The Model Adolescent Suicide Prevention Program (MASPP) is a public health-oriented suicidal-behavior prevention and intervention program originally developed for a small American Indian tribe in rural New Mexico to target high rates of suicide among its adolescents and young adults. The goals of the program are to reduce the incidence of adolescent suicides and suicide attempts through community education about suicide and related behavioral issues, such as child abuse and neglect, family violence, trauma, and alcohol and substance abuse. As a community-wide initiative, the MASPP incorporates universal, selective, and indicated interventions and emphasizes community involvement, ownership, and culturally framed public health approaches appropriate for an American Indian population.

Central features of the program include formalized surveillance of suicide-related behaviors; a school-based suicide prevention curriculum; community education; enhanced screening and clinical services; and extensive outreach provided through health clinics, social services programs, schools, and community gatherings and events. In addition, neighborhood volunteers of various ages are recruited to serve as "natural helpers." These individuals engage in personal and program advocacy, provide referrals to community mental health services, and offer peer counseling (with guidance from professional mental health staff) to youth who may prefer to seek assistance from trusted laypersons in a less formal setting.

Several evaluations of MASPP have been conducted, including one that followed the program over 15 years of implementation. The professional staff involved in implementing the program included a mental health technician, clinical social worker, master's-level counselor, and doctoral-level psychologist.

### Descriptive Information

<table>
<thead>
<tr>
<th>Areas of Interest</th>
<th>Mental health promotion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcomes Review Date: January 2012</td>
<td>1: Suicide attempts 2: Suicide gestures</td>
</tr>
<tr>
<td>Outcome Categories</td>
<td>Suicide</td>
</tr>
<tr>
<td>Ages</td>
<td>6-12 (Childhood) 13-17 (Adolescent) 18-25 (Young adult)</td>
</tr>
<tr>
<td>Genders</td>
<td>Male Female</td>
</tr>
<tr>
<td>Races/Ethnicities</td>
<td>American Indian or Alaska Native</td>
</tr>
<tr>
<td>Settings</td>
<td>Outpatient Home School Other community settings</td>
</tr>
<tr>
<td>Geographic Locations</td>
<td>Tribal</td>
</tr>
<tr>
<td>Implementation History</td>
<td>MASPP was implemented and evaluated over a 15-year period beginning in 1990 with a small American Indian tribe in rural New Mexico. Between 565 and 800 youth were served annually.</td>
</tr>
<tr>
<td>NIH Funding/CER Studies</td>
<td>Partially/fully funded by National Institutes of Health: No Evaluated in comparative effectiveness research studies: No</td>
</tr>
<tr>
<td>Adaptations</td>
<td>No population- or culture-specific adaptations of the intervention were identified by the developer.</td>
</tr>
</tbody>
</table>
Quality of Research
Review Date: January 2012

Documents Reviewed
The documents below were reviewed for Quality of Research. The research point of contact can provide information regarding the studies reviewed and the availability of additional materials, including those from more recent studies that may have been conducted.

Study 1

Supplementary Materials


Outcomes

Outcome 1: Suicide attempts

Data on suicide attempts were collected using an adaptation of a surveillance form developed by the Indian Health Service. The form was completed by program staff using information obtained from community sources (police records, health clinic records, tribal emergency medical services records, and family and community members) any time an individual was known to have attempted suicide or engaged in suicidal behavior. The form recorded demographic information about the individual (e.g., age, sex, marital status, tribe, employment, education) and other information related to risk factors (e.g., number of previous suicidal acts, location of suicidal act, alcohol and/or substance abuse, family history of suicidal behaviors, loss of job, break-up with or death of a significant other, suicide of a friend). One question on the form indicated whether the suicidal act was a gesture, attempt, or completion. An attempt was defined as a "genuine, life-threatening effort to kill oneself by self-inflicted means which would have led to death if no intervention had occurred--not an accident or manipulation."

