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Working with Baseball to Change Tobacco's Spitting Image: The NSTEP Program

National Spit Tobacco Education Program

SUMMARY

In 1994, Oral Health America, a Chicago-based organization that advocates improved dental care, launched a public education campaign to reduce the use of spit tobacco (both chewing tobacco and snuff).

The campaign, named the National Spit Tobacco Education Program (NSTEP), focused on professional baseball as a means of making the public—especially boys and young men—aware of the physical harm that spit tobacco use can cause. Spit tobacco has long been part of the culture of baseball, and major league players have a higher usage rate than the general population.

Key Results

- Greater awareness among professional baseball players—especially minor league players—of the harm posed by the use of spit tobacco.
- Implementation of the first comprehensive national effort to educate the American public about the dangers of spit tobacco.
- A stronger voice in the tobacco-control movement for steps to restrict the use of chewing tobacco and snuff.

The Project

NSTEP worked to break the game's association with spit tobacco and to use ball players to deliver anti-spit tobacco messages to young fans. The campaign included:

- Public service announcements (PSAs) broadcast in connection with baseball games.
- Stadium events focused on promoting spit tobacco prevention and cessation.
- Distribution of posters and pamphlets illustrating the physical damage that oral cancer can bring to spit tobacco users.

NSTEP also provided major and minor league players with spit tobacco-cessation counseling and oral exams and fielded a staff of community coordinators to build anti-spit tobacco coalitions in high-use regions of the country.

Joe Garagiola, a former major league catcher turned sportscaster and all-around media personality, was the NSTEP national chairperson and spokesperson.

Funding

From April 1996 through December 2005, the Robert Wood Johnson Foundation (RWJF) provided $10,885,451 in 18 grants for the program, its evaluation and promotion:

- $10,234,737 to Oral Health America.
- $387,014 to Oregon Pacific Research Institute for surveys of players and trainers.
- $67,345 to Judith Schector for strategic planning.
- $128,455 to Wake Forest University School of Medicine for an evaluation.
- $50,000 to Romano & Associates and $17,900 to the Professional Baseball Athletic Trainers Society for promotion.
- $17,900 to the Professional Baseball Athletic Trainers Society for developing and distributing a CD-ROM.

Other funding came from the Centers for Disease Control and Prevention (CDC) and the National Cancer Institute, the National Institute of Dental Research, and Major League Baseball, which provided an estimated $9 to 10 million in cash and in-kind contributions for television ads. See Other Funding.

Oral Health America planned to secure sufficient funding for NSTEP from other sources to maintain the program as an integrated component of the organization's overall effort to advocate improved oral health for Americans.

THE PROBLEM

Increased Spit Tobacco Usage in the United States

In mid-20th century America, users of spit tobacco were mainly older men in rural areas. Beginning about 1970, however, national consumption of chewing tobacco and snuff began to increase markedly, especially among boys and young men.

A 1990–91 survey in 22 states (Youth Risk Behavior Survey) found that nearly a fifth of high-school male students were using spit tobacco. Among white male students, the usage rate was higher—almost one out of every four students. In some states—notably Tennessee and Montana—a third of the males in grades 9–12 used spit tobacco.

Although use was higher in rural areas, urban youth also were proving to be a promising market for spit tobacco products. In Illinois, one out of every six metropolitan 11th grade males was a user, compared to one out of every four non-metropolitan males, according to a 1987 survey by the state Department of Public Health (Smokeless Tobacco Survey). In Connecticut, the state Department of Health Services found that 10 percent of the state's high school seniors were using spit tobacco in 1990—a 25 percent increase from 1987.

Citing these and other research findings, a 1992 report, *Spit Tobacco and Youth*, by the Office of the Inspector General of the U.S. Department of Health and Human Services, concluded that underage spit tobacco use was widespread and required a broad-based response. As one strategy to decrease the social acceptability of usage, the report recommended educational efforts to sever the close association between spit tobacco and sports, especially baseball.

Nationally, during this period the tobacco-control movement focused principally on cigarettes and smoking—a far more prevalent and costly use of tobacco. As a result, efforts to educate the public and policy-makers about the dangers of spit tobacco lagged behind.

Congress banned cigarette ads on television and radio in 1970, but it was not until 1986—with passage of the Comprehensive Smokeless Tobacco Health Education Act—that broadcast spit tobacco ads were outlawed and health warnings required on print ads and product packaging.

The Baseball Connection

Health experts attributed the increase in spit tobacco use among teens at least in part to aggressive marketing by tobacco companies. Expenditures on spit tobacco advertising and promotion in 1997 totaled a record $150.4 million, according to the Federal Trade Commission.

To try to position "smokeless tobacco" as a safe alternative to cigarettes, manufacturers used sporting events and professional athletes to promote their products. Big league baseball players, a traditional role model for American youth, were provided with free samples of spit tobacco products and were commonly featured in industry ads.

Heroes such as Hall of Fame catcher Carlton Fisk urged consumers to "take a pinch instead of a puff" or "enjoy real tobacco pleasure without lighting up." Televised baseball games commonly included shots of players chewing and spitting—free promotion for the spit tobacco industry.

By 1987, 46 percent of all major league players were using spit tobacco, according to an article, "Smokeless Tobacco Use Among Professional Baseball Players: Survey Results,

1998 to 2003," in the February 2005 issue of the journal *Tobacco Control* (see the Bibliography for citation). Although the usage rate among major league players later declined somewhat—to 43 percent in 1990 and to 31 percent in 1997—it remained far above that of the general male population.

Organized baseball took some steps to curtail spit tobacco use. Some teams banned spit tobacco advertising in their programs or prohibited members from chewing while in uniform. In 1992–93 Major League Baseball banned spit tobacco use by minor league players while in uniform, although from the outset there was concern about the degree of enforcement since umpires were responsible for citing violators.

Baseball never extended the ban to major league players—the result, according to observers, of opposition by the players' union to a blanket prohibition. (Minor league players have no players' union.) In 1994 the National Collegiate Athletic Association banned spit tobacco use by college baseball players.

Despite these anti-spit tobacco steps, there had never been a national, high-visibility media-based campaign to educate baseball players and fans about the health effects of spit tobacco use.

For the understanding of readers of this report who are not familiar with the business of baseball, it is worth noting that Major League Baseball (in capital letters) is an entity that operates North America's two major leagues, the National League and the American League, and also controls most aspects of minor league baseball. Through ownership and contractual arrangements, major league teams control many of the minor league teams, using them to develop younger players—the so-called farm system. Little League is the name of a nonprofit organization that runs baseball and softball leagues for children.

CONTEXT

Reducing the personal, social and economic harm caused by substance abuse is one goal of RWJF. For more than a decade, RWJF has been funding initiatives to prevent people from starting to use tobacco products and to help users quit. Providing a counterforce to the tobacco industry was a top priority of Steven A. Schroeder, MD, RWJF president 1990–2002. RWJF's tobacco-control programs include the following:

- The first major undertaking in this area was the *Tobacco Policy Research and Evaluation Program*, a $5-million initiative authorized by the Board of Trustees in 1992 to identify and encourage public policies that reduce tobacco use (see Program Results). RWJF later renamed the program the *Substance Abuse Policy Research Program* and expanded its focus to include policies on alcohol and illegal drug use. (For more information, see the program's website and Program Results.)

- In 1993, the Trustees authorized *Smokeless States®: National Tobacco Policy Initiative*, a program that before closing in 2004 funneled $92 million in grants to statewide health coalitions to advocate tobacco-control policies, conduct tobacco education campaigns and strengthen smoking prevention and treatment. (For more information see Program Results.)
- In 1994, RWJF established *Smoke-Free Families: Innovations to Stop Smoking During and Beyond Pregnancy* (see Program Results). The program oversees development and evaluation of evidence-based interventions to help women quite smoking before, during and after pregnancy.
- In 1995, RWJF funded a planning effort that led to creation the next year of the National Center for Tobacco-Free Kids. The center, a freestanding organization with a number of funders, develops national policy and communications strategies to reduce tobacco use among children and youth. As with the tobacco-control movement generally, it has focused much of its activity on cigarettes and smoking. (See Program Results and the center's website.)
- From 1997 to 2005, RWJF funded a two-part national program, *Addressing Tobacco in Managed Care* (for more information see Program Results). This program's goal was to evaluate systems-level changes to improve the delivery of tobacco dependence treatment to members of managed care plans, and to foster managed care plans' ability to deliver such treatments through ongoing technical assistance.

Support of the National Spit Tobacco Education Program (NSTEP) was another early effort in RWJF's tobacco-control work. It was one of several initiatives that sought to use sports and sports figures to deglamorize tobacco.

As explained by Joe Marx, a senior RWJF communications officer involved in these initiatives, there was an emerging belief within RWJF that professional sports—both individual players and team franchises—provided an effective means of addressing tobacco and other health problems. Because of their community visibility, professional sports teams can have an impact on the public that other corporate entities cannot, says Marx. Other RWJF projects using sports to deglamorize tobacco included the following:

- In 1995, the year before funding NSTEP, RWJF gave the Jacksonville Jaguars professional football team—through its affiliated foundation—the first of a series of grants to discourage smoking among fans and area youth. The funded activities included placing tobacco control messages on stadium signs and in public address announcements. (See Program Results.)
- In 1997, RWJF awarded the first of two contracts to the New Jersey Nets professional basketball team to mount an educational and media campaign to reduce youth smoking. (See Program Results.)

