Year 3 Program Evaluation
and

This report includes:

- Year 3 (2004-2005) Program Evaluation Results
- Three-year (2003-2005) trend data from the Cuyahoga County Adult Surveillance of Tobacco Use
- Conclusions and Recommendations

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Executive Summary

1. Overview

The Cuyahoga County Comprehensive Partnership for Tobacco Reduction (CCCPTR or “The Partnership”), under the leadership of the Cuyahoga County Board of Health (CCBH), has been diligently working to reduce the burden of tobacco use in Cuyahoga County since 2001. These efforts have been funded by the Ohio Tobacco Use Prevention and Control Foundation (TUPCF) and local funding partners, including the Community Vision Council, the Abington Foundation, the Mount Sinai Health Care Foundation, Saint Luke’s Foundation of Cleveland, and the Sisters of Charity Foundation of Cleveland.

The Cuyahoga County Board of Health, which is the largest general health district in Ohio, functions as the lead agent for the Partnership of over 30 diverse agencies and organizations. Cuyahoga County, which includes the city of Cleveland, has suffered its burden of tobacco related deaths and illnesses. Lung cancer and heart disease rates in many communities in our county continue to be well above national rates. Lung cancer rates range from 62-98/100,000, while heart disease rates are as high as 438/100,000. However, since the launching of the Partnership, our local surveillance of tobacco product use reveals a small, but consistent decline in cigarette and cigar use, the two most common tobacco products used by adults in Cuyahoga County. In 2003, the local prevalence rate of cigarette use was higher than the state average (26.5% vs. 25.2%). In 2004, the state average remained nearly the same (25.8%), while the rate in Cuyahoga County dropped to 25.0%. The trend continues in 2005, where the local prevalence rate was 24.0% (the state data is not yet available). While these trends are extremely promising, the fact remains that a quarter of adults in the county smoke and engage in a risk behavior that is highly associated with debilitating disease and death.

The statistics regarding our youth population’s tobacco use are also quite alarming. According to our Partnership Youth Tobacco Survey, 28% of high school students report current use of some type of tobacco product (2003). However, cigarettes are not the most prevalent product of choice among adolescents in Cuyahoga County. More students report use of cigars, cigarillos and little cigars than cigarettes, smokeless tobacco or any other tobacco product. Among high school students in Cuyahoga County, 18.9% are current cigar smokers (2003). By continuing our current level of programming which includes prevention, cessation and reduction in secondhand smoke exposure, we can impact rates of tobacco initiation and use among youth and adults in our county.

In order to provide a comprehensive tobacco control program, we have applied a multiple-level strategy over the past three years. Our program activities have been divided into three levels: school programming, neighborhood programming, and community-wide programming. The school programs have included an evidence-based prevention program (Life Skills) and an established

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1 From the Ohio Behavioral Risk Factor Surveillance System (2003 and 2004).
school-based prevention program (Word of Mouth). School districts were able to choose their prevention program based on the needs and capacity of their teachers and students. The neighborhood programs have focused on cessation, utilizing an existing community-based and worksite-based cessation program (Freedom From Smoking). Cessation providers were required to deliver the Freedom From Smoking program as a way to establish baseline data for adult cessation across the county. In addition, all Freedom From Smoking program facilitators provided additional cessation information and resources which included referrals to the Ohio Tobacco Quit Line.

The community-wide programs have included youth advocacy teams or SHOUT Teams (Student Heath advocates Opposing the Use of Tobacco), OFF (Officially Free From) Nicotine program, Not in Mama’s Kitchen, EPA Smoke-free Home Pledge program, worksite smoking policy committee (Wellness Council of Northeast Ohio), smoke-free establishment guide, the Clean Indoor Air Partnership, surveillance (Cuyahoga County Behavioral Risk Factor Surveillance Survey and the Partnership Youth Tobacco Survey), and the tobacco vendor compliance check program.

2. Program Evaluation and Surveillance Methodology

The surveillance and program evaluation plan for the Cuyahoga County Comprehensive Partnership for Tobacco Reduction is comprised of three components: adult surveillance, youth surveillance, and program evaluation (includes school-based prevention, adult cessation, and community-wide programs). This report is limited to program evaluation of school-based prevention and adult tobacco cessation programming, and adult tobacco surveillance. Reports on other programmatic and surveillance components of the Partnership can be obtained from the County Board of Health.

Program Evaluation: In addition to process outcomes (participation, program reach), the evaluation team assesses a myriad of outcomes each program year. Many of these outcomes are required by the Ohio Tobacco Use Prevention and Control Foundation, while others are of interest to the Partnership and the local community.

School-Based Prevention Programming: In order to assess impact of the school-based prevention programs (Word of Mouth, Life Skills Training), a quasi-experimental design was used, involving pre-tests (given just prior to the programming) and post-tests (given 2-4 weeks after the completion of the program). In addition, during the 2004-2005 program year, a comparison “control” group was introduced to the evaluation plan for the school-based prevention programs so that we could determine whether changes in the pretest-posttest scores were due to the intervention exposure or to a naturally occurring phenomenon (e.g., taking a test twice), or chance.

Adult Cessation Programming: To evaluate Freedom From Smoking, baseline data (i.e., pre-test) was collected at either the information session or the first session of the 8-session program. A post-test survey was administered on the last day of the program (i.e., to completers). In addition, participants attending at least one session (excluding the information session) were contacted via phone at three time points: 30, 60 and 90 days after the last session of the program to determine smoking status. Surveys were administered by the cessation program facilitators. Those participants that remained in the program through the final session were the only participants that post-test data was collected on.

Adult Tobacco Surveillance: Cuyahoga County BRFSS: Each year, 1200-1500 Cuyahoga County adult residents were randomly telephoned on behalf of the Partnership and asked a broad range of questions regarding tobacco use and cessation, attitudes and awareness and tobacco-related health correlates and outcomes. The survey is an adaptation of the Behavioral Risk Factor Surveillance
Survey (BRFSS), which is a comprehensive health behavior survey developed by the Centers for Disease Control and Prevention (CDC) and administered annually in every state in the US. For the past three summers (2003, 2004, 2005), ORC Macro has conducted the Cuyahoga County BRFSS on behalf of the Partnership. The annual data was then weighted to the county population estimates and results were extrapolated to represent all adults (aged 18+) living in Cuyahoga County.

3. Summary of Results

Program Evaluation: School-Based Prevention Programs: School-based programming involved two different curricula: Word of Mouth and Life Skills Training. 2892 4th and 5th grade students received the 5-session Word of Mouth (WOM) curriculum at 42 schools during the 2004-2005 program year. Among these students exposed to WOM, 2642 (91.4%) students completed a pre-test; 2378 (83%) students completed a post-test (1 week following the end of the program) and 2043 (70.6%) students had both a pre-test and post-test that could be linked to each other via unique identifiers. Two thirds (n=1375, 67.3%) of these students were in the Intervention group; 668 (32.7%) were in the control group, receiving the intervention after the evaluation was completed.

With regard to Life Skills (LS) Training, 1427 6th grade students received LS in 13 schools during the 2004-2005 program year. Among these students exposed to LS, 1273 (89.2%) students completed a pre-test; 949 (66.5%) students completed a post-test and 730 (51.2%) students had both a pre-test and post-test that could be linked to each other via unique identifiers. 392 (53.7%) of these students were in the Intervention group; 338 (46.3%) were in the control group.

We examined the reported changes in the post-test tobacco product use and the knowledge, attitudes and intentions related to tobacco use, after controlling for baseline scores and individual characteristics (e.g., age, gender, race). We then compared the results to those of the control group to determine if the change was unique to the intervention group. When compared to controls:

- Students receiving WOM reported a decrease in their social acceptance of tobacco, while students receiving LS reported no change.
- Students receiving WOM and LS reported an increase in their knowledge about the harm of tobacco use.
- Students receiving LS were no less likely to report tobacco use initiation (smoking for the first time during the evaluation period). Initiation was not assessed among WOM students as the evaluation timeframe was too short (2-3 weeks).
- Students receiving WOM and LS surveys reported no change in their intentions to use tobacco in the future.

Program Evaluation: Adult Cessation Programs: Among the 356 participants enrolled in Freedom From Smoking, 347 reported tobacco use at baseline. Also at baseline, 57% of the participants reported at least one quit attempt in the past 12 months; 97.3% reported that they were ready to quit smoking. Among the 128 (36%) individuals who completed the Freedom From Smoking program (completed a post-test), over half (56%) reported that they were tobacco free at the end of the program. Among the 56 individuals who completed the program (completed a post-test) and were still smoking, there was a significant reduction in the amount of tobacco consumed, with 72% reporting that they were smoking 10 cigarettes or less a day, up from 27% who reported smoking a similar amount at baseline. Additionally, we had an 18% increase in the number of Freedom From Smoking classes and a 64.5% increase in the number of participants, both of which demonstrate success.
Adult Tobacco Surveillance: Cuyahoga County BRFSS: The adult surveillance data between 2003 and 2005 indicate successful trends in the way residents of Cuyahoga County think about tobacco as well as in the increased enforcement of tobacco-free policies at home and work. In 2005, more households in Cuyahoga County had rules about smoking in their homes (69%) than in 2004 (64%) or in 2003 (56%) (p<.001). Similarly, significantly more residents supported bans against smoking in public areas (including and excluding bars) in 2005 than in earlier years. But, most importantly, we have seen a small, but steady decline in tobacco use over the past three years. The prevalence of cigarette use has decreased from 26.5% in 2003, to 25.0% in 2004 and 24.3% in 2005. Similar declines were seen in cigar and little cigar use, though not pipe or smokeless tobacco use. Finally, in 2005 we saw a fairly significant increase in the number of quit attempts among smokers, when compared to either 2003 or 2004. Only time will tell whether these results are part of an improving trend or not.

4. Conclusions

Program Evaluation: School-Based Prevention: Significant effort was made in Year 3 to help the subgrantees improve their data collection efforts and to improve our tracking of surveys through a newly developed computerized tracking system. We also introduced the control group to our design this year. While noticeable improvements were seen (nearly all classrooms were surveyed, better match rates of the pre- and post-tests, few “lost” packets of surveys), agencies struggled with the distinction between intervention and controls groups and as a result, more classrooms/schools were designated as intervention groups. Additionally, in spite of the increased efforts, the evaluation revealed little impact of the prevention programs on tobacco-related attitudes, intentions or behavior. Due to the well established effectiveness of at least one of these programs (Life Skills Training), we conclude that program fidelity may need to be further optimized. In addition, because we are not convinced that the agencies fully understood the distinction between intervention and control groups, it is possible that the groups were not accurately identified (intervention groups were actually controls and vice versa).

Program Evaluation: Adult Cessation: Low quit rates of program participants were associated with the high dropout rate. As found in the group cessation literature, less than 40% of participants who started the program, finished. However, of those who did complete, over half quit smoking during the program (typically during week 4) and were still smoke-free at the end of the program (week 8). Furthermore, those that completed the program but continued to smoke, significantly reduced their tobacco consumption. Despite introducing the 30, 60, 90 day follow-ups, the agencies were unable to reach many participants, resulting in the reduced success of the long-term follow-up of the program. However, new protocol is in place to ensure agencies receive a reminder call prior to the follow-up dates. Also, additional materials have been created that allow agencies to contact participants unreachable by phone.

Adult Tobacco Surveillance: Cuyahoga County BRFSS: The adult surveillance is our best indicator of community level change with regard to tobacco use and to the attitudes towards secondhand smoke. The significant increases in home and work smoke-free policies are promising, as is the small, but consistent downward trend in cigarette, cigar and little cigar use. Additionally, our surveillance is unique in that we specifically assess the use of little cigars (e.g., Black and Milds), which have relatively high prevalence rates among minority populations (e.g., 14% of African-American men in Cuyahoga County report little cigar use). This type of tobacco product is not specifically addressed in national estimates of tobacco use among adults; however, in that most little cigar users (80%) also report the use of another tobacco product, we do not feel they have been completely unaccounted for in prior surveillance.
5. Recommendations

School-Based Prevention: The recommendations for the prevention programming are three-fold: (1) In the next programming year, it is strongly encouraged to further optimize the program fidelity by working closely with facilitators, providing them with additional training, and getting feedback from them on a regular basis; (2) Include more process outcomes, including the assessment of competing health promotion and prevention curricula offered in the schools, particularly those serving as controls; (3) Work more closely with the agencies on the assignment of intervention and control and provide additional training to program schedulers.

Adult Cessation: Recommendations for adult cessation programming are two-fold: (1) Hire an independent party to conduct follow-up phone interviews in order to decrease bias; (2) Establish a connection with the Ohio Quit Line in order to determine how Cuyahoga County residents are being counted and tracked.

Adult Tobacco Surveillance: The adult surveillance should continue as is. The estimates appear to be relatively stable (indication of randomization strategies being effective), and the Partnership should continue to fund the larger sample size (>1500) to maintain this stability each year. The cost of the survey is highly reasonable, particularly in light of the amount of valuable local information it provides, even beyond tobacco use. Owing to this value, another recommendation is for the Partnership to begin looking for community partners to develop a plan for sustaining the surveillance system beyond the current funding period.
A. Project Overview

The Cuyahoga County Comprehensive Partnership for Tobacco Reduction (CCCPTR or “The Partnership”), under the leadership of the Cuyahoga County Board of Health (CCBH), has been diligently working to reduce the burden of tobacco use in Cuyahoga County since 2001. These efforts have been funded by the Ohio Tobacco Use Prevention and Control Foundation (TUPCF) and local funding partners, including the Community Vision Council, the Abington Foundation, the Mount Sinai Health Care Foundation, Saint Luke's Foundation of Cleveland, and the Sisters of Charity Foundation of Cleveland.

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In order to provide a comprehensive tobacco control program, we have applied a multiple-level strategy over the past three years. Our program activities have been divided into three levels: school programming, neighborhood programming, and community-wide programming. The school programs have included an evidence-based prevention program (Life Skills) and an established school-based prevention program (Word of Mouth). School districts were able to choose their prevention program based on the needs and capacity of their teachers and students. The neighborhood programs have focused on cessation, utilizing an existing community-based and worksite-based cessation program (Freedom From Smoking). Cessation providers were required to deliver the Freedom From Smoking program as a way to establish baseline data for adult cessation across the county. In addition, all Freedom From Smoking program facilitators provided additional cessation information and resources which included referrals to the Ohio Tobacco Quit Line.

