Healthier Students are Better Learners:

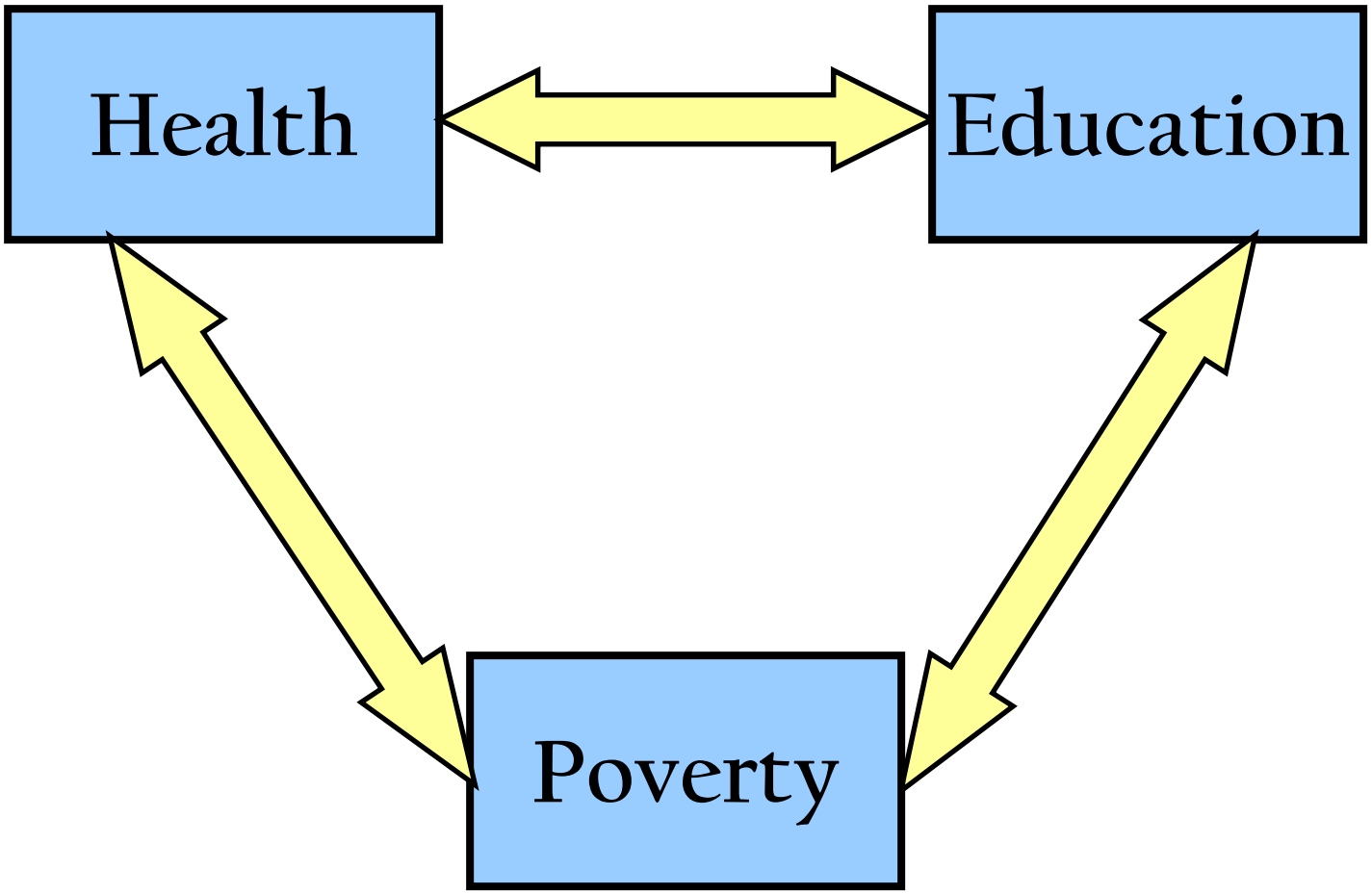
Reducing Educationally Relevant Health Disparities is a Missing Link in School Reforms to Close the Achievement Gap among Urban Minority Youth

Charles E. Basch

Strategies to Close the Educational Achievement Gap

- Standards and accountability
- Revising school financing
- Teacher preparation
- Rigorous curricula
- Charter schools
- **Reducing 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

2: Effective and Efficient School Health Programs

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

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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

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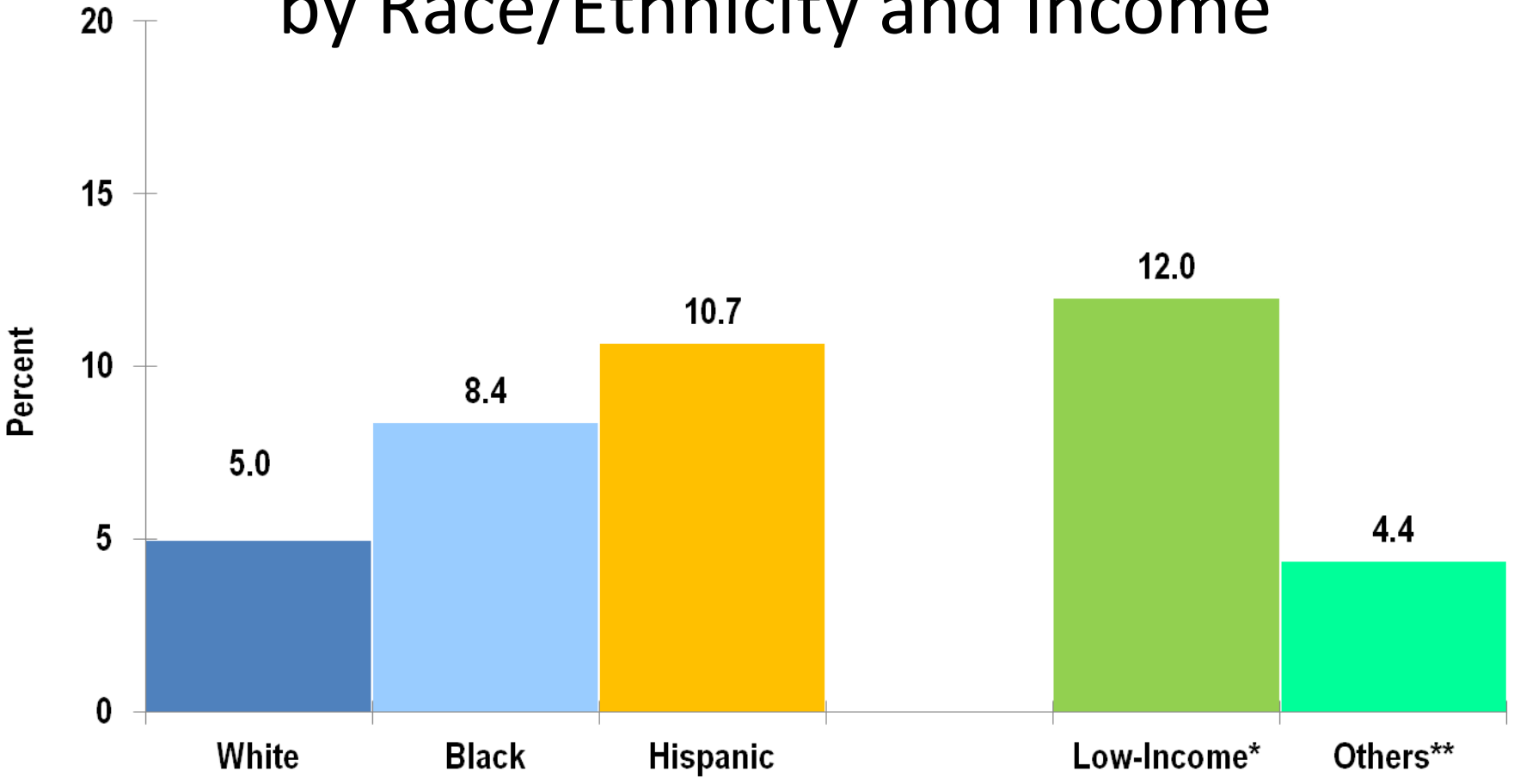
High Prevalence