- Also in 1997, RWJF explored the feasibility of working with major league soccer on smoking prevention. (See Program Results.)

A key figure in RWJF's tobacco-control work was Tracy Orleans, PhD, senior program officer and senior scientist, RWJF research and evaluation unit. Before joining RWJF in 1995, she was director of tobacco-control research at the Fox Chase Cancer Center (1985–93). There, with funding from the National Cancer Institute and additional support from Major League Baseball, she and her colleagues conducted the first national survey of spit tobacco use in Major League Baseball (1987) and developed materials and workshops to educate baseball athletes and trainers on the hazards of spit tobacco use and effective quitting methods.

PROJECT DESIGN

NSTEP's Genesis: An Inspirational Leader

The inspiration for NSTEP was Joe Garagiola, a former major league catcher turned sportscaster and all-around media personality. He knew all about baseball and, as a former chewer himself, all about spit tobacco—why players started chewing (peer pressure, boredom and the desire to look macho, he says) and the damage it could do to the human body.

Indeed, Garagiola was passionate about the need to counter industry promotion and prevent youngsters from taking up the habit. He talked publicly about the problem whenever he had the opportunity. At one such speaking event—a banquet in 1993 in Phoenix, where he lives—Garagiola met a board member of Oral Health America, a Chicago-based, nonprofit organization that advocates improved dental care.

The outcome was that Oral Health America agreed to develop a multimedia campaign that would collaborate with professional baseball and individual stars of the game to educate the public, especially youth, on the hazards of spit tobacco use. The name of the campaign would be the National Spit Tobacco Education Program—NSTEP. Garagiola, with the title of national chair, was to be NSTEP's public face.

To use Marx's term, Garagiola was a "boundary spanner"—an individual who could reach a wide spectrum of people. It was an ingredient that would help make NSTEP an attractive funding opportunity for RWJF. (For an in-depth look at Garagiola's views on spit tobacco and his role as NSTEP dynamo, see the article on the program's early years written by sportswriter Leonard Koppett and appearing in the 1998–99 edition of the RWJF Anthology *To Improve Health and Health Care.* The text is available online.

Oral Health America provided the organizational home and staff for NSTEP. Founded in 1955 as the American Fund for Dental Health by the American Dental Association, other

dental groups and the Wrigley chewing gum company, it became independent in 1994. Dating back to 1972, the organization had participated in a number of RWJF-funded initiatives related to oral health, including the foundation's *National Preventive Dentistry Demonstration Program*, a $10-million effort from 1975 to 1984 to determine the effectiveness of various preventive dental procedures.

Oral Health America worked closely on NSTEP's development with a communications firm in Maryland, Romano & Associates. Neil Romano, the principal, had been involved in previous communications projects involving spit tobacco and baseball, including developing educational brochures for Little League coaches and a video for Major League Baseball. Romano's ties to the sport helped NSTEP secure baseball's collaboration, Marx says.

The Launch

Oral Health America launched NSTEP on October 6, 1994 at the National Press Club in Washington. The line-up that Garagiola put together included home-run kings Henry Aaron and Mickey Mantle along with National League president Leonard Coleman and U.S. Surgeon General Joycelyn Elders. Also on hand was Bill Tuttle, a former major league outfielder, his face badly disfigured by oral cancer. Tuttle and his wife, Gloria, wanted to show the public what a horrible toll spit tobacco could exact.

In another significant step, NSTEP secured an agreement with Major League Baseball and the Major League Baseball Players Association to work together over the next three years to break the link between spit tobacco and baseball. Under the agreement, Major League Baseball committed to promote NSTEP activities and messages among the 28 franchises and to assure that NSTEP PSAs would be used on network and local game telecasts. The players' association agreed to waive endorsement fees for players who participated in NSTEP media.

On the Baltimore Orioles' opening day in 1996—April 2—Garagiola joined Bud Selig, then acting baseball commissioner (he became commissioner in 1998), and Donald Fehr, executive director of the players' association, at a pregame press conference at Oriole Park to announce the agreement.

A Proposal for RWJF Funding

Encouraged by NSTEP's initial success in focusing attention on spit tobacco, Oral Health America was interested in expanding the program's reach. Specifically, the organization wanted to produce and disseminate a series of educational materials—broadcast and print public service announcements (PSAs), videos, brochures and posters—that used baseball celebrities to tell the general public and dental professionals about the addictive, dangerous nature of spit tobacco.

In September 1995 Oral Health America requested RWJF support for a three-year NSTEP campaign budgeted to cost $1.85 million. The proposal set three goals for the program:

- Stop the increase in—and eventually reduce—annual spit tobacco consumption.
- Increase public awareness of spit tobacco's dangerous and addictive properties.
- Mobilize health care professionals, especially the dental community, to look actively for signs of spit tobacco use among patients and counsel them on cessation methods.

RWJF agreed to provide funding for one season—1996—to gauge the impact of the NSTEP intervention. The grant of $767,885 (ID# 028191) covered nine months of NSTEP activities—from May 1996 through January 1997.

As funded by RWJF, NSTEP differed somewhat from Oral Health America's September proposal. The final design provided for the NSTEP campaign to have two main components:

- A media campaign centered on television and radio PSAs aired during national and local Major League Baseball broadcasts. The media component was to focus on all 28 major league teams then in existence (there are now 30 teams) and would include print PSAs in major baseball publications, such as the programs for the World Series and All-Star Game.
- "On the ground" outreach activities targeted at six teams. The six selected were Atlanta Braves, Baltimore Orioles, Colorado Rockies, Detroit Tigers, Seattle Mariners and Texas Rangers. Selection factors included the extent of spit tobacco use in the geographic area, level of team support for NSTEP, local access to media coverage and the readiness of local tobacco-control coalitions to help with outreach efforts.

For each of the six, NSTEP was to recruit a local coordinator to mobilize Little League teams and other youth organizations, coaches, dental health professionals, businesses and the media. The idea of local coordinators originated within RWJF. Foundation staff believed a coordinator embedded in the community would help NSTEP link up with other tobacco control forces and sustain the public attention garnered by NSTEP publicity events and media efforts.

RWJF viewed NSTEP as a collaborative effort with Major League Baseball to reach three distinct audiences:

- Preadolescent children (ages 8–13). For this audience, the NSTEP message would focus on discouraging first use of spit tobacco.
- Late-adolescent male athletes (ages 14–19) and high-risk female athletes. The message to this group would emphasize cessation as well as prevention.

- Adults able to influence young people's use of spit tobacco—parents, teachers, coaches, athletes and dental professionals. For the adult audience, NSTEP would suggest strategies for curbing promotion, access to and use of spit tobacco.

PROJECT IMPLEMENTATION

NSTEP Activities under RWJF's Initial Funding

Public Service Announcements

Staff of Romano & Associates and Oral Health America working on NSTEP in 1996 produced, distributed and secured broadcast time for TV and radio PSAs—including national spots aired on prime-time telecasts of the All-Star Game, the American and National League playoffs, and the World Series.

The communications effort also encouraged print and broadcast news stories on spit tobacco as a public health problem. In September, for example, *Reader's Digest* ran an article—"My War with a Smoke-Free Killer"—chronicling Tuttle's battle with oral cancer.

One PSA produced by the Romano firm featured Phillies outfielder Lenny Dykstra, a player known for his gritty approach to the game—and a spit tobacco user. The spot, which aired nationally on NBC's All-Star Game telecast, said Dykstra was trying to quit but had not yet been "tough enough to beat spit tobacco." Other major leaguers who agreed to do TV spots included Mike Piazza, Tino Martinez, Alex Rodriguez and Paul Molitor.

Team-specific PSAs aired on local broadcasts of games of a number of teams, including the six targeted teams. Jeff Bagwell, the Houston Astros' 1994 Most Valued Player, appeared in a full-page PSA in the official written programs for the league championships and World Series.

The ad carried a picture of Bagwell and this quote: "Some people think chewing tobacco or dipping snuff is part of baseball. It's not. It's a terrible and sometimes deadly addiction. I know. I stopped."

Help also came from outside baseball. At the request of Garagiola and Neil Romano, cartoonist Charles Schulz animated a PSA featuring Charlie Brown, Snoopy and Schroeder and gave NSTEP the right to use the Peanuts characters in promotional materials free of charge. Schulz also worked the spit tobacco issue into his Peanuts cartoon strip that was carried by hundreds of newspapers the Sunday before the All-Star Game.

Stadium Events

NSTEP put on a special stadium event in conjunction with a home game played by each of the six targeted teams. The purpose was to generate media coverage of—and fan interest in—the spit tobacco issue. The events involved players and officials of the team and representatives of local tobacco-control and oral health groups, usually with some kind of on-field ceremony.

