Evidence-Based Behavior Change Campaigns to Improve Traffic Safety:

Appendix C: Case Studies
APPENDIX C. BEHAVIOR CHANGE CAMPAIGN CASE STUDIES

Appendix C presents case studies of four behavior change campaigns—one from the traffic safety field, and three from the broader public health field. These campaigns were selected because they successfully changed the behavior of their intended audience using organized communication strategies. The four campaigns have been identified as evidence-based and effective because they meet the following criteria:

- **Publication of evidence**: Campaign evaluation findings are reported in at least one peer-reviewed journal that describes the evaluation and documents successful behavior change outcomes.
- **Evidence of effectiveness**: The campaign has produced behavior changes using clearly stated outcome measures.
- **Evaluation design**: The campaign was evaluated using a rigorous design to gather credible evidence and demonstrate positive outcomes.

Traffic safety practitioners can learn from the experiences of these four behavior change campaigns to design their own evidence-based campaign.

**Case Studies**

- **Case Study 1: Boosting Restraint Norms**: A community-delivered social marketing campaign designed to promote use of belt-positioning booster seats among populations at risk for non-seat belt use.

- **Case Study 2: Tu Salud ¡Si Cuenta!**: A community-led campaign in the Rio Grande Valley (South Texas) that includes media and education components designed to help Mexican-American adults increase healthy eating and physical activity behaviors.

- **Case Study 3: Text4baby**: The first free mobile health text message service in the U.S. that provides information to pregnant and postpartum women about many health behaviors.

- **Case Study 4: Tips From Former Smokers® Campaign**: The Tips campaign profiles real people who are living with serious long-term health effects from smoking and secondhand smoke exposure.
Boosting Restraint Norms

*Boosting Restraint Norms* is a community-delivered social marketing campaign designed to promote use of belt-positioning booster seats among at-risk populations.

“With limited resources, we don’t want to work on a program that isn’t evidence-based and proven to work. That is number one: pick a program that is based on evidence and that shows a positive result for what the campaign is trying to accomplish.” – Jennifer Ryan, M.P.A., Director of State Relations, AAA National

**Overview**

*Boosting Restraint Norms* is a community-delivered, multi-component social marketing campaign designed to promote use of belt-positioning booster seats among populations at-risk for non-seat belt use, which include parents and caregivers with low educational attainment and socioeconomic status, and people from racial and ethnic minority groups. The main campaign components are a motivational video, paired with education and a booster seat giveaway. Booster seats reduce the risk of injury and death among older children in a motor vehicle crash and are intended for children who have outgrown their forward-facing car seats. The Center for Injury Research and Prevention at the Children’s Hospital of Philadelphia (CHOP) conducted research on strategies for promoting booster seat use among at-risk populations. This research led to the creation of the campaign, *Boosting Restraint Norms*.

**Boosting Restraint Norms: Campaign at a Glance**

<table>
<thead>
<tr>
<th>Campaign Characteristics</th>
<th>Campaign Topic</th>
<th>Scope</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Child passenger safety and booster seat use</td>
<td>Community-based (Norristown, PA)</td>
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<tr>
<th>Intended Audience</th>
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<tbody>
<tr>
<td>Parents and caregivers of children aged 4 to 7 with lower income and educational attainment, living in the intervention community.</td>
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| Activities | The “No Regrets” video (available in English and Spanish); educational posters, flyers, and audio public services announcements (PSAs); educational sessions; and free booster seats. |

<table>
<thead>
<tr>
<th>Campaign Messages</th>
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<tbody>
<tr>
<td>The “Avoid Regret” and “No Regret” messages are centered around the No Regrets video. The video describes a family’s story of injuries sustained from not using a booster seat, describes how booster seats protect children, and explains how to use booster seats.</td>
</tr>
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<table>
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<tr>
<th>Partners</th>
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<tbody>
<tr>
<td>Local Women, Infants, and Children (WIC) office</td>
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<tr>
<td>Head Start program</td>
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<tr>
<td>Department of Transportation</td>
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<tr>
<td>Department of Social Services</td>
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<tr>
<td>Local fire department, churches, and elementary schools</td>
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<tr>
<th>Campaign Outcomes</th>
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<tbody>
<tr>
<td>A 28.5% increase in booster seat use in the intervention community (adjusted for child age and gender; vehicle type; driver gender; and driver seat belt use, race/ethnicity, and educational attainment), six months post campaign.</td>
</tr>
</tbody>
</table>
Theory or Evidence Base

