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How Health, Health Care Access & Health Education Affect Student Attendance: What We Can Do About It

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Overview

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 - ❑ **Local Wellness Policies**
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Research on Health & Attendance – Key Findings

- Child and adolescent health outcomes affect school readiness, school engagement, student behavior, student attendance, and academic performance; these effects are direct and significant.¹
 - Disproportionate impact on African American males²
 - Children who live in urban areas of **concentrated poverty** face significantly higher risks for poor physical and socio-emotional health outcomes.³

Why this Matters!

➤ 88.4 percent of Baltimore City Schools students are African American.⁴

➤ 79.3 percent of Baltimore City Schools students come from low income families.⁵

➤ Baltimore youth are subject to extreme risk in 6 of 7 risk factors associated with concentrated poverty and disadvantage.⁶

[1] This link is well-established. See Swingle (1997); Dewey (1999); Rothstein (2009); Anderson-Moore, et.al. (2009) citing Brooks-Gunn; Gershan & Wyatt (2007). [2] Brooks, Johnson et. al. (2007) [3] Acevedo-Garcia, D, et al. (2008); Knitzer (2007); Tsoi-A-Fatt (2006); Rothstein (2009); Anderson-Moore, et.al. (2009) [4-5] Baltimore City Public Schools Fast Facts 2009 (6) Tsoi-A-Fatt (2006)

Concentrated Disadvantage & Health Effects

- Economically distressed or “youth distressed⁷” communities expose youth to higher numbers and greater concentration of risks.

- Risk Factors:
 - High numbers of families living below federal poverty level
 - High unemployment rate
 - High teen pregnancy rate
 - High crime community
 - High levels of juvenile violence
 - High drop out rate among youth
 - High number of adults without high school diploma

Concentrated Disadvantage & Health Effects (cont.)

Low income, minority children and youth, who live in impoverished communities, are more likely to develop mental and physical health issues, but less likely to receive diagnosis and treatment.⁸

- These children and youth are more likely to:
 - Experience higher levels of toxic stress, due to:
 - Community violence⁹
 - High rates of parental incarceration¹⁰
 - Be exposed to unhealthy living environments,¹¹ caused by high concentrations of old or abandoned buildings, which lead to:
 - Unsafe lead paint exposure
 - Increased cockroach, rodent, and mold exposure
 - Be food insecure,¹² and:
 - Experience hunger
 - Be malnourished
 - Become obese

^[8] DHHS-Surgeon General (1999); DHHS-Surgeon General (2000); Knitzer (2007); Center for Health and Health Care in Schools (nd); Tsoi-A-Fattt (2006); Rothstein (2009) ^[9] Singer, Anglin, et. al. (1995) ^[10] Lavigne, Davies & Brazzell (2008) ^[11] DHHS-PHS (2005); American Federation of Teachers (2007) ^[12] Acevedo-Garcia, et. Al (2008); Anderson-Moore (2006); Currie (2005); Nord, Andrews, Carlson (2008)

Health Conditions that Affect Student Attendance

- **Physical Health**
 - ❑ Dental decay and other oral Disease
 - ❑ Asthma
 - ❑ Food insecurity
 - ❑ Obesity
- **Mental & Socio-Emotional Health**
 - ❑ Serious emotional disturbance, including depression and/or anxiety caused by trauma and toxic stress



Dental Problems: The Leading Cause of Student Absenteeism

Students miss an estimated 51 million hours of school due to dental problems, according to U.S. Surgeon General.¹³

- Untreated tooth decay affects 5 times more children than asthma¹⁴; Nearly 59 percent of American children experience tooth decay.¹⁵
- Tooth decay and other oral diseases are highest among children from low-income families.¹⁶
- Medicaid-eligible children with cavities have twice as many decayed teeth and twice the number of visits for pain relief but fewer total dental visits, compared to children coming from families with higher incomes.¹⁷
- Tooth decay is on the rise in preschool children for the first time in 40 years.¹⁸

➤ Maryland has one of the highest per capita numbers of dentists in the United States¹⁹, yet only 19% participate the HealthChoice Program.²⁰

➤ Of the 500,000 Medicaid-eligible children in Maryland, fewer than one in three received dental care in 2008.²¹

^[13] DHHS-Surgeon General (2000) ^[14-15] Gehshan & Wyatt (2007); ^[16] DHHS-Surgeon General (2000); ^[17] Gershan & Wyatt, 2007 and Maryland Dental Action Committee ^[18] Hough (2008) citing the National Center for Health Statistics ^[19] Paradise (2008) ^[20] Maryland Dental Action Committee (2007) ^[21] Deamont Dental Project (nd) Maryland Dental Action Committee (2007).