The Detroit event featured an appearance by Tuttle, who had played for the Tigers. In Atlanta, Aaron, a former member of the team, spoke about his affiliation with NSTEP. At several events, the winner of a statewide NSTEP anti-spit tobacco poster contest for elementary and middle school children received recognition.

In conjunction with the in-stadium events, Garagiola held a pregame press conference with baseball notables and gave interviews to the local media. The NSTEP team produced a fact sheet on spit tobacco use in that specific state and at the ballpark distributed thousands of anti-spit tobacco posters and brochures to fans. One popular poster carried pictures of more than two dozen players with the words: "We Agree! Chew, Dip or Snuff Aren't Part of Our Game. Don't Make Spit Tobacco Part of Yours!"

Regional Coordinators

From a variety of backgrounds, including state tobacco-control programs and dental school faculties, Oral Health America hired six part-time regional coordinators—one for each of the targeted teams.

The coordinators helped organize the in-stadium events and worked with tobacco-control groups, youth organizations and the oral health community to build local coalitions in support of anti-spit tobacco efforts. For example, coordinators worked with local dental associations to organize continuing education programs on tobacco cessation and prevention and collaborated with Little League, 4-H and Boy Scout groups to disseminate entry forms for the poster contests.

They also secured a proclamation from the governor, mayor or other official declaring a spit tobacco-free day for that state or area.

Other Funding

Other funding included the following:

- The Centers for Disease Control and Prevention (CDC) and the National Cancer Institute supported NSTEP activities, including providing funding for PSAs (a total of $75,000 in 1995–96).
- The National Institute of Dental Research gave $25,000 to support an NSTEP booth used at the in-stadium events, the All-Star Game, FanFest (a multi-day collection of

baseball attractions held in connection with the All-Star Game) and other sports events.

- Major League Baseball provided $9 to 10 million in NSTEP support, the majority in in-kind contributions for free air time to promote anti-spit tobacco messages on game broadcasts, the waiver of the customary fee on player appearances, donated print space in game programs, and assistance with in-stadium promotional events and advertising. Counting the additional help that NSTEP got from minor league teams, including free in-stadium promotion, Romano estimates professional baseball as a whole donated $15 million to the NSTEP cause.

Additional Short-Term Funding from RWJF

RWJF was pleased with NSTEP's accomplishments. Oral Health America reported that the campaign in 1996 leveraged in-kind PSA broadcast time worth an estimated $30 million and generated more than 1,600 news stories, clips and features. Joe Garagiola donated his time. In addition, NSTEP activities in the six target communities appeared to have raised awareness, based on growth of community involvement in efforts to curb spit tobacco.

There was also an indication of progress in sensitizing baseball and the broadcast industry to the spit tobacco problem. Rhys B. Jones, a dentist long active in tobacco-control efforts, had been counting the time of televised spit tobacco use in World Series since 1986.

In the 1996 World Series, he found the lowest number of minutes since he began monitoring it. Although the 1996 fourth game was the longest in World Series history up to that point—four hours and 17 minutes—Jones counted only 2.3 minutes of perceptible spit tobacco use—down from 23.9 minutes in 1986 and from 8.6 in 1995. For additional information about Jones's annual World Series study, see the Sidebar on Rhys Jones.

Given those results, in January 1997, RWJF awarded Oral Health America a four-month grant of $146,182 (ID# 029682) to lay the groundwork for NSTEP's continuation. RWJF program staff anticipated that this bridge grant would be followed soon after by a large, multi-year award. In addition to maintaining the six coordinators, the money helped pay for an expanded 1997 spring training tour.

Spring Training Tour

For spring training in 1997, Garagiola and the Tuttles again visited team camps to make players—for both major league teams and their minor league affiliates—aware of the dangers of spit tobacco. This time, however, they were accompanied by one of several tobacco-cessation experts who agreed to help out. Following Garagiola's presentation to the full team, the expert on hand offered to provide private cessation counseling to

individual players. The Garagiola tour visited 15 teams in the two traditional spring training locations—seven teams in Arizona and eight in Florida.

The participating experts—some of whom went to Arizona, some to Florida—included:

- John C. Greene, DMD, MPH, professor and dean emeritus at the University of California San Francisco School of Dentistry and a former deputy surgeon general of the United States.
- Margaret Walsh, EdD, MS, professor at the University of California San Francisco School of Dentistry.
- Dorothy Hatsukami, PhD, professor of psychiatry at the University of Minnesota.
- Herbert H. Severson, PhD, research scientist at the Oregon Research Institute and its affiliate, Oregon Pacific Research Institute, Eugene, Ore. (Severson played an additional NSTEP-related role. See An Added Component: Player Surveys.)

In addition, players for two teams (San Francisco Giants and Anaheim Angels) received oral exams to identify potentially precancerous mouth lesions (called leukoplakia) associated with spit tobacco use. Oral Health America reported that leukoplakia were found in 50 of 94 players (53%) who were spit tobacco users. Moderate to heavy users received nicotine patches.

More PSAs

In February 1997 RWJF awarded Oral Health America a second short-term grant. This one (ID# 031418) was for $246,000 to fund the Romano firm's production of team-specific radio and TV PSAs for the 1997 season and a national TV spot that Major League Baseball committed to run on network TV at the beginning of the 1997 season.

At their annual winter meeting in January 1997, the team owners had unexpectedly agreed to use team-specific TV and radio PSAs in the upcoming season, and immediate funding was necessary to develop the materials by opening day. The team-specific spots, which the clubs received April 1, could be shown on stadium scoreboards during games as well as broadcast on TV. The national PSA premiered April 21 on Fox Sports Net and April 23 on ESPN.

RWJF's First Multi-Year Grant

In April 1997 the RWJF Board of Trustees approved a $3.5-million grant (ID# 031540) to Oral Health America to support NSTEP through 1999. Later, RWJF extended the grant period through 2002. The purpose of the new funding, the first of two multi-year grants, was to permit NSTEP to expand its reach still further—to bring the "program to scale," RWJF staff told the Trustees. RWJF expected NSTEP to engage new partners, including minor league teams, Little League baseball and softball and the American Baseball

Coaches Association, and to more fully integrate the campaign's anti-spit tobacco efforts into other tobacco-control programs.

The general outline of the NSTEP campaign was unchanged. RWJF funds would support production of PSAs and educational materials plus coordination and implementation of community-based and in-stadium educational and outreach events.

Reflecting NSTEP's widened scope, however, the plan was to produce PSAs and conduct in-stadium events for all of the major league teams and many of their minor league affiliates. Also, through NSTEP, Oral Health America planned to encourage local dental health professionals to include spit-tobacco prevention and cessation materials and advice in their practices.

Garagiola continued in the unpaid position of national chair, and responsibility for overall direction of the program remained with Robert Klaus, president of Oral Health America since 1988. However, the grant included funding for an NSTEP national coordinator to manage the community coordinators and the program's outreach activities and to develop a centralized NSTEP technical assistance resource center and website.

Over the life of this and the subsequent RWJF grants, four individuals had the job of national coordinator, later called national director. The longest serving—1999–2003—was Paul M. Turner Jr., former deputy director of the CDC Division of Oral Health. Turner previously headed Georgia's state spit-tobacco education program and was NSTEP's original community coordinator for the Atlanta team. After taking the national position, he continued to live and work in Georgia. A number of outside advisers and consultants—including the cessation experts on the spring training tour—provided direction and technical assistance.

Among program activities during this initial multi-year grant, Oral Health America reported that NSTEP staff and representatives:

- Developed and disseminated anti-spit tobacco kits containing print materials and a videotape to members of the America Baseball Coaches Association and to all coaches of Little League teams. The CDC provided resources to help disseminate the kits.
- Provided all minor league teams with kits that included a copy of the official ban on players' use of spit tobacco and a video entitled *Tragic Choice: The Bob Leslie Story.* Leslie was a high school baseball coach in California who used spit tobacco, got oral cancer and died at an early age in June 1998.
- Conducted in-stadium events for all major league teams and most minor league teams. Volunteers from the local dental community distributed educational materials to fans at the gate and from an NSTEP exhibit. The first in-stadium event of 1998 was

at the Minneapolis Twins stadium on May 19, which was declared Bill Tuttle Day in the state. Tuttle, who was present, died two months later.

- Made presentations on spit tobacco and offered counseling and oral exams to all major league clubs during 1998 and 1999 spring training. In 1998 alone, Greene examined 141 players and found 83 with some form of oral lesions, 15 of whom were recommended for a biopsy.
- Discussed the spit tobacco problem with broadcasters and instructed team trainers in how to assist players interested in quitting spit tobacco use.
- Set up an NSTEP speakers bureau that placed speakers for approximately two dozen appearances. In addition to Garagiola, Gloria Tuttle was active as an NSTEP spokesperson. So was former National League umpire Doug Harvey, a long-time spit tobacco user who was battling oral cancer. Garagiola's appearances included testimony before the Senate Commerce Committee in March 1998 to advocate inclusion of spit tobacco in national tobacco-regulation legislation. (The legislation was not enacted.)
- Developed customized team PSAs with the team logo for use on TV and in-stadium screens and a national TV PSA featuring country-music star Garth Brooks, which Major League Baseball agreed to run on prime-time game telecasts in 1999. RWJF provided a $50,000 contract directly to the Romano firm (ID# 036730) to produce and distribute the Garth Brooks PSA because all communications money in the NSTEP grant had been expended when Brooks came available. The program also developed two national radio PSAs specifically for minor league baseball audiences.
- Produced exhibits on tobacco cessation for national, regional and local dental meetings. Also, several professional groups, including the American Public Health Association and American Association of Public Health Dentistry, included NSTEP-related presentations at their meetings.
- Continued to employ part-time community coordinators in Colorado, Georgia, Michigan, Maryland, Texas and Washington to build outreach networks and organize in-stadium events, including events for minor league teams.
- Launched the NSTEP website in early 2000 providing information on NSTEP, the dangers of spit tobacco, and prevention and cessation resources.