The “No Regrets” video was developed using the Theory of Planned Behavior, which states that intention to perform a behavior is influenced by attitudes towards the behavior and beliefs about whether others approve or disapprove of the behavior. The video also integrates the theoretical constructs of response efficacy, an individual’s belief that the desired behavior is effective (a booster seat protects children), and self-efficacy, an individual’s belief in their ability to perform the behavior (using a booster seat in the car).

Planning and Message Development

“No Regrets” is a three-minute motivational video that describes the story of a family involved in a crash, the injuries that one child sustains, how a booster seat could have prevented those injuries, and instructions on proper booster seat use. The central campaign messages are “no regrets” and “avoid regret.” To develop the video and messages, CHOP researchers conducted a formative, developmental, and evaluative study. They held focus groups with parents to explore barriers, benefits, and threats to booster seat use; focus group participants said they favored messages that described a real family’s story. Then researchers created the “No Regrets” video, as well as other possible campaigns to address the barriers and threats, and piloted the interventions while providing each participant with a free booster seat. Through follow-up telephone interviews six weeks later, the researchers found that 98.9% of participants self-reported using booster seats on all trips. Participants favored the “No Regrets” video over the other interventions and credited the video and the “no regrets” message to motivating their change in behavior.

Following this study, the “No Regrets” video was adapted into the community-based campaign, Boosting Restraint Norms. Campaign activities included the video (in English and Spanish), education, and a one-time booster seat giveaway. Researchers developed additional educational materials based on the formative research and social marketing techniques; they also adapted the materials based on feedback from community partners.

Lessons Learned for Traffic Safety Practitioners

- **Involve the community in developing materials and messages.** Both the research team and community partners assessed whether the materials and messages resonated with the community.
- **Community partners can effectively deliver messages.** Community partners effectively served as messengers by delivering education and materials to community members.
- **Provide access to the materials that make the behavior change possible.** The campaign goal was to increase booster seat use, so the researchers sought a national partner who donated booster seats for the one-time free booster seat distribution.
- **Be flexible.** The original planned partner did not have the capacity to support implementation, so the research team was flexible, listened to the community, and shifted their implementation plans along the way.
- **Identify and support community champions.** Practitioners should identify champions by speaking with the community and equip them with the information and resources they need to succeed.
Materials included brochures, posters, and flyers that were written at a fifth-grade reading level and included images of children from different racial and ethnic minority groups.

**Implementation**

*Boosting Restraint Norms* was implemented in Norristown, PA in October 2008. To prepare for implementation, CHOP researchers identified local community groups to serve as partners. Partners had frequent contact with the target population and included the Women, Infants, and Children office (WIC), Head Start program, Department of Transportation, Department of Social Services, the local fire department, and local churches and schools. The research team identified partners by speaking with community groups to determine who was willing to support implementation and who had the capacity to champion the campaign in the community.

After identifying partners, the research team distributed outreach kits, intended for use by partners to be delivered to community groups, schools, and parents. The outreach kits included the “No Regrets” video, brochures, audio PSAs, posters, active displays, and flyers. The research team taught the community partners how to correctly use booster seats, using a train-the-trainer model, and shared information to help partners distribute the outreach kits. Other broad implementation activities included placing posters in “high traffic” areas, such as beauty salons, health departments, and faith-based organizations; conducting educational sessions with parents at schools and daycares; and disseminating audio and print news releases throughout the community. The campaign culminated in a one-time event at a local fire department, where the first 250 attendees received a free booster seat and instruction on how to properly install the seat after watching the video.

“It’s really important to know the community and if you don’t, then ask someone who does.”

