

ADOLESCENT HEALTH, WELLNESS, AND SAFETY

In support of *This We Believe* characteristic:

- School-wide efforts and policies that foster health, wellness, and safety

Adolescence is a unique period in the life cycle that presents special challenges and opportunities. During the transition from childhood to adulthood, adolescents experience significant biological, cognitive, emotional, and social change. No longer children and not yet adults, young adolescents make significant choices about their health and develop attitudes and health practices that continue into adulthood. Risky behavior in substance use, sexuality, physical exercise, and diet contribute to the leading causes of adult morbidity and mortality. Thus, fostering healthy adolescent development and behavioral choices has the potential to improve the health of adults as well as adolescents.

The importance of providing a safe, healthy, and supportive learning environment for young adolescents has been recognized and promoted for decades. It serves as a central tenet or core principle of nearly all middle school reform recommendations and models (e.g., Turning Points). Numerous reports have documented the health status of young adolescents in America. After more than a decade of negative trends in the health of adolescents, significant improvements were reported in the decade from 1980–1990. However, since 1990, some of these risky behaviors have again increased, and adolescents continue to have high rates of morbidity and mortality owing to violence, injury, and mental health disorders (e.g., Blum & Reinhart, 1997; Irwin, Burg, & Cart, 2002; Ozer, Park, Paul, Brindis, & Irwin, 2003).

Existing research has focused on varying aspects of safe and supportive learning environments including comprehensive health and fitness programs, development and inclusion of health curricula, collaborations with local health and social support agencies, school safety, violence prevention, risk behaviors (e.g., alcohol, tobacco, drugs), latchkey status, and a sense of social adjustment and school community (i.e., dropout, climate, sense of belonging) (Call, Reidel,

Hein, McLoyd, Peterson, & Kipke, 2002; Dryfoos, 1994; Finn, 1989; Hamburg, 1997; Hechinger, 1992; Schultz, 2001). Each of these areas is critically important to the health, wellness, and safety of middle grades students.

The research literature provides overwhelming evidence that the middle level years are “the last best chance” to influence these students’ futures. It is during these years that young adolescents begin experimenting with a range of risky behaviors such as alcohol, tobacco, and drug use and unprotected sex. Based on several large-scale studies, Dryfoos (1998) concluded that 10% of 14-year-olds in 1995 were “at very high risk,” based on their involvement in high-risk behaviors. Resnick et al. (1997) found that parent/family connectedness and perceived school connectedness were protective against every health risk behavior measured, except history of pregnancy. Conversely, ease of access to guns at home was associated with suicidality and violence. Access to substances in the home was associated with use of cigarettes, alcohol, and marijuana among all students. Appearing “older than most” students in the class was associated with substance use and an earlier age of sexual debut among both junior and senior high students. Repeating a grade in school was associated with emotional distress among students in junior high and high school and with tobacco use among junior high students. On the other hand, parental expectations regarding school achievement were associated with lower levels of health risk behaviors; parental disapproval of early sexual debut was associated with a later age of participation in sexual intercourse.

Comprehensive School Health Programs

Comprehensive School Health Programs (CSHP) seek to reduce or eliminate health-related barriers to student academic and personal success. CSHP are designed to reinforce health-promoting behaviors in students and to provide the skills students need to



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avoid negative health practices. The Centers for Disease Control and Prevention (CDC) propose the Comprehensive School Health Programs (CSHP) framework as the cornerstone for healthy schools for school age children (Allensworth, Lawson, Nicholson, & Wyche, 1997; Centers for Disease Control and Prevention, 2005a). The CSHP is comprised of eight components that guide middle level schools in providing and promoting health behaviors and a health promoting environment.

Health education. CDC recommends a health curriculum addressing the most salient and preventable health conditions—tobacco, diet, physical activity, alcohol and drug use, unintentional injuries, and sexual behaviors (Centers for Disease Control and Prevention, 2005b). It is also becoming clear what does not work. For example, merely teaching the “facts” about the dangers of drugs or holding school assemblies are not effective methods for reducing alcohol, tobacco and drug use (National Institute on Drug Abuse, 2003).

