

A photograph of a man in a blue t-shirt sitting on the floor against a light-colored wall. He has his hands pressed against his face, covering his eyes and forehead, suggesting a state of deep distress or despair.

## Opioids: Progression of a Public Health Emergency

**The opioid crisis has reached epidemic proportions and now ranks as a leading public health challenge. The 2017 National Survey on Drug Use and Health estimated that opioid overdoses claimed an average 130 lives daily.<sup>1</sup>**

### **Consider these facts:**

- Fatal drug overdoses in 2017 rose to a total of 70,200 deaths
- Of these deaths, 68 percent involved an opioid
- The death rate in 2017 spiked nearly six times over that for 1999<sup>2</sup>

Opioid misuse has cost many lives and is impartial to gender, lifestyle and race, affecting adults of nearly all ages.<sup>3</sup> Infants also are vulnerable. Opioid use during pregnancy has led to babies with neonatal abstinence syndrome (NAS) being born every 25 minutes. The human cost to these infants is immeasurable, but there is also a financial cost in billions of dollars, owing to increased lengths of stay in hospitals.<sup>4</sup> For these and other reasons, the United States declared the opioid crisis a “national public health emergency” on Oct. 26, 2017.<sup>5</sup>

## Deadly Medicine

Why are opioids so deadly? Opioids are medications naturally derived from poppy plants to become opium, heroin, morphine and codeine. They can also be synthetically produced in laboratories as fentanyl, hydrocodone, oxycodone, hydromorphone and other forms.<sup>6</sup> When used to alleviate chronic pain, a cycle of events can quickly culminate in addiction. What makes opioids so dangerous is that, once consumed, they bind to opioid receptors in the brain and nervous system, triggering the release of “feel good” chemicals. Endorphins and dopamine create feelings of reward, pleasure and satisfaction. Unfortunately, opioid use releases more dopamine than is necessary, creating a euphoric effect for the user. This signals the brain as a rewarding experience, which prompts the user to desire more. This cycle quickly descends into addiction.

While at first people may use the drugs for pain control or to experience euphoria, prolonged use and higher doses of these drugs alter brain cell structures and their natural protective mechanisms against overdose. Once drug users become habituated to opioids, they have to use them just to feel normal.<sup>7</sup>

## How Did We Get Here?

During the 1990s, physicians prescribed opioids to relieve pain following surgeries and in cancer treatment. Some pharmaceutical companies widely promoted both natural and synthetic opioids, including methadone, with the assurance they were safe to use and non-addictive. By 2010, prescription opioids expanded in use for back pain, dental procedures and other commonplace conditions. It wasn't long before physicians realized the addictive danger of longer-term natural and synthetic opioid use.<sup>8</sup>

At the same time, heroin use became more widespread. By 2013, fatalities involving fentanyl and illicit counterfeit pills began to appear.<sup>9</sup> Fentanyl use spiked because of its low cost and easy availability.

Despite changes to policy for prescribing opioids, the rate of deaths continues to be alarming. The number of fatalities is such that it has helped depress life expectancy estimates for the United States, as well as increasing rates of infectious diseases like HIV and hepatitis C due to unsafe injection practices.<sup>10</sup> These tragedies are compounded by an enormous economic burden in healthcare, treatment and lost productivity. By one estimate, this totals \$78.5 billion annually.<sup>11</sup>



## A Battle on Multiple Fronts

It will be difficult to reverse the course of this epidemic, and will require the collective efforts of many individuals, as well as policy changes. Health officials are adapting practices in the prescription of drugs, monitoring of their use, safe medication disposal and controls on the manufacture and marketing of these substances. The efforts of federal law enforcement and legislators to curb illegal drug trafficking are also very important. Federal agencies, immigration departments and various organizations are working to stem the tide of illegal imports. It will be critical to collect and analyze data, as well as educate the public. The medical community and public must be open to exploring alternate methods of pain relief.

The U.S. Department of Health & Human Services has issued a five-point strategy for addressing the crisis. A summary of their recommendations follows.<sup>12</sup>

**1. Better addiction prevention, treatment and recovery services:** HHS has issued more than \$800 million in grants to improve access to prevention, treatment and recovery support services to prevent the health, social and economic consequences associated with opioid misuse and addiction, and to enable individuals to achieve long-term recovery.

**2. Improve methods for data collection and use the data effectively:** A stronger reporting structure is needed to gather statistical information. Valid data is helpful to treatment programs and recovery outreach. Federal and state resources, along with surveillance, can be used.

**3. Alternative pain relief:** Physicians need to follow innovative yet structured approaches for pain assessment and management. Greater awareness can be brought to healthcare personnel. Changes to care pathways and policies, as well as easier accessibility to other pain relief therapies will help.

**4. Timely treatment for opioid addiction and easy access to naloxone:** The Health Resource & Service Administration (HRSA) recently allotted \$2.5 million to help rural people needing opioid overdose treatment. HRSA has also initiated efforts in telehealth for treatment and support to primary care providers in treating overdose. The HRSA 2019 budget includes \$74 million to provide opioid-reversing drugs.

**5. Funding research:** The Agency for Health Care and Quality Research (AHRQ) has invested an estimated \$12 million over three years in support of Medication Assisted Treatment (MAT) for opioid addiction in rural areas. The National Institutes of Health (NIH) launched the HEAL Initiative (Helping to End Addiction Long-term) for research on complex pain pathways, effectiveness of behavioral interventions when supplemented by other medications; and the testing and discovery of new pain management treatments. This support led to the development of naloxone nasal spray, which reverses opioid overdose, and the creation of buprenorphine for treatment of opioid use disorder. Other research by federal and non-federal agencies is underway.<sup>13</sup> [▲](#)

## The Role of Health Plans

A report by the Centers for Disease Control reflects millions of dollars spent across 52 jurisdictions in 45 states for opioid-related emergency room visits. These visits increased by 30 percent from 2016 to 2017. Identifying at-risk health plan members and initiating treatment is a high priority for health plans. They can play a role in linking care providers with one another, offering counseling services, increasing treatment availability, including MAT, and coordinating with community organizations for support services.<sup>14</sup>

Understanding opioid prescribing patterns helps health plans, insurers, policymakers and legislators take critical steps to curbing the human and economic losses of this national tragedy. [▲](#)

### References

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