

Is a vaccination against deadly fentanyl addictions on the horizon?

Researchers report they have created a vaccine to fight fentanyl addiction, in a potential breakthrough in the opioid epidemic.

The shot would block the ability of fentanyl to enter the brain and cause the “high” that users crave. It could be used to prevent relapses in people trying to quit opioids, once it gets through clinical trials, the scientists said.

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More than 150 people die every day in the United States from overdoses of synthetic opioids including fentanyl. About 80% of people who try to quit suffer a relapse.

Fentanyl is 50 times stronger than heroin and 100 times stronger than morphine. Even a tiny amount, 2 milligrams, is likely to cause death.

Scientists created the vaccine using a derivative from *E. coli* bacteria, to help boost immune response to the vaccine.

“The anti-fentanyl antibodies were specific to fentanyl and a fentanyl derivative, and did not cross-react with other opioids, such as morphine. That means a vaccinated person would still be able to be treated for pain relief with other opioids,” [researcher Colin] Haile said.

Even people who don’t ordinarily consume fentanyl but who use other drugs sometimes experience fentanyl overdoses because the drug is often added to street drugs like cocaine, methamphetamine, counterfeit benzodiazepines like Xanax, and other opioids, such as oxycodone and hydrocodone.

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