
Journal of School Health

Volume 65, Number 10

December 01, 1995

Published since 1939 by the American School Health Association

A Review of Selected School-Based Conflict Resolution and Peer Mediation Projects

Kenneth E. Powell,
Lois Muir-McClain,
Lakshmi Halasyamani

A Review of Selected School-Based Conflict Resolution and Peer Mediation Projects

Kenneth E. Powell, Lois Muir-McClain, Lakshmi Halasyamani

ABSTRACT: *Many U.S. schools are implementing curricula and other activities to reduce interpersonal violence among students. Most involve conflict resolution or peer mediation (CR/PM) training. Little is known about the effectiveness or manner of implementing these projects. This paper examines nine projects supported by four state health departments. Available data suggest some projects may modify youths self-reported attitudes about violent behavior, improve school discipline, and reduce absenteeism. The review also revealed considerable variation in implementation, especially in the role of professionally trained consultants and amount of teacher and student training. More attention should be paid to evaluating CR/PM projects. Some data suggest they may contribute positively to community efforts to reduce violence among youth, but insufficient information exists to know which projects best serve which students, and how projects should be implemented. Until consensus emerges, project personnel should carefully assess the implementation and impact of their activities. Routinely collected data, such as disciplinary actions, can be used for evaluation, often with only minor modification. (J Sch Health. 1995;65(10):426-431)*

Interpersonal violence among youth represents a major problem across the United States. Homicide victimization and perpetration rates for young males ages 15-19 increased substantially since 1985.¹ Similarly, physical fighting, weapon carrying, assaults, robberies, and sexual assaults are too common among youth.² As violence becomes a more prevalent concern for society, safety at school becomes an issue as well.

To create a safer atmosphere at school and to contribute to broader efforts within the community to reduce violence, a large but unknown number of U.S. schools have implemented projects to reduce interpersonal violence among youth. Estimates place the number of schools adopting some form of violence prevention training at more than 5,000.³ These efforts provide cognitive-behavioral and social skills training on various topics using sundry methods.

Although other terms sometimes are used for the projects, they commonly are referred to as conflict resolution and peer mediation (CR/PM) training. While conflict resolution and peer mediation often are talked about and implemented together, they differ. Conflict resolution training, as commonly implemented and as used in this paper, provides training to an entire class, grade, or school. In contrast, peer mediation training is provided to a few selected students. In general, conflict resolution projects teach students to manage anger, control aggressive responses, understand conflict, and avoid and diffuse potentially physically violent confrontations. Peer mediation projects train a few selected students to mediate disputes between other students. Student mediators are taught to remain impartial. They generally are the same age as the disputants. Both conflict resolution and peer mediation allow students to settle disagreements peacefully among themselves.

Over the past decade, public health workers have become increasingly concerned and involved in efforts to reduce the morbidity and mortality caused by interpersonal violence.^{4,5} The numerous types of violence and the manner

in which many of its causes are imbedded deeply in the social fabric preclude simple solutions. The public health community, however, brings several important interests and skills to the arena including a primary focus on prevention; a concern for violent injuries not part of criminal activity such as fights among students; a set of practical, goal-oriented practices including surveillance, epidemiologic analysis, and program evaluation; and the ability to collaborate with a wide spectrum of disciplines.⁴ As part of the public health community's involvement in violence prevention activities, some state health departments have provided funds to help schools implement CR/PM projects.

Presently, limited documentation exists on the implementation and success of these projects. The curricula, materials, teacher and student training, and role of the project coordinator (if any), may vary widely, with presumably varying results. The magnitude of the youth violence problem, the financial cost associated with implementing school-based CR/PM projects, and the many hours devoted to these activities by students and faculty, demand that effective methods and their role in larger programs be determined. Recent reviews of school-based projects⁶ and of youth violence prevention efforts in general⁷ emphasize the importance for more research and evaluation of existing and future projects. The limited amount of evidence of success has caused some to question the value of CR/PM projects.⁸

PROJECT SUMMARIES BY STATE

The following section reviews retrospectively the status of CR/PM projects at nine schools in four states. Projects were supported by grants from the Centers for Disease Control and Prevention's National Center for Injury Prevention and Control to state health departments to conduct general injury prevention activities. Tabular data summarizing these projects may be obtained from the first author. Additional information about a given project may be obtained from individual contacts (see Resources).

