

# FRAMEWORKS: A COMMUNITY-BASED APPROACH TO PREVENTING YOUTH SUICIDE

Kristine Baber and Gretchen Bean  
*University of New Hampshire*

*Few youth suicide prevention programs are theory based and systematically evaluated. This study evaluated the pilot implementation of a community-based youth suicide prevention project guided by an ecological perspective. One hundred fifty-seven adults representing various constituencies from educators to health care providers and 131 ninth-grade students received training and participated in the evaluation. Analysis of questionnaire data collected before and after the trainings indicated significant increases in knowledge about youth suicide and belief in the usefulness of mental health care among adults and students. Adults' preparedness to help youth also increased. Students' sense of responsibility to help their peers who might be at risk for suicide increased from pre- to posttraining, as well as the likelihood that these trained students would seek adult assistance immediately if they were concerned about a peer. The results of these analyses are discussed in the context of qualitative information collected through individual interviews with key community contacts. © 2009 Wiley Periodicals, Inc.*

Youth suicide, the third leading cause of death among 15- to 24-year-olds in the United States, is now recognized as an important public health issue. Over the last decade, new prevention programs proliferated in response to the Surgeon General's

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Correspondence to: Kristine Baber, Pettee Hall, University of New Hampshire, Durham, NH 03824. E-mail: kristine.baber@unh.edu

Report indicating that more adolescents and young adults die from suicide than from cancer, heart disease, AIDS, birth defects, stroke, pneumonia and influenza, and chronic lung disease combined (U.S. Department of Health and Human Services, 1999). Mental illness and substance abuse disorders are identified in 90% of those who die by suicide (Gould, Greenberg, Velting, & Shaffer, 2006; Mann et al., 2005). Depressive disorders are the most frequent problem for youth, and the vast majority of depressed youth involved in suicides are untreated when they die.

Strategies for preventing youth suicide include education programs, screening programs, means restriction programs, and programs targeted to specific groups of young people such as Native American youth or those exposed to the suicide of a friend or family member (Commission on Youth Suicide Prevention, 2005). Mann and colleagues (2005) identified gatekeeper education, physician education, and means restriction such as limiting access to firearms as the most promising strategies. Gatekeeper programs prepare community and professional individuals (including physicians, first responders, educators, parents, faith leaders, etc.) to understand risk and protective factors, to identify youth at risk, to be aware of available resources, and to make referrals when necessary. Gatekeeper education also may attempt to raise awareness of policies and procedures that encourage help seeking, including the reduction of stigma and greater understanding about the usefulness of mental health services.

As is the case with other approaches to youth suicide prevention, gatekeeper programs frequently lack theoretical grounding and outcome evaluation (Commission on Youth Suicide Prevention, 2005; Mann et al., 2005). When systematic implementation and evaluation of gatekeeper training has occurred, it has taken place almost exclusively in institutional settings such as schools and the U.S. Air Force. The current study evaluated the effectiveness of the Frameworks Youth Suicide Prevention Project (Frameworks), a community-based program guided by an ecological perspective, developed and implemented by the New Hampshire chapter of the National Alliance on Mental Illness (NAMI-NH). Frameworks is listed in the National Best Practices Registry by the American Foundation for Suicide Prevention (AFSP) and the Suicide Prevention Resource Center (SPRC) as a program designed according to current standards in the field, but not yet evaluated to document its effectiveness.

## **THE FRAMEWORKS PROJECT**

The Frameworks project seeks to build community competence for identifying youth at risk for suicide and connecting these youth to appropriate resources and services. The project is designed to increase community effectiveness in responding to suicidal events, including suicidal ideation, attempts and threats, and completed suicides, by developing shared knowledge, language, and understanding among all constituencies in a community. The goal of the project is to reduce the number of youth suicides by improving participants' knowledge about youth suicide and preparing them to recognize youth at risk. The project also aims to increase community members' sense of responsibility to put their knowledge into action and their belief in the usefulness of mental health care. Trained individuals then can connect with youth about whom they are concerned and refer them to supportive services. The primary goals of the trainings for youth are to ensure they have the knowledge to identify peers who are at

