Prescription Drug Abuse in Los Angeles County
Background and Recommendations for Action
Message from the Health Officer

Prescription drug abuse has become one of the fastest-growing public health concerns in the United States and Los Angeles County. National data from the Substance Abuse and Mental Health Services Administration (SAMHSA) indicate that prescription drugs (opioid pain relievers, stimulants, and sedatives) are the second most-abused category of drugs after marijuana. In a national study of high-school seniors, nearly one in four reported having abused prescription drugs and the number of babies born addicted to opioid painkillers has tripled in the past decade.

Increases in the abuse of prescription drug—opioid pain relievers in particular—have led to substantial increases in morbidity and mortality. For example, from 1997 to 2007, opioid painkiller-related overdose deaths in the United States rose from 2,901 to 11,499 (nearly a 300% increase) and accounted for more deaths than heroin and cocaine combined. This report focuses on the most widely abused class of prescription drugs, opioid pain relievers.

In Los Angeles County (LAC), drug overdose is the third-leading cause of injury death and premature death. Over 14 million prescriptions for opioids were issued in LAC in the past five years (Figure 1). Results from the 2011 Los Angeles County Health Survey show that 5.2% of adults (18 and over), or an estimated 379,000, reported misusing any form of prescription drugs in the past year. In 2009, there were more than 650 prescription/over-the-counter (OTC) drug-related deaths as well as more than 3,000 hospitalizations and 5,000 emergency department visits for prescription/OTC drug overdose among LAC residents. Lastly, between 2005 and 2010, the number of admissions to publicly funded substance abuse treatment programs for opioid abuse almost doubled, from 674 to 1,022.

Tackling this problem is vital to protecting the public's health and will require a coordinated effort of the public health system with other public and private agencies and organizations. We can reduce the burden of this problem by working together to address this growing public health concern through education, training, and other actions to reduce inappropriate access and use. This report summarizes the trends in national and local prescription drug abuse; opioid pain relievers are emphasized due to the high morbidity and mortality associated with this class of prescription drugs. The report also provides recommendations for action in three key areas to address prescription drug abuse: training and education, tracking and monitoring, and disposal. Although much of the data presented focuses on opioid pain relievers, the report’s recommendations are applicable to all prescribed medications. A set of appendices also provides frequently asked questions about prescription drugs (Appendix 1) and resources on education and training programs (Appendix 2).

To successfully implement these recommended actions and to address prescription drug abuse in Los Angeles County, sustained collaboration between the public and private sectors is essential. We hope that the information provided in this report will not only increase awareness of the growing problem of prescription drug abuse but also stimulate joint efforts to implement coordinated strategies that will turn the curve on this problem within our county.

Jonathan E. Fielding, MD, MPH
DIRECTOR OF PUBLIC HEALTH AND HEALTH OFFICER
Background
Abuse of prescription drugs (opioid pain relievers, stimulants, and sedatives) is a growing public health problem in the United States and Los Angeles County. National data from the Centers for Disease Control and Prevention (CDC) indicate that drug-induced deaths now exceed all other causes of injury death, including deaths from motor vehicle accidents and firearms. The increase in drug overdose deaths in recent years has been driven by increased nonmedical use of prescription drugs.

Nonmedical use of prescription drugs—and of opioid pain relievers (e.g., oxycodone, hydrocodone, or methadone) in particular—is now second only to marijuana use among the nation's most prevalent drugs of choice. In 2010, an estimated 2.4 million Americans used prescription drugs nonmedically for the first time within the past year, which averages to approximately 6,600 initiates per day. Furthermore, between 1997 and 2007, there was a more than 600% increase in the amount of opioids prescribed and almost a 300% increase in deaths involving opioid pain relievers. Opioid pain relievers are now involved in more overdose deaths nationwide (15,597 deaths in 2009) than heroin and cocaine combined. The impact of opioid abuse extends into almost every aspect of health care. For every one death, there are an additional 10 substance abuse treatment admissions, 32 emergency room visits, 130 persons who abuse or are dependent, and 825 persons who report nonmedical use of opioids.

