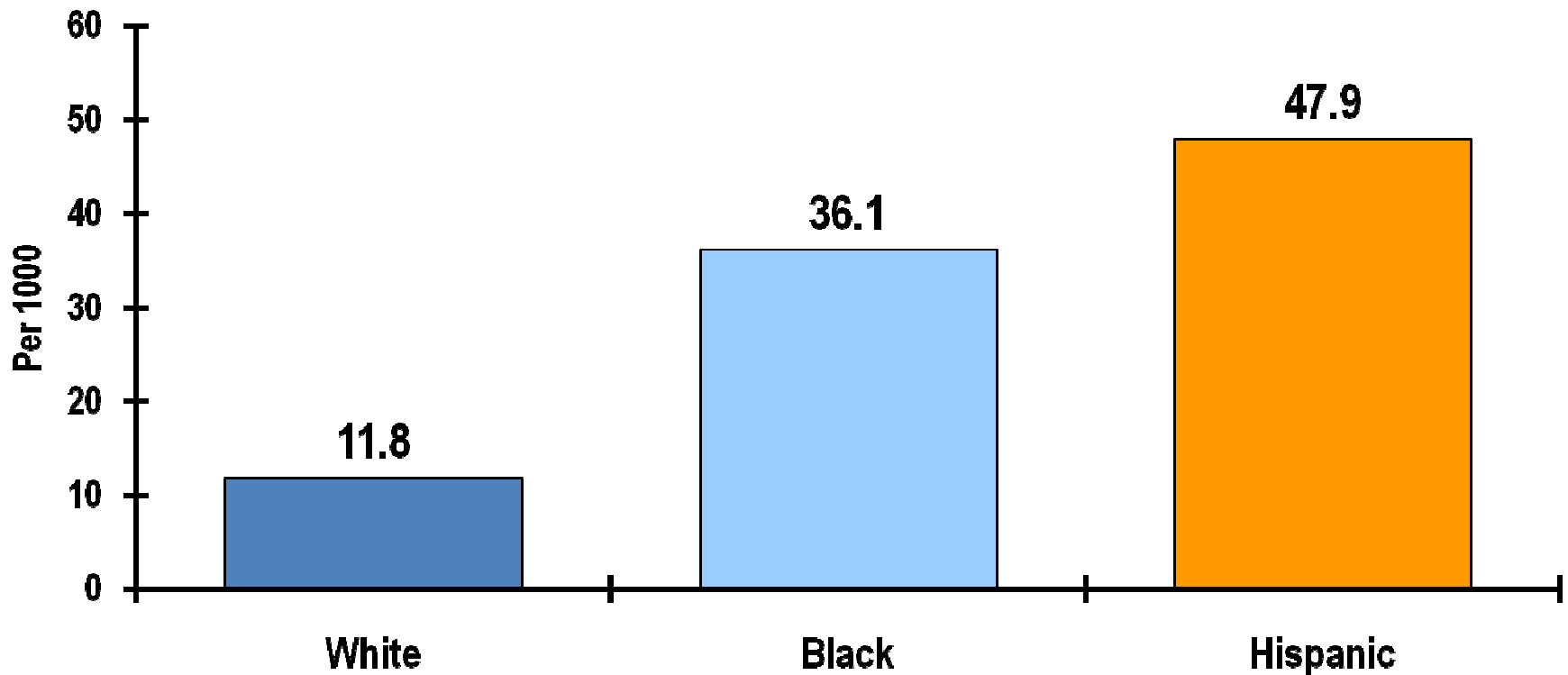
Source: NHANES 1999-2002

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

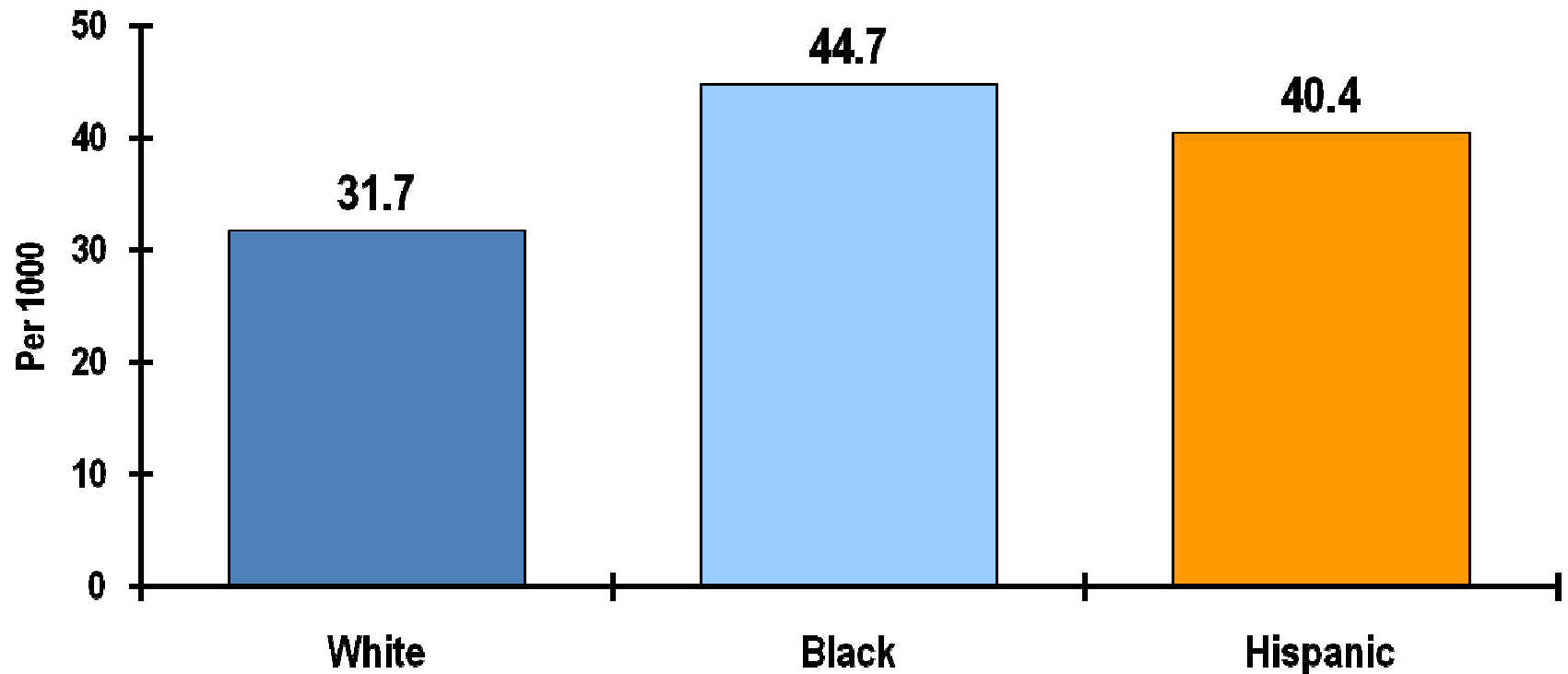