Florida

A CR/PM skills training project was piloted at one elementary school (K-6) in the greater metropolitan Miami area. The project was supported by the Florida Dept. of

Kenneth E. Powell, MD, MPH, Associate Director for Science, Division of Violence Prevention, MS K-60, National Center for Injury Prevention and Control, Centers for Disease Control and Prevention, Atlanta, GA 30333; Lois Muir-McClain, 1068 Traymore Drive, Norcross, GA 30093; and Lakshmi Halasyamani, MD, 10 Lanark Road, #5, Brookline, MA 02146. This article was submitted June 30, 1995, and revised and accepted for publication September 11, 1995.

Health and Rehabilitative Services, Florida Injury Prevention and Control Program, the Dade County Public Health Unit, the Dade-Monroe Teacher Education Center, and the Peace Education Foundation. The school enrolls approximately 1,700 students, 90% of whom are members of minority groups, and 85% of whom qualify for a free or reduced-price lunch. The violent crime rate in 1992 in Dade County was 19.1 per 1,000 population.

The curriculum, Fighting Fair Model, was designed by Peace Education Foundation and is based on age- and grade-appropriate workbooks and materials previously developed by the same organization.^{9,10} It teaches students to deal with conflict positively, and to replace aggressive behaviors with constructive ones. The curriculum contains The Rules for Fighting Fair, which students are to adopt in conflict-provoking situations. The rules are: 1) identify the problem, 2) focus on the problem, 3) attack the problem, not the person, 4) listen with an open mind, 5) treat a person's feelings with respect, and 6) take responsibility for your actions. Negative or destructive behaviors such as name-calling, threats, and hitting are termed "fouls." Students learn through "hands-on" techniques including role-playing, brainstorming, puppetry, classroom discussion, stories, and skits. Students also learn to mediate disputes between others. The importance of listening, questioning, and paraphrasing skills is explained, then reinforced through interactive exercises and mock mediations.

Three classes (one class each from grades four, five, and six) were selected as the experimental group. Experimental classrooms were selected because their teachers volunteered to participate. Three control classrooms, one from each of grades four-six, were chosen randomly from the remaining classrooms. Assignment of children to classrooms was random. Eighty-three children participated in the experimental group, and 88 in the control group.

An educational specialist with the Dade-Monroe Teacher Education Center served as the project coordinator. She conducted a three-day workshop to familiarize teachers in the experimental group with the concepts of conflict resolution and to teach them how to use the curriculum. She visited classrooms and met with the teachers at least weekly to conduct demonstration lessons and to ensure that the curriculum was being implemented consistently.

During the seven-week implementation period, teachers in the experimental group introduced conflict resolution into existing language arts and social studies curricula, through almost daily 30-minute lectures. Students were directed to solve interpersonal disputes using knowledge obtained through these sessions.

The experimental effect was measured through 1) a before and after teacher-administered survey of attitudes and knowledge, and 2) written evaluations by school staff of aggressive behaviors. In the survey, students provided multiple-choice responses to 10 hypothetical situations involving conflicts between individuals. Responses were recorded in four broad categories, scored from one-four, with one being the most "pro-social" response and four the most "anti-social" or aggressive response. Total scores ranged from 10-40. The post-test was given after the seven-week implementation period, using the same survey. Pre- and post-test survey scores improved for the treatment group, with mean scores changing from 25.73 pretest to 22.10 post-test ($t = -6.15, p < .001$). Mean scores of the

control group changed little, from 21.39 pretest to 21.55 post-test ($t = 0.41, p > .10$).