\(^2\) From the Ohio Behavioral Risk Factor Surveillance System (2003 and 2004).
The community-wide programs have included youth advocacy teams or SHOUT Teams (Student Heath advocates Opposing the Use of Tobacco), OFF (Officially Free From) Nicotine program, Not in Mama's Kitchen, EPA Smoke-free Home Pledge program, worksite smoking policy committee (Wellness Council of Northeast Ohio), smoke-free establishment guide, the Clean Indoor Air Partnership, surveillance (Cuyahoga County Behavioral Risk Factor Surveillance Survey and the Partnership Youth Tobacco Survey), and the tobacco vendor compliance check program.
B. EVALUATION PLAN

1. Overview

The evaluation plan for the Cuyahoga County Comprehensive Partnership for Tobacco Reduction is comprised of three components: (1) surveillance of tobacco use, awareness and attitudes among youth of Cuyahoga County; (2) surveillance of tobacco use, awareness, attitudes and tobacco-related health outcomes among adults of Cuyahoga County; and (3) evaluation of program reach and effectiveness of school-based prevention and adult cessation programs sponsored by the CCCPTR. All three components are needed to address the required performance indicators outlined by TUPCF. The first component, surveillance of youth, is the responsibility of the Case Division of Adolescent Health and the second and third components are the responsibility of the Case Center for Health Promotion Research (CHPR). This report focuses only on the adult surveillance and program evaluation components, as the results from the youth surveillance are summarized in a separate report.

2. Goals and Objectives

The program prevention, cessation, and surveillance activities are linked to specific goals and objectives identified by both TUPCF and the Partnership as important to our local community. The following is a summary of these goals and a brief, general description of the associated program activities, settings, and populations served.

**TUPCF Goal #1: To prevent youth tobacco initiation**

**Program Activities:** Word of Mouth (WOM), Life Skills (LS), Student Health advocates Opposing the Use of Tobacco (SHOUT), Vendor Compliance Checks, Partnership Youth Tobacco Survey (PYTS)

**Setting:** Public school districts and tobacco vendors across the county

**Description of Activities:**
- WOM: Provides four, 40 minute sessions on tobacco prevention for grades 4-8. This program was implemented to 4th and 5th graders, primarily in African-American and Latino communities.
- LS: An evidence-based, school-based program that provides fifteen, 50 minute sessions for grades 6-8. This program was implemented to 6th graders throughout Cuyahoga County.
- SHOUT: Youth tobacco advocacy groups were used as a tool for social change among the youth population across the county.
- Vendor Compliance Checks: Underage youth (14-16 years old) attempted to purchase tobacco products during random unannounced inspections of tobacco vendors throughout the county. After the inspections, vendors were sent information and trained at a Tobacco Vendor Education Workshop.
- PYTS: Survey administered to middle school students (grades 7–8) to collect baseline data to determine prevalence rates, product use, and attitudes and behaviors related to tobacco use.
TUPCF Goal #2: To reduce tobacco use among youth

Program Activities: Life Skills (LS), Partnership Youth Tobacco Survey (PYTS), Officially Free From (OFF) Nicotine Youth Cessation Program

Setting: Public school districts across the county

Description of Activities:
- LS and PYTS: See Goal #1
- OFF Nicotine: A voluntary youth cessation program developed by one of our subgrantees, the University Family Medicine Foundation (UFMF). The program offers four, 90 minute sessions with access to cell phone and ally support. OFF Nicotine was developed as an alternative due to the limited success in year two of the Alternative to Suspension and Not-On-Tobacco Programs.

TUPCF Goal #3: To reduce tobacco use among minorities, regional population groups and other populations

Program activities are distributed throughout Goals #1, #2, #5, and #6

TUPCF Goal #5: To reduce exposure to secondhand smoke

Program Activities: Life Skills (LS), Word of Mouth (WOM), Partnership Youth Tobacco Survey (PYTS), Not in Mama’s Kitchen (NIMK), Smoke-Free Home Pledge, Smoking Policy Committee (Wellness Council of Northeast Ohio), Smoke-Free Establishment Guide, Cuyahoga Behavioral Risk Factor Surveillance Survey (BRFSS), Clean Indoor Air Partnership

Setting: Public school districts, worksites, and establishments (bars, restaurants, bowling alleys, etc.) across the county

Description of Activities:
- LS, WOM, PYTS: See Goal #1
- NIMK: A pledge program developed to discourage use of tobacco in the home or car. Selected to primarily appeal to the African-American community. Pledges were collected in the African-American populations.
- Smoke-Free Home Pledge: The Environmental Protection Agency’s (EPA) pledge program to discourage the use of tobacco in the home or car.
- Smoking Policy Committee: Developed by the Wellness Council of Northeast Ohio to serve as a forum for worksites to address successes, challenges and obstacles in developing and enforcing comprehensive tobacco-free worksite policies.
- Smoke-Free Establishment Guide: A program to identify and recognize smoke-free establishments within the county.
- Cuyahoga BRFSS: A telephone survey, using random digit dialing technology, to collect data from adults on tobacco use, behaviors, knowledge and attitudes and awareness of local and state marketing campaigns.
• Clean Indoor Air Partnership: Support of the Clean Indoor Air Partnership developed to encourage the adoption of clean indoor air ordinances in the county. The Greater Cleveland Health Education & Service Council is the lead agent for the campaign in the City of Cleveland and CCBH is the lead agent for any campaign in suburban communities.

**TUPCF Goal #6: To reduce tobacco use among adults**

**Program Activities:** Freedom From Smoking Adult Cessation Program, Cuyahoga Behavioral Risk Factor Surveillance Survey (BRFSS)

**Setting:** Worksites and healthcare organizations across the county

**Description of Activities:**
- Freedom From Smoking: An eight session adult cessation program that uses a positive behavior change approach by giving the smoker alternatives to smoking and helping the individual want to quit.
- Cuyahoga BRFSS: See Goal #5

3. Population Served

Cuyahoga County is an urban area located in the Northeast region of Ohio with a population of approximately 1.3 million residents. Within Cuyahoga County, 68% of all residents are Caucasian, while 30% and 3.4% are African-American and Latino, respectively. Also, according to the 2000 US Census, 13.1% of Cuyahoga County’s residents live below the poverty level (the national poverty level is 12.7%). Cuyahoga County consists of 31 school districts and 93 neighborhoods (36 within the city of Cleveland; 57 suburban neighborhoods that surround the city of Cleveland).

We offered community-wide programming to all county residents with an emphasis on African-American and Latino residents due to the higher rates of lung cancer and heart disease in these populations. Our school-based tobacco prevention programs were in seven school districts, three residing on the west side (Cleveland, Berea, and Lakewood) and five on the east side (Cleveland, Euclid, Cleveland Heights-University Heights, Garfield Heights, and Warrensville Heights) of the county. Our neighborhood-based adult cessation programs took place in six neighborhoods (Cleveland, Lakewood, South Collinwood, Union Miles Park, St. Clair Superior, and Hough) within the City of Cleveland and surrounding suburbs. We have continued our work with these specific neighborhoods based on their racial composition and community support.

4. Agency/Organization Partners

The Partnership is comprised of over 30 agencies and organizations throughout Cuyahoga County. The vast majority of these groups, as shown in Table 1, provide prevention programming or cessation services.
Table 1: Participating Organizations in the Partnership

- Cuyahoga County Board of Health, Lead Agency (CCBH)
- American Cancer Society
- American Lung Association of Ohio
- Asian Services in Action
- Berea Children’s Home
- Changing Attitudes Utilizing Skills from Everyday Life (CAUSE)
- Division of Adolescent Health, Case Western Reserve University
- Center for Community Solutions
- Center for Families and Children (CFC)
- Center for Health Promotion Research, Case Western Reserve University
- City Year Cleveland
- Cleveland Department of Public Health (CDPH)
- Cleveland Clinic Foundation
- Cleveland Municipal School District (CMSD)
- Cuyahoga County Tobacco Control Coalition
- Greater Cleveland Health Education & Service Council (GCHESC)
- Health Space Cleveland
- Hispanic Urban Minority Alcohol and Drug Abuse Outreach Programs, Inc
- Lakewood Department of Human Services
- Lakewood City School District
- Lakewood Hospital
- Lesbian/Gay Community Service Center
- Let’s Talk About (LTA)...Youth Enrichment Program
- Metro-Health Medical Center (METRO)
- Northeast Ohio Neighborhood Health Services (NEON)
- PLAN of North East Ohio (PLAN)
- Recovery Resources
- Saint Vincent Charity Hospital
- Shaker Heights Health Department
- South Pointe Hospital
- University Hospitals Family Medicine Foundation
- Warrensville Heights City School District
- Wellness Council of Northeast Ohio
5. Program Reach

An important component of any community-based public health initiative is determining whether the program is reaching a broad range of residents, and those most in need. The table below provides a listing of the participating agencies/organizations that provided prevention and cessation programming, and the location and type of programming that they provided. As shown in the table, most programming is provided within schools, with the majority focused on the urban schools (Cleveland Municipal School District); however, a number of suburban school districts were also involved. Similar distributions of cessation programming were offered.

<table>
<thead>
<tr>
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</tr>
<tr>
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</tr>
<tr>
<td>CMSD - GCHESC</td>
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</tr>
<tr>
<td>CAUSE</td>
<td>X</td>
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</tr>
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<td>CFC</td>
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<td>GCHESC</td>
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<tr>
<td>LTA</td>
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Table 2 Key

| FFS = Freedom From Smoking |
| WOM = Word of Mouth |
| LS = Life Skills |

Inner Ring = Shares a border with the city of Cleveland
Outer Ring = Does not share a border with the city of Cleveland
C. PROGRAM EVALUATION:
SCHOOL-BASED PREVENTION PROGRAMMING

1. Study Design

Data used to evaluate the school-based, prevention-based programming (Word of Mouth, Life Skills) were collected via self-administered, paper/pencil questionnaires (see Appendix A), one administered approximately one week prior to programming (i.e., pre-test) and the other administered 2-4 weeks after the last session of the program (i.e., post-test).

During the 2004-2005 program year, we introduced comparison groups into our design in order to determine whether the changes observed in the pre- and post-tests were due to the program exposure or some other confounder, such as test familiarity (simply taking the test twice will induce change). Schools in a district were paired up with one in the pair assigned (not randomized) to be an intervention school, and the other a control. Students in both groups completed the pre-test, followed by the intervention school receiving the program (Word of Mouth or Life Skills). Approximately 2-4 weeks after the last session of the program, all students completed the post-test, after which time the control school received the programming.

We were relatively successful in implementing the new design. The need to pre- and post-test at two schools at relatively the same time proved to be complicated for some districts, and thus we ended up with more students in the intervention group than the controls. This is to be expected in the first year of introducing this type of design as it requires a different level of coordination.

2. Survey Description

To assess the Word of Mouth program (involving 4th and 5th graders), a 32-question pre-test and 24-question post-test were designed, based on the questions required by TUPCF. The Life Skills Training program (involving 6th graders) was assessed with a 44-question pre-test and a 34-question post-test. All surveys were designed using the Teleform technology (scannable forms).

3. Survey Tracking

Upon receipt of classroom information from the agencies (see Appendix A), packets of pre-test surveys were prepared for each classroom, each with an assigned, unique number. Each packet included a tracking label that contained the unique identification number (see Figure 1). This number was used to track the packet through the data collection, data editing and data entry processes, with each step logged by CHPR into an ACCESS database. Facilitators signed for each packet at pick up and return, which was also logged into the database. The agencies were required to return the packet to CHPR within 48 hours of pre-test administration. Packets with post-test surveys were then prepared with linking information to the pre-test packet and picked up by the agencies at least one week prior to administration, and again returned to CHPR within 48 hours of completion.
4. Matching Procedures

In order to assess intervention impact, individual pre- and post-test data were linked. To do so, students were asked several unique questions on both surveys: age, sex, race, classroom teacher, initials, birth month and day, and last four digits of phone number. Surveys were hand-matched using these identifiers as we have found that computerized matching results in far fewer matches. For the most part, matching was fairly simple as students typically remained in the same classroom from pre-test to post-test and surveys were retained in their original classroom packets until data entry. However, on occasion (e.g., when the semester changed before post-testing could be completed) the matching process was not conducted by classroom, and schools simply post-tested multiple classrooms at the same time. In this case, more of the identifiers were needed for successful matching within the larger group.

5. Survey Administration

Typically, the survey was administered by a data collection person from the provider organization, the program facilitator, or the classroom teacher. Only students in school on the day of data collection were assessed. Absent students were not pursued for baseline (pre-test) or follow-up surveys. Facilitators confirmed the number of enrolled students with the classroom teacher and documented any differences on the packet. See Appendix A for a copy of the survey administration instruction sheet provided for the facilitators.
6. Measures

In addition to the required individual questions on beliefs and intentions, we included additional measures to assess other important theoretical constructs considered to be important in predicting health behavior changes, such as knowledge and efficacy. Again, refer to Appendix A for copies of the surveys. A general description of survey items is as follows:

- **Knowledge about tobacco**: 4 item index in WOM, 7 item index in LS; based on the number of correct responses. Range 0-4 (WOM), 0-7 (LS).
- **Social acceptance of tobacco beliefs**: 2 items that assessed students’ beliefs that smokers have more friends and that cigarettes make young people “look cool.” Range 1-4.
- **Efficacy (refusal skills)**: Ability of students to say no if offered a cigarette or little cigar by a friend (1 item). Range 1-4.
- **Intentions**: 2 items that assessed intention to smoke cigarettes or little cigars in the next 5 years. Range 1-4.
- **Secondhand smoke exposure**: 1 item that assessed belief that secondhand smoke is harmful. Range 1-4.
- **Tobacco use behaviors**: Pre-tests - 2 items that asked if students have tried cigarettes and little cigars; 4 additional items in LS that asked if students have tried chewing tobacco, how many days they have smoked in the past 30, how many cigarettes or little cigars smoked on those days, and quit attempts. Post-tests - 1 item in WOM that asked students if they have tried smoking in the past 30 days; 4 items in LS that asked if students have ever tried cigarettes or little cigars, how many days they have smoked in the past 30, how many cigarettes or little cigars smoked on those days, and quit attempts.

7. Results: Process Outcomes

At the beginning of each grant year, participating subgrantees propose the number of participants they will reach in their program. Tables 3 and 4 summarize how well they did at reaching their proposed numbers during the 2004-2005 grant year.

Each table is divided into two sections. The first set of columns report on program reach, or the number of students who received programming as compared to what was originally proposed. The last four columns report on the success of the evaluation process, including the number of students who completed the pre-test and post-test and how many of them could be successfully matched (needed to assess individual change in knowledge, efficacy, behaviors, etc.). The higher the match rate, the more generalizable the findings. Low match rates reflect both absenteeism (around 30%) and the agency’s ability to coordinate the evaluation assessment with the schools.

As shown in Table 3, the number of middle school students who received Life Skills Training during the 2004-2005 school year surpassed the proposed numbers. Cleveland Municipal School District proposed to reach 1100 students, but with the help of City Year, was able to provide programming to over 1300 students. Similarly, Let’s Talk About proposed to reach 90-120 students in Garfield Heights School District, and was able to reach 120.

With regard to the evaluation process, adherence to the evaluation plan was a bit more challenging. Of the 1427 students who were enrolled in the program, 1273 completed a pre-test, 949 completed a post-test and only 730 (57%) were able to be matched for analyses. The table highlights where the problem most likely occurred. In general, the numbers of pre-tests and post-
tests were similar, as they capture the number of students who were attending school on that day. Typically, daily absenteeism ranges from 10-15% in the suburban schools, and 20-30% in the urban schools. The rate of pre-test completion was actually quite high (89%), but only 66% completed a post-test. This is partially due to the type of programming that was provided. Life Skills Training is a long program (15 sessions), which unfortunately, when offered during the fall semester, was not always completed before the semester changed and students changed schedules. Thus, difficulties in following students into the next semester may have greatly reduced the post-test completion rate.

