CDC School Health Guidelines to Prevent Unintentional Injuries and Violence

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ABSTRACT

Approximately two-thirds of all deaths among children and adolescents aged five to 19 years result from injury-related causes: motor-vehicle crashes, all other unintentional injuries, homicide, and suicide. Schools have a responsibility to prevent injuries from occurring on school property and at school-sponsored events. In addition, schools can teach students the skills needed to promote safety and prevent unintentional injuries, violence, and suicide while at home, at work, at play, in the community, and throughout their lives. The school health recommendations for preventing unintentional injury, violence, and suicide summarized here were developed by the Centers for Disease Control and Prevention [CDC] in collaboration with experts from universities and from national, federal, state, local, and voluntary agencies and organizations. They are based on an in-depth review of research, theory, and current practice in unintentional injury, violence, and suicide prevention; health education; and public health. The guidelines include recommendations related to the following eight aspects of school health efforts to prevent unintentional injury, violence, and suicide: a social environment that promotes safety; a safe physical environment; health education curricula and instruction; safe physical education, sports and recreational activities; health, counseling, psychological, and social services for students; appropriate crisis and emergency response; involvement of families and communities; and staff development.

BACKGROUND

Approximately two-thirds of all deaths among children and adolescents aged five to 19 years result from injury-related causes: motor vehicle occupants and pedestrians (32%), all other unintentional injuries (14%), homicide (13%), and suicide (10%) (CDC, 2000). Between 10% and 25% of child and adolescent injuries occur on school property (Passamore et al., 1989; Rivara et al., 1989; Scheidt et al., 1995; Danseco et al., 2000). Schools have a responsibility to prevent injuries from occurring on school property and at school-sponsored events. In addition, schools can teach students the skills needed to promote safety and prevent unintentional injuries, violence, and suicide while at home, at work, at play, and in the community, and throughout their lives. These guidelines are designed to be part of a coordinated school health program, which is "an integrated set of planned, sequential, and school-affiliated strategies, activities, and services designed to promote the optimal physical, emotional, social, and educational development of students. A coordinated school health program involves and is supportive of families and is determined by the local community based on community needs, resources,

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standards, and requirements" (Allensworth et al., 1997). Coordinated school health programs can improve the health, safety, and educational prospects of students (Cauce et al., 1987; Perry et al., 1992; Kolbe, 1993; McGinnis, 1993; Kalnins et al., 1994; Allensworth et al., 1997; Hawkins et al., 1999; McLellan et al., 1999; St. Leger, 1999).

The guidelines summarized here were published in full in December, 2001 in *MMWR Recommendations and Reports* (CDC, 2001). The full report includes strategies for implementing the recommendations listed here, addressing unintentional injury, violence, and suicide prevention for students in pre-kindergarten through 12th grade. These guidelines are one in a series from the Centers for Disease Control and Prevention that provide guidance for school efforts to promote healthy and safe behaviors among children and adolescents (CDC, 1988; CDC, 1994; CDC, 1996; CDC, 1997).

METHODS

CDC reviewed published literature (peer-reviewed journal articles, books, private and government reports, and web sites) to identify more than 200 strategies that schools could implement to prevent unintentional injuries, violence, and suicide. Few strategies had been subjected to scientific evaluation, and thus an expert consensus approach was used to generate these guidelines. CDC convened a panel of 17 experts in unintentional injury, violence, and suicide prevention, school health, and mental health services. The panel employed a two-round Delphi technique (Linstone & Turoff, 1975; Green & Kreuter, 1991) to reach a group decision about which recommendations to include in this report. The first-round questionnaire listed the 200 identified strategies, organized by coordinated school health program components. The panelists rated the extent to which evidence existed to support each strategy, the effectiveness of each strategy, and the feasibility for schools to implement each strategy. Panelists considered these ratings to arrive at a priority score for each strategy.

The second-round questionnaire listed the strategies that received the highest priority scores within each coordinated school health program component. Panelists considered the group results and their individual scoring on the first-round questionnaire to decide how to rank the strategies. Panelists ranked strategies within each component rather than across all strategies to ensure that all components of a coordinated school health program were addressed.

