

**ANNUAL ANALYSIS OF THE EFFECTIVENESS OF THE NATIONAL YOUTH ANTI-  
DRUG MEDIA CAMPAIGN**

**Report to Congress**



**June 2010**

## *EXECUTIVE SUMMARY*

ONDCP's 2006 Reauthorization requires the Director to submit by April 20 of each year an evaluation of the National Youth Anti-Drug Media Campaign (hereafter referred to as the Campaign) that "enables consideration of whether the national media campaign has contributed to reduction of illicit drug use among youth." Further, Congress directed that the evaluation be based upon data from three national surveys of America's youth: the Monitoring the Future study, the National Survey on Drug Use and Health, the Partnership for a Drug-Free America's analysis of data from the Partnership Attitude Tracking Study, and "other relevant studies or publications, as determined by the Director, including tracking and evaluation data collected according to marketing and advertising standards." The present evaluation report utilizes data from the three national surveys, data from the Campaign's copy testing and in-market tracking studies, and findings from other relevant studies.

The data sets discussed in this report were not designed as evaluation instruments for the Campaign. Therefore, the available standard for determining the effectiveness of the Campaign is whether the combined results from these data sources are consistent with an interpretation of the Campaign having a favorable effect on improving anti-drug attitudes, beliefs, and perceptions and reducing drug use behavior. For two key reasons, however, these data cannot be used to establish a causal relationship between the Campaign's activity and these drug-related outcomes. First, these national survey data are cross-sectional, i.e., each year a different portion of the population (a cross section) is sampled; thus they cannot provide evidence about the sequence of changes involving 1) exposure to Campaign messages, 2) potential improvements in attitudes and perceptions, and 3) subsequent changes in behavior attributable to the Campaign. Second, the measures compiled by the national surveys are not collected within the context of the Campaign's messages—that is, they either do not measure exposure to the Campaign specifically or, if they do, they merely establish an associational relationship (i.e., there is no ability to determine whether exposure to the Campaign preceded any change in outcomes nor whether any changes can be attributed to the Campaign).

Highlights from these additional data sources as they relate to an assessment of the effectiveness of the Campaign include the following:

According to copy testing undertaken by the Campaign to ensure that, before any advertisements air, they communicate effectively:

- In Fiscal Year (FY) 2009 the Campaign copy tested ten Above the Influence (the Campaign's youth-targeted initiative) television advertisements: eight met the criteria for airing (i.e., they conveyed the intended messages, strengthened anti-drug use intentions and beliefs, and did not have any adverse effects) and two advertisements initially failed to meet these criteria. One of these advertisements was revised and subsequently met the criteria for airing; the second advertisement is being revised and will be retested in FY 2010.

According to the Campaign’s in-market tracking of advertisements directed at youth (which is conducted by a reputable, independent market research firm):

- Teens that were aware of the Campaign held significantly stronger anti-drug beliefs than those teens that were unaware of the Campaign.
- Awareness of the Above the Influence logo—a surrogate for the *Above the Influence* brand—continues to lead other prominent youth-targeted campaigns (e.g., the Truth Campaign, an anti-tobacco initiative) and commercial brands by significant margins in logo awareness.
- There appears to be some softening of the perceived danger of marijuana along with some lessening of negative expectations of marijuana use associated with higher awareness of the Above the Influence Campaign. The changes in these measures currently are modest but should be monitored closely.

According to the Campaign’s in-market tracking of advertisements directed at parents:

- Encouragingly, parental awareness of advertising associated with teen prescription drug abuse more than doubled to 71 percent after the 2009 Prescription Drug Campaign.
- Likewise, parental intentions to take action against teen prescription drug abuse increased when comparing the pre-launch period to the period following the 2009 Prescription Drug Campaign, as evidenced by increases in the following pre-post measures:
  - Intention to safeguard drugs at home (68% to 77%)
  - Intention to ask friends to safeguard drugs (42% to 51%)
  - Intention to properly conceal and dispose of out-of-date and unneeded medicines (70% to 76%)
  - Intention to set clear rules for teens about all drug use, including not sharing medicines (83% to 88%)

According to the Monitoring the Future (MTF) study:

- Rates of 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> grade students saying that they have seen or heard anti-drug advertisements weekly decreased both between 2000 and 2009 (26%, 15%, and 8%, respectively) and between 2008 and 2009 (9%, 3%, and 10%, respectively).
- The percent of students saying that anti-drug commercials have made them feel less favorable toward drugs to a “very great extent” has fluctuated in recent years but increased overall from 2000 through 2009.
- Lifetime, past year, and past month use of any illicit drug decreased overall from 2000 through 2009 among 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> graders; however, that trend appears to have leveled off in either 2007 or 2008, depending upon the measure and the grade.

- Among 12<sup>th</sup> graders<sup>1</sup> (the only grade for which these data are available), use of narcotics other than heroin (a category that includes Vicodin, Percocet, and OxyContin) remained stable across all three prevalence periods between 2002 and 2009. (Because of a modification to this question on the MTF survey, data from prior to 2002 cannot be compared with data from subsequent years.)
- Past year use of amphetamines remained stable among 8<sup>th</sup> graders but decreased 36 percent (from 11.1% to 7.1%) among 10th graders and 37 percent (from 10.5% to 6.6%) among 12<sup>th</sup> graders.

According to the National Survey on Drug Use and Health (NSDUH):

- Trends in drug use among youth (aged 12 to 17 years) showed decreases from 2002 through 2008, although the trends have flattened in recent years. For example, past month use of any illicit drug declined nearly 20 percent (from 11.6% to 9.3%), with the rate being generally stable since 2005. Similarly, past month use of marijuana declined 18 percent (from 8.2% to 6.7%) over the same period of time, with the rate remaining flat since 2005.
- Initiation of drug use also has been stable the past two years, with the number of youth initiating the use of any illicit drug in the past year estimated to be about 1.5 million in 2007 and in 2008. The number of past year initiates of marijuana among youth was unchanged in 2007 and 2008 at 1.2 million.

According to the Partnership for a Drug-Free America's assessment of Partnership Attitude Tracking Survey (PATS) data:

- Eight in ten (80.4%) of 9<sup>th</sup> through 12<sup>th</sup> graders say they have seen one or more of the Campaign advertisements asked about in the 2009 attitude tracking survey.
- Across age, grade, and marijuana usage groups, the proportion of adolescents who think television commercials teach them a lot about the risks of drugs increases with increased advertisement recall. Four in ten (40%) adolescents in grades 9 through 12 who report seeing six or more of the seven Campaign advertisements asked about in the survey say they have learned "a lot" about the risks of drugs from television commercials, while about a quarter (26.2%) of those recalling one to five advertisements say they have learned "a lot" about drug risks this way. By comparison, only 14.7 percent of youth in these grades who could not recall any of the advertisements shared this view.
- Social disapproval among youth regarding the use of marijuana appears to be lessening. The percent of youth indicating "smoking marijuana is OK sometimes" increased from 35 percent in 2008 to 41 percent in 2009—the highest rate since 2004.

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<sup>1</sup> Although the Campaign's prescription drug messages are not directly targeted to teenagers—they instead speak to parents of teenagers—the desired ultimate outcome is decreased abuse of prescription drugs by teenagers.

- Also since 2008, fewer youth agree with the statement “I don’t want to hang around anyone who uses marijuana” (46% in 2009, down from 50% in 2008).

Taken together, these data present a varied picture: some key indicators are consistent with the trends that would be anticipated if the National Youth Anti-Drug Media Campaign were to work as intended (i.e., increased exposure to anti-drug media messages leads to improved anti-drug attitudes, beliefs, and intentions, which ultimately result in less initiation and lowered drug use) while other results are less clear. The continued prominence of the Above the Influence Campaign is encouraging, particularly when juxtaposed with the declining awareness of anti-drug advertising in general. This may signal the importance of the Media Campaign, which provides research-driven anti-drug messages as a bulwark against the increasing prevalence and influence of pro-drug themes confronting America’s youth and as the national debate on marijuana legalization for medical purposes and purported fiscal benefits gains public attention.

The Campaign produced advertising that tested well among target audiences; increased awareness of its advertising for the Above the Influence, Anti-Methamphetamine, and Parents Prescription Drug Abuse Prevention campaigns; and improved specific beliefs and intentions related to each of the campaigns. For example, according to the MTF, among youth who are aware of anti-drug advertising, including the Campaign’s messages, the belief that they have learned “a lot” from the advertisements or made them less favorable toward drugs increased in 2009. However, with respect to drug use behaviors and attitudes as measured by such data sets as MTF, NSDUH, PATS, and the Campaign’s advertising tracking study, the results are more mixed. Youth drug use has remained stable for the past 2 or 3 years following steady declines from 2001 and 2002; some measures of the perception of risk of using drugs have softened; and awareness of anti-drug advertising, in general, has declined.

Rather than waiting another year or two to see if these declines translate into increased drug use among teenagers, as would be expected, the Administration is implementing a new vision for the Campaign that features an increased focus on local media markets, including working closely with community and media partners to leverage the Campaign’s resources, while at the same time maintaining the national-level prevention program. Details of this new vision for the Campaign are provided in the companion document, Progress Report on the National Youth Anti-Drug Media Campaign for FY 2009. Full implementation of this new vision is an important element in the President’s National Drug Control Strategy, which calls for a bold goal of a 15 percent reduction in teen drug use in the next 5 years.

