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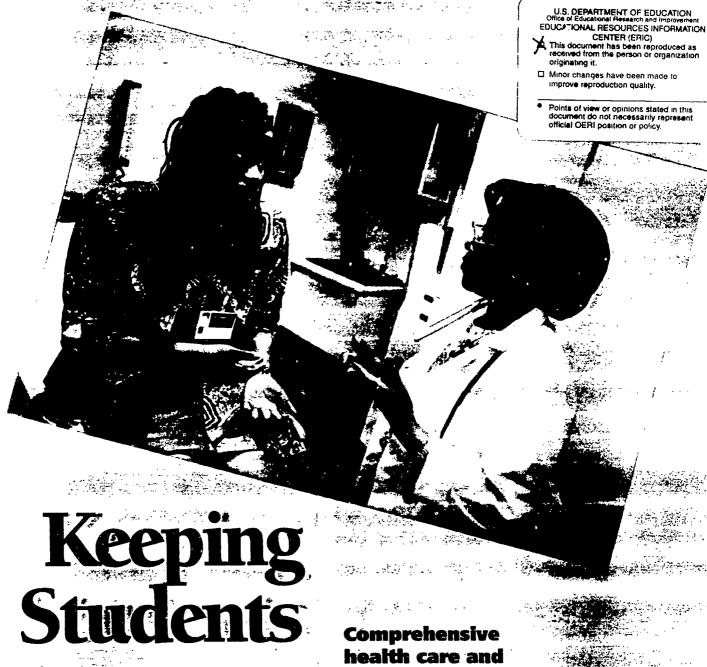
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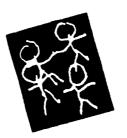
#### **ABSTRACT**

This report discusses the role that school health centers can play in providing comprehensive health care and health education services to adolescents and reviews the effectiveness of such health centers in three Chicago high schools. School-based health centers need to stress: (1) high-quality care; (2) parental, school, and community involvement; (3) consistent care from trusted adults; (4) convenience, affordability, confidentiality, and respect; (5) support and education; (6) flexibility and openness; and (7) comprehensiveness. Three such centers were opened by the Ounce of Prevention Fund in three Chicago high schools in economically-depressed areas in the mid-1980s with financial support from state and private organizations. The centers were found to contribute to adolescent health by greatly increasing the number of students who visited school health centers, reducing the number of low birthweight babies born to student mothers, and providing various health maintenance and education services to students. The report argues that school-based centers need adequate financial support to provide high-quality, comprehensive services, and that such support should be mandated in any future health care reform initiatives. (Contains 18 references.) (MDM)





on Track Comprehensive health care and education for American teenagers



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### Introduction

n just over a decade, hundreds of communities have seized on school-based health care as an effective weapon in the struggle against poor health among highrisk adolescents. Pioneered in Texas. Massachusetts, and Minnesota as an approach to preventing teenage pregnancy, school-based health centers have become multi-purpose providers handling an array of physical and emotional health issues. Typical activities include basic nutrition and personal hygiene education, care for acute and chronic health conditions, and family planning services. The school-based health center concept embraces the idea that many childhood health problems have complex psychological, social, and physiological roots and that effective solutions will reflect this complexity.

American adolescents today are at considerable risk of harm from untreated illnesses, violence, premature parenthood, and sexually transmitted diseases. Nearly one-third of American children suffer from a chronic health condition and 10 percent of American children have conditions that are considered moderate or severe. Chronic health problems account for 41 million missed school days each year (Newacheck and Taylor 1992). Injury or death from violence threatens all young people. Homicide is the leading cause of death for African-Americans aged 15 to 19 years and is the third leading cause of death for all Americans that age (Jenkins and Bell 1992). Suicide rates have increased for every cohort of adolescents since the 1950s (Devkin and Buka 1994).