Physical education. Students must be physically active in their daily lives if they are to reduce the risks associated with sedentary lifestyles. The “new” physical education uses a more “personalized health and fitness” approach than the traditional “competitive sports,” where individualized health and fitness assessments are conducted.

Health services. Numerous health service delivery models exist, ranging from the traditional school nurse who visits a building once a week to a fully developed school-based clinic staffed with physicians, nurses, and related health personnel. Schools with well developed health services depend on district resources and involvement of the community. Since school-based clinics are considered beyond the school mission, they are often operated by partner organizations such as health departments, hospitals, and community health centers or clinics.

Nutrition services and policies. Integrating effective nutrition education programs and policies with appropriate health and physical education curriculum provides the greatest opportunity to reduce the increasing rates of childhood obesity and to prevent chronic diseases (Morbidity and Mortality Weekly Report, 1996).

Mental health—counseling, psychological and social services. Similar to health services, many of today’s youth require mental health and social services to help them navigate the developmental challenges and

highs and lows of the adolescent years. The Surgeon General reports that 21% of school age children (9–17) have mental health problems that require appropriate mental health services (U.S. Department of Health and Human Services, 1999).

Healthy school environment. Research demonstrates that a positive school climate and student feelings of school attachment are major factors in promoting academic success and healthy behaviors (Resnick et al., 1997). Regardless of the type or location of a middle grades school, it must be safe, engaging, and empowering for teachers and students.

Parent and community engagement. Although parental influence remains important for young adolescents, peer influence significantly increases as youth reach out to cliques, teams, and subgroups. How families and communities provide constructive opportunities and outlets for young adolescents often affects how they manage their energy, emotions, ambitions, and risk taking behaviors. Communities offer resources that provide experiences and adult role models through community service, recreation, and career options.

Health promotion for faculty and staff. Many schools provide in-house health promotion programs including weight-loss and exercise groups, health screenings, health fairs, and educational brown bag lunches where staff learn about health issues and obtain group support for behavioral change.

These components provide additional opportunities, supports, and services that many of today’s students need to be successful (Brinds, Klein, Schlitt, Santelli, Juszczak, & Nystrom, 2003; MacLaurry, 2000; Reyes & Fowler, 1999). Although the components listed above are present in many schools, few schools have developed a comprehensive, seamless web of care, frequently termed a “full-service” school (Dryfoos, 1994). Full-service schools develop multifaceted comprehensive programs that build knowledge, attitudes, and skills that promote health and reinforce the behaviors that prevent future problems.

The existing research literature focuses primarily on individual components of student well-being. There are numerous studies specific to student safety, violence prevention, health curricula, physical education programs, approaches to peer mediation, and the outcomes of high-risk behaviors (e.g., alcohol, tobacco, and drug use). Currently, there are very few large-scale



studies that have examined young adolescent health and safety issues from a comprehensive perspective. Such studies, while potentially time intensive and

costly, would provide results more likely to influence and promote policy decisions concerning best practices for students in middle grades schools.

REFERENCES

Allensworth, D., Lawson, E., Nicholson, L., & Wyche, J. (Eds.). (1997). *Schools and health: Our nation's investment*. Committee on Comprehensive School Health Programs in Grades K–12, Institute of Medicine. Washington, DC: National Academy Press.

Blum, R. W., & Rinehart, P. M. (1997). *Reducing the risk: Connections that make a difference in the lives of youth*. Minneapolis, MN: University of Minnesota, Division of General Pediatrics and Adolescent Health.

Brinds, C. D., Klein, J., Schlitt, J., Santelli, J., Juszczak, L., & Nystrom, R. J. (2003). School-based health centers: Accessibility and accountability. *Journal of Adolescent Health, 32S*, 98–107.

Call, K. T., Riedel, A. A., Hein, K., McLoyd, V., Peterson, A., & Kipke, M. (2002). Adolescent health and well-being in the twenty-first century: A global perspective. *Journal of Research on Adolescence, 12*(1), 69–98.