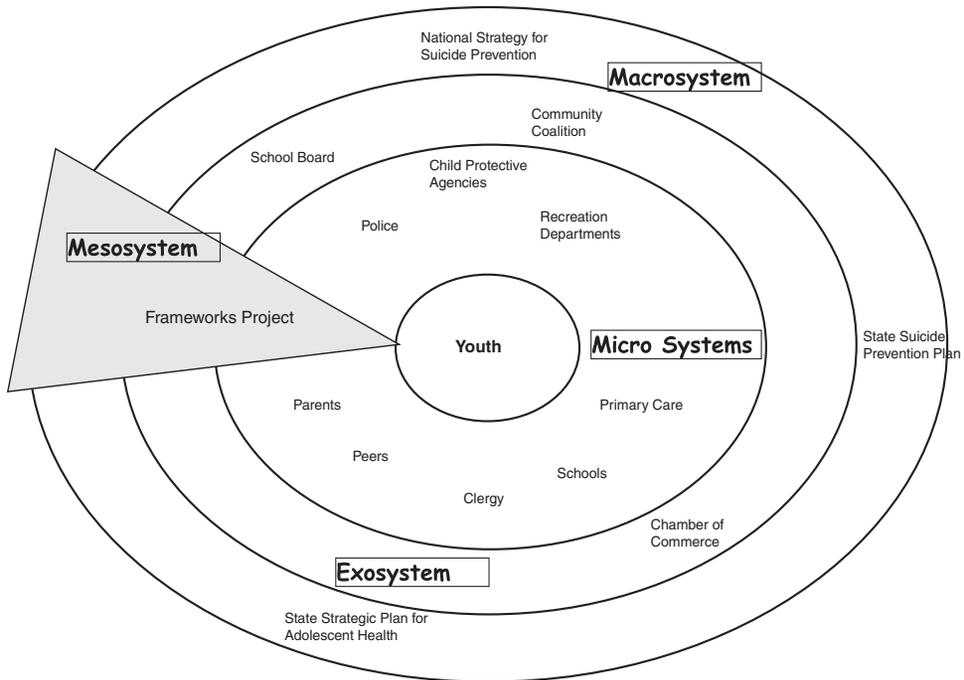
risk and to increase the likelihood that they will seek the assistance of an adult if they are concerned about another young person.

The project is organized around common gatekeeper training for all participants, discipline-specific training for professionals in 13 different disciplines (e.g., law enforcement, educators, clergy), and clear, evidence-supported protocols that provide an integrated approach to guide the response of individuals who recognize a youth as being at risk for suicide. All protocol development involved a multistep process that included collaboration with groups of relevant professionals in the state and external review by national experts in youth suicide prevention. The protocols attempt to raise participants' awareness of factors that may indicate that youth are at heightened risk for suicide, prepare the participants to competently connect with such youth, and enhance their ability to connect the youth to appropriate professionals and services.

The Frameworks training is designed to increase not only the competence of individual participants, but also, in aggregate, the competence of the community as a whole through training a critical mass of individuals in the common procedures for responding to youth at risk for suicide. The Frameworks project also is designed to build linkages among professionals, programs, and services in a community, which in turn may improve access to mental health care, facilitate an integrated support system for youth in the area, and address community risk and protective factors.

Frameworks is based on an ecological risk/protective model (Bogenschneider, 1996; Bronfenbrenner, 1979) that is founded on the belief that the most effective approach to supporting youth is to reduce risks that compromise healthy development and to enhance protective factors that mitigate risks and encourage health and well-being. An ecological approach emphasizes the importance of the environmental, contextual, and sociohistorical influences on the experiences and development of individuals (Schiamberg, Paulson, & Zawacki, 1998). Central to this perspective is the idea that the developing young person interacts with a series of ever-widening systems that operate both proximally and distally to shape the environments within which the youth functions. Formally identified eco-levels encourage a comprehensive, rather than fragmented, approach to understanding the multiple factors that contribute to problems such as youth suicide and offer multiple possibilities for intervention. An environment with few risk factors and an abundance of protective influences at every eco-level would provide the ideal context for optimal development and well-being.