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## *EVALUATING THE NATIONAL YOUTH ANTI-DRUG MEDIA CAMPAIGN*

### *Introduction*

This report is submitted in response to Congress's requirement—as iterated in the 2006 reauthorization of the Office of National Drug Control Policy (ONDCP), (P.L. 109-469, Section 709)—that each year ONDCP provide an evaluation of the National Youth Anti-Drug Media Campaign (hereafter referred to as the Campaign). Specifically, Congress required that:

In using amounts for the evaluation of the effectiveness of the national media campaign under paragraph (1)(E), the Director shall—

“(i) designate an independent entity to evaluate by April 20 of each year the effectiveness of the national media campaign based on data from—

“(I) the Monitoring the Future Study published by the Department of Health and Human Services;

“(II) the Attitude Tracking Study published by the Partnership for a Drug-Free America;

“(III) the National Household Survey on Drug Abuse; and

“(IV) other relevant studies or publications, as determined by the Director, including tracking and evaluation data collected according to marketing and advertising industry standards; and

“(ii) ensure that the effectiveness of the national media campaign is evaluated in a manner that enables consideration of whether the national media campaign has contributed to reduction of illicit drug use among youth and such other measures of evaluation as the Director determines are appropriate.

This report fulfills the requirement stipulated in section (i) above and follows three similar reports submitted to Congress in April 2007, April 2008, and April 2009. (The larger evaluation detailed in section (ii) above entails different methods of analysis and will be provided in a separate report.<sup>2</sup>) The purpose of the current report is to assess the effectiveness of the Campaign over the past year. This assessment is based upon data from several sources: formative and process evaluation research conducted on the Campaign's advertising, in-market tracking data, and data from the three nationally representative surveys—named in section (i) above—of youth drug use and related attitudes, beliefs, and perceptions.

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<sup>2</sup> ONDCP currently is engaged in the process to select an independent Contractor to undertake this larger evaluation (i.e., the Outcome Evaluation). Changes in the vision and Congressional appropriations for the Campaign in FY 2010 resulted in an unavoidable interruption in the contracting process and a consequent delay in the anticipated date of contract award. ONDCP expects to award the contract for the Outcome Evaluation by the end of June 2010.

The standard that this report relies upon in assessing the effectiveness of the Campaign is gauged by determining whether the results of these disparate data sources are consistent with the Campaign’s objectives to reduce drug-use behaviors and to improve anti-drug attitudes, beliefs, and perceptions. That is, we seek to establish whether the trends observed in the various data sources are consistent with what we would expect to see if the Campaign were to have an impact—we would expect to observe improvements in exposure, attitudes, beliefs, and intentions and, ultimately, decreases in youth drug initiation and use.

The data presented in this report cannot establish a *causal* relationship between the Campaign’s activity and trends seen in the data. That is, it cannot be definitively asserted that the Campaign’s efforts directly caused changes in youth drug-use behavior or attitudes. There are various reasons for this. First, the data compiled by two of the national surveys—the Monitoring the Future (MTF) study and the National Survey on Drug Use and Health (NSDUH)—are not linked to the Campaign’s messages, i.e., they measure trends regarding drug use and youth, but they do not assess the subjects’ exposure to the Campaign. Second, the data that are collected in the context of the Campaign’s activity—as is the case with the Partnership Attitude Tracking Survey (PATS) data and third party advertisement tracking<sup>3</sup> data—only establish an association to exposure to the Campaign. That is, these data can demonstrate whether a subject claims to have been exposed to Campaign messaging, but they cannot determine whether changes in the subject’s attitudes, beliefs, and behavior were attributable to that messaging. Finally, because all of these data are cross-sectional, they cannot provide evidence that, for example, improvements in attitudes and perceptions preceded changes in behavior.

### ***Organization of the Report***

The remainder of this report is organized into four major sections. The first section provides an overview of the Campaign’s activity in 2009, including a discussion of the Campaign’s goals and target audiences. The second section describes the ongoing research that shapes the Campaign’s approaches and techniques; this formative and process evaluation research includes copy testing and in-market tracking. (Copy testing is conducted initially with focus groups prior to final production of advertising and then quantitatively before advertisements are aired to ensure that the desired messages are being communicated effectively and that no adverse effects are detectable. In-market tracking is conducted on a continuous basis among a sample of the target population once the advertising is in the market place, e.g., airing on television, to determine how well the advertising is performing in the “real world.”) In the third section, data from the national surveys are presented. Finally, in the fourth section, a synthesis of the findings from the preceding sections is provided, including a conclusion about whether the data support an interpretation that the Campaign has proven effective in 2009. Note that, throughout the report, terms such as “increased” and “decreased” are

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<sup>3</sup> The Campaign’s advertising contractor provides quarterly reports depicting findings from advertisement tracking data collected by a reputable, independent market research firm.

reserved for changes that are statistically significant. In the instances where changes are not statistically significant, trends will be characterized as stable.

## *THE NATIONAL YOUTH ANTI-DRUG MEDIA CAMPAIGN*

### *Overview of Campaign*

The National Youth Anti-Drug Media Campaign is managed by ONDCP and is one of the Federal government's largest public health communication efforts. With bipartisan support from Congress, the Campaign seeks to prevent drug use among the country's youth, to increase adults' awareness of the impact of drug use on young people, and to encourage parents and other interested adults to discuss the dangers of drug use with young people.

The Campaign activities discussed in this report are specific to FY 2009. Beginning in FY 2010, the Campaign will implement a new vision, which recognizes that influencing youth attitudes about drugs is an important part of preventing drug use. Teenagers today are bombarded with pro-drug content, particularly online where they spend a significant amount of time. The Campaign is the most visible and comprehensive provider of anti-drug media content in the Nation. In consultation with national experts in drug prevention, media, marketing, and technology, ONDCP is changing the Campaign to respond to changes in media and the softening of teen drug attitudes. Building upon the high level of recognition of its Above the Influence initiative, the Campaign will expand its use of digital media to reach youth, ages 12-17. Additional information about the Campaign's new vision can be found in the companion document, Progress Report on the National Youth Anti-Drug Media Campaign for FY 2009.

### *Methods*

The Campaign accomplishes its goals by integrating national paid advertising with public communication outreach to achieve an impact on its target audiences. As required by authorizing legislation, the Campaign allocates the great majority of its funding to the purchase of advertising time and space in media outlets, including national television, radio, newspapers and other publications, out-of-home venues (such as billboards), cinema, and the Internet. A Congressional mandate requires that all Campaign funds allocated to the purchase of time and space be matched with time and space equivalent in value and placement. In essence, this "match" policy doubles the amount of media exposure and enables more continuity,<sup>4</sup> stronger reach,<sup>5</sup> and greater frequency<sup>6</sup> levels throughout the year. Since its inception in 1998, the Campaign has received match advertising worth \$1.28 billion.

While paid and match advertising allows the Campaign to reach audiences with anti-drug messages on a national level, public communications outreach is critical to augmenting and amplifying the messages in ways that resonate with various audiences. This communications

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<sup>4</sup> Continuity refers to consistent advertising presence without hiatus ("dark") periods. The Campaign seeks to have few breaks (i.e., periods when the Campaign is off the air) to ensure that anti-drug messages remain continually in the media and are at the forefront of the minds of those in the Campaign's target audience.

<sup>5</sup> Reach is the percentage of people who can potentially see or be exposed to an advertisement or message.

<sup>6</sup> Frequency is the number of times that people potentially see or are exposed to an advertisement or message. For example, in FY 2009, the Campaign reached 97 percent its youth target audience an average of 71 times; thus, the frequency is 71.

support includes maintaining Internet sites, conducting news media events, convening roundtable discussions and briefings with news and entertainment media, and developing partnership opportunities with nationally recognized organizations and companies to extend the reach of the Campaign's messages.

### *Audiences*

In FY 2009, the Campaign spoke directly to three key audiences: 1) youth aged 12 to 17 (with a particular focus on 14- to 16-year-olds), 2) young adults aged 18 to 25, who are more likely to use methamphetamine than other age groups,<sup>7</sup> and 3) parents (among whom the Campaign sought to raise awareness about prescription drug use by teenagers).

In its efforts to prevent drug abuse among young people in the United States, the Campaign has been guided by scholarly research. In particular, the Campaign has acted upon studies showing that young people at critical transition periods, e.g., those moving from junior high to senior high school, are most likely to experiment with drugs.<sup>8</sup> Guided by this research, the Campaign addresses all youth from 12- to 17-years-old but specifically focuses on teens between 14 and 16 years of age—that is, those most at risk.

In addition, the Campaign recognizes that teenagers are exposed to substantial pro-drug content in their digital media environment, which is important because they spend increasing amounts of time with the media, particularly online and with social networking sites. Such exposures—few of which show any negative consequences of drug use—tend to foster the perception that teenage drug use is both common and without significant consequences. In a review by Nielsen Online on behalf of ONDCP, almost 40 percent of drug-related videos found online contained explicit use of drugs and/or intoxication. That study also found that more than a third of those viewing drug-related content are under the age of 16.<sup>9</sup> In addition, content analysis of music popular among youth has revealed that youth in the study were exposed to an average of 40 marijuana references in music per day, and that there was an independent association between such exposure in popular music and early marijuana use among urban adolescents.<sup>10</sup>

Similarly, research drives the Campaign's decision to focus its anti-methamphetamine efforts on young adults, i.e., individuals aged 18 to 25. Data from the NSDUH, published by the Substance Abuse and Mental Health Services Administration (SAMHSA), show that young adults<sup>11</sup> are more likely to abuse methamphetamine than are individuals aged 12 to 17 or those 26 and older. Also, data show that the average age at which individuals abuse methamphetamine for the first time is slightly over 19 years. In addition, the Campaign identified the geographic areas where its

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<sup>7</sup> SAMHSA, 2008 National Survey on Drug Use and Health, September 2009.

<sup>8</sup> Analysis of historical data from the MTF study, supported by the National Institute on Drug Abuse, typically show significant increases in drug abuse among teenagers transitioning from junior high to senior high school.

<sup>9</sup> "Teen Viewing of Drug- and Alcohol-Related Videos Online," September 2008.

<sup>10</sup> See Primack, Douglas, "Kraemer, Exposure to cannabis in popular music and cannabis use among adolescents," *Addiction*, 2009.