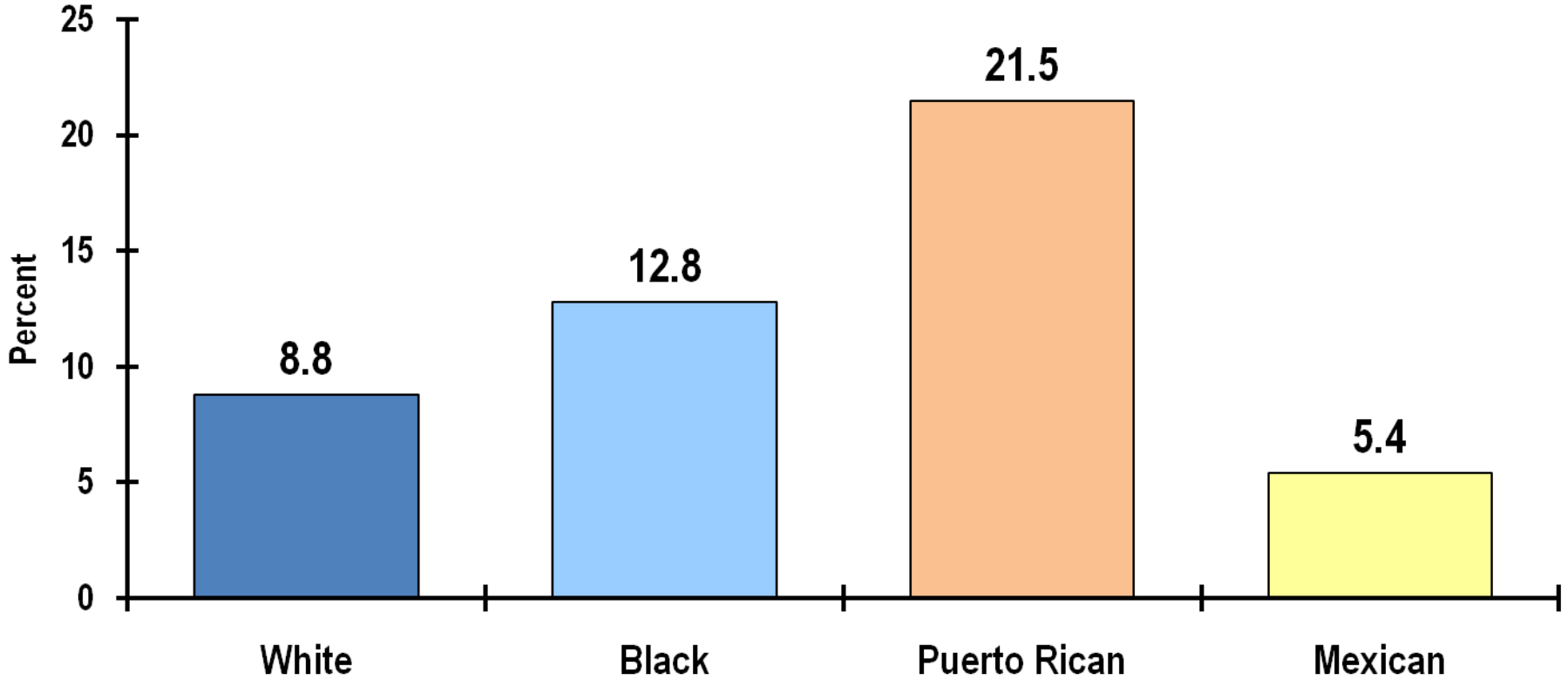
- Visual problems: ~20% of youth
- Asthma: ~14% of youth <18
- Teen pregnancy: 1 in 3 teens
- Violence: 28% of adolescents bullied at school
- Physical activity: ~2 in 3 don't get enough
- Breakfast: ~20% of youth skip it
- Hyperactivity: ~8% of youth 6-17 diagnosed

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



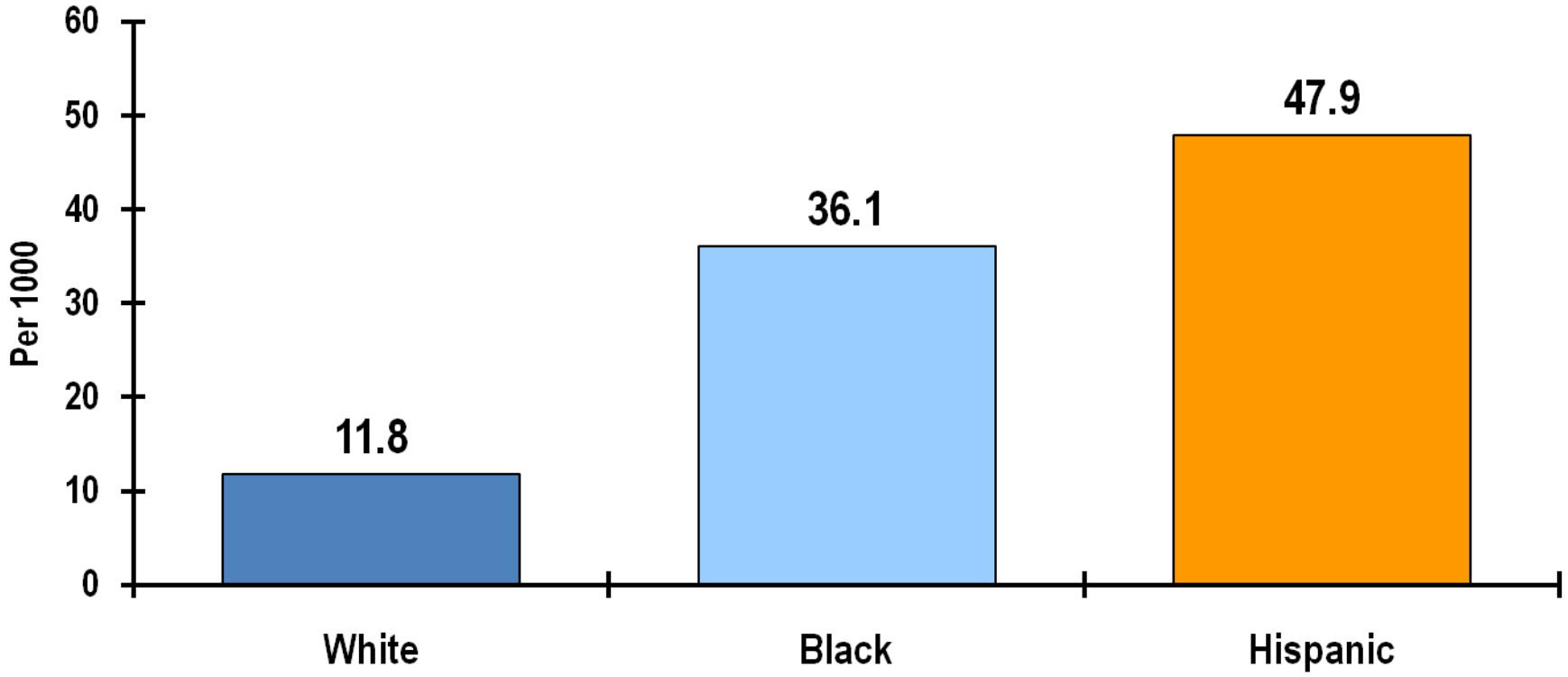
*Income below poverty level; **Income ≥2X poverty level
Source: NHANES 1999-2002