Key Findings
In a rural American Indian tribal community that implemented MASPP over a 15-year period, suicide attempts declined steadily from a baseline of 19.5 attempts the year before the intervention began to 8.5 attempts in the first 2 years of implementation and 4.0 attempts in the final year (p = .016).

Studies Measuring Outcome
Study 1

Study Designs
Preexperimental

Quality of Research Rating
2.0 (0.0-4.0 scale)

Outcome 2: Suicide gestures

Data on suicide attempts were collected using an adaptation of a surveillance form developed by the Indian Health Service. The form was completed by program staff using information obtained from community sources (police records, health clinic records, tribal emergency medical services records, and family and community members) any time an individual was known to have attempted suicide or engaged in suicidal behavior. The form recorded demographic information about the individual (e.g., age, sex, marital status, tribe, employment, education) and other information related to risk factors (e.g., number of previous suicidal acts, location of suicidal act, alcohol and/or substance abuse, family history of suicidal behaviors, loss of job, break-up with or death of a significant other, suicide of a friend). One question on the form indicated whether the suicidal act was a gesture, attempt, or completion. An attempt was defined as a "genuine, life-threatening effort to kill oneself by self-inflicted means which would have led to death if no intervention had occurred--not an accident or manipulation."
Readiness for Dissemination

A suicide gesture was defined as "a self-destructive act where the primary motive is not death but an attempt to cause someone or something to change. The self-destructive act is often not life-threatening."

Key Findings

In a rural American Indian tribal community that implemented MASPP over a 15-year period, suicide gestures declined steadily from a baseline of 15 suicidal gestures the year before the intervention began to 14.5 gestures in the first 2 years of implementation and 4.0 gestures in the final year (p = .000).

Studies Measuring Outcome

Study 1

Study Designs

Preexperimental

Quality of Research Rating

2.0 (0.0-4.0 scale)

Study Populations

The following populations were identified in the studies reviewed for Quality of Research.

<table>
<thead>
<tr>
<th>Study</th>
<th>Age</th>
<th>Gender</th>
<th>Race/Ethnicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study 1</td>
<td>6-12 (Childhood)</td>
<td>51% Female</td>
<td>100% American Indian or Alaska Native</td>
</tr>
<tr>
<td></td>
<td>13-17 (Adolescent)</td>
<td>49% Male</td>
<td></td>
</tr>
<tr>
<td></td>
<td>18-25 (Young adult)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Quality of Research Ratings by Criteria (0.0-4.0 scale)

External reviewers independently evaluate the Quality of Research for an intervention's reported results using six criteria:

1. Reliability of measures
2. Validity of measures
3. Intervention fidelity
4. Missing data and attrition
5. Potential confounding variables
6. Appropriateness of analysis

For more information about these criteria and the meaning of the ratings, see Quality of Research.

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Reliability of Measures</th>
<th>Validity of Measures</th>
<th>Fidelity</th>
<th>Missing Data/Attrition</th>
<th>Confounding Variables</th>
<th>Data Analysis</th>
<th>Overall Rating</th>
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</thead>
<tbody>
<tr>
<td>1: Suicide attempts</td>
<td>1.5</td>
<td>2.0</td>
<td>1.0</td>
<td>2.5</td>
<td>1.0</td>
<td>4.0</td>
<td>2.0</td>
</tr>
<tr>
<td>2: Suicide gestures</td>
<td>1.5</td>
<td>2.0</td>
<td>1.0</td>
<td>2.5</td>
<td>1.0</td>
<td>4.0</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Study Strengths

Intervention fidelity was monitored by community leaders and service providers, the group that was responsible for implementing program elements in accordance with a strategic plan. Monitoring was performed through case reviews, weekly roundtable discussions, and staff discussion of program implementation issues. Using a standardized curriculum and providing training on suicide risk assessment to a broad range of community members also supported fidelity. Appropriate descriptive and linear regression analyses were conducted.