Asthma: Baltimore Children and Youth at High Risk

Asthma is the most common chronic illness among children, and a leading cause of absenteeism.²²

- Children with asthma are far more likely to miss school and fall behind than other students, ²³ especially in cases of moderate to severe asthma.²⁴
- African-American children are four to six times more likely than white children to die from asthma.²⁵
- Aging schools with poor ventilation, limited air conditioning, and damp, moldy conditions may trigger asthma.²⁶
- Anecdotal Baltimore data—and survey data of African American parents in Cincinnati²⁷—suggest parental concern for the well-being of their asthmatic children in school.
 - Uncomfortable with non-nurse school personal giving medicine to their children.
 - Feel teachers don't recognize the symptoms of asthma.

➤ Nearly half of City Schools report asthma rates above the 7.5 % national asthma rate; some report rates as high as 20%.²⁸

➤ National Asthma study finds many in Baltimore “uninformed” of the causes and treatment of asthma, and do not receive treatment for underlying causes.²⁹

Food Insecurity Leads to Child Hunger, Malnutrition and Obesity

Hungry, malnourished, and obese children are more likely to develop health issues and have school difficulties.³⁰

- Food Insecurity is “chronic, cyclical, poverty-related inadequacy in household food supplies,³¹” with an emphasis on limited access to affordable, healthful, nutritious foods.
- Food Insecure families often cope by skipping meals, or over relying on low-cost, unhealthful food (e.g., ramen, fast food, junk food).³²
- Factors ³³
 - Limited food choices due to low ratio of supermarkets to fast food restaurants in low income neighborhoods
 - Limited use of nutritional assistance programs, such as WIC and Food stamps due to confusion about eligibility or perceived stigma
 - Limited understanding of importance of healthful and nutritious diet to child wellbeing

➤ 13.5% of low-income Baltimore families are food insecure; of these, 22% report that their children do not eat enough because they could not afford enough food.³⁴

➤ More than 50% of the food-insecure families in Baltimore do not access WIC and Food Stamp assistance. ³⁵

➤ 27% of Maryland’s urban 4th graders skip breakfast at least 3 days a week.³⁶

[30] Murphy, C. Ettinger de Cuba, S, & Cook J. (2008); Parker (2005) [31] Parker (2005), p. 10 [32-33] Black et. al 2008; Parker (2005) [34-35] Black, et. al, (2008) [36] Maryland African American Male Task Force citing Journal of American Dietary Association, 2003

Obesity Contributes to Absenteeism

Obesity factors in health-related absenteeism; being overweight contributes to asthma, joint problems, type 2 diabetes, depression, anxiety, and sleep apnea.³⁷

- Obesity is a stronger predictor for absenteeism than any other factor according to U Penn researchers, who studied 1,069 fourth- to sixth-graders for one academic year in nine Philadelphia schools. ³⁸
- Overweight students are at increased risk for bullying, depression, and low self-esteem; emotional health problems associated with weight-related stigmatization and chronic bullying affect student attendance. ³⁹
- Obesity rates for low income and African American children are higher than the American population as a whole.⁴⁰

➤ 37% of Baltimore high school students are overweight or at risk for being overweight⁴¹; 18% are obese.⁴²

➤ Baltimore's overweight high school students cluster in high poverty neighborhoods.⁴³

➤ 71% Baltimore High School students do not attend daily PhysEd classes; 67% do not meet minimum CDC standards for weekly physical activity.⁴⁴

[37] Story, Kaphingst & French (2006) citing others [38] Geier, et. al. (2007)[39] Pekruhn (2009), Story et. al. (2006) [40] Anderson & Butcher (2006) [41] Figure, drawn from 2005 CDC data. Both the BCPSS Wellness Policy (6.13.06) and The Baltimore Blueprint for Healthy Outcomes in Children: Addressing Childhood Obesity cite it. [42] CDC (2009) 2007 data. [43] Association of Black Charities and Baltimore Area Grant Makers (2008) "The geographic distribution of overweight high school students matches the distribution of high poverty Baltimore neighborhoods (> poverty levels in excess of 8.9%" [44] CDC (2009) 2007 data.