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



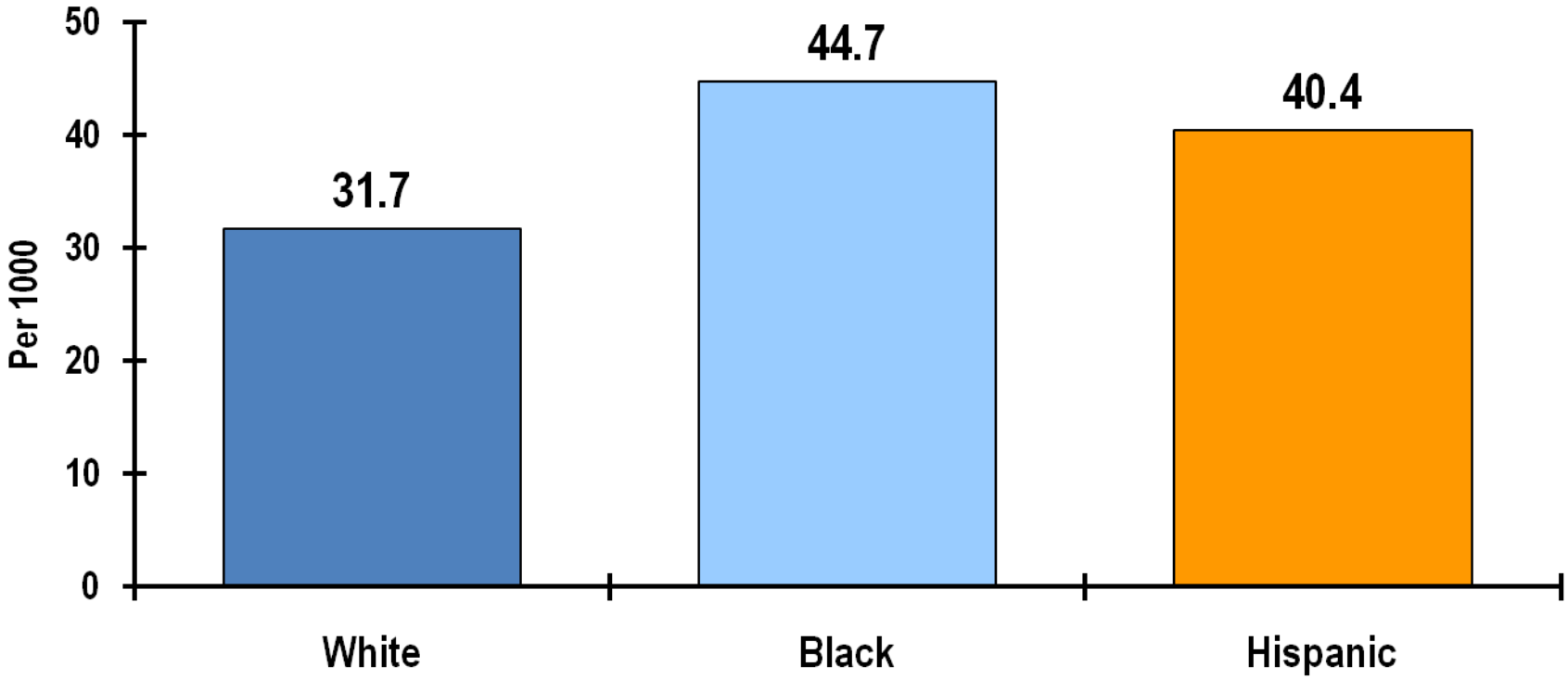
Source: National Center for Health Statistics, 2001-2003 data

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



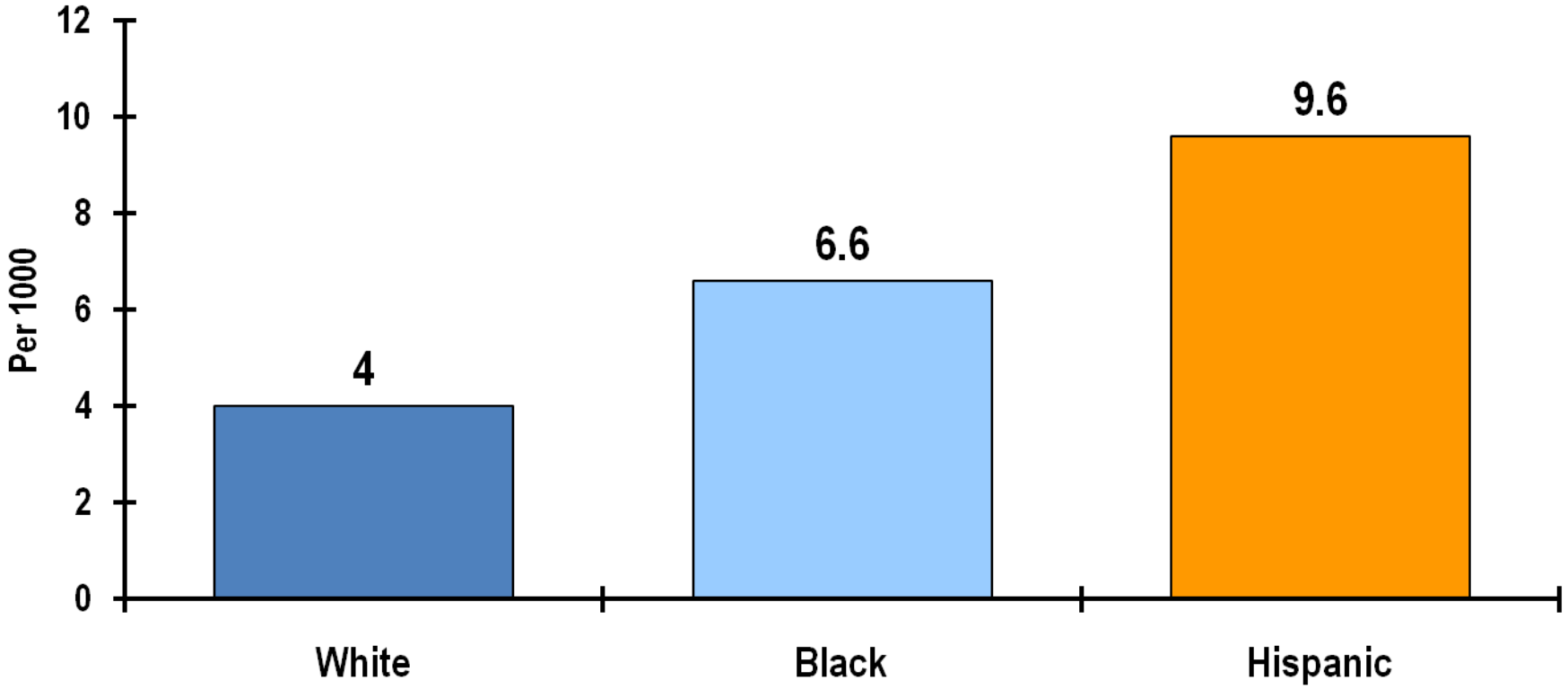
Source: Annual Summary of Vital Statistics, 2006

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



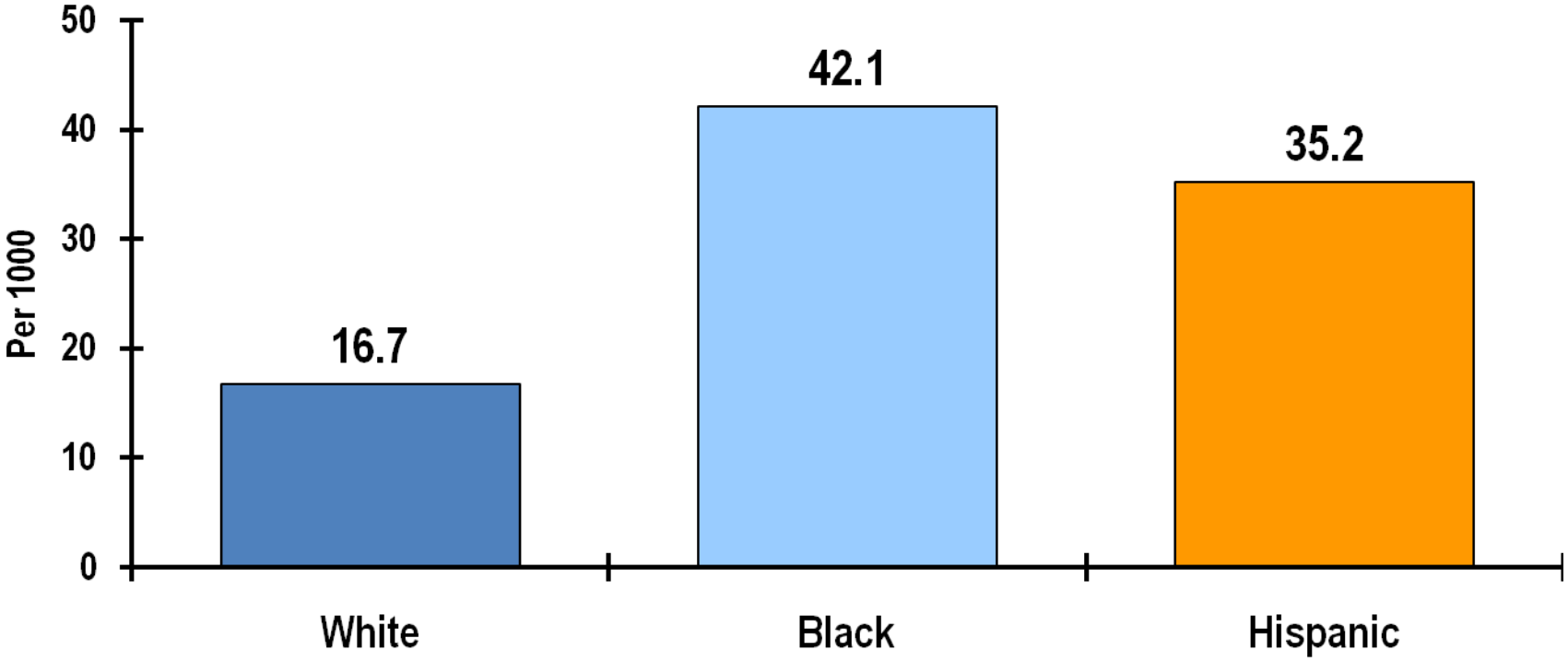
*One or more times during the 12 months before the survey.
** B > H > W
Source: CDC, National Youth Risk Behavior Survey, 2007