Source: National Center for Health Statistics, 2001-2003 data

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**

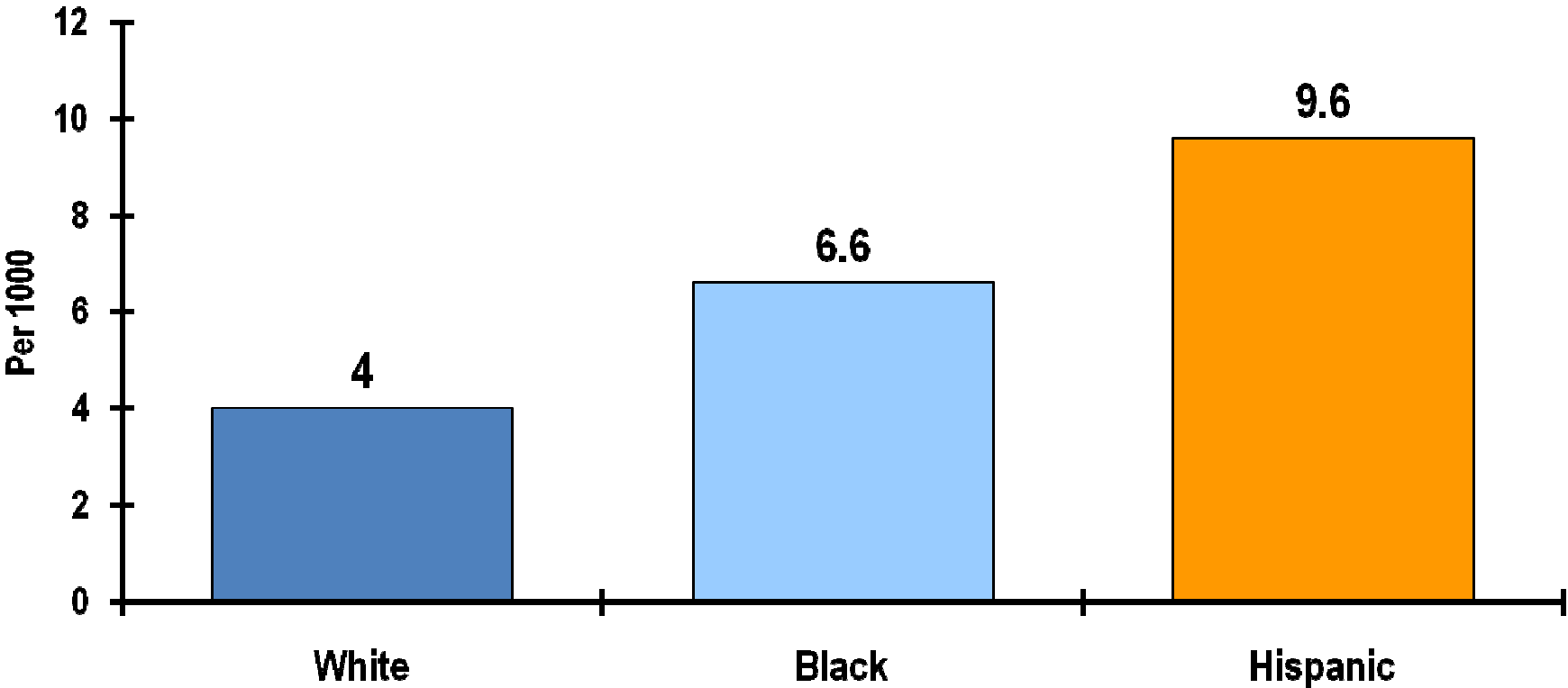


*One or more times during the 12 months before the survey.