<sup>11</sup> SAMHSA, 2008 National Survey on Drug Use and Health, September 2009.

anti-methamphetamine efforts were most needed by drawing upon state-level NSDUH data<sup>12</sup> (which show areas of greatest use) and clandestine methamphetamine laboratory seizure statistics<sup>13</sup> (which indicate areas where methamphetamine is produced). Using these data, the Campaign targeted the population most at risk: individuals aged 18 to 25 in the parts of the country where methamphetamine use is most prevalent.

Likewise, in targeting parents as the focus of the Campaign's Prescription Drug Abuse Prevention initiative, the Campaign responded to a concern particularly highlighted by the PATS<sup>14</sup> data, namely, that parents had not been discussing the dangers of prescription drug abuse with their teens. The Campaign's approach also was influenced by some promising findings demonstrated by PATS data—that parents believe their actions play a crucial role in protecting adolescents from drug use and a wide variety of other risky behaviors.

### *Initiatives*

In FY 2009, the Campaign comprised three distinct initiatives: 1) messages directed at youth bearing the Above the Influence brand, 2) an anti-methamphetamine campaign focused on communities where the methamphetamine problem is most severe, and 3) an effort to raise awareness among parents about prescription drug abuse by teenagers.

### *Above the Influence*

Beginning in FY 2009, the Campaign broadened its youth-targeted communication efforts—efforts that since 2001 principally focused on marijuana—to encompass other dangerous and illicit substances abused by teenagers. This new, broader focus builds upon the successes of the Above the Influence campaign, which was launched in November 2005. The Above the Influence campaign draws a direct connection between substance use and the negative influences that surround it—both the influence of the drug itself and the social influences that can encourage its use.

In FY 2009, the Campaign reached 97 percent of teens an average of 71 times with drug prevention messages by harnessing a variety of media (cable and network television, print publications, Internet sites and social networks, radio, and mobile marketing) to maintain 52 weeks of media presence. In 2009, the Campaign made significant progress in its efforts to strengthen the Above the Influence brand and make teenagers aware of the messages. Campaign research indicates that, in 2009, an average of 76 percent of the Campaign's target audience was aware of Above the Influence advertising, up significantly from 2006, when average awareness

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<sup>12</sup> SAMHSA provides ONDCP with a data extract that estimates methamphetamine in the past year among persons aged 12 and older, by state and age group, annual averages based upon 2005 through 2008 data.

<sup>13</sup> Methamphetamine laboratory seizure statistics are taken from the National Seizure System maintained by the El Paso Intelligence Center, a component of the Drug Enforcement Administration.

<sup>14</sup> *2009 Final Report: Assessment of the National Anti-Drug Media Campaign*, prepared for ONDCP by GfK Custom Research North America, October 2009.

was 64 percent.<sup>15</sup> In addition, Campaign research indicates that an average of 82 percent of teens recognized the Above the Influence logo, which exceeds awareness of the Truth campaign logo (63%), a national youth-targeted anti-smoking campaign.

#### *Anti-Methamphetamine Initiative*

In response to the growing threat posed by methamphetamine, Congress directed<sup>16</sup> that Campaign resources be allocated to reducing the use of methamphetamine. The resulting 2009 Anti-Meth Campaign,<sup>17</sup> which launched in September and ran through November, delivered most of its advertising weight to those states with high rates of methamphetamine use and/or high numbers of methamphetamine laboratory seizures. In these states, the Campaign focused on rural areas. The Anti-Meth Campaign sought to prevent methamphetamine use, to dispel myths that treatment for methamphetamine addiction was ineffective, and to encourage people who needed help to get treatment.

The Anti-Meth Campaign combined paid advertising with public communications outreach and public service announcements to deliver methamphetamine use prevention and treatment benefit messages to the people who need them most. In FY 2009, the Anti-Meth Campaign launched across 16 states,<sup>18</sup> which received the full suite of anti-methamphetamine advertising, including television, print, out-of-home (e.g., billboards, convenience store posters, and gas pump signs), radio, and Internet advertising. The Anti-Meth Campaign reached 87 percent of its target audience an average of 13 times during the campaign through paid advertising in the 16 states receiving the most advertising.

#### *Prescription Drug Abuse Prevention*

Beginning in 2008 and continuing for 3 months in 2009, the Prescription Drug Abuse Prevention campaign employed advertising and public outreach to inform parents about this growing threat and to advise them of simple actions they could take to prevent prescription drug abuse by their teenagers. Using the Campaign's brand for parents (Parents: The Anti-Drug), the effort employed paid advertising to reach over 90 percent of its target audience—primarily parents of

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<sup>15</sup> To enable ONDCP to monitor exposure to its paid advertisements, a third party vendor (Millward Brown) collects data by interviewing youth at shopping malls and by contacting parents via random telephone digit dialing. In 2009, ONDCP received quarterly reports of these advertisement tracking efforts from its advertising contractor, DraftFCB.

<sup>16</sup> The ONDCP Reauthorization Act of 2006 includes the following language: *(1) Requirement to use 10 percent of funds for methamphetamine abuse prevention.—The Director shall ensure that, of the amounts appropriated under this section for the national media campaign for a fiscal year, not less than 10 percent shall be expended solely for the activities described in subsection (b)(1) with respect to the advertisements specifically intended to reduce the use of methamphetamine.* In addition, the FY 2009 appropriations for the Campaign included a requirement that “at least \$8,000,000 shall be for methamphetamine prevention ads.”

<sup>17</sup> The Anti-Meth Campaign is described here because this section comprises all FY 2009 Campaign initiatives. However, because only 1 month (September 2009) of the Campaign occurred in FY 2009, it was not possible to assess the effectiveness of this initiative in FY 2009. As a result, the Anti-Meth Campaign is not discussed in subsequent sections of this report, which focus on evaluating Campaign effectiveness in the context of specific data measures.

<sup>18</sup> The 16 states include Alaska, Arizona, Arkansas, Indiana, Iowa, Kentucky, Minnesota, Missouri, Nebraska, Nevada, New Mexico, Oklahoma, Oregon, Illinois, Washington, and Wyoming.

teens aged 12 to 17—an average of 10 times from April through June 2009, the duration of the Campaign.

During FY 2009, the Campaign's parent website ([TheAntiDrug.com](http://TheAntiDrug.com)) received 2,267,461 visits—a rate of approximately 190,000 visits per month. The messages distributed online spoke to the dangers of abusing prescription drugs—both alone and in combination with other substances commonly abused by teens. The Campaign also purchased online advertisements that delivered 278.3 million media impressions on 15 parent-targeted sites, such as [Parents.com](http://Parents.com), [iVillage.com](http://iVillage.com), and [CNN.com](http://CNN.com).

## *FORMATIVE AND PROCESS EVALUATION RESEARCH*

The Campaign draws upon two forms of research in developing its approaches and techniques: copy testing and in-market tracking. In-market tracking is conducted on a continuous basis among a sample of the target population once the advertising is in the market place (e.g., airing on television) to determine how well the advertising is performing in the “real world.”<sup>19</sup>

### *Copy Testing*

Copy testing is a technique used by the advertising industry and social marketing practitioners to evaluate advertising quantitatively prior to its airing to ensure that specific desired outcomes are achieved (e.g., strengthening of attitudes, intent to take action) and that no adverse effects are created by the messaging. Advertising industry-standard copy tests typically are either pre-post or test-control designs. In pre-post designs, responses to measures are collected both before and after subjects see an advertising message; responses from those individuals are then compared to quantify changes. In experimental test-control designs, a test group of respondents views advertising while a control group does not; responses to a series of questions related to the message content of the advertising (e.g., anti-drug attitudes and beliefs) are obtained from both the test and control groups and the differences quantified. This latter design is employed by the Campaign because it is a more rigorous approach and has a cleaner means of comparison.<sup>20</sup>

### *Purpose of Copy Testing*

The Campaign uses copy testing methodology to screen all individual television advertisements to ensure they are suitable for airing and that they meet the objectives for the campaign. The key research questions that the copy test is intended to answer are as follow:

- Does the advertising have any adverse effects in terms of beliefs or intentions related to drug use?
- Does the advertising strengthen beliefs or intentions associated with not using drugs?
- Does the advertising convey the message expressed in the creative brief from which it emanated?

### *Copy Testing Procedures*

Before an advertisement is produced and made ready for quantitative testing, its content and proposed execution first undergo a rigorous qualitative evaluation by members of the audience for which the work is intended. This occurs in a small, focus-group setting where an experienced moderator shows story boards, scripts, and other sample advertisement concepts and content to approximately six teens per group and solicits feedback from those teens. After the qualitative phase of research has been completed, the concepts are winnowed and recommendations for how

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<sup>19</sup> The methods employed in the Campaign’s formative and process evaluation research have been reviewed by and have received clearance from the Office of Management and Budget (OMB).

<sup>20</sup> The Campaign’s copy testing approach is cited in the upcoming publication of the Wiley International Encyclopedia of Marketing as adhering to Positioning Advertising Copy Testing (PACT), the major industry document on copy testing standards. See *Copy Test Methods to Pretest Advertisements* written by Cornelia Pechmann, Ph.D., and Craig Andrews, Ph.D.

the remaining advertisements might be improved are made prior to production. When the television advertisements are in final form, they are submitted for copy testing with target audience members recruited in approximately 60 shopping malls around the country. Data collection typically is conducted over one weekend. The dataset is then analyzed according to an established protocol, and formal decision criteria are then employed to determine if the advertisement should air. In addition, any scientific claims made in an advertising concept are reviewed by the National Institute on Drug Abuse (NIDA) prior to qualitative testing.

The copy testing process evaluates all individual advertisement executions within the Campaign. Each of the youth advertisements is copy tested among 300 respondents, split among 100 Caucasian, 100 Hispanic, and 100 African-American youth in grades 7 through 10. This youth sample is stratified to ensure equal numbers of male and female respondents and equal numbers of teens (ages 14 to 16) and tweens (ages 11 to 13 in each ethnic category). Also, 300 youth are randomly assigned to a control group—with the same ethnic composition as the test group—that is not exposed to any advertising.