The Frameworks Youth Suicide Prevention Project puts this ecological model into practice by intervening at multiple eco-levels to reduce risk and enhance protective factors (Fig. 1). The program itself functions at the mesosystem level using trainings and protocols to link microsystems in which youth are members, such as schools and peer groups. Aspects of the program also target services and social policies in the exosystem that indirectly influence youth, as well as addressing macro-level issues such as attitudes and ideologies. For example, an underlying assumption of the Frameworks project is that youth suicide prevention is best accomplished by training individuals in all of the microsystems within which youth function—family, peers, school, other community programs and institutions—to recognize young people at risk for suicide and to connect them with services. Frameworks trainings encourage the integration of program protocols for responding to youth at risk for suicide into institutional policies and procedures to bring about structural change and maximize the likelihood of sustainability of the effects of the program.



**Figure 1.** Ecological model of Frameworks.

### ***The Current Study***

The purpose of this study was to determine the effectiveness of the pilot implementation of the Frameworks project. Determining the impact of youth suicide prevention programs such as Frameworks is challenging because the outcome of ultimate interest involves statistically rare events and effects that may only manifest themselves long after the evaluation ended (Bogenschneider, 1996; Izzo, Connell, Gambone, & Bradshaw, 2004). Programs such as Frameworks that identify youth at risk for suicide and provide them with assistance should result in fewer suicide attempts; fewer attempts should result in fewer deaths by suicide (Gutierrez, 2006). However, successful intervention with youth, such as efforts to increase help-seeking, ideally will occur much earlier in the process—before self-injury threats and attempts become a reality. Therefore, immediate and intermediate outcomes, such as knowledge and attitudinal changes, are useful in evaluating the effectiveness of certain youth suicide prevention programs. For the Frameworks Project, we believed it also was important to demonstrate effectiveness in preparing individuals with the knowledge, confidence, and competence to identify youth that might need assistance because of the gatekeepers' pivotal role.

We generated several hypotheses as part of the evaluation process. The first hypothesis stated that those individuals participating in the Frameworks training would demonstrate an increase in correct knowledge about youth suicide prevention. We also hypothesized that Frameworks training would positively affect participants' attitudes and beliefs. More specifically, we expected an increase in participants' preparedness to identify youth at risk and respond to them confidently and competently. We also expected that the training would increase participants' belief

that mental health care is useful and increase their sense of responsibility to respond to youth they perceived to be at risk for suicide. Regarding youth, we hypothesized that Frameworks training would increase the likelihood youth would seek assistance from adults if they recognized another young person who needed help.

## **METHOD**

The pilot intervention site consisted of five small towns with a combined population of 9,727 people, of which 30% were under the age of 25 (U.S. Census Bureau, 2000). The site was selected through a competitive application process. Selection was based on the strength of the local community health coalition's application and the coalition's motivation to address the issues of youth suicide. Staff from NAMI-NH implemented the program and worked in collaboration with the director of the community health coalition who acted as a liaison with key stakeholders in the community and helped arrange trainings and recruit participants.

### ***Participants***

Data for the evaluation came from several sources. One source of data was information collected before and after Frameworks training from 157 adults. Participants included community professionals such as police officers, first responders, primary care providers, educators, guidance counselors, social service workers, and mental health care providers, as well as school custodians, bus drivers, and other community individuals. A second source of data was information collected from 131 ninth-grade high school students who participated in Frameworks training in health class. The third source of data came from 12 key informant interviews with individuals in the pilot community. Key informants were individuals in critical positions in the community such as law enforcement, school administrators, guidance staff, mental health providers, and the Community Coordinator, who were expected to have had some contact with the Frameworks Project. These interviews were either face-to-face contacts, telephone interviews, or both. Information from these interviews provides context for our discussion of the results of the study.

### ***Instruments and Procedure***

Pre- and posttraining questionnaires were developed specifically for the Frameworks Project. The instruments were constructed to document changes in knowledge, attitudes, and beliefs expected to occur as the result of the training sessions. The brief pre- and posttests were designed to minimize burden on the participants because they were used at the beginning and end of the 3-hour community training sessions. Adult participants completed the informed consent document and the questionnaires at the training session. Youth participants provided assent at the beginning of their training, after their parent/guardian had completed and returned an active informed consent document. The research protocol, the consent process, and the instruments were reviewed by the university's institutional review board and approved for use with human subjects.