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**

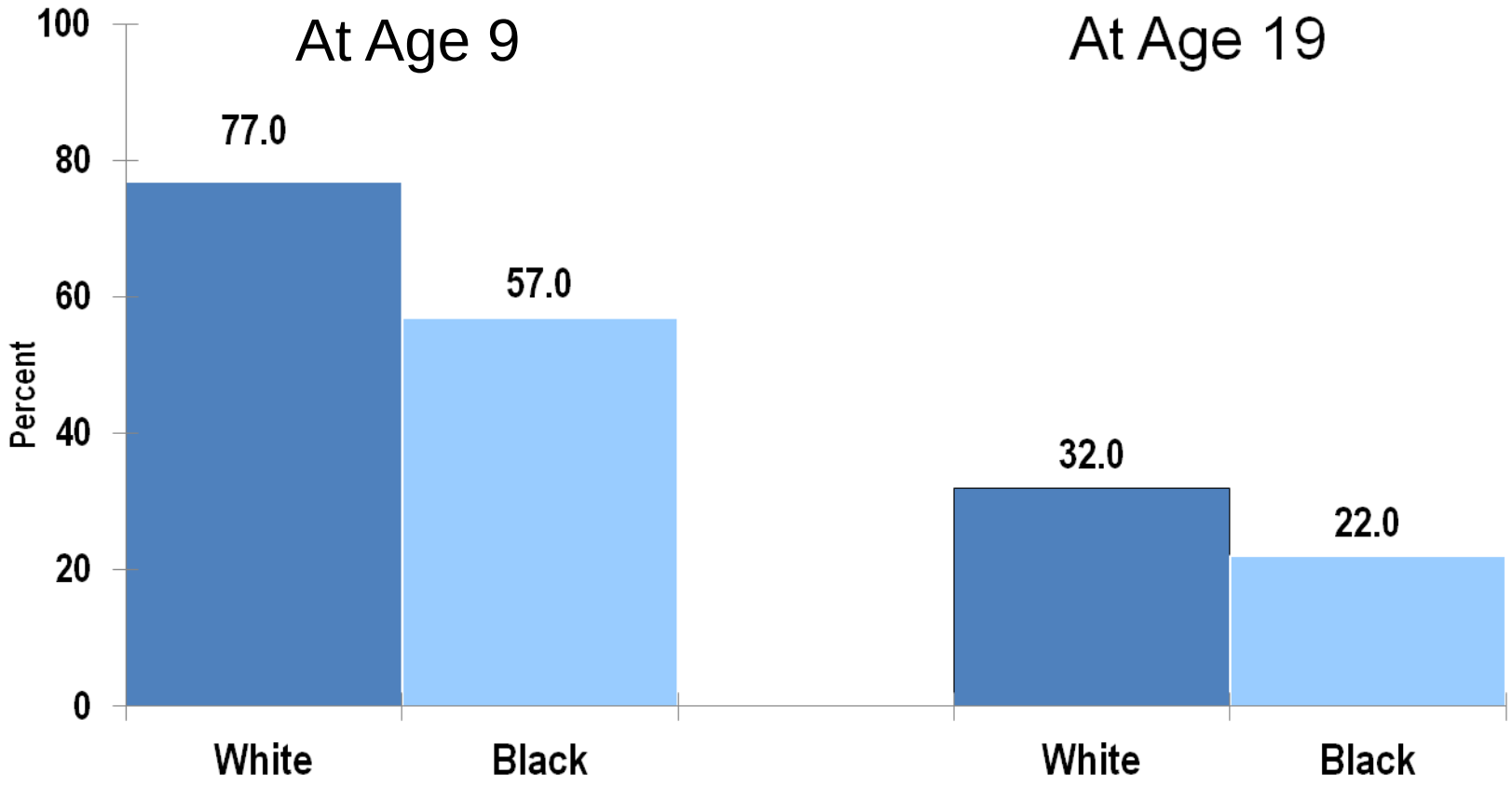


* Did not participate in 60 or more minutes of any kind of physical activity that increased their heart rate and made them breathe hard some of the time on at least 1 day during the 7 days before the survey.

** B > H > W

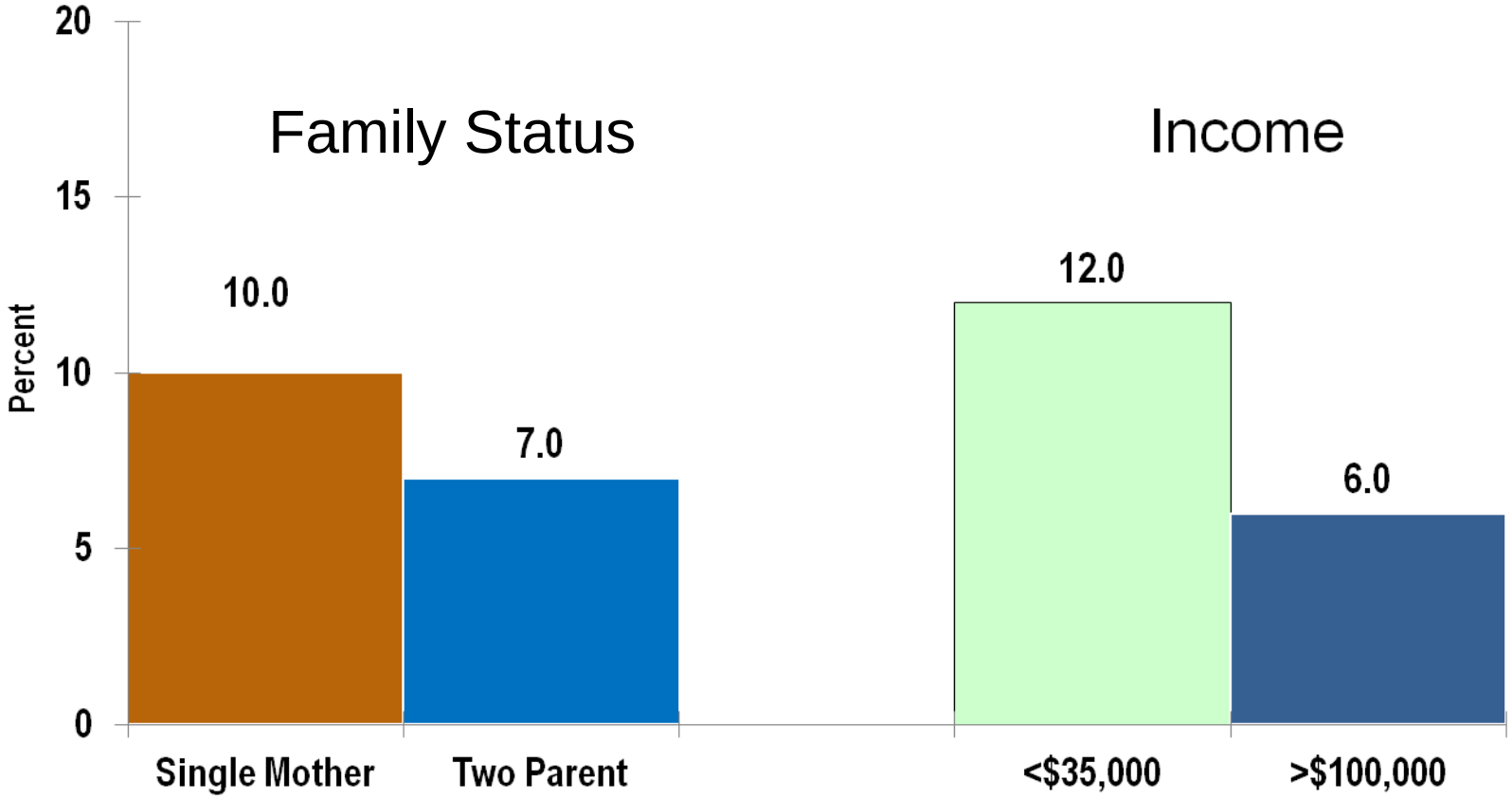
Source: CDC, National Youth Risk Behavior Survey, 2007