Study Weaknesses

The reliability of the suicide surveillance form was not documented, and while the instrument has face validity, other measures of validity were not reported. Apart from the developer's statement explaining how intervention fidelity was monitored, no detailed information on fidelity was provided. There is no information or data about the rate of participation in the various components of the intervention or adherence rates. Attrition rates were not reported; while attrition is not relevant to the population-based, universal elements of the program, it is a concern for the selective and indicated components of the program, such as professional mental health counseling and social services. Since the study did not include a comparison community, confidence in attribution of causality is limited.

Readiness for Dissemination

family history of suicidal behaviors, loss of job, break-up with or death of a significant other, suicide of a friend). One question on the form indicated whether the suicidal act was a gesture, attempt, or completion. A suicide gesture was defined as "a self-destructive act where the primary motive is not death but an attempt to cause someone or something to change. The self-destructive act is often not life-threatening."
Materials Reviewed
The materials below were reviewed for Readiness for Dissemination. The implementation point of contact can provide information regarding implementation of the intervention and the availability of additional, updated, or new materials.


Readiness for Dissemination Ratings by Criteria (0.0-4.0 scale)
External reviewers independently evaluate the intervention’s Readiness for Dissemination using three criteria:

1. Availability of implementation materials
2. Availability of training and support resources
3. Availability of quality assurance procedures

For more information about these criteria and the meaning of the ratings, see Readiness for Dissemination.

<table>
<thead>
<tr>
<th>Implementation Materials</th>
<th>Training and Support Resources</th>
<th>Quality Assurance Procedures</th>
<th>Overall Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.3</td>
<td>1.8</td>
<td>1.3</td>
<td>1.8</td>
</tr>
</tbody>
</table>

Dissemination Strengths
The manual is well organized and provides an overview of each of the program components and strategies used in the tribal community that first developed and implemented MASPP. Considerations for replicating the program in other tribal communities are included, along with suggested staff qualifications and use of informal community supports. The manual consistently describes how the culture of the initial implementation site served as the driving force in program design and implementation. Suggestions for training topics and curriculum are provided along with ongoing phone and email consultation to assist new implementers. The manual describes quality assurance processes and offers guidance on how to prepare for data collection and use the results to improve program operation.

Dissemination Weaknesses
The manual provides a general overview of what is required to implement a community-wide prevention, education, and clinical intervention program. However, any new implementation of this program would likely require significant adaptation to meet the specific needs, culture, and resources of the community. The developer does not have the capacity to offer the in-depth technical assistance, training, and support that would be required to assist those undertaking a replication. Although the manual describes the evaluation conducted at the initial implementation site, it does not address how another community might replicate this evaluation process. Similarly, while the manual describes the quality assurance processes used in the initial site, the information is likely to be insufficient to help new implementers, who would need to develop their own quality assurance procedures.

Costs
The cost information below was provided by the developer. Although this cost information may have been updated by the developer since the time of review, it may not reflect the current costs or availability of items (including newly developed or discontinued items). The implementation point of contact can provide current information and discuss implementation requirements.

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Cost</th>
<th>Required by Developer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adolescent Suicide Prevention Manual</td>
<td>Free</td>
<td>Yes</td>
</tr>
<tr>
<td>2-day, off-site training</td>
<td>$1,200 per person for up to 25 participants</td>
<td>No</td>
</tr>
<tr>
<td>2-day, on-site consultation</td>
<td>$1,500 plus travel expenses</td>
<td>No</td>
</tr>
<tr>
<td>Phone and email support</td>
<td>Free</td>
<td>No</td>
</tr>
</tbody>
</table>

Replications
No replications were identified by the developer.

Contact Information
To learn more about implementation or research, contact:
Patricia Serna, LISW
Consider these Questions to Ask (PDF, 54KB) as you explore the possible use of this intervention.

This PDF was generated from http://nrepp.samhsa.gov/ViewIntervention.aspx?id=251 on 5/15/2014