Tyra Bryant-Stephens, M.D., Medical Director and Founder, Community Asthma Prevention Program, CHOP

**Evaluation**

To evaluate whether the campaign increased booster seat use, researchers compared data from the intervention community (Norristown, PA) and another comparison community (York, PA). The intervention community received the video, educational component, and booster seat distribution. Using a pre/post design, booster seat use was observed in both communities at baseline (September 2008, one month prior to implementation) and follow-up (April to June 2008, six months post implementation). Trained researchers conducted the booster seat observations in teams of two or more by visiting locations frequented by children and their caregivers, such as schools, grocery stores, daycares, churches, and other local businesses, within each community. The researchers approached the drivers, obtained consent, asked demographic questions, and documented the type of restraint used. At least 200 observations were conducted at each location and point in time.
Evaluation results showed a 28.5% increase in booster seat use in the intervention community from baseline to follow-up, after adjusting for child age and gender; vehicle type; driver gender; and driver characteristics including seat belt use, race, ethnicity, and education attainment. There was no observed change in booster seat use in the comparison community.

**Funding and Sustainability**

The National Highway Traffic Safety Administration (NHTSA) funded the formative research that led to the development of the “No Regrets” video, and the Delaware Valley Regional Planning Commission funded the implementation and evaluation of *Boosting Restraint Norms*. Additional funding from AAA National was used to disseminate the campaign and test its implementation with three AAA clubs in other communities.

### Boosting Restraint Norms References


Tu Salud ¡Si Cuenta! (Your Health Matters!)

Tu Salud ¡Si Cuenta! (Your Health Matters!) is a community-led and evidence-based campaign in the Rio Grande Valley (South Texas) that includes media and education components designed to help Mexican-American adults increase healthy eating and physical activity.

“The campaign Tu Salud ¡Si Cuenta! was driven by community need.” – Natalia Heredia, Ph.D., M.P.H., MD Anderson Cancer Center, University of Texas

Overview

Tu Salud ¡Si Cuenta! is a community-based, multi-component campaign that works with community health workers (CHWs) to reach audience with monthly newsletters, media messages, including television, and community events. The community-wide campaign also works the built environment and policies to improve the health outcomes of adult Mexican-Americans living in the Rio Grande Valley region of Texas, located along the Texas-Mexico border. The focus of the campaign is on nutrition and physical activity with the goal of promoting healthy behaviors. CHWs are the key component of the campaign; they distribute informational newsletters and lead education sessions within the community. The newsletters and education sessions feature information about ways to increase vegetable and fruit intake and how to create an exercise plan, and describe the effects of obesity on health, among other topics. Many campaign messages, including those on television and in monthly newsletters, feature community role models or experts who share their stories.

Tu Salud ¡Si Cuenta!: Campaign at a Glance

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<thead>
<tr>
<th>Campaign Characteristics</th>
<th>Campaign Topic</th>
<th>Scope</th>
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<tbody>
<tr>
<td></td>
<td>Nutrition and physical activity</td>
<td>Regional (Rio Grande Valley region of Texas)</td>
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<tr>
<th>Intended Audience</th>
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<tr>
<td>Mexican-American populations living along the Texas-Mexico border.</td>
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<tr>
<th>Activities</th>
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<tr>
<td>Education sessions; media segments; monthly newsletters; community events and promotions. All activities are conducted in Spanish and English.</td>
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<tr>
<th>Campaign Messages</th>
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<tr>
<td>Campaign messages provide specific examples of barriers to physical activity and how local role models have overcome those barriers. Messages include healthy recipes, physical activity guides, diabetes management tips, and nutrition label guidance.</td>
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<tr>
<th>Partners</th>
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<tbody>
<tr>
<td>University of Texas Health School of Public Health</td>
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<tr>
<td>Local organizations and advocates</td>
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<tr>
<td>Health care providers</td>
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<tr>
<td>Businesses</td>
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<tr>
<td>Collaborative Action Board (CAB)</td>
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<tr>
<th>Select Campaign Outcomes</th>
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<tr>
<td>The campaign has led to improvements in physical activity and healthy eating, decreases in sedentary behavior, changes in knowledge with exposure to information about healthy eating and physical activity, and reductions in average hip and waist circumferences.</td>
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</table>
Theory or Evidence Base

Development of Tu Salud ¡Si Cuenta! was guided by the Social Cognitive Theory and the Transtheoretical Model. Researchers incorporated behavior change techniques and constructs from both theories to inform message content. The campaign also used the Ecological Model for health promotion to guide decisions about strategy implementation across individual, organizational, community, and public policy factors influencing health.