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

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- **Causal Pathways**
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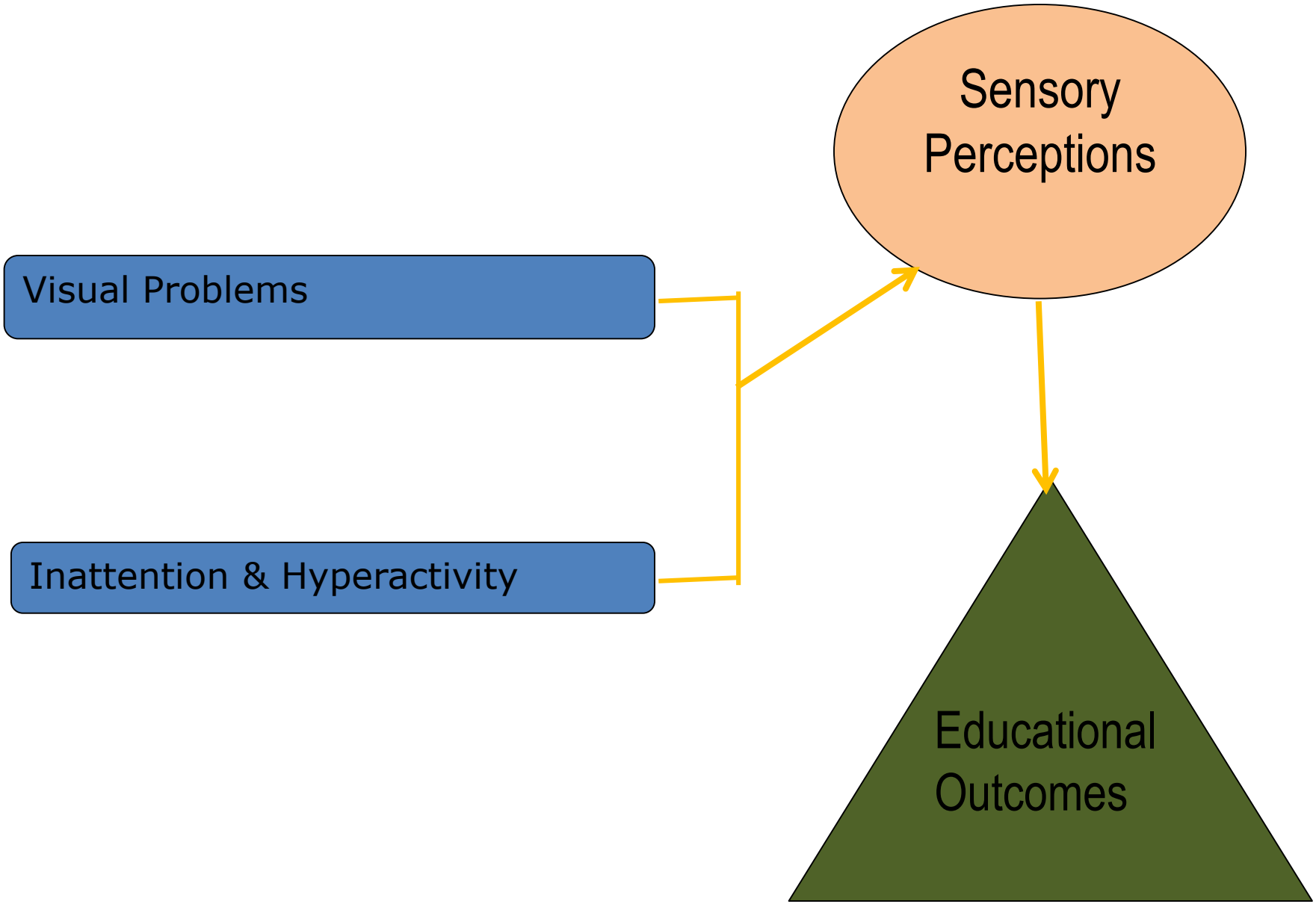
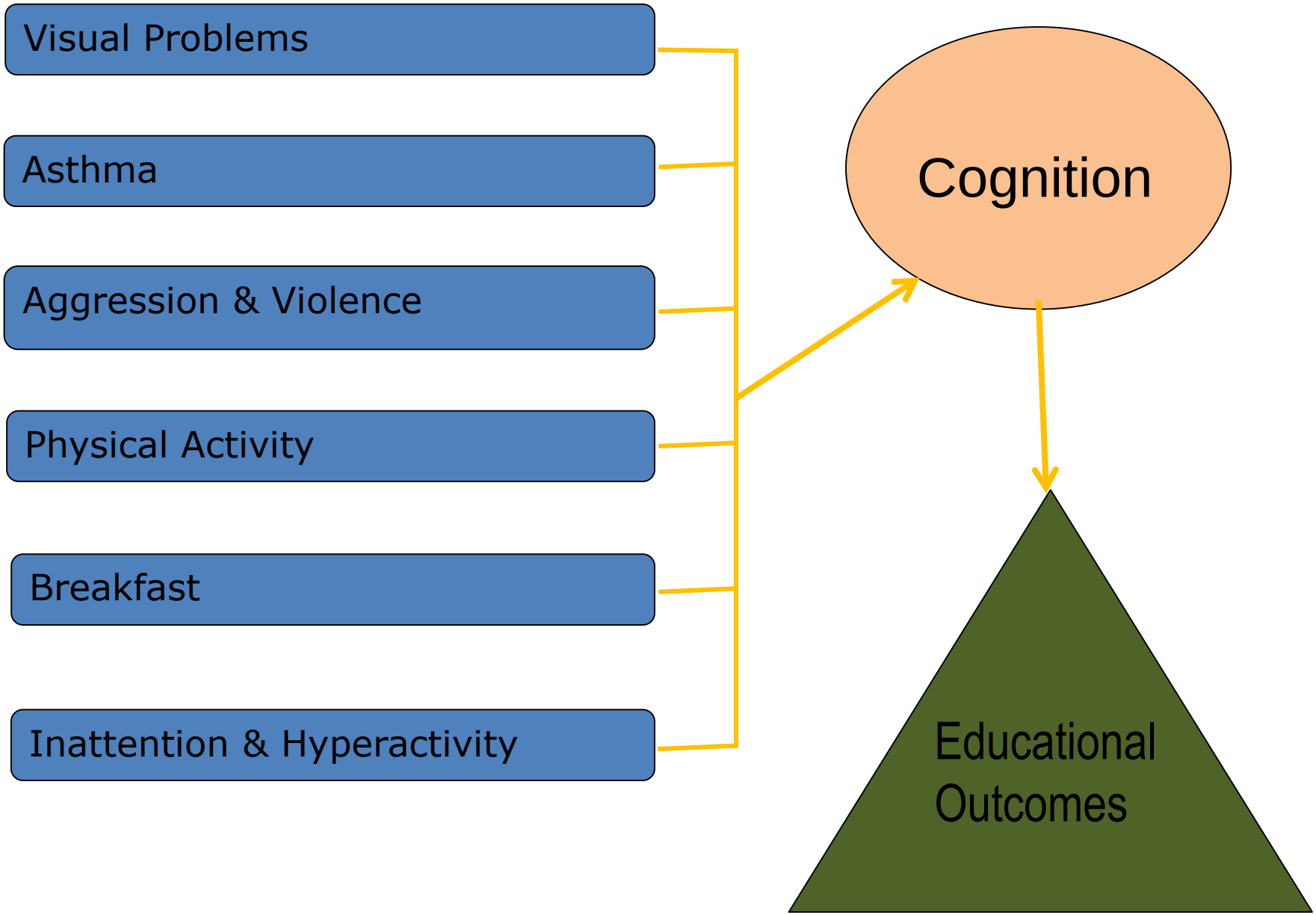
Causal Pathways