The pre- and posttest questionnaires completed by adults included 6 items that tapped knowledge about youth suicide and youth suicide prevention, 10 attitude and belief items, and two questions about their experience with youth at risk for suicide.

Youth participants completed pre- and posttest questionnaires modeled on the adult survey instruments, but with questions modified to reflect the content of the Frameworks peer-training module. The questionnaire for youth included seven knowledge items, nine attitude and belief items, and two questions about their experience helping peers who might be at risk for self-injury. Youth participants also replied to open-ended questions about how they would respond if someone revealed he or she was thinking about hurting himself or herself, and what their community could do to reduce the likelihood that young people might hurt themselves or attempt suicide. Copies of the questionnaires are available from the authors.

Participants responded to knowledge items by circling True, False, or Unsure. Pretraining and posttraining knowledge scores were calculated based on the percentage correct with a possible range of 0 to 100%. Participants indicated how much they agreed with each of the attitude and belief items by circling a percentage with 0% signifying *Totally Disagree* and 100% indicating *Totally Agree*. A four-item Preparedness to Help Scale (see Table 1), with a possible range of scores from 0 to 40, was used to assess adult participants' perceived readiness to respond to a youth they thought might be a risk for suicide. The Cronbach's alpha for the Preparedness to Help Scale was .85. Participant's sense of responsibility was measured by agreement with the item, "If I became aware that a young person was thinking about, threatening, or had attempted suicide, I would feel I had a responsibility to do something to help," and usefulness of mental health care by agreement with the item, "Mental health care is useful for youth who might be thinking about, threatening, or who had attempted suicide."

For the analysis of the youth data, a three-item Orientation to Adults Scale (see Table 2), with a possible range of 0 to 30, was used as a measure of the likelihood that youth would turn to adults rather than friends if they were concerned about a peer. The Cronbach's alpha for this scale was .73. In both the pre- and posttests, youth were asked to indicate their agreement with the statement, "I am really not sure I would

**Table 1. Adult Preparedness to Help Scale With Individual Item Analyses**

Survey item		<i>n</i>	<i>M</i> (%)	<i>SD</i> (%)	<i>t Test</i>
I am not really sure I would know what to do if I was faced with a young person I believed was thinking about suicide <sup>a</sup>	Pretest	155	35.5	30.2	-5.72*
	Posttest	155	19.4	26.6	
I would feel <b>confident</b> about my ability to effectively respond to threats or an attempt of suicide by a young person.	Pretest	154	60.9	28.4	-11.34*
	Posttest	154	85.5	16.6	
I believe I have adequate knowledge and training to help a young person who might be thinking about, threatening, or who had attempted suicide.	Pretest	154	42.3	29.9	-15.65*
	Posttest	154	80.9	18.7	
I would feel <b>comfortable</b> responding to a young person who might be thinking about, threatening, or had attempted suicide.	Pretest	151	57.3	31.7	-10.33*
	Posttest	151	83.8	20.3	

*Note.* Boldface type appears in original survey. Range for each item 0–100%.

<sup>a</sup>Reflects reverse coding. Percentage agreement expected to decrease at posttest. \* $p < .001$ .

**Table 2. Youth Orientation to Adults Scale With Individual Item Analyses**

Survey item		<i>n</i>	<i>M</i> (%)	<i>SD</i> (%)	<i>t</i> Test
I would be likely to talk to an adult right away if I was concerned about someone hurting him or herself.	Pretest	131	62.3	30.6	-6.17**
	Posttest	123	76.3	27.7	
I know an adult I could turn to for help if I was concerned about someone.	Pretest	131	77.3	31.3	-3.40*
	Posttest	124	87.1	23.8	
Helping youth and keeping them safe is important to adults in my community.	Pretest	130	76.1	24.1	-3.97**
	Posttest	123	84.3	20.1	

Note. Range for each item 0–100%. \* $p < .01$ . \*\* $p < .001$ .

know what to do if I was faced with someone I thought was thinking about suicide” as an indicator of their preparedness to help others. Youth participants were asked whether they had ever tried to help a friend or someone else they thought might hurt himself or herself and, if so, to estimate how many friends or other people they had talked with in the last 3 months about getting help with problems that might be bothering them.

