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OPIOIDS

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They obliterate pain. They make people feel temporarily blissful. And they have triggered one of the most severe public-health crises of recent decades. Known as opioids, these drugs have destroyed lives and blighted communities. Research might offer ways to escape some of the worst effects of the drugs.

First, we chart the epidemic by the numbers, and examine ways to halt the crisis (see page S2). In the United States, deaths from opioid-related causes have grown to outnumber fatalities from gunshots and motor-vehicle accidents, even as doctors prescribe the drugs less frequently. Understanding how the US opioid epidemic arose could help to predict how it might spread to other countries (S10).

Addiction to opioids often starts with prescriptions to treat chronic pain, so non-opioid analgesic drugs now in development could nip the problem in the bud (S4). Finding other approaches to alleviating discomfort after surgery might head off another way in which people become addicted (S8). And regulatory changes aimed at reducing opioid prescriptions further will also be part of the solution (S13).

People who are already addicted face a difficult road back. A bioethicist's harrowing personal experience of opioid addiction shines a harsh light on common medical protocols (S16). Still, a cannabis-derived compound is showing promise as a treatment for opioid addiction (S7). But the realization that some people will remain dependent on opioids has led to various approaches to reducing harm from drug use, which are being enacted around the world (S17).

Much remains unknown — including, fundamentally, what makes opioids so addictive (S20). But research into the mechanisms and effects of opioids is progressing (S22).

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Herb Brody

Chief supplements editor

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