



Buprenorphine: Where are we going?

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Date: Friday, November 10, 2023

Disclosure Statement

No disclosures

Our Outline

- Current state of pain management
- History of buprenorphine
- The types of buprenorphine
- How are we using buprenorphine?

What happened during the pandemic?

- Opioid overdose deaths, primarily driven by fentanyl, have surged during the pandemic
- From 2016 to 2021, opioid overdose deaths nearly doubled, from 42,249 to 80,411.
- By 2021, these deaths accounted for 75% of all fatal drug overdoses, up from 66% in 2016.

Fentalogues

- The majority of opioid-related deaths over the last several years are clearly due to illicit fentalogues.

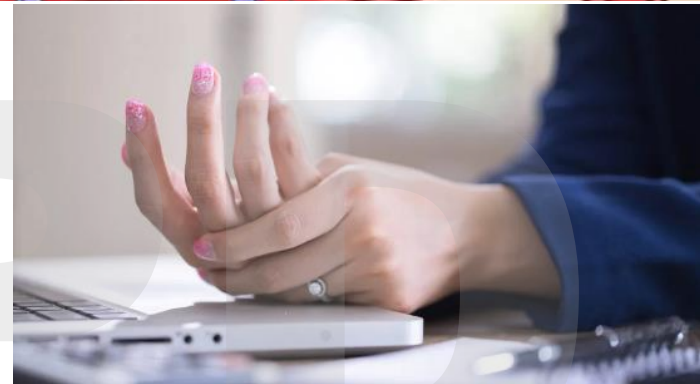