** B > H > W

Source: CDC, National Youth Risk Behavior Survey, 2007

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**

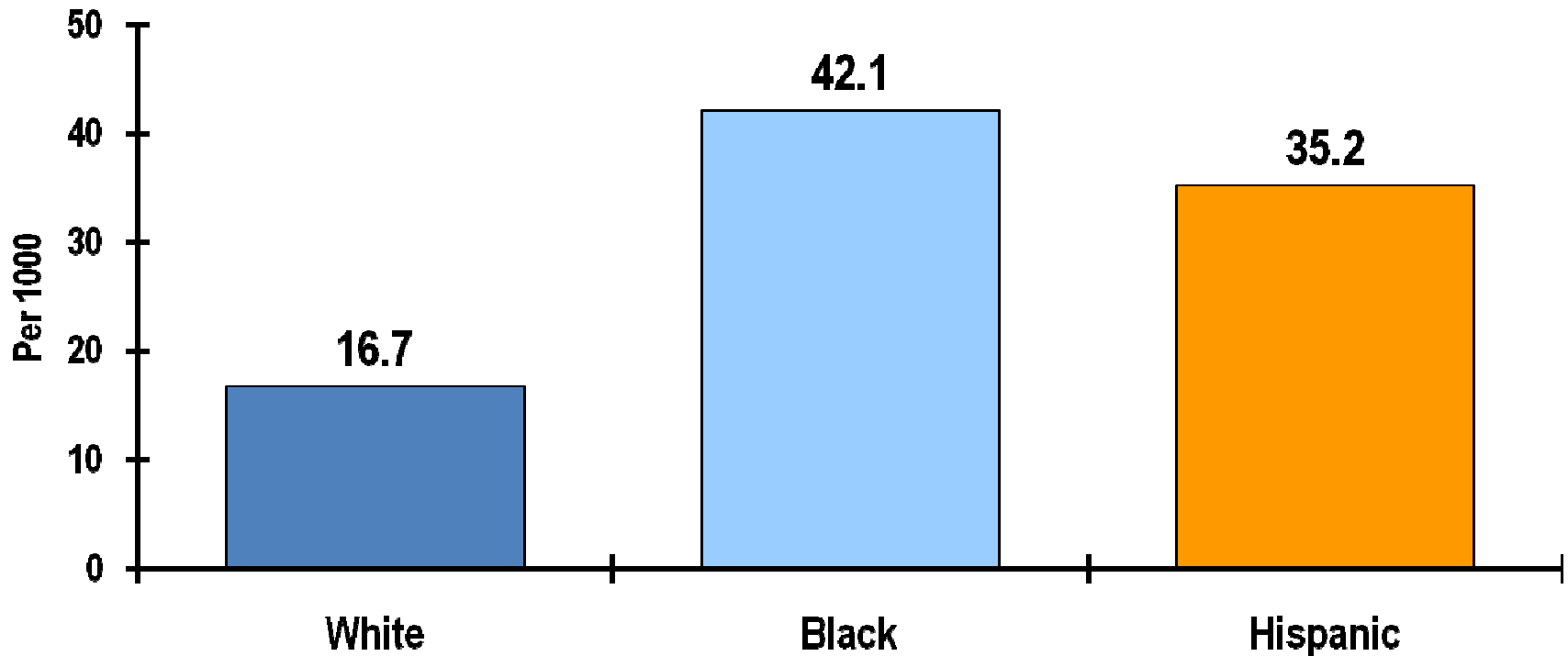


* On at least 1 day during the 30 days before the survey.