Table 4 summarizes the program and evaluation participation rates for those subgrantees providing Word of Mouth programming in the elementary schools, most typically in the 4th grade. While the number of participants did not reach the proposed goal (94%), four of the subgrantees (CMSD, CFC, LTA and Recovery Resources) met or exceeded their participation goals (99-146%), which helped to boost the overall participation rates by the Partnership. Other agencies had more difficulty securing the schools for programming, with some clearly struggling more than others. A likely factor contributing to this difficulty was the number of failed school levies across Cuyahoga County this past year.

The overall completion rates of the pre-test and post-test were more aligned to what is expected for an elementary school population (lower absenteeism rates) and a much shorter program (4 sessions). 91% completed a pre-test and 82% completed a post-test, with an overall match rate of 77%. While acceptable, an emphasis should be placed on data collection efforts in Year 4 as completion rates at post-test could be greatly improved (entire classrooms were missed), which would impact overall match rates.

### Table 3: Program Reach and Evaluation Compliance: Life Skills Training

<table>
<thead>
<tr>
<th>Agency</th>
<th>School District</th>
<th>Program Reach</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td># Proposed</td>
<td># Enrolled</td>
<td>% Completed</td>
</tr>
<tr>
<td>CMSD</td>
<td>CMSD</td>
<td>1100</td>
<td>1307</td>
</tr>
<tr>
<td>CMSD</td>
<td>CMSD*</td>
<td>487</td>
<td>420</td>
</tr>
<tr>
<td>City Year*</td>
<td>CMSD</td>
<td>820</td>
<td>746</td>
</tr>
<tr>
<td>LTA</td>
<td>Garfield</td>
<td>90-120</td>
<td>120</td>
</tr>
<tr>
<td>Total</td>
<td>1190-1210</td>
<td>1427</td>
<td>100%</td>
</tr>
</tbody>
</table>

*Figured into the CMSD subtotal; CMSD proposed a total reach of 1100, and contracted with City Year to fulfill partial programming requirements.
### Table 4: Program Reach and Evaluation Compliance: Word of Mouth

<table>
<thead>
<tr>
<th>Agency</th>
<th>School District</th>
<th>Program Reach</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td># Proposed</td>
<td># Enrolled</td>
<td>% Completed</td>
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<td>CMSD Subtotal</td>
<td>1100</td>
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</tr>
<tr>
<td>CCBH* CMSD</td>
<td>346</td>
<td>300</td>
<td>307</td>
</tr>
<tr>
<td>CMSD* CMSD</td>
<td>568</td>
<td>499</td>
<td>442</td>
</tr>
<tr>
<td>GCHESC* CMSD</td>
<td>178</td>
<td>167</td>
<td>129</td>
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<tr>
<td>CAUSE Warrensville</td>
<td>656</td>
<td>372</td>
<td>57%</td>
</tr>
<tr>
<td>CFC Cleveland Heights</td>
<td>300</td>
<td>340</td>
<td>113%</td>
</tr>
<tr>
<td>GCHESC Subtotal</td>
<td>180</td>
<td>166</td>
<td>92%</td>
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<td>GCHESC** Charter Schools</td>
<td>115</td>
<td>112</td>
<td>121</td>
</tr>
<tr>
<td>Lakewood Lakewood</td>
<td>500</td>
<td>443</td>
<td>87%</td>
</tr>
<tr>
<td>LTA Garfield</td>
<td>200</td>
<td>291</td>
<td>100%</td>
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<tr>
<td>Recovery Resources Berea</td>
<td>138</td>
<td>188</td>
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<tr>
<td>Total</td>
<td>3074</td>
<td>2892</td>
<td>94%</td>
</tr>
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</table>

* Figured into the CMSD subtotal.
** Figured into the GCECSCH subtotal.
8. Results: Descriptives

As noted in Tables 3 and 4, 2642 4th and 5th graders completed a pre-test as part of their Word of Mouth curriculum and 1273 6th graders completed a pre-test as part of their Life Skills Training curriculum. This section describes the participants in each sample, including basic demographics and smoking related information, such as experimentation and exposure to secondhand smoke.

**Gender:** As shown in the graph to the left, both program groups were essentially equal with regard to gender, with 51% males and 49% females.

**Racial/Ethnicity:** The graph to the right displays the racial distribution of the program groups. In both groups, over half of participants reported themselves to be African-American (52% in WOM; 58% in LS), approximately a quarter reported Caucasian decent (31% in WOM; 25% in LS), just over a tenth reported Hispanic or Latino decent (11% in WOM; 13% in LS), and a small percentage (6% in WOM; 4% in LS) reported themselves as belonging to other subgroups (e.g., Asian, American-Indian).

**Living Arrangement:** As shown in the graph to the left, the WOM participants were more likely to live with two parents than the LS participants (64% vs. 48%). Nearly half (46%) of LS participants reported living with either their mother or father, compared to less than a quarter (23%) of WOM participants. A small percentage of both groups lived with individuals other than their parents. The apparent age difference in living arrangements of the participants is more likely a reflection of the individual characteristics of the schools that offered the different programs.
Experimentation with Tobacco: Students in both program groups (WOM, 4th/5th graders; LS, 6th graders) were asked if they were ever offered a cigarette or little cigar, such as a Black and Mild. Then, in separate questions, they were asked if they had ever tried, even a puff or two of (a) a cigarette; and (b) a cigar or little cigar, such as a Black and Mild.

The graph to the right shows the percentage of students in each group who were offered and who tried a cigarette or cigar. Among the 4th and 5th graders, 17% said that someone had offered them a cigarette or cigar. This percentage doubled for the 6th graders, where nearly 40% of students reported an offer of a cigarette or cigar.

While the opportunity was available, the percentage that took the offer was much lower. While 17% of 4th and 5th graders were offered, only 7% reported trying either a cigarette or a little cigar. The likelihood of experimentation was higher among the older, Life Skills, participants. In this case, 40% were offered a cigarette or little cigar and 21% actually tried either of the two products.

Who Offered the Tobacco Product? Students who were offered a cigarette or little cigar were then asked who offered them the product. The graph below shows the percentage of students who reported that the person was (a) a friend; (b) someone in the family; (c) someone they didn’t know very well; or (d) other. In both groups, the source person was likely to be someone that they didn’t know very well, as reported by 36% of 4th/5th graders and 34% of 6th graders.

Close friends were the next source for 4th/5th grade students (28%). Close friends (35%), however, were just as likely to be the source for 6th grade students, as those they didn’t know, demonstrating the power of the peer group with age.

15-20% of both groups noted either family members or others as the source.
Exposure to Secondhand Smoke: Students were next queried about exposure to secondhand smoke. First, as shown in the graph below, they were asked whether they currently lived with anyone who smokes. Nearly half (47%) of the 4th and 5th grade students and 61% of 6th grade students reported that they did. These reports were surprisingly high when compared to the adult-reported prevalence rate of smoking (~25%). When asked about the types of tobacco products that these individuals smoked, the vast majority (~80%) reported cigarettes, following by cigars and little cigars (~12%).

Students were next asked to report their specific exposure to smoke by reporting separately, the number of days they were in the same room with someone who was smoking and number of days they rode in a car with someone who was smoking.

As show in the graph below, about half of all students (4th–6th grade) reported no exposure to smoke in the home or car, followed by approximately one third who reported 1-6 days of exposure. Between 13% and 20% of students reported home and car exposure every day.

Secondhand Smoke Exposure: “In the past 7 days, how many days were you in the same room / car with someone who was smoking?”

- No Days
- 1-6 days
- Every day
Smoking Rules in the Home: Though the majority of students (50% 4th/5th graders; 44% 6th graders) reported that smoking is not allowed in their homes, roughly a third of students (30% 4th/5th graders; 35% 6th graders) reported that smoking is allowed in some places, anywhere, or that there are no rules about smoking in their home. Because approximately one-fifth of students (20% 4th/5th graders; 22% 6th graders) were unsure about the smoking rules in their home, it is difficult to understand the full picture.

Number of Closest Friends who have Tried Smoking: For both groups of program participants, the majority reported that their closest friends have not tried smoking (81% 4th/5th graders; 61% 6th graders). Likewise, a very small percentage reported that all of their friends have tried smoking (2% 4th/5th graders; 8% 6th graders). With age, however, it is clear that students’ experiences change, as demonstrated by 6th graders who were in most cases more than twice as likely than 4th/5th graders to report that some or all of their friends have experimented with smoking.

Perception of Peers who Smoke: Similar to the age differences in having friends who have tried smoking, there is an age difference in 4th/5th versus 6th graders’ perceptions of peers who smoke. Clearly, a majority (43%) of 4th/5th graders perceived that none of their peers smoke. Another 39% expected that only a couple or some of them smoke, while very few believed that half (9%) or most (10%) smoke. 6th graders, however, are much more diverse in their perceptions. In fact, 6th graders were less than half as likely to assume that none of their peers smoke (16%), and twice as likely to assume that half (20%) or most (20%) of them do.
9. Results Summary: Measurable Outcomes Linked to Specific Goals and Objectives

The following section discusses the outcome-based results related to the specific goals and objectives outlined in the program evaluation plan (pp. 8-12). Under each goal and objective, the activities and population related to each goal/objective are again listed, followed by the results, most typically assessed as whether the intervention students reported a change (post-test score – pre-test score) in their tobacco-related attitudes and behaviors, and whether the change was statistically different from what was reported by the students in the control group.

**TUPCF Goal #1: To prevent youth tobacco initiation**

**Goal 1, Objective A: Increase the number of youth who report a delayed age of first tobacco use (cigarettes, cigars, chew).**
- *Program Activities:* Life Skills Program (LS), Partnership Youth Tobacco Survey (PYTS)
- *Population:* Youth, ages 11-13 programming; 7th-8th grade for PYTS
- *Results (from program data):* We did not ask age of initiation among students who tried smoking for the first time during the 2 month evaluation period. However, only 30 LS students reported trying smoking during the evaluation period.

**Goal 1, Objective B: Increase the number of youth who report that they have never tried tobacco products (cigarettes, cigars, chew).**
- *Program Activities:* Life Skills Program (LS), Partnership Youth Tobacco Survey (PYTS)
- *Population:* Youth, ages 11-13 programming; 7th-8th grade for PYTS
- *Results (from program data):*
  - Students receiving LS (6th graders) were no less likely to report initiating tobacco use during the evaluation period than the controls (I: 4.6% vs. C: 4.0%, p=.769).
  - The Word of Mouth program (WOM) has a one month duration at most, and thus does not provide enough time to capture incident use of tobacco.

**Goal 1, Objective C: Increase the number of youth who report a firm intention to never use tobacco products (cigarettes, cigars, chew).**
- *Program Activities:* Word of Mouth Program (WOM), Life Skills Program (LS), Partnership Youth Tobacco Survey (PYTS)
- *Population:* Youth, ages 9-11 (WOM) and 11-13 (LS); 7th-8th grade for PYTS
- *Results (from program data):*
  - Students receiving WOM (4th and 5th graders) reported no change in their intentions to use tobacco in the future (1.25 to 1.21) – although owing to their young age, their intentions to abstain were extremely high to begin with. The post-test score was not significantly different than the controls (p=.447).
  - Students receiving LS (6th graders) reported no change in their intentions to use tobacco in the future (1.44 to 1.48). The post-test score was not significantly different than the controls (p=.168).

**Goal 1, Objective D: Increase the percentage of youth who report a decrease in the social acceptance of tobacco use (cigarettes, cigars, chew).**
- *Program Activities:* Word of Mouth Program (WOM), Life Skills Program (LS), Partnership Youth Tobacco Survey (PYTS)
- *Population:* Youth, ages 9-11 (WOM) and 11-13 (LS); 7th-8th grade for PYTS
Goal 1, Objective E: Increase the number of public school districts implementing evidence-based tobacco prevention curriculum by 6%.

- Program Activities/Population: Recruitment of new school districts; Youth, ages 9-13
- Results: Baseline data = 7 school districts; Process Outcome data = 7 school districts; Maintained seven school districts.

Goal 1, Objective F: Increase the number of youth participating in evidence-based tobacco prevention curriculum.

- Program Activities/Population: Recruitment of new school districts; Youth, ages 9-13
- Results: Baseline data = 2500 youth (WOM & LS); Process outcome data = 4319 (WOM & LS); Increased our number of participants by 72.7%. In addition, we were able to increase the number of schools recruited for the programs from 41 to 57 (39%).

Goal 1, Objective G: Increase the number of youth who report an increase in their refusal skills related to tobacco use.

- Program Activities/Population: Word of Mouth Program (WOM), Life Skills Program (LS); Youth, ages 9-11 (WOM) and 11-13 (LS)
- Results (from program data):
  - Students receiving WOM reported a decrease in their efficacy (or confidence) that they could refuse a cigarette or little cigar, if offered by a best friend (3.63 to 3.58). This difference was not significantly different than the controls (p=.086).
  - Students receiving LS reported a decrease in their efficacy (or confidence) that they could refuse a cigarette or little cigar, if offered by a best friend (3.63 to 3.56). This difference was not significantly different than the controls (p=.063).

Goal 1, Objective H: 1% of youth in grades 4-6 will report an increase in their knowledge regarding the health risks associated with tobacco use.

- Program Activities/Population: Word of Mouth Program (WOM), Life Skills Program (LS); Youth, ages 9-11 (WOM) and 11-13 (LS)
- Results (from program data):
  - Students receiving WOM reported an increase in their knowledge regarding the harm of tobacco use (1.59 to 2.54). Not significantly different than the controls.
  - Students receiving LS reported an increase in their knowledge regarding the harm of tobacco use (3.42 to 3.77). Not significantly different than the controls.

Goal 2, Objective A: Decrease the proportion of youth who report using tobacco products (cigarettes, cigars, chew).

- Program Activities/Population: Word of Mouth Program (WOM), Life Skills Program (LS); Youth, ages 9-11 (WOM) and 11-13 (LS)
• Results (from program data):
  ➢ Compared to controls, smokers receiving LS were no different in reporting a reduction in their tobacco use during the evaluation period (C: 72.1% vs. I: 73.0% smoking ≤1 cigarette per day, p=.960).
  ➢ Due to the low prevalence of smoking within the WOM sample, these analyses were not conducted.

Goal 2, Objective B: Increase the proportion of youth tobacco users who report a quit attempt in the last 12 months.
  • Program Activities: Life Skills Program (LS), Partnership Youth Tobacco Survey (PYTS)
  • Population: Youth, ages 11-13 programming; 7th-8th grade for PYTS
  • Results (from program data): Due to a small sample of baseline smokers followed at LS post-test and an inequitable assignment to the control condition, we were unable to provide detailed results for control and intervention groups separately. However, 35 of 39 students identified as baseline smokers reported at least one quit attempt during the evaluation period.