Statistical analyses were conducted using SPSS. Paired-samples *t* tests and repeated measures MANOVA were used to compare pre- and posttest data for adults and youth separately. Cohen’s *d* and partial  $\eta^2$  were used to estimate effect size. Responses to open-ended items were content analyzed to determine dominant themes.

## RESULTS

### *Participant Involvement With Youth at Risk*

Fifty-four percent of the adult participants reported that they had responded to a youth suicide or an attempt or threat prior to participating in the Frameworks Project. Participants were asked to estimate the number of youth aged 12–24 years that they had spoken with in the 3 months prior to questionnaire completion about getting assistance for problems that might be bothering them. Among those who had spoken with any youth about getting assistance, the mean number of youth with whom they had spoken was 7.01 ( $SD = 11.6$ ), with a range of 1 to 65.

Forty-six percent of the youth participants reported that they had tried in the past to help a friend or someone else they thought might hurt himself or herself. Among those who had ever tried to help another young person, the mean number of youth they had tried to help in the last 3 months was 2.1 ( $SD = 2.7$ ).

### *General Knowledge About Youth Suicide*

Our first hypothesis, that participants would demonstrate an increase in correct knowledge about youth suicide from pre- to posttraining, was supported for both adults and youths. Table 3 provides information on the proportion of correct, incorrect, and unsure responses for the general knowledge items used in the adult evaluation instruments. There was a significant increase in adults’ knowledge about youth suicide from pretraining ( $M = 50.3\%$ ,  $SD = 20.3\%$ ) to

**Table 3. General Knowledge Items for Adult Participants**

		<i>n</i>	Correct (%)	Incorrect (%)	Unsure (%)
Suicide is the second leading cause of death for NH youth aged 15–24 years.	Pre	165	95 (58)	23 (14)	47 (28)
	Post	157	140 (89)	15 (10)	2 (1)
Male adolescents are more likely than female adolescents to attempt suicide.	Pre	165	76 (46)	50 (30)	39 (24)
	Post	157	114 (73)	43 (27)	0 (0)
Female adolescents are more likely than male adolescents to die by suicide.	Pre	164	66 (40)	52 (32)	46 (28)
	Post	157	136 (87)	18 (11)	3 (2)
Firearms are the method most frequently used in youth suicides.	Pre	166	32 (19)	85 (51)	49 (30)
	Post	157	145 (92)	10 (6)	2 (2)
Youth who attempt suicide frequently communicate their plans in advance.	Pre	165	125 (76)	26 (16)	14 (8)
	Post	156	150 (96)	6 (4)	0 (0)
If a young person confides in you about thoughts of suicide, you are bound by confidentiality to keep that information private.	Pre	165	153 (93)	26 (2)	14 (5)
	Post	157	151 (96)	6 (4)	0 (0)

Note. NH = New Hampshire; Pre = pretraining; Post = posttraining.

posttraining ( $M = 82.4\%$ ,  $SD = 14.2\%$ ),  $t(156) = -17.8$ ,  $p < .001$ ,  $d = 1.8$ . Using Cohen's categories of magnitude (Grissom & Kim, 2005), this indicates a very large effect size. The change in youth participants' knowledge was also significant, increasing from pretraining ( $M = 62.9\%$ ,  $SD = 20.8\%$ ) to posttraining ( $M = 84.7\%$ ,  $SD = 20.3\%$ ),  $t(122) = -11.2$ ,  $p < .001$ ,  $d = 1.1$ , a very large effect size. Table 4 provides information on changes in correct, incorrect, and unsure responses for the general knowledge items used in the youth version of the evaluation instruments.