** H > B > W

Source: CDC, National Youth Risk Behavior Survey, 2007

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

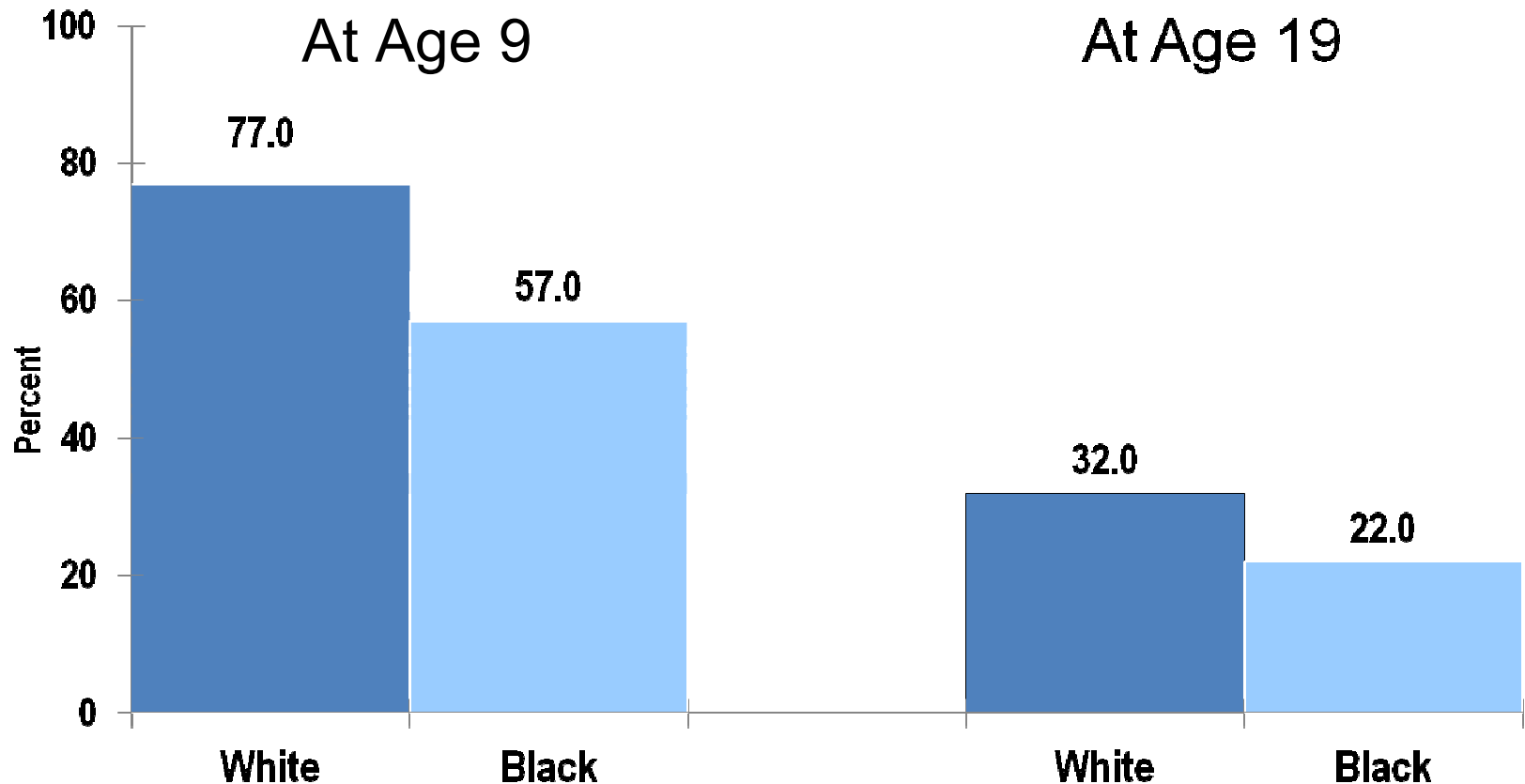


* Did not participate in 60 or more minutes of any kind of physical activity that increased their heart rate and made them breathe hard some of the time on at least 1 day during the 7 days before the survey.

** B > H > W

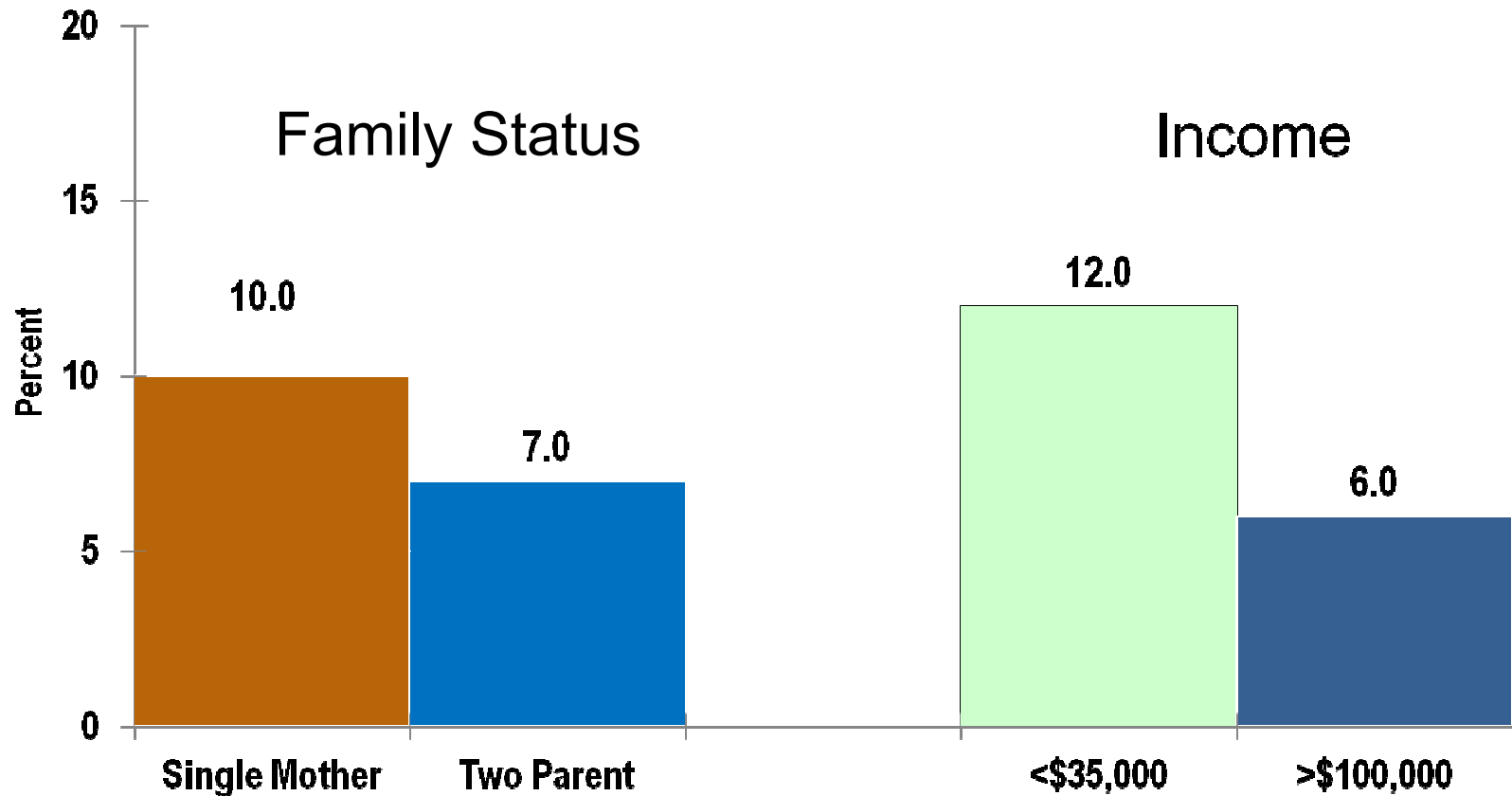
Source: CDC, National Youth Risk Behavior Survey, 2007