Written reports by school staff were used to analyze behavioral changes in the subjects. Data for grading periods prior to and during implementation of the curriculum were examined. Weighted scores were calculated by multiplying the frequency (up to five occurrences) of each of five behaviors rated on a one-five scale from the least to the most severe. The five behavior categories are: 1) disruptive behavior, 2) rude/discourteous behavior, 3) defiance of adult authority, 4) battery (one student hits another), and 5) fighting (two students hit each other). Weighted scores for each student could range from 0 (no reported incidents of disruptive behavior) to 75 (five or more episodes of all five behaviors). The sum of weighted scores for students in the experimental group decreased from 82 to 1. A decrease also occurred in the control group, from 103 to 45. No reported incidents of battery or fighting occurred among subjects in either the experimental or control group during the project implementation period.

Results suggest the curricula improved conflict resolution behavior in students and support the hypothesis that conflict resolution projects are useful and beneficial in the classroom setting. Reduction in objectionable behaviors among control students may have occurred because they were influenced by experimental students outside of class time. Project directors are modifying the evaluation design, mainly by selecting the control group from a separate school. Generalizability of findings may be questioned because teachers who volunteered for the study may have been more favorably disposed to project goals, and, as a result, more effective teachers of the curricula than teachers who did not volunteer.

Maryland

A peer mediation project, supported by the Injury Prevention and Control Program, Dept. of Health and Mental Hygiene, the Dept. of Criminal Justice at Coppin State College, and Project BRAVE (Baltimoreans Reducing All Violent Encounters), was implemented at one elementary school (K-5) in Baltimore, selected in part because the school is located in a neighborhood with a high incidence of drug trafficking and violence. The project also was supported by the local PTA and a neighborhood planning committee, including officials from a merchants' association, local police precincts, Coppin State College, and representatives from the school district. The school had a population of more than 500, all of whom are African-American, and 80% of whom qualify for a free or reduced-price lunch. The violent crime rate in Baltimore in 1992 was 28.8 per 1,000 population.

In fall 1991, a full-time project coordinator was employed to implement the project and conduct the training sessions. First, the project coordinator presented the entire student body an overview of conflict mediation theory through classroom presentations and assemblies. Skits, role-play exercises, and question and answer sessions familiarized students with conflict mediation theory and procedure.

After the student body was oriented, student mediators were trained. Students were nominated by peers, teachers, and administrators. Students and staff were instructed to

choose boys and girls with diverse social and academic skill levels, and to select children who might benefit from learning communication, analytic, and problem-solving skills. The project coordinator interviewed nominees to assess their interest in the project, and to distribute training schedules and letters requesting parental consent. During a two-year period, 23 girls and 21 boys from the third, fourth, and fifth grades were trained as mediators.

In five, two-hour sessions spanning two weeks, the mediators were taught listening and communication skills, problem identification and solutions, leadership and teamwork, conciliation, and conflict mediation process. A modification of an existing curriculum was used¹¹ that included games, simulations, role-play, and practice exercises. Students completing the training were awarded certificates. Following the initial training period, student mediators met biweekly with the project coordinator to improve their mediation skills and to discuss problems.

To facilitate the mediation process, student mediators wore patrol belts which identified them as mediators. They patrolled in pairs in the hallways, cafeteria, and playground of the school. Upon witnessing an argument or incipient fight, mediators asked the disputants if they wished to solve the conflict through mediation. If they agreed, the mediators — without taking sides — guided them toward a solution or compromise by facilitating communication between them. The project coordinator, or a trained parent or faculty member, monitored the mediation session.

The project implemented several supplementary activities. Educational sessions about conflict mediation were held for 11 parents and family members and 13 faculty members who volunteered over the two-year period. Parents formed a support group to assist the project coordinator and to encourage healthier relationships with their children at home. Further, 15 special agents and support personnel from the Baltimore office of the FBI established a mentoring project to form one-on-one relationships with 15 male fourth and fifth grade students, some of whom were mediators. Each mentor had weekly contact with the student.