Goal 2, Objective C: Increase the proportion of youth tobacco users who report an intention to quit using.
  • Program Activities: Life Skills Program (LS), Partnership Youth Tobacco Survey (PYTS)
  • Population: Youth, ages 11-13 programming; 7th-8th grade for PYTS
  • Results (from program data): Due to a small sample of baseline smokers followed at LS post-test and an inequitable assignment to the control condition, we were unable to provide detailed results for control and intervention groups separately. However, 18 of 35 students identified as baseline smokers were no longer smoking at the post-test and an additional 10 students indicated a desire to stop smoking.

Goal 2, Objective D: Establish baseline data of youth cessation program participants who report that they are tobacco-free at the end of the program.
  • Program Activities/Population: Officially Free From (OFF) Nicotine Youth Cessation Program; Youth, ages 13-22
  • Setting: Schools and community-based organizations
  • Methodology (data source, sampling, data collection): Purposeful sample; process evaluation, Smoker's CAGE pre-test to offer a complete assessment of tobacco use behavior and attitudes, use of exhaled carbon dioxide (Ex CO) monitors to provide bio feedback, and post-intervention survey to identify changes in behaviors, attitudes, self-image, and Ex CO biomarkers.
  • Results (from program data): 8 participants; 6 out of 8 participants reported quitting and had Ex CO levels in the nonsmoking range; Quit rate at end of program = 75% (Intent to Treat calculation = 6/8).

Goal 2, Objective E: Establish baseline data of youth cessation program participants who report that they are tobacco-free 30 days after end of the program.
  • Program Activities, Population, Setting, and Methodology: Same as Goal 2, Objective D above
  • Results (from program data): 4 out of 8 participants attended the reunion session at one month post program. All 4 had Ex CO levels lower than their previous high, while 3 of these 4 had Ex CO levels in the non-smoking range. All participants revealed they used at least 1 cigarette in the past 30 days.

Goal 2, Objective F: Establish baseline data of youth cessation program participants who report that they are tobacco-free 60 days after end of the program.
• Program Activities, Population, Setting, and Methodology: Same as Goal 2, Objective D above
• Results (from program data): Unavailable at this time.

Goal 2, Objective G: Establish baseline data of youth enrolled in cessation pilot program who report a decrease in tobacco use.
• Program Activities, Population, Setting, and Methodology: Same as Goal 2, Objective D above
• Results (from program data): Reduction in tobacco use plus quit rate was 87.5% (using the Intent to Treat Format).

Goal 2, Objective H: Establish the baseline number of youth cessation services/programs.
• Program Activities, Population, Setting, Methodology, and Results: Same as Goal 2, Objective D above

Goal 2, Objective I: Establish the baseline number of youth cessation program participants
• Program Activities, Population, Setting, Methodology, and Results: Same as Goal 2, Objective D above

Goal 3, Objective A: Increase the number of cessation sites/classes that serve high populations of African-American and Latino adults and/or youth.
• Program Activities: Recruitment of additional cessation sites and programs
• Population: African-American and Latino youth and adults
• Setting: Schools and community-based organizations
• Methodology (data source, sampling, data collection): Review of program records
• Results (from program data): Baseline data = 5 sites; Process outcome data = 1 site.

Goal 5, Objective A: Decrease the number of youth exposed to secondhand smoke.
• Program Activities: Not in Mama’s Kitchen (NIMK), EPA Smoke-Free Home Pledge, Word of Mouth Program (WOM), Life Skills Program (LS), Partnership Youth Tobacco Survey (PYTS)
• Population: Youth, ages 9-11 (WOM) and 11-13 (LS); 7th-8th grade for PYTS
• Setting: Schools (programming and surveillance); homes (NIMK)
• Methodology (data source, sampling, data collection): See Prevention Programming Methodology and PYTS Methodology; Not in Mama’s Kitchen/EPA Smoke-Free Home Pledge - review of program records
• Results (from program data):
  ➢ Students receiving LS reported a decrease in their likelihood to “avoid places were someone is smoking around you” (3.73 to 3.48). Not significantly different than the controls (p=.493).
  ➢ Students receiving LS reported no difference in their reported comfort in “telling someone they should not smoke around me” (2.99 to 3.03). Not significantly different than the controls (p=.444).
  ➢ Due to their young age, we did not ask the above questions to the WOM participants.
47.1% of WOM and 61.3% of LS participants reported living in a home with someone who smokes.

Goal 5, Objective C: Increase the number of youth who know about the hazards of secondhand smoke.

- **Program Activities, Population, Setting, and Methodology:** Same as Goal 1, Objective B above
- **Results (from program data):**
  - Students receiving WOM reported an increase in their belief that “smoke from other people’s cigarettes are harmful to you” (3.61 to 3.72). This difference was not significantly different than the controls (p=.136).
  - Students receiving LS reported no difference in their belief that “smoke from other people’s cigarettes are harmful to you” (3.70 to 3.67). This difference was not significantly different than the controls (p=.254).

Goal 5, Objective D: Increase the number of adults who know about the hazards of secondhand smoke.

- **Program Activities:** Not in Mama’s Kitchen (NIMK), EPA Smoke-Free Home Pledge Program
- **Population:** Adults, ages 18-98, African-Americans
- **Setting:** Community
- **Methodology (data source, sampling, data collection):** See Adult Surveillance Methodology; NIMK/EPA Smoke-Free Home Pledge - review of program records
- **Results (from program data):** 578 pledges collected.

10. Conclusions

Year 3 of the Partnership was marked with many successes.

This was the year to implement the final component of the evaluation plan – adding a control group to the school-based evaluation design. This component is necessary for making any conclusions about program effectiveness.

This year marked success in establishing the framework for a rigorous evaluation of the school-based prevention programs, Word of Mouth and Life Skills. Agencies did a better job with data collection efforts and most were successful with assigning control groups. Tracking (and subsequent matching of data) was substantially improved this year as well. However, the evaluation results revealed little impact of the programs. This was surprising owing to the wealth of the research studies demonstrating the effectiveness of at least one of the programs (Life Skills), when conducted in similar populations (i.e., middle school teens) and settings (i.e., schools). Moreover, the evaluation methods and measures used were standardized and very similar to those used in previous studies. Nonetheless, with the exception of knowledge, the evaluation revealed very little impact on tobacco beliefs, efficacy, intentions or behavior (use).

11. Recommendations

To assure more accurate and equitable distribution, it is first recommended that agencies be assisted more closely in the assignment of intervention and control. Similarly, they should be guided in the timing of pre- and post-testing to allow for greater comparability. It is also suggested that additional training be provided to program schedulers on timing of post-testing to maximize matching.
Due to the lack of strong outcomes, particularly from the evidence-based Life Skills program, it is recommended that more attention be given to program fidelity in the next programming year. This should include additional training of facilitators, regular observation of facilitators in the classroom, completion of a fidelity checklist by facilitators in each school, mid-program assessments and an interim feedback session to allow facilitators to discuss issues that they are facing in the classroom.

Finally, a focus on process outcomes may broaden the scope of what we know about prevention programming in the schools. For instance, an assessment of competing health promotion and prevention curricula offered, particularly in those schools serving as controls, may provide a context for which to reconsider baseline data and subsequent outcomes.
D. PROGRAM EVALUATION:
ADULT CESSATION PROGRAMMING

1. Study Design

To evaluate the adult cessation program (Freedom From Smoking), baseline data (i.e., the pre-test) was collected at either the information session or the first session of the eight-session program. A post-test survey was administered on the last day of the program (i.e., to completers). In addition, participants attending at least one session (excluding the information session) were contacted via phone at three time points: 30, 60 and 90 days after the last session of the program, to determine smoking status. See Appendix A for copies of the data collection tools.

2. Survey Description

To assess the adult cessation programs, 21-question pre-tests and 13-question post-tests were developed based on the questions required by TUPCF. All surveys were designed using the Teleform technology which uses scannable forms.

3. Survey Tracking

The tracking system used for the cessation programs was similar to the system for the youth prevention programs. Facilitators were given separate packets (each with the same unique packet number) containing the pre-tests, post-tests and follow up forms. Some programs were provided by single individuals, thus providing all materials at once was deemed less burdensome. Facilitators were required to return the pre- and post-test packets within two weeks of completion (permitting enough time to get the baseline surveys from participants who joined the program after the initial session). Packets were tracked within the CHPR database as previously described (i.e., the ACCESS database). Emails were sent to the facilitators one week prior to the 30, 60 and 90-day time points to remind them to complete the follow-up form.

4. Matching Procedures

Due to the age of program participants (able to provide own consent to the process), personal information (name, address, phone number) was collected for matching and follow-up purposes. Upon receipt of the pre-tests, individuals were given a unique ID, which was then used to link baseline and follow-up data.

5. Survey Administration

Surveys were administered by the cessation program facilitators. The pre-test was administered during the orientation session in week one of the program. The post-test was administered in the final session of the eight-week program. Those participants that remained in the program through the final session were the only participants from whom post-test data was collected.
6. Measures

The following questions were used in predicting health behavior changes, such as quit attempts, intentions to quit, tobacco use cessation, and usage of tobacco products:

- Prevalence of tobacco use: (1a) During the past 30 days, on how many days did you smoke cigarettes? or (1b) About how many cigarettes do you smoke each day? and (2) Are you currently using any other tobacco products?
- Tobacco users who report a quit attempt in the last 12 months: During the past 12 months, have you stopped smoking for one day or longer because you were trying to quit?
- Intention to quit smoking: Are you ready to quit smoking cigarettes?
- Tobacco use cessation: (1) Are you currently smoking cigarettes? (Asked at 30, 60 and 90 days.) and (2) Are you currently using any other tobacco products?
- Amount of tobacco products consumed by tobacco users: About how many cigarettes do you smoke each day?

7. Results: Process Outcomes

Each year, the participating subgrantees propose the number of classes and the number of participants they hope to reach in their program. The following table summarizes how well they did at reaching their proposed numbers. The table is divided into two sections; the first set of columns report on class statistics, or the number of classes that were proposed and offered, and the second set of columns report on the participant statistics, or the number of participants who enrolled in the cessation programs, as compared to what was originally expected.

<table>
<thead>
<tr>
<th>Agency</th>
<th>Class Statistics</th>
<th>Participant Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Proposed</td>
<td>Actual</td>
</tr>
<tr>
<td>Recovery Resources</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>CDPH</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Lakewood Hospital</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Metro</td>
<td>11</td>
<td>9</td>
</tr>
<tr>
<td>NEON</td>
<td>16</td>
<td>11</td>
</tr>
<tr>
<td>PLAN</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>Wellness Council</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>TOTAL</td>
<td>45</td>
<td>42</td>
</tr>
</tbody>
</table>
The eight different subgrantees offering cessation programming proposed that they would offer 45 classes and serve 432 participants during the program year. While the actual number of classes offered came close to that which was proposed (93%), the number of participants in each class was underestimated, and the classes attracted only 82% of what was expected. There is one small caveat to consider when looking at these numbers. The number of participants was based on the number who completed a pre-test survey at the information session or the first session of the program. Thus, there may have been individuals who signed up for the class, but did not show up for the first session. In summary, the subgrantees came close to their goal number of classes, but did not reach as many participants in the classes as they had proposed.

8. Results: Measurable Outcomes Linked to Specific Goals and Objectives

The following section discusses the outcome-based results related to the specific goals and objectives outlined in the program evaluation plan (pp. 8-12). Under each goal and objective, the associated cessation activities and populations are again listed, followed by the results.

**TUPCF Goal #6: To reduce tobacco use among adults**

**Goal 6, Objective A: Decrease the proportion of adults who report using tobacco products.**
- **Program Activities:** Freedom From Smoking, Adult Surveillance
- **Population:** Adults, ages 18-98 (cessation programming and adult surveillance)
- **Setting/Methodology (data source, sampling, data collection):** Community; See Adult Cessation Methodology and Adult Surveillance Methodology
- **Results (adult cessation data):** Among the 356 participants enrolled in Freedom From Smoking, 347 reported tobacco use at baseline.

**Goal 6, Objective B: Increase the proportion of adult tobacco users who report a quit attempt in the last 12 months.**
- **Program Activities, Population, Setting, and Methodology:** Same as Goal 6, Objective A above
- **Results (adult cessation data):** At baseline, 57.1% of the 356 Freedom From Smoking program participants reported at least one quit attempt in the past 12 months.

**Goal 6, Objective C: Increase the proportion of adult tobacco users who report an intention to quit using.**
- **Program Activities, Population, Setting, and Methodology:** Same as Goal 6, Objective A above
- **Results (adult cessation data):** At baseline, 97.3% of the 356 Freedom From Smoking program participants reported that they were ready to quit smoking.

**Goal 6, Objective D: Increase the proportion of cessation program participants who report that they are tobacco-free at the end of the program.**
- **Program Activities/Population:** Freedom From Smoking; Adults, ages 18-98
- **Setting/Methodology:** Community; See Adult Cessation Methodology
- **Results (adult cessation data):** Among the 128 individuals who completed the Freedom From Smoking program (i.e., completed a post-test), 56.3% reported that they were tobacco free at the end of the program.
**Goal 6, Objective E:** Increase the proportion of cessation program participants who report that they are tobacco-free 30 days after the end of the program.
- **Program Activities, Population, Setting, and Methodology:** Same as Goal 6, Objective D above
- **Results (adult cessation data):** Among the 75 individuals who completed the Freedom From Smoking program (i.e., completed a post-test) and were contacted 30 days following program completion, 44.0% reported that they were tobacco-free 30 days after the end of the program.

**Goal 6, Objective F:** Increase the proportion of cessation program participants who report that they are tobacco-free 60 days after the end of the program.
- **Program Activities, Population, Setting, and Methodology:** Same as Goal 6, Objective D above
- **Results (adult cessation data):** Among the 58 individuals who completed the Freedom From Smoking program (i.e., completed a post-test) and were contacted 60 days after program completion, 55.2% reported that they were tobacco-free 60 days after the end of the program.

**Goal 6, Objective G:** Increase the proportion of cessation program participants who report a decrease in tobacco use.
- **Program Activities, Population, Setting, and Methodology:** Same as Goal 6, Objective D above
- **Results (adult cessation data):** Among the 56 individuals who completed the Freedom From Smoking program (i.e., completed a post-test) and were still smoking, 71.7% reported smoking 10 cigarettes or less a day at the end of the program, compared to only 26.9% who reported smoking 10 cigarettes or less a day at baseline.

**Goal 6, Objective H:** Increase the number of Freedom From Smoking classes by 10%.
- **Program Activities/Population:** Scheduled classes; Adults, ages 18-98
- **Setting/Methodology:** Healthcare/Community-based Organizations; Review of program records
- **Results:** Baseline = 33 classes; Process outcome = 39 classes; Increased number of classes by 18%.

**Goal 6, Objective H:** Increase the number of Freedom From Smoking participants by 10%.
- **Program Activities, Population, Setting, and Methodology:** Same as Goal 6, Objective H above
- **Results:** Baseline = 200 participants; Process outcome = 329 participants; Increased number of participants by 64.5%.