Planning and Message Development

Dr. Belinda Reininger, Dr.PH., from the University of Texas Health Science Center at Houston School of Public Health-Brownsville Campus (UTSPH), is a community leader and through her partnerships with the community and research led the development of Tu Salud ¡Si Cuenta! to address the high rates of diabetes and obesity among Mexican-Americans living close to the Texas-Mexico border. UTSPH in Brownsville, Texas provided baseline data about the rates of diabetes, obesity, and characteristics of the intended audience from on-going surveillance and assessments. The researchers used a searchable database of evidence-based interventions (EBIs) and the Guide to Community Preventive Services to determine that a multi-component community-wide campaign would be most effective and culturally appropriate for achieving the desired outcomes. One study was a community-wide campaign study done along the Texas-Mexico border focused on cancer prevention, called A Su Salud.

Overall, there was a lack of research on community-wide campaigns with minority and vulnerable populations, so the research team implemented community-based participatory research (CBPR) strategies to develop the campaign messages. They involved community members to conduct a needs assessment to determine the intended audience’s high priority needs. Researchers conducted nine focus groups with Mexican-American adult men and women who reported Spanish as their primary language and who lived close to the Texas-Mexico border to discuss which health issues and media channels were most important and accessible. Following these discussions, the researchers worked with the Collaborative Action Board (CAB) to further refine the messages and channels. The CAB was created in 2003 and represents health care providers, universities, community health workers,

Lessons Learned for Traffic Safety Practitioners

Be selective about campaign objectives. It can be easy to be overwhelmed when choosing behavior change objectives. The objectives should be easy to measure and consistent with the campaign message.

Conduct a process evaluation. Practitioners should consider conducting a process evaluation to determine whether modifications to the campaign will help achieve behavior change.

Build evaluation into campaign planning. It is important not to wait until the campaign is over to create an evaluation plan. It is difficult and sometimes impossible to ask individuals to recall past information, particularly about health behaviors.

Leverage community resources. Likely, there are other organizations in the community trying to achieve the same objectives and behavior change outcomes. Connect with different partners and stakeholders, and involve them in the campaign.
community organizations, and religious organizations. The CAB provided input on campaign topics, media channels, role models to feature, intended audience, and the campaign messages during regular meetings with both the researchers and community stakeholders.

“I definitely think that, apart from funding, you need partners who are invested in the same goals.”

Natalia Heredia, Ph.D., M.P.H., MD Anderson Cancer Center, University of Texas

Researchers, with input from the CAB, identified that a Spanish language community-wide media campaign with a CHW component would be effective at improving health outcomes for Mexican-Americans. The research staff selected mass media outlets including morning television segments and small media outlets like monthly newsletters as the message channels. The television segments and radio segments featured Hispanic health experts sharing information about nutrition and physical activity and community role models sharing their personal stories of health behavior change. The segments were designed to target the priority populations viewing the media messages. For example, the local morning show’s audience was typically Hispanic and female, so the role models featured in those messages matched this audience. The newsletters discussed nutrition and physical activity and how these behaviors relate to health outcomes like diabetes, cancer, or obesity. The newsletters also featured community role models sharing their stories and community health experts sharing recommendations. Following the Social Cognitive Theory and the Transtheoretical Model, the researchers included specific actions and information to increase self-efficacy among the intended audience. For example, the monthly newsletters would include steps to increase exercise during work or would include information about free community exercise classes.

Another main campaign component used CHWs to lead education sessions in the community. The focus groups and CAB identified CHWs or promotoras as a trusted source of information in the community. CHWs visited individuals in their homes to personally share information on increasing healthy eating and physical activity. They also visited local sites, such as community centers, religious organizations, or grocery stores, to distribute newsletters and conduct informal education sessions. Over the years that the campaign has been in place, layers of policy and environmental changes have also been implemented so as to address barriers to making healthy lifestyle changes. For example, communities have modified road safety rules so that pedestrians can be physically active with fewer threats of auto/pedestrian crashes and the environment has been changed by adding off-road trails to promote active lifestyles.

