



January 2019

Costs of opioids and naloxone: Troubling snapshot of opioid crisis and saving lives

December 7, 2018 marked the fifth anniversary of the death of [Jack Fishman](#), the man who invented naloxone, a medication that rapidly reverses opioid overdoses. His peers have described him as a brilliant yet humble man whose life was filled with many ironies.

Fishman was born in Poland in 1930. He fled before the Nazi invasion and eventually immigrated to the United States. During his early 30s, he worked for a small private lab in New York City. It was there, while trying to come up with a way to treat constipation caused by opioid use, that he invented naloxone. In 1961, when Fishman and his business partner applied for a [patent](#) for naloxone, they had no idea how many lives their invention would save.

Though naloxone would go on to become standard treatment for opioid overdose in ambulances and emergency rooms across the country, Fishman

did not benefit financially from his discovery. Once his original patent expired, the cost of acquiring another was too expensive. He did not reapply, allowing his invention to be snapped up by pharmaceutical companies. More than 40 years after inventing naloxone, Fishman lost his stepson to a heroin overdose.

Since the expiration of Fishman's patent, the pricing and availability of drugs--both legal and illegal--illustrate how markets chase profits and reward innovation. A comparison of heroin with naloxone offers a disturbing glimpse into the overdose epidemic that is sweeping the U.S.

For example, the price of heroin in the early 1980s [was about \\$2,200](#) for a gram. Today, that same amount costs less than \$500, a nearly 80 percent decrease. A bag of heroin today costs about \$5, and prices continue to fall with the introduction of more powerful synthetic opioids such as [fentanyl](#).

Compared to heroin, which requires lengthy cultivation of poppy plants and cumbersome processing, fentanyl is relatively cheap to make. Humans have been growing poppies and harvesting opium [for at least 6,000 years](#). Manufacturing has historically been constrained by the 120-day growth cycle of the opium poppy plant and the location where it grows. Today, fentanyl and other illicit opioids are being [rapidly mass produced](#). Much of the supply is coming from China through Mexico, and small U.S. based labs are also creating these products.

It is a different story for [naloxone](#); prompt access could prevent some or all of the [115 opioid overdose deaths](#) that occur in the U.S. every day. Naloxone is cheap to make and has been off patent since 1985. Given the ongoing devastation of the opioid crisis, you might expect that naloxone would be widely available at a low price. Not so...a decade ago, a [lifesaving dose of nasal naloxone cost \\$1](#). Today, that same dose costs \$150, a 150-fold increase. A naloxone auto-injector, [approved in 2016](#), costs \$4,500.

Pharmaceutical innovation hasn't driven up these prices; opportunity has. Market forces are working from opposite directions. In the midst of this crisis, lethal street drugs are increasingly affordable and available, while naloxone is increasingly expensive to obtain across much of the U.S. [Most states](#) have some form of pharmacy access--either with or without a prescription. [Out of pocket costs](#) vary depending on insurance.

In April 2018 the U.S. Surgeon General Jerome M. Adams issued a public health [advisory](#) on naloxone that explains the drug's benefits and urges people at elevated risk of opioid overdose and those close to someone at high risk to carry it with them. Some states--including Massachusetts, a leader in fighting the opioid crisis--have [free access sites](#) where active users, families, and friends can obtain overdose education and Narcan at no cost.

The opioid epidemic is a catastrophic consequence of multiple forces-- aggressive marketing of prescription opioids as well as increased availability and decreased costs of illicit opioids. Greater access to inexpensive naloxone alone will not solve the opioid crisis. However, individuals dependent on opioids must be kept alive if they are to have the opportunity to recover.

Jack Fishman died not knowing the true impact of his invention or how many second chances it has afforded to those who struggle with substance use disorder. One might wonder what would he think today about the rising cost of his invention?

Upcoming Trainings

Regional Trainings

We encourage smaller agencies with limited staff, new staff members in larger agencies, or large agencies with many locations to attend our regional trainings (they are the same as our regular trainings). Those who attend will be able to get Continuing Education certificates upon completion.

[HIV/AIDS Care Integration in Lowell](#)

February 1, 2019

9:00 AM – 12:00 PM

[Harm Reduction in Lowell](#)

February 1, 2019

1:00 – 4:00 PM

[Viral Hepatitis in Worcester](#)

March 1, 2019

9:00 AM – 12:00 PM

[Opioid Overdose Prevention in Worcester](#)

March 1, 2019

1:00 – 4:00 PM

[Opioid Overdose Prevention in West Springfield](#)

April 12, 2019

9:00 AM – 1:00 PM

[Opioid Overdose Prevention in Boston](#)

May 6, 2019

9:00 AM – 12:00 PM

[Harm Reduction in Boston](#)

May 6, 2019

1:00 – 4:00 PM

[Medication Assisted Treatment in West Springfield](#)

April 12, 2019

1:00 – 4:00 PM

[Viral Hepatitis in Fall River](#)

May 10, 2019

9:00 AM – 12:00 PM

[HIV/AIDS Care Integration in Fall River](#)

May 10, 2019

1:00 – 4:00 PM

Training of Trainers

Our “Training of Trainers” series will focus on training community members and programs on opioid overdose prevention and making connections to pharmacies. Participants will be given information and tools necessary to become trainers on opioid overdose prevention within their communities. We ask trainers to make a commitment to conduct at least one training within six weeks, participate in future learning activities with their cohort, help other trainers remain current in their knowledge, and continue to polish their training skills.

These trainings are free and open to the public with no training experience needed. Priority for registration will be given to BSAS funded treatment providers, non-profits, and community organizations. Narcan will not be provided after the training.

[Training of Trainers in Barnstable](#)

January 18, 2019

9:00 AM – 4:00 PM

[Training of Trainers in Canton](#)

March 11, 2019

9:00 AM – 4:00 PM

[Training of Trainers in Springfield](#)

May 24, 2019

9:30 AM – 4:30 PM

Praxis provides training to all Massachusetts Bureau of Substance Abuse Services funded substance use disorder treatment programs on

Contact us to request training or technical assistance:
www.center4si.com/praxis/trainings
praxis@center4si.com

- [Harm Reduction](#)
- [HIV/AIDS Care Integration](#)
- [Medication-Assisted Treatment](#)
- [Opioid Overdose Prevention](#)
- [Viral Hepatitis Care Integration](#)