### ***Decision Criteria to Air Advertisements from Copy Tests***

An individual advertisement execution will air if it has a positive net effect on general or ad-specific beliefs or intentions. The decision criteria are as follows:

- If an advertisement significantly strengthens anti-drug beliefs and/or weakens intentions to use marijuana among the overall sample or any subgroup (by gender, ethnicity, or teens vs. tweens), the execution is recommended for airing, except in the instances noted below.
- If an advertisement significantly *weakens* anti-drug beliefs and/or *strengthens* intentions to use drugs within any subgroup, that execution cannot be used until it is revised and successfully retested.

### ***Findings from Copy Testing***

In FY 2009, the Campaign copy tested 10 Above the Influence television advertisements: 8 met the criteria for airing (i.e., they conveyed the intended messages, strengthened anti-drug use intentions and beliefs, and did not have any adverse effects) and 2 advertisements initially failed to meet all of these criteria. One of these advertisements was revised based upon the copy testing findings and subsequently met the criteria for airing; the second advertisement is being revised and will be retested in FY 2010.

### ***In-Market Tracking***

In general, tracking studies serve to assess the performance of advertising in the actual marketplace, based on key measures, including awareness, recall, attitudes, and intent to take action. Tracking data typically are evaluated in conjunction with other data (often using statistical modeling techniques that compare multiple factors at the same time). These other data include the following:

- In-market sales of consumer products
- Behavioral panel data
- Media expenditures, i.e., gross ratings points (GRPs)<sup>21</sup>
- Competitive activity

### ***Purpose of In-Market Tracking***

The Campaign tracking study serves as a valuable resource in guiding Campaign decisions, strategic direction, and media spending, which results in a more efficient use of Campaign resources. The tracking data typically are utilized in a variety of analytic capacities, covering both long-term and short-term (“real time”) process evaluation functions. These functions include the following:

- Optimizing media weight through modeling awareness
- Refining media plans (e.g., determining how long advertisements stay on the air, selecting which media to use)
- Providing information for making changes and improvements to strategic direction on an ongoing basis
- Validating logic model linkages that show how the campaign effectively communicates messages (i.e., establishing a connection between spending and awareness and then linking that to attitudes, intentions, and, ultimately, to drug-related behavior)
- Conducting advertising pre-launch/post-launch studies in order to identify differences and gauge real-time responses

### ***In-Market Tracking Procedures and Methodology***

The methodology of the Campaign’s in-market tracking study includes the following features:

#### *Youth Study*

- Samples of 100 teenagers aged 14 to 16 are surveyed each week (excluding 2 holiday weeks in December); new samples are recruited each week
- The sample is balanced by gender and by race/ethnicity
- Research takes place at geographically dispersed mall facilities around the country
  - Interviews are 15 minutes in length
  - Interviews are completed using self-administered, fully interactive, touch-screen technology
- Key measures include brand and logo awareness; ad awareness and recall; banner advertisement and website recognition; attitudes about drug usage, social norms, and peer pressure; and intentions to use marijuana and other drugs

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<sup>21</sup> A gross ratings point (GRP), a standard measure of exposure in the advertising industry, is the calculation of *reach* multiplied by *frequency*. (Reach is the percentage of people exposed to the advertisements, and frequency is the number of times people are exposed to the advertisement.) GRPs allow the Campaign to measure the level of advertising impact upon a target audience.

The focus of the in-market testing is on the impact of the advertising on belief systems. The beliefs are divided into three primary categories: 1) perceptions of positive outcomes associated with not using marijuana,<sup>22</sup> 2) perceptions of social acceptability of not using marijuana, and 3) perceptions of negative expectations associated with using marijuana. These three categories compose the beliefs section of the widely accepted Theory of Reasoned Action,<sup>23</sup> which is the behavior-change paradigm employed by the Campaign's Above the Influence campaign as well as by several other large-scale social marketing efforts.

#### *Parent and Prescription Drug Study*

- Samples of 100 parents who have children aged 11 to 16 are surveyed each week (excluding 2 holiday weeks in December); new samples are recruited each week
- Interviews are conducted by telephone
- Key measures include awareness of teen prescription drug abuse advertising, parents' perceptions of the prevalence of teen prescription drug abuse, parents' beliefs that prescription drug abuse is a serious problem among teens, and parents' stated intentions to take the following actions:
  - Safeguard drugs at home
  - Monitor prescription drug quantities and control access
  - Properly dispose of expired and unneeded medications

The Parents and Prescription Drug tracking report examined both parental awareness of advertising as well as their awareness of prescription drug abuse by youth.

#### *Findings from In-market Tracking Study*

The results from the in-market tracking study focus on the impact of the Campaign with regard to the association between advertising awareness of the Campaign and youth attitudes, beliefs, and intentions. The results for this report are presented in two sections: 1) awareness of anti-drug advertising in general and Campaign specific advertising awareness and 2) belief systems associated with marijuana use.

#### *Youth Results*

While awareness of the Above the Influence Campaign continues to increase (and to outpace other major public health information campaigns), anti-drug attitudes, such as the perceived dangers associated with marijuana use, seem to be softening.

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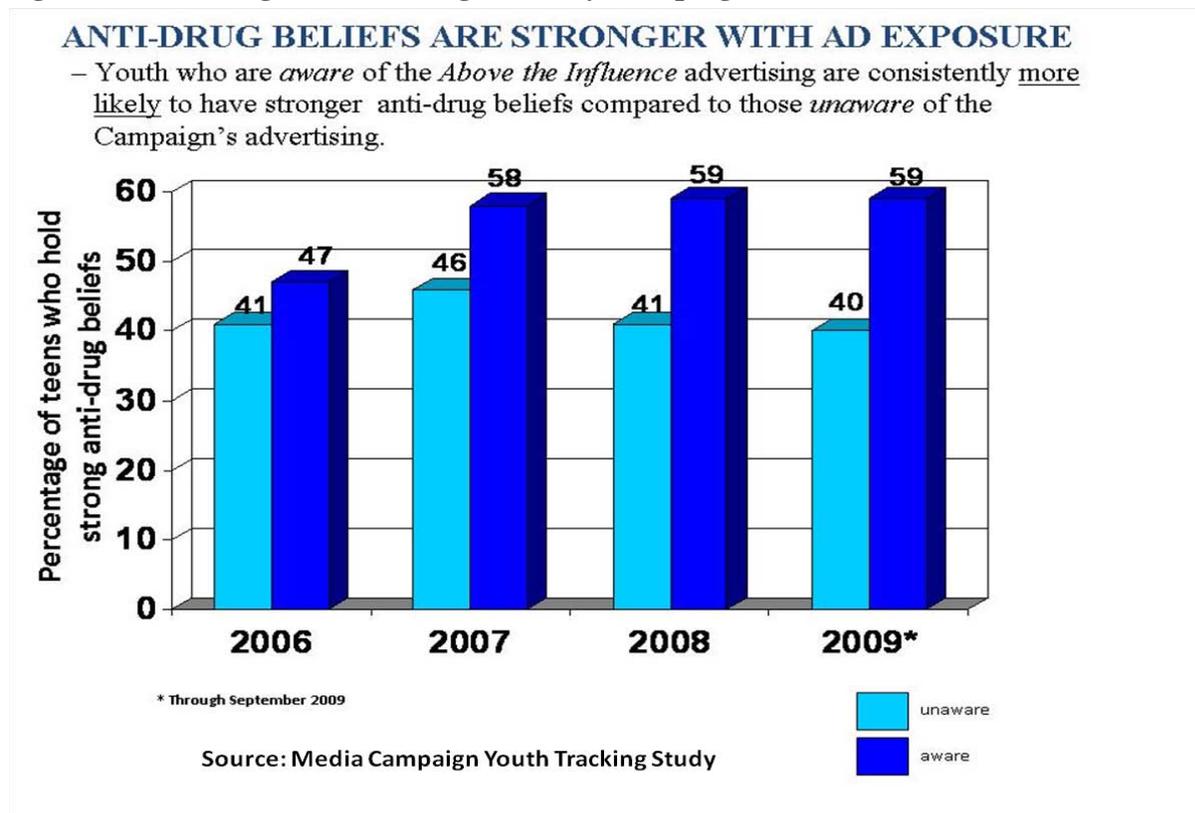
<sup>22</sup> The FY 2010 in-market tracking will be altered to reflect the Campaign's new vision, which addresses the behavior associated with drug use generally instead of focusing on a particular drug. Details of this new vision for the Campaign are provided in the companion document, Progress Report on the National Youth Anti-Drug Media Campaign for FY 2009.

<sup>23</sup> The Theory of Reasoned Action is discussed further in the following resources: Ajzen, I., & Fishbein, M. (1982). *Understanding attitudes and predicting social behavior*. Englewood Cliffs, NJ: Prentice-Hall and Fishbein, M. & Ajzen, I. (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research*. Reading, MA: Addison-Wesley.

## Advertising Awareness

- Teenagers who were aware of the Campaign held significantly stronger anti-drug beliefs than those teenagers who were unaware of the Campaign. (See Figure 1).
- Awareness of general, i.e., all drug prevention advertising (including the Campaign's), was stable at 73 percent in 2006 and 2007 but has since decreased (to 70% in 2009).
- By contrast, the yearly average awareness for Above the Influence advertising increased steadily from 64 percent in 2006 to 76 percent in 2009.
- Notably, average awareness of the Above the Influence logo—a surrogate for the Above the Influence brand—continued to lead other prominent campaigns (e.g., the Truth Campaign) by significant margins. Awareness of the Above the Influence logo neared its all-time peak<sup>24</sup> in April 2009 (85%) and was at an average of 82 percent in 2009, placing Above the Influence with other teen-targeted national brands, such as Coca-Cola (79%) and Burger King (79%).

