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Schools and Health: Relationship Between Schools And Health

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March 30, 2010
Schools and Health
Session 1 Objectives

- To understand the basic structure and content of the Schools and Health Course
- To understand the course expectations regarding grading and assignments
Objectives

- To understand the current health issues facing school aged children and the links between academic success and health issues
- To understand how schools, health, and public health intersect and diverge with regard to priorities/accountability, mission, activities, etc.
“You can have all the bells and whistles as far as technology and facilities go, but if at the beginning of the day you start with an unhealthy child, there isn’t a lot of learning that can go on.”

- Pat Cooper, ED
  McComb School District, MS
The National Association of State Boards of Education (NASBE)

"Health and success in school are interrelated. Schools cannot achieve their primary mission of education if students and staff are not healthy and fit physically, mentally, and socially."

Fit, Healthy, and Ready to Learn: Part 1 – Physical Activity, Healthy Eating, and Tobacco Use Prevention, 2000
The U.S. Department of Health and Human Services (HHS)

“Schools have more influence on the lives of young people than any other social institution except the family and provide a setting in which friendship networks develop, socialization occurs, and norms that govern behavior are developed and reinforced.”

— Healthy People 2010
Themes in School Health

- Locally driven program/system
- Serve as a health safety net
- Help meet public health priorities
- May be a casualty of competing priorities
- Often have to justify their existence

Indispensable for student success!!
Mission of Public Health

1. To Promote Physical and Mental Health
2. To Prevent Disease, Injury, and Disability

Core Public Health Functions:
- Assessment
- Assurance
- Policy Development
Healthy People 2010 Goals

Goal 1: Increase Quality and Years of Healthy Life

Goal 2: Eliminate Health Disparities

Health Indicators:
- Physical Activity
- Overweight and Obesity
- Tobacco Use
- Substance Abuse
- Responsible Sexual Behavior
- Mental Health
- Injury and Violence
- Environmental Quality
- Immunization
- Access to Health Care
Mission of Public Schools

➢ To educate students

Within an educational system that has accountability, assurances of safe environments, with local control and flexibility, responsive to the needs of all students.
National Education Goals

1. School Readiness
2. School Completion
3. Student Achievement and Citizenship
4. Teacher Education and Professional Development
5. Mathematics and Science
6. Adult Literacy and Lifelong Learning
7. Safe, Disciplined, and Alcohol-and Drug Free Schools
8. Parental Education
Goal Shared by Public Health and Education

- Healthy, educated students who become adults equipped with health-related skills, beliefs, and practices conducive to a lifetime of learning, good health, productivity, and economic success.
- To assure that students are healthy and ready to learn

Source: Coordinated School Health Programs: A strategy for Improving and Protecting Children’s Health
Definitions

➢ **School Health:**
All the strategies, activities, and services offered by, in, or in association with schools that are designed to promote students' physical, emotional, and social development make up a school's health program.

[www.ASHA.org](http://www.ASHA.org)

➢ **Coordinated School Health:**
When a school works with students, their families, and their community to provide these strategies, activities, and services in a coordinated, planned way, then the term coordinated school health program applies.

[www.ASHA.org](http://www.ASHA.org)
The Eight-Component Model of Coordinated School Health

- Family & Community Involvement
- Comprehensive School Health Education
- Physical Education
- School Health Services
- School-site Health Promotion for Staff
- Nutrition Services
- Healthy School Environment
- Counseling, Psychological & Social Services

Source: ASTHO: Making the Connection
www.thesociety.org
Challenges of Today’s Students

- Mental health concerns (depression, suicidal, stress, anxiety)
- Bullying
- Chronic or acute illness
- Alcohol or other drugs
- Hunger (poor nutrition)
- Abused (unsafe family or neighborhood environment)
- Lack of access to health care
School Health Program Goal: To assure that students are healthy and ready to learn

Healthy students make healthier adults

Healthy adults and healthy students make healthy communities
Link Between Health and Education

- HEALTH STATUS
- EDUCATION OUTCOMES
- SOCIAL OUTCOMES

CSHPs
Benefits of School Health Programs

- Reduces absenteeism
- Improves academic performance
- Improves the health of children and the community
- Improves the health of staff
- Addresses critical public health priorities
- Delayed onset of certain health risk behaviors
- Promotes youth development
- Assists in the transition to adulthood for CSHCN
- Assists in the provision of services under 504 and IDEA
- Links students to community care
The School Population

- 50,000,000 in PK-12 *
- 98,000 Public Schools^ 
- 3,178,142 Public School Staff*
- 8,334,833 5-17 y.o. below Federal Poverty Level† (19%)$
- 7.9% report at least one chronic condition#