This year, hundreds of thousands of unmarried teenagers will become parents. Increasing numbers of teens risk sexually transmitted diseases—including acquired immunodeficiency syndrome (AIDS)—as adolescents become sexually active at younger ages. A greater percentage of teenagers are sexually active now than a decade ago. While comparisons between data collected in 1989 and data collected in 1991 show a modest reduction in the number of high school students reporting four or more lifetime sexual partners, today's adolescents have more partners than did previous generations of teens (Smith 1994). Adolescents

The Ounce of Prevention Fund wishes to thank the AT&T Foundation for helping to make this publication possible.



have the highest rates of gonorrhea, syphilis, and chlamydia (Henggeler et al. 1992) and just under one-fifth of new AIDS cases in 1993 were among persons aged 13 to 29 years (Centers for Disease Control 1994). Given the syndrome's long incubation period, it is likely that many of the young adult cases stem from adolescent infection. Substance abuse increases all of these risks (Lowry et al. 1994; Deykin and Buka 1994).

School-based health centers supply adolescents with access to resources that they may otherwise lack. Often teens have only rudimentary knowledge of preventive medicine and nutrition. Doctors and hospitals are scarce in many urban neighborhoods and rural areas. Many teens do not have insurance coverage for the services they may need. Many also lack relationships with caring adults who encourage healthy behavior.

Evaluations from government agencies and private organizations identify school-based health centers as a key element in effectively addressing adolescent health issues. Health centers are a core component of strategies to reach at-risk teenagers with a variety of social services.

Comprehensive health care available to students where they spend most of their time is vital in helping them safely navigate the complexities of adolescence. Comprehensive care in this case means treating the whole person within his or her life context. It means considering the student's family situation, socioeconomic status, neighborhood and community, obligations, strengths, and weaknesses. It does not mean just diagnosing or treating a disease. Because they are partnerships between health care providers and schools, school-based health centers help ensure that services are delivered in a safe and familiar environment, that the relationship between health and learning is supported and reinforced, and that parents in the community can be actively involved. School-based care should be responsive to students' needs and their parents' priorities.

### School-Based Health Centers in Theory and Practice

#### **Defining Quality Care for Adolescents**

Adolescence is a difficult, confusing time of life. The physical and psychological changes that comprise the maturation process make teens susceptible to particular diseases, injuries, and emotional stresses. Teenagers are often suspicious of adults and vulnerable to the temptations of unhealthy behavior. It is vital that health professionals foster a climate of trust and confidentiality in caring for and educating adolescents. A successful program will promote such a climate by making it clear to the student that he or she is a valued member of the community, entitled to dignity and respect. Some of the building blocks of a successful school-based health center are described below.

#### Parental, school, and community involvement

School-based services require the support of the community that they serve. Community advisory boards, collaboration with parents, teachers, counselors, and school nurses, and regular contact with school leadership and school governing boards all increase the acceptance and success of school-based health centers. By establishing referral networks with community-based social service agencies, school-based health centers channel teenagers toward appropriate support systems.

#### Consistent care from a trusted adult

Trust and consistency are fundamental to a successful adult-teenager relationship. Relationships must be built over time and sustained through ongoing interest and involvement. Staff members at school-based health centers need to be active in school events and community activities so that they raise the health center's visibility and get to know students in different contexts. If a student forms a special bond with a staff member, it is more likely that the student will use the services available and benefit from them.

# Convenience, affordability, confidentiality, and respect

Because most teenagers attend school, school-based health centers are both convenient and easy to use. There are no transportation costs, few prohibitive time constraints, and no additional gang boundaries to cross. Respect for the individual student is a priority. Even if the health center requires parental consent for enrollment (and most do), individual visits and services are kept confidential and provided free of charge.

#### **Support and education**

Every student visit to the health center is an opportunity to establish trust and to educate young people about caring for and about themselves. A physical examination in a mprehensive health center never stops at simple

diagnosis. Conversation during the exam may uncover many needs in addition to the presenting problem. At school-based health centers students are encouraged to ask questions. They learn to expect answers that help them understand both a problem and the routes to its solution.