**Figure 1. Anti-Drug Beliefs among Teens by Campaign Awareness Levels**



<sup>24</sup> The all-time peak in Above the Influence logo awareness was 86 percent in August 2008.

## Belief Systems: Expectations and Perceptions<sup>25</sup>

- The perceived danger associated with marijuana use for those aware of the Above the Influence Campaign remained stable from 2006 (45%) to 2009 (46%). Likewise, youth perceptions of danger regarding drugs in general remained stable from 2006 to 2008 (62%) but decreased slightly in 2009 (60%).
- The percent of youth reporting negative expectations of marijuana use such as “Smoking weed can define you as someone you don’t want to be,” decreased slightly from 2006 (54%) to 2009 (52%) for those aware of the Above the Influence Campaign.
- The percent of youth reporting positive expectations and the belief in their capacity to stay away from negative influences remained stable at 59 percent from 2006 to 2009 for those aware of the Above the Influence Campaign.
- The percent of youth reporting positive social perceptions of not using drugs remained stable from 2006 (53%) to 2009 (52%) for those aware of the Above the Influence Campaign.
- The percent of youth reporting marijuana-friendly social norms and intentions of using marijuana remained stable at 35 percent from 2006 to 2009 for those aware of the Above the Influence Campaign.
- The percent of youth perceiving the existence of at least one out of seven listed risks of marijuana use (e.g., messing up their lives or losing control of themselves) declined from 2006 (38%) to 2009 (33%) among those aware of the Above the Influence Campaign.
- The percent of youth who said that they definitely would not smoke marijuana if a close friend were to offer it was higher among those who were aware of the Above the Influence Campaign (48%) than among those who were not (45%).

## *Parents and Prescription Drug Study Results*

In-market tracking data related to the parents Prescription Drug Abuse Prevention Campaign are promising. When evaluated post-launch, parents demonstrated an increased belief that prescription drug abuse is a serious problem as well as increased intentions to take action to prevent abuse, such as securing drugs at home, disposing of unneeded medications, and setting clear rules about drug use.

## Awareness of Advertising

- Parental awareness of advertising associated with teen prescription drug abuse more than doubled—increasing from 31 percent pre-launch to 67 percent after the 3-month 2008

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<sup>25</sup>Belief systems pertain to youth beliefs about the implications of marijuana use such as positive expectations of not using marijuana, negative expectations of using marijuana, and self-efficacy. Beliefs were measured by asking a set of 19 questions such as “Teens can make the choice to be above negative influences rather than give into them,” “Listening to yourself rather than others, can help you stand up to pressure to do things like get high,” and “A lot of teens today are deciding to resist the influence to use marijuana.”

Prescription Drug Campaign—and reached an all-time high of 71 percent in July 2009 after the 2009 Campaign.

### Belief Systems

- Parental beliefs that prescription drug abuse is a serious problem among teens increased from the 2008 Campaign pre-launch period (49%) to the post-launch period (59%). Also, agreement that prescription drug abuse is a serious problem among teens was higher during the second wave of Campaign advertising activity in 2009 (59%) than compared to the pre-launch period.
- Parental intentions to take action against teen prescription drug abuse increased when comparing the pre-launch period to the period following the 2009 Prescription Drug Campaign, as evidenced by the following measures:
  - Intention to safeguard drugs at home (68% to 77%)
  - Intention to ask friends to safeguard drugs (42% to 51%)
  - Intention to properly conceal and dispose of out-of-date and unneeded medicines (70% to 76%)
  - Intention to set clear rules for teens about all drug use, including not sharing medicines (83% to 89%)
- The percentage of parents who indicated that they are likely or very likely to limit the time children spend unsupervised remained relatively stable from the pre-launch period (75%) to after the 2008 Prescription Drug Campaign (78%), but then decreased after the cessation of the 2009 Campaign. The July through September 2009 average was 70 percent.
- An overwhelming majority of parents agree or strongly agree that monitoring their children will make them less likely to try drugs: the average rate of agreement was 83 percent in 2008 and 86 percent in 2009.

### *DATA FROM NATIONAL SURVEYS*

The data provided by the national surveys present a complex picture. The 2009 MTF study yields generally encouraging results in the area of illicit drugs and mixed results regarding prescription drugs. Also, while weekly exposure levels to anti-drug messages in general continued to decrease, the percent of those reporting that exposure to anti-drug commercials has made them feel less favorable toward drugs to a “very great extent” has increased overall since 2000 in spite of recent fluctuations. In addition, results from the 2008 NSDUH are broadly consistent with an effective Campaign. Rates of use of both ‘any illicit drug’ and marijuana in particular declined overall from 2002 (the earliest year for which comparable data are available) through 2008; rates were stable between 2007 and 2008. An area of concern is presented by analysis of 2009 PATS data, which show that social disapproval among youth regarding the use of marijuana appears to be lessening.

### *Monitoring the Future*

Researchers at the University of Michigan’s Institute for Social Research conduct the MTF study under a grant from NIDA. Since 1975, MTF has collected data on drug use and related behaviors, attitudes, and perceptions among high school seniors; in 1991, the study began collecting similar data on 8<sup>th</sup> and 10<sup>th</sup> graders. Each year during the late winter and early spring, researchers collect data from 15,000 to 18,000 students in each grade in schools across the country.

This report discusses information collected by the MTF study regarding students’ reactions to and beliefs concerning out-of-school anti-drug advertising; however, these questions are not specific to the Campaign. The report also presents data regarding the use of any illicit drug and narcotics other than heroin, a category that includes prescription drugs such as Vicodin, OxyContin, and Percocet.

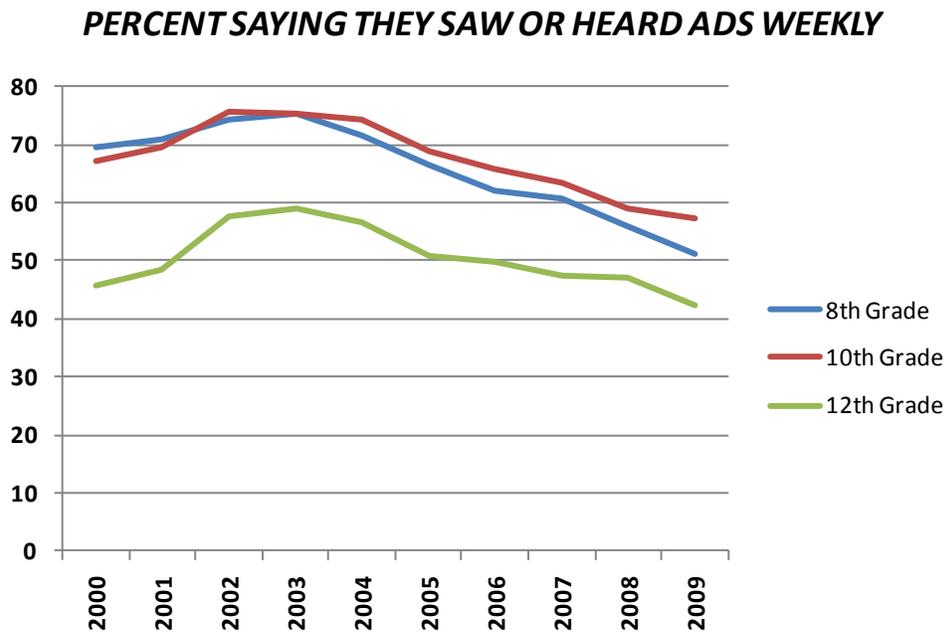
Highlights from the 2009 MTF study are presented below.

### ***Exposure to Media Messages***

The MTF measures self-reported general exposure to anti-drug media messages—the measures are not specific to the Campaign. The MTF reports data on four measures: 1) exposure to messages on television or radio, 2) less favorable attitudes toward drugs as a result of messages, 3) perceived exaggeration of messages, and 4) reduced intentions to use drugs as a result of messages.

Rates of students saying that they have seen or heard anti-drug advertisements weekly decreased both between 2000 and 2009 and between 2008 and 2009. (See Figure 2.) Among 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> graders, rates declined 26 percent, 15 percent, and 8 percent, respectively, from 2000 through 2009. From 2008 to 2009, rates remained stable among 10<sup>th</sup> graders (the Campaign's core audience) but dropped 9 percent and 10 percent, respectively, among 8<sup>th</sup> and 12<sup>th</sup> graders.

**Figure 2. Trends in Weekly Exposure to Anti-Drug Commercials on Television or Radio, By Grade, 2000-2009**

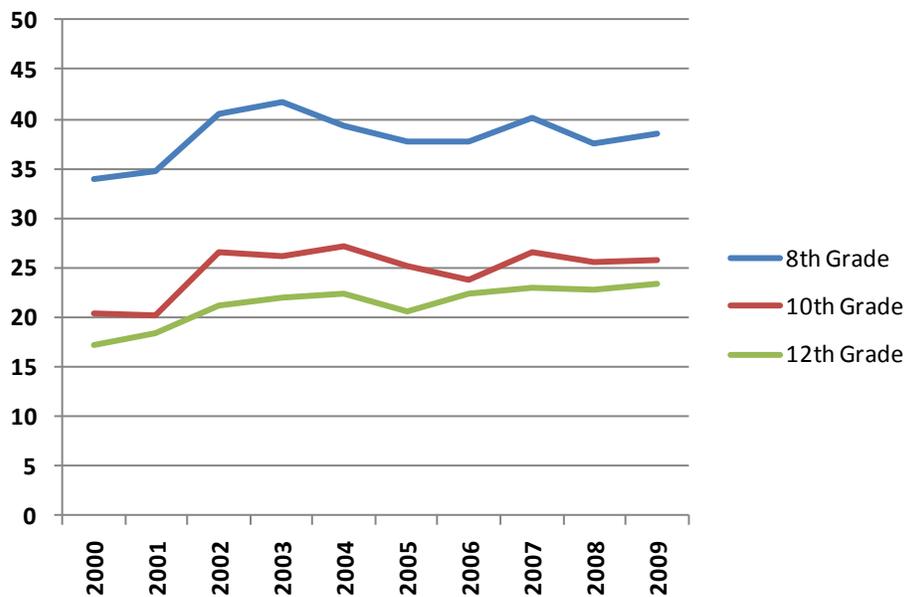


Source: 2009 Monitoring the Future Study, December 2009.

