Name of Program/Strategy: Not On Tobacco (N-O-T)

Report Contents

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1. Overview and description

Not On Tobacco (N-O-T) is a school-based smoking cessation program designed for youth ages 14 to 19 who are daily smokers. N-O-T is based on social cognitive theory and incorporates training in self-management and stimulus control; social skills and social influence; stress management; relapse prevention; and techniques to manage nicotine withdrawal, weight, and family and peer pressure. The program consists of 50-minute group sessions conducted weekly for 10 consecutive weeks, plus four optional booster sessions. The sessions are delivered in gender-specific groups of 10-12 teens by same-gender facilitators. N-O-T can be implemented by schools or other community organizations using teachers, school nurses, counselors, and other staff and volunteers who are trained to facilitate group sessions.

2. Implementation considerations

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3. Descriptive information

Areas of Interest	Substance abuse prevention Substance abuse treatment
Outcomes	1: Smoking cessation 2: Smoking reduction 3: Cost-effectiveness
Outcome Categories	Cost Tobacco
Ages	13-17 (Adolescent)
Genders	Male Female
Races/Ethnicities	Asian Black or African American Hispanic or Latino Native Hawaiian or other Pacific Islander White Race/ethnicity unspecified
Settings	School
Geographic Locations	Urban Suburban Rural and/or frontier
Implementation History	According to the American Lung Association, more than 150,000 teens have participated in N-O-T. Between 2002 and 2004, three independent evaluations of the program were conducted in high schools in Illinois, Virginia, and Wisconsin.
NIH Funding/CER Studies	Partially/fully funded by National Institutes of Health: No Evaluated in comparative effectiveness research studies: Yes
Adaptations	Not On Tobacco has been adapted for Native American youth.
Adverse Effects	No adverse effects, concerns, or unintended consequences were identified by the applicant.
IOM Prevention Categories	Indicated

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4. Outcomes

Outcome 1: Smoking cessation

Description of Measures	Smoking cessation was measured using the Smoking History Form, a self-report instrument that assessed participants' smoking patterns, including age of onset, number of cigarettes smoked per day, and baseline stage of readiness to quit smoking. Carbon monoxide readings were used to validate self-reported smoking status.
Key Findings	Two studies compared teen smokers who received either N-O-T or a brief intervention (BI) on smoking cessation that included self-help brochures and a 10- to 15-minute presentation of scripted advice. In the first study, conducted with Appalachian teens in North Carolina and West Virginia, 8.1% of N- O-T participants reported smoking cessation 3 months after the intervention, compared with only 2.2% of BI participants ($p < .05$). This difference, however, was largely accounted for by the female segment of the sample; 10.3% of females who received N-O-T reported smoking cessation, compared with only 2.6% of females who received BI ($p < .05$). Among males, 5.4% of N-O-T participants and 1.8% of BI participants reported cessation, a difference that was not statistically significant. In the North Carolina sample, the percentage of students who reportedly quit smoking 15 months after the intervention was higher in the N-O-T group than in the BI group (9.8 vs. 1.6, $p < .05$). In the second study, conducted in Florida, 21.7% of N-O-T participants reported smoking cessation 5 months after the intervention, compared with only 12.6% of BI participants ($p < .05$). Again, this difference was largely accounted for by the female segment of the sample; 33% of females who received N-O-T reported smoking cessation, compared with only 11.4% of the females who received BI ($p < .05$). Males did not report statistically significant differences in smoking cessation. To determine if the interventions were more effective for students who were at different stages of readiness to quit smoking at baseline, students were classified as precontemplators (not planning to quit in the next 6 months), contemplators (planning to

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	quit in the next 6 months), or preparers (planning to quit in the next 30 days). Among BI participants, preparers were more likely to quit smoking than precontemplators ($p < .05$), a finding associated with a large effect size (odds ratio = 25.51). In contrast, among N-O-T participants, there were no differences in cessation between precontemplators, contemplators, or preparers, indicating that the intervention was equally effective for smokers regardless of their stage of readiness
Studies Measuring Outcome	Study 1, Study 2
Study Designs	Quasi-experimental
Quality of Research Rating	3.6 (0.0-4.0 scale)

Outcome 2: Smoking reduction

Description of Measures	Smoking reduction was measured using the Smoking History Form, a self-report instrument that assessed the number of cigarettes smoked on weekdays and weekends.
Key Findings	A study in Florida compared teen smokers who received either N-O-T or a brief intervention (BI) on smoking cessation that included self-help brochures and a 10- to 15-minute presentation of scripted advice. Among students who continued to smoke after the intervention, N-O-T participants had larger reductions in reported weekday smoking than BI participants (53.2% vs. 34.7%, $p < .05$). This difference was statistically significant among males (65.9% vs. 31.1%, $p < .05$), but not among females. Among students who continued to smoke, N-O-T participants also had larger reductions in reported weekend smoking than BI participants (74% vs. 41.2%, $p < .05$). This difference was statistically significant among both males (80% vs. 34.6%, $p < .05$) and females (73.2% vs. 36.6%, $p < .05$).
Studies Measuring Outcome	Study 2
Study Designs	Quasi-experimental
Quality of Research Rating	3.5 (0.0-4.0 scale)

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Outcome 3: Cost-effectiveness