Centers for Disease Control and Prevention. (2005a). *Healthy youth: Coordinated school health programs*. Retrieved June 20, 2005, from <http://www.cdc.gov/HealthyYouth/CSHP/index.htm>

Centers for Disease Control and Prevention. (2005b). *Registries of programs effective in reducing youth risk behaviors*. Retrieved June 20, 2005, from <http://www.cdc.gov/HealthyYouth/publications/registries.htm>

Dryfoos, J. G. (1994). *Full-service schools: A revolution in health and social services for children, youth, and families*. San Francisco: Jossey-Bass.

Dryfoos, J. (1998). *Safe passage: Making it through adolescence in a risky society*. New York: Oxford University Press.

Finn, J. D. (1989). Withdrawing from school. *Review of Educational Research, 59*(2), 117–142.

Hamburg, B. (1997). Education for healthy futures: Health promotion and life skills training. In R. Takanishi & D. A. Hamburg (Eds.), *Preparing adolescents for the twenty-first century: Challenges facing Europe and the United States* (pp. 108–135). New York: Cambridge University Press.

Hechinger, R. M. (1992). *Fateful choices: Healthy youth for the 21st century*. New York: Carnegie Council on Adolescent Development.

Irwin, C. E., Burg, S. J., & Cart, C. U. (2002). America's adolescents: Where have we been, where are we going? *Journal of Adolescent Health, 31*, 91–121.

MacLaury, S. (2000). Teaching prevention by infusing health education into advisory programs. *Middle School Journal, 31*(5), 51–56.

Morbidity and Mortality Weekly Report. (1996). *Guidelines for school and community programs to promote lifelong healthy eating*. Retrieved June 25, 2005, from <http://www.cdc.gov/mmwr/PDF/RR/RR4509.pdf>

National Institute on Drug Abuse. (2003). *Preventing drug abuse among children and adolescents: A research-based guide for parents, educators and community leaders* (2nd ed.). Retrieved June 24, 2005, from <http://www.drugabuse.gov/pdf/prevention/RedBook.pdf>

Ozer, E. M., Park, M. J., Paul, T., Brindis, C. D., & Irwin, C. E., Jr. (2003). *America's adolescents: Are they healthy?* San Francisco: University of California, San Francisco, National Adolescent Health Information Center.

Resnick, M. D., Bearman, P. S., Blum, R. W., Bauman, K. E., Harris, K. M., Jones, J., Tabor, J., Beuhring, T., Sieving, R. E., Shew, M., Ireland, M., Bearinger, L. H., & Udry, J. R. (1997). Protecting adolescents from harm. Findings from the National Longitudinal Study on Adolescent Health. *Journal of the American Medical Association, 278*, 823–832.

Reyes, A., & Fowler, M. (1999). Healthy minds in healthy bodies: Adolescent clinics and middle schools in collaboration. *Middle School Journal, 30*(5), 7–12.

Schultz, J. (2001). Programs and policies that foster health, wellness, and safety. In T. O. Erb, (Ed.), *This we believe...and now we must act* (pp. 99–107). Westerville, OH: National Middle School Association.

U.S. Department of Health and Human Services. (1999). *Mental health: A report of the Surgeon General*. Retrieved June 27, 2005, from <http://www.surgeongeneral.gov/library/mentalhealth/home.html>



ANNOTATED REFERENCES

Blum, R. W., & Rinehart, P. M. (1997). *Reducing the risk: Connections that make a difference in the lives of youth*. Minneapolis, MN: University of Minnesota, Division of General Pediatrics and Adolescent Health.