#### Flexibility and openness

Depending on geographic location, adolescent health may encompass the effects of poverty, violence, racism, limited future options, drugs, and peer pressure. Health centers must be flexible enough to respond to teens in a variety of circumstances. While school-based health centers cannot cure socioeconomic or environmental ills, they can help students cope more effectively with them. Attention to cultural context and a variety of special services to handle social and emotional needs are essential to successful operation within underserved communities.

#### Comprehensiveness

Holistic care means considering the individual's physical, social, and emotional well-being. A holistic approach to comprehensive health care for adolescents requires being able to respond to all the health needs of this age group. Staff expertise must include mental health, reproductive health and sexuality, and adolescent development.

Sexually active teens risk pregnancy, sexually transmitted diseases, and HIV infection. Recent research indicates that many adolescents enter high school already sexually active. The majority of young people are sexually experienced by the time they reach high school graduation age (Smith 1994). School-based health centers must address the full spectrum of reproductive health concerns, either on-site or through referral. These concerns include education, counseling, laboratory testing, disease treatment, and family planning services. Saint Paul and Baltimore adolescent health centers that offer family planning services have demonstrated an impact in causing adolescents to delay first intercourse and in boosting contraceptive use (Brooks-Gunn and Furstenberg 1989).

#### **High-quality care**

Adolescents are entitled to medical services that reflect a high standard of quality. Parents want to know who is treating their children. Physicians should be Board-certified and all staff should be experienced in working with adolescents. Health centers must be supported by a medical facility to which prompt referrals can be made. Referral services must be accessible, affordable, and reflect the quality of care given in the health center.

### A Look at Our Results

The Ounce of Prevention Fund established the Toward Teen Health program in 1985 by opening a health center at Jean Baptiste Point DuSable High School in Chicago. This debut was followed by the opening of two more centers—at Rezin Orr Community Academy High School in 1986 and at Richard T. Crane High School in 1987. Support for the centers has come from many sources.

These schools are located in three of Chicago's most economically depressed neighborhoods. The five goals of the centers are: to improve student health by providing comprehensive examinations, laboratory testing, and follow-up care; to reduce absenteeism and the drop-out rate by providing immunizations, health maintenance exams, detecting and treating illness as early soon as possible, and counseling students; to educate students to be well-informed health consumers; to reduce the incidence of teen pregnancy and undesirable birth outcomes; to reduce the cost of medical care among adolescents at these three schools through one-on-one health education by staff which stresses prevention and teaches students how to use the health care system appropriately, and through management of chronic conditions on site.

The health centers endow students with a measure of control over their own physical and emotional well-being. We believe that the ongoing relationships between adolescents and caring adults provided by these health centers can help bring about the behavioral changes necessary to reduce risk. Ounce health centers can report success in a number of areas for students who receive health education and individual care. Three positive indications are the substantial number of health center visits, a favorable ratio of low birthweight babies born to health center moms as compared to those born to teenagers in the surrounding community, and the large number of students receiving maintenance and health education services.

#### Who Uses the Centers?

Substantial numbers of students and their parents have embraced the idea of school-based centers. At the midpoint of the 1993-94 school year more than 3,000 students (approximately **82 percent** of school enrollment) were registered for health and education services at the health centers. By December, the centers had logged nearly 2,000 student visits. Numbers of male and female student enrollees are about equal. The centers' high registration rates stem from the hard work of the center staff. Staff make presentations at the elementary schools that feed into Orr, Crane, and DuSable. They staff tables at

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health fairs, are available to parents on report card pick-up nights, meet with local school councils, attend graduations, and participate in and sponsor other schoolwide events.