† U.S. Census 2000, Summary File 3
$
Health Status of School-Age Children

- Health insurance coverage/access to care
  - 10% uninsured
  - 30% of insured are public insurance
  - Barriers to effective utilization of services
Preventive Health Services

Health Status of School-Age Children

- Health insurance coverage/access to care
  - 10% uninsured
  - 30% of insured are public insurance
  - Barriers to effective utilization of services
- Chronic conditions
National Survey of Children’s Health

- 57.5% of children with a Medical Home
- 84.9% have no gaps in health insurance
- 78.4% with preventive dental care in past year
- 60.0% of children with mental health or behavioral problems got the care they needed
- 83.2% live in a supportive neighborhood
- 53.5% always feel safe in their neighborhoods
- 56.5% always feel safe at school*
- 80.5% are engaged in school (F>M, healthy>C SHCN, ES>MS/HS)


* 2003 data
Children with Moderate or Severe Health Conditions
U.S. 2005

- Has No Health Condition or Condition Not on List: 77.7%
- Has 1 health condition: 13.6%
- Has 2 health conditions: 3.9%
- Has 3 or more health conditions: 4.8%

National Survey of Children’s Health, 2007
Percent of Children with Reported Chronic Conditions

- Tourette Syndrome: 0.1%
- Brain Injury or Concussion: 0.3%
- Diabetes: 0.4%
- Epilepsy or Seizure Disorder: 0.6%
- Autism Spectrum Disorder: 1.1%
- Vision Problems*: 1.3%
- Hearing Problems: 1.4%
- Depression: 2%
- Bone, Joint, or Muscle Problems: 2.2%
- Anxiety Problems: 2.9%
- Developmental Delay: 3.2%
- ODD or Conduct Disorder: 3.3%
- Speech Problems: 3.7%
- ADD/ADHD: 6.4%
- Learning Disabilities: 7.8%
- Asthma: 9%

National Survey of Children's Health, 2007
Children with Moderate or Severe Health Conditions, by Age
U.S. 2003

- 0-5 Years: 4.4%
- 6-11 Years: 9.1%
- 12-17 Years: 10%

National Survey of Children’s Health, 2005
School Health Services Statistics
Maryland, 2006-2007 SY

<table>
<thead>
<tr>
<th>% Students with Chronic Health Problem</th>
<th>16.5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asthma</td>
<td>46%</td>
</tr>
<tr>
<td>ADHD</td>
<td>24%</td>
</tr>
<tr>
<td>Anaphylaxis</td>
<td>6%</td>
</tr>
<tr>
<td>Diabetes</td>
<td>1%</td>
</tr>
<tr>
<td>Not Specified</td>
<td>15%</td>
</tr>
</tbody>
</table>

# Health Room Visits: 4,425,578
% Returned to class: 87%
# Students Receiving Medication: 37,264
# Doses of Medication: 1,349,597

Total population: 851,640
Number of School Days Missed in the Past Year by Children Age 6-17 Years, U.S., 2003

http://mchb.hrsa.gov/thechild/1child/1status/11misses.htm
Children Ages 6-17 Missing 11 or More Days of School by Family Income, U.S., 2005

* FPL $18,400 for a family of 4 in 2003
National Survey of Children’s Health, 2007
Youth Risk Behavior Survey-2007

- 44 of 50 states participated; 14,000 students
- Clear improvements in some indicators, but there are still significant racial and ethnic differences
Youth Risk Behavior Survey-2007

- 10.5% driven in a car/vehicle when drinking; but 29% rode in a vehicle with someone who had been drinking
- 18.0% carried a weapon;
- 5.5% did not go to school due to feeling unsafe;
- 44.7% currently drink alcohol;
- 35.5% had been in a fight in the past 12 months
- 6.9% attempted suicide;
- 46.8% had had sexual intercourse;
- 38.5% of sexually active did not use a condom at last intercourse;
- 20% smoked cigarettes in the past 30 days;
- 78.6% did not eat the rec. daily fruits/vegetables;
- 69.7% had no daily physical education class+;
- 13.0% are obese.

Link Between Academic Success and Health

“Efforts to improve school performance that ignore health are ill-conceived, as are health improvements efforts that ignore education.”

-National Commission on the Role of the School and the Community in Improving Adolescent Health (1990)
What is the relationship between academic achievement and....