The National Longitudinal Study of Adolescent Health is the first national study of adolescent health designed to measure the social settings of adolescent lives, the ways in which adolescents connect to their social world, and the influence of these social settings and connections on health. In a response to a federal mandate, this study shows how key aspects of the home environment, the school context, and the individual adolescent's life can protect young people from harm or place them at risk. Surveys were conducted in two phases. In the first phase, more than 90,000 students in grades 7 through 12 attending 145 schools in the U.S. answered brief questionnaires about their lives, including health, friendships, self-esteem, and expectations for the future. The second phase consisted of more than 20,000 in-home interviews of students; a follow-up of 15,000 adolescents was conducted a year later.

Lockwood, D. (1997). *Violence among middle school and high school students: Analysis and implications for prevention*. Washington, DC: Department of Justice.

Violent incidents among at-risk middle school and high school students are discussed. The type and frequency of these incidents are identified, but the focus is on factors such as the relationship among the antagonists, the sequence of events and escalations, and the goals and justifications cited by the students. Information is drawn from in-depth interviews with 110 students from public schools with high levels of violence. The 110 students, 86 of whom were African Americans, reported 250 incidents of violence. Data show that the problem of violence is growing, as is juveniles' risk of victimization. The design of this study was chosen to provide information that can be used in the curricula of school-based conflict resolution programs. In a majority of incidents, the first step was relatively minor, but escalated. About five percent eventually involved a gun. Most incidents took place among young people who knew each other, and most incidents started in the school or in the home. The most common goal was retribution, followed by an attempt to bring about compliance, and self-defense or defense of one's image, and justifications offered stemmed from a value system in which violence was acceptable. In using the findings in violence prevention programs, reducing the frequency of opening moves may be the most promising approach.

National Center for Education Statistics. (2000). *In the middle: Characteristics of public schools with a focus on middle schools* (NCES 2000-312). Jessup, MD: U.S. Department of Education.

This report uses data from the Schools and Staffing Survey (SASS), a nationally representative survey conducted in 1987-88, 1990-91, and 1993-94, to describe various aspects of middle grades schools, examine how they have changed over time, and compare middle grades schools to elementary and secondary schools. The report focuses primarily on the 1993-94 SASS that contains data from teachers and principals in more than 82,000 schools across the country. One area that was examined was health-related services. General medical care was provided by 60% of all schools and diagnostic services by 82%; at least 90% of schools had had drug and alcohol prevention programs. The proportion of schools providing substance abuse counseling increased from elementary to middle grades to high school. At least 50% of middle grades and secondary schools provided this service in 1993-94, compared to 26% for elementary schools.

North Carolina State Department of Public Instruction. (1996). *Middle school risk behavior 1995 survey results*. Raleigh, NC: Division of Accountability Services.

This study reports the results of the 1995 Youth Risk Behavior Survey (YRBS) Middle School Questionnaire. The survey measured health risk behaviors including (1) weapons and violence, (2) suicide-related behaviors, (3) vehicle safety, (4) tobacco, alcohol, and other drug use, and (5) nutrition and physical exercise. A total of 2,227 students from 53 North Carolina public schools were surveyed. Results within the personal safety category showed that weapon use is predominantly a male activity, with 20% carrying weapons to school and 10% reporting having been threatened with or injured by weapons at school. More than 25% of students had considered suicide, and 10% had attempted suicide. Concerning drug use, findings showed that 53% had smoked cigarettes. High smoking rates were found among minorities, males, and older students. More than half had tried alcohol and 17% had used marijuana, with the percentages increasing by grade. Results concerning personal health revealed that about 25% consider themselves overweight, but 40% are dieting, most of whom are females. More than 80% reported exercising or playing sports in the previous week in addition to attending physical education classes. Almost 80% reported receiving AIDS education at school; 60% had discussed AIDS or HIV with parents or other adult family members.



ANNOTATED REFERENCES (continued)

Ozer, E. M., Park, M. J., Paul, T., Brindis, C. D., & Irwin, C. E., Jr. (2003). *America's adolescents: Are they healthy?* San Francisco: University of California, San Francisco, National Adolescent Health Information Center.