Los Angeles County Data
Mortality
A coroner-based surveillance system is used to monitor drug-related deaths in Los Angeles County. There were 8,265 drug-related deaths between 2000 and 2009, and approximately 61% of those deaths involved a commonly abused prescription/OTC drug (Figure 2). Among those who tested positive for a commonly abused prescription/OTC drug, 96% tested positive for more than one drug (prescription or other drugs). Deaths that tested positive only for prescription/OTC drugs (not for illicit drugs) were evenly split between men and women and were more common among individuals aged 45-54 years (32%), and non-Hispanic whites (71%). Of those deaths, 64% were unintentional.
**Figure 1.** Opioid Prescriptions Filled by Fiscal Year, Los Angeles County, 2007-2012

![Opioid Prescriptions Graph](image)

Source: Department of Justice, California Prescription Drug Monitoring Program (PDMP)/Controlled Substance Utilization Review and Evaluation System (CURES) data.

**Figure 2.** Drug-Related Deaths with Positive Toxicology for Commonly Abused Prescription/OTC Drugs, Los Angeles County, 2000-2009

![Drug-Related Deaths Graph](image)

Treatment
 Nationally, between 2000 and 2010, opioid prescription drug-related treatment episodes increased by 609%, the largest increase of any drug tracked in the Treatment Episode Data Set (TEDS). The Los Angeles County Participant Reporting System (LACPRS), a computer-supported system that tracks participant admission and discharge information from publicly funded substance abuse treatment programs in LAC, revealed that between 2005 and 2010, there were over 6,500 treatment admission episodes reporting prescription drugs as the primary drug problem. Among these, a large majority of treatment episodes (70%) were for opioid pain relievers. As shown in Figure 3, treatment episodes for opioids almost doubled during the five-year period from 2005 to 2010 (n=674 to n=1,022). Prescription drug treatment admissions were most common among persons who were white (61%), aged 25-54 (62%), had education beyond high school, and full-time employment. LACPRS data, however, likely underestimate the number of prescription drug treatment admission episodes in LAC because they do not include data from privately funded treatment programs.

Figure 3. Treatment Admission Episodes by Primary Prescription Drug Problem, Los Angeles County, 2005-2010

Source: Los Angeles County Participant Reporting System data, Los Angeles County Department of Public Health, Substance Abuse Prevention and Control.
Hospitalization and Emergency Department Visits
The Office of Statewide Health Planning and Development (OSHPD) collects and maintains hospitalization and emergency department visit data from California licensed hospitals. These data are useful in monitoring local health care utilization trends. In 2009, there were 3,048 hospitalizations and 5,382 emergency department visits for prescription/OTC drug overdose among LAC residents (Figure 4).

Figure 4. Hospitalizations and Emergency Department Visits for Prescription/OTC Drug Overdose, Los Angeles County, 2005-2009

Source: Office of Statewide Health Planning and Development, Emergency Department and Hospital Discharge Data, 2005-2009; prepared by the Los Angeles County Department of Public Health, Office of Health Assessment and Epidemiology.
Prescription Drug Abuse in Los Angeles County

Adult Prescription Drug Use
Results from the 2011 Los Angeles County Health Survey show that 5.2% of adults (18 and over), or an estimated 379,000, reported misusing any form of prescription drugs in the past year in Los Angeles County. Data also revealed that a higher percentage of males (6.6%) than females (4.0%) reported misuse of prescription drugs. Additionally, higher percentages of the misuse of prescription drugs were reported among adults aged 18-29 years (7.3%) and adults aged 30-39 years (7.6%), compared to adults aged 40-49 years (4.7%), 50-64 years (3.9%), and 65 years and above (1.5%). These results are based on self-reported data, and may underestimate the actual prevalence in the population.

Youth Prescription Drug Use
In many states, the first drug used by most youth is no longer marijuana; rather, it is the nonmedical use of prescription drugs. This change is driven in part by a perception that prescription drugs are easier to obtain and are less harmful than illicit drugs. In 2010, 22% of high-school seniors in the United States reported nonmedical prescription drug use at any point in their lifetime, and 15% reported nonmedical prescription drug use in the past year. In Los Angeles County, 11% of students in grade 9, 14% of students in grade 11, and 37% of students in continuation, community day or alternative high schools reported misuse of prescription painkillers at least once in their lifetime.