#### **How the Centers Make a Difference**

About 33 percent of visits to Ounce school-based health centers in 1992-93 were related to reproductive health and family planning. Two of the key reproductive health issues are low infant birthweight and the treatment of sexually transmitted diseases. The centers have demonstrated substantial impacts in these areas. Monitoring chronic health conditions such as asthma and diabetes is another potentially lifesaving center priority. Even conditions seemingly easy to diagnose and treat remain undiagnosed and untreated in this student population. For example, vision screening of 200 students turned up 80 students—40 percent of those screened—who needed eyeglasses.

#### Low birthweight

Low birthweight (less than five and one-half pounds) is the leading cause of infant death. For infants who survive. it is a key correlate of lifelong disability according to the National Commission on Children (1993). Combatting low birthweight is an important goal of the school-based centers. Because the centers provide pregnancy testing, prenatal care, and prenatal education and support groups, pregnant students have immediate and ongoing opportunities to improve their chances to deliver healthy babies. The capability to conduct ultrasound screenings has enhanced the health centers' capacity to diagnose problem or high-risk pregnancies. Between 1990 and 1993, 154 pregnant women received prenatal care at one of the three health centers. In the communities served by DuSable. Crane, and Orr, more than 13 percent of babies born to teenagers are of low birthweight. Since 1990 fewer than 8 percent of health center moms have given birth to babies under normal weight. In Grand Boulevard, where the low birthweight rate approaches 16 percent (Chicago Department of Health 1994a. 1994b), all babies born to a health center mom during the last three school years were of normal weight.

#### Sexually transmitted diseases

During 1992-93, some 500 students were screened for STD infections and 157 cases were treated. The damage done by the two most common venereal infections among health center users—chiamydia and gonorrhea—worsens the longer the infections are untreated. Screening for and treating sexually transmitted diseases provides an opportunity to educate students about AIDS, genital herpes, and other severe conditions. It also supplies the opportunity to stress sexual abstinence and responsible sexual behavior.

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#### Asthma

In the case of students who suffer from chronic conditions such as asthma, preventive measures taken at the school-based health centers can enhance well-being and save lives. A study currently underway is designed to assess the impact of Ounce health centers on risk-taking behavior among students in two health center schools. For comparison, a similar population of students attending two schools without health centers is also being interviewed.

Preliminary analyses of data collected show that students in schools with health centers are more likely to report suffering from chronic health conditions such as asthma than are students attending the two schools without health centers. As the student populations across these schools are comparable, the prevalence of these conditions is probably about the same. These findings suggest that school-based health centers play a vital role in the early detection of these diseases. Once diseases are detected, the health centers can educate students about symptoms and necessary care. An asthma sufferer who experiences a lifethreatening attack needs to go to an emergency room and may require hospitalization. The average costs for asthma hospitalization are \$2,000 per stay (Weiss et al. 1992). At the Ounce's school-based health centers, students learn how to manage their conditions, can go there for aid during an attack, and avoid emergency room visits.

#### **Mental Health Services**

Thirteen percent of visits to Ounce health centers were for mental health services in 1992-93. That 13 percent, however, identifies only those visits that are primarily for mental health purposes. The school centers address all the needs of the student and, in doing so, the staff is alert to identify stress-related origins of physical symptoms and the emotional component of health-damaging behavior. The centers' broadest mental health purpose is to mediate the environment, which includes the presence of violence, stress, anxiety, and depression often suffered by teens in

#### **Health Education and Outreach Programs**

The students' experience with the Junce-sponsored health centers should enable them to better maintain their own health. This means that they will be better consumers of health services and also more attuned to the consequences of their actions on their own health and future well-being. Health center staff treat each student visit as an cducational opportunity. They also make presentations in classrooms at the three high schools and at the schools that feed into the high schools. Each health center operates several programs that seek to engage the students in their own health maintenance. Such efforts include discussion and support groups devoted to sexual abstinence, male responsibility, and weight problems; center advisory councils composed of students who reach out to the rest of the school; an AIDS awareness program; Lamaze, prenatal, and parenting classes; and outreach to middle-school-age students attending area primary schools.