The percent of students saying that anti-drug commercials have made them feel less favorable toward drugs to a “great” or a “very great extent” has fluctuated in recent years but increased overall from 2000 through 2009. (See Figure 3.) Among 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> graders rates increased 13 percent, 26 percent, and 36 percent, respectively, from 2000 through 2009. From 2008 through 2009, trends for all three grades remained stable.

**Figure 3. Trends in Less Favorable Attitudes Toward Drugs as a Result of Anti-Drug Commercials on Television or Radio, By Grade, 2000-2009**

**PERCENT SAYING ADS MADE THEM FEEL A LOT LESS FAVORABLE**

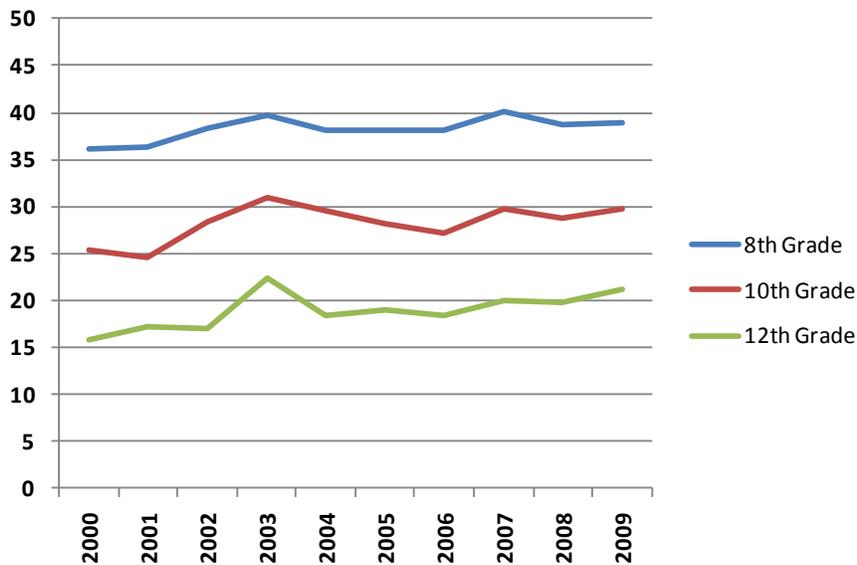


Source: 2009 Monitoring the Future Study, December 2009.

Researchers also inquired about the extent to which students felt that anti-drug commercials overstated the dangers or risks of drug abuse. The rates of students reporting that they felt these advertisements overstated the dangers and risks to a “great” or a “very great extent” has trended upward across all three grades since 2000.<sup>26</sup> (See Figure 4.) Among 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> graders, rates increased 8 percent, 18 percent, and 33 percent, respectively, from 2000 through 2009. The trend from 2008 through 2009 was stable.

**Figure 4. Trends in Perceived Exaggeration of Anti-Drug Commercials on Television or Radio, By Grade, 2000-2009**

**PERCENT SAYING ADS OVERSTATED DANGERS TO A GREAT OR VERY GREAT EXTENT**



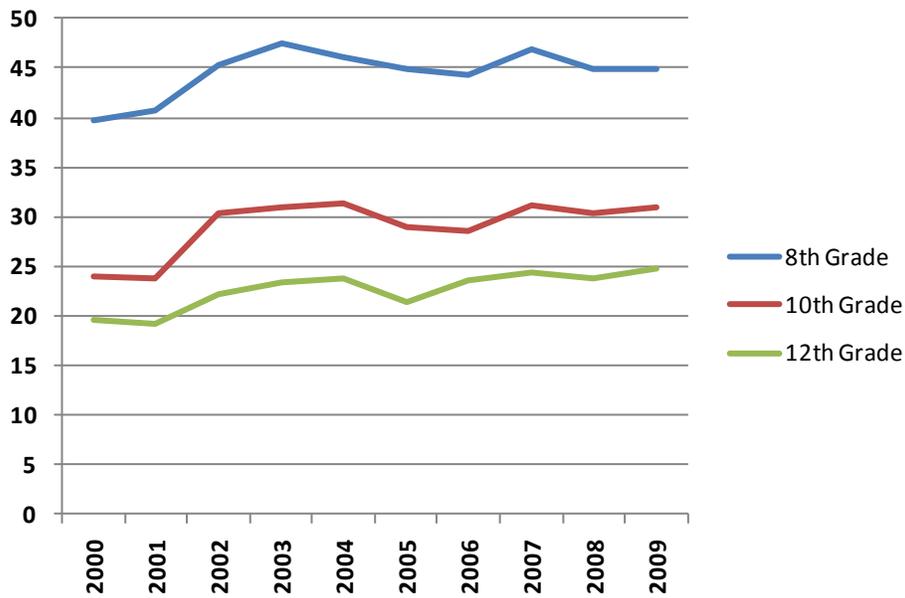
Source: 2009 Monitoring the Future Study, December 2009.

<sup>26</sup> In contrast, copy testing of Campaign advertising among the targeted youth audience indicates that the majority of teenagers find the advertising especially “true to life” (77%), “well done” (75%), and “informative” (74%).

The percent of students reporting that anti-drug advertisements had made them less likely to use drugs in the future to a “great” or a “very great extent” increased across all three grades from 2000 to 2009. The trend from 2008 to 2009 was stable. (See Figure 5.) Among 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> graders, rates increased 13 percent, 29 percent, and 27 percent, respectively from 2000 through 2009.

**Figure 5. Trends in Reduced Intention to Use Drugs as a Result of Anti-Drug Advertisements on Television or Radio, By Grade, 2000-2009**

**PERCENT SAYING ADS MADE THEM A LOT LESS LIKELY TO USE DRUGS**

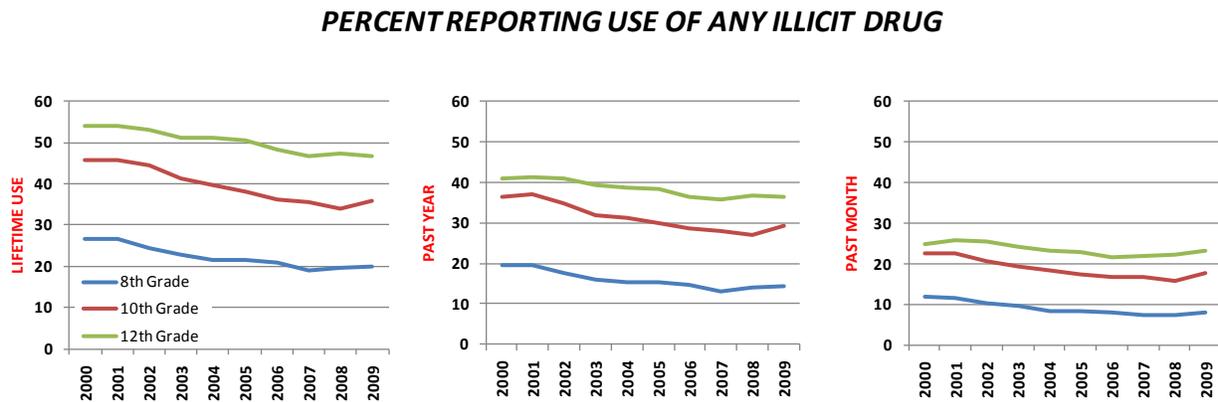


Source: 2009 Monitoring the Future Study, December 2009.

## Drug Abuse Trends

Use of any illicit drug decreased overall from 2000 through 2009 among 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> graders. (See Figure 6.) The leveling off of that trend in more recent years is cause for concern.

**Figure 6. Trends in Lifetime, Past Year, and Past Month Use of Any Illicit Drug by Grade, 2000-2009**



Source: 2009 Monitoring the Future Study, December 2009.

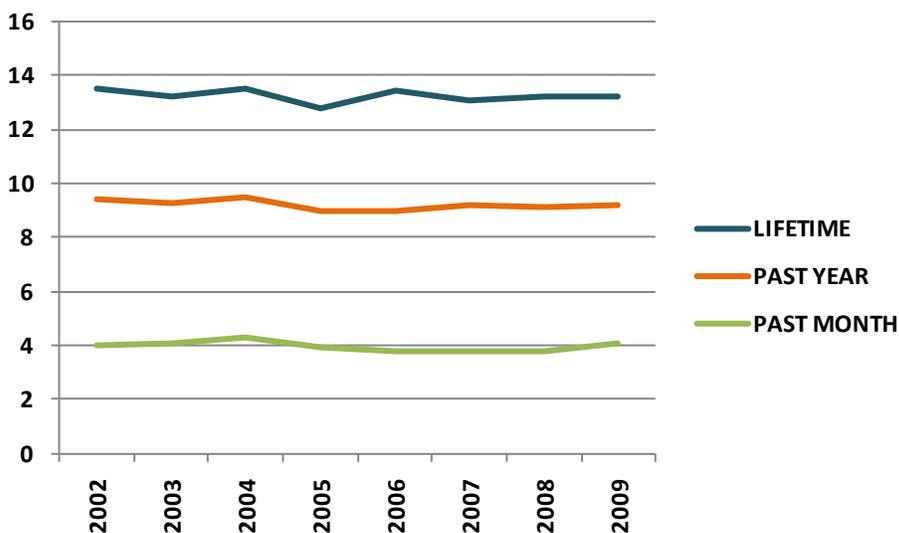
- Lifetime use of any illicit drug was down 26 percent from 2000 through 2009 among 8<sup>th</sup> graders (from 26.8% to 19.9%); 21 percent among 10<sup>th</sup> graders (from 45.6% to 36.0%); and 14 percent among 12<sup>th</sup> graders (from 54.0% to 46.7%). Changes from 2008 to 2009 are not statistically significant and indicate a leveling off of the downward trend.
- Past year use of any illicit drug was down 26 percent from 2000 through 2009 among 8<sup>th</sup> graders (from 19.5% to 14.5%); 19 percent among 10<sup>th</sup> graders (from 36.4% to 29.4%); and 11 percent among 12<sup>th</sup> graders (from 40.9% to 36.5%). Again, the downward trend appears to have leveled off in 2009, with changes between 2008 and 2009 not being statistically significant.
- Past month use of any illicit drug was down 32 percent from 2000 through 2009 among 8<sup>th</sup> graders (from 11.9% to 8.1%) and 21 percent among 10<sup>th</sup> graders (from 22.5% to 17.8%). The trend among 12<sup>th</sup> graders was statistically unchanged. As above, changes from 2008 to 2009 were not significant, suggesting that the overall trend appears to be flattening.