Description of Measures	The cost-effectiveness analysis was conducted using estimated life expectancies and school cost data. Due to the lack of data on the life expectancies of smokers and nonsmokers below the age of 25, Markov transition models were used to estimate participants' future smoking status at the age of 25 based on baseline and 7-month postbaseline data collected in a previous efficacy study. Costs in the analysis included those for relevant training and implementation and were measured in terms of dollars in the year 2000.
Key Findings	A study in Florida compared teen smokers who received either N-O-T or a brief intervention (BI) on smoking cessation that included self-help brochures and a 10- to 15-minute presentation of scripted advice. Compared with students who received BI, students who received N-O-T were predicted to have an increased life expectancy of 7.46 years. Best-case and worst-case scenarios found that this increased life expectancy ranged from 6.76 to 9.5 years. The average financial cost for each additional year of life expectancy for those completing N-O-T was $442.65. This estimate ranged from $273.60 to $1,028.90 per life-year saved.
Studies Measuring Outcome	Study 2
Study Designs	Quasi-experimental
Quality of Research Rating	3.5 (0.0-4.0 scale)

5. **Cost effectiveness report** (Washington State Institute of Public Policy – if available)

6. **Washington state results** (from Performance Based Prevention System (PBPS) – if available)

7. **Where is this program/strategy being used (if available)?**

Washington Counties	Oregon Counties
	Lincoln

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8. Study Populations

The studies reviewed for this intervention included the following populations, as reported by the study authors.

Study	Age	Gender	Race/Ethnicity
Study 1	13-17 (Adolescent)	56% Female 44% Male	93.4% White 6.6% Race/ethnicity unspecified
Study 2	13-17 (Adolescent)	56% Female 44% Male	81.3% White 8.8% Hispanic or Latino 4.3% Race/ethnicity unspecified 1.8% Black or African American 1.6% American Indian or Alaska Native 1.1% Asian 1.1% Native Hawaiian or other Pacific Islander

9. Quality of Research

The documents below were reviewed for Quality of Research. Other materials may be available. For more information, contact the developer(s).

Study 1

Horn, K. A., Dino, G. A., Kalsekar, I. D., & Fernandes, A. W. (2004). Appalachian teen smokers: Not On Tobacco 15 months later. American Journal of Public Health, 94(2), 181-184.

Study 2

Dino, G. A., Horn, K. A., Goldcamp, J., Maniar, S. D., Fernandez, A., & Massey, C. J. (2001). Statewide demonstration of Not On Tobacco: A gender-sensitive teen smoking cessation program. Journal of School Nursing, 17(2), 90-97.

Dino, G., Horn, K., Abdulkadri, A., Kalsekar, I., & Branstetter, S. (2008). Cost-effectiveness analysis of the Not On Tobacco program for adolescent smoking cessation. Prevention Science, 9(1), 38-46.

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Dino, G., Horn, K., Goldcamp, J., Fernandes, A., Kalsekar, I., & Massey, C. (2001). A 2-year efficacy study of Not On Tobacco in Florida: An overview of program successes in changing teen smoking behavior. Preventive Medicine, 33(6), 600-605.

Dino, G., Kamal, K., Horn, K., Kalsekar, I., & Fernandes, A. (2004). Stage of change and smoking cessation outcomes among adolescents. Addictive Behaviors, 29(5), 935-940.

Supplementary Materials

Horn, K., Dino, G., Kalsekar, I., & Mody, R. (2005). The impact of Not on Tobacco on teen smoking cessation: End-of-program evaluation results, 1998 to 2003. Journal of Adolescent Research, 20(6), 641-661.

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.

Outcome	Reliability of Measures	Validity of Measures	Fidelity	Missing Data/Attrition	Confounding Variables	Data Analysis	Overall Rating
1: Smoking cessation	4.0	4.0	3.5	3.5	3.3	3.5	**3.6**
2: Smoking reduction	3.5	3.5	3.5	3.5	3.3	3.5	**3.5**
3: Cost-effectiveness	3.5	3.5	3.5	3.5	3.3	3.5	**3.5**

Study Strengths

The researchers used reliable and valid measures; used well-developed procedures for training, implementation, and evaluation; tested for differential attrition consistently; and used generally appropriate analyses, including intent-to-treat and compliant sample analyses. The length of follow-up in the Appalachian study was unusually long and still found significant effects. Overall, the methodological quality was high in these studies.

Study Weaknesses

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Because neither study used a randomized design, potential confounds (e.g., preexisting group differences in nicotine dependence, motivation to quit smoking) may have biased results. Analyses did not account for potential intraclass correlation within schools or within groups but were otherwise appropriate.

10. Readiness for Dissemination

The documents below were reviewed for Readiness for Dissemination. Other materials may be available. For more information, contact the developer(s).

Dissemination Materials

American Lung Association. (2003). N-O-T: Not On Tobacco. The premier teen smoking cessation program. New York: Author. Program Web site: http://www.lungusa.org/site/pp.asp?c=dvLUK9O0E&b=39866

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.

Implementation Materials	Training and Support Resources	Quality Assurance Procedures	Overall Rating
3.3	2.3	1.0	**2.2**

Dissemination Strengths

Program materials recognize the importance of engaging school administrators and teachers to facilitate organizational implementation. Master trainers are available to train program implementers through the American Lung Association. Some tools are available to support quality assurance.

Dissemination Weaknesses

Very little information is provided on ensuring organizational preparedness. It is unclear how facilitators are selected or trained. No formal support is available to program implementers. Quality assurance materials do not include guidance for assessing program delivery, training effectiveness, or facilitator competence.

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11. Costs

The information below was provided by the developer and may have changed since the time of review. For detailed information on implementation costs (e.g., staffing, space, equipment, materials shipping and handling), contact the developer.

Item Description	Cost	Required by Program Developer
Implementation materials	Contact the developer	Yes
Training	About $300 per participant	Contact the developer
Technical assistance/consultation and quality assurance information	Contact the developer	Contact the developer

Additional Information

Training costs vary by State and region. Cost information can be obtained by contacting the American Lung Association (1-800-LUNG- USA).

12. Contacts

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Learn More by Visiting: http://www.notontobacco.com

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