# Major Financial Issues for Future Success

Health care reform gives supporters of the school-based health center model an opportunity to help integrate school-based centers into new health care delivery systems. Such discussion must address the specialized funding needs of school-based centers. It is important to ensure that state and federal initiatives—particularly those expanding managed care—support financing mechanisms that promote long-term stability.

When the first school-based health centers opened they received substantial financial backing from private foundations—most importantly the Robert Wood Johnson Foundation—on the assumption that within a decade the centers would have demonstrated their usefulness and would receive regular municipal or state public health financing. Today, however, only 45 percent of the cash operating budgets of school-based or school-linked adolescent health centers come from state or local health or human services funds (McKinney and Peak 1994).

School-based health centers continue to receive private and public grant funds. However, it is an immense challenge for them to merge federal, state, municipal, and private monies—often categorical funds restricted to the support of particular services and accompanied by complicated reporting requirements—into sufficient capital to provide an efficient program of services. Farrow and Joe (1992) point out that the problem with this categorical funding is that focusing on specific maladies

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### Consistent Care from the Robert Wood Johnson Foundation

School-based adolescent health centers have enjoyed the consistent support of the Robert Wood Johnson Foundation since the early 1980s. Between 1982 and 1986 the Foundation provided critical matching funds for nine health centers through the Community Care Funding Partners Program. In 1986, there were fewer than fifty school-based health centers in existence in the United States. That year, the Foundation kicked off its School-Based Adolescent Health Care Program which established clinics in twenty-four more schools across the country. By 1993, there were more than 500 school-based health centers in the United States.

In 1993, the Foundation announced its Making the Grade program to help states, counties, and municipalities reorganize funding policies and also to encourage new mid-level practitioner training efforts. Both goals will facilitate the establishment and continued operation of new school-based health centers. In 1994, twelve states were awarded Making the Grade planning grants. Up to ten states will receive four-year implementation grants in 1995. By helping states identify and reduce organizational and financing barriers to the continuation and expansion of school-based health centers, it is hoped that Making the Grade will serve as a catalyst for the inclusion of school-based health centers in state and federal health care reform plans (Robert Wood Johnson Foundation, 1993).

has meant "little attempt to reconcile the many separate funding strands as part of an overall state-level or community-level strategy." As its initial grants in support of school-based health centers began to expire, the Robert Wood Johnson Foundation sought to address the complex funding situation of school-based health centers. In 1993, the Foundation launched its Making the Grade program to promote systemic changes in the way states finance these centers (see sidebar).

In addition to grants, school-based health centers can also collect reimbursement from government and private insurance programs for services to Medicaid-eligible and insured students. However, this kind of reimbursement does not generate significant income for most health centers. There are a number of factors that limit revenues from insurance and Medicaid reimbursement. First, school health centers serve a high proportion of uninsured students (nearly 40 percent). Second, the health centers

have difficulty obtaining accurate information about student insurance status. Finally, there are limits to what services state Medicaid programs and private health insurers will reimburse and private companies and managed care providers are sometimes unwilling to work with or contract with school-based health centers.

Third-party insurance procedures offer an additional complication. To secure and maintain the trust of high school students, health centers must offer absolute confidentiality. However, some insurance providers routinely send information on care provided to dependents, including diagnosis, to parents. Medicaid programs present the same problem. States are required to issue an explanation of benefits on a sample of visits. These breaches of confidentiality between adolescent patient and doctor make some health centers reluctant to seek insurance or Medicaid fee-for-service reimbursement because the resulting confidentiality breach might scare students away.

In some ways the missions of the school-based health centers and the insurance providers are not compatible. The health centers' mission is to be comprehensive and prevention-oriented and they frequently provide services such as nutrition education, preventive physical and mental health classes, and health-promotion groups that are not covered by Medicaid, private insurance, or managed care plans. Not surprisingly, Medicaid and insurance providers, with their strong orientation toward cost control, lack incentive to pay for such services. Managed care providers are also not interested in including school-based health centers in their networks because this diminishes the control they hold over how services are delivered to plan subscribers.