Summary
Prescription drug abuse is a serious public health problem that has increased in magnitude in recent years, leading to substantial increases in morbidity and mortality. Patterns observed on a national scale have been observed within Los Angeles County and indicate that the burden on health is increasing. The impact of prescription drug abuse is serious and demands immediate community attention. Parents, patients, educators, health care providers, and manufacturers will need to collaborate in order to reduce prescription drug abuse. Public policy initiatives and governmental actions will be critical in addressing this issue, and sustainable solutions will only be achieved through coordinated efforts at the local, state, and federal levels.
Recommended Actions to Prevent Prescription Drug Abuse

Interventions to reduce and prevent prescription drug abuse have been documented and reported by many communities throughout the United States. These interventions fall into three general categories: training and education, tracking and monitoring, and disposal. In the sections that follow, 13 specific actions within these three categories are identified and recommended for implementation in Los Angeles County. Each recommendation is an important element in a comprehensive approach to address prescription drug abuse in Los Angeles County. Implementation of these recommendations requires participation and support by many agencies and organizations outside of the Department of Public Health and will require engagement and sustained collaboration with other sectors, including nonprofit and for-profit organizations, other government agencies, health care providers, retail establishments where prescription medications are sold, and other community partners.

A. Training and Education

Many people are not aware that the misuse or abuse of prescription drugs can be as dangerous as the misuse or abuse of illegal drugs, and that inappropriate use of prescription drugs can lead to serious injury, addiction, and even death. Nearly three-quarters (71%) of people who have used prescription drugs for nonmedical purposes report obtaining them from family members, other relatives, or friends. Therefore, a crucial first step in addressing this problem is to raise awareness about prescription drug abuse through the education of parents, youth, patients, educational professionals, and health care providers. This will establish a foundation for population-level changes in attitudes and behaviors related to the way prescription drugs are obtained, used, stored, and disposed.

Health care providers (e.g., physicians, pharmacists, nurses, nurse practitioners, and dentists) play a critical role in the prevention of prescription drug diversion, misuse and addiction, especially in their ability to appropriately prescribe drugs with high abuse potential, as well as in the information they provide to their patients. Unfortunately, most health care providers receive very little training and education on substance use disorders and addiction, and are poorly equipped to identify and address factors that lead to the abuse of prescription medications. The complex challenges of treating chronic pain and addiction, along with the high level of skill required to properly prescribe and dispense medications with high abuse potential complicates the problem. Training and educating health care providers about potential prescription drug abuse, particularly prescription opioid abuse, will increase their awareness and knowledge so that they will better understand the need to prescribe safely. In turn, they can educate patients in the proper use and disposal of unused prescription drugs, thereby reducing the amount of unused prescription medications in home medicine cabinets.
RECOMMENDED ACTIONS

1. Implement public awareness programs through public education and social media campaigns for youth, young adults, and parents on the potential harm associated with the misuse of prescription drugs, and the consumption of multiple drugs. These campaigns should include:

   • Information to families that even Food and Drug Administration (FDA)-approved prescription drugs can be extremely dangerous when they are misused or abused, and that misuse can lead to unintended injury, addiction, and even death.

   • Information to families that prescription drug abusers often obtain pills from the medicine cabinets of friends and family members. Therefore, all prescription medications should always be kept hidden or locked/secure, and unused medications should be disposed of immediately and properly.

   • Educational messages for youth and young adults on the danger of mixing prescription medications with alcohol and other drugs.

   • Education regarding how and where to dispose of unused and unwanted prescription medications.

   • Community-wide public awareness campaigns, including participation in the Los Angeles County Sheriff’s Department “Safe Drug Drop-Off” Program and national prescription drug “take-back” events, with advertising of permanent prescription drug drop-off locations.

2. Support and promote school-based prevention efforts, including training sessions for teachers, school administrators, and school nurses on the potential harms associated with the misuse of prescription drugs, and engaging in the use of multiple drugs. In particular, schools should be encouraged to revise their student policies and add specific language regarding the nonmedical use and diversion of prescription drugs.