Media Attention

Throughout the grant period, Garagiola, other program spokespersons and various Major League Baseball personalities helped generate media attention for NSTEP and the spit tobacco problem. In one three-month period alone, more than 350 articles on spit tobacco appeared in publications. Highlights of NSTEP's media efforts included:

- A segment on the TV news show *Dateline* NBC December 12, 1997, about the growing use of spit tobacco by teenagers. The program included interviews with Garagiola and Dykstra.
- A cover story in the April 8–14, 1998, issue of *USA Today Baseball Weekly* on NSTEP's efforts.
- An *HBO Sports* segment on NSTEP that ran five times in May 1998.
- A story in the June 1, 1998, issue of *People Magazine* on the discovery by Greene of a lesion in the mouth of Phillies' star pitcher Curt Schilling (later with the Boston Red Sox).

The Tuttle Award

Complementing NSTEP's efforts, in 1998, Oral Health America established the Bill Tuttle Award with a $5,000 cash gift to honor leaders in the fight against spit tobacco. RWJF issued a grant of $50,000 (ID# 034249) to support the first five years of the award with the expectation that Oral Health America would fund the award thereafter.

To oversee the nomination and selection process, Oral Health America organized a group of health professional and tobacco-cessation experts called the Partnership for Tobacco Cessation. The first-year winner was Tuttle himself and his wife, Gloria. They received the award at the May 19, 1998, in-stadium event in Minneapolis just before he died. For the list of subsequent winners, see Appendix 1. Initially billed as an annual award, the selection process did not follow a strict calendar; there was no winner in 2000 and two awards were given in 2001.

Some grant money remained unspent after five years, and Oral Health America asked to use the remaining balance to cover another two years of awards, extending the grant to March 31, 2005. Oral Health America did not continue the award after the RWJF funding ended, making the 2004 selection of Garagiola the last.

An Added Component: Player Surveys

From 1998 through 2003, researchers led by Severson at the Oregon Research Institute administered an annual survey of professional baseball players to assess their use of spit tobacco products and their interest in quitting in order to help gauge and guide NSTEP's efforts.

Severson also surveyed trainers to measure their attitudes, knowledge and experience regarding spit tobacco cessation. RWJF supported the surveys with a series of seven grants (ID#s 033450, 036384, 038667, 039262, 041739, 044095 and 048100).

Technically, the survey project was independent of NSTEP, but in practice it was linked. Severson depended on NSTEP and the Professional Baseball Trainers Society, whose

executive committee included Neil Romano, to help secure the trainers' cooperation in distributing the surveys to players. Also, Severson's RWJF grants helped support his work as a cessation counselor in NSTEP's spring training tour. The money also funded a series of workshops on cessation interventions that he and other experts ran for team trainers and employee assistance program (EAP) staff.

The RWJF program staff believed the survey data would help assess the impact of NSTEP activities and lay the foundation for developing an ongoing system of cessation counseling in professional baseball. Funding of the surveys ended in 2003, the last year for full RWJF funding of NSTEP.

The number of survey respondents ranged annually from 1,356 to 2,446 minor league players and 136 to 454 major league players. For details of the survey methodology, see Appendix 2.

A New NSTEP Planning Process

In 1999, RWJF commissioned an outside evaluation of NSTEP and its impact. In July that year the evaluators—a team from the Wake Forest University School of Medicine—submitted a report identifying the program's strengths but also recommending changes in NSTEP's administration, intervention strategy and other areas. See Evaluation for details.

To determine the future direction of NSTEP, and in part based on evaluation findings, in April 2000, RWJF initiated a strategic planning process funded by two grants:

- A $735,134 grant (ID# 038131) to Oral Health America to develop a plan that would build on NSTEP's accomplishments and identify new program objectives, methods, audiences, partners and funders. In a written explanation for its Trustees, RWJF program staff noted that while spit tobacco use among high school students had gone down in the 1990s, the decline was modest—3 percent in the years 1992–99. The goal of this planning grant was "to find ways to move the program into the next phase of spit tobacco-prevention and cessation efforts," the staff wrote, and to develop strategies for sustaining NSTEP funding after RWJF support ended. The planning process was to last nine months, although the grant was eventually extended through 2002 to cover additional non-planning NSTEP activities.
- A $67,345 grant (ID# 038925) to Judith Schector, an independent consultant in Portland, Ore., to direct and oversee the NSTEP planning effort. RWJF staff believed that putting an outside consultant in charge of the planning process would help assure an objective, comprehensive result. Schector specializes in organization and leadership development.

With this new funding, Oral Health America formed a planning team to review NSTEP's past efforts and develop a strategic plan for the future. The members included personnel

from Oral Health America and Romano & Associates and representatives of outside groups and agencies. See Appendix 3 for the list of external members.

Schector and the planning team interviewed the community coordinators and other key NSTEP informants, gathered information from a variety of consultants and held separate meetings—termed growth summits—with representatives of four constituencies to explore how NSTEP could best meet their needs:

- Professional, college and youth baseball.
- Dental and other oral health professionals.
- Tobacco-control activists.
- Media experts.

Facilitated by Schector, the team assessed the strengths, weaknesses and organizational capacity of NSTEP and analyzed the gap between the current program and what the planners wanted it to be in the future. The process produced:

- An NSTEP mission statement, which reads: "to prevent people, especially young people, from starting to use spit tobacco, and to help all users quit."
- An NSTEP organizational chart that included a new committee to coordinate day-to-day operational issues. The committee included staff of Oral Health America and Romano & Associates and resulted in improved communications between the two, Oral Health America later reported to RWJF. The new organizational setup also included an advisory council on NSTEP policy and funding issues chaired by Garagiola with representatives of baseball, public health, and the medical and dental professions.
- A plan—in diagram form—identifying three strategic goals for NSTEP and a multi-level series of subgoals and action steps. The plan put increased emphasis on building a spit tobacco-control infrastructure at the community level and involving organized baseball below the major leagues. The three strategic goals called for NSTEP to:
    - Be positioned within communities as a leader, resource and partner to affect spit tobacco education and cessation programs and policies.
    - Have a public awareness campaign that informs, affects policy and supports prevention and cessation efforts and lends tactical support to NSTEP community-based activities.
    - Be a catalyst for a research agenda that yields science-based surveillance, education, cessation and policy data.

For a list of the first level of subgoals and action steps, see Appendix 4.

An extension of the 1997 multi-year grant permitted some NSTEP educational efforts to continue during the planning process, including events at several minor league ball parks and dissemination of a resource manual for local organizers of anti-spit tobacco initiatives.

A Shift in Focus

Reflecting the strategic plan, Oral Health America in November 2000 applied to RWJF for funding to support NSTEP for three years as it expanded its work with minor league and youth league baseball and developed additional community-based spit tobacco control initiatives and coalitions.

The proposal called for NSTEP to concentrate on eight regions of the country that had high spit tobacco use both among teens and minor league teams. Each of the eight regions was to have a coordinator who would work with community groups to integrate spit-tobacco control initiatives into local tobacco-control and oral health efforts, using minor league team events and players as a drawing card.

The goal was for the coordinators to generate local and state funding to fully cover the expense of their community programs—including their own salaries—by the end of the three-year grant period. The eight targeted regions, as defined in a revised, January 2001 proposal, were:

- Georgia/Alabama
- West Virginia/Kentucky
- Tennessee/Arkansas
- Iowa/Nebraska
- Colorado/Kansas
- Idaho/Montana
- North Carolina/South Carolina
- Texas

From its beginning in 1994, NSTEP had based its educational effort on the status of athletes as role models for youth. That approach would continue, but at the community level using players for the local minor league team to deliver the anti-spit tobacco message. The community coordinators were to work closely with Romano & Associates to develop regionally specific educational materials.

Although the proposal shifted NSTEP's main focus to grassroots organizing, it did not altogether eliminate the national media effort. The proposal included funding for two TV, one radio and one print PSA featuring major league celebrities for use during the 2001 major league playoffs.

The Final Multi-Year Grant

In February 2001, RWJF awarded Oral Health America a grant of $4,785,803 (ID# 040793) to support the refocused NSTEP program for three years—through January 2004

(since extended to the end of December 2005). The following were the principal NSTEP activities reported by Oral Health America during that period:

- In the first year of the grant, NSTEP filled 10 part-time community coordinator positions, using carryover from earlier RWJF funding to hire the two additional coordinators to cover Ohio/Michigan and California. Seven of the 10 were dental professionals, four based at dental schools.