Socio-Emotional & Mental Health

*Students with serious emotional disturbances, clinical depression, trauma-related anxiety, social phobias, and behavioral disorders—fail more classes, miss more days of school, have lower grades and retention levels, and have higher drop-out rates than students without such problems.*⁴⁵

- One in five children and adolescents—ages 9-17—have a mental or addictive disorder.⁴⁶
- Being victimized by violence and witnessing violence involving friends and family is linked to depression.⁴⁷
- Of the nearly 2.2 million youth aged 12 to 17 who reported a major depressive episode, fewer than 50% received treatment.⁴⁸

- More than 40% of Maryland’s public mental health clients are under the age of 18.⁴⁹
- More than 2100 Baltimore children—ages 3 to 21—were counted as “emotionally disturbed” in 2006.⁵⁰
- An estimated 3,965 Baltimore City children, who are in foster care, have mental health needs.⁵¹

Socio-Emotional & Mental Health (cont.)

Urban youth, living in areas of concentrated disadvantage, regularly experience higher levels of toxic stress and are more likely to internalize feelings. ⁵²

- Exposure to **community violence** traumatizes children; even youth with good ability to regulate emotions have symptoms of depression and anxiety at high levels of violence exposure.⁵³
- Children with an **incarcerated parent** are more likely to exhibit emotional and behavioral symptoms that negatively affect school time.⁵⁴
- Low income children are more likely to be exposed to **maternal depression** and **parental substance abuse**.⁵⁵
 - Maternal depression increases hostility and irritability toward a child and with lower levels of praise and affection. ⁵⁶
 - Food insecurity contributes to parental depression.⁵⁷

➤ The 2005 violent crime rate in Baltimore was more than three times the national average; nearly 40% of Baltimore homicide victims were under age 24. ⁵⁸

➤ Baltimore residents accounted for 61% of the new entrants to Maryland prisons in 2008. ⁵⁹

➤ More than 50% of the 1,059 women incarcerated in Maryland prisons in 2008 were from Baltimore ⁶⁰; on average, 80% of incarcerated women are mothers with school age children. ⁶¹

[52] Anderson-Moore, et.al (2009); Weist et al., (2000) [53] See Cooley-Strickland, Quille, Griffin, et. al. (2009) for thorough review of literature and description of ongoing Baltimore study. [54] Lavigne, Davies & Brazzell (2008); Murray & Farrington 2007; Justice Policy Institute (2009) [55] Kntzer (2003) citing NICHD data. Mental Health America (2008)[56] Lovejoy & Graczyk (2000); Knitzer (2003) citing NICHD data. [57] Black, et. al (2008) [58] Tsoi-A-Fatt (2008) citing Department of Justice Crime and Justice Data online 2005 and FBI Uniform Crime Report 2006 respectively. [59-61] Justice Policy Institute (2009)

Student Health Services: Challenges & Opportunities for Action

- **Barriers to Student Health Services**
- **The Basics: What Maryland Law Requires**
- **Opportunities for Action**
 - **School-based, School-linked Health Services**
 - **Coordinated Student Health Model**
 - **Local Wellness Policies**
 - **Full Service /Community Schools Model of Integrated Services**
 - **Planning & Assessment Tools**



Barriers to Student Health Services

- Limited access to high quality, accurate information on health conditions and healthy lifestyles⁶²
- Unaffordable Health Care⁶³
 - Uninsured
 - Underinsured
- Limited Access to Health Care⁶⁴
 - Availability of practitioners who accept Medicaid/HealthChoice
 - Lack of community-based services
 - Barriers due to hours of operation and lack of transportation
- Lack of Culturally Competent Services⁶⁵
- Underuse of public assistance⁶⁶
 - Cumbersome/confusing enrollment procedures
 - Unaware of eligibility and availability