3. Increase training and continuing education programs for health care providers on the prevention and recognition of prescription drug abuse. Training sessions can be provided through our health care partners and should focus on:

   • Screening patients for the risk of prescription drug misuse and abuse, and monitoring aberrant drug related behaviors on a regular basis, particularly those patients to whom opioid drugs are prescribed.

   • Evidence-based pain management guidelines, clinical practice tools (e.g., informed consent, pain treatment contracts, screening, and monitoring tools), the relationship between pain and addiction, and safe prescribing practices for opioid pain medications.

   • Education for current and future prescribers regarding their role in the prevention of prescription drug diversion, misuse, and addiction. This will also include their role in providing education to patients about prescription drug abuse and addiction, drug diversion, and proper use and disposal of all unused prescription drugs.

   • Accessing and using the State's Prescription Drug Monitoring Program (PDMP)/California's Controlled Substance Utilization Review and Evaluation System (CURES) database to reveal patient prescription patterns and trends with regard to controlled substances (Schedules II-IV).
B. Tracking and Monitoring

Prescription Drug Monitoring Programs are secured statewide electronic databases that allow health care providers (preregistered, licensed, and eligible) to access the patient’s controlled substance history information at the point of patient care. Currently, 49 states and one U.S. Territory have enacted PDMPs, and 41 states have operational PDMPs. California’s database, CURES, has more than 200 million entries of controlled substance drugs that are dispensed. Through CURES/PDMP, health care providers are able to identify possible patterns of controlled substance abuse (e.g., doctor shopping) and make better prescribing decisions in combating prescription drug abuse with regard to controlled substances. CURES/PDMP can also be used by professional licensing boards to identify clinicians with patterns of inappropriate prescribing and dispensing controlled substances, and to assist law enforcement in cases of controlled substance diversion. At this time, CURES/PDMP enrollment and usage is optional, which leads to an underestimation of the number of prescribers and users. The effectiveness of CURES data is also limited because clinicians often fail to access the data prior to prescribing Schedule II, III, or IV medications.

Recently, the Bureau of Narcotic Enforcement (which had managed California’s PDMP) was eliminated for budgetary reasons. Without a permanent source of funding, the future of California’s CURES/PDMP is not clear. With the rise of prescription drug abuse, this is a very inopportune time to defund a system that needs to be a key part of a comprehensive approach to help address the problem.

RECOMMENDED ACTIONS

1. Support PDMP or Department of Justice (DOJ) staff to secure a permanent source of funding for CURES and enhance the effectiveness of the present CURES/PDMP by incorporating the use of Health Information Technologies (HIT) to give clinicians real-time access to CURES data.

2. Work with professional licensing boards to require that practitioners (i.e., physicians, dentists, others authorized to prescribe) enroll in CURES/PDMP before they renew their licenses and check patient prescription history before prescribing a controlled substance.

3. Explore policy options that would require pharmacists to update the database in real time when schedule II, III, or IV prescriptions are filled.

4. Explore policy options at the state and local level that would require e-prescribing of controlled substances to eliminate the problem of forged or stolen prescriptions.

5. Work with professional licensing boards to take action against those engaged in inappropriate prescribing of controlled substances.

6. Explore the possibility of providing PDMP enrollment services at DPH. California DOJ can waive notarizations if DPH can verify physicians’ identities. Currently, there are over 200,000 prescribers and dispensers in California, but only about 10,000 are registered users.
7. Explore the feasibility of expanding questions related to the prevalence of prescription drug use asked on existing population-based surveys (e.g., the California Health Interview Survey, the Behavioral Risk Factor Surveillance System, the California Healthy Kids Survey, the Youth Risk Behavior Survey, and the Los Angeles County Health Survey).

C. Disposal

The safe disposal of unused and unwanted prescription products can be challenging, as most medical providers and pharmacies will not take them back from patients on a routine basis. However, it is important to remove these prescription medications from the community safely so that they are not misused.