  The number of coordinators later fell to six, and in the third year the NSTEP leadership decided to cut back to only three in order to maximize the remaining grant funds. In addition to funding issues, staff turnover was a factor in the fluctuating number of coordinators. Changes in their full-time jobs caused several coordinators to leave NSTEP, according to Sue Dodd, who succeeded Turner as NSTEP national director. The coordinators varied in skill and experience, and as a result, the success of NSTEP's effort to build local spit tobacco-control coalitions around baseball varied from region to region, according to both Oral Health America and RWJF program staff.

- NSTEP—through the work of the coordinators and central management—conducted events at minor league stadiums and helped stimulate tobacco-control groups and the oral health community to put on additional stadium events of their own. The Crown Council, an alliance of more than 1,500 dentists in the United States and Canada, was especially active.

  Counting events put on by both NSTEP and its allies, the number totaled 80 in 2001, 32 in 2002 and 29 in 2003. Content differed from event to event, but the key ingredients were a pre-game activity on the field, NSTEP exhibits, distribution of NSTEP literature and promotional items, public address announcements and the distribution of free game tickets to members of youth baseball teams and recreation programs.

  In concert with Romano & Associates, the NSTEP national leadership selected certain stadium events for special promotional efforts designed to attract media attention. TV coverage of the 2001 events reached more than a million viewers in minor league markets, according to Oral Health America. Garagiola, who remained national chairperson, attended some of the events—three, for example, in 2001.

- In partnership with the Crown Council, NSTEP helped organize annual oral screenings for minor league players during spring training. The Crown Council funded the screenings and provided volunteer dentists to conduct them. In 2001, dentists screened 2,128 players, 259 of whom needed brush biopsies—a quick, simple test to identify lesions warranting further evaluation. Of the 259 brush biopsies, 21 were positive and another 22 required retesting. Crown Council dentists were also active at NSTEP stadium events.

- NSTEP produced new anti-spit-tobacco educational materials, including a CD-ROM and accompanying brochure designed for use by dental hygienists in educating

patients. Other materials featured the story and photographs of Gruen Von Behrens, a teenage user of spit tobacco who contracted oral cancer and underwent a series of disfiguring surgeries.

- In collaboration with Little League, NSTEP initiated a slogan contest for Little League players on the dangers of spit tobacco use. Youth judges evaluated the slogan entries, and the winner received a plaque and a $500 check during the annual Little League championship in Williamsport, Pa. The winner's home league also received a monetary award. The contest continues annually. In 2004, Kai Calder, a 10-year-old Little Leaguer from Delray Beach, Fla., won with "Spit Tobacco—an Automatic Strikeout!"
- The Romano firm produced a series of NSTEP TV, radio and print PSAs featuring Bagwell, the Astros' All-Star first baseman. Major League Baseball used the TV version during the National League's 2001 division playoffs and the radio spots throughout that year's post-season play, including the World Series. Also, the Romano firm coordinated the use of broadcast and in-stadium PSAs by minor league teams—about 75 teams in 2001—and distributed the Bagwell print PSA for use in minor league team programs as well as commercial publications.
- NSTEP bought a national ad package on the Fox Sports telecast of major league games in 2001. It was NSTEP's first and only paid media advertising. The ads, which ran in conjunction with the network's use of a special visual aid that tracked pitches, included the NSTEP logo, website address and message "Smokeless Does Not Mean Harmless." In addition to running in key markets across the country, the ads (including some for which NSTEP did not have to pay), generated some 200 minutes of live on-air verbal mentions by baseball broadcasters and others about the danger of spit tobacco. This impromptu banter was more important than the ads themselves, according to Neil Romano. He says the package cost between $700,000 and $800,000 but generated an estimated $3 million worth of air time, counting the informal on-air chats.
- NSTEP organized some awareness events and activities in connection with other sports, including professional hockey and college football and basketball. To broaden NSTEP's local base, some coordinators reached beyond tobacco-control and oral health groups and built collaborative relationships with medical centers, physician groups, 4-H clubs and cancer-control programs. In Georgia, for example, NSTEP partnered with the Medical Association of Georgia Alliance to produce an educational video featuring Garagiola and Georgia State University baseball coach Mike Hurst, a spit tobacco user who battled oral cancer.
- NSTEP personnel posted exhibits and/or made presentations at a number of conferences on tobacco issues, including the 2003 World Conference on Tobacco OR Health in Helsinki, Finland.
- NSTEP staff made efforts to educate policy-makers on spit tobacco issues. The Georgia Spit Tobacco Education Program (GSTEP), which NSTEP helped organize

and fund, was part of a coalition that sought to make Georgia officials aware of the health impact of spit tobacco use. Subsequently, in 2003, the legislature enacted an excise tax on spit tobacco projects—the first ever in Georgia. In another example, Turner (in his capacity as national NSTEP director) wrote the Federal Trade Commission in 2001 urging the agency to maintain the requirement for tobacco companies to report annually on their marketing efforts and to expand the mandated data. In 2003, Garagiola (who was an unpaid spokesperson) joined Connecticut Attorney General Richard Blumenthal in opposing an effort by the U.S. Smokeless Tobacco Co. to advertise its products as less risky than cigarettes.

- NSTEP commissioned a survey of baseball fans to better understand the perceptions and usage of spit tobacco. Laura Knight-Lynn, PhD, a Chicago-based researcher with the Prism Community Institute, developed the survey and analyzed the results. In November 2003, she reported on data from 3,217 people surveyed across the country in 2001–2002. A key finding was that a significantly larger proportion of spit tobacco users misunderstood the NSTEP slogan—"Smokeless Does Not Mean Harmless"—than did non-users. Based on that finding, the report recommended an effort to inform the public how spit tobacco use can lead to negative health consequences as serious as those from smoking. Also, based on a finding that college-age males had the highest usage rate, the report recommended targeting NSTEP activities at that age group.

Winding Down RWJF Support - A Smaller NSTEP

RWJF viewed the second multi-year grant as an opportunity for NSTEP to become self-sustaining, providing funds in this grant for development of a strategic plan and a business development consultant to help them plan for financial sustainability. Orleans informed the Oral Health America leadership during the planning process leading up to the grant award that RWJF did not plan to provide additional funding.

In January 2004, when the three-year grant was scheduled to end, about $530,000 of the $4.8-million award remained unspent. Oral Health America asked and received permission to use this balance for an additional 24 months to continue NSTEP and work toward the program's sustainability. RWJF eventually extended the grant through December 2005.

To make the money go as far as possible, Oral Health America eliminated the three remaining community coordinator positions and reduced the level of NSTEP operations and communications activities. In this reduced state, NSTEP staff consisted of only Dodd and a part-time assistant. Dodd, a dental hygienist by training, had other duties at Oral Health America in addition NSTEP.

The Romano firm (by then renamed R&A Communications) ceased doing NSTEP work, and the coordinating committee and advisory council went out of existence. Garagiola

remained national chairperson but, nearing his 80th birthday, was making fewer public appearances.

As described by Turner, the former national coordinator and now head of North Carolina's spit tobacco education program, NSTEP during the grant extension period became primarily an information clearinghouse that other groups like his contacted for materials.

Nevertheless, the Oral Health America board voted to maintain NSTEP as one of the organization's "signature programs," and development of new funding sources became a major priority of the program.

Sunstar Butler, a manufacturer of dental products, and the Academy of Sports Medicine agreed to be NSTEP sponsors and provide funding. Also, the sale of NSTEP educational posters, videos and brochures provided income; purchasers included state tobacco-control programs, dental offices, schools and sport leagues. In March 2005, Oral Health America projected total NSTEP-related income from all sources at $80,000 to $85,000 a year.

During the grant extension, NSTEP relied largely on the Crown Council and other supporters in the dental and tobacco-control communities to put on their own educational events using NSTEP materials. Although Crown Council dentists discontinued the spring training oral screenings, they provided services to a number of teams at other times of the year, according to Neil Romano.

Several former community coordinators—either as volunteers or with payment from other sources—continued coalition building in their areas in collaboration with NSTEP. NSTEP efforts remained active in Georgia, North Carolina, Michigan, South Carolina and West Virginia, Oral Health America reported to RWJF in March 2005. The NSTEP website, which had grown out of date, underwent redesign in 2005.

In NSTEP's new phase, the annual Little League Baseball World Series in Williamsport, Pa., was a key focus of the program. In addition to holding an on-field ceremony recognizing the winner of the slogan contest, Oral Health America provided NSTEP stadium signage and staffed a booth at which the public could pick up free NSTEP materials and Sunstar Butler toothbrushes.

Among other NSTEP activities, Dodd worked with the Minnesota Twins on a spit tobacco-control promotion.

Educating Baseball Athletic Trainers

In conjunction with NSTEP, RWJF gave a small $17,900 transition grant (ID# 047853) to the Professional Baseball Athletic Trainers Society in 2004 to support production of a CD-ROM for athletic trainers on effective spit tobacco-prevention and cessation policies.