➤ HealthChoice, Maryland's Medicaid managed care program, insures most Baltimore students, but school-based Health Centers are not eligible for fee-for-service reimbursement for preventative health and mental health services for students.⁶⁷

➤ Re-enrollment requirements for the non-Medicaid Maryland Children's Health Program pose a barrier to families and cause lags in access to service.⁶⁸

[62] Black, et. al. (2008); SRBI (2004a, 2004b) [63] The issue of health care affordability for uninsured and underinsured families in areas of concentrated poverty is widely acknowledged and is a common theme in the literature reviewed. [64] Brooks, Johnson et. al. (2007) citing 2003 Urban Institute report; Maryland Dental Action Committee (2007); Mental Health America (2008) [65] President's New Freedom Commission on Mental Health (2003); DHHS/Office for Minority Health Cultural Competence in Health Care (nd); Brooks, Johnson et. al. (2007) citing 2003 Urban Institute report [66] Black, et. al. (2008); Currie (2005) [67] In June, 2009 Members of the U.S. Senate introduced S. 1034, "Healthy Schools Act of 2009 to ensure that SBHCs receive Medicaid reimbursement for health and mental health services for Medicaid-enrolled students [68] Personal Communication (Fink, Taylor, Oros)

The Basics: What Maryland Law Requires

Maryland State School Health Services Standards (COMAR 13.05.05 - 13.05.15) ⁶⁹

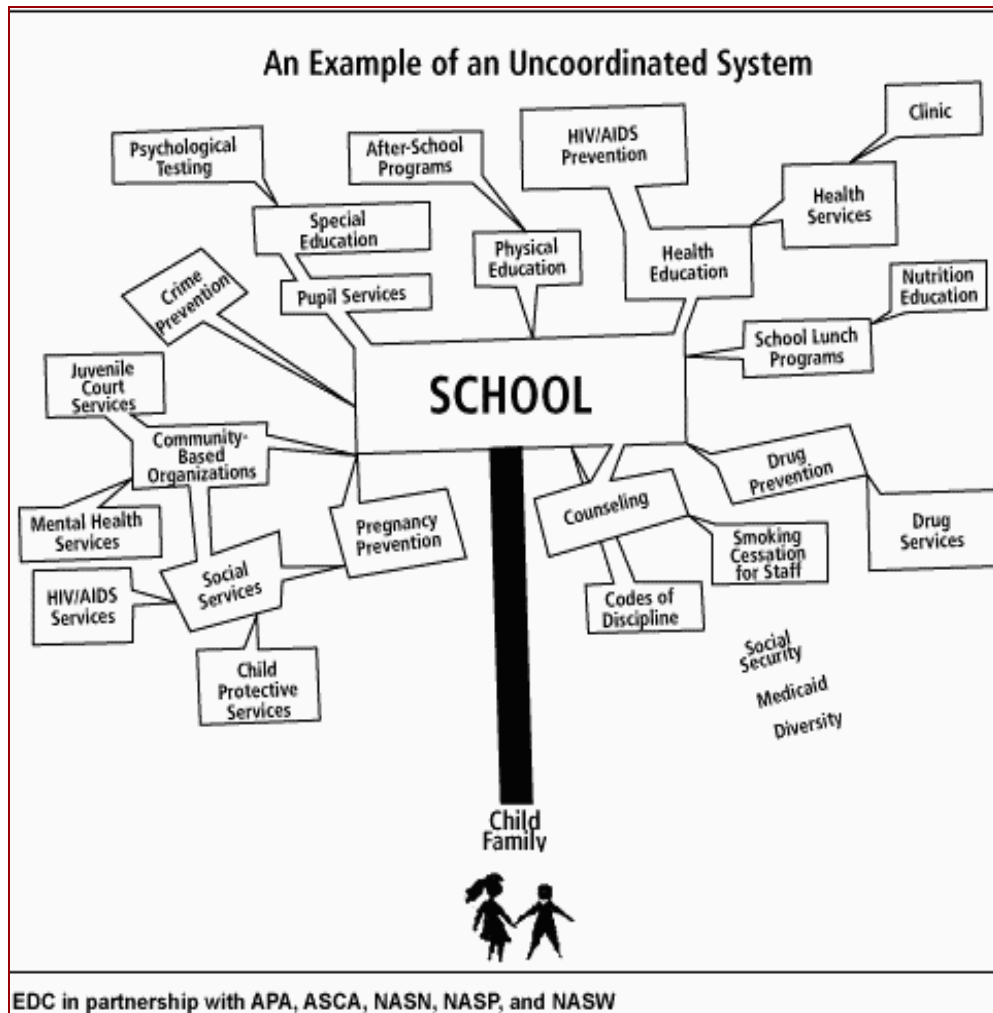
- Maryland mandates school health services for all students but does not fund health services. ⁷⁰ Local education and health agencies fund health programs. Maryland recommends, but does not require, districts adopt national school health standards. ⁷¹
 - Mandated health coverage in schools by a “school health services professional,” defined as a “physician, certified nurse practitioner, or registered nurse with experience and/or training in working with children or school health programs.”
- Maryland districts, with the assistance of local health departments, must provide school health services to all public schools; CEO of City Schools and Baltimore Health Commissioner are jointly responsible for ensuring School Health Service Standards are met.
 - Standards emphasize immunizations, hearing and vision assessments, and physicals for children entering school for the first time; no provision for ongoing health assessments or data collection on student health outcomes or family access to health care.
- MDSE establishes minimum standards for data collection and retention. ⁷² Districts may adopt additional data collection guidelines.