The DEA sponsors “Drug Take-Back” events in an effort to remove potentially dangerous drugs from the community, thereby decreasing access for either diversion and/or inappropriate use. Events are coordinated locally, with police stations and other community organizations serving as drop-off points. During the DEA’s first five National Take-Back events, more than 2 million pounds (1,018 tons) of unwanted or expired prescription drugs were turned in for safe and proper disposal at more than 5,000 take-back sites. In Los Angeles County, the Sheriff’s Department launched the “Safe Drug Drop-Off” Program in conjunction with the LAC Departments of Public Health and Public Works. The program has approximately 20 drug drop-off boxes for public use (placed outside of sheriffs’ stations), and provides an opportunity for residents to safely and anonymously drop off any unused or expired prescription drugs, sharps (needles), or any other controlled substances. Drop-off boxes are emptied weekly and the contents are taken to incinerator five times a year.

RECOMMENDED ACTIONS

1. Promote the LAC Sheriff’s Department “Safe Drug Drop-Off” program and DEA-sponsored “Community Take-Back” disposal events. Advertise “Safe Drug Drop-Off” sheriff station locations and DEA-sponsored community drop-off points.

2. Work with the LAC Sheriff’s Department and other County partners to greatly increase the number of permanent take-back locations in Los Angeles communities.

3. Explore policy options at the state and local levels that would allow pharmacies to accept unused and expired prescription medications and that would make drug companies responsible for the cost of disposing unused portions of their products.

Conclusion

Prescription drug misuse and abuse is a public health crisis, claiming more than 20,000 lives a year nationally. Urgent action is needed to combat this problem. An important first step is to raise awareness of prescription drug abuse through the education and training of parents, youth, patients, educational professionals, and health care providers. There needs to be improved education of physicians in medical school and residency on treating chronic pain and screening and managing the risks of opioid misuse and addiction. Second, better monitoring and tracking of patient’s prescribing records of controlled substances to ensure no duplication of prescription and “doctor shopping” is also needed. Third, safe removal of unused and expired prescription products from the community is imperative so that they are not misused or abused. Significant and sustained outcomes will only be achieved through collaboration between public and private agencies and actively engaging key community sectors and stakeholders in adopting the recommendations outlined in this report.
References


6. 2011 Los Angeles County Health Survey; Office of Health Assessment and Epidemiology, Los Angeles County Department of Public Health.


Appendix 1

FAQs FOR PRESCRIPTION DRUGS

What are prescription drugs?
• Prescription medications/drugs are legal drugs that require a prescription to be written by a licensed clinician, and include opioids, stimulants, and sedatives.

How are prescription drugs inappropriately used?
• Taking the medication on a schedule or in a dosage that is different from how it was prescribed.
• Taking the medication without a prescription (not the prescribed patient).
• Taking the medication for reasons other than those intended by the prescriber.
• Taking the medication in combination with other drugs/substances (such as alcohol).

Who is most at risk for abuse of prescription drugs?
Individuals with a history of drug and/or alcohol abuse or those with a previous drug or alcohol (e.g., DUI) conviction are at higher risk. Also, individuals with (untreated) mental health conditions, and those who suffer from other social issues (e.g., social isolation) have an increased risk.

Where do people who abuse prescription drugs obtain them?
Among persons aged 12 or older who used pain relievers non-medically in the past 12 months, nearly three-quarters (71%) reported that they obtained them from a friend or relative, 4% obtained them from a drug dealer or other stranger, and less than 1% bought them on the Internet (SAMHSA, 2010).1

What are some of the more commonly abused prescription drugs?
OPIATES/OPIOIDS – These are pain relievers that include the drug heroin.
Examples include:
• Fentanyl (e.g., Actiq)
• Oxymorphone (e.g., Opana)
• Oxycodone (e.g., OxyContin, Percocet, Percodan)
• Hydromorphone (e.g., Dilaudid)
• Morphine (e.g., MS Contin)
• Methadone (e.g., Dolophine, Methadose)
• Buprenorphine (e.g., Bruprenex)
• Meperidine (e.g., Demerol)
• Hydrocodone (e.g., Lortab, Vicodin)
• Codeine (e.g., Tylenol with Codeine)

Note: The use of brand names does not imply endorsement by the Los Angeles County Department of Public Health. Consult prescribing information for complete safety information, including boxed warnings.
STIMULANTS – These include medications used for nasal congestion, psychiatric purposes (ADHD, sleep disorders), and weight loss.

