

**DEPARTMENT OF HEALTH AND HUMAN SERVICES**

**NATIONAL INSTITUTES OF HEALTH**

**Prescription Opioid and Heroin Abuse**

**Witness appearing before the**

**House Committee on Energy and Commerce**

**Subcommittee on Oversight and Investigations**

**Nora D. Volkow, M.D.**

**Director, National Institute on Drug Abuse**

**April 29, 2014**

Good Morning, Mr. Chairman and Members of the Subcommittee. Thank you for inviting the National Institute on Drug Abuse (NIDA), a component of the National Institutes of Health (NIH), to participate in this important hearing and contribute what I believe will be useful insights into the growing and intertwined problems of prescription pain relievers and heroin abuse in this country.

***Background***

The abuse of and addiction to opioids such as heroin, morphine, and prescription pain relievers is a serious global problem that affects the health, social, and economic welfare of all societies. It is estimated that between 26.4 million and 36 million people abuse opioids worldwide,<sup>1</sup>

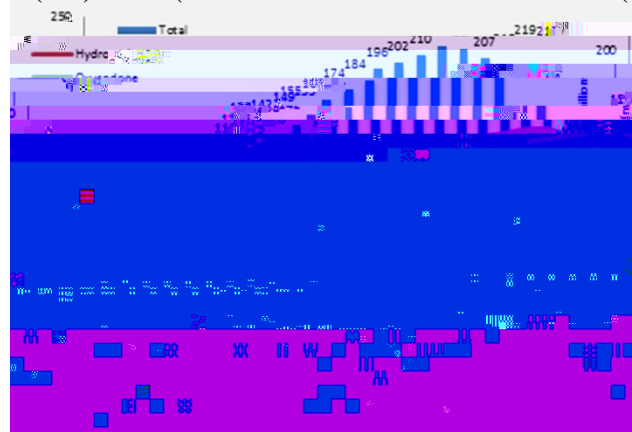
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***Abuse of Prescription Opioids: Scope and Impact***

Prescription opioids are one of the three main broad categories of medications that present abuse liability, the other two being stimulants and central nervous system (CNS) depressants.

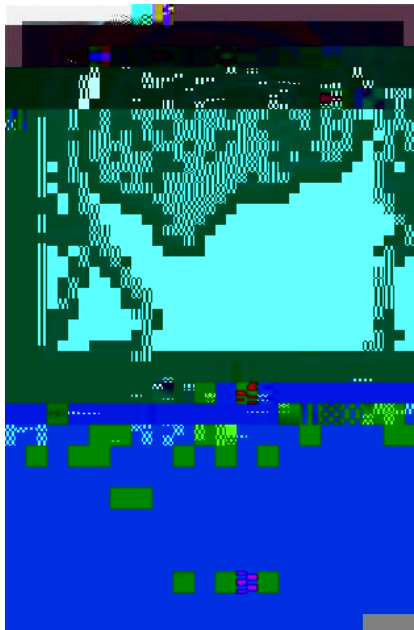
Several factors are likely to have contributed to the severity of the current prescription drug abuse problem. They include drastic increases in the number of prescriptions written and dispensed, greater social acceptability for using medications for different purposes, and aggressive marketing by pharmaceutical companies. These factors together have helped create the broad “environmental availability” of prescription medications in general and opioid analgesics in particular.

To illustrate this point, the following chart shows the total number of prescriptions written and dispensed for hydrocodone and acetaminophen from 2000 to 2010.



2007<sup>8</sup>; and overdose deaths due to prescription opioid pain relievers have more than tripled in the past 20 years, escalating to 16,651 deaths in the United States in 2010.<sup>9</sup>

In terms of abuse and mortality, opioids account for the greatest proportion of the prescription drug abuse problem. Deaths related to prescription opioids began rising in the early part of the 21<sup>st</sup>