^[69] See Maryland State Department of Education (nd1) for full text. ^[70-71] Lear, Barnwell, & Behrens (2008) ^[72] Maryland State Department of Education (2006); Maryland State Department of Education (2008)

School-based and School-linked Health Services

Schools cannot address student health alone, but are an “ideal” venue for delivery of efficient, high quality, effective services to children and families. ⁷⁴

- Collaborative, multi-agency approaches best meet the complex health needs linked to concentrated poverty and disadvantage.⁷⁵
- Coordination Matters!
 - Coordinated Student Health Model
 - School Wellness Policies
 - Full Service/Community School Model of Integrated Family and Community Services
 - Community Asset Mapping
 - State-wide Systems of Care Initiatives
 - Continuum of Care/Public Health Model – Three Tiers of Prevention and Intervention



[74] Brown & Bolen (2008) argue the case for schools as “ideal” venue. For other examples see Kondracke (2009); Rothstein (2009); Dillon (2008); President's New Freedom Commission on Mental Health (2003); American Academy of Pediatrics (2004); Gershon & Wyatt (2007); Bolder Broader Approach (nd); Story, Kaphingst & French (2006); Children's Aid Society (2005); Lear, JG, Barnwell, EA, & Behrens, D (2008); Council of Chief State School Officers (2004) [75] This strategy underlies systems of care initiatives, such as the Maryland Children's Cabinet.

Coordinated Student Health Model⁷⁶

CDC recommends schools adopt a systematic approach to student health based on eight integrated components.



Key Elements

- State and District Leadership
- School-based Coordination
- Community Partnerships

Key Activities:

- Student Needs Assessments
- Community Asset Maps
- Gap and Redundancy Analysis
- Outcomes evaluation

Why CSHP?

- Reduce cost
- Less time consuming
- More effective
- Encourages coherent, systemic approach

➤ Few City Schools have documented health activities based on review of School Improvement Plans.⁷⁷

➤ Few Baltimore middle and high schools use CDC School Health Index or similar assessment tools to evaluate physical education and nutrition policy and programs.⁷⁸

[76] CDC (nd); EDC (nd) [77] Batada, et.al. (2008) [78] CDC (2009)

Local School Wellness Policies⁷⁹

Child Nutrition and WIC Reauthorization Act of 2004 mandates school policies to support healthier school environments and address diet-related health issues.

- Districts with federally-funded school meals programs must have Wellness policies that establish:
 - School health councils
 - Nutritional guidelines for all food available on campus
 - Nutritional education goals
 - Physical education goals
 - Other school-based physical activity (e.g., recess, safe walks to school)
 - Monitoring and evaluation plans
- Initial nationwide research⁸⁰ suggests:
 - Wellness policies have not increased physical education and activity in schools
 - Few districts address funding and resources necessary to implement and evaluate wellness policies; many cite lack of funding as a barrier to full implementation.