- Health-risk behaviors?
- Physical inactivity and unhealthy weight control behaviors?
- Sexual risk behaviors?
- Tobacco use?
- Unintended injury and violence?
- Alcohol and other drug use?
YRBS Data: Links to Academic Achievement

- Negative association between health-risk behaviors and academic achievement
- Negative effects are independent of gender, race/ethnicity, and grade level
Health Characteristics of Academically Successful Youth: Making the Case

- Delayed initiation of sexual activity
- Higher self-esteem
- Lower levels of depression and anxiety
- Less likely to abuse alcohol and to exhibit socially deviant behavior
- Less likely to engage in substance abuse

Michael S. Brockman, M.A., P.R.S.C., Hiram Johnson High School - Sacramento, CA
Stephen T. Russell, Ph.D., University of Arizona http://cals-cf.calsnet.arizona.edu/fcs/content.cfm?content=academic_success
Percentage of U.S. high school students receiving mostly A’s, B’s, C’s or D/F’s who currently used marijuana – Youth Risk Behavior Survey, 2003.*

*p<.0001 after controlling for sex, grade level, and race/ethnicity.
Percentage of U.S. high school students receiving mostly A’s, B’s, C’s or D/F’s who tried marijuana for the first time before age 13 years – Youth Risk Behavior Survey, 2003.*

*p<.0001 after controlling for sex, grade level, and race/ethnicity.
Percentage of U.S. high school students receiving mostly A’s, B’s, C’s or D/F’s who ever had sexual intercourse
Youth Risk Behavior Survey, 2003.*

*p<.0001 after controlling for sex, grade level, and race/ethnicity.
Percentage of U.S. high school students receiving mostly A’s, B’s, C’s or D/F’s who currently smoked cigarettes – Youth Risk Behavior Survey, 2003

p<.0001 after controlling for sex, grade level, and race/ethnicity.
Youth Development and School Health

- Search Institute
- National Longitudinal Study on Adolescent Health (ADD Health Study)
Search Institute:
40 Developmental Assets

- Internal Assets
  - Commitment to Learning
  - Positive Values
  - Social Competencies
  - Positive Identity

- External Assets
  - Support
  - Empowerment
  - Boundaries and Expectations
  - Constructive Use of Time
4.0 grade point scale

*N = 325 6th- to 12th-grade students in St. Louis Park, Minnesota, 1998.

Succeeds in School

Gets mostly “A”s

Benson, P. What Teens Need to Succeed.
## Assets and Negative Health Outcomes

<table>
<thead>
<tr>
<th></th>
<th>0-10 Assets</th>
<th>11-20 Assets</th>
<th>21-30 Assets</th>
<th>31-40 Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Problem Alcohol Use</strong></td>
<td>53%</td>
<td>30%</td>
<td>11%</td>
<td>3%</td>
</tr>
<tr>
<td><strong>Drug Use</strong></td>
<td>42%</td>
<td>19%</td>
<td>6%</td>
<td>1%</td>
</tr>
<tr>
<td><strong>Sexual Activity</strong></td>
<td>33%</td>
<td>21%</td>
<td>10%</td>
<td>3%</td>
</tr>
<tr>
<td><strong>Violence</strong></td>
<td>61%</td>
<td>35%</td>
<td>16%</td>
<td>6%</td>
</tr>
<tr>
<td><strong>Depression/Suicide</strong></td>
<td>40%</td>
<td>25%</td>
<td>13%</td>
<td>4%</td>
</tr>
<tr>
<td><strong>School Problems</strong></td>
<td>43%</td>
<td>19%</td>
<td>7%</td>
<td>2%</td>
</tr>
</tbody>
</table>
National Longitudinal Study of Adolescent Health (ADD Health) Study: Major Findings

- **Parent Connectedness** - closeness, caring, satisfied with relationship, felt loved wanted and understood, high expectations

- **School Connectedness** - students believe that the adults in the school cared about their education and about them as a whole

  Protective for emotional distress, suicidal thoughts and attempts, violence, delayed onset of sexual activity, cigarette, alcohol, drug use.

Resnick, M. JAMA (1997)
Conclusions (Selected)

- Youth with supportive parents have greater school commitment (engagement)
- Youth with support from other adults (teachers and mentors) are better at learning to be productive (e.g., school engagement, attendance, dropout)

Discussion

- What Role Do/Can School Health Programs Play in the Health Care System?
What Role Do/Can School Health Programs Play in the Health Care System?

Consider:

- 10 Essential Public Health Services to Promote Maternal and Child Health in America
- Cultural/Ethnic/Socioeconomic diversity within and between communities
- Areas of convergence of National Education Goals and Healthy People 2010 Goals
Considerations (Cont’)

- Unmet basic health needs of students
- Increasing numbers of students with chronic diseases
  - Increased complexity
  - Legal issues
  - Financial issues
- Increasing breadth of responsibility
  - Responding to public health concerns
Considerations (Cont’)

- Need to validate programs with data
  - Program data
  - Scientific research
“Kids gain more weight when school’s out. Schools do a better job at keeping students trim than parents, study finds.”