Implementation

The campaign first launched in 2005 in Brownsville, Texas and involved CHWs conducting home visits and community visits, distributing newsletters, and providing education to community members. Following implementation, the research staff conducted a process evaluation. They conducted six focus groups with community members to collect feedback on the campaign messages. Findings from the focus groups confirmed that nutrition and physical activity, in relation to chronic diseases such as diabetes, heart disease, or cancer,
are topics that were most relevant and important to community members. The focus group findings also showed the importance of including community role models who speak Spanish fluently, and using graphics such as pictures and videos to convey messages. The most compelling feedback was the importance of CHWs conducting home visits and education sessions throughout the community. Since 2005, the campaign has been modified to increase use of CHWs, role models, and news coverage, and to improve vetting of role models’ Spanish language ability. Today, the campaign includes community events such as walkathons, bike races, and weight loss challenges. The campaign has also evolved with new media channels and technology and now uses social media, including Facebook.

**Evaluation**

Evaluations of Tu Salud ¡Si Cuenta! found that it achieved positive outcomes in increasing healthy eating and physical activity and decreasing sedentary behavior. The evaluations were conducted using self-reported data from questionnaires like the International Physical Activity Questionnaire or a modified version of the School Physical Activity and Nutrition Survey. CHWs were trained to administer the questionnaires and a survey to randomly selected houses that measured exposure to the campaign. One quasi-experimental evaluation compared a control community with the intervention community to assess health outcomes. This evaluation showed the intervention community exposed to Tu Salud ¡Si Cuenta! had higher odds of exercising and lower odds of excessive sedentary behavior. Additionally, exposure to CHWs, monthly newsletters, and TV segments were associated with positive outcomes, like participants having an increased odds of frequent exercise, compared to exposure to the radio segments. Another evaluation used the same quasi-experimental design but measured healthy eating and average hip and waist circumferences. The evaluation results showed an increase in healthy eating, decrease in unhealthy eating, and smaller average hip and waist circumferences for the population in the intervention community versus the control community.

**Funding and Sustainability**

Tu Salud ¡Si Cuenta! began in 2005 and continues to encourage thousands of people to change their behavior to achieve healthier lives. It was first funded by the National Institutes of Health through the University of Texas Health Science Center at Houston School of Public Health-Brownsville Campus. The continued success of the program and strong relationship with the community have been key to developing partnerships that led to additional funding to sustain the program. A unique feature that contributed to the sustainability of the CHWs is that the program now offers continuing education credits, certified by the Texas Department of State Health Services, to CHW students. The Robert Wood Johnson Foundation awarded Brownsville, Texas the 2014 Culture of Health Prize Winner for the campaign’s continued success and creativity. The community-wide campaign model program has been expanded to 11 communities in the Rio Grande Valley of South Texas. Curriculum used by the CHWs has been enhanced and is being pilot tested in Houston, Texas following the positive results in Brownsville, Texas.
Tu Salud ¡Si Cuenta! References


Text4baby

Text4baby is the first free mobile health text message service in the U.S. that provides information to pregnant and postpartum women about many health behaviors.

"Text4baby’s messages are door openers, teasers, and get you moving in a direction. They are motivational, inspirational, and informational—not making a heavy demand on the person." – W. Douglas Evans, Ph.D., Professor of Prevention and Community Health & Global Health, The George Washington University

Overview

Text4baby is a unique public health campaign in the U.S. that addresses many health behaviors in the course of a woman’s pregnancy and in the first year of her baby’s life. This campaign was launched in 2010 and uses a “light touch approach” by providing short text messages to enrollees. The prenatal and postpartum messages describe actions that enrollees can take to improve their health and the health of their babies, such as taking a prenatal vitamin with folic acid. The text messages contain links to other information and resources such as phone numbers and websites. Women can enroll by texting BABY (BEBE for Spanish) to 511411.