➤ *City Schools' Local Wellness Policy has not been evaluated or updated since 2006.*

➤ *46% of Baltimore middle and high schools do not have copy City School's Wellness Policy.*⁸¹

Full Service Community Schools Model of Integrated Services⁸²

*Community Schools model of integrated onsite primary health care, mental health services, and family health promotion and education reduces student absenteeism, improves student outcomes, and strengthens communities.*⁸³

- Growing call for creation of full service schools to improve academic outcomes, and life chances for low income children.⁸⁴ Among them:
 - American Federation of Teachers
 - Broader Bolder Approach to Education, a national coalition of leading researchers, practitioners, and policy makers.
 - Grantmakers for Education, one of the largest philanthropic affinity groups

- On-site medical, dental, mental health and social services are essential elements in a fully-integrated service model.⁸⁵

[82] The terms “full service schools” and “community schools” are some sometimes used synonymously but “full service” conveys a commitment to health services. [83] See Blank, Mellavill, & Shah (2003) for a synthesis of more than 20 evaluations of community schools initiatives. [84-85] As examples, see American Federation for Teachers (2009); Bazelon (2006); Warren, et. al, (2003); Lawson & Sailor (2000); Forum for Education and Democracy (2008); Grantmakers for Education (2006); Kondracke (2009)

School-based Health Centers (SBHCs) & School Nurses

Child advocates, health professionals view school-based health services as “sorely underutilized” yet promising resource for prevention and intervention services to school age children. ⁸⁵

- School-based health services serve as the de facto “medical home ⁸⁶” for many children from low income families, yet school based health centers are ineligible for Medicaid reimbursement for most preventative health and mental services.

- For many children a school nurse is their only consistent health care professional. ⁸⁷
 - American Academy of Pediatrics recommends a full-time nurse in every school; or as interim goal 1 full time nurse for every 750 students. ⁸⁸

- Several studies link presence of SBHCs with improved attendance rates and overall improved health outcomes for students. ⁸⁹

- Some districts use “school-linked” health centers
 - Off-campus with extended Hours
 - May serve more than one school
 - Service delivery coordinated by school-based personnel (i.e., established referral, communication, and follow-up procedures)
 - Includes **Federally-Qualified Community Health Centers**, university-based health centers, and private providers.

Planning and Assessment Tools

Centers for Disease Control (CDC) [School Health Index](#) (SHI) self-assessment and planning tool based on CDC's coordinated school health program model helps school districts improve student health services.

- ❑ Identify strengths and weaknesses of health and safety policies and programs
- ❑ Develop action plan, which can be incorporated into the School Improvement Plan
- ❑ Engage teachers, parents, students, and the community in promoting health behaviors

School Wellness Policies and Documents

- ❑ USDA [Local School Wellness Policy](#) including requirements and resources
- ❑ The National Association for Nutrition and Physical Activity [Model School Wellness Policies](#)
- ❑ Food Research and Action Center [Local Wellness Policies](#). See *School Wellness Policy and Practice: Meeting the Needs of Low Income Students*.

School-Based Health Centers

- ❑ National Assembly on School Based Health Care – [Evaluation Tools](#)
- ❑ National Association of School Based Health Centers' [School-Based Health Center Road Map](#) includes a comprehensive set of tools and resources to support starting a school health center.
- ❑ National Association of Community Health Centers' [So You Want To Start A Health Center...? A Practical Guide for Starting a Federally Qualified Health Center](#)

Other Resources

- ❑ Centers For Disease Control [Healthy Youth!](#)
- ❑ Council of Chief State School Officers [School Health Project](#), See *No Time for Turf* tool
- ❑ Center for Health and Healthcare in Schools – [Fact Sheets](#) (e.g., Children's Mental Health Needs, Childhood Overweight)
- ❑ [Leadership for Healthy Communities](#) – Healthy Eating & Active Living
- ❑ Office for [Minority Health Cultural Competency in Health Care Resources and Guides](#)
- ❑ Mental Health America (2008) [Maternal Depression Making a Difference Through Community Action: A Planning Guide](#)

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