- Dextroamphetamine/Amphetamine (e.g., Adderall)
- Methamphetamine (e.g., Desoxyn)
- Methylphenidate (e.g., Concerta, Ritalin)
- Modafinil (e.g., Provigil)
- Phendimetrazine (e.g., Bontril)
- Phentermine (e.g., Adipex-p)

SEDATIVES – These include hypnotics, tranquilizers, and muscle relaxants.

- Barbituates (e.g., Nembutal)
- Benzodiazepines (e.g., Xanax, Klonopin, Valium, Ativan, Restoril)
- Buspirone (e.g., BuSpar)
- Sleep Medications (e.g., Lunesta, Ambien)
- Muscle Relaxants (e.g., Skelaxin, Robaxin)

Why are opioids different from other prescription drugs?
Opioids are a family of chemicals processed from opium that includes the illicit drug heroin and many legal pharmaceutical drugs, such as morphine and codeine. These drugs are primarily prescribed by health care providers to treat pain (and also prescribed to treat heroin addiction). All opioids are narcotics—mind-altering, sleep-inducing, pain-relieving and addictive. They depress the nervous system and cause symptoms such as drowsiness and constipation. At high doses, opioids can depress respiratory centers in the brain, and slow or stop breathing.

Like the other classes of commonly abused prescription drugs, opioids have powerful neurological and psychological effects. However, unlike stimulants and sedatives, opioids are usually used to treat pain. It can be difficult to measure pain; therefore, clinicians are faced with the challenge of being able to accurately prescribe the appropriate amount of medication given to a patient.
What is difficult about opioid prescribing?
Opioids are addictive and individuals can develop tolerance from taking them. Individuals respond differently to these medications, leading to variation of the effects, both initially and over time. Thus, when prescribing opioids, constant re-evaluation and readjustment is required to maintain adequate pain-relief and to minimize any adverse effects and the risk of abuse or diversion.\textsuperscript{2} Prescribing opioids is technically challenging, and there are many opioids with different names, formulations, dosages, onset time, and potency; making it difficult for clinicians to knowledgeably and safely prescribe them. Lastly, few clinicians who prescribe opioids are also trained in addiction.

Additionally, the treatment of pain is challenging. Chronic pain is usually caused by the action of a number of elements or factors, and always subjective. Opioids may only address one aspect of that multi-factorial situation, leaving the other factors unaddressed. It can be hard to know if the opioids are "working," or if another aspect of the pain needs to be addressed. Because the amount of pain felt by a patient is subjective, there is no objective way to know how much medication is "enough" to treat someone’s pain.

How common is opioid abuse and dependence among chronic pain patients?
Abuse has been found in 18\%-41\% of patients receiving opioids for chronic pain.\textsuperscript{3}

Taking 20 mg of oral OxyContin or 30 mg of oral Vicodin prescribed by a doctor is equivalent to taking 30 mg of oral morphine.\textsuperscript{4}

References


Appendix 2

Summary of Federal Efforts to Educate the General Public about Prescription Pain Reliever Abuse and Misuse

Drug Enforcement Administration (DEA)

Take Back Initiative
To promote DEA's drug collection program (National Take-Back Day) and educate the public about drug disposal, DEA created web buttons, posters, brochures, billboards, and banners.
http://www.deadiversion.usdoj.gov/drug_disposal/takeback/

Get Smart About Drugs
A website for parents and caregivers to learn about drug abuse and to give them the tools to talk to their children about drugs. The website includes a downloadable booklet, Prescription for Disaster: How Teens Abuse Medicine, and educational PowerPoint presentations for community groups.
http://www.getsmartaboutdrugs.com/

Just Think Twice
A website to educate teens about the dangers of drug abuse. It is intended to talk to teens in “their language” and give them the information they need to make informed decisions about drugs. The website also includes a teacher’s guide that provides lesson plans and classroom activities about drug abuse.
http://www.justthinktwice.com/

Good Medicine, Bad Behavior
A museum exhibit that provides information on the history of prescription drug abuse and diversion in the United States and efforts to combat the problem through time, including the effects of prescription drugs on the body and the dangers of misuse.
http://www.goodmedicinebadbehavior.org/