Text4baby: Campaign at a Glance

<table>
<thead>
<tr>
<th>Campaign Characteristics</th>
<th>Campaign Topic</th>
<th>Scope</th>
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<tbody>
<tr>
<td></td>
<td>Maternal and child health</td>
<td>National</td>
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<tr>
<td>Intended Audience</td>
<td>Pregnant and postpartum women</td>
<td></td>
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<tr>
<td>Activities</td>
<td>Mobile health text messaging service</td>
<td></td>
</tr>
<tr>
<td>Campaign Messages</td>
<td>Six messages are texted to all enrollees when they sign up; there are 250 messages on 17 different prenatal and postnatal topics from nutrition and breastfeeding advice to symptoms of labor and safe sleep.</td>
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</tr>
<tr>
<td>Partners</td>
<td>Centers for Disease Control and Prevention</td>
<td></td>
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<tr>
<td></td>
<td>Voxiva, Inc.</td>
<td></td>
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<td></td>
<td>The National Healthy Mothers, Healthy Babies Coalition</td>
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<td></td>
<td>Johnson and Johnson</td>
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<td></td>
<td>CTIA–The Wireless Foundation</td>
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<tr>
<td></td>
<td>Others including national, state, and local organizations; advocates; health care providers; health plans; businesses; WIC; and Medicaid/CHIP.</td>
<td></td>
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<tr>
<td>Select Campaign Outcomes</td>
<td>Different evaluations have found: improvements in enrollees’ belief that they were prepared for motherhood; changes in knowledge, attitudes, and beliefs with exposure—importance of prenatal health care and prenatal vitamins, risks of alcohol use; and improvements in influenza vaccination rates, especially among women whose provider did not recommend or offer the vaccine.</td>
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Theory or Evidence Base

Text4baby was developed using behavioral theories, including Social Cognitive Theory, Transtheoretical Model, and the Health Belief Model (HBM), based on the premise that women would develop positive views of Text4baby, and self-efficacy, and that would, in turn, lead to behavior changes and ultimately positive health outcomes.

Planning and Message Development

Many organizations contributed to the development and implementation of Text4baby, including the Centers for Disease Control and Prevention; Voxiva, Inc., a private mobile health company; and The National Healthy Mothers, Healthy Babies Coalition, a nonprofit group of local, state, and national organizations focusing on maternal and children's health, among other partners.

Voxiva and Healthy Mothers, Healthy Babies established partnerships with Johnson and Johnson, a multinational consumer health care, pharmaceuticals, and diagnostics corporation, which served as the founding sponsor; CTIA, a nonprofit foundation that secured 18 wireless carriers to absorb messaging costs; and Gray Healthcare Group, a firm that provided a logo, strategy, and other materials.

A key first step in developing the campaign was conducting discussion groups with women in six cities to understand if they would use a text messaging service like Text4baby. For example, how useful would a text messaging service be to them? Would they use it? What would they use it for? Maternal and children’s health and science experts from CDC and other federal agencies contributed their knowledge about the types of topics that could be presented in Text4baby’s messages. Messages were developed using evidence-based guidelines such as Bright Futures Guidelines for Health Supervision of Infants, Children, and Adolescents, among others.

Lessons Learned for Traffic Safety Practitioners

Create SMART objectives. Ensure objectives are SMART (Specific, Measurable, Achievable, Realistic, and Time-Bound).

Identify partners. For programs with few resources, it is unlikely the campaign will achieve long-term objectives. Practitioners should engage stakeholders and partners to identify additional resources prior to implementing a campaign.

Develop a message that people will want in their lives. In campaigns, there is an element of branding. The message should be offering something. People must find that there is a benefit to the information offered through the message.

Ensure the campaign is audience-centric and co-created with the audience. By involving the audience in the formative phases of the campaign the audience are more likely to find the messages appealing.

Create a sustainability plan. If the goal is to sustain the campaign, practitioners should think about how to achieve sustainability. Waiting until the end of the campaign to consider sustainability is too late.
“The goal of the messages is not to answer every question or serve as a comprehensive source of information, but rather to motivate people to move in a positive direction.”