Other methods of introducing conflict resolution into the community and reinforcing it among students included: 1) project updates for the PTA and local community planning committee, 2) field trips for the student mediators to the FBI headquarters, Circuit Court of Baltimore, and Coppin State College, 3) a school poster contest involving a conflict mediation theme, and 4) conflict resolution training workshops for local children at a community summer recreation center conducted by the project coordinator using student mediators for their knowledge and skills.

During the two years of the project, student mediators helped to resolve 311 incidents, which included threats and harassments, personal property disputes, name calling, line cutting, rumors and gossip, and physical contact such as kicking, pushing, or bumping. Disputants signed agreements in 289 (93%) of the incidents. Follow-up by the project coordinator indicated that 275 (95%) of the agreements were honored for the remainder of the school year.

Desirable changes for the entire school were recorded after implementation of the project. Faculty attendance increased from 92% to 95%, and student attendance from 91% to 93%. Disciplinary suspensions fell from four the year before the project to one during each of the two

project years. Referrals to the principal's office declined from 103 before the project to 93 and then 80 during it. Anecdotally, there were fewer incidents of fighting, hitting, and name-calling.

Unfortunately, no actual counts were made of fighting or hitting. Also, suspension and referral counts were not categorized, so no assurance exists that reductions occurred in violent or aggressive acts. No information about a comparison group was obtained. Nevertheless, the reduced suspension and referral rates, slightly improved attendance, and the perception of less fighting, suggest a favorable influence of the project on the school atmosphere, even with no confirmed evidence of violence reduction. Use of a project coordinator, continuing training for mediators, parent involvement, and extracurricular mentoring were positive features of the project and may have contributed to the apparent benefit.

Missouri

Peer mediation projects, supported by the Office of Injury Control, Missouri Dept. of Health, were established in two elementary, two middle, and two high schools in the St. Louis area. The schools have populations ranging from 350 to 1,800. All have sizeable minority representation, ranging from 10% to 53% African-American students, and many students qualify for a free or reduced-price lunch (10% to 55%). The violent crime rate in St. Louis in 1992 was 32.9 per 1,000 population.

The mediation training curriculum was based on two existing models.¹² A consultant, hired under contract, trained a school counselor at five schools and a classroom teacher at a sixth. These individuals then trained selected students chosen by their teachers. Counselors and students met at regularly scheduled sessions either during class time or after school, totaling three-six hours, depending on the school. On occasion, trainers worked directly with students to determine the students' progress.

During training, students learned about the role and responsibilities of a mediator. They discussed events that frequently result in conflict and the consequences of various responses. Using role-playing and mock mediation, mediators learned the skills needed to help disputants reach a resolution. Finally, students discussed methods for introducing conflict mediation to the entire school.

Disputants are referred to mediation by teachers and other students. The mediation process takes place in the counselor's office. Student mediators have disputants tell their side of the problem, then encourage the disputants to generate solutions. A mutually agreed upon solution is written, which the disputants sign. The school counselor is available in the mediation area, but does not participate during mediation. The mediation sessions occur throughout the day during class time, and last 15-30 minutes each.

Comparison of one participating high school with a nearby demographically similar school showed the mediation school had a slightly higher rate of suspensions (6.9% versus 5.6%) and weapons carriage (five events versus one event). The schools had not retained disciplinary records from previous years, making it impossible to detect year to year changes. No pre/post surveys were conducted. School officials spoke supportively about the projects. The subjective impression of evaluation team members who visited

the schools was that top-level support for the project varied substantially among the six schools.