Food and Drug Administration (FDA)

Opioid Public Service Announcements
In-store broadcast announcements and a slide presentation shown in physician waiting rooms over a 4-week period. The announcements and slides contain messages about how to properly use, store, and dispose of prescription medications.
http://www.fda.gov/Drugs/

National Institutes of Health (NIH)

Heads Up: Real News About Drugs and Your Body
Heads Up is a drug education series from Scholastic and NIH for teachers and 11- to 15-year-old students with materials about drugs’ effects on the brain and body. The series includes inserts in Scholastic magazines and a presence on the Scholastic website and includes materials such as teacher guides and posters.
http://headsup.scholastic.com/

NIDA for Teens
Launched in 2003, NIDA for Teens provides teens with science-based information about the harmful effects that prescription drug abuse and addiction have on the brain and body through a website and hard copy materials. PEERx is the prescription drug abuse component within the NIDA for Teens website.
http://teens.drugabuse.gov/index.php
Office of National Drug Control Policy (ONDCP)

National Youth Anti-Drug Media Campaign
Aims to prevent and reduce youth drug abuse across the nation through a mass-media campaign. The Campaign targets youth, their parents and other caregivers, and community organizations through two primary brands: “Above the Influence” is the Campaign’s teen brand and “Parents. The Anti-Drug” is the Campaign’s brand aimed at parents, other caregivers, and community organizations. In fiscal year 2011, the Campaign targeted parents and teens with messages about prescription drug abuse and misuse on its websites. http://www.whitehouse.gov/ondcp/anti-drug-media-campaign

Substance Abuse and Mental Health Services Administration (SAMHSA)

“Not Worth the Risk; Even If It’s Legal”
A series of posters and brochures released in three phases targeting teens, college students, and teen influencers with information about the dangers of prescription drug abuse.
http://www.talkaboutrx.org/not_worth_the_risk.jsp

Educational Resources for Clinicians

Continuing Medical Education (CME)
There are many CME opportunities for clinicians, including from the Pain Clinician website: http://painclinician.com/education/ and the Pain Treatment Topics website: http://pain-topics.org/education_CME_locator/index2.php

Physicians for Responsible Opioid Prescribing (PROP)
PROP provides physicians with educational materials and resources to promote cautious, safe, and responsible opioid prescribing practices.
http://www.supportprop.org/

Buprenorphine Training & Support
Training programs for primary care clinicians on opioid addiction treatment with Buprenorphine, both web-based modules and live trainings can be found at:
Appendix 2  (continued)

EDUCATION AND TRAINING PROGRAM RESOURCES
Various agencies have provided educational and training programs for teens, parents, teachers, public, and health care providers with regard to pain management, safe prescribing and disposal, drug abuse, addiction, and diversion.

Federal Agencies – Public Education Efforts
The General Accounting Office (GAO) has published a report titled “Prescription Pain Reliever Abuse: Agencies Have Begun Coordinating Education Efforts, but Need to Assess Effectiveness” (GAO-12/115, http://www.gao.gov/assets/590/587301.pdf). The report describes a total of nine educational campaigns conducted by seven federal agencies, all with the goal of “reducing prescription pain reliever abuse and misuse” (GAO, 12/2011). The following excerpts/tables are from the report:

Table A. Public Education Efforts about Prescription Pain Reliever Abuse and Misuse

