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# Myths about fentanyl spread more prolifically online than articles correcting them, study finds

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News articles containing misinformation about fentanyl—falsely suggesting that people can overdose and die from simply touching the synthetic opioid—are shared and spread far more widely on social media than stories that attempt to correct such myths, a new study from researchers at Northeastern University finds.

Fentanyl has approved medical uses as an anesthetic during surgery and an analgesic for severe pain. But an illicit form has been turning up in the heroin supply in cities like Philadelphia for the last several years. Stronger and cheaper than heroin, it was initially used to cut the less powerful drug, and contributed to skyrocketing overdoses among heroin users unaccustomed to fentanyl's potency.

Now, fentanyl has replaced most of the heroin supply in Philadelphia, and is present in most overdose deaths in the city.

"Fentanyl is scary enough without making stuff up. It's a highly potent drug, and the public health implications of fentanyl proliferation in the drug supply have been absolutely catastrophic," said Leo Beletsky, a professor of law and health sciences at Northeastern in Boston and lead author of the study published last week in the *International Journal of Drug Policy*.

But since fentanyl's emergence into the drug market, he said, law

enforcement agencies, federal officials and credulous news outlets have spread the idea—refuted by addiction and toxicology experts as scientifically impossible—that a person can overdose from accidental, casual contact with fentanyl.

In 2019, an officer in Harrisburg searched a book bag containing an open Ziploc bag, crack cocaine, and a "wet napkin or paper," and then became pale and disoriented, with dropping oxygen levels, the Harrisburg Patriot-News reported. He was dosed with the overdose-reversing spray naloxone, and police officials characterized the incident as an "accidental opioid exposure."

In a follow-up article, experts pointed out that the incident likely wasn't driven by opioids, and said people who regularly come into contact with fentanyl—from drug dealers and distributors to nurses and doctors in surgical settings—are not overdosing from their casual contact with the drug.

In a 2017 article, experts told *The Inquirer* that, though just two to three milligrams of fentanyl would make most people stop breathing, that's only true if the drug found its way into the bloodstream.

"Fentanyl just isn't absorbed through skin into your blood quickly or efficiently enough to make this kind of dose possible from incidental contact," Andrew Stolbach, an emergency physician and medical toxicologist at Johns Hopkins University in Baltimore, told the paper.

The study looked at 551 news articles on the topic from 48 states, published between 2015 and 2019. Researchers categorized 506 as spreading misinformation about fentanyl: in other words, endorsing the idea that just touching or inhaling small amounts of fentanyl could cause overdose or death.

Those articles spread widely on Facebook, racking up hundreds of thousands of shares and potentially reaching nearly 70 million people between 2015 and 2019, the study found. Most of the articles were published in Texas and Pennsylvania.

The remaining 45 articles in the study tried to correct or at least counterbalance misinformation about fentanyl. They received about one-tenth of the exposure that articles spreading misinformation garnered, the study found.

"This media trope, that you can overdose by touching fentanyl, is one of the most evidently false—and it's a myth that refuses to die. It's not a debatable point from a scientific perspective," Beletsky said.

Much of the misinformation, he said, is spread by reporters uncritically repeating law enforcement accounts of encounters with fentanyl, without consulting other addiction experts or people who deal with addiction themselves.

"What you're seeing is really an illustration of how big a megaphone law enforcement has when it comes to drug policy or drug issues," Beletsky said. "They have oftentimes a direct line."

Many of the articles examined in the study dealt with anecdotes of police officers coming into contact with fentanyl, or even simply an unknown powder that an officer believes is fentanyl, and experiencing a physical reaction. A 2016 video produced by the Drug Enforcement Administration—cited in 80 of the articles examined in the study—featured two officers from Atlantic County, N.J., who said they had inhaled airborne fentanyl.

"Symptoms described include loss of blood flow to the face, disorientation, and shortness of breath—consistent with panic attacks,"

the study authors wrote.

A typical opioid overdose involves a loss of consciousness; unresponsiveness to outside stimuli; blue or grayish skin; slow, shallow, erratic, or no breathing; and slow, erratic, or no pulse, according to the National Harm Reduction Coalition.

The panic around fentanyl can have far-reaching consequences, the study authors wrote.

"An effective public health response directly depends on having an accurate understanding of the risks and the dynamics of the emerging public health problems," Beletsky said. "If we don't have accurate information, our responses won't hit the mark. And that's exactly what has happened with fentanyl."

Fear of overdosing themselves might prevent first responders and bystanders from helping overdose victims in a timely manner. Overestimating the risk of overdose through casual contact with drugs can lead to "unnecessary stress and other mental health issues," the study authors wrote, and can trigger more widespread use of punitive measures like drug-induced homicide laws.

"This kind of misinformation crowds out effective responses," Beletsky said. "Instead of spending money on things like naloxone, effective substance use treatment, and supportive services that can prevent overdose in the first place, like housing, fentanyl panics have fueled funding for things like decontamination equipment, or HAZMAT suits. It's like security theater."

Beletsky said it's key for advocates to help educate the public, and reporters, on fentanyl and drug policy in general, to track how misinformation about drugs spreads online, and to help correct the

record on articles that uphold such myths.

"There's always going to be fringe news sources and social media posts that are going to fuel misinformation, but at the very least, mainstream media should not be repeating this," he said. "And they continue to."