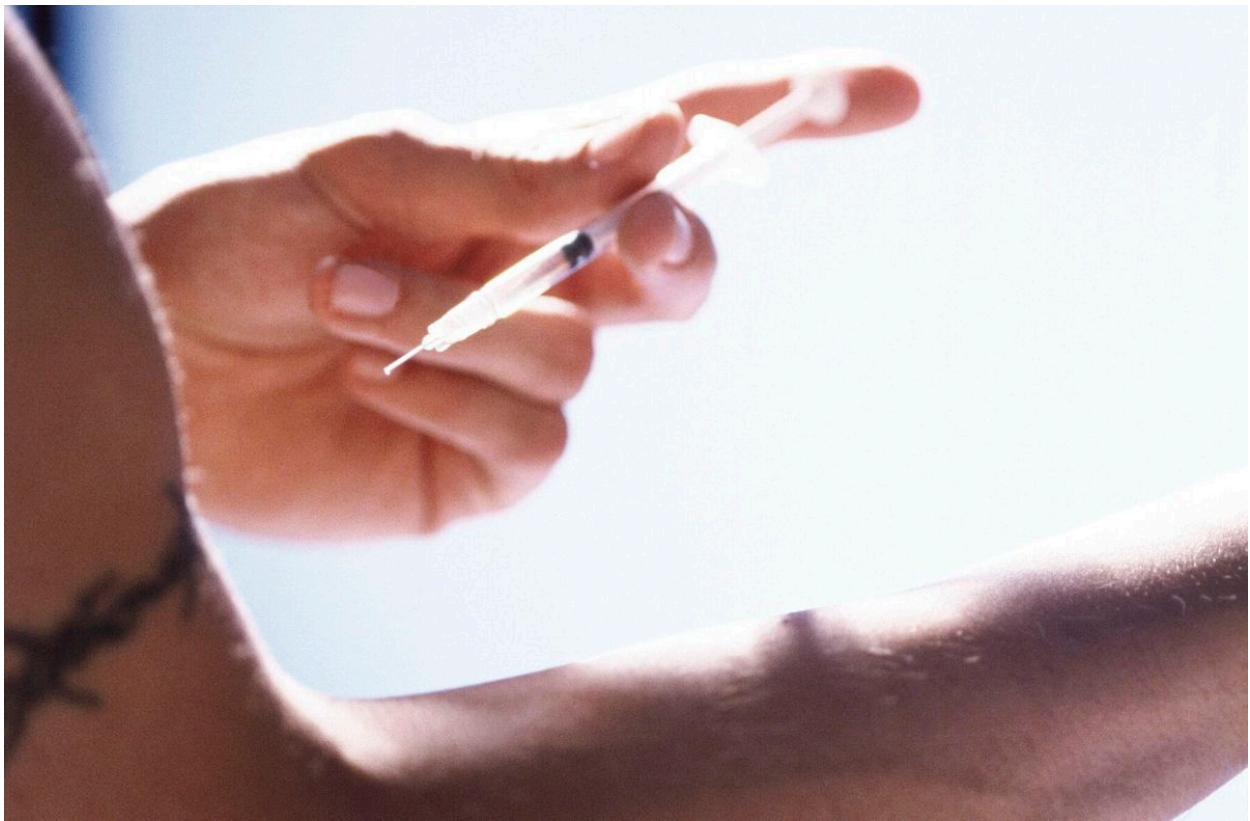


Hospitalizations for injection drug-related bacterial infections jump dramatically, study finds

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Oregon hospitalizations for serious bacterial infections associated with injection drug use increased dramatically from 2008 to 2018, reflecting an urgent need to expand treatment and harm-reduction services that improve health outcomes for people with substance use disorder, according to a new study co-authored by Oregon Health Authority and Oregon Health & Science University researchers.

The study, published Monday in The Public Library of Science ONE (PLOS ONE), found that the number of patients with an injection drug use-related serious bacterial infection increased from 839 to 5,055, or from 2.52% to 8.46% of all hospitalized patients, during the 11-year period. Hospitalizations from bacteremia, or bloodstream infection, and sepsis, which occurs when the body's response to infection causes potentially life-threatening organ damage, rose most rapidly, with an 18-fold increase.