W. Douglas Evans, Ph.D., Professor of Prevention and Community Health & Global Health, The George Washington University

Based on this information, CDC and Healthy Mothers, Healthy Babies developed a prototype set of messages that would be understandable to populations with low literacy. They staged the topics and timing of each message according to the mother’s stage of gestation or the infant’s age. The team conducted additional focus groups to test and refine the messages and assess usability, and developed a final library of messages. One paper describes this process as assessing “audience exposure, awareness, and cognitive and affective reactions to text4baby messages.” The message development process took nine months. Text4baby evolved over time, and today includes additional modules related to flu prevention, and smoking cessation during and after pregnancy. Whittaker et al. (2012) described the steps involved in developing and implementing Text4baby.

Implementation

When the campaign launched in 2010, many local, state, and regional implementation partners were involved in promoting Text4baby in different ways, including billboards, displays at public places, mass e-mails, newsletters, newspaper articles, health fairs, home-visiting programs, and media events, among others. The campaign then moved to a national launch. National partner spotlights describe how some organizations supported the implementation of Text4baby.

Evaluation

Text4baby is a “place-based” campaign, which created a unique opportunity to conduct experimental evaluations. Randomized controlled trials are often not possible to conduct when evaluating population-level campaigns because everyone has the potential to be exposed to the campaign. With Text4baby, researchers were able to “control the offer,” that is, the exposure to the campaign. In one study, pregnant women visiting a health clinic for their first prenatal exam were randomly assigned to be offered Text4baby or not. Once offered, the program staff enrolled women in the service. Participants completed a baseline questionnaire and were followed over time. They were able to collect self-reported data on message recall, and data on changes in women’s attitudes, beliefs, and behavioral changes, as a function of exposure. The researchers also had access to participants’ medical records data. This evaluation found that, among a subgroup of high-exposure participants, Text4baby reduced self-reported alcohol use behavior of pregnant and postpartum women. In fact, there was a dose-response effect among Text4baby participants whereby high-exposure participants were more than two times as likely to abstain from alcohol compared to low-exposure participants.

Another evaluation of Text4baby found effects on knowledge, attitudes, and beliefs; for example, participants agreed with the belief that it is important to take prenatal vitamins. Also, a study of enrollees who reported receiving Text4baby influenza messages found that,
among women whose provider did not recommend or offer a vaccine, Text4baby participants were more than three times as likely to report influenza vaccination. Text4baby has had many other impacts including improved glycemic control among pregnant women with diabetes. The Health Resources and Services Administration funded a national evaluation of Text4baby.

**Funding and Sustainability**

Text4baby has existed for 10 years and, as of March 2019, had enrolled more than 1.1 million people. It is sustained through public private partnerships and has received investment from many foundations and companies. A key to success was developing partnerships with organizations that endorsed Text4baby, including health care organizations that were willing to offer it at their facilities. Text4baby has over 100 hospital or health plan partners, among other national, state, and local partners.

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**Text4baby References**


**Tips From Former Smokers® Campaign**

In March 2012, the Centers for Disease Control and Prevention (CDC) launched the first-ever paid national tobacco education campaign—*Tips From Former Smokers®* (Tips®). The Tips campaign profiles real people who are living with serious long-term health effects from smoking and secondhand smoke exposure.

All content used with permission from CDC and retrieved from [CDC.gov/Tips](http://CDC.gov/Tips)

**Overview**

The *Tips From Former Smokers®* (Tips®) campaign shares the truth about tobacco smoking through the lives of real people living with smoking-related illnesses. Since its launch, Tips has featured compelling stories of people who used to smoke and are living with smoking-related diseases and disabilities and the toll these conditions have taken on them. The campaign, which continues through 2019, has also featured people who do not smoke who have experienced life-threatening episodes as a result of exposure to secondhand smoke.

**Tips From Former Smokers®: Campaign at a Glance**

<table>
<thead>
<tr>
<th>Campaign Characteristics</th>
<th>Campaign Topic</th>
<th>Scope</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tobacco education</td>
<td>National (U.S.)</td>
<td></td>
</tr>
</tbody>
</table>

**Intended Audiences**

- Primary audiences include adults who smoke, ages 18 through 54.
- Secondary audiences include family members, health care providers, and faith communities.