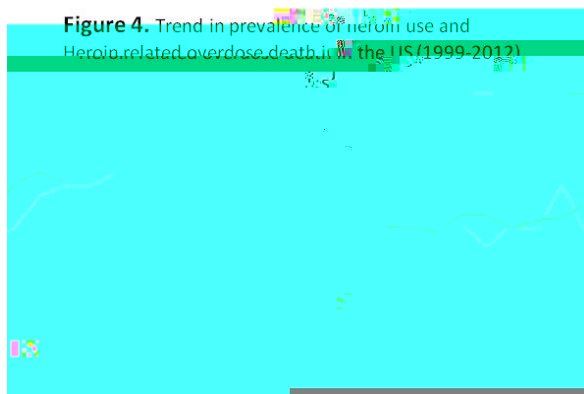
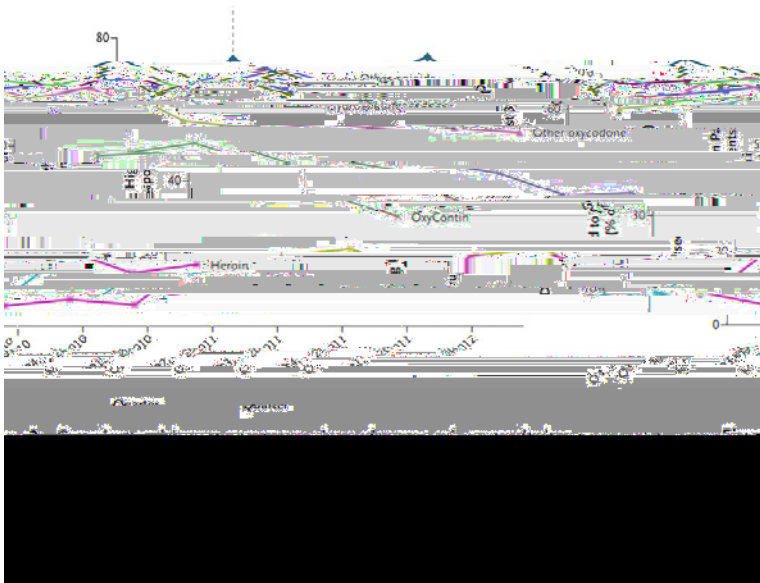


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experience by taking the drug in ways other than those prescribed. For example, extended-release oxycodone is designed to release slowly and steadily into the bloodstream after being taken orally in a pill; this minimizes the euphoric effects. People who abuse pills may crush them to snort or inject which not only increases the euphoria but also increases the risk for serious medical complications, such as respiratory arrest, coma, and addiction. When people tamper with long-acting or extended-release medicines, which typically contain higher doses because they are intended for release over long periods, the results can be particularly dangerous, as all of the medicine can be released at one time. Tampering with extended release and using by -10(t)-2(e)4(nde)4( 1



since 1999 is greater among women: Deaths from opioid pain relievers increased five-fold between 1999 and 2010 for women versus 3.6 times among men.<sup>27</sup>







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according to CDC.<sup>33</sup> For many years, naloxone was available only in an injectable formulation and was generally only carried by medical emergency personnel. However, FDA has recently approved a new hand-held auto-injector of naloxone to reverse opioid overdose that is specifically designed to be given by family members or caregivers. In order to expand the options for effectively and rapidly counteracting the effects of an overdose, NIDA is also supporting the development of a naloxone nasal spray—a needle-free, unit-dose, ready-to-use opioid overdose antidote that can easily be used by an overdose victim, a companion, or a wider range of first responders (*e.g.*, police) in the event of an emergency.<sup>34</sup>

*Research on the Treatment of Opioid Addiction.* Drug abuse treatment must address the brain changes mentioned earlier, both in the short and long term. When people addicted to opioids first quit, they undergo withdrawal symptoms, which may be severe (pain, diarrhea, nausea, vomiting, hypertension, tachycardia, seizures). Medications can be helpful in this detoxification stage, easing craving and other physical symptoms that can often trigger a relapse episode. However, this is just the first step in treatment. Medications have also become an essential component of an ongoing treatment plan, enabling opioid-addicted persons to regain control of their health and their lives.

Agonist medications developed to treat opioid addiction work through the same receptors as the addictive drug but are safer and less likely to produce the harmful behaviors that characterize addiction, because the rate at which they enter and leave the brain is slower. The three classes that have been developed to date include (1)



hydrochloride. This formulation was developed as the initial product. The second medication, Suboxone, contains naloxone to guard against misuse (by initiating withdrawal if the formulation is injected). Subutex and Suboxone are less tightly controlled than methadone because they have a lower potential fo

The image is a screenshot of the eNIDA website. At the top, the logo reads "eNIDA eTool Innovations for Provider Education" next to icons of a tablet and a smartphone. Below the logo, the main heading is "Training to Your Patients About Opioids" with a sub-heading "CME/CNE, 1.0 CEU from NIDA and Medscape LLC". A navigation bar includes a "Home" button and a "Safe Prescribing for Opioids" link. The main content area features a video player with a play button and a text box that says "Interactive case-based programs including video demonstrations and interactive". At the bottom, there is a list of topics with a search bar and a "View All" button.

training, including medical students and resident physicians in primary care specialties (*e.g.*, internal medicine, family practice, and pediatrics). NIDA has also developed, in partnership with the Office of National Drug Control Policy (ONDCP), two online continuing medical education courses on safe prescribing for pain and managing patients who abuse prescription opioids. To date, combined, these courses have been completed over 80,000 times. Additionally, NIDA is directly reaching out to teens with its PEERx initiative, an online education program that aims to discourage prescription drug abuse among teens,<sup>40</sup> by providing factual information about the harmful effects of prescription drug abuse on the brain and body.

NIDA will also continue its close collaborations with ONDCP, the Substance Abuse and M

but they are also powerful clinical allies. Therefore, it is imperative that we strive to achieve a balanced approach to ensure that people suffering from chronic pain can get the relief they need