North Carolina

A conflict resolution project in a middle school (grades six-eight) in Orange County, North Carolina, was supported by the Injury Control Section, Division of Epidemiology, North Carolina Dept. of Environment, Health, and Natural Resources. The school has a population of more than 700 students, approximately 29% of whom are members of a racial or ethnic minority; 21% qualify for a free or reduced-cost lunch. The violent crime rate in Orange County in 1992 was 14.8 per 1,000 population.

The curriculum involved a combination of conflict resolution and peer mediation training, incorporating aspects of several existing projects.^{13,14} A trainer from the Orange County Dispute Settlement Center taught 391 sixth grade students about conflict resolution during three 50-minute classroom periods. Nine teachers also were trained in conflict resolution theory. With lectures, discussion groups, and role-playing, students were taught about individuality, anger, and power. Then they were introduced to the concept that self-control is having the "power" to remain calm when upset or angry. Students were taught "*The Rules for Fighting Fair*," also used in Florida.

In addition, 26 students were selected by their peers to be trained in peer mediation. During four, four-hour training sessions over a two-day period, the trainer taught these students to help negotiate conflicts. Role-playing, videos, and games were used to improve the students' communication, listening, and questioning skills. Mediators were instructed to provide no direct solutions but to help disputants express their feelings, and to assist them in reaching a mutually agreeable solution. Ground rules for the mediation process were: 1) one person speaks at a time, 2) no name-calling or put-downs, and 3) be honest. Mediators were instructed to begin by encouraging disputants to express their views and feelings about the argument. The mediator summarized both sides and stated what he or she perceived to be the problem. Next, disputants brainstormed possible solutions, with the mediator writing down all solution ideas. A fair and reasonable solution was developed, written down, and signed by the disputants. Sessions lasted up to one hour, and occurred during class time in the counselor's office or a conference room. An adult was available outside of the mediation area if needed.

From the 1991-1992 school year to the 1992-1993 school year, disciplinary referrals of sixth grade students to the principal's office dropped from 150 to 27 (82%), in-school suspensions of sixth grade students decreased from 52 to 30 (42%), and out-of-school suspensions of sixth grade students decreased from 40 to 1 (97%). In-school suspensions for the entire school increased by 25% and out-of-school suspensions for the entire school decreased by 26%.

A pretest survey given to the 391 students yielded a mean score of 16% correct answers. After the three classes in conflict resolution, a post-test administered to 184 (47%) sixth grade students had a mean score of 50% correct responses. Pretest scores for these 184 students cannot be separated from the whole, nor is it known how representative they may be of the entire group.

The reduced number of disciplinary actions between

1991-1992 and 1992-1993 suggest a beneficial effect of the project. However, available information does not indicate whether 1992-1993 was an improvement or whether 1991-1992 was an uncharacteristically troublesome year. In addition, it is not known if the number of acts of physical violence decreased or if the improvement encompassed all types of infractions.

CATEGORIES OF PROJECT VARIATION

The preceding summaries demonstrate marked differences in the way CR/PM projects were implemented. The most apparent differences occurred in the role of a professionally trained consultant and the extent of teacher and student training. Data to assess change in violence-related knowledge, attitudes, and behaviors were scant and often unavailable. Differences among the targeted students also were present. These differences are abstracted in the following eight categories.

Targeted Students

Age range of the target groups and school size varied substantially. Projects were implemented in two high schools, three middle schools, and four elementary schools. All elementary school projects focused on the older grades. Schools ranged in size from about 300 to 1,800 students (50 to 450 per grade). Schools for the upper grades were larger, as would be expected. The projects were more similar in their efforts to select schools in poorer neighborhoods with higher crime rates. The proportion of students receiving reduced cost lunches ranged from 10% to 85%. The violent crime rate in four of the five counties was above the national rate of 7.6 per 1,000 population.

Violence reduction curricula should be tailored to the ages of the students and the backgrounds and communities from which they come. Even so, effectiveness of various curricula likely will vary because of those backgrounds and conditions. Curricula may be less effective because violence is prevalent in the surrounding community. Alternatively, curricula may be more effective because there is more violence to reduce. These contradictory possibilities emphasize the importance of evaluation. Characteristics of the students and surrounding community should be noted and taken into consideration when assessing and describing overall impact of a violence reduction curriculum.