The panelists received the results of the second-round questionnaire in advance of a meeting of the panel in December, 1999. At the meeting, the panel received the resulting outline for the guidelines in this report. They reached consensus about whether any strategies that were not included in the outline should be included and whether there were strategies that should be removed from the outline.

In January, 2001, national nongovernmental organizations representing state and local policy makers, educators, parents, and experts in unintentional injury, violence, and suicide prevention, 14 other federal agencies involved in unintentional injury, violence, and suicide prevention, and five representatives of state and local agencies reviewed a draft version of the guidelines. The guidelines were revised based on their review.

SCHOOL HEALTH RECOMMENDATIONS TO PREVENT UNINTENTIONAL INJURIES, VIOLENCE, AND SUICIDE

The guidelines presented here address eight topics derived from the coordinated school health program model: a social environment that promotes safety; a safe physical environment; health education curricula and instruction; safe physical education, sports, and recreational activities; health, counseling, psychological, and social services; appropriate responses to crises; involvement of families and communities; and staff development. The guidelines represent the state-of-the-science in school-based unintentional injury, violence, and suicide prevention. However, every recommendation is not appropriate or feasible for every school to implement, nor should any school be expected to implement all the recommendations. Schools should determine which recommendations have the greatest priority based on their own needs and available resources.

Establish a social environment that promotes safety and prevents unintentional injuries, violence, and suicide. The social environment of a school encompasses the climate as well as the formal and informal policies, norms, and other mechanisms through which students, faculty, and staff members interact daily. A social environment can promote safety or contribute to increased risk of unintentional injuries, violence, and suicide (Laflamme & Menckel, 2001). To promote safety and prevention, schools can implement the following principles:

- Ensure high academic standards and provide faculty, staff members, and students with the support and administrative leadership to promote the academic success, health, and safety of all students.
- Encourage students' feelings of connectedness to school.
- Designate a person with responsibility for coordinating safety activities.
- Establish a climate that demonstrates respect, support, and caring, and that does not tolerate harassment or bullying.
- Develop and implement written policies on unintentional injury, violence, and suicide prevention.
- Infuse unintentional injury, violence, and suicide prevention into multiple school activities and classes.
- Establish unambiguous disciplinary policies; communicate these policies to students, faculty, staff members, and families; and implement the policies consistently.
- Assess unintentional injury, violence, and suicide prevention strategies and policies at regular intervals.

Provide a physical environment, inside and outside school buildings, that promotes safety and prevents unintentional injuries and violence. The physical environment of a school (including walkways and

grounds, playgrounds, sports fields, parking lots, driveways, school vehicles, gymnasiums, classrooms, shop and vocational education classrooms, cafeterias, corridors, and bathrooms, as well as other places in which students engage in school activities) and the equipment used there can affect unintentional injuries and violence. Approximately four million children and adolescents are injured at school each year (Danseco et al., 2000). By implementing the following strategies, schools can ensure that the physical environment helps to prevent unintentional injuries and violence.

• Conduct regular safety and hazard assessments.

• Maintain structures, playground and other equipment, school vehicles, and physical grounds; make repairs immediately after hazards have been identified.

• Actively supervise all student activities.

• Ensure that the school environment, including school buses, is free from weapons.

Implement health and safety education curricula and instruction that help students develop the knowledge, attitudes, behavioral skills, and confidence needed to adopt and maintain safe lifestyles and to advocate for health and safety. Health education curricula and instruction can be an important component of school efforts to prevent unintentional injuries, violence, and suicide. In 2000, 75% of schools required students to receive instruction on preventing unintentional injury; 80% required instruction on preventing violence; and 40% required instruction on suicide prevention (CDC School Health Policies and Programs Study, unpublished data, 2000). To improve health education around unintentional injury, violence, and suicide prevention, schools can implement the following principles:

• Choose prevention programs and curricula that are grounded in theory or have scientific evidence of effectiveness.

• Implement curricula consistent with national and state health education standards.

• Use active learning strategies, interactive teaching methods, and proactive classroom management to encourage student involvement in learning.

• Provide adequate staffing and resources including budget, facilities, staff development, and class time to unintentional injury and violence prevention education.