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

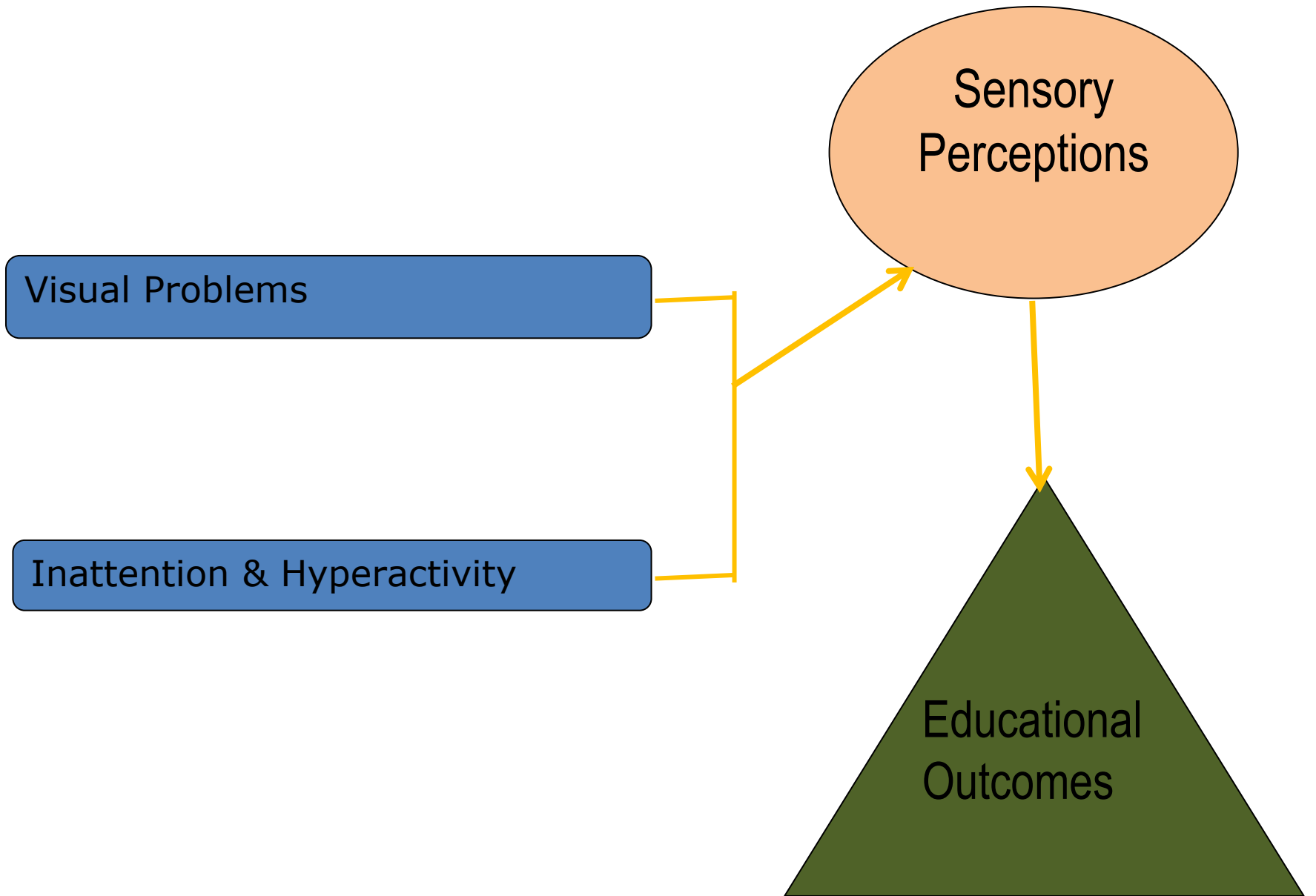
- Prevalence and Disparities
- **Causal Pathways**
- What Schools Can Do