Project Consultant

The role of the "consultant" differed substantially among projects. At all schools, consultants provided on-site training for teachers and students. At two sites, however, consultants also served as overall project coordinator and met regularly with students, teachers, or both.

Teacher and Student Training

The number of school staff trained varied from about one per 80 students to one per 1,800 students. Duration of training for school staff ranged from a few hours to three days (about 20-24 hours). Training formats differed among projects, ranging from informal, general "information meetings," to rigorous, detailed seminars.

As with staff training, student training varied among projects. In some schools, students were taught directly by the consultant. In other schools, students were taught by a

teacher trained by the consultant. Number of training sessions varied from three to more than 20 for conflict resolution and from one-six for peer mediation. Length of sessions ranged from a half-hour to four hours each, with total hours of training varying from two to 16 hours.

Admittedly, some flexibility in project implementation is desirable to accommodate differences among schools in student or teacher backgrounds, daily routines, or even physical facilities. However, major differences in the role of the project coordinator and amount of formal teacher and student training exhibited among projects almost certainly had an important impact on effectiveness. Future evaluations should adequately note implementation characteristics such as duties of the project coordinator and amount of teacher and student training.

Teaching Methods and Curriculum Content

Teaching methods in all schools combined formal instruction with creative and participatory activities. All curricula combined an effort to increase understanding of factors that lead to arguments and physical fights with training in skills to prevent escalation of disagreements into fights.

Mediation Format

The mediation process was similar in most schools. Students were always a source of referrals, and teachers were a source in all but one school. All schools provided a specific location and permitted use of class time for mediation. Time allowed for sessions often was limited, ranging from 20-60 minutes. Adults did not formally participate in the negotiating process at any school, but in all four elementary schools and one of the three middle schools a teacher was present in the room during mediation. In the other two middle schools and the two high schools, a teacher was not in the room but nearby and available for consultation.

Complementary Strategies

Some schools added other violence prevention strategies. The Maryland project, for example, consciously augmented CR/PM training with parent involvement and extracurricular mentoring. It is unlikely that school-based CR/PM projects can exert an appreciable impact on the overall rate of student violence without concomitant efforts to modify youth's experiences in the home and community. When other complementary strategies are added to a CR/PM curriculum, the likelihood of violence reduction increases. Though an "augmented" project is desirable in terms of preventing violence, it precludes ascribing beneficial effects to any specific component because changes in student behaviors are attributable to the combined effect of the various strategies and not the CR/PM alone. Project descriptions should not be limited to the CR/PM component but should include all strategies used.

Project Cost

Reported cost of the projects ranged from \$4,200 to about \$8,000 per year for eight of the nine schools. An estimate of \$45,000 for the other school included in-kind contributions. The range of estimates undoubtedly reflects variation in bookkeeping as much as, if not more than, variation in real project costs.

Project Evaluation

Data assembled by these projects suggest CR/PM projects may reduce the frequency of fighting and other undesirable behaviors at school, increase knowledge and modify student's attitudes about conflict, improve school discipline, and increase attendance. However, these observations are based on so few data they must be considered speculative.

School administrators, health department officials, or other participants in similar projects should determine if the curriculum, as implemented in their school, is having the desired impact and is worth the cost. Evaluation is necessary because few empirical data exist to support the value of school-based CR/PM violence reduction projects. In addition, the unique characteristics of students and teachers at any school influence success of an adopted curriculum. Quantitative evaluations enable school officials and others to know if the CR/PM activities (or other violence reduction efforts) are having a positive effect and to demonstrate those effects to others with more than statements of opinion.