**Campaign Key Messages**

- Smoking causes immediate damage to your body, which can lead to long-term health problems.
- For every person who dies because of smoking, at least 30 people live with a serious smoking-related illness.
- Now is the time to quit smoking. If you need help, free assistance is available by calling 1-800-QUIT-NOW.

**Campaign Results to Date**

During 2012–2018, CDC estimates that more than 16.4 million people who smoke have attempted to quit and approximately one million have quit for good because of the *Tips* campaign.

- During the 2018 campaign, a total of 206,253 calls to 1-800-QUIT-NOW were attributable to the *Tips* campaign.
- As a result of the *Tips* 2012 campaign, people who do not smoke reported increased conversations with family or friends about the dangers of smoking and had greater knowledge of smoking-related diseases.
- People who smoke who have seen *Tips* ads report greater intentions to quit within the next 30 days and next six months, and people who smoke who have seen the ads multiple times have even greater intentions to quit.
Theory or Evidence Base

Hard-hitting media campaigns have been proven to raise awareness about the dangers of smoking and to motivate people who smoke to quit. Many studies have shown that ads carrying strong graphic and emotional messages about health consequences are more effective than other forms of advertising, such as humorous or emotionally neutral advertisements. Given the large scientific evidence base supporting this approach, CDC uses graphic and emotional advertisements in its Tips® campaign. CDC tested these ads first with groups of people who smoke, and the results found that these ads would be effective.

Message Development

The Tips® ads feature real people who have experienced health consequences as a result of smoking cigarettes and breathing secondhand smoke. The personal stories shared in this series of ads are compelling and communicate in a very human way that tobacco smoking causes immediate damage to your body and that this damage can happen at a young age and be severe.

Tips® campaign participants are not actors; they are real people telling their real stories. They come from a variety of states and backgrounds. They chose to tell their stories to help prevent other people from suffering the same consequences.

Implementation

The Institute of Medicine, National Cancer Institute, and U.S. Surgeon General have all recommended a national media campaign as part of a comprehensive approach for ending the tobacco use epidemic. The Tips® campaign not only educates the public about the negative consequences of tobacco smoking, but also provides a supportive call to action — “You Can Quit” — and directs people who smoke to free resources to help them be successful.

Why Tips Works

- People who smoke told CDC that they needed to see and hear what it would be like to live with the health consequences of smoking.
- For decades, people who smoke had heard that smoking would ultimately kill them, but that wasn’t the motivation they needed. The nicotine in cigarettes is so addictive, they said, that even the fear of death wouldn’t motivate them to quit.
- People who smoke said that seeing how smoking could affect their lives and impact their families was the true way they would be motivated to quit.
- Scientific studies have shown that hard-hitting media campaigns are effective in helping people quit smoking. Study results suggest that emotionally evocative tobacco education media campaigns featuring graphic images of the health effects of smoking can increase quitline calls and website visits, and that these campaigns’ effects decrease rapidly once they are discontinued.
Evaluation

People who smoke who want to quit have responded dramatically to the Tips® campaigns. During 2012–2018, CDC estimates that more than 16.4 million people who smoke have attempted to quit and approximately one million have quit for good because of the Tips® campaign. In addition, in the first year of the campaign, an estimated 6 million people who do not smoke talked with friends and family about the dangers of smoking. In each campaign, there was an immediate, sustained and dramatic spike in calls to the national quitline, 1-800-QUIT-NOW, and in visits to the campaign website. Additional results from the campaign can be found at CDC.gov/TipsImpact

Campaign Resources

Find many free materials for educational use at CDC’s Tips From Former Smokers® Download Center, including:

- Low-resolution TV, print, radio, online, and out-of-home ads
- Continuous-loop videos
- Public service announcements (PSAs) about quitting smoking and secondhand smoke (English and Spanish)

Visit the Media Campaign Resource Center for broadcast-quality ads, PSAs for media use, and materials for textbooks or as part of a media buy.