Although the Campaign’s prescription drug messages are not directly targeted to teenagers—they instead speak to parents of teenagers—the goal is to raise awareness among parents with the desired ultimate outcome being decreased abuse of prescription drugs among teenagers. By this measure, the findings indicated by the MTF study are mixed. (See Figure 7.)

- Among 12<sup>th</sup> graders (the only grade for which these data are available), use of narcotics other than heroin (a category that includes Vicodin, Percocet, and OxyContin) remained stable across all three prevalence periods between 2002<sup>27</sup> and 2009.
- Past year use of amphetamines remained stable among 8<sup>th</sup> graders but decreased 36 percent (from 11.1% to 7.1%) among 10<sup>th</sup> graders and 37 percent (from 10.5% to 6.6%) among 12<sup>th</sup> graders.

**Figure 7. Trends in Lifetime, Past Year, and Past Month Use of Narcotics Other than Heroin 12<sup>TH</sup> Graders, 2002-2009**

**PERCENT REPORTING USE OF NARCOTICS OTHER THAN HEROIN**



Source: 2009 Monitoring the Future Study, December 2009.

<sup>27</sup> The MTF survey was modified in 2002 to update the list of drugs provided as examples for this question. As a result, data from prior to 2002 cannot be compared with subsequent data. Thus, in this section, trend data can be presented only for the years 2002 through 2009.

### *National Survey on Drug Use and Health*

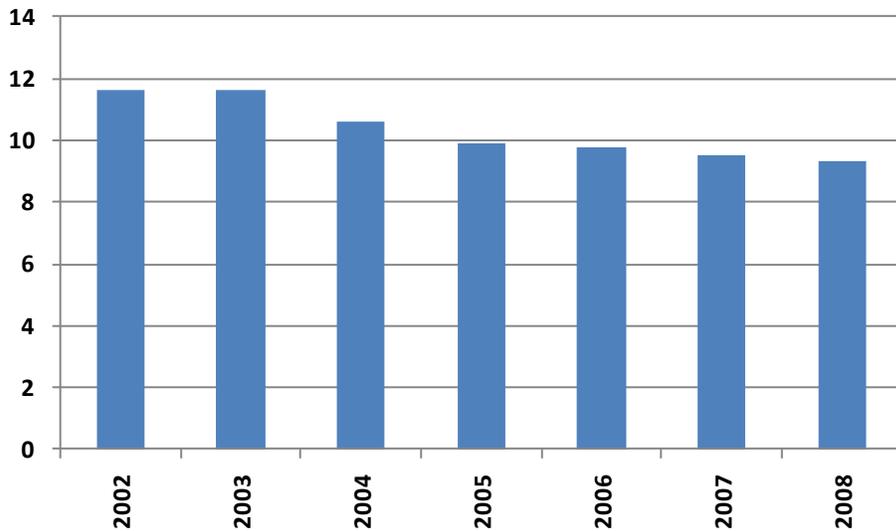
Since the early 1970s, NSDUH (formerly known as the National Household Survey on Drug Abuse) has been collecting data on substance abuse and mental health issues among the general U.S. household population (ages 12 and older). To improve the precision of NSDUH's age-based estimates, youth (ages 12 to 17) are over-sampled—that is, researchers include a higher number of youth in their population sample so that trends specific to youth are more accurately represented. In its surveys in 1998 and 2002, SAMHSA introduced changes to the survey to improve both response rates and the precision of its estimates. These changes included converting from a paper and pencil self-interview to a computer assisted self-interview, increasing the sample size from approximately 24,000 individuals to nearly 70,000, changing the name of the survey, and improving interviewer training. A result of these changes is that data from the year of the change and later cannot be compared to earlier years (i.e., data from 1998 through 2001 cannot be compared with later years, and data from 2002 and later cannot be compared with earlier years).

Highlights for youth from the 2008 NSDUH are presented below.

The rates of use of any illicit drug in the past month by youth aged 12 to 17 have decreased by nearly 20 percent (from 11.6% to 9.3%) since 2002. Rates from 2007 to 2008 remained statistically unchanged (9.5% and 9.3%). (See Figure 8.) Similarly, the number of youth aged 12 to 17 who began using an illicit drug in the past year remained statistically stable from 2007 to 2008 (1.47 million and 1.49 million).

**Figure 8. Illicit Drug Use Among Youth (Aged 12 to 17), 2002-2008**

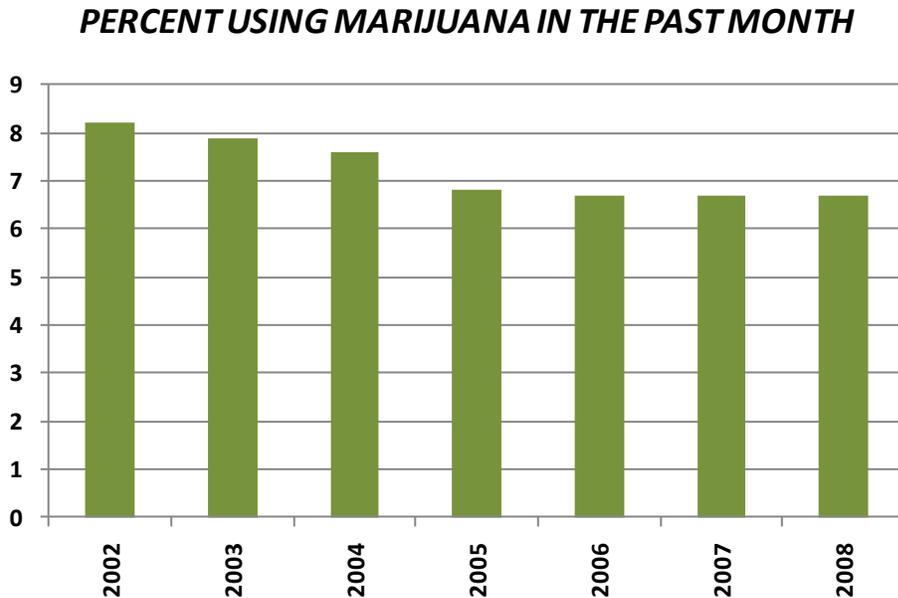
**PERCENT USING ANY ILLICIT DRUG IN THE PAST MONTH**



*Source: National Survey on Drug Use and Health (September 2009).*

The rates of use of marijuana in the past month were similar, decreasing 18 percent from 2002 through 2008 (from 8.2% to 6.7%). Rates from 2007 to 2008 were unchanged (6.7% in both years). (See Figure 9.) Similarly, the number of youth aged 12 to 17 who began using marijuana in the past year remained the same from 2007 to 2008 (1.2 million in each year).

**Figure 9. Marijuana Use among Youth (Aged 12 to 17), 2002-2008**



*Source: National Survey on Drug Use and Health (September 2009).*

In 2008, approximately one in nine youths aged 12 to 17 (11.1%) reported that they had participated in drug, tobacco, or alcohol prevention programs outside of school in the past year. This rate was similar to the 11.3 percent reported in 2007, but was lower than the rates reported in 2002 (12.7%) and 2003 (13.9%). The prevalence of past month use of illicit drugs, marijuana, cigarettes, or binge alcohol use among those who participated in these prevention programs outside of school was not significantly lower (8.9%, 5.6%, 8.0%, or 7.5%, respectively) than among those who did not (9.2%, 6.7%, 9.2%, or 8.9%, respectively).

In 2008, 78.0 percent of youths aged 12 to 17 reported having seen or heard drug or alcohol prevention messages in the past year from sources outside of school, which was similar to the 77.9 percent reported in 2007, but lower than the 83.2 percent reported in 2002. The prevalence of past month use of illicit drugs was lower among those who reported having such exposure (8.9%) than among those who reported having no such exposure (10.2%).

In 2008, 75.9 percent of youths aged 12 to 17 enrolled in school in the past year reported having seen or heard drug or alcohol prevention messages at school, which was similar to the 75.8 percent reported in 2007, but was lower than the 78.8 percent reported in 2002. The prevalence of past month use of illicit drugs or marijuana was lower among those who reported having such

exposure (8.5% and 6.1% for illicit drugs and marijuana, respectively) than among those who reported having no such exposure (12.1% and 9.0%, respectively).

### *2009 Partnership for a Drug-Free America Annual Tracking Study*

Since 1993, the Partnership for a Drug-Free America (PDFA) has conducted the PATS, an annual, nationally representative school-based survey of U.S. students in grades 9 through 12.<sup>28</sup> In 2009, a total of 3,287 students from 61 schools in 48 states were surveyed. The PATS survey assesses students' exposure to anti-drug advertising; general exposure is measured as is exposure to the Above the Influence campaign in particular. The PATS survey also measures youth attitudes and behaviors relating to illicit drug use. General exposure to anti-drug advertising is based upon responses to the question, "How frequently do you see or hear commercials or ads telling you about the risk of drugs?" Meanwhile, analysis of specific aspects of the Campaign is based upon survey respondents' recognition of specific Campaign television advertisements. That is, respondents read descriptions of seven commercials from the Above the Influence Campaign—five of which aired between January and September 2009 and two that did not air (to account for false recall)—and then respond to questions about those advertisements.