RWJF viewed the project as a means of providing NSTEP-related training to a wider audience and as a way to help sustain and magnify NSTEP's educational impact. Support for the project also came from the trainers' society, Major League Baseball and other organizations.

The trainers' society distributed the completed CD-ROM free of charge to all major and minor league trainers in professional baseball and offered copies for sale at or near cost to members of the National Athletic Trainers' Association, according to Jamie Reed, Professional Baseball Athletic Trainers Society president and head trainer for the Texas Rangers. A lack of funding stymied plans for a wider distribution of free copies.

Attracting New Funding

To help attract new funding sources, Oral Health America used—with RWJF's concurrence—some of the remaining grant money to develop a promotional DVD entitled "NSTEP: Ten Years of Progress." The DVD, which was completed in 2004, chronicles NSTEP activities and accomplishments since the program's 1994 kickoff.

Also to help spread word about NSTEP's efforts, the RWJF Television Health Series produced a video news story on the dangers of spit tobacco for local TV newscasts across the nation to air in July 2005 free of charge. In conjunction, Garagiola scheduled interviews with about 15 local and national television outlets and 16 radio outlets on the health risks associated with spit tobacco use. Von Behrens and Harvey also participated in some of the interviews.

RESULTS

The following were the key results of NSTEP and related RWJF-supported projects:

- **Greater awareness among professional baseball players—especially minor league players—of the harm posed by the use of spit tobacco.**
  - NSTEP succeeded in disassociating baseball from spit tobacco and removing players as an advertising tool for the industry, says Neil Romano. The 1999 evaluation of NSTEP echoed that judgment, finding that NSTEP had "destabilized the spit tobacco-baseball relationship." The evaluators noted adoption of team policies banning spit tobacco and other tobacco products in clubhouses. (See Evaluation Findings.) Although the minor league ban on players' use predated NSTEP, the program's activities helped spur more aggressive enforcement, according to Romano.
  - "I think the NSTEP program had significant impact on spit tobacco use by professional athletes," says Jeff Cooper, head trainer for the Philadelphia Phillies and a past president of the athletic trainers' society who worked closely with the program. Indeed, Cooper says he believes that since NSTEP reduced its level of

activities, players' use has increased, a reflection of the constant turnover among the players. "I don't know the numbers, but going to work every day I see use is up."

- The annual player survey indicated decreased spit tobacco use by minor league players. (See Findings for details.) Severson, the survey director, says he believes the NSTEP spring training tours were a factor along with the minor league ban on use.
- NSTEP helped sensitize baseball and the television industry to the impact that shots of on-field tobacco use can have on young fans, Orleans says. One example is that in 1997 the players' union asked members not to chew or spit during the All-Star game. However, the decline in televised spit tobacco use during the World Series, as documented by Jones, also suggested decreased player use. Jones identifies NSTEP as a definite factor, specifically the personal intervention with players and cessation counseling that resulted from the program.
- NSTEP-related education heightened baseball trainers' knowledge of spit tobacco-prevention and cessation strategies and resources available to players, according to Orleans at RWJF. Cooper agrees, saying, "It gave trainers the tools that they didn't have before to help the athlete—other than just saying, 'You shouldn't do that.'"

- **Implementation of the first comprehensive national effort to educate the American public about the dangers of spit tobacco.**
  - NSTEP's array of PSAs, media stories and educational materials helped focus attention on the harm caused by use of chewing tobacco and snuff. According to Oral Health America, NSTEP garnered more than $175 million in prime-time television and radio exposure of the anti-spit tobacco message. Counting all media, including newspapers and magazines, Romano said NSTEP generated a documented $100 million in free promotion of its message but estimated the real value was $350 to $500 million.
  - Although there is no evidence of NSTEP's impact on the public's use of spit tobacco, NSTEP was the only major initiative and campaign addressing spit tobacco use in the 10 years from 1995 to 2005.
    - National statistics show use by young people declined over the period that NSTEP was in full operation.
    - The percentage of 12th graders reporting using spit tobacco in the previous 30 days dropped from 12.2 percent in 1995 to 6.7 percent in 2004 (a 45 percent decline), according to the annual Monitoring the Future survey funded by the National Institute on Drug Abuse.
    - RWJF did not fund research to try to determine to what extent, if any, NSTEP was responsible. A study of that kind would have been expensive, and teasing

out NSTEP's effect from that of other, broader tobacco-control efforts and policy changes (e.g., to decrease advertising directed at youth and youth purchase of all tobacco products, and to raise state and federal tobacco taxes) would have been extremely difficult, according to RWJF program staff.

- What can be said with some assurance is that NSTEP added to the public's overall awareness of the harm associated with all forms of tobacco use, says Marx of RWJF.

- **A stronger voice in the tobacco-control movement for steps to restrict the use of chewing tobacco and snuff.**
  - Although not primarily focused on policy, NSTEP helped educate policy-makers on the dangers of spit tobacco—a product generally overshadowed by concern for the far more prevalent use of cigarettes. As a prime example, NSTEP and RWJF staff point to the effort of the Georgia STEP program, GSTEP, to make state officials aware of the impact of spit tobacco use on young men's health.
  - Garagiola worked to raise the profile of the spit tobacco problem at the federal level.
  - NSTEP worked with Major League Baseball and the Professional Baseball Athletic Trainers Society to ban or eliminate all tobacco advertising from major and minor league stadium signage and game and team program materials. NSTEP also worked to expand Major League Baseball's Employee Assistance Program (EAP) to include insurance coverage for treatment for tobacco use and addiction.
  - The Crown Council, Little League and other groups cultivated by NSTEP as partners maintain ongoing efforts to encourage spit tobacco prevention and cessation, according to Oral Health America.

Findings

The following were among the results of the annual player survey as reported by Severson and members of his research team at the Oregon Pacific Research Institute in a February 2005 article in the journal Tobacco Control:

- **The spit tobacco usage rate among minor league players showed a significant overall change from 31.7 percent use in 1998 to 24.8 percent in 2003.** The decline was driven primarily by a large drop from 1998 to 1999 (from 31.7 percent to 26.3 percent), with the rates remaining about 25–26 percent from 1999 through 2003.
- **Usage among major league players showed no overall change in prevalence during the survey period.** The usage rate was 35.9 percent in 1998 and 36.0 percent in 2003. Although the rate declined to 32.6 in 2000 and 30.2 in 2002 before rising in 2003, these declines were not statistically significant. In an interview, Severson said

he believes NSTEP had greater impact on minor league players in part because they are younger, newer to the game and less addicted.

- **The prevalence of spit tobacco use among white players was approximately double that reported by either Latino or African-American players.**
- **Players using spit tobacco showed substantial interest in quitting,** with 40–50 percent reporting an effort to quit at least once in the previous year. Only 11–12 percent reported no interest in quitting.
- **Health concerns, especially about the dangers of cancer, were the most frequently given reason for wanting to quit.** More than a third also noted concern about being a negative role model.
- **More than 30 percent of the regular spit tobacco users reported exposure to an NSTEP presentation or oral exam.** However, users reported that their personal dentists seldom pointed out lesions or counseled them on cessation.
- **Fewer than half of the players—in the major and minor leagues—who used spit tobacco products reported that they quit or reduced spit tobacco consumption in the off season.**
- **While the prevalence of spit tobacco use among professional baseball players was higher than among the general population, the players' use of cigarettes was lower**—10.3 percent in the major leagues and 4.2 percent in the minors compared to 32.4 percent nationwide for males in the same general age range. Baseball players may perceive spit tobacco as a more acceptable form of tobacco than cigarettes, the article reported.

The *Tobacco Control* article suggested that the reduction in use by minor league players was at least partially the result of stronger policy and environmental influences in the minor leagues—including the 1992 ban on use—compared to the major leagues. While acknowledging the steps taken by NSTEP and the Professional Baseball Athletic Trainers Society to educate players and provide cessation assistance, the article suggested that the survey results showed the need for:

- Required regular oral exams of players and the training of team-affiliated dentists.
- Year-round spit tobacco education and treatment efforts.
- Extension of the spit tobacco use ban to the major leagues despite resistance by the players' union.

The results of the trainers' survey were not included in the journal article. However, Severson reported to RWJF in 2002 that the prevalence of spit tobacco use among trainers had gone up—from 6.7 percent in 1998 to 17.6 percent in 2002.

In an interview, Severson said the increase surprised him, especially since trainers are more apt than players to know the health risks of spit tobacco use. However, he noted that the number of surveyed trainers was relatively small (from 53 to 108 a year), allowing a change in behavior by a few to have a large impact on the overall sample. No formal systematic surveys were conducted, and there was no follow-up beyond 2002.

Limitations

The *Tobacco Control* article stated that due to the survey's low and variable response rate and the possibility of self-selection and self-report biases, the results may over- or underestimate actual spit tobacco prevalence among the player respondents. The researchers were unable to evaluate the "representativeness" of the survey sample or independently verify the spit tobacco use reported. Also, because this was not a longitudinal study, a continual look at individual player behavior from year to year was not possible.