9. **Conclusions**

Although the quit rates of all program participants was relatively low, this was highly associated with the high program dropout rate, typically found in this type of cessation-outreach approach. If participants were retained in the program, their likelihood of making a quit attempt or at least reducing their tobacco use was relatively high. These results appear to be similar to that which is found in the literature for group-based cessation programs. Additionally, this year, the 30, 60, 90-day follow-ups of the adult smokers were introduced. The agencies did fairly well; however, many were unable to reach participants, reducing the success of the long-term follow-up of the program.
10. Recommendations

There are two major recommendations regarding the adult cessation programs; however, these recommendations cannot be made without first acknowledging the difficulty the agencies have had in contacting participants at follow-up. This is a time-intensive endeavor that may go beyond the scope of work assigned to each agency. It may be helpful to have an independent party conduct the follow-up phone interviews. An independent agency would also reduce the appearance of bias that is introduced when the same individuals who are conducting the programs (and being evaluated) are responsible for documenting the success rates. It is recommended that a graduate student trained in evaluation methods be hired (by the hour) to conduct these interviews. The second recommendation for Year 4 is to place additional effort and emphasis on developing a stronger connection to the Ohio Quit Line to determine how Cuyahoga County residents are being counted and tracked through this service.
E. ADULT TOBACCO SURVEILLANCE:
CUYAHOGA COUNTY BRFSS

1. Description

Adult tobacco surveillance was collected via the Cuyahoga County Behavioral Risk Factor Surveillance Survey (CC-BRFSS), conducted by ORC Macro, a telephone survey company that manages numerous state-wide surveys (including the Ohio BRFSS prior to 2003) across the country. The BRFSS is a standardized survey developed by the Centers for Disease Control and Prevention (CDC) and is administered annually by every state. The survey involves a broad array of health behaviors (including tobacco use) and health outcomes related to those behaviors. We chose to use the BRFSS as our survey template so that we would have both state and national comparisons for our local estimates. However, in order to make the phone survey more manageable with regard to time (approximately 16-18 minutes) and focused on tobacco, the core survey was modified by dropping all nontobacco-related questions; the tobacco sections retained were expanded to include more detailed questions about cigarette use, little cigar use (which has a high prevalence in Cuyahoga), perceptions of secondhand smoke, support/opposition for smoke-free policies, worksite and home policies about smoking, and worksite programs for smoking cessation. Beginning in 2003, each summer (between August-October) approximately 1200-1500 Cuyahoga County households are randomly selected to complete our shortened versioned of the survey (approximately 18 minutes long). This report discusses data collected from 2003 through 2005.

2. Methodology (see Appendix B)

3. Annual vs. Trend Data

This report includes not only the annual estimates of tobacco use, related attitudes, and health outcomes, but also the trends in the data over the three-year period (summer of 2003 – summer of 2005) of the Partnership. Each year, the data were weighted to reflect the county population, based on demographic characteristics (age, gender, race). In addition, the weighting formula took into account: (1) the unequal probabilities of selection of participating households; (2) the unequal probabilities of selection of participating adults; (3) the differential non-response rates; and (4) the differential telephone coverage rates. To examine the trends, the three years of data were merged into a single file and analyzed, retaining the individual weighting variables.

An additional advantage of the multiple-years of surveillance data is the ability to more accurately estimate less prevalent tobacco product use (e.g., pipe, cigar or little cigar), and to explore tobacco use and related factors among small subgroups of the population. By combining the data across three years, the sample size rises to nearly 3800 cases, resulting in ample sample size for examining differences by age, gender, race, and geographic locations.
4. Results: Tobacco Use

Six tobacco indicators are being tracked with the Cuyahoga County BRFSS: (1) prior and current cigarette use; (2) prior and current little cigar (e.g., Black and Mils) use; (3) current regular cigar use; (4) current pipe use; (5) current smokeless tobacco use; and (6) all tobacco use – use of one or more of all tobacco products. Most of the detailed information (beyond current use) was not added until 2004; therefore, trends cannot yet be established for these variables.

Cigarette Use

Cigarette Smoking: The prevalence of both ever (smoking at least 100 cigarettes) and current cigarette use (smoking everyday or some days in past month) are displayed in the graph below. The prevalence has decreased each year (51.4, 51.0, 47.8 for ever cigarette use and 26.7, 25.0, 24.0 for current cigarette use). However, the confidence bands around these estimates overlap, and thus we cannot conclude that this is a true decline as measurement error may still explain the trend. Nonetheless, the observed change is consistent and in the desired direction.

Demographic Characteristics of Cigarette Users: In order to better understand who smokes cigarettes and how we might better direct our intervention efforts, we next examined the demographic characteristics of current cigarette users. However, due to the small sample size of the demographic subgroups, we combined the three years of data to provide a large sample size to work with. The following page describes current cigarette smokers by age, gender, race/ethnicity, income, education, and occupation. As with the data described above, current cigarette smokers are those who (a) report that they have smoked at least 100 cigarettes in their lifetime, and (b) report to be smoking either every day or on some days.
Table 6: Demographic Characteristics of Current Cigarette Users: Adults (18+) Cuyahoga County BRFSS, 2003-2005

Prevalence of Cigarette Use by Sex

- Male: 27.1%
- Female: 23.5%

Prevalence of Cigarette Use by Age

- 18-24: 32.6%
- 25-34: 31.3%
- 35-44: 28.7%
- 45-54: 28.2%
- 55-64: 25.1%
- >65: 10.3%

Prevalence of Cigarette Use by Race

- White: 24.1%
- African American: 28.3%

Prevalence of Cigarette Use by Education Status

- Less than HS: 40.9%
- GED or HS: 31.1%
- Some Post HS: 29.8%
- College Graduate: 12.8%

Prevalence of Cigarette Use by Household Income

- < 25K: 32.0%
- 25-50K: 27.4%
- > 50K: 20.1%

Prevalence of Cigarette Use by Employment Status

- Employed: 26.9%
- Unemployed: 43.3%
- Stud/Retired/Other: 15.4%
- Unable to Work: 38.4%
Our data is similar to that which has been reported in the literature. Males were less likely to smoke cigarettes than females (27.1 vs. 23.5%), though the difference between the two has become increasingly smaller. Cigarette smoking decreased as individuals aged, as more people quit smoking and as more smokers died. As shown in the graphs, the rate of cigarette smoking was around 33% among the youngest population, and did not decline below national averages (around 21%) until after age 65. Smoking rates also varied by race and ethnicity, with cigarette smoking being reported by 24% of Caucasian residents, 28% of African-American, and 36% of Hispanic residents. However, the estimates for Hispanic residents may be unstable due to the small sample size. No other ethnic group was represented adequately enough to be examined separately. As revealed nationally, one of the strongest factors associated with tobacco use was education level. As shown in the graph, 41% of residents with less than a high school education reported being current smokers, as compared to approximately 30% of those with a high school degree or some post-high school education, and only 13% of those with a college degree or more. Similar differences were shown with regard to household income where rates of cigarette smoking were 32% of those with incomes of $25,000 or less, as compared to 27% for those with incomes of $25-50,000, and 20% of those with incomes of $50,000 or more. Finally, cigarette smoking was the most prevalent among the unemployed (43%) and those unable to work due to disability (38%), followed by full-time, part-time or self-employed workers (27%) and students, homemakers and retired respondents (15%).

**Quit Attempts:** One of the primary goals of the Partnership is to increase the number of smokers who make an attempt to quit, even if they are not successful, as research has shown that most former smokers make multiple quit attempts before actually quitting. As displayed in the graph at the right, nearly half of all cigarette smokers reported at least one quit attempt (of one day or more) in the past year. This percentage was unchanged between 2003 and 2004; however, there was a fairly large jump in quit attempts in 2005, increasing from 46.5% in 2004 to 55.6% in 2005. The confidence bands around the estimates suggest that these differences may be due to chance; thus, additional years of data are needed to reveal whether this is a sustainable change or an anomaly.

**Intentions to Quit:** State of change theory suggests that the step prior to actually quitting is an individual’s intention to quit in the future, with the time frame being well defined (e.g., within the next 6 months). In 2004 and 2005, we asked current smokers, “Are you seriously considering stopping smoking cigarettes within the next six months?” In 2004, 69.8% (data not shown) of smokers stated that they were thinking of quitting in the next six months. The percentage rose to 73.6% (data not shown) in 2005. Again, while trends cannot be established, the change was in the desired direction.
Other Tobacco Product Use

This section describes the prevalence rates of the other tobacco products queried in the BRFSS, including regular cigars, little cigars (asked only in the Cuyahoga County survey), pipe, and smokeless tobacco. In comparison to cigarettes, far fewer adults reported usage of these products, with prevalence rates ranging from less than 1% for pipe smoking to over 5% for cigars.

Cigar and Little Cigar Use: While the usage rates of other tobacco products are far less than that of cigarettes, there are some unique findings for Cuyahoga County. When designing our surveys, our community partners reminded us that cigarettes may not be the most common tobacco product used by residents, particularly minority residents. Moreover, there was concern that minority residents may be underrepresented as tobacco users due to the reliance on cigarette smoking as the primary source of tobacco use rates.

Our data supports this perception. While pipe and smokeless tobacco use are quite low in Cuyahoga County, cigar and specifically little cigar use is significantly higher for some subgroups of the population (e.g., minority men) where the rates are nearly as high as those of cigarette use. For example, while less than 4% of adults reported use of little cigars, the rate was significantly higher (14%; data not shown) among African-American men.

The trends observed with cigarette use (slow, progressive reduction) were also seen with cigars and little cigars, as seen in the graph to the right. Again, however, the possible error/chance surrounding the estimates does not allow us to conclude that the trend is significant. The estimates of pipe and smokeless tobacco appear to be more volatile, likely a result of the very small sample size of users.

Due to the higher prevalence of little cigar use among Cuyahoga County residents, we added additional questions to our 2004 and 2005 survey to better capture these trends. In particular, we were interested in determining whether little cigar users were unique and the degree to which they were being overlooked in the reporting of tobacco use prevalence.

As shown in Table 7, the average little cigar user was much younger (32 years old) than either the cigarette user (42 years old) or the regular cigar user (40 years old). The average little cigar user was also much more likely to be male (71%) than the cigarette smoker (50%), though not as likely as the cigar user, where nearly 90% of users were male.

With regard to race and ethnicity, cigarette and cigar users were very similar, with the majority of users being Caucasian (67% of cigarette users; 65% of cigar users), followed by a quarter of each group being African-American. In contrast, nearly two-thirds (62%) of little cigar users were
African-American, compared to only a third of Caucasian users. Little cigar users were also much more likely to have less than a high school degree and make less money than either cigarette or cigar users. Disposable income may play a significant role in their choice of tobacco products, as little cigars can be purchased singly for as little as 50 cents from the corner store. With regard to where smokers live, 35% of little cigar users lived in the city of Cleveland, as compared to 24% of cigarette users and 20% of cigar smokers.

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Cigarette Users</th>
<th>Cigar Users</th>
<th>Little Cigar Users</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (mean years)</td>
<td>42.2</td>
<td>40.0</td>
<td>31.8</td>
</tr>
<tr>
<td>Gender (% male)</td>
<td>49.5%</td>
<td>87.4%</td>
<td>71.2%</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% White</td>
<td>66.8</td>
<td>65.4</td>
<td>34.8</td>
</tr>
<tr>
<td>% African-American</td>
<td>27.5</td>
<td>26.5</td>
<td>62.4</td>
</tr>
<tr>
<td>% Hispanic</td>
<td>3.9</td>
<td>5.0</td>
<td>2.3</td>
</tr>
<tr>
<td>% Other</td>
<td>1.8</td>
<td>3.1</td>
<td>0.4</td>
</tr>
<tr>
<td>Income (%&lt; $25K)</td>
<td>35%</td>
<td>30%</td>
<td>52%</td>
</tr>
<tr>
<td>Education (%&lt; HS)</td>
<td>12.5%</td>
<td>16.3%</td>
<td>25.4%</td>
</tr>
<tr>
<td>% Urbanites</td>
<td>23.6%</td>
<td>19.5%</td>
<td>34.8%</td>
</tr>
<tr>
<td>Also smokes cigarettes</td>
<td>--</td>
<td>50%</td>
<td>56%</td>
</tr>
<tr>
<td>Also smokes cigars</td>
<td>--</td>
<td>--</td>
<td>48%</td>
</tr>
</tbody>
</table>

These results demonstrate that little cigar smokers are very different from regular cigar smokers and therefore, should not be grouped together under a single category as is done with most national tobacco use surveys (BRFSS, Adult Tobacco Survey - ATS).

Finally, we were concerned with whether little cigar users smoke only little cigars (perhaps due to the high cost of cigarettes) or whether they are multiple product users. Surprisingly, 56% of little cigar users also reported current cigarette smoking, and 48% also reported current cigar smoking. Further exploration (data not shown) reveals that on average, little cigar smokers smoke 1-2 little cigars, ½ pack of cigarettes and 1 regular cigar a day. This multiple product use is even more damaging to the health of its users when one considers the research that shows 1 little cigar has the impact of 7 cigarettes and other research that shows that individuals who smoke both cigarettes and cigars are more likely to inhale the cigars than those who only smoke cigars. Thus, each little cigar may carry even more damage than the estimated 7-cigarette exposure if it is inhaled like a cigarette.
Local, State and, National Comparisons of Tobacco Use

One of the values of using the BRFSS as our survey template is that it allows for state and national comparisons of the data. The following table provides such comparisons on a number of tobacco indicators for which state and national data are available.

**Table 8: Local, State, and National Comparisons of Tobacco Indicators, BRFSS, 2003-2005**

<table>
<thead>
<tr>
<th></th>
<th>Cuyahoga County</th>
<th>Ohio</th>
<th>Nationwide³</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current Cigarette Use¹</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td>26.7</td>
<td>25.2</td>
<td>22.0</td>
</tr>
<tr>
<td>2004</td>
<td>25.0</td>
<td>25.9</td>
<td>20.9</td>
</tr>
<tr>
<td>2005</td>
<td>24.0</td>
<td>NA²</td>
<td>NA²</td>
</tr>
<tr>
<td><strong>Quit Attempts Among Cigarette Smokers</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td>45.9</td>
<td>50.0</td>
<td>52.7</td>
</tr>
<tr>
<td>2004</td>
<td>46.5</td>
<td>47.8</td>
<td>54.8</td>
</tr>
<tr>
<td>2005</td>
<td>55.6</td>
<td>NA²</td>
<td>NA²</td>
</tr>
<tr>
<td><strong>Current Cigar Use</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2002</td>
<td>----</td>
<td>7.2</td>
<td>5.7</td>
</tr>
<tr>
<td>2003</td>
<td>5.2</td>
<td>----</td>
<td>5.7</td>
</tr>
<tr>
<td>2004</td>
<td>4.8</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>2005</td>
<td>4.5</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td><strong>Current Pipe Use</strong></td>
<td></td>
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<tr>
<td>2002</td>
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<td>0.8</td>
<td>0.8</td>
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<tr>
<td>2003</td>
<td>0.8</td>
<td>----</td>
<td>0.9</td>
</tr>
<tr>
<td>2004</td>
<td>1.4</td>
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<tr>
<td>2005</td>
<td>1.0</td>
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<tr>
<td><strong>Current Smokeless Tobacco Use</strong></td>
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<td>2002</td>
<td>----</td>
<td>2.8</td>
<td>3.6</td>
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<tr>
<td>2003</td>
<td>1.6</td>
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<td>3.4</td>
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<tr>
<td>2004</td>
<td>1.3</td>
<td>2.7</td>
<td>3.7</td>
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<tr>
<td>2005</td>
<td>1.4</td>
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</tr>
</tbody>
</table>

¹ Adults (≥18 years old) who report smoking cigarettes every day or some days.
² 2005 BRFSS data for Ohio and nation not yet available.
³ The BRFSS is a state-based system and therefore does not provide a national estimate. However, as suggested by the CDC, the median prevalence across the 50 states can be used to estimate a national figure.
Use of Cessation Services (asked in 2005 only)

In 2005, we added four questions concerning the awareness and use of tobacco cessation services:

- (Asked of everyone) If you or someone you knew wanted to quit smoking would you know who to call or where to go for these services?