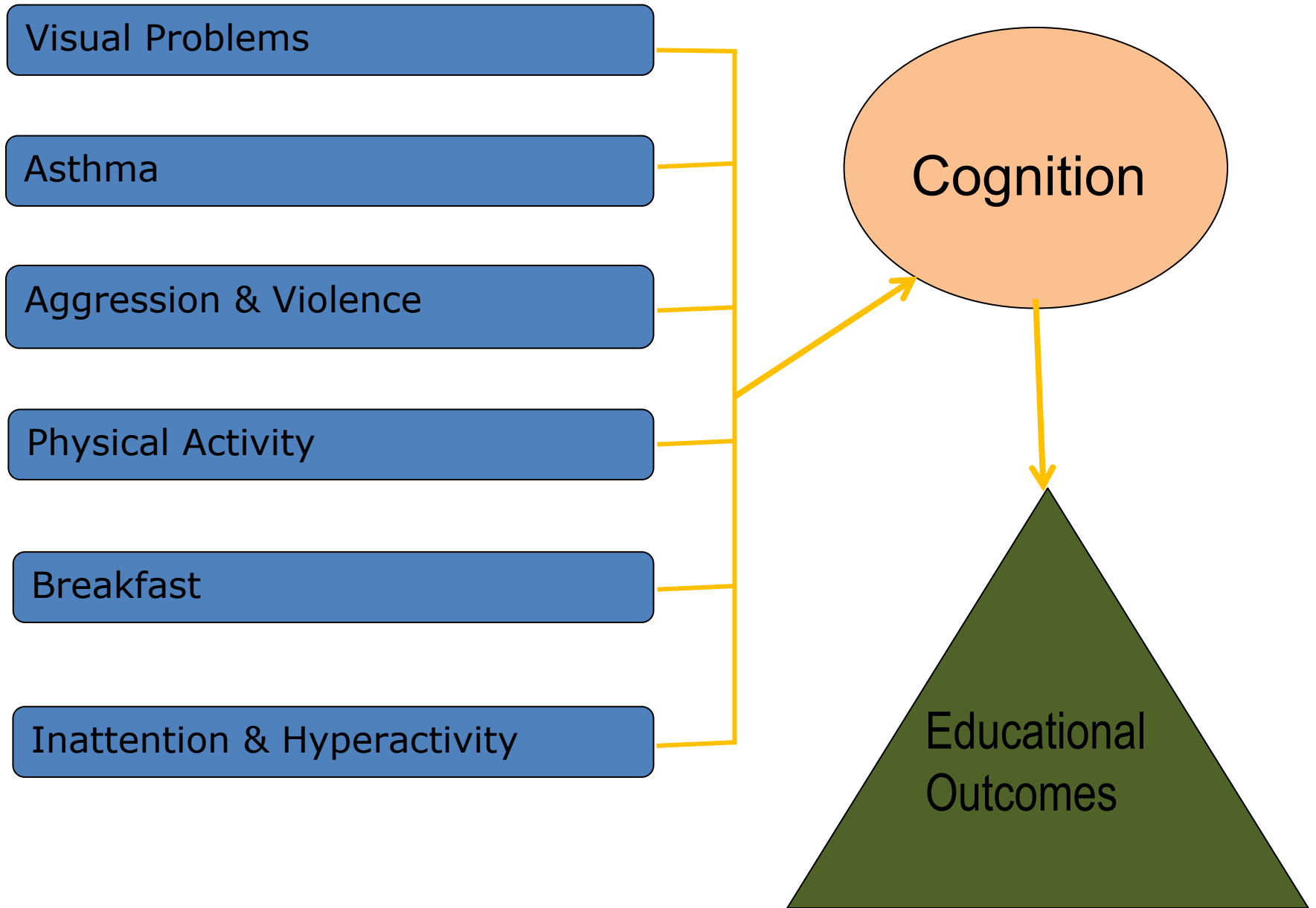
2: Effective and Efficient School Health Programs

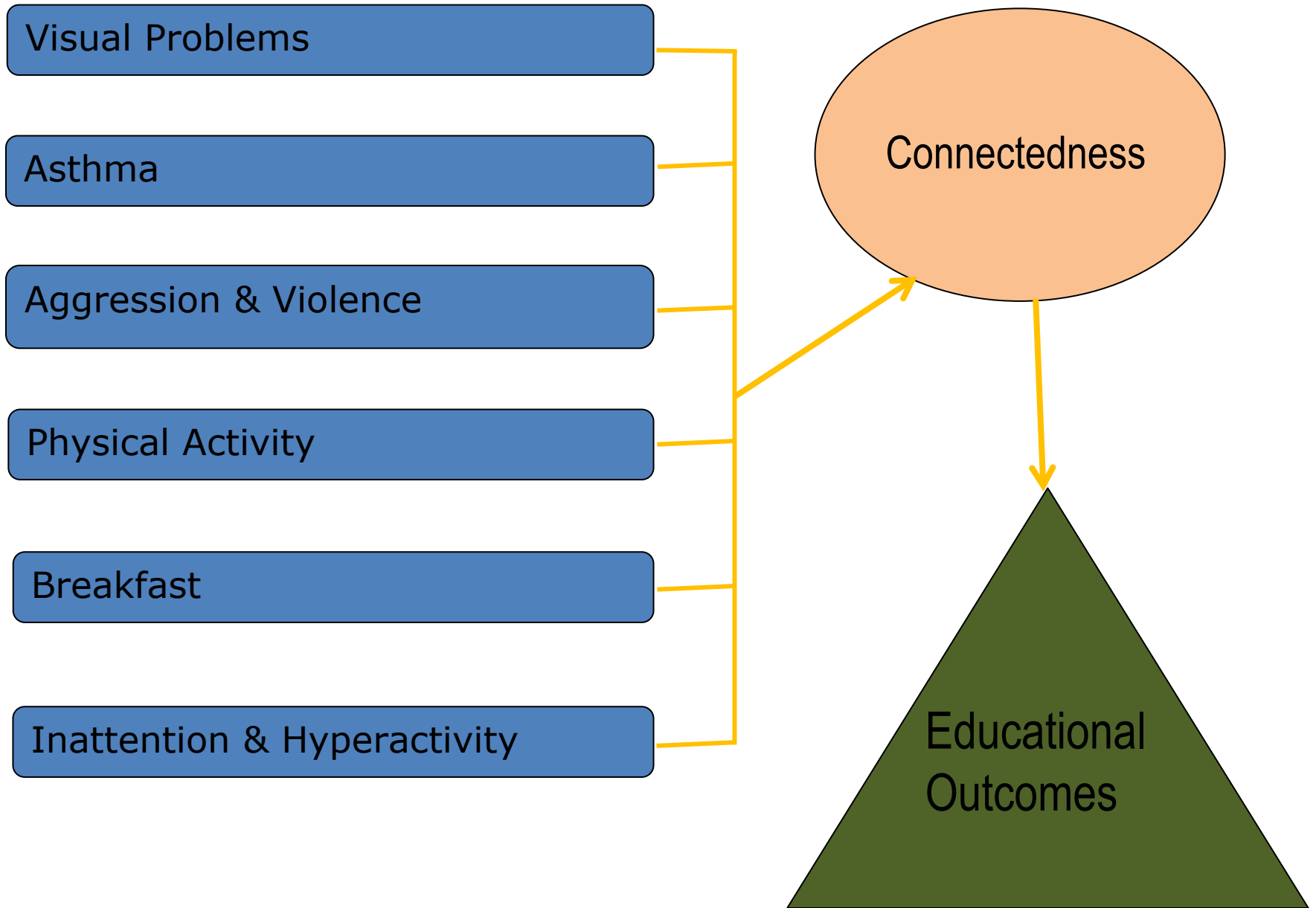
- How Schools Can Influence the Health of Youth
- How We Need to Help