Another reason that prevention services are not always reimbursable is that such services are often aimed at preventing high-risk behaviors which may not result in serious health problems until decades after adolescence. Managed care entities and private insurers do not expect to be responsible for the health care of today's adolescent over the long term. The preventive care provided by the school-based centers is generally outside the insurance providers' range of services. In 1991-92, all forms of billing, including private insurance, accounted for only 17 percent of health center revenue and Medicaid was responsible for 5 percent (McKinney and Peak 1994).

National health care reform will not benefit school-based health centers unless the centers figure into the thinking of the health planners. If health care reform is based on expanding managed care arrangements, and those arrangements do not place school-based centers in the provider networks, then the long-term prospects of school-based facilities will not improve and could actually deteriorate (General Accounting Office 1994). State and federal health care planners and policymakers must find a



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way to allow school-based health centers to be reimbursed for services provided to children of families in all managed care plans.

In the final analysis, because school-based health centers strive to offer comprehensive, prevention-oriented services, revenues from reimbursement will never be enough. There will always be the need for funds to support long-term, stable health education outreach and other prevention services. This outreach is an integral part of any community's public health mission.

Along with others who have looked at the future of schoolbased health centers, we believe that school-based health centers are essential community providers, no different from other safety-net facilities such as clinics in isolated rural areas or clinics of the Indian Health Service. They should be designated as such and any health plan operating within the area served by a school-based center should be obligated to reimburse the center for services to plan members. In particular, all managed-care entities should be mandated to contract with school-based health centers to reimburse the centers for services to managedcare plan enrollees. The method of reimbursement should be negotiated on a case-by-case basis. Alternatively, state governments could continue to independently fund school centers as complementary safety-net sites emphasizing health promotion along with comprehensive services, perhaps adjusting capitation to local health plans accordingly. In this case, states should mandate coordinated information flow between school-based health centers and managed care organizations and directly subsidize the centers to protect their financial base. Combinations of the two funding scenarios above might also work well.

The result of the current climate of inadequate and unstable funding is that school-based health centers can offer only a fraction of the needed services that they were designed to provide. Private start-up support for health centers is now being withdrawn and public support for ongoing programs varies widely across the country. Experience shows that third-party, direct-services reimbursement by government and by private insurers can be only a part of the funding equation.

To be successful, school-based health centers must have stable ongoing funding that is sufficient to support a full range of primary care, community health services. School-based centers are essential guardians of the health of students. Appropriately, funding mechanisms to support them must be integral components of any national or local health care financing system.

### The Future

The school-based health center model recognizes that adolescents are at a critical point in their lives where decisions about physical health, mental health, smoking, substance abuse, and reproductive behavior may have a lifelong impact. School-based health centers seek to address the complete spectrum of adolescent health and health education issues. Preventive medicine and health education are particularly important for this population.

Yet, this crucial work can only continue and expand if health care reform efforts create funding systems compatible with the health centers' comprehensive, preventive mission. An obstacle that school-based health centers now face is that preventive health-promotion activities are not supported by the current health care financing system. Mechanisms such as public grants, private sponsorship, and Medicaid and insurance reimbursement have not produced sufficient revenues to allow school-based centers to live up to their full potential and separate categorical funding for clinical procedures, public health, mental health, and drug abuse prevention activities, as examples, make it impossible to weave together an integrated and adequately funded set of services.

It has been the experience of the Ounce of Prevention Fund's Toward Teen Health program that school-based health centers are particularly successful in treating chronic conditions and in providing health education, reproductive health, and family planning services. We believe that the trusting relationships that students develop with health center staff members supports the goal of good health and helps guide the teens toward academic achievement and life success.