### Beliefs and Attitudes

Our second hypothesis also was supported. Multivariate analyses indicated that there was a significant change in participants' beliefs and attitudes from pre- to posttraining for both the adult and student participants. For adults, the difference on the linear combination of the three dependent variables from pre- to posttraining was significant,  $F(3, 147) = 70.3$ ,  $p < .001$ , partial  $\eta^2 = .59$ . Follow-up ANOVAs revealed that there was a significant change in participants' Preparedness to Help,  $F(1, 149) = 192.3$ ,  $p < .001$ , partial  $\eta^2 = .56$ . Average scores on the Preparedness to Help Scale increased from  $M = 22.6$  ( $SD = 10.0$ ) prior to the training to  $M = 33.0$  ( $SD = 6.0$ ) upon completion of training. There also was an increase in belief in the usefulness of mental health care,  $F(1, 149) = 40.7$ ,  $p < .001$ , partial  $\eta^2 = .21$ . Even though the adult participants' belief in the usefulness of mental health care was quite high at pretest ( $M = 84\%$ ,  $SD = 20\%$ ), there was a statistically significant increase in agreement with this item after training ( $M = 93\%$ ,  $SD = 12\%$ ). There was not a significant change in adults' sense of responsibility for helping a youth who might be at risk for suicide. An examination of the means indicated that participants' belief that they would feel responsible to respond was very high at both pretraining ( $M = 95\%$ ,  $SD = 12\%$ ) and post training ( $M = 97\%$ ,  $SD = 11\%$ ).

For youth, the difference on the linear combination of the four dependent variables from pre- to posttraining was significant,  $F(4, 115) = 22.6$ ,  $p < .001$ , partial  $\eta^2 = .97$ . Follow-up ANOVAs indicated a significant change from pre- to posttraining

**Table 4. General Knowledge for Youth Participants (N = 131)**

		Correct (%)	Incorrect (%)	Unsure (%)
Suicide is the second leading cause of death for NH youth aged 15-24 years.	Pre	72 (55)	11 (8)	48 (37)
	Post	108 (87)	8 (6.5)	8 (6.5)
Sometimes kids who are angry and hostile are really depressed.	Pre	97 (74)	14 (11)	20 (15)
	Post	111 (90)	6 (5)	7 (5)
If a friend seems to be doing better and promises not to hurt him or herself, you can wait to tell an adult.	Pre	78 (60)	34 (26)	19 (14)
	Post	110 (89)	8 (6)	6 (5)
It is not necessary to do something if someone just says they are thinking about hurting themselves.	Pre	115 (88)	10 (8)	6 (4)
	Post	110 (89)	11 (9)	3 (2)
Youth who attempt suicide frequently communicate their plans in advance.	Pre	52 (40)	50 (38)	29 (22)
	Post	93 (76)	20 (16)	9 (8)
If a young person confides in you about thoughts of suicide, you are bound by confidentiality to keep that information private.	Pre	92 (70)	13 (10)	26 (20)
	Post	103 (83)	9 (7)	12 (10)

Note. NH = New Hampshire; Pre = pretraining; Post = posttraining.

on all four dependent variables. Youth participants' sense that they would know what to do if they were faced with someone they thought was thinking about suicide increased from pretraining ( $M = 54\%$ ,  $SD = 30\%$ ) to posttraining ( $M = 75.8\%$ ,  $SD = 27.8\%$ ),  $F(1, 118) = 49.2$ ,  $p < .001$ , partial  $\eta^2 = .29$ . Youths' agreement that mental health care is useful also increased significantly from pretraining ( $M = 72.6\%$ ,  $SD = 24\%$ ) to posttraining ( $M = 83.8\%$ ,  $SD = 20\%$ ),  $F(1, 118) = 22.1$ ,  $p < .001$ , partial  $\eta^2 = .16$ . There also was a significant increase in youth participants' feeling of responsibility to respond from pretraining ( $M = 78\%$ ,  $SD = 26$ ) to posttraining ( $M = 83\%$ ,  $SD = 25\%$ ),  $F(1, 118) = 5.5$ ,  $p < .05$ , partial  $\eta^2 = .04$ . Our expectation that the training would increase the likelihood of youth participants seeking assistance from an adult if he or she was concerned about a peer was also supported. Orientation toward adults scores increased for the youth participants from pretraining ( $M = 21.6$ ,  $SD = 7.1$ ) to posttraining ( $M = 25.0$ ,  $SD = 5.5$ ),  $F(1, 118) = 38.0$ ,  $p < .001$ , partial  $\eta^2 = .24$ .