Provide safe physical education and extracurricular physical activity programs. Physical education and extracurricular physical activity programs offer many opportunities to teach the skills needed to facilitate lifelong safe participation in physical activity. Physical activity programs also can be positive alternatives to risky behaviors. However, along with increased participation in physical activity comes an increased risk of physical activity-related injury (Gilchrist et al. 2000). To improve the safety of their physical education and other physical activity programs, schools can:

• Develop, teach, implement, and enforce safety rules.

• Promote unintentional injury prevention and nonviolence through physical education and physical activity program participation.

• Ensure that spaces and facilities for physical activity meet or exceed recommended safety standards for design, installation, and maintenance.

• Hire physical education teachers, coaches, and other physical activity program staff members who are trained in injury prevention, first aid, and CPR and provide them with ongoing staff development.

Provide health, counseling, psychological, and social services to meet the physical, mental, emotional, and social health needs of students. Students' risk for unintentional injuries, violence, and suicide is affected by their physical, mental, emotional, and social health status. Unfortunately, only a small percentage of children in the United States receive the mental health treatment they need, with schools serving as primary providers of these services (U.S. Department of Health and Human Services, 1999). To better address students' physical, mental, emotional, and social health needs, schools can:

• Coordinate school–based counseling, psychological, social, and health services; and the educational curriculum.

• Establish strong links with community resources and identify providers to bring services into the schools.

• Identify and provide assistance to students who have been seriously injured, who have witnessed violence, who have been the victims of violence or harassment, and who are being victimized or harassed.

• Assess the extent to which injuries occur on school property.

• Develop and implement emergency plans for assessing, managing, and referring injured students and staff members to appropriate levels of care.

Establish mechanisms for short- and long-term responses to crises, disasters, and injuries that affect the school community. Schools need to be responsive to a wide variety of crises and disasters that may affect the school community. These might include, for example, environmental disasters (e.g., fires, floods, tornadoes, blizzards, and earthquakes); death or serious injury of a student or staff member in a car or bus crash, suicide, or a violent event at school; a suicide attempt; terrorism; hazardous chemical spills; explosions; and mass illness or injury. School plans can be comprehensive, addressing response needs for multiple types of crises, disasters, and emergencies. To establish comprehensive mechanisms for addressing crises, schools can:

• Establish a written plan for responding to crises, disasters, and associated injuries.

• Prepare to implement the school's plan in the event of a crisis.

• Have short-term responses and services established after a crisis.

• Have long-term responses and services established after a crisis.

Integrate school, family, and community efforts to prevent unintentional injuries, violence, and suicide. Schools cannot prevent unintentional injuries, violence, and suicide in isolation from the communities and families they serve. When parents

are involved in school, violent and antisocial behavior decreases (National PTA 1997). To integrate school, family, and community efforts, schools can:

• Involve parents, students, and other family members in all aspects of school life, including planning and implementing programs and policies.

• Educate, support, and involve family members in child and adolescent unintentional injury, violence, and suicide prevention.

• Coordinate school and community services.

For all school personnel, provide regular staff development opportunities that impart the knowledge, skills, and confidence to promote safety effectively and to prevent unintentional injuries, violence, and suicide, and support students in their efforts to do the same. Trained staff members are essential to implementing a coordinated school program to prevent unintentional injuries, violence, and suicide. Staff members who understand how to prevent unintentional injury, violence, and suicide for students, and for themselves, can transmit this information to students. Adults in the school can role model prosocial and safe behaviors (e.g., coaches can treat students respectfully; custodial staff members can model safe use and storage of caustic chemicals; bus drivers can wear seat belts; and industrial arts teachers can use eye protection and other safety equipment). To promote safety and prevention, schools can implement the following principles:

• Ensure that staff members are knowledgeable about unintentional injury, violence, and suicide prevention and have the skills needed to prevent injuries and violence.

• Train and support all personnel to be positive role models for safe lifestyles.

CONCLUSIONS

To ensure a safe and healthy future for our students, school-based programs to prevent unintentional injury, violence, and suicide should become a national priority. These programs could be part of coordinated school health programs and reach students from preschool through secondary school. School leaders, community leaders, and families can commit to implementing and sustaining unintentional injury, violence, and suicide prevention within the schools. The CDC School Health Guidelines to Prevent Unintentional Injuries and Violence provide the framework for establishing such schoolwide strategies. By adopting these guidelines, schools can help ensure that all school-age youth attain their full educational potential and good health.

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