The school-based health center concept, if realized to its fullest extent, has the potential to have a lifelong positive influence on entire generations of Americans. Few other aspects of health care reform efforts have the potential to offer wideranging and long-lasting contributions to the health and well-being of such large numbers of children and adolescents.

Rosenberg and Associates (Rosenberg and Associates 1994) and the Columbia University Center for Population and Family Health's National Work Group on Financing of School-Based Health Center Services (National Work Group, 1993).

# Support for the Ounce of Prevention Fund's Health Centers

We would like to acknowledge the contributors listed below who made it possible for the Ounce of Prevention Fund to establish our Toward Teen Health school-based health centers. We are deeply grateful to them for their support.

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#### References

Brooks-Gunn, Jeanne and Frank F. Fürstenberg, Jr. 1989. Adolescent sexual behavior. *American Psychologist* 2: 44 in 2, 249-257.

Centers for Disease Control 1994 Update: Impact of the expanded AIDS surveillance case definition for adolescents and adults on case reporting—United States, 1993 Morbidity and Mortality Weekly Report, v 43, n 9, March, 11

Chicago Department of Health 1994a Infant mortality in Chicago. 1991-92 Chicago Chicago Department of Health

Chicago Department of Health 1994b. Special tabulations for the Ounce of Prevention Fund, July

Deykin, Eva Y and Stephen L Buka. 1994. Suicidal ideation and attempts among chemically dependent adolescents. *American Journal of Public Health*, v. 84, n. 4, April

Farrow Frank and Tom Joe 1992 Financing school-linked, integrated services. The Future of Children, Spring

General Accounting Office 1994 Health care reform School-based health centers can promote access to care Washington. General Accounting Office, May

Henggeler, S. W., G. B. Melton, and J. R. Rodrigue. 1992. *Pediatric and adolescent AIDS. Research findings from the social sciences.* Newberry Park, California. Sage Publications.

Jenkins, E. J. and C. C. Bell. 1992. Adolescent violence. Can it be curbed? Adolescent Medicine. State of The Art Reviews, v. 3, n. 1, February.

Lowry, Richard, Deborah Holtzman, Benedict I. Truman, Laura Kann, Janet L. Collins, and Lloyd J. Koibe. 1994. Substance use and HIV-related sexual behaviors among U.S. high school students. Are they related? *American Journal of Public Health*, v. 84, n. 7, July

McKinney, D. H. and G. L. Peak. 1994. School-based and school-linked health centers. Update 1993. Washington. Center for Population Options.

National Commission on Children 1993 Just the facts. A summary of recent information on America's children and their families. Washington National Commission on Children. (Data from Institute of Medicine. 1985. Preventing low birthweight.)

National Work Group On Financing School-Based Health Center Services 1993 Selected recommendations from the School Health Initiative's National Work Group On Financing School-Based Health Center Services New York Columbia University School of Public Health, Center for Population and Family Health

Newacheck, Paul W and William R Taylor 1992 Childhood chronic illness Prevalence, severity, and impact: *American Journal of Public Health*, v 82, n 3, March

Robert Wood Johnson Foundat 1993 Making the Grade State and local partnerships to establish -based health centers Princeton, New Jersey: The Robert Wood Johnson roundation

Rosenberg and Associates, 1994. Financing adolescent school-related health centers under the proposed National Health Security Act

Smith, T. W. 1994. The demography of sexual behavior. Menlo Park. California. Henry J. Kaiser Family Foundation.

Weiss, K. B., P. J. Gergen, and T. A. Hodgson. 1992. An economic evaluation of asthma in the United States. *New England Journal of Medicine*, v.326, no. 13, March 26.

#### Aiso from the Ounce:

Toward Teen Health: The Ounce of Prevention Fund's School-Based Adolescent Health Centers. This 1992 report describes in detail the programs, services, staffing, and funding of the Ounce's adolescent health centers.

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