The open-ended question asking youth participants what they would do if they were concerned that a peer might hurt himself or herself was coded to determine whether participants spontaneously would tell an adult rather than try to deal with the situation themselves. The percentage of youth participants who mentioned seeking adult assistance increased significantly from 26% pretraining to 49% posttraining,  $\chi^2(1) = 26.1$ ,  $p < .001$ . Table 5 indicates to whom the youth said they would turn for help, before and after the training, if they were concerned about another young person.

In response to the open-ended question regarding what adults in their community could do to reduce the likelihood that young people would hurt themselves or attempt suicide, the youth participating provided a variety of responses. The most frequent responses (37%) related to education and included recommendations such as "Have every adult go through training," "Have a public suicide prevention (training) outside school that parents could go to," and "Have people be more aware of the facts." The second most frequent group of responses (20%) suggested the importance of services and programs that would be preventive: "Have programs where kids my age are not always alone," "Offer private services for depression and being more aware of the signs of

**Table 5. Who Youth Would Tell**

	<i>Pretest (%)</i>	<i>Posttest (%)</i>
No one	12	6
Adult, unspecified	27	43
Guidance	26	27
Teacher	16	18
Other school staff	5	8
Own parents	37	35
Peer's parents	16	16
Friends	12	15

suicide,” and “Our community could get a place where kids could hang out.” Other responses revealed participants’ awareness of the importance of means restriction: “Keep guns locked up and take kids to get help” and “Make sure that kids aren’t near any firearms.” Youth participants also indicated their belief in the fact that discussing youth suicide and suicide prevention needs to be normalized as they recommended that adults in their community should “talk about suicide,” “try and make it not so hard to talk about suicide,” and “talk, help, cure. Show people that they don’t have to go it alone.”

## DISCUSSION

The results of the evaluation indicated that NAMI-NH’s Frameworks Youth Suicide Prevention Project was effective in increasing both adult and youth participants’ knowledge about youth suicide and changing attitudes and beliefs relevant to preventing youth suicide. For adults, the significant change over time in attitudes and beliefs was associated with the intervention, but only for two of the three dependent variables—perception of their preparedness to help a young person who might be at risk for suicide and the belief that mental health care is useful for youth who may be thinking about injuring, or who have injured, themselves. For youth who participated in the training, the significant change over time was associated with all four of the dependent variables. Because of the training, these youth were more likely to turn to an adult for assistance if they were concerned about a peer, rather than trying to deal with the situation on their own. They also indicated a greater belief in the usefulness of mental health care. In addition, training not only increased their sense of responsibility that they should do something to help a peer about whom they may be concerned, but also helped them feel more confident about what to do.

Having valid information and feeling competent to respond to a youth perceived to be at risk is critical because both adults and youth appear to interact fairly frequently with young people about whom they have concern, and both adults and youth participants appear to feel a strong sense of responsibility to do something if they believe a young person is at risk. More than half of the adults and almost half of the youth in this study reported that they had tried to help a young person they thought might hurt themselves in the last 3 months. Prepared with correct information and an understanding about how best to respond to youth at risk, these participants are more likely to connect with these young people and assist them in getting appropriate care.

It is important that those who intervene with youth at risk for suicide have correct information. Frameworks increased adults’ general knowledge about youth suicide.

Some participants were uncertain of their knowledge coming into the training or had incorrect information. The most striking change was in regard to participants' awareness that firearms are the method most frequently used in youth suicide. Fewer than 1 in 5 adults had correct information pretraining, but by the end of the session, 9 out of 10 responded correctly. Information about firearms is critical because the lethality of this method emphasizes that means restriction is an effective method of suicide prevention. There is a higher risk of death by suicide for adolescents if firearms are available in the home, even if they are unloaded and locked up for storage (Shain & the Committee on Adolescence, 2007).

The greatest increases in youth participants' knowledge about suicide prevention were in regard to their understanding that many young people communicate suicide plans in advance and that, if someone does disclose intent to hurt himself or herself, one is not bound by confidentiality to keep that information private. It is believed that this understanding will increase the likelihood that trained youth will seek adult assistance earlier. There were several indicators that Frameworks-trained youth were more oriented toward talking with an adult as soon as possible if they became concerned about a peer. If there are adults in the multiple systems within which youth function who also have received training in how to respond to prevent youth suicide, there will be a high likelihood that the young person who needs care will be assisted quickly. It is noteworthy that parents were the individuals to whom youth said they would be most likely to turn for assistance. This highlights the importance of training parents so that they can respond knowledgeably if their children turn to them for help. However, parents as a group are often difficult to recruit for programs such as this. Therefore, consideration should be given to using a variety of methods such as newsletters, fact sheets, and electronic media to disseminate information and resources to parents.