EVALUATION

In anticipation of the end of the first multi-year grant, RWJF gave a $128,453 grant (ID# 035833) to the Wake Forest University School of Medicine to assess NSTEP's impact on professional baseball and NSTEP partner groups and to provide a sense of the return on the Foundation's investment in the program.

The six-person evaluation team consisted of faculty and outside consultants under the direction of David G. Altman, PhD, a Wake Forest professor who has since moved to the Center for Creative Leadership in Greensboro, N.C.

Methodology

The team conducted 76 interviews with individuals representing diverse constituencies related to baseball and spit tobacco prevention, cessation and policy. Included were CDC and National Cancer Institute staff members, representatives of professional baseball management, athletic trainers and NSTEP community coordinators.

The evaluators also analyzed NSTEP educational materials, reports and other documents and, with help from a board of media advisers, evaluated the NSTEP media campaign. (Of the $4.5 million in NSTEP direct costs funded by RWJF up to that point, about 63 percent went to support the media and related public awareness work of Romano & Associates, the team reported.)

EVALUATION FINDINGS

The evaluation team's July 7, 1999, report to RWJF (*An Assessment of the National Spit Tobacco Education Program*) identified NSTEP strengths, weaknesses and opportunities, and threats facing the program and made recommendations. Among these were the following:

Strengths

- **NSTEP contributed to raising the awareness of spit tobacco as a health problem so that it is now on the national agenda along with smoking.**
- **The involvement of Joe Garagiola as national spokesperson was a definite asset, facilitating much of what the program accomplished.**
- **NSTEP engaged baseball in spit tobacco prevention and cessation and—primarily through the efforts of Romano & Associates—it influenced several policy changes at high levels of Major League Baseball.** "There is strong consensus that NSTEP has destabilized the spit tobacco-baseball relationship," said the evaluation team. The report noted that NSTEP had provided cessation counseling and oral exams during spring training and said several unidentified interviewees stated that NSTEP had changed Major League Baseball management's attitude toward spit tobacco. It quoted one unidentified person as saying that for the first time spit and other tobacco products were not provided in the clubhouse.
- **NSTEP brought structure to spit tobacco-control efforts around the country and helped provide a focus for the movement.**

Weaknesses

- **There were several areas in which Oral Health America needed to strengthen its management and leadership.** These included insufficient resources for local community coordinators; and inadequate communication between Romano & Associates staff members and the community coordinators and consultants, and among coordinators.
- **NSTEP needed to develop a plan to fill Joe Garagiola's shoes as the national spokesperson.**
- **NSTEP's contact with allied organizations in the tobacco-control and health fields had been somewhat inconsistent, and its contact with individual major league teams had mixed results.**
- **There were questions about the effectiveness of media messages, pointing to the need for a more evidence-based communications strategy.**

- **Given the lack of a formal outcomes evaluation, it was not known if NSTEP had been effective in the prevention of spit tobacco use or in helping users stop using spit tobacco.**

Opportunities

- **Improve relationships with the tobacco control, dental and public health/medical communities.**
- **Expand into minor leagues and amateur baseball and assess expanding into other settings where spit tobacco is used.**
- **Add more visible policy advocacy to NSTEP strategy.**

Threats

- **NSTEP was dependent upon external funding and had no firm commitments to sustain activities beyond 1999.**
- **Major League Baseball teams were tolerant of NSTEP programming but dedicated limited additional resources or assistance to NSTEP beyond free broadcast time, encouragement and logistical support for spring training events, and expanding player EAP benefits to include tobacco addiction treatment coverage.**
- **Baseball is not universally committed to ending spit tobacco use.** Use continued to be high; a major league ban seemed unlikely; the minor league ban was inconsistently enforced, and the quality of cessation services easily accessible to players through EAPs was uneven.
- **Spit tobacco, as an issue, had not rallied public health organizers.**

Recommendations

- **Oral Health America should bolster its leadership capacity and improve its competency to allocate resources and manage budgets.**
- **There should be clarification of which organization—Oral Health America or Romano & Associates—was in charge of which parts of the program.**
- **If the community component of NSTEP were to remain a priority, more resources should be invested in it.**
- **NSTEP should give more attention to the major league player pipeline—from Little League through the minor leagues.**
- **NSTEP should continue to develop relationships with constituencies outside of baseball.**

- **NSTEP should develop a national referral system to link its audience to existing cessation services, including local providers and dentists.**
- **Relationships with organized dentistry at all levels must be improved, and ties to tobacco control, public health and medical groups expanded.**
- **An evaluation of NSTEP's impact on spit tobacco use should be funded.**

Response

Robert Klaus, president of Oral Health America, agreed with a number of the report's conclusions, including the need to strengthen Oral Health America's overall management capacity and to direct NSTEP efforts more fully at organized baseball below the major league level. However, he took exception to a number of points in the report. In a lengthy letter to Orleans at RWJF, he suggested the evaluators had focused too heavily on NSTEP processes and given too little attention to the program's impact, particularly on baseball.

He resolved "to move ahead." Neil Romano, too, took issue with portions of the report, including the assertion that the minor league ban was poorly enforced, but vowed to work to improve NSTEP materials and operations.

RWJF responded by funding an NSTEP strategic planning process facilitated by an outside consultant. (See A New NSTEP Planning Process.) But RWJF program staff did not recommend funding for a formal NSTEP outcome evaluation for reasons related to cost and feasibility.

LESSONS LEARNED

1. **A formal outcomes evaluation of NSTEP might have provided evidence helpful to NSTEP's sustainability.** The NSTEP initiative was launched as a media campaign and demonstration at a time of enormous and rapid progress in national tobacco-control policy and social norms against tobacco use. A formal outcomes evaluation would have been quite difficult and costly. The program assessment and surveys that RWJF funded provided helpful program direction, but could not (and were not designed to) conclusively document program impact. (Orleans, RWJF Program Officer)

2. **The partnership between Major League Baseball and NSTEP was critical to NSTEP's implementation and impact.** Major League Baseball facilitated and financed or provided in-kind support for anti-spit tobacco PSA airings, spring training events, access to Major League Baseball TV broadcasters and a host of policy changes (including tobacco addiction treatment services in its EAP program, eliminating all tobacco advertising from Major League Baseball stadiums and

game/team materials). (Romano, NSTEP contractor and Orleans, RWJF Program Officer)

3. **The Professional Baseball Athletic Trainers Society and its leaders, especially Jeff Cooper, were vital allies.** They assisted in NSTEP's efforts and in catalyzing Major League Baseball support and policy actions and enabling player and trainer surveys. (Orleans, RWJF Program Officer)

4. **Bolder Major League Baseball policy changes (e.g. banning use of on-field spit tobacco at the major league level and rigorously enforcing the minor league ban) would have had more dramatic, independent effects on player use and quit rates.** Such changes would have amplified the impact of the individual behavior change efforts provided by NSTEP and the Professional Baseball Athletic Trainers Society. (Severson, Oregon Pacific Research Institute and Orleans, RWJF Program Officer)

5. **A public awareness campaign will be most successful if it has a public spokesperson personally committed to the cause.** Joe Garagiola was passionately committed to NSTEP and as a result motivated the NSTEP staff and the program's communications contractor, Romano & Associates, to go faster and do more. The kind of aggressive leadership provided by Garagiola is what it takes to make a campaign effective. (Romano, NSTEP contractor and Orleans, RWJF Program Officer)

6. **Do not expect raising money in the corporate sector for spit tobacco prevention to be an easy sell.** Oral Health America found that some corporations were concerned about the business and political ramifications of supporting a tobacco-control initiative. What's more, spit tobacco itself is a decidedly unglamorous topic. As a result, securing corporate funding to fully underwrite NSTEP operations seems unlikely. However, Oral Health America had some success in attracting corporate aid for specific NSTEP activities. Sunstar Butler (an oral health care products company), for example, funded NSTEP's Little League-targeted educational efforts, and the Crown Council helped to finance minor league in-stadium events and conduct spring training player screenings. (Dodd, current NSTEP National Director)

7. **Visible use of spit tobacco in televised Major League Baseball games, including the World Series should continue to be monitored and reported as an ongoing spur to Major League Baseball policy action.** (Orleans, RWJF Program Officer)

8. **Smokeless tobacco-control efforts are going to continue to require special emphasis, particularly as the smokeless tobacco industry markets its products as reduced-harm products for smokers who have a hard time quitting or handling smoke-free environments.** NSTEP will continue to provide an example of what a focused initiative can accomplish. (Orleans, RWJF Program Officer)

AFTERWARD

Oral Health America's board voted to continue NSTEP before the extended grant period ended. Oral Health America planned to secure sufficient funding to maintain NSTEP as an integrated component of its overall effort to advocate improved oral health for Americans. Specifically, according to Dodd, the national director, NSTEP's ongoing activities included:

- Focusing educational efforts on Little League players, including conducting the annual slogan contest in connection with the Little League World Series.
- Selling videos, posters and pamphlets highlighting the dangers of spit tobacco.
- Providing educational materials and other support to tobacco-control organizations, dental health groups and tobacco control efforts in the sports world, including specifically minor league baseball and rodeos.
- Speaking at tobacco-related conferences and fielding public inquiries on the spit tobacco issue.
- Entering into contracts to provide consultation on spit-awareness campaigns. For example, NSTEP was assisting the Canadian province of British Columbia.
- Developing funding sources to sustain NSTEP.