Evaluation of any project should assess violence reduction or, at the least, acquisition of knowledge and skills. Several evaluation plans are possible. A randomized experimental design is the most powerful evaluation approach. The Florida project made a laudable effort to approach that model. Randomized experimental designs, however, are not always feasible, especially for projects encompassing multiple strategies such as CR/PM, parent training, and mentoring. Simpler approaches can be taken. For example, project schools can be compared with nonproject schools. At the least, preproject and post-project comparisons within the same school should be undertaken. These comparisons may involve knowledge or skill acquisition measured by "pencil and paper" tests, or comparison of various behavioral data, much of which schools collect regularly.

Attendance, grades, disciplinary actions, or visits to a school nurse could be used to evaluate CR/PM projects. To be useful, however, these data should be saved from year to year and tabulated on a school-wide basis rather than stored in individual students' files. Some routinely collected data may need to be subdivided for maximum usefulness. For example, disciplinary actions for fights should be counted separately from disciplinary actions for shouting. School-wide or grade-wide counts should suffice, thereby eliminating concern about maintaining student privacy. The two most commonly encountered problems in these efforts to obtain data retrospectively were that pertinent, routinely recorded data had been discarded and that disciplinary actions of all types were lumped together.

RECOMMENDATIONS

The following recommendations are offered based on information from these nine projects conducted in four states.

1. Evaluations of CR/PM projects are needed. These projects are being widely implemented at unknown cost and with unconfirmed benefit.

2. Given the limited evidence of success, burgeoning number of curricula, and wide range of implementation efforts, school officials should assess the success of any project adopted by their school. Assessment need not be expensive or exhaustive, but it should be done.

3. Evaluations should describe the target group; the comparison group, if any; content of the curriculum; project implementation including the role of a consultant, if any; amount and type of teacher training; amount and type of student training; quantitative changes, if any, in violence-related knowledge, skills, attitudes, and behaviors of the students, both short-term and longer-term; characteristics of the community in which the project takes place; and other associated efforts such as involvement of parents or provision of mentors. Assistance with an evaluation may be available from local or state health departments, or local colleges or universities.

RESOURCES

The following individuals may be contacted to obtain additional information about other violence prevention activities in their state or about the specific project described herein.

Florida. David V. Jacobsen, Program Administrator, Florida Injury Prevention and Control Program, Office of Health Promotion and Wellness, 1317 Winewood Blvd., HSH, Tallahassee, FL 32399-0700; 904/487-3220, FAX 904/488-6495; and Jean Marvel, MA, Teacher Education Center, 1080 Labaron Drive, Miami Springs, FL 33166; 305/887-2002, FAX 305/884-8142.

Maryland. Roger L. Harrell, MHA, Dept. of Health and Mental Hygiene, Division of Injury and Disability Prevention and Rehabilitation, Local and Family Health, 201 W. Preston St., #302, Baltimore, MD 21201-2399; 410/225-5780, FAX 410/-333-7279; and Joseph L. Washington, Director, Project BRAVE, Coppin State College, 2500 W. North Ave., Baltimore, MD 21216; 410/-383-5755, FAX 410/-333-7160.

Missouri. Cherie Crowe, Director, Office of Injury Control, Missouri Dept. of Health, P.O. Box 570, Jefferson City, MO 65102; 314/-751-6365, FAX 314/-751-7894.

North Carolina. Jeanne Givens, Injury Prevention Branch Head, North Carolina Dept. of Environment, Health, and Natural Resources, P.O. Box 27687, Raleigh, NC 27611-7687; 919/-715-6448, FAX 919/-733-9575;

Eileen Kugler, RN, MSN, MPH, Director, Personal Health Services Division, Orange County Health Dept., P.O. Box 8181, Hillsborough, NC 27278; 919/-732-8181, ext. 2401, FAX 919/644-3007; and Frances Henderson, Executive Director, Orange County Dispute Settlement Center, 302 Weaver St., Carrboro, NC 27510; 919-929-8800, FAX 919-942-6931. ■

