

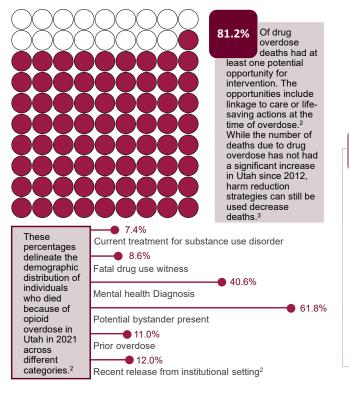
Background

Substance use disorder (SUD) in Utah continues to pose a significant public health challenge. In 2021, Utah witnessed the tragic loss of 603 lives due to drug overdose, with a staggering 67% attributed to opioid-related overdoses. This stark reality underscores the need for effective harm reduction measures such as buprenorphine/methadone clinics, naloxone distribution, fentanyl testing strips, and syringe service exchange programs. This exploration aims to contribute to the ongoing dialogue on mitigating the impact of substance use disorder and preventing further loss of life, fostering a deeper understanding to communities grappling with similar challenges.

Methods

A comprehensive literature review on harm reduction measures for SUD was conducted, drawing information from sources including the Centers for Disease Control (CDC), PubMed, and the American Journal of Preventative Medicine (APJM). Data extracted from these sources were thematically organized to highlight harm reduction strategies, interventions, and their effectiveness. This comprehensive review aims to provide insights into the current state of knowledge on harm reduction strategies SUD.

Utah Overdose Deaths in 2021



Harm Reduction Measures in Substance Use Disorder (SUD)

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Buprenorphine/ Methadone Clinics Harm Reduction Strategies Syringe Service/ Exchange Programs

Syringe Service/Exchange Programs

• Using clean needles are important for preventing infections from blood-borne pathogens and finding clean needles can be a problem for injection drug users. Syringe exchange programs have a clear effect in improving the health outcomes of injection drugs users through lowering high-risk injection behaviors and decreasing the transmission of blood-borne diseases.⁴

Fentanyl Testing Strips

• Fentanyl is a synthetic opioid that is typically 50 to 100 times more portent than morphine which can greatly increases the risk of overdose when used recreationally. Drugs may be laced with fentanyl, and it would be nearly impossible to tell unless the drugs are tested with fentanyl testing strips. Test strips are inexpensive and typically give results within 5 minutes. If a drug is laced with fentanyl, the dosage the patient would normally take of another opioid would reach toxic and potentially fatal levels which highlights the importance of using fentanyl testing strips. However, there are still some analogues of fentanyl that the strips cannot detect.



This QR code directs to a fentanyl testing strip distribution website. The services and test strips are supplied for free if they are for non-personal use.

Buprenorphine/Methadone Clinics

- Methadone is an opioid that has been used since 1947 to treat opioid use disorder (OUD). Patients using methadone had 33% fewer opioid-positive drug tests and were 4.44 times more likely to stay in treatment when compared to control.⁶
- Buprenorphine was approved in 2002 and is used to treat OUD. Patients taking 16 mg per day, or more, were 1.82 times more likely to stay in treatment than patients treated with placebo. It also decreased the number of opioid positive drug tests by 14.2%. Both methadone and buprenorphine are equally effective at reducing opioid use.⁸

Naloxone

• Naloxone is a medication that works quickly to reverse the effects of opioids and can restore normal breathing in 2-3 minutes. Because of it's potential to save lives, increasing awareness and accessibility are pivotal. It was found that co-prescribing naloxone is a way that could potentially prevent opioid overdose deaths, but that strategy isn't viable for every case as many patients use synthetic/illicit opioids rather than prescribed. Some other options include implementing naloxone vending machines, but the three key themes to improve naloxone uptake are knowledge, convenience and privacy. 10



This QR code directs to a naloxone training and information website.

Conclusion

This review underscores the critical opportunities for intervention in addressing substance use disorder, as just over 80% of Utah overdose deaths revealed at least one potential point for timely action. Syringe exchange programs emerge as a crucial element in improving health outcomes and reducing the transmission of blood-borne pathogens. Fentanyl testing strips demonstrate their potential to act as life-saving tools, preventing overdoses by empowering individuals with information about the substances they consume. Buprenorphine/methadone clinics stand out as valuable resources in the continuum of care, aiding in the retention of individuals with opioid use disorder in treatment. Additionally, the accessibility and knowledge surrounding naloxone play a pivotal role in opioid reversal emphasizing the importance of enhancing patient education, convenience, and privacy. As we navigate the complex landscape of substance use disorder, these insights not only shed light on effective harm reduction measures but also advocate for comprehensive, patient-centric approaches to foster lasting positive outcomes in communities grappling with this public health crisis.

References