  Over 60% of respondents reported that they would know who to call should they or someone they know need cessation services. Respondents with more education were more likely to know about services than those with less education, but knowledge did not differ by any other variable such as age, gender, or race.

- (Asked of everyone) Have you, or anyone in your household taken advantage of these services in the past 12 months?

  Only 2.4% of respondents reported that they or someone in their household took advantage of smoking cessation services in the past 12 months. African-American residents were more likely to report use of the services than other groups (4.4% vs. less than 2% of all other groups). Use did not vary by age, gender, or education.

- (Current smokers only) In the past 12 months, have you attended any stop smoking programs or support groups, such as those offered at the local hospitals, clinics or community centers? (Examples: Freedom From Smoking, Fresh Start)

  Less than 3% of smokers reported attending any of the local cessation services, such as the Freedom From Smoking classes offered through the Partnership. Respondents who reported use were more likely to be female, age 40-49, African-American, or have more than a high school education.

- (Current smokers only) In the past 12 months, have you used any other support services to quit smoking, such as calling the Ohio Quit Line?

  Similarly, less than 3% reported using other services, such as the Ohio Quit Line. However, interestingly, the demographic correlates were different from those of the organized cessation programs discussed above. Respondents who reported other service use such as the Quit Line were more likely to be female, but also Hispanic and having less than a high school education. While these differences may reflect the types of services different individuals prefer, we must also acknowledge the small sample size and the instability of these subgroup estimates with such a small sample.

5. Results: Tobacco Policies

Smoking Policies: In 2004 and 2005, six questions were added regarding adults’ perceptions on tobacco policies. Respondents were asked to what degree (in all areas, in some areas, and not permitted) should smoking be permitted in six different places: (a) indoor dining areas of restaurants; (b) in public buildings; (c) bars and cocktail lounges; (d) day care centers; (e) indoor sporting events and concerts; and finally (asked in 2005 only), (f) in schools.
The graph to the left shows the changes in the adult perceptions across the two years of data. While two years does not provide evidence of true trend, we saw a significant decline in nearly every area, in the number of adults who think that smoking should be permitted in all or some areas. The only location that did not elicit a change was in day care centers, where nearly 100% of residents already believed that smoking should not be permitted at all. Similarly, even though only asked in 2005, nearly all residents (95%; data not shown) felt that smoking should not be permitted in schools.

**Smoking Bans:** For three years, we have asked the same questions regarding the public’s support or opposition to clean air laws and specifically, bans on smoking in restaurants and bars:

- Would you “support” or “oppose” a law that would prohibit smoking in most indoor places, including work places, public buildings, and restaurants, excluding bars?
- How would you feel if a ban on smoking in bars in Cuyahoga County were proposed, including bars located within restaurants (strongly in favor to strongly opposed)?

As shown in the figure below, there has been increasing support for these bans over the three years. Support for tobacco bans in restaurants increased from 72.0% in 2003 to 77.4% in 2004 and 78.8% in 2005. The change from 2003 to 2005 is statistically significant, as demonstrated by the non-overlapping confidence bars for the two years. Similarly, the increase in support for a tobacco ban in bars, from 45.5% in 2003 to 50.7% in 2004 to 54.5% in 2005 is statistically significant. Interestingly, the largest change was among those who reported that they are “strongly in favor” of a ban that includes bars, which increased from 17.7% in 2003 to 28.7% in 2005 (data not shown).
6. Results: Secondhand Smoke Exposure and Perceptions

Smoking Rules at Home and Work: In all three years, respondents were asked about the rules that existed around smoking in their home and their work place:

- Which statement best describes the rules about smoking inside your home (smoking is not allowed, allowed in some places at some times, is allowed anywhere, or there are no rules about smoking in the home)?
- Which of the following best describes your place of work's official smoking policy for indoor public or common areas, such as lobbies, rest rooms, and lunch rooms? (same responses)
- Which of the following best describes your place of work's official smoking policy for work areas? (same responses).

As shown in the graph below, there was an increase in reported non-smoking policies (smoking is not allowed) across all three areas from 2003 to 2005. However, the most significant change was observed with regard to policies in the home. The percentage increased from 56.4% in 2003 to 63.5% in 2004 to 68.8% in 2005. Interestingly, further examination of the data revealed that the shift was largely from within those who reported “there are no rules in my home” (data not shown). In 2003, 26% reported that they had no rules. In 2005, only 17% reported the same. There was also a slight increase in the number of working residents who reported that smoking was not permitted in the public or work areas of their jobs.

Figure 7: Trends in Rules About Smoking - % Residents Who Report that Smoking is NOT Allowed: Cuyahoga County BRFSS 2003-2005

![Figure 7: Trends in Rules About Smoking - % Residents Who Report that Smoking is NOT Allowed: Cuyahoga County BRFSS 2003-2005](image_url)
In 2004, questions regarding smoking policies in the home and at work were added to the state and national BRFSS. The following table provides a comparison of the local reporting policies to those reported across the state of Ohio and nationally (of the 21 states that included the questions in 2004). While Cuyahoga County saw an increase in smoke-free policies at home and at work from 2003-2005, the percentages were lower than what has been reported at the state and national level, based on the one year (2004) of comparison. For example, while 63.5% of residents reported that smoking was not permitted in their home in 2004, this was less than the 64.9% of Ohio-polled residents and 73.1% of nationally-polled residents.

| Table 9: Tobacco Policies in Home and at Work: Local, State and National Comparisons, BRFSS, 2003-2005 |
|-------------------------------------------------|-------------------------------------------------|---------------------------------|
|                                                  | Cuyahoga County | Ohio BRFSS | National BRFSS |
| Rules in the home: smoking is not permitted.     |                  |           |                |
| 2003                                              | 56.4             | ----      | ----           |
| 2004                                              | 63.5             | 64.9      | 73.1           |
| 2005                                              | 68.8             | NA²       | NA²            |
| Rules at work: smoking is not permitted in public areas. |      |           |                |
| 2003                                              | 68.3             | ----      | ----           |
| 2004                                              | 69.9             | 70.6      | 78.4           |
| 2005                                              | 71.9             | NA²       | NA²            |
| Rules at work: smoking is not permitted in work areas. |      |           |                |
| 2003                                              | 75.3             | ----      | ----           |
| 2004                                              | 77.8             | 78.8      | 84.1           |
| 2005                                              | 78.0             | NA²       | NA²            |

1 Tobacco policy questions were included in 21 states' BRFSS. The estimates are median prevalence rates across the 21 states that included the questions.

2 The tobacco policy questions were asked in the 2005 BRFSS; however, that data are not yet available.

Finally, in 2005, we asked working residents whether they preferred a stronger, weaker, or no change in the smoking policy at work (data not shown). Most respondents (82%) reported that the current policy was fine, 16% preferred a stronger policy, and a very small number of respondents (1.6%) preferred a weaker policy. Not surprisingly, 89% of those wanting a stronger policy were non-smokers and 60% of those wanting a weaker policy were current smokers.

**Exposure to Secondhand Smoke:** In 2004 and 2005, non-smoking residents were asked to report their exposure to secondhand smoke in their home and car. Interestingly, more residents reported exposure to secondhand smoke in their car than in their home (13.7% vs. 10.8% in 2004, data not shown). This may be due to the increasing number of households that now limit smoking in the home. As with other secondhand smoking indicators, a reduction in exposure was reported between 2004 and 2005, although a trend cannot be established. Among non-smokers, the percentage that reported exposure to smoke in their car decreased from 13.7% in 2004 to 10.8% in 2005 (data not shown). Similarly, the percentage that reported exposure to smoking in the home decreased from 10.8% to 6.1% (data not shown).
Perceptions of Risk Associated with Secondhand Smoke: In 2004 and 2005, residents were asked four questions regarding their perceptions of secondhand smoke risk, stating their level of agreement/disagreement with each statement of risk:

- It is harmful to a person's health if they live in a house where a smoker smokes tobacco indoors.
- Children who live with a tobacco smoker are just as likely to develop asthma or other respiratory problems as children who do not live with a tobacco smoker.
- Inhaling someone else's cigarette smoke can cause lung cancer in nonsmokers.
- Smoking cigarettes around a baby increases the chance it will die of sudden infant death syndrome.

In the majority of the situations, most people agreed or strongly agreed that secondhand smoke was dangerous. Nonetheless, it is surprising the number of residents who did not believe that secondhand smoke was associated with children developing asthma and other respiratory problems (28%) and an increased risk of SIDS in babies exposed to smoke in the home (22%). The two-year data (not shown) revealed very little change in these perceptions.

Table 10: Perception of Risk Associated with Secondhand Smoke Exposure, BRFSS, 2004

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>No Opinion/Don't Know</th>
<th>Disagree/Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harmful to live in a house with a smoker</td>
<td>51.0</td>
<td>34.6</td>
<td>2.4</td>
<td>12.0</td>
</tr>
<tr>
<td>Children who live with a smoker more likely to develop respiratory problems</td>
<td>31.3</td>
<td>34.8</td>
<td>5.6</td>
<td>28.3</td>
</tr>
<tr>
<td>Secondhand smoke can cause lung cancer in nonsmokers</td>
<td>38.4</td>
<td>42.4</td>
<td>14.2</td>
<td>5.1</td>
</tr>
<tr>
<td>Smoking around a baby increases the risk of SIDS</td>
<td>24.8</td>
<td>32.7</td>
<td>20.2</td>
<td>22.2</td>
</tr>
</tbody>
</table>
7. Results: Geographic Distribution of Tobacco Use

This section describes the prevalence rates of the five tobacco indicators (cigarette, cigar, pipe, smokeless tobacco, and any tobacco product) as they are distributed across Cuyahoga County. As shown on the following maps, the county is divided into six regions, including the City of Cleveland, its inner-ring suburbs, and outer-ring suburbs, each with an east and west side, determined by the Cuyahoga River as a natural dividing line. An inner-ring suburb is defined as one that shares a border with the City of Cleveland, while outer-ring suburbs do not.

1. Cleveland – East Side (EC)
2. Cleveland – West Side (WC)
3. Inner-Ring – East Side (EIR)
   - Euclid, East Cleveland, Cleveland Heights, South Euclid, Lyndhurst, University Heights, Shaker Heights, Warrensville Township, Warrensville Heights, North Randall, Maple Heights, Garfield Heights, Cuyahoga Heights, Newburgh Heights
4. Inner-Ring – West Side (WIR)
   - Lakewood, Fairview Park, Linndale, Brooklyn, Parma Heights, Parma, Brooklyn Heights
5. Outer-Ring – East Side (EOR)
   - Richmond Heights, Highland Heights, Mayfield Village, Mayfield Heights, Gates Mills, Beachwood, Pepper Pike, Hunting Valley, Woodmere Township
6. Outer-Ring – West Side (WOR)
   - Bay Village, Rocky River, Westlake, North Olmsted, Olmsted Township, Olmsted Falls, Berea, Brookpark,, Middleburgh Heights, Strongsville, North Royalton, Broadview Heights, Seven Hills, Independence, Brecksville, Valley View
Geographic Distribution of ALL TOBACCO Use Prevalence

In the map below, the prevalence of all tobacco use (combined) is shown for the six different geographic areas of Cuyahoga County. The combined rates include cigarette, cigar, little cigar, pipe, and smokeless tobacco use. In general, the rates of tobacco use were the highest in the city of Cleveland, with rates being somewhat higher on the west side of Cleveland (39.1%) than the east side of Cleveland (36.3%). However, the rates of tobacco use on the west side, inner-ring suburbs (e.g., Lakewood, Parma, Brooklyn) were nearly as high as those of the city at 34.3%. The inner-ring, eastern suburbs’ rate (e.g., Cleveland Heights, Shaker Heights, Euclid, Warrensville Heights) was a bit lower at 28.3%, followed by the outer-ring, west side suburbs at 24.1% and the outer-ring, east side suburbs at 17.8%.

Figure 8: Prevalence of Current Tobacco Use¹ Among Cuyahoga County Adults by Demographic Region²

1 Tobacco Use includes cigarettes, pipes, smokeless tobacco, cigars and little cigars
2 REGIONS C-E=Cleveland (eastside); C-W = Cleveland (westside) IR-E = Inner Ring – East; IR-W = Inner Ring – West; OR-E = Outer Ring – East; OR-W = Outer Ring - West

Source: 2003-2005 Cuyahoga County BRFSS
Geographic Distribution of Cigarette Use Prevalence

In the map below, the prevalence of just cigarette use is shown for the six different geographic areas of Cuyahoga County. As with overall tobacco use, the rates of current cigarette use were the highest in the city of Cleveland, with rates being much higher on the west side of Cleveland (36.5%) than the east side of Cleveland (32.0%). And, again, the rates of cigarette use in the west side, inner-ring suburbs (e.g., Lakewood, Parma, Brooklyn) were nearly as high as those of the city at 30.9%. The rate in the inner-ring, eastern suburbs (e.g., Cleveland Heights, Shaker Heights, Euclid, Warrensville Heights) was quite a bit lower at 24.1%, followed by the outer-ring, west side suburbs at 19.8% and the outer-ring, east side suburbs at 15.1%.

Figure 9: Prevalence of Current Cigarette Use\(^1\) Among Cuyahoga County Adults by Demographic Region\(^2\)

<table>
<thead>
<tr>
<th>Region</th>
<th>Prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-E</td>
<td>36.5%</td>
</tr>
<tr>
<td>C-W</td>
<td>32.0%</td>
</tr>
<tr>
<td>IR-E</td>
<td>24.1%</td>
</tr>
<tr>
<td>IR-W</td>
<td>30.9%</td>
</tr>
<tr>
<td>OR-E</td>
<td>15.1%</td>
</tr>
<tr>
<td>OR-W</td>
<td>19.8%</td>
</tr>
</tbody>
</table>

\(^1\)Current cigarette use is defined as anyone who reports smoking cigarettes “everyday” or “some days” in the past 30 days.

