

## Recruitment & Retention of Youth Smokers for Community-Based Tobacco Cessation Programs

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### Overview

The Helping Young Smokers Quit initiative (HYSQ) is a two-phase project that addresses the critical need to disseminate effective, developmentally appropriate youth smoking cessation programs.

While a growing number of teen cessation programs are available little is known about:

- How many programs exist
- What services they offer
- What populations they serve
- How they provide treatment

Moreover, only a handful of such programs have been evaluated.

The HYSQ initiative has two primary aims directed toward filling this gap in knowledge:

- 1) Identify and describe tobacco treatment programs currently available to youth across the U.S.
- 2) Evaluate smoking cessation programs tailored for youth to help understand what works.

### Background

Smoking prevalence among youth is unacceptably high. Driven by increased resources available through funding like the master settlement agreement, there has been increased attention to providing smoking cessation programs at the community level.

However, there is a limited evidence base for what constitutes effective programming:

- Evidence reviews indicate programs are challenged to recruit and retain sufficient numbers of youth smokers to evaluate.
- Impact of smoking cessation programs appears to be influenced by factors other than program content.
- It is unclear whether non-research, community-based programs face similar challenges.

This research examines factors associated with:

- Numbers of youth recruited or served in the programs
- Proportion of youth who are recruited into programs who complete treatment

Some examples of recruitment materials from programs in Phase I:



\* Collaborators

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 Collaborators: Survey Research Laboratory (Phase I & II), RTI International (Phase I), Westat (Phase II)

For more information visit: [www.HYSQ.org](http://www.HYSQ.org)

### Methods

Using a snowball sampling process in a nationally representative sample of 408 counties across the U.S., Phase I of the HYSQ initiative identified and characterized 591 youth smoking cessation programs offered in 48 states.

**Sample Design:** A two-stage sampling design was employed.

#### Stage 1

The overall sampling frame consisted of 2,453 counties (3,142 total U.S. counties minus 689 rural counties with less than 10,000 people).

Counties were stratified on four criteria:

County Level	Criteria	Levels	Definition	Date available
County Level	Metropolitan Status	MSA	MSAs (20,000 or more people)	1999 Census
	MSA	Non-MSA	MSAs (20,000 or more people) Non-MSAs (under 20,000)	1999 Census
County Level	County Level	High	High > 10% of population 10-19 years below federally defined poverty line	1999 Census
	County Level	High	High > 10% population 10-19 years	1999 Census
State Level	State Level	High	Tobacco-based revenue as percent of total state revenue	2000-2001
	State Level	High	Percentage of population 10-19 years	1999 Census

#### Survey Content

The Phase I program survey was designed to profile youth smoking cessation programs by:

- community context
- organizational setting
- participants
- program implementation
- program content
- program evaluation.

Analyses were guided by a multi-level logic model that relates program context, content and participant characteristics to outcomes. Analyses for this presentation focused on participation and retention as intermediate outcomes.

#### Stage 2

Through a snowball sampling process starting in 4 county sectors:

1. Departments of health
2. Departments of education
3. Voluntary organizations and
4. Other known program supporters

10,157 individuals knowledgeable about youth cessation programs or could lead to such persons were identified, which included 1,275 Program Informants.

#### Sample Selection

Once identified, programs were screened to determine eligibility as a "youth smoking cessation program." Eligible programs were defined as any voluntary or mandatory program that:

- 1) Was established at least 6 months prior to the HYSQ evaluation
- 2) Provides direct tobacco cessation services.
- 3) Provides services primarily to individuals aged 12-24.
- 4) Is not already part of a research initiative.

For those deemed eligible, program administrators completed a 45-minute telephone administered survey. Phase I data collection ended in July 2003. A total of 591 program characteristic surveys were completed.



### Participation and Retention Analyses

#### Recruitment Strategies

Bivariate analyses suggest that ads on TV/radio and personal encouragement or referral from adults or peers were positively associated with the number of participants in the program.

Recruitment Strategy	Yes (%)	Mean # of Youth
Ads on school/community poster boards	17%	3.11
Ads on TV/radio*	34%	3.29
Adult encouragement/referral**	54%	3.32
Peer encouragement/referral**	57%	3.26
Referrals from other participants	33%	3.03
Referrals from adults**	30%	3.29
Other**	30%	3.4

\* p < .001  
 \*\* p < .05

We used OLS and Logistic regression to analyze factors associated with the number of participants and the percentage who completed the program. Models included county stratification on level (MSA/Non-MSA), SES, Smoking prevalence, Tobacco control expenditures and various program characteristics. We included only school-based, group-format, and voluntary/mixed programs in the reported model. Results are robust to model specification.

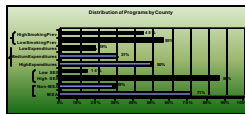
Normal Log of Participation Model		County Stratification Criteria	Retention Model		
B	exp(B)		Odds Ratio	95% C.I.	
1.35	3.85	Perceived community awareness	1.30	97.1.23	
1.14	3.13		Incentives	85	231.35
0.97	2.63		Number of contacts	30	2071.00
1.16	3.18		Externally developed	1.60	673.82
0.81	2.25	Externally developed	2.35	1.38-4.00	
0.66	1.94	Parental consent a barrier	--	--	
1.20	3.49	Number of treatment sessions used	1.60	1311.20	
--	--	Number of paid employees	0.1	711.17	
--	--	Trained counselors	0.09	42.1.89	
--	--	Number of participants	0.01	691.03	
--	--	Percent independent of funding	0.01	1021.14	
--	--	Number of cognitive-behavioral strategies	0.01	151.13	

\* p < .05, \*\* p < .001

Controlling for other factors ...

- Programs in urban (MSA) counties had more participants.
- Higher reported community awareness was positively associated with the number of participants.
- Programs that employed more recruitment strategies had more participants.
- Requiring parental consent was negatively associated with participation.
- Compared to programs that used a combination of internal and external development, wholly externally developed programs were significantly more likely to report at least 80% of participants completed the program.

### Community Characteristics



- 62% of counties had at least one program
- 71% of programs are located in urban counties
- 14% are counties with low socio-economic status (>20% living below the federal poverty level)

68% of programs reported the general population is somewhat aware of their program

#### Awareness of general population



### Results

#### Program Characteristics

There is surprising homogeneity in the programs found. Most were found in schools and utilized a group format.

- 89% utilized a facilitator guide/manual
- 89% used trained counselors
- 56% of programs reported all Voluntary enrollment; 9% reported Mandatory only.
- 8 = median # of contacts
- 68% of programs that require parental consent do not see it as a barrier to participation in the program

#### Top 3 challenges reported

- enrolling enough participants
- getting follow-up information from participants
- obtaining sufficient operating funds

	Phase I Programs
Unique Participants	1,098 (3,383)
Unique Sessions	636
Child Staff	236
Child Staff	Max 112
Program Development	626
• External	236
• Internal	390
Financial Independence	176
• None	66
• State	110
• School	0
• Other	0
• Other	0
• Other	0
• Other	0
• Other	0
• Other	0
• Other	0
• Other	0
• Other	0
• Other	0
• Other	0
• Other	0
• Other	0

### Summary

- Phase I identified youth cessation programs in a majority of counties in a nationally representative sample.
- Higher number of participants was associated with higher community awareness of program and the use of more recruitment strategies.
- Programs were surprisingly homogenous.
- Enrolling participants was a most commonly cited challenge.
- Higher retention is associated with externally developed programs.