References

1. CDC. Homicides among 15-19 year old males. 1963-1991—United States. *MMWR*. 1994;43:725-728.
2. Lowry R, Sleet D, Duncan C, Powell K, Kolbe L. Adolescents at risk for violence. *Educ Psychol Rev*. 1995;7:7-39.
3. Massey S. Schools find pupil mediators cut violence. *The Wall Street Journal*. Feb 24, 1994.
4. Mercy JA, Rosenberg ML, Powell KE, Broome CV, Roper WL. Public health policy for preventing violence. *Health Aff*. 1993; Winter:7-29.
5. US Dept of Health and Human Services. *Report on the Surgeon General's Workshop on Violence and Public Health*. Leesburg, Va: US Dept of Health and Human Services; 1985.
6. Altman E. *Violence Prevention Curricula: Summary of Evaluations*. Springfield, Ill: Illinois Council for the Prevention of Violence; 1994.
7. Tolan PH, Guerra NG. *What Works in Reducing Adolescent Violence: An Empirical Review of the Field*. Boulder, Colo: Center for the Study and Prevention of Violence; 1994.
8. Webster DW. The unconvincing case for school-based conflict resolution. *Health Aff*. 1993; Winter:126-141.
9. Schmidt F, Friedman A. *Creative Conflict Solving for Kids: Grades 5-9*. Miami, Fla: Grace Contrino Abrams Peace Education Foundation; 1985.
10. Schmidt F, Friedman A. *Creative Conflict Solving for Kids: Grades 3-4*. Miami, Fla: Grace Contrino Abrams Peace Education Foundation; 1991.
11. The Community Board Program. *Training in Elementary School Conflict Management: Conflict Resolution Resources for Schools and Youth*. San Francisco, Calif. The Community Board Program, Inc; 1990.
12. Office of Injury Control. *School-based Conflict Management/Mediation: A Manual for Implementation*. Columbia, Mo: Missouri Dept of Health; 1992.
13. Grace Contrino Abrams Peace Education Foundation, Inc. Miami, Fla; 1986, 1990, 1991.
14. The Community Board Program Inc. San Francisco, Calif. 1987.

This article was prepared for the State Health Department Evaluation Team by Kenneth E. Powell, MD, MPH, Lois Muir-McClain, and Lakshmi Halasyamani, MD. McClain and Halasyamani were student interns at the National Centers for Disease Control and Prevention during their work on this project. The members of the State Health Department Evaluation Team were: **CDC:** Lois Muir-McClain, Lakshmi Halasyamani, MD, and Kenneth E. Powell, MD, MPH, Division of Violence Prevention, National Center for Injury Prevention and Control; **Florida:** David V. Jacobsen, Program Administrator, Florida Injury Prevention and Control Program, Dept. of Health Rehabilitation Services, Jean Marvel, BFA, MA, Teacher Education Center, Miami Springs, and Grisseel Cruz-Espaillet, MD, HRS Dade County Injury Prevention Coordinator, Dade County Public Health Unit; **Maryland:** Ellen R. Schmidt, MS, OTR/L, and Les R. Becker, MA, NREMT-P, Dept. of Health and Mental Hygiene, Division of Injury and Disability Prevention, and Rehabilitation, Local and Family Health Administration; Joseph L. Washington, Director, and Eleanor M. Bellamy, Project Coordinator, Project BRAVE, Coppin State College; and Jan Desper Maybin, MPA, Executive Director, Black Mental Health Alliance; **Missouri:** Cherie Crowe, Chief, Office of Injury Control, Garland Land, MPH, Director, Division of Health Resources, Missouri Dept. of Health; and **North Carolina:** Thomas B. Cole, MD, MPH, Chief, Injury Control Section, North Carolina Dept. of Environment, Health, and Natural Resources, Eileen Kugler, RN, MSN, MPH, Director, Personal Health Services Division, Orange County Health Dept., and Frances Henderson, Executive Director, Orange County Dispute Settlement Center.