\(^2\)REGIONS: C-W = Cleveland (westside); C-E = Cleveland (eastside); IR-E = Inner Ring – East; IR-W = Inner Ring – West; OR-E = Outer Ring – East; OR-W = Outer Ring – West

Source: 2003-2005 Cuyahoga County BRFSS
Finally, we explored the geographic distributions of the prevalence of little cigar use. It is here where we can see the differences from cigarette rates and that little cigar use is an urban phenomenon. The rates of little cigar use were the highest on Cleveland’s east side, at 8.6%. This was followed by significantly lower rates on Cleveland’s west side at 4.4% and then in the east side, inner-ring suburbs at 4.1%. The prevalence of little cigar use was much lower in the outer-ring suburbs with rates of 1.7% on the west side and less than 1% on the east side.

Figure 10: Prevalence of Current Little Cigar Use Among Cuyahoga County Adults by Demographic Region

1 Current cigarette use is defined as anyone who reports smoking little cigars (like Black & Mils) “everyday” or “some days” in the past 30 days.

2 REGIONS C-E=Cleveland (eastside); C-W = Cleveland (westside) IR-E = Inner Ring – East; IR-W = Inner Ring – West; OR-E = Outer Ring – East; OR-W = Outer Ring - West

Source: 2003-2005 Cuyahoga County BRFSS
8. Conclusions

The data thus far suggest that progress is indeed being made. The community-wide indicators reveal changes in the way residents think about tobacco, as evidenced by the increase in households who have tobacco-free policies in their home and those who support tobacco-free public policies. The surveillance also provided extremely important information regarding specific tobacco use (e.g., little cigar use) of our residents that had been previously undocumented.

9. Recommendations

Stay the course. These cross-sectional snapshots provide the best evidence of community-level change on tobacco use, health consequences of tobacco use, and opinions about tobacco-free policies. In addition, because the surveillance is local, the content of the survey can change annually and allow for the Partnership to customize the questions to local need.
Appendix A:  
Survey Protocols and Tools

Survey Request Forms/Program Information Sheets
- Prevention Programming
- Cessation Programming

Survey Administration Instructions
- Example: Word of Mouth Program

Surveys
- Prevention Programming
  - Word of Mouth – Pre-test
  - Word of Mouth – Post-test
  - Life Skills – Pre-test
  - Life Skills – Post-test
- Cessation Programming
  - Freedom From Smoking – Pre-test
  - Freedom From Smoking – Post-test (last session)
  - Freedom From Smoking – Follow-up form (30 day and 6 month)
Directions: Please provide the following information. This information will assist in finalizing your program evaluation plan and is needed prior to your first evaluation site visit. Please fax the completed sheet as soon as possible to 216-368-2610, attention: Matt Russell AND attention: Nichelle Brown, County Board of Health (fax): 216-676-1325. Thank you!

1. What: Curriculum  
   A. Names of the program/curriculum that you will be using

2. Where: Site of Programming (for each curricula)  
   A. Names of all schools that will receive programming

3. Who: Target (for each curricula, for each school, for each class)  
   A. The grade(s) you will program in  
   B. The period that will receive programming  
   C. Whether the class is intervention or control  
   D. Name of the teacher  
   E. The number enrolled

4. When: Timeline (for each curricula, by school, by grade)  
   A. How often program will be given  
   B. Date program will begin and end  
   C. Date pre- and post-tests will be given

Example:
Curriculum: Word of Mouth

<table>
<thead>
<tr>
<th>School Name</th>
<th>Grade</th>
<th>Period</th>
<th>Int/Ctrl</th>
<th>Teacher</th>
<th># Enrolled</th>
<th>How often</th>
<th>Date begin</th>
<th>Date end</th>
<th>Pre date</th>
<th>Post date</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABC Elementary</td>
<td>4th</td>
<td>2</td>
<td>Int</td>
<td>Smith</td>
<td>23</td>
<td>2 x per month</td>
<td>2-1-05</td>
<td>3-31-05</td>
<td>1-30-05</td>
<td>4-1-05</td>
</tr>
<tr>
<td>DEF Elementary</td>
<td>4th</td>
<td>3</td>
<td>control</td>
<td>Barns</td>
<td>26</td>
<td>2 x per month</td>
<td>4-2-05</td>
<td>5-20-05</td>
<td>1-30-05</td>
<td>4-1-05</td>
</tr>
</tbody>
</table>
### Program Evaluation Information Sheet

**Agency Name:** ____________________  **Prevention Programming:** ____________________  **Program Name:** ____________________

*(To be completed by grantees providing school-based programming)*

<table>
<thead>
<tr>
<th>School Name</th>
<th>Grade</th>
<th>Period</th>
<th>Int/Ctrl</th>
<th>Teacher</th>
<th># Enrolled</th>
<th>How often program given</th>
<th>Date begin</th>
<th>Date end</th>
<th>Pre date</th>
<th>Post date</th>
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</tbody>
</table>

**DIRECTIONS:** Please complete and fax or email to 216-368-2610/mer23@case.edu, attn: Matt Russell, Center for Health Promotion Research, Case Western Reserve University AND to Marcita Peak, County Board of Health (fax): 216-676-1325.
Directions: Please provide the following information. Important: Please fax/email the completed sheet two weeks prior to beginning programming to Matt Russell, 216-368-2610, and to Jennifer Clayton, 216-676-1325. Thank you!

4. What: Curriculum
   A. Names of the program/curriculum that you will be using

5. Where: Site of Programming
   A. Names of community sites that will provide programming during year 3

6. Who: Target
   A. The number of sessions that will be offered during year 3
   C. The number of expected enrollees per session
   D. Names of facilitators implementing the program

4. When: Timeline (for each site)
   A. How often the program will be given (i.e., once per week)
   B. Date sessions will be given
   C. Date of follow-up (30, 60, and 90 days)

Example:
Curriculum: Freedom From Smoking

<table>
<thead>
<tr>
<th>Name of Program Site</th>
<th>Facilitator Name</th>
<th># of sessions</th>
<th># of expected enrollees</th>
<th>How often?</th>
<th>Date begin</th>
<th>Date end</th>
<th>Follow-up Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital 123</td>
<td>Smith</td>
<td>4</td>
<td>15</td>
<td>Once per week</td>
<td>12-1-04</td>
<td>2-15-05</td>
<td>a) 5-15-05 b) 10-15-05</td>
</tr>
<tr>
<td>Center ABC</td>
<td>Jones</td>
<td>3</td>
<td>10</td>
<td>Twice a week Mon&amp;Wed</td>
<td>1-15-05</td>
<td>4-1-05</td>
<td>a) 7-1-05 b) 12-1-05</td>
</tr>
</tbody>
</table>
Program Evaluation Information Sheet
Cessation Programming*

Name of Agency:

<table>
<thead>
<tr>
<th>Name of Program Site</th>
<th>Facilitator Name</th>
<th># of sessions</th>
<th># of expected enrollees</th>
<th>How often?</th>
<th>Date begin</th>
<th>Date end</th>
<th>Follow-up Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>a) 30 days</td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>b) 6 month</td>
</tr>
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<td>a)</td>
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<td>b)</td>
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<td>a)</td>
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<td>b)</td>
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<td></td>
<td>b)</td>
</tr>
</tbody>
</table>

Curriculum:

**Important:** Please fax/email the completed sheet **two weeks prior to beginning programming** to Matt Russell ([mer23@case.edu](mailto:mer23@case.edu)) fax: 216-368-1617, and Jennifer Clayton, (fax) 216-676-1325. Thank you! Center for Health Promotion Research, Case Western Reserve University
Word of Mouth 05-06 PRE-TEST Survey Instructions

Materials Needed:
- Pen or pencil, Do NOT use light colors, no gel pens
- Pre-test questionnaire – 1 per student
- Collection Envelope – 1 per classroom

Overview:
1. Introduce yourself (if necessary) and explain the purpose of the pre-test questionnaire.
   
   SAY ALOUD: (Hello, my name is…….). The purpose of this survey is: (1) To ask you some questions about smoking and (2) to see if programs that teach students about smoking are working.

2. Explain that we need to understand how they feel and what they know before the program begins. Ensure students that this is NOT a test! It is an instrument that will help us understand how they feel and what they know before the program begins.
   
   SAY ALOUD: This questionnaire will ask you several questions about what you think about smoking. This is NOT a test. It will not count as a grade in any of your classes. Please answer each question thoughtfully and honestly. We are interested in your thoughts and opinions.

3. Explain the term “confidentiality”. Their trust is very important to us. We do not want to know their names.
   
   SAY ALOUD: You will be asked a few questions that will allow us to connect the answers you give today with answers you will give at the end of the program. At no point will you, as an individual, be identified. It’s NOT important for us to know WHO said what....but it is important for us to know how opinions and thoughts from the SAME PERSON CHANGE over time.

4. Explain the process of collecting their completed pre-tests. Place the collection envelope in a location that is away from the students taking the pre-test. Inform students to insert their questionnaire in the collection envelope when they are finished. The envelope is not to be opened once it has been sealed. It will be opened by the Center for Health Promotion Research at the time of data entering. This ensures student confidentiality.
   
   SAY ALOUD: When you are finished with your questionnaire, please place your questionnaire in this (hold up envelope) collection envelope. I will put the envelope here (DESIGNATE PLACE IN THE CLASSROOM). I would like to ask for a volunteer to seal and date the envelope when the entire class has finished. Thank you.

5. If a student has a question about one of the survey questions, try not to interpret the question. Ask, “What do you think it means?” Define words in simple terms. Do not interpret the meaning of a question. Have them answer to their best ability.

(PLEASE TURN PAGE OVER FOR ADDITIONAL INSTRUCTIONS)
**Beginning the Pre-test**

1. Have students spread out so that privacy and confidentiality is maintained.

2. Make sure each student has a pen/pencil.

3. Ask students to not begin until they are directed to do so.

4. Hand out one questionnaire per student (face down). Students are to answer directly ON THE SURVEY. Instruct students to completely darken in their circles when answering questions and to write neatly! (demonstrate example on the board). If they make a mistake, have them put an X through the incorrect answer, and darken in the correct answer (demonstrate example on the board).

5. Instruct students to turn the questionnaire over and to look at the top of the first page. It begins with, “You’ll soon be participating in a program ….

   CAREFULLY instruct students through this page. Please read aloud the first section in the shaded box. Once finished, ask if students have any questions. If not, direct students to the next section.

   **It is imperative that students fill out the identifier section.** Please do not allow students to skip any question (unless they do not know the answer). These questions will serve as identifiers (allowing us to link their pre and post answers). The success of your evaluation depends on how well the information on the top page is answered. Please be sure that all persons administering the questionnaire are fully aware of how to instruct students.

6. Have students read along with you as you read aloud the following:

   - **Teacher's name:** Please fill in your teacher’s last name. Place one letter in a box.
   - **Your birth date:** Please fill in the month and day of your birth date. Read example aloud.
   - **Your initials:** Please fill in your first initial and last initial. Read example aloud.
   - **Last four digits of your phone number:** Please fill in the last 4 digits of your phone number. Read example aloud.

7. Once students have finished this section, ask if there are any questions before they begin.

8. Once you have answered any questions, instruct students to turn the page. If necessary, read aloud each question, giving time for students to respond.

**Collecting the Pre-tests**

1. Once the pre-tests are completed have each student place his or her questionnaire in the collection envelope.

2. Once everyone is finished, ask for the volunteer to seal and date the envelope.
Filling out the collection envelope labels

LABEL #1

1. Agency: Fill in the agency name
2. Site/School: Fill in school name
3. Teacher: Fill in name of teacher
4. Period: Fill in the period/module number or time
5. Grade: Fill in grade of classroom

LABEL #2

6. Important:
   Circle if the class is an intervention or control group

7. Pre-test Date:
   Fill in the month/day/year the pre-test was given

8. # Enrolled:
   Fill in the total number of students enrolled

9. Total # present in class:
   Fill in the number present the day of the pre-test

10. Comments:
    Please provide comments (i.e., half of class on field trip; many students disruptive; etc)

Returning completed surveys to Case

Please return completed surveys within 10 days to Matt Russell at the Center for Health Promotion Research (CHPR), Case Western Reserve University (216-368-1617). CHPR is located at 11430 Euclid Avenue, Cleveland, OH 44106. The hours for the Center are 9am to 5pm (M-F). Please do not mail surveys.
**CCC Partnership for Tobacco Reduction**

**Freedom from Smoking Attendance and Follow-up Form**

**Directions:** Please fill out form for each participant at registration, at the beginning of each session, and at follow-up (30 days and 6 months). When completed, return form to the Center for Health Promotion Research. Attn: Matt Russell. FAX: (216)-368-2610. EMAIL: mer23@case.edu

**Participant Information**

Name: ____________________________
Phone: ____________________________
Email: ____________________________
Comments: _________________________

**Participant Attendance Record (attend=✓)**

<table>
<thead>
<tr>
<th>Registration</th>
<th>Session 1</th>
<th>Session 2</th>
<th>Session 3</th>
<th>Session 4</th>
<th>Session 5</th>
<th>Session 6</th>
<th>Session 7</th>
</tr>
</thead>
</table>

**Smoking Status at Last Session (7)**

_____ (indicate # using key below)

1 = Not smoking  
2 = Smoking, but quit at least once during program  
3 = Smoking  
4 = Don’t know status

**30 Day follow-up for participants completing registration and at least 1 session:**

Are you currently smoking?  
☐ YES  ☐ NO  

IF YES: On average, on how many days per week do you smoke? ____________

IF YES: On the days that you smoke, how many cigarettes do you smoke? ____________

During the past 30 days, have you stopped smoking for one day or longer because you were trying to quit?  
☐ YES  ☐ NO  

IF YES: How many separate attempts? ____________

**6 Month follow-up for participants completing registration and at least 1 session:**

Are you currently smoking?  
☐ YES  ☐ NO  

IF YES: On average, on how many days per week do you smoke? ____________

IF YES: On the days that you smoke, how many cigarettes do you smoke? ____________

During the past 6 months, have you stopped smoking for one day or longer because you were trying to quit?  
☐ YES  ☐ NO  

IF YES: How many separate attempts? ____________

**Date(s) of call attempt(s):**

1. ____________________________  
2. ____________________________  
3. ____________________________

Comments: ____________________________

**Date(s) of call attempt(s):**

1. ____________________________  
2. ____________________________  
3. ____________________________

Comments: ____________________________
Appendix B:
Adult Tobacco Surveillance Methodology
Adult Tobacco Surveillance Methodology

1. Survey Instrument

In order to reduce the overall survey time and costs, the Ohio BRFSS survey was modified for use in the Cuyahoga County surveillance, and was limited to questions about tobacco use and cessation, attitudes and perceptions of tobacco use policies (e.g. home, workplace, public places), and tobacco-related health outcomes, such as overall health status, health care access, asthma, exercise, nutrition, oral health, childhood asthma, cardiovascular health, and cancer screening. A list of topics covered in the Cuyahoga County BRFSS are displayed in the table below. In order to document tobacco-related prevalence across the county, the survey also included zip code. The average interview length of survey is 18-20 minutes. In the subsequent years, the basic survey remained the same, although additional questions were added each year as TUPCF indicators changed.

| Table 11: Topics Covered in the Cuyahoga County BRFSS, 2003-2005 |
|---|---|---|---|---|
| • Tobacco Product Use (cigarette, cigar, little cigar, pipe, and smokeless) |
| • Tobacco-Related Opinions (about tobacco policies, smoking bans, 2ndhand smoke, etc.) |
| • Other tobacco questions (age of initiation, cessation attempts, etc.) |
| • Tobacco-related health correlates (e.g. other risk behaviors) and outcomes (e.g. hypertension, cardiovascular disease, asthma) |
| • Associated health correlates (e.g. physical activity, nutrition, obesity, general health assessment, etc.) |

2. Sample Population

The population from which the Cuyahoga County oversample sample is drawn is the total non-institutionalized adult (18 years or older) population residing in telephone-equipped dwelling units (DUs).

