XYLAZINE: BE AWARE, EDUCATE PATIENTS

QUICK TAKE 4-13-22

XYLAZINE





- Analogue of clonidine that is also a centrally-acting alpha-2 adrenergic receptor agonist
- » Not an opioid
- Synthesized in 1962: clinical trials in humans terminated due to severe hypotension and CNS depressant effects
- >> Used in veterinary medicine for analgesia, not controlled substance (not approved for use in humans)

XYLAZINE EFFECTS





- >> Onset 30 minutes, last 8 hours +
- Transient hypertension and tachycardia, followed by hypotension and bradycardia (differential effects and timing of A, B, C subtypes of alph-2 receptors)
- >> Drowsiness, respiratory depression, hypothermia, coma, death
- >> Why used:
 - >> Used with fentanyl generally (98% of xylazine-involved deaths were with fentanyl)
 - >> Users report that xylazine gives "legs" to fentanyl, which has a significantly shorter duration of "high"
 - >> Clonidine is used to decrease physiologic effects of opioid withdrawal and xylazine may provide relaxation and suppression of withdrawal in the early period of a waning fentanyl "hit"

MARKET FORCES





- >> Fentanyl inexpensive, available
- Users looking for product that mimics heroin and want to avoid need for frequent dosing
- >> Xylazine is cheap and available
- >> Transition within a market to fentanyl has been followed by increasing xylazine presence, called "Tranq" or "Tranq dope" by some
- >> Trend appears to be accelerating rapidly and in new geographies

HISTORY

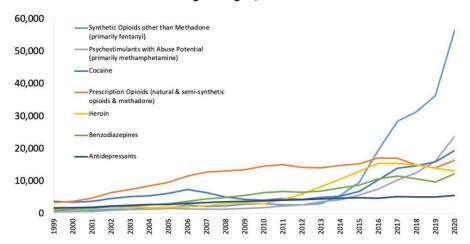




- Early 2000s appeared in Puerto Rico, 37% of syringes in 2005-7 had xylazine, impacts on overdoses unknown
- >> 2006 Philadelphia 7 deaths identified
- >> Among 10 US jurisdictions, prevalence of xylazine in overdose deaths rose from 0.36% to 6.7% from 2015 to 2020

 National Daylo-Involved Overdose Deaths*
- An important reason for rise in xylazine in overdoses is the rapid rise in fentanyl in overdoses, but xylazine almost 20x increase versus 6x for fentanyl

National Drug-Involved Overdose Deaths*, Number Among All Ages, 1999-2020



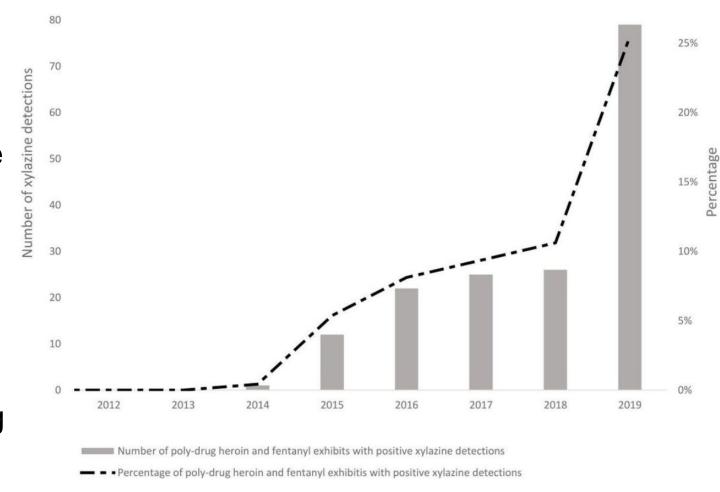
*Includes deaths with underlying causes of unintentional drug poisoning (X40–X44), suicide drug poisoning (X60–X64), homicide drug poisoning (X85), or drug poisoning of undetermined intent (Y10–Y14), as coded in the International Classification of Diseases, 10th Revision. Source: Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death 1999-2020 on CDC WONDER Online Database, released 12/2021.

ACCELERATION?





- >> Philadelphia now >30% of overdoses
- Cause or association?
- Overdoses that include xylazine will not respond as well to naloxone (the xylazine contribution to sedation and respiratory depression will not respond: it is not an opioid)
- Unclear yet if this recalcitrant form of overdose is accelerating



UNIQUE SEQUALA: SKIN ULCERS









Photo source: Dr. Greg Vachon



WHAT CAN YOU DO?





Provide harm reduction advice:

- Start low, go slow
- If on clonidine and suspect xylazine, consider decreasing dose
- Still have and use naloxone
- Monitor for skin infection
- Get on MAT

Be aware of skin findings

Advocate for testing drug supply and informing community of users