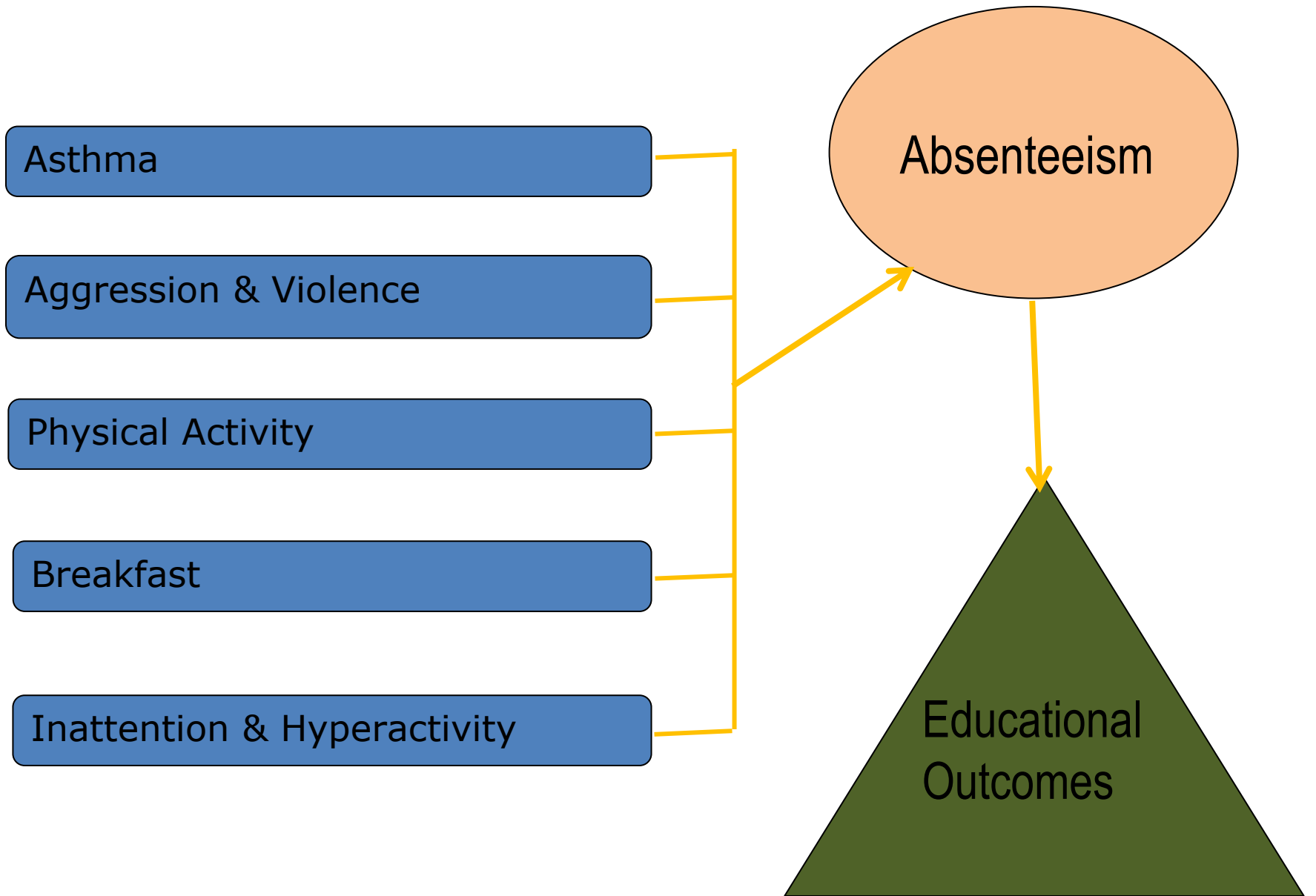
Causal Pathways

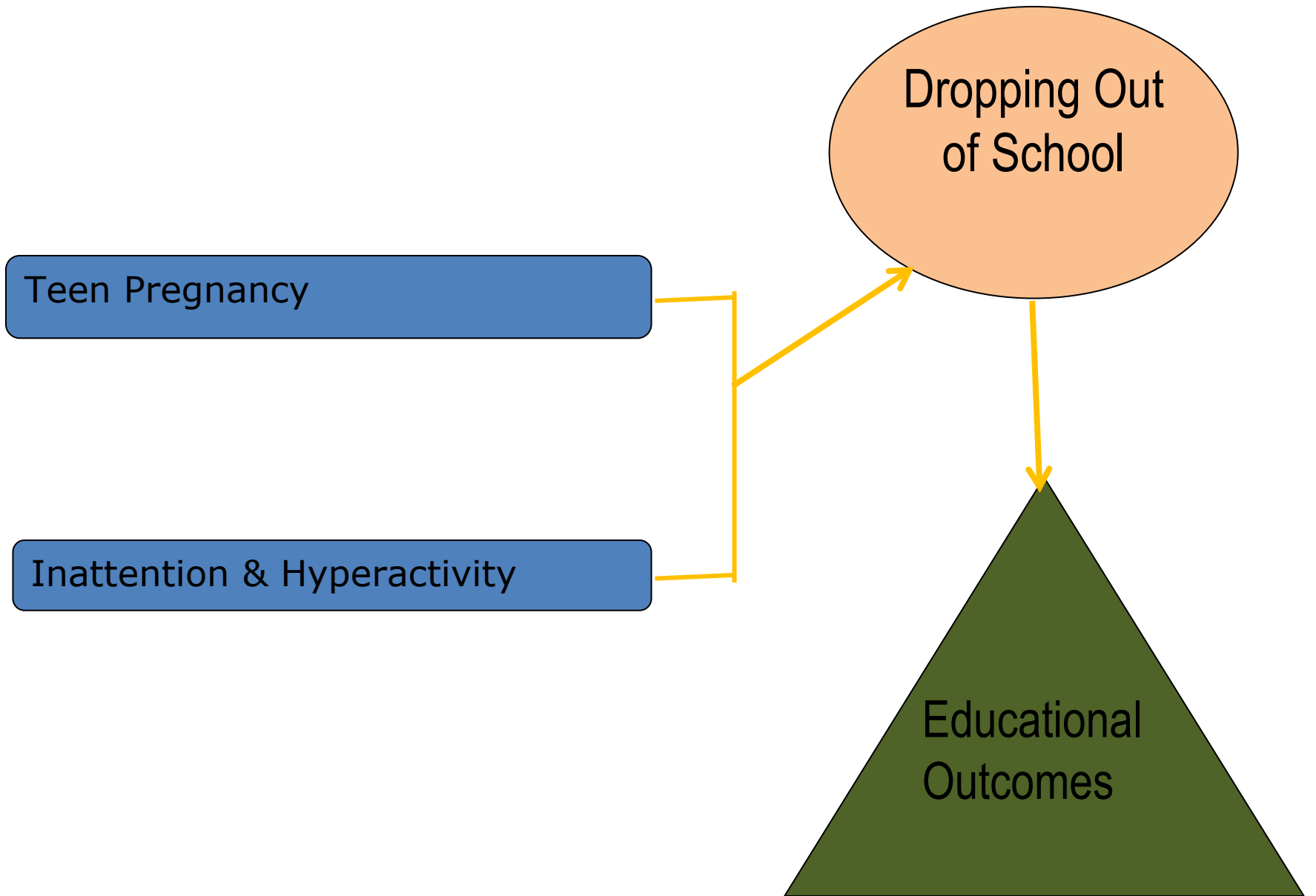
- 1) sensory perceptions
- 2) cognition
- 3) school connectedness and engagement
- 4) absenteeism
- 5) temporary or permanent dropping out











Teen Pregnancy

Inattention & Hyperactivity

Dropping Out
of School

Educational
Outcomes

Healthier Students are Better Learners

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What Can Schools Do?

- Visual Problems:
 - Vision screening
 - Outreach to parents and teachers
 - On-site provision of services
- Asthma
 - Case management
 - Elimination of environmental triggers
 - Education for students with asthma
 - Safe opportunities for physical activity

What Can Schools Do?

- Teen Pregnancy:
 - Effective, skills-based sex education
 - Social and emotional learning
 - Contraceptive services for sexually active youth
 - Health and social services for teen moms

What Can Schools Do?

- Aggression and Violence:
 - Supportive social climate
 - Safe physical environment
 - Effective, skills-based health education
 - Social and emotional learning
 - Counseling, psychological, and social services

