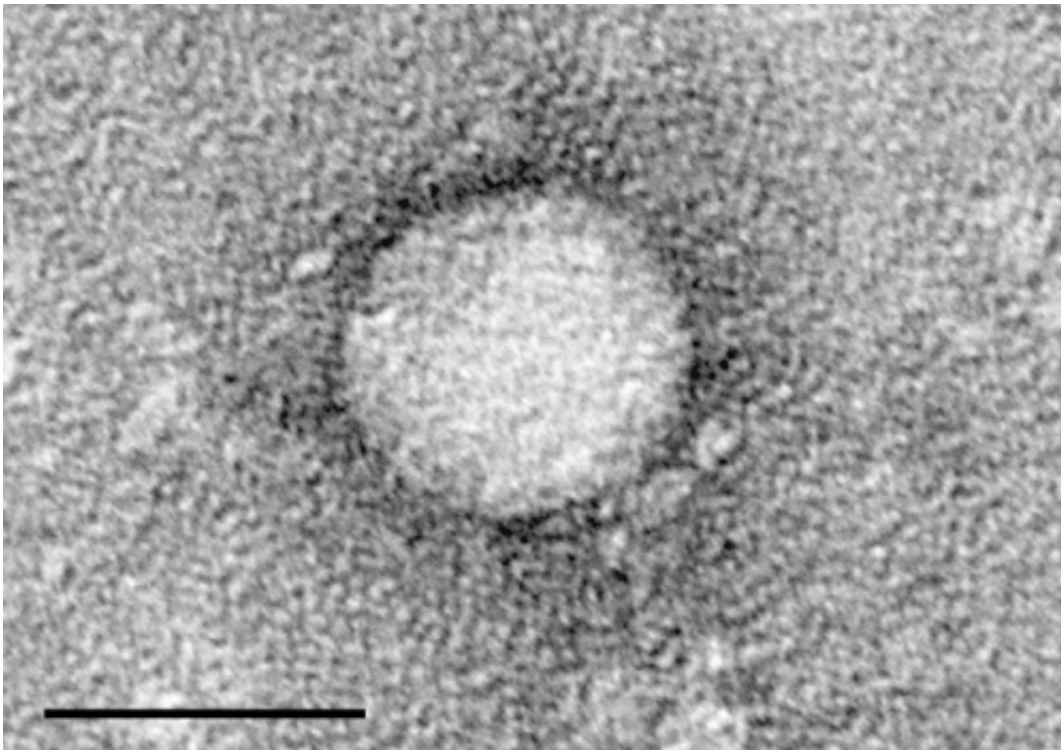


Illicit fentanyl use linked to increased risk of hepatitis C among people who use drugs

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Electron micrographs of hepatitis C virus purified from cell culture. Scale bar is 50 nanometers. Credit: Center for the Study of Hepatitis C, The Rockefeller University.

An international team of researchers from University of California San Diego and el Colegio de la Frontera Norte in Mexico have revealed a significant association between the use of illicit fentanyl and the transmission of hepatitis C virus (HCV) among people who inject drugs

in San Diego, California and Tijuana, Mexico. The findings, published in [Clinical Infectious Diseases](#), suggest that illicit fentanyl use could be driving recent increases in HCV incidence.

"Our study provides the first evidence that illicit fentanyl use is linked to an increased risk of acquiring hepatitis C infection, which disproportionately affects people who inject drugs," said Steffanie Strathdee, Ph.D., senior author and professor of medicine at UC San Diego School of Medicine.

"This underscores the importance of making point-of-care HCV viral load testing more widely available in the U.S., so those needing treatment can access it immediately."

HCV is one of several types of hepatitis, inflammation of the liver most often caused by a viral infection. HCV is most often transmitted through blood, which means that people who inject drugs are at particularly high risk of acquiring the disease.

Once acquired, the virus is easy to transmit unknowingly, because symptoms of HCV often don't emerge until months or years after the initial infection. According to the U.S. [Department of Health and Human Services](#) (HHS), about half of people with HCV do not know they have it.

HCV prevalence has also been on the rise in recent years; according to the [Centers for Disease Control and Prevention](#) (CDC), the number of reported cases of acute hepatitis C has doubled since 2014 and, during 2021, increased by 5% from 2020.

The new study, which followed a cohort of 398 people who injected drugs over two years, found that illicit fentanyl use was associated with a 64% increased risk of acquiring HCV.

"The broad shift from heroin to illicit fentanyl may be playing an important role in sharply rising HCV incidence among young people in recent years," said Joseph Friedman, M.D., Ph.D., a [resident physician](#) in the Department of Psychiatry at UC San Diego School of Medicine and the study's first author.

"HCV elimination has been prioritized as a [goal of the White House](#), and these findings suggest that accomplishing that goal may require taking a closer look at the role of fentanyl and other synthetic drugs in driving infectious disease risks."

The researchers suggest that fentanyl's short half-life—the time it takes for half the dosage of a drug to metabolize—may lead to more frequent dosing and sharing of syringes and smoking materials, which may increase the risk of HCV transmission. Notably, the relationship between illicit fentanyl use and HCV was not confined to those who inject the drug, but was noted among those who smoke as well.

"There are a variety of complex lifestyle factors that could be contributing to the increase in HCV infections among those who don't inject, especially given how long HCV can go undetected," said Strathdee. "We don't have all the answers just yet, but what we are seeing is that this is a major unmet public health need."

The study's findings have significant implications for public health policy and practice across both the United States and Mexico. According to the researchers, immediate steps that could be taken include making fentanyl testing kits more accessible to people who use drugs, many of whom don't even realize they're using [fentanyl](#) due to widespread contamination of the illicit [drug](#) supply.

Also critical to reducing the burden of HCV is increasing access to accurate point-of-care HCV tests, which are used in other countries but

are only just now [starting to be approved](#) for use in the United States.

"Since hepatitis C can be cured with a short course of antiviral treatment, efforts are needed in both the U.S. and Mexico to make these treatments more widely available," said study co-author Gudelia Rangel, Ph.D., a professor at el Colegio de la Frontera Norte.

"Both countries have dedicated [government programs](#) focused on eliminating hepatitis C, but our results show that there is so much more that needs to be done to meet the goals of these programs."

Additional co-authors of the study include Daniela Abramovitz, Britt Skaathun, Alicia Harvey-Vera, Carlos F. Vera, Irina Artamonova, Natasha K. Martin, William H. Eger and Katie Bailey at UC San Diego; Sheryl Muñoz at Comisión de Salud Fronteriza México-Estados Unidos; Bo-Shan Go at the University of Amsterdam and Philippe Bourgois at the University of California Los Angeles. Rangel and Harvey-Vera also hold affiliations at the Comisión de Salud Fronteriza México-Estados Unidos.

More information: Joseph Friedman et al, Illicit Fentanyl Use and HCV Seroconversion Among People Who Inject Drugs in Tijuana and San Diego: Results from A Binational Cohort Study, *Clinical Infectious Diseases* (2024). [DOI: 10.1093/cid/ciae372](https://doi.org/10.1093/cid/ciae372)

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