“The results of this study affirm, once again, that the effects of substance use disorder ripple through our entire health care system,” said study senior author Tim Menza, M.D., Ph.D., medical director for the HIV/STD/TB Section at the OHA Public Health Division.

“Addressing injection drug use with proven, community-based treatment and harm-reduction strategies, such as syringe service, peer recovery support programs and medication for opioid use disorder, could potentially prevent millions of injuries and deaths from substance use disorder.”

Other study co-authors included researchers at OHSU’s Department of Medicine; the College of Public Health and Human Sciences at Oregon State University; and OutsideIn, a federally qualified health center (FQHC) in Portland.

The study involved retrospectively analyzing hospitalizations among patients with a diagnosis for substance use and a serious bacterial infection during the same hospital admission, using Oregon Hospital Discharge Data. The researchers examined trends in hospitalizations and costs of hospitalizations attributable to injection drug use-related serious bacterial infections from Jan. 1, 2008, through Dec. 31, 2018.

While opioid use diagnoses accounted for the largest percentage of hospitalizations for injection drug use-related serious bacterial infections (52%) during the study period, hospitalizations for serious bacterial infections linked to methamphetamine use saw a 15-fold increase, the most rapid rise in infection hospitalizations.

People living with HIV and hepatitis C virus experienced big increases in hospitalizations for injection drug use-related serious bacterial infection as well during the study period. Hospitalizations for both groups increased five-fold — from 18 to 174, or an increase from 1.7% to 13.0% of all hospitalizations, among people living with HIV, and from 105 to 910, or an increase from 3.7% to 17.0% of all hospitalizations, among people living with hepatitis C virus.

Overall, according to the study, the total cost of hospitalizations for injection drug use-related serious bacterial infections increased from \$16.3 million in 2008 to \$150.8 million in 2018. The increase in cost and cases represents a growing preventable burden in dollars and lives.

The study noted that hospitalization can present a reachable moment for adults: “Hospital-based initiation of buprenorphine and methadone are acceptable to patients and providers. Hospital-initiated (substance use disorder) treatment and other programs, including harm reduction-based peer recovery support initiated during hospitalization or at release can improve care quality, reduce post-hospital substance use, increase engagement in post-hospital (substance use disorder) treatment, for people not ready or able to stop using substances, prevent overdose and support safer use practices.”

The research was conducted as part of the Oregon HOPE initiative, a collaboration between OHA and the OHSU Addiction Medicine Program that seeks to expand testing, prevention and treatment services to decrease overdose rates and other complications of drug use in rural Oregon. The initiative is funded by the

National Institutes of Health, National Institute on Drug Abuse (principal investigator Todd Korthuis, M.D., M.P.H., OHSU).

Health officials emphasize that there are many ways to recover from harmful substance use and that substance use disorder, including stimulant use disorder, can be successfully treated. Opioid use disorder accounted for the greatest proportion of hospitalizations. People who want help to stop using opioids can talk to a health care provider or view OHA's list of opioid resources. In addition, Oregon law allows lay people to carry and use naloxone, a medication that can be used to reverse an opioid overdose, on other people. Learn more about naloxone.

While this study was just published, OHA has shared this data internally and with partners, including local public health authorities, health systems, federally qualified health centers, law enforcement, community providers and people with lived experience of substance use disorder. Community partners have used this data to respond locally, including initiating syringe service programs, and community health worker and peer support programs centered on harm reduction.

Oregon-based nonprofit Lines for Life and OHA recently launched the Safe + Strong Helpline at 800-923-4357 (800-923-HELP). The line offers free, 24-7 emotional support and resource referral to anyone who needs it — not only those experiencing a mental health crisis. The Safe + Strong Helpline is a response to needs for emotional support around disasters like COVID-19 and wildfires and was funded by the CARES Act. Callers are routed to a counselor who can provide emotional support, mental health triage, drug and alcohol counseling, crisis counseling or just connection.