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


Sensory Perceptions
Visual Problems
Inattention & Hyperactivity
Educational Outcomes


Visual Problems
Asthma
Aggression & Violence
Physical Activity
Breakfast
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Cognition
Educational Outcomes

Visual Problems

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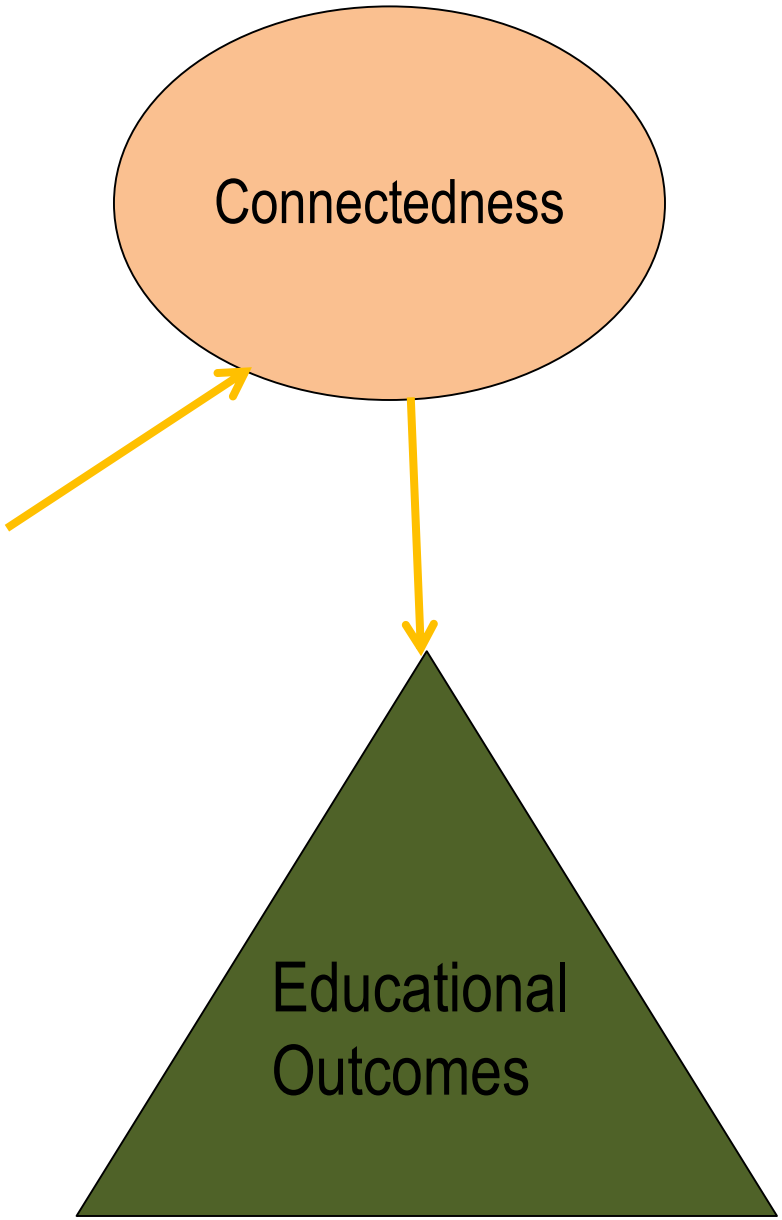
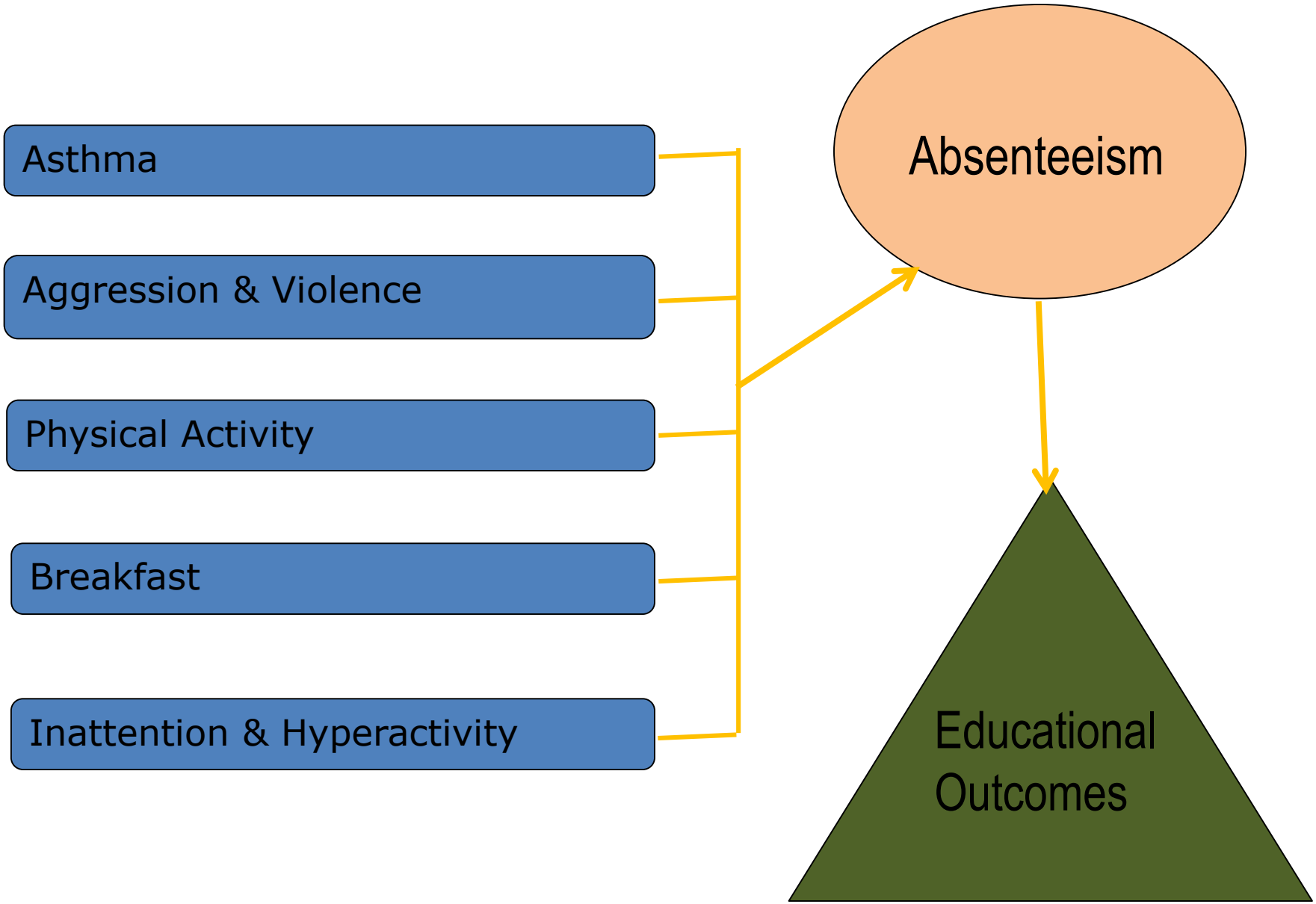
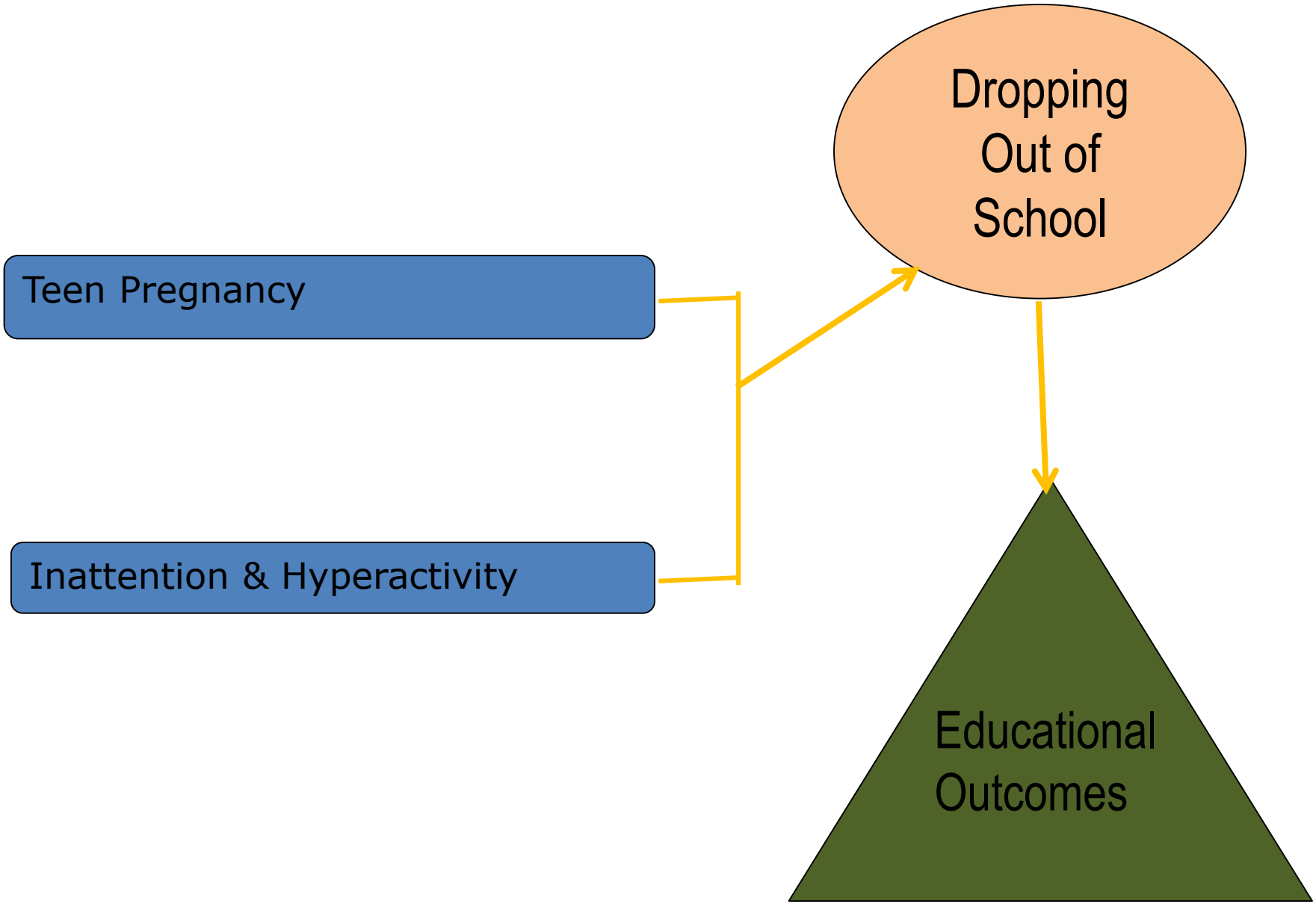