Highlights from the 2009 PATS survey are presented in the following four sections: 1) exposure to anti-drug information sources and advertisements, 2) attitudes and intentions held by teens about drug use, 3) teenagers reports of taking action to help friends avoid drugs or to seek help, and 4) youth perceptions of social disapproval of marijuana use.

### *Exposure to Campaign Advertising*

- Eight in ten (80.4%) of 9<sup>th</sup> through 12<sup>th</sup> graders say they have seen one or more of the Campaign advertisements asked about in the 2009 attitude tracking survey. White (83.8%) and Hispanic (83.4%) youths are slightly more likely to report seeing the Campaign advertisements at least a few times in the past few months than are African American youth (81.8%).
- The survey included recall questions about seven Campaign advertisements. Between 27.9 percent and 64.6 percent of adolescents in grades 9 through 12 say they had seen each of the seven advertisements at least a few times in the past few months.
- Across age, grade, and marijuana usage groups, the proportion of adolescents who think television commercials teach them a lot about the risks of drugs increases with increased advertisement recall. Four in ten (40%) adolescents in grades 9 through 12 who report seeing six or more of the seven Campaign advertisements asked about in the survey say they have learned "a lot" about the risks of drugs from television commercials, while about a quarter (26.2%) of those recalling one to five advertisements say they have learned "a lot" about drug risks this way. By comparison, only 14.7% of youth in these grades who could not recall any of the advertisements shared this view.

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<sup>28</sup> Prior to 2009, students in grades 6 through 12 were surveyed; however, beginning in 2009, only students in grades 9 through 12 were surveyed.

### *Attitudes and Intentions*

- Higher recall of Campaign advertising was associated with more favorable attitudes toward the commercials and increased reluctance to try or use drugs. Four in ten (41.5%) of 9<sup>th</sup> through 12<sup>th</sup> graders who viewed six or seven of the Campaign advertisements listed in the survey “agreed a lot” that anti-drug commercials have made them less likely to try or use drugs. This compares to 30.8 percent who recall one to five advertisements and 23.7 percent of those who said they had not seen any of the Campaign advertisements.
- A similar proportion of teens (44.6%) who have viewed six or seven Campaign advertisements think the advertisements have made them more aware of the risks of drug use (vs. 30.8% of teens who have seen one to five advertisements and 23.7% of those who said they had not viewed any advertisements).
- At least half of 9<sup>th</sup> through 12<sup>th</sup> graders who recall any of the Campaign advertisements listed in the survey report there is “great risk” involved in using marijuana regularly (seen one to five advertisements: 54.8%; seen six or seven advertisements 54.6%). Slightly fewer teens who said they have not seen any Campaign advertisements still consider regular marijuana use to be very risky (47.9%).
- Overall, teens have similar views about the risks of using marijuana regardless of the number of Campaign advertisements they recall seeing. In response to questions about the consequences of marijuana use, on 13 of 21 measures the majority of 9<sup>th</sup> to 12<sup>th</sup> graders—both those who recalled the Campaign advertisements and those who claim they did not see any of the advertisements asked about—think there is a “great risk” of negative life outcomes for someone who uses marijuana. Teens who recall seeing six or seven Campaign advertisements, though, are more likely than teens who did not see any of the advertisements to think someone who uses marijuana has a “great risk” “messing up their lives” (61.5% vs. 51.5%) and making them become “lazy” (55.7% vs. 42.4%).

### *Taking Action*

- Campaign advertisement recognition also appears to be more closely associated with teens taking action to help friends avoid drugs or get help. More than half of 9<sup>th</sup> through 12<sup>th</sup> graders who saw six or seven anti-drug advertisements (52.1%) and a similar number who saw one to five advertisements (48.9%) say in the past year they have tried to talk a friend out of using drugs or into getting help. This compares to only 35.6 percent who saw no anti-drug advertisements.
- Students in grades nine through twelve are not as likely to have intervened on their siblings’ behalf, but the number who tried to talk their brothers or sisters out of using or into getting help does increase with the number of anti-drug advertisements viewed. Significant differences are noted between those who saw six or seven advertisements and those saying they have not seen any (15.7% vs. 8.8%).

### *Youth Perceptions of Marijuana Use*

- Since 2008, there has been an increase in the percent of youth who feel that “smoking marijuana is OK sometimes” (41.2%, up from 35.3%).
- Also since 2008, fewer youth agree with the statements “I don’t want to hang around anyone who uses marijuana” (45.6%, down from 50.3% in 2008) and that “in my school most teens don’t smoke marijuana” (29.0%, down from 36.6% in 2008).
- In addition, 81.9 percent of youth felt that most people will try marijuana sometimes, and 77.3 percent agreed that “it seems like marijuana is everywhere nowadays.”
- A majority of youth perceived “great risk” of putting themselves or others in danger by using marijuana; this perception was most common among those who had seen one to five advertisements (62.5%) compared with those who had seen none (54.5%) and those who had seen six to seven (58.5%).
- Regardless of the number of anti-drug advertisements seen, a large percentage of youth perceived “great risk” involved in using marijuana regularly: no advertisements seen (47.9%), one to five advertisements seen (54.8%), and six to seven advertisements seen (54.6%).

## CONCLUSION

### *The Impact of the National Youth Anti-Drug Media Campaign*

According to the results of the Campaign's copy testing, the Above the Influence advertisements were determined to be effective in that, at the time of testing, they significantly strengthened anti-drug beliefs and/or weakened intentions to use marijuana among the target audience or subgroup. Subsequent in-market data, however, present a more complex picture. While awareness of the Above the Influence Campaign continues to increase (and to outpace other major public health information campaigns), anti-drug attitudes, such as the perceived dangers associated with marijuana use, nonetheless appear to be softening. In-market tracking data related to the parents Prescription Drug Abuse Prevention Campaign are more encouraging. When evaluated post-launch, parents demonstrated an increased belief that prescription drug abuse is a serious problem, as well as increased intentions to take action to prevent abuse, such as securing drugs at home, disposing of unneeded medications, and setting clear rules about drug use.

In 2009, weekly exposure levels to anti-drug messages in general collected by the MTF continued to decrease. Meanwhile, the percent of those reporting that exposure to anti-drug commercials has made them feel less favorable toward drugs to a "very great extent" has increased overall since 2000 in spite of recent fluctuations. A less encouraging trend is illustrated by the rates of students saying they felt anti-drug advertisements overstated the dangers and risks of drug use to a "great" or "very great extent;" these data show increases across all three grades since 2000. More promising are trends regarding the extent to which anti-drug advertisements have made students less likely to use drugs in the future: students reporting that these advertisements have positively influenced them to a "great" or "very great extent" have increased among all three grades.

The 2009 MTF study yields generally encouraging results with regard to illicit and prescription drugs. Use of any illicit drug from 2000 through 2009 among 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> graders decreased across all measures (lifetime, past year, and past month use), a result consistent with the execution of a successful Campaign. Regarding prescription drugs, the MTF results pose some concern. Although the Campaign's prescription drug messages, which first began in 2008, are not directly targeted to teenagers—they speak instead to parents of teenagers—the desired ultimate outcome is decreased abuse of prescription drugs among teenagers. The 2000s represented a period of stability among 12<sup>th</sup> graders (the only grade surveyed on this topic) in the use of narcotics other than heroin (i.e., prescription pain relievers). Also, past year use of prescription amphetamines decreased among 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> graders from 2000 through 2009.

Results from the 2008 NSDUH, though not directly attributable to the efforts of the Campaign, are broadly consistent with an effective Campaign. Rates of use of both "any illicit drug" and marijuana in particular declined overall from 2002 (the earliest year for which comparable data are available) through 2008; rates were stable between 2007 and 2008. Likewise, initiation of

illicit drug use was relatively constant (at 1.5 million in the previous year) in both 2007 and 2008.

Data from the PDFA's analysis of the 2009 PATS data are generally consistent with those from the in-market tracking study discussed above. Encouragingly, exposure to the Campaign remains high: eight in ten high school students said they had seen at least one Campaign advertisement. Also, Campaign advertisement recognition appears to be associated with teens taking action to help their friends avoid drug use or to seek help. An area of concern, however, is what appears to be a lessening in social disapproval among youth regarding the use of marijuana, which is arguably consistent with general social trends, including the increasing public debate over legalization of marijuana for medical purposes and purported fiscal benefits.

Conclusions regarding the causal relationship between the Campaign and the trends relating to anti-drug attitudes, beliefs, intentions, and behaviors that are observed in the national data sets reviewed here cannot be made. Without the ability to assess causation—that is, to establish a definitive link between the Campaign and these national estimates—we can only assess whether the findings of the studies mentioned above are consistent with a finding that the Campaign has been effective at changing attitudes, beliefs, intentions, and ultimately, behavior. This should not be interpreted as a conclusion that the Campaign has or has not had an impact on these youth trends. That determination must await the results of the outcome evaluation scheduled to commence in 2010.

If these data are suggestive of the Campaign's impact on the drug-related outcomes of interest, then they indicate that this impact possibly has stalled. Perhaps more troubling is that many of the indicators of anti-drug beliefs and intentions are softening. Rather than waiting another year or two to see if these declines translate into increased drug use, the Administration is implementing a new vision for the Campaign that features an increased focus on local media markets, including working closely with community partners to leverage the Campaign's resources, while at the same time maintaining the national prevention program. Details of this new vision for the Campaign are provided in the companion document, Progress Report on the National Youth Anti-Drug Media Campaign for FY 2009.