This monograph presents an overview of the health status of American young adolescents. It focuses primarily on adolescent health problems, particularly risky behaviors. The information contained in this report is drawn from many data sources. Based on the multitude of data sources used in this report, adolescence is divided into two periods: early adolescence (ages 10–14) and late adolescence (ages 15–19). Additionally, the various limitations of adolescent health studies are described and discussed.

Resnick, M. D., Bearman, P. S., Blum, R. W., Bauman, K. E., Harris, K. M., Jones, J., Tabor, J., Beuhring, T., Sieving, R. E., Shew, M., Ireland, M., Bearinger, L. H., & Udry, J. R. (1997). Protecting adolescents from harm. Findings from the National Longitudinal Study on Adolescent Health. *Journal of the American Medical Association*, 278, 823–832.

The objective of this study was to identify risk and protective factors at the family, school, and individual levels as they relate to four domains of adolescent health and morbidity: emotional health, violence, substance use, and sexuality. The research design consisted of a cross-sectional analysis of interview data from the National Longitudinal Study of Adolescent Health. A total of 12,118 adolescents in grades 7 through 12 were drawn from an initial national school survey of 90,118 adolescents from 80 high schools, plus their feeder middle schools. Eight areas were assessed: emotional distress, suicidal thoughts and behaviors, violence, use of three substances (cigarettes, alcohol, marijuana), and two types of sexual behaviors (age of sexual debut and pregnancy history). Independent variables included measures of family context, school context, and individual characteristics. Family and school contexts as well as individual characteristics are associated with health and risky behaviors in adolescents. The results should assist health and social service providers, educators, and others in taking the first steps to diminish risk factors and enhance protective factors for our young people.

Rumberger, R. W. (1995). Dropping out of middle school: A multilevel analysis of students and schools. *American Educational Research Journal*, 32(3), 583–625.

Using data from the National Educational Longitudinal Surveys (NELS) 1988 and hierarchical linear modeling (HLM), this study focuses on dropouts from middle school and examines the issue from both individual and institutional perspectives. Data for the study were drawn from the sample of 17,424 base-year students who were resurveyed in 1990. The final school sample consisted of 981 schools. At the individual level, the results identified a number of family and school experience factors that influence the decision to leave school, with grade retention being the single most powerful predictor. Additionally, there are widespread differences in the effects of these factors on White, Black, and Hispanic students. At the school level, the results revealed that average dropout rates vary widely between schools and that most of the variation can be explained by differences in the background characteristics of the students.

RECOMMENDED RESOURCES

Bosworth, K. (Ed.). (1999). *Preventing school violence: What schools can do*. Bloomington, IN: Phi Delta Kappa International.

Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Adolescent and School Health; Health Resources and Services Administration, Maternal and Child Health Bureau, Office of Adolescent Health; National Adolescent Health Information Center, University of California, San Francisco. (2004). *Improving the health of adolescents and young adults: A guide for states and communities*. Atlanta, GA: Author.

Collaborative for Academic, Social and Emotional Learning. (2003). *Safe and sound: An educational leader's guide to evidence-based social and emotional (SEL) programs*. Available at <http://www.casel.org/safeandsound.htm>

Hoy, W. K., Sabo, D. J. (1998). *Quality middle schools: open and healthy*. Thousand Oaks, CA: Corwin Press.

Marx, E., Wooley, S. F., & Northrop, D. (Eds.) (1998). *Health is academic: A guide to coordinated school health programs*. New York: Teachers College Press.

McCarthy, A. R. (2000). *Healthy teens: Facing the challenges of young lives*. Birmingham, MI: Bridge Communications.

Wisconsin Department of Public Instruction. (1997). *Component quality: A comprehensive school health program assessment tool*. Madison, WI: Author.



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National Middle School Association (NMSA) produces research summaries as a service to middle level educators, families and communities, and policymakers. The concepts covered in each research summary reflect one or more of the characteristics of successful middle schools as detailed in the NMSA position paper, *This We Believe: Successful Schools for Young Adolescents*. Further research on each topic is available in the book *Research and Resources in Support of This We Believe*. Both books are available at the NMSA online store at www.nmsa.org