Asthma
Aggression & Violence
Physical Activity
Breakfast
Inattention & Hyperactivity
Absenteeism
Educational Outcomes


Dropping Out of School
Teen Pregnancy
Inattention & Hyperactivity
Educational Outcomes

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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

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Recognition in Education Reform Proposals

Healthy Kids Make Better Students. Better Students Make Healthy Communities

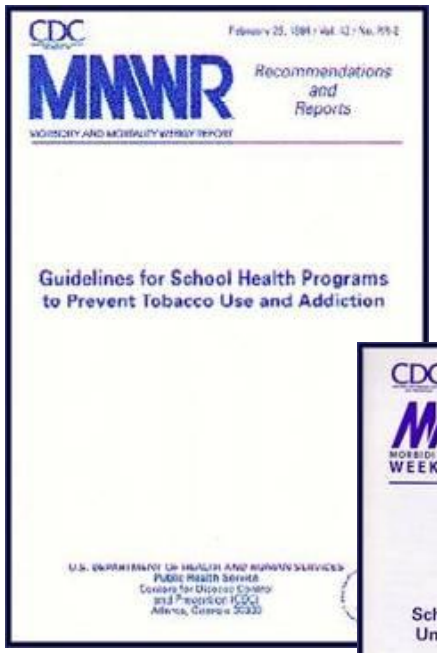
Limited Returns on Investments of Social Resources

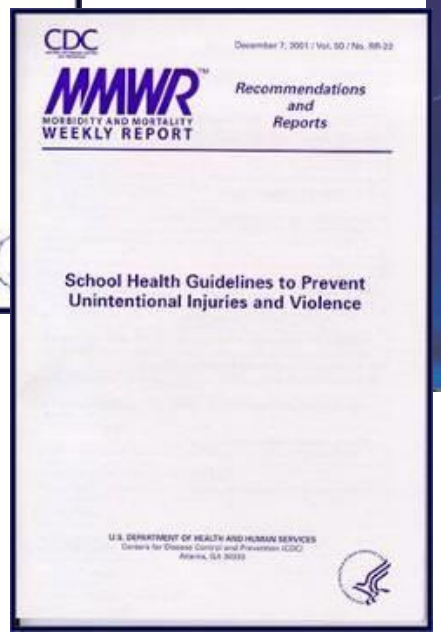
- Insufficient financial investments
- Efforts are not *strategically planned*
- Poor quality programs
- Efforts are not *effectively coordinated*

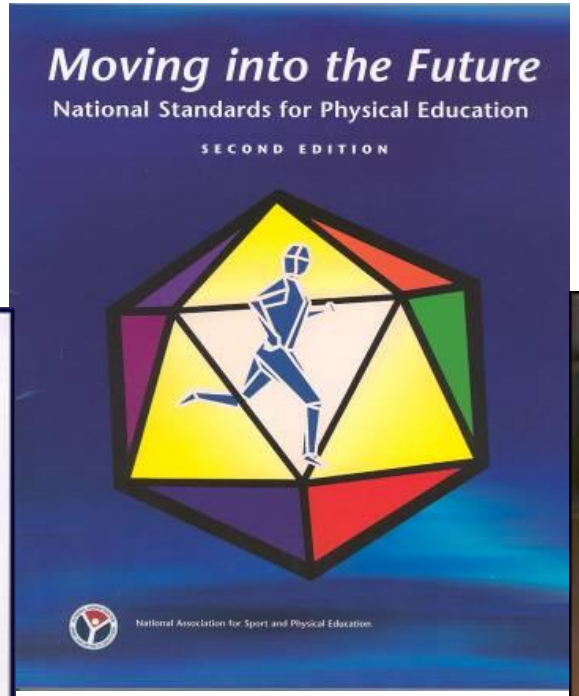
Strategically Planned

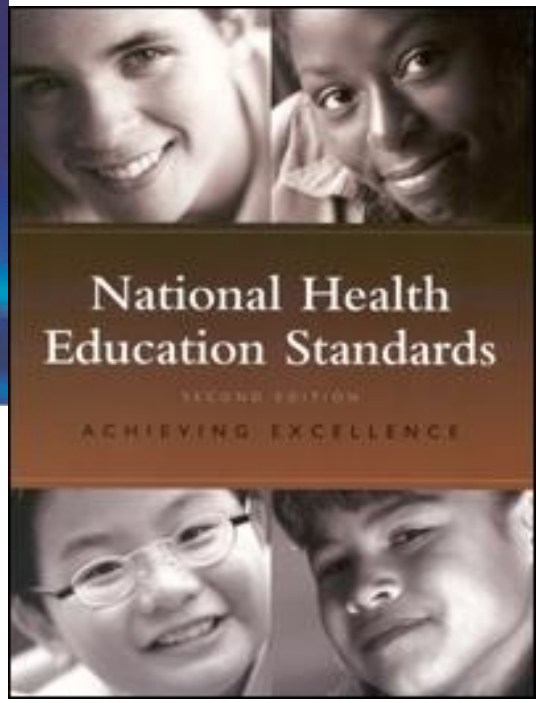
- Maximize yield from investments
- School-specific priorities
- Ongoing process
- Community involvement