What Can Schools Do?

- Physical Activity:
 - Standards-based physical education
 - Recess and in-class movement
 - Intramural and after-school programs
 - Support for walking and biking to school
- Breakfast
 - Universal school breakfast program
 - Allowing students to eat in classroom

What Can Schools Do?

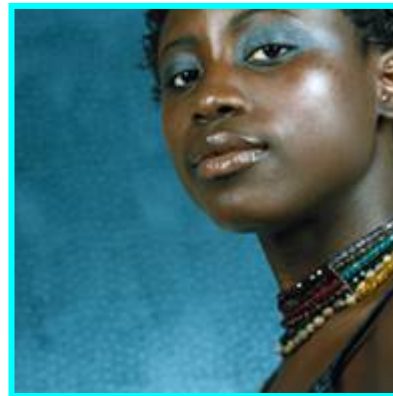
- Inattention and Hyperactivity
 - Assessment, evaluation, diagnosing, and monitoring
 - Organize classrooms to minimize distractions
 - Improving teacher–student relationship
 - Behavioral interventions
 - Academic interventions
 - Outreach and partnership with parents

CONCLUSIONS

An Academic Imperative



If...



Synergistic Effects

- ▶ Reducing multiple impediments to motivation and ability to learn (e.g., breakfast, physical activity, sleep) would be not only additive but also *synergistic*
- ▶ School health programs must focus on *multiple* educationally relevant health disparities

For More

Teachers College, Columbia University
Campaign for Educational Equity
www.equitycampaign.org

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Charles E. Basch, Ph.D.