This population excludes:
   (1) adults in penal, mental, or other institutions
   (2) adults living in other group quarters such as dormitories, barracks, convents, or boarding houses (with ten or more unrelated residents)
   (3) adults contacted at their second DU during a stay of less than 30 days
   (4) adults living in a DU without a telephone
   (5) adults who do not speak English well enough to be interviewed.

For this oversample, we sampled from the Cuyahoga County population only.

3. Sample Design

ORC Macro used its in-house Genesys sampling system to create the sample for the Cuyahoga County oversample. This system is identical to the one used by the CDC for BRFSS. In accordance with BRFSS rules, only one-plus block phone numbers were used for the oversample project. One-plus blocks are banks of phone numbers that contain at least one listed household.
Telephone exchanges were selected for inclusion based on their prevalence within the county. Exchanges were included if most of the telephone numbers in the exchange were physically located within Cuyahoga County. Exchanges that overlapped into Cuyahoga County, but were mostly used in neighboring counties, were excluded.

The sampling frame for the 2005 oversample consisted of 3 area codes (216, 440, and 330; 330 was newly added in 2005) and 315 telephone exchanges within Cuyahoga County. Telephone sample was drawn from this frame using the standard BRFSS methodology, including phone number randomization, assignment to replicates and sample-to-complete ratios. The original sample consisted of 14,865 phone numbers. On October 17th, an additional 4,008 new phone numbers were added in order to meet the target number of completed interviews.

4. Interviewing Procedures

Experienced, supervised personnel conduct the interviews using Computers for Marketing Corporation’s (CMC) computer-assisted telephone interviewing (CATI) software package. ORC Macro used its existing core of BRFSS-trained interviewers for this project. 1,500 interviews were expected to be collected during the 8-week survey period. The following sections describe the procedures used in conducting the Cuyahoga County oversample survey.

Respondent Selection.
Within each household contacted, an adult is selected at random. If that adult is unavailable during the survey period, is unable or unwilling to participate, was contacted at a second residence during a stay of less than 30 days, or does not speak English well enough to be interviewed, no interview is conducted. If a randomly sampled number proves to serve only a business, an institution, group quarters, or other strictly non-residential space, then no interview is conducted. A screening question regarding county of residence was added to the survey introduction to ensure that only Cuyahoga County residents were interviewed.

Treatment of No Answers.
If a call to a sampled telephone number is not answered, that number is called back at different times throughout daytime and evening hours (9 a.m to 9 p.m. Monday - Saturday; 11 a.m. to 9 p.m. on Sundays) over different days of the week, in a pattern chosen to maximize the likelihood of contact with a minimum number of calls. At least 15 contact attempts over a minimum five day period (typically 15 days) are made to reach a sampled number. Once any contact is made at a residence, as many calls as necessary are made within the permitted time schedule to reach the randomly selected adult.

Non-English Interviews.
No attempt is made to conduct an interview in a household where the randomly selected adult cannot be interviewed in English. However, a member of ORC Macro’s refusal conversion team contacts the household to confirm that the selected person is not capable of completing the survey in English.

Converting Initial Refusals.
Households where interviews are initially refused are contacted again, where possible, at least three days later by specially trained refusal conversion interviewers in an effort to persuade respondents to participate in the survey.
Quality Control Measures.

In 2000, ORC Macro introduced a dedicated Quality Assurance (QA) department at each of the call centers. The QA department consists of highly experienced callers trained to coach others in interviewing technique. The QA department monitors and validates at least 10% of interviews by tapping into an interviewer’s phone line and using the CATI system’s monitoring function to observe the interview in progress. Neither the interviewer nor the respondent is aware that the QA staff is monitoring the call. Interviewers are scored on several measures of interview performance designed to reinforce proper interviewer protocol: properly introducing the survey, asking questions verbatim, repeating questions when necessary, probing, providing feedback, maintaining a proper pace, and the overall clarity of the interviewer’s voice and presentation. QA personnel also monitor calls made between completed interviews to verify that interviewers code dispositions properly, leave useful messages for the next interviewer, and make every attempt to complete an interview on every contact.

5. Data Editing

In order to eliminate human subjectivity in the assignment of call dispositions, ORC Macro has automated the process in both the CATI program and in the data processing stage. The CATI program offers the interviewer a menu of dispositions, with specific definitions, from which to choose for any outcome. When the project is finished, the data processor employs an algorithm based on CDC rules to reclassify CATI dispositions into BRFSS dispositions. To do this, the program stores call attempts in a database to enforce accuracy of dispositions and build an ongoing tracking system. This system also proves useful when tracking a particular respondent, because it provides information on each call attempt made to the selected number.

In the last half of 2000 and beginning of 2001, ORC Macro took an additional step to improve data quality: automating the process to organize open-ended responses. Through this automation, ORC Macro has greatly increased the efficiency of coding, minimizing manual back-coding and re-coding of verbatim responses. Standardized quality control checks also verify the validity of this recoding.

In addition to the quality control procedures implemented during interviewing, edit checks for the core and modules has been programmed into the CATI survey instrument. This eliminates errors during data collection rather than fixing problems during data processing. It forces interviewers to verify with respondents answers that are outside of the "normal" range. As a final quality control step, all data is run through edit checks prior to delivery.

6. Weighting the Data

Weighting is a multi-stage process involving adjustments to account for the following:
- Unequal probabilities of selection of participating households
- Unequal probabilities of selection of participating adults
- Differential non-response rates
- Differential telephone coverage rates

More specifically, the final weight calculation for each respondent is, \( w = f_{Unit} \times f_{Phone} \times f_{Adult} \times f_{Post} \), where each component is described below. The first adjustment factor accounts for differences in the probability of selection of the unit, in this case a household. Different probabilities of selection arise in stratified designs where certain strata are sampled at a higher rate than the remaining
strata. If we refer to these as stratum oversampling factors, \( k_{\text{stratum}} \), we can express the adjustment factor as \( f_{\text{Unit}} = 1/k_{\text{stratum}} \).

Since residences are contacted through a random digit dialing design, households with more than one phone have a higher probability of selection. To account for this in the weighting, an adjustment for multi-phone residences, \( f_{\text{Phone}} \), is applied, which is equal to the inverse of the number of phones at the residence.

All adults at least 18 years old in a selected household are eligible for the survey. Since household size varies we need to account for unequal probabilities of selection. This adjustment factor \( f_{\text{Adult}} \) is equal to the number of adults in the household divided by the number of adults selected in a household.

Finally, to account for differential non-response rates and differential telephone coverage rates, the weighted sample distribution is adjusted to conform to the corresponding population distribution. This adjustment factor \( f_{\text{Post}} \) is the ratio of the population total to the weighted sample total.

For weighting the Cuyahoga County, Ohio BRFSS oversample, the weighting scheme outlined above was used. The weighted sample was controlled to population total by age, sex, race, and Hispanic origin. The specific controls, taken from the U.S. Census 2000, are in the table below. To account for item non-response of the weighting variables, values were imputed according to the appropriate population distributions. The imputation is for weighting purposes only.

| Table 12: Cuyahoga County Population Figures, Census, 2000 |
|-----------------|-----------------|-----------------|-----------------|-----------------|
|                 | Female          |                 |                 |                 |
|                 | 18-29 | 30-39 | 40-49 | 50-64 | 65+  |
| Non-Hispanic    |        |        |       |       |      |
| White alone     | 59,552 | 67,424 | 72,924 | 77,604 | 95,817 |
| Black alone     | 32,088 | 30,175 | 31,261 | 28,237 | 23,934 |
| Other           | 8,811  | 7,420  | 5,803  | 5,146  | 2,982  |
| Male            |        |        |       |       |      |
| Non-Hispanic    |        |        |       |       |      |
| White alone     | 59,629 | 68,108 | 72,418 | 69,820 | 64,086 |
| Black alone     | 24,253 | 21,629 | 23,028 | 20,687 | 15,390 |
| Other           | 9,024  | 7,487  | 5,606  | 4,746  | 2,256  |

7. Calling Results

18,873 phone numbers were called for the 2005 Cuyahoga County oversample. The 1,500 interview target was exceeded; 1627 interviews were completed over the 8-week data collection period. The interviewed group includes 19 “Partial Completes”. Partial completes are interviews that started but stopped before the survey ends but after the demographic questions. Counting partially completed interviews is a standard BRFSS protocol. Interviews that start, but stop before the demographic section, are called “Mid-terminates”. The Cuyahoga County oversample had 165 mid-terminated interviews.
8. Demographic Distributions

The following tables display various demographic characteristics of the interviewed population using unweighted data from the Cuyahoga County sample. Don't Know or Refused responses were removed from the calculations and are reflected in the changing totals.

<table>
<thead>
<tr>
<th>Table 13: Unweighted Age Group Distribution, CC-BRFSS, 2003-2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age groups</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>18-24</td>
</tr>
<tr>
<td>25-34</td>
</tr>
<tr>
<td>35-44</td>
</tr>
<tr>
<td>45-54</td>
</tr>
<tr>
<td>55-64</td>
</tr>
<tr>
<td>65-74</td>
</tr>
<tr>
<td>75+</td>
</tr>
<tr>
<td>Don't Know/Refused</td>
</tr>
<tr>
<td>TOTAL</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 14: Unweighted Gender Distribution, CC-BRFSS, 2003-2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td>TOTAL</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 15: Unweighted Racial Distribution, CC-BRFSS, 2003-2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>White</td>
</tr>
<tr>
<td>Black/African American</td>
</tr>
<tr>
<td>Asian</td>
</tr>
<tr>
<td>Native Hawaiian/Pacific Islander</td>
</tr>
<tr>
<td>American Indian/Alaska Native</td>
</tr>
<tr>
<td>Other</td>
</tr>
<tr>
<td>Don't Know/Refused</td>
</tr>
<tr>
<td>TOTAL</td>
</tr>
</tbody>
</table>
### Table 16: Unweighted Ethnicity (Hispanic) Distribution, CC-BRFSS, 2003-2005

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percent</td>
<td>Frequency</td>
</tr>
<tr>
<td>Hispanic</td>
<td>32</td>
<td>3%</td>
<td>26</td>
</tr>
<tr>
<td>Non-Hispanic</td>
<td>1104</td>
<td>97%</td>
<td>986</td>
</tr>
<tr>
<td>Don’t Know/Refused</td>
<td>6</td>
<td>&lt;1%</td>
<td>9</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1136</td>
<td>100%</td>
<td>1018</td>
</tr>
</tbody>
</table>

### Table 17: Unweighted Household Income Distribution, CC-BRFSS, 2003-2005

<table>
<thead>
<tr>
<th>Household Income</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percent</td>
<td>Frequency</td>
</tr>
<tr>
<td>&lt;$10,000</td>
<td>67</td>
<td>7%</td>
<td>55</td>
</tr>
<tr>
<td>$10-$14,999</td>
<td>55</td>
<td>5%</td>
<td>56</td>
</tr>
<tr>
<td>$15-$19,999</td>
<td>89</td>
<td>9%</td>
<td>81</td>
</tr>
<tr>
<td>$20-$24,999</td>
<td>100</td>
<td>10%</td>
<td>84</td>
</tr>
<tr>
<td>$25-$34,999</td>
<td>146</td>
<td>14%</td>
<td>120</td>
</tr>
<tr>
<td>$35-$49,999</td>
<td>186</td>
<td>18%</td>
<td>158</td>
</tr>
<tr>
<td>$50-$74,999</td>
<td>188</td>
<td>19%</td>
<td>131</td>
</tr>
<tr>
<td>$75,000+</td>
<td>176</td>
<td>17%</td>
<td>197</td>
</tr>
<tr>
<td>Don’t Know/Refused or N/A</td>
<td>136</td>
<td>13%</td>
<td>238</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1007</td>
<td>100%</td>
<td>1018</td>
</tr>
<tr>
<td>Disposition</td>
<td>2003</td>
<td></td>
<td>2004</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>-------</td>
<td>----------</td>
<td>-------</td>
</tr>
<tr>
<td></td>
<td>Frequency</td>
<td>Percent</td>
<td>Frequency</td>
</tr>
<tr>
<td>Completed Interview</td>
<td>1144</td>
<td>10%</td>
<td>1018</td>
</tr>
<tr>
<td>Refused Interview</td>
<td>413</td>
<td>4%</td>
<td>2291</td>
</tr>
<tr>
<td>Non-working Number</td>
<td>4708</td>
<td>43%</td>
<td>5334</td>
</tr>
<tr>
<td>Ring-no-answer</td>
<td>853</td>
<td>8%</td>
<td>1002</td>
</tr>
<tr>
<td>Not an Eligible Residence</td>
<td>1199</td>
<td>11%</td>
<td>1333</td>
</tr>
<tr>
<td>Selected Respondent/Household Unavailable</td>
<td>74</td>
<td>&lt;1%</td>
<td>60</td>
</tr>
<tr>
<td>Language Barrier</td>
<td>51</td>
<td>&lt;1%</td>
<td>41</td>
</tr>
<tr>
<td>Mid-terminated</td>
<td>52</td>
<td>&lt;1%</td>
<td>91</td>
</tr>
<tr>
<td>Line Busy</td>
<td>205</td>
<td>2%</td>
<td>251</td>
</tr>
<tr>
<td>Physical/Mental Impairment</td>
<td>44</td>
<td>&lt;1%</td>
<td>35</td>
</tr>
<tr>
<td>Technological Barrier</td>
<td>255</td>
<td>2%</td>
<td>289</td>
</tr>
<tr>
<td>Fax/Modem Line</td>
<td>315</td>
<td>3%</td>
<td>352</td>
</tr>
<tr>
<td>Reached Maximum Attempts</td>
<td>425</td>
<td>4%</td>
<td>396</td>
</tr>
<tr>
<td>Hang-up/Refused before Intro</td>
<td>1158</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>10,896</td>
<td>100.0%</td>
<td>12493</td>
</tr>
<tr>
<td>CASRO</td>
<td></td>
<td></td>
<td>43.4%</td>
</tr>
<tr>
<td>Cooperation Rate (among eligible households)</td>
<td></td>
<td></td>
<td>70.2%</td>
</tr>
<tr>
<td>Overall Response Rate (all numbers called)</td>
<td></td>
<td></td>
<td>10.5%</td>
</tr>
</tbody>
</table>