Among the materials distributed to youth participants in the trainings was a list of all adults in the community who are Frameworks trained. Knowing there are many people in the community that they could consult with, such as a favorite bus driver, a neighbor who is a police officer, or their guidance counselor, may enhance the likelihood that trained youth will be able to identify someone they trust and seek adult assistance. Indeed, as a result of the training, there was a significant increase in the youths' agreement that they knew an adult with whom they could talk if they were concerned about a peer.

Having valid information is necessary, but not sufficient, to prevent youth suicide. Trained individuals must feel confident that they can put their knowledge into practice. Frameworks training increased the belief among both adults and youth that they are better able to deal with youth who may be at risk for suicide. Adults reported significant increases in their sense of competence and in their confidence in responding. They have a better sense of what to do and, as a result of information shared during the trainings, how specific professional colleagues are likely to respond to youth suicide events if they are consulted. Youth, too, appear to be more certain of what to do if they encounter peers they think might injure themselves. For adults, there was a weak, negative correlation between knowledge and their agreement with the statement that they would be unsure what to do if they encountered a youth about whom they were concerned both before ( $r = -.18, p < .05$ ) and after training ( $r = -.22, p < .01$ ). For youth participants, there was no correlation before training between their knowledge and their sense that they would know how to respond. However, after the training there was a significant relationship,  $r = -.38 (p < .001)$ , indicating that the higher their knowledge, the less unsure they felt about responding. Believing they

have correct knowledge may be particularly important to youths' belief that they know how to respond to a peer they think might be at risk for suicide.

The belief in the usefulness of mental health care for youth who may be thinking about or who have attempted suicide is also an important influence on the way that someone might respond to these youth. In light of the fact that research indicates that most young people who die by suicide had untreated psychiatric illness at the time of death, seeing mental health services as a resource may increase the likelihood that a trained individual would take steps to connect a youth with such care. Therefore, the increase in the belief in the usefulness of mental health care, even though it was quite high to begin with, is particularly encouraging.

In addition to individual-level changes that occurred as the result of the Frameworks project, there are also indications of structural changes in process. The most obvious community change that may lead to an integrated response to suicide events is that now almost 300 individuals in the community have received Frameworks training and have increased their knowledge and confidence about responding to youth suicide attempts and threats. Representatives of many critical disciplines in the community have been trained. The schools, one of the most important institutions in the everyday lives of most youth, are deeply engaged in the Frameworks project. At least 70 adults associated with the schools have been trained, including administrators, guidance staff, school nurses, office staff, teachers, bus drivers, and custodians. This should result in a "community within the community" that will be prepared to respond in an integrated manner to youth needing assistance. In addition, the top administrators, health educators, and guidance staff at both the high school and the middle school are strong supporters of Frameworks and have taken steps to institutionalize the trainings. For example, health educators have integrated the Frameworks Trainings into the ninth-grade health curriculum so that all new high school students have access to critical information and resources about suicide.

Not only are a critical mass of community members and professionals trained in youth suicide prevention, but there are now comprehensive protocols and training manuals available to increase the ability of professionals and gatekeepers in the community to respond appropriately, and in an integrated manner, to youth suicides and attempts. Frameworks protocols also have been used by one law enforcement agency as part of their accreditation process, and the high school has revised operating procedures to reflect Frameworks protocols. In addition, a sustainability committee formed to ensure that the benefits of the project continued after the NAMI-NH staff completed their work. When individuals in the community were asked about the major accomplishments or benefits of the Frameworks Project during follow-up interviews, the most common response was that it had raised awareness of youth suicide, as well as understanding of risk and protective factors in the community, and had started people thinking and talking about the issue. This increased level of awareness and discussion, in conjunction with a critical mass of residents with common training in the protocols, should enhance the likelihood of a coordinated, community response to youth suicide prevention.

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