RWJF expanded its work with professional sports teams beyond tobacco issues.

- In 1998, RWJF initiated the Sports Philanthropy Project to help sports teams enhance their philanthropic activities and build partnerships with community initiatives that promote health and other social benefits.
- RWJF continues to fund the Boston-based $8.8-million project through 2009 (ID#s 034260, 037486, 037939, 038221, 044565, 045229, 050912, 055483). It is now managed by Third Sector New England.

Major League Baseball

In November 2011 the baseball team owners and players association signed a labor agreement that included a significant, new provision to reduce the visibility of smokeless products. For the first time ever, the five-year pact prohibits big league ballplayers, managers and coaches from:

- Using chewing tobacco during televised interviews, autograph signings and team-sponsored events.
- Carrying any tobacco packaging in their uniforms while on the field.

Violators are subject to discipline, and a coalition of anti-tobacco groups called on fans to help enforce compliance by reporting observed infractions. The Knock Tobacco Out of

the Park Coalition, which included Oral Health America and RWJF, sponsored an online form for documenting tobacco use by players.

While short of a complete ban, the new provision nevertheless means that the 2012 baseball season "will be the first ever to be played with restrictions on smokeless tobacco use," a coalition spokesperson said.

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APPENDIX 1

Winners of the Tuttle Award

- **1998: Bill and Gloria Tuttle.** A former Major League Baseball player who used spit tobacco, Bill Tuttle contracted oral cancer and became a key NSTEP spokesman, as did his wife. She continued to make appearances on NSTEP's behalf after her husband's death in 1998.
- **1999: Amy Leslie.** Her husband, Bob Leslie, was a high school baseball coach who used spit tobacco, contracted oral cancer and became an NSTEP spokesman. He died in 1998.
- **2000: No winner.**
- **2001: Robert Mecklenburg, DDS, MPH, and Doug Harvey.** Mecklenburg is a former chief dental officer of the U.S. Public Health Service and an authority on spit tobacco and its effects on oral health. He provided scientific advice to NSTEP. Harvey was a major league umpire for 31 years with a career-long spit-tobacco habit. After being diagnosed with oral cancer in 1997, he became an active speaker on the dangers of spit tobacco.
- **2002: John C. Greene, DMD, MPH.** A professor and dean emeritus at the University of California, San Francisco, School of Dentistry, Greene is an expert on the health effects of spit tobacco use and was a key adviser to NSTEP and participant in NSTEP's tour of baseball spring training camps.
- **2003: Gruen Von Behrens.** A user of spit tobacco at age 13, Von Behrens was diagnosed with oral cancer at age 17 and underwent a series of disfiguring surgeries. He made numerous public appearances on behalf of NSTEP and was featured in NSTEP educational materials.
- **2004: Joe Garagiola.** The inspiration for NSTEP, Garagiola was the program's unpaid national chairperson and chief spokesperson on the dangers of spit tobacco use.

APPENDIX 2

Methodology of Annual Player Survey

Herbert H. Severson, PhD—developer of a self-help spit tobacco-cessation program entitled *Enough Snuff*—designed the player survey with input from other experts, including C. Tracy Orleans, PhD, of RWJF. Among the survey questions was whether the player had used spit tobacco in the previous seven days. The survey was in written form with English and Spanish versions and identified players only by team, not by name. The survey content underwent annual revision but was designed to provide year-to-year comparisons on a set of core items.

Coinciding with spring training, Severson sent a packet of surveys to the head trainer of each club for distribution to its major and minor league players—with one exception. The 2001 survey was given only to minor league players, reflecting a change in NSTEP's focus to minor league baseball. (See A Shift in Focus for details.) Severson, however, wanted to continue generating data on both major and minor league players and the next year, 2002, prevailed on trainers to resume giving survey forms to both major and minor leaguers.

The players' willingness to fill out the surveys was important to the response rate, but Severson says the more important factor was the trainers' level of enthusiasm for distributing the forms to the players—especially in the minor leagues, where he says a trainer's instruction has considerable influence.

The initial survey return rate among players was disappointing—only 28 percent in 1998 and 23 percent in 1999. To try to increase player participation, in 2000 Severson arranged $100 payments to each head team trainer as partial compensation for their distribution efforts as well as a $2,000 contribution to the Professional Baseball Athletic Trainers Society. RWJF later made a small supplemental grant (ID# 039262) to the Oregon Pacific Research Institute as reimbursement for those incentives.

The return rate in 2000 was still only 25 percent, and Severson concluded that individual trainer payments were not sufficiently helpful, especially given the timing of surveys during the demanding spring training period, which posed substantial logistical obstacles. However, donations to the trainers' society did appear to encourage trainers' support, and that practice continued. Also, Severson found that meeting with the trainers' society leadership in advance of spring training to solicit their input into the survey content also increased trainer involvement and support. In 2002 the return rate rose to a high of 35 percent.

APPENDIX 3

External Members of the 2000 NSTEP Planning Team

(Current as of the end date of the program; provided by the program's management; not verified by RWJF.)

Dianne Barker, MHS
Principal, Barker Bi-Coastal Health Consultants
Los Angeles, Calif.

Karina Boehm
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Office of Communications and Health Education
National Institute of Dental and Craniofacial Research
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Michael Eriksen (or a representative in his place)
Director, Office on Smoking and Health
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Williamsport, Pa.

Laura Knight-Lynn
Researcher
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APPENDIX 4

Strategic Goals and First Level of Subgoals/Action Steps in the 2000 NSTEP Strategic Plan

Strategic Goal #1

NSTEP is positioned within communities as a leader, resource, and partner to affect spit tobacco education and cessation programs and policies.

Subgoals/Action Steps

- Expand NSTEP's target communities and populations.
- Develop a spit-tobacco curriculum for science and health classes to be disseminated to all schools in community coalitions.

- Continue to address spit tobacco issues among baseball players, pushing further into the family of baseball, including the minor leagues, college and organized youth baseball.
- Support existing NSTEP community coalitions and help them to become financially self-sustaining.
- Ensure that spit tobacco is included in at least 15 state tobacco-control programs.

Strategic Goal #2

NSTEP's public awareness campaign informs and affects policy, supports prevention and cessation efforts and lends tactical support to its community-based activities.

Subgoals/Action Steps

- Develop and produce new design elements for various media (including broadcast, cable and the Internet) that target new national and community audiences.
- Identify new methods for raising awareness of the hazards associated with spit tobacco.
- Identify appropriate messages for new target populations.
- Develop a broad toolbox of materials for use by all groups.

Strategic Goal #3

NSTEP is a catalyst for a research agenda that yields science-based surveillance, education, cessation and policy data and is a clearinghouse for related information.

Subgoals/Action Steps

- Convene interdisciplinary summits with leading experts to encourage research on spit tobacco.
- Promote and disseminate findings resulting from such research.
- Assist researchers in obtaining funding for clinical trials, market research and other investigations.

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- *Here's a Pitch No One Can Handle* (Pamphlet)
- *Question: What does chewing or dipping tobacco do for a ballplayer? Answer: Ask Bill Tuttle* (Poster)
- *Six Steps to a Healthier You* (Pamphlet)
- *Some Important Tips from Major Leaguers to Their Fans Everywhere* (Pamphlet)
- *Spit Tobacco…Dangerous and Deadly* (Pamphlet)
- *Spit tobacco is dangerous, addictive and…IT'S REALLY GROSS!* (Poster)

- *Tips for Quitting Spit Tobacco* (Wallet-size pamphlet)
- *What Gruen Von Behrens Wants You to Know About Spit Tobacco* (One-page card)
- *What's Really in Spit Tobacco?* (Pamphlet)
- *Who Uses Spit Tobacco?* (Pamphlet)

Audio-Visuals and Computer Software

Instruction for athletic trainers on effective spit tobacco-prevention and cessation policies, on CD-ROM. Atlanta: Professional Baseball Athletic Trainers Society, 2004.

NSTEP: Ten Years of Progress, a retrospective of NSTEP program activities and accomplishments on DVD. Chicago: Oral Health America, 2004.

The following is a sampling of videotapes produced by Oral Health America for the National Spit Tobacco Education Program (NSTEP):

- *Bill Tuttle, Glory Days/Gory Days,* tells the story of the late Bill Tuttle and his battle against cancer caused by chewing tobacco, 6 minutes.
- *Tragic Choice: The Bob Leslie Story* details how a young high school baseball coach who started chewing tobacco at age 13 got oral cancer and the impact on him, his family and his team, 12 minutes.
- *Innocent Addiction* tells about Gruen Von Behrens, a former spit tobacco user diagnosed with cancer at age 17, 10 minutes.
- *Six Innings…The Little League Report* features Little Leaguers assembling a news show on spit tobacco, 12 minutes.

Survey Instruments

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