<table>
<thead>
<tr>
<th>Primary Target Audience</th>
<th>Agency</th>
<th>Program</th>
<th>Medium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teens</td>
<td>DEA</td>
<td>Good Medicine, Bad Behavior Just Think Twicena</td>
<td>Museum Exhibit Website</td>
</tr>
<tr>
<td></td>
<td>NIH</td>
<td>Heads Up: Real News About Drugs and Your Bodyna</td>
<td>Classroom Materials Website</td>
</tr>
<tr>
<td></td>
<td>ONDCP</td>
<td>NIDA for Teensna</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SAMHSA</td>
<td>National Youth Anti-Drug Media Campaignna</td>
<td>Website</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Worth the Risk; Even if it’s Legal</td>
<td>Brochures and posters</td>
</tr>
<tr>
<td>Parents</td>
<td>DEA</td>
<td>Get Smart About Drugsna</td>
<td>Website</td>
</tr>
<tr>
<td></td>
<td>ONDCP</td>
<td>National Youth Anti-Drug Media Campaignna</td>
<td>Website</td>
</tr>
<tr>
<td></td>
<td>SAMHSA</td>
<td>Not Worth the Risk; Even if it’s Legal</td>
<td>Brochures and posters</td>
</tr>
<tr>
<td>College students</td>
<td>SAMHSA</td>
<td>Not Worth the Risk; Even if it’s Legal</td>
<td>Brochures and posters</td>
</tr>
<tr>
<td>Teachers</td>
<td>NIH</td>
<td>Heads Up: Real News About Drugs and Your Bodyna</td>
<td>Classroom materials</td>
</tr>
<tr>
<td></td>
<td>SAMHSA</td>
<td>Not Worth the Risk; Even if it’s Legal</td>
<td>Brochures and posters</td>
</tr>
<tr>
<td>Public</td>
<td>DEA</td>
<td>Take Back Initiative</td>
<td>Posters, brochures, advertisements</td>
</tr>
<tr>
<td></td>
<td>FDA</td>
<td>Opioid Public Service Announcements</td>
<td>Audio, slides</td>
</tr>
</tbody>
</table>

KEY
a. Efforts are broader than prescription drugs. The analysis is limited to the prescription drug-related components of these efforts.
### Table B. Efforts to Educate Prescribers about Issues Related to Prescription Pain Reliever Abuse and Misuse

<table>
<thead>
<tr>
<th>Target Audience</th>
<th>Program (Agency)</th>
<th>Medium</th>
<th>Content of Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current prescribers</td>
<td>Extended-release and Long-acting Opioid Risk Evaluation and Mitigation Strategy [REMS] (FDA)</td>
<td>CME/CE course</td>
<td>Appropriate prescribing</td>
</tr>
<tr>
<td></td>
<td>Addiction Performance Project (NIH)</td>
<td>CME course</td>
<td>Screening, brief intervention, and referral to treatment</td>
</tr>
<tr>
<td></td>
<td>Prescribing Opioids for Chronic Pain (SAMHSA)</td>
<td>CME course</td>
<td>Appropriate prescribing</td>
</tr>
<tr>
<td></td>
<td>Transmucosal Immediate-release Fentanyl Risk Evaluation and Mitigation Strategy [REMS] (FDA)</td>
<td>Written materials</td>
<td>Appropriate prescribing</td>
</tr>
<tr>
<td></td>
<td>Physician Clinical Support System–Primary Care (NIH)</td>
<td>Written materials, screening tools, mentoring</td>
<td>Screening, brief intervention, and referral to treatment</td>
</tr>
<tr>
<td></td>
<td>Prescriber’s Clinical Support System for the Appropriate Use of Opioids in the Treatment of Pain and Opioid-related Addiction (SAMHSA)</td>
<td>Written materials, mentoring, webinars</td>
<td>Appropriate prescribing</td>
</tr>
<tr>
<td>Future prescribers</td>
<td>NIDA Centers of Excellence for Physician Information (NIH)</td>
<td>Curricular resources, including lectures, case studies, and web-based training</td>
<td>Appropriate prescribing; screening, brief intervention, and referral to treatment</td>
</tr>
<tr>
<td></td>
<td>NIH Pain Consortium Centers of Excellence in Pain Education (NIH)</td>
<td>Curricular resources</td>
<td>Treating pain</td>
</tr>
<tr>
<td></td>
<td>Screening, Brief Intervention, Referral and Treatment Medical Residency Program (SAMHSA)</td>
<td>Curricular resources, including lectures, web-based training, role plays, and clinical training, including practice with simulated patients</td>
<td>Screening, brief intervention, and referral to treatment</td>
</tr>
</tbody>
</table>

**KEY**

b. Content is anticipated as materials have not yet been developed.

c. Programs are broader than prescription drugs. Analysis is limited to the prescription drug-related components of these programs.

d. The primary goal of the Addiction Performance Project is to help break down the stigma associated with addiction. Educating prescribers about screening, brief intervention, and referral to treatment is a secondary goal.