High Quality, Evidence-Based









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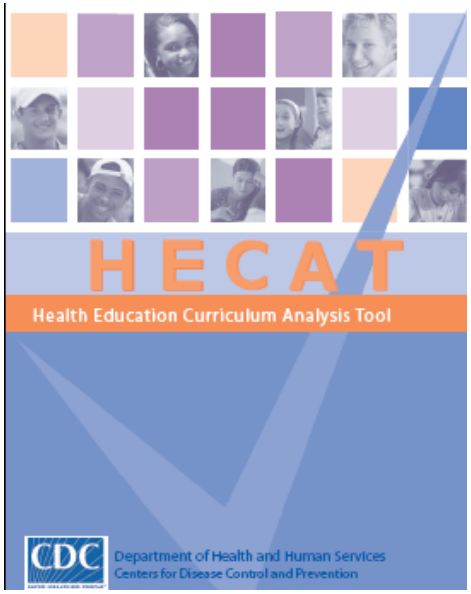
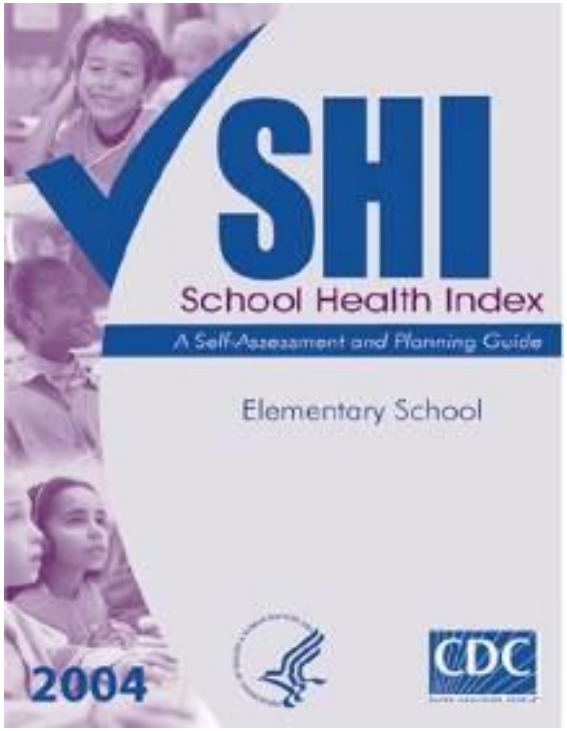
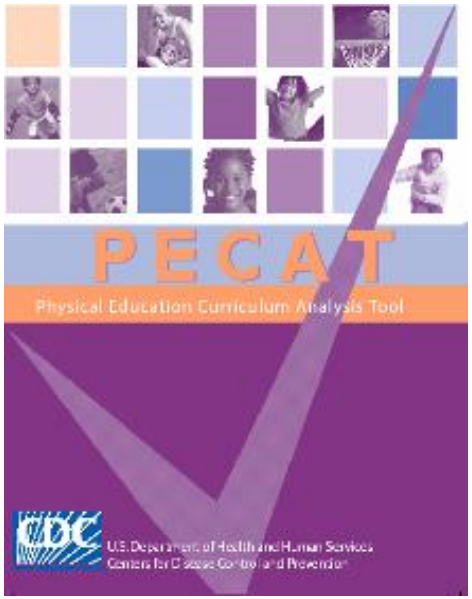




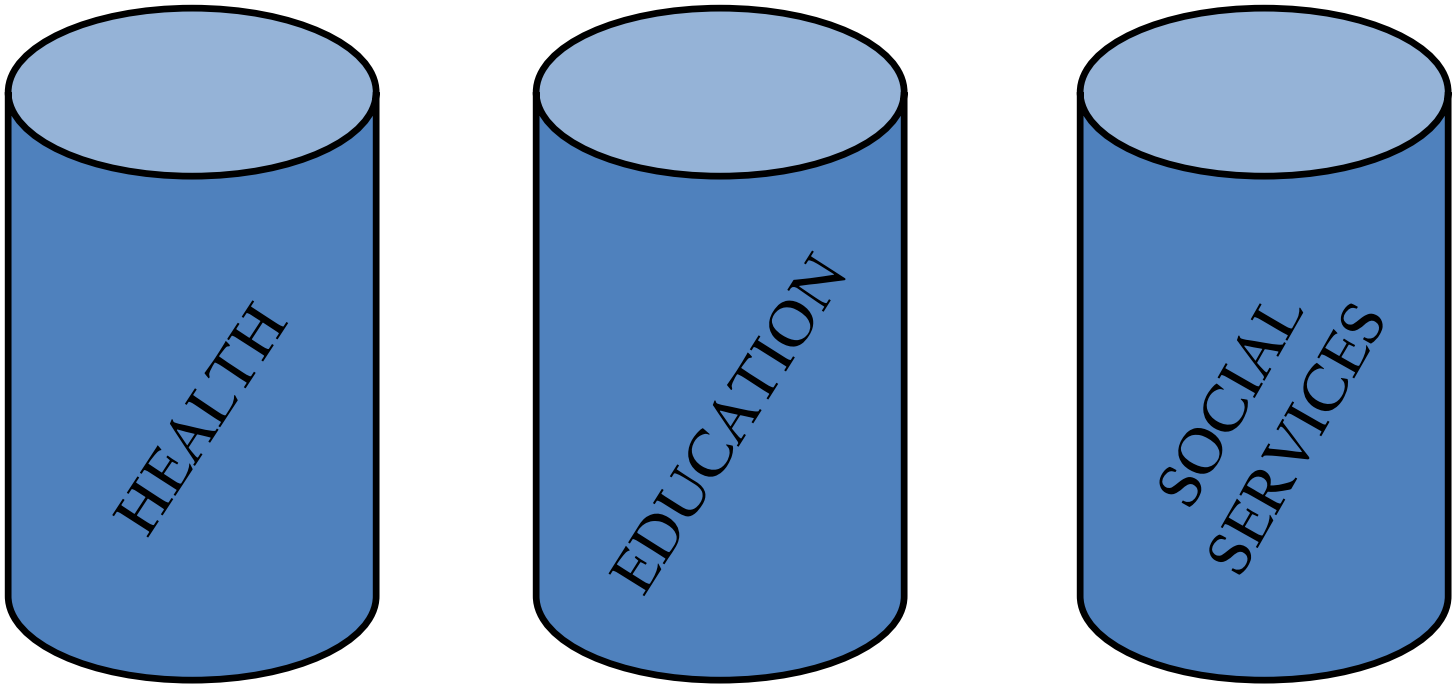


High Quality, Evidence-Based

Effectively Coordinated

- School health coordinator
- School health council
- Community involvement and support
- Program integration
- Coordinated services for individual students

Our Children Are Ill Served by the Silo Approach



A Coordinated School Health Program

Health Education

Physical Education

Family and Community Involvement

Health Services

Health Promotion for Staff

Nutrition Services

Healthy and Safe School Environment

Counseling, Psychological, and Social Services

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Strategies for Supporting School Efforts to Address Educationally Relevant Health Disparities

- Communication
- Policy mandates and accountability
- Financial support
- Guidance, technical assistance, and professional development
- Data collection and research

Leadership from US Department of Education

- Integrate strategies to reduce educationally relevant health disparities into 4 key ED priorities:
  - Distribution of highly effective teachers
  - Focusing on lowest performing schools
  - Improving data systems
  - Assessment and standards

Leadership from US Department of Education

- A national school health strategic plan
- Incentives for involvement
- Human capital grant programs
- Integrate school climate and connectedness into data collection systems
- Integrate health into the ED research agenda

Policy Development

- Integrate health-related measures into accountability systems for school improvement efforts
- Include health goals in mandated school improvement plans
- Establish school health councils or leadership teams
- Ensure sufficient curricular time is devoted to health education
- Support professional development of staff
- Adopt specific policies to address each of the educationally relevant health problems

Guidance, Technical Assistance, and Professional Development

- Intensive efforts to disseminate up-to-date, evidence-based guidance to teachers, administrators, and policy makers
- Provide ongoing follow-up consultation and support
- Support school health learning communities
- Train school health coordinators for urban schools serving minority populations

Data Collection and Research

- Develop and implement a national research agenda to put what we already know into practice and demonstrate its value for improving educational outcomes
- Conduct research on:
  - motivations and skills of school leaders and teachers
  - the kinds of evidence valued by legislators
- Include educational outcomes as key measures in evaluations of health interventions for young people
- Document the extent and nature of current investments in support of school health programs

Role for Colleges of Education

- Integrate health topics and evidence-based school health strategies into professional preparation programs for teachers and administrators
- Form school—university partnerships to facilitate implementation of school health programs and policies
- Lead efforts to develop and implement a national research and development agenda on the impact of high quality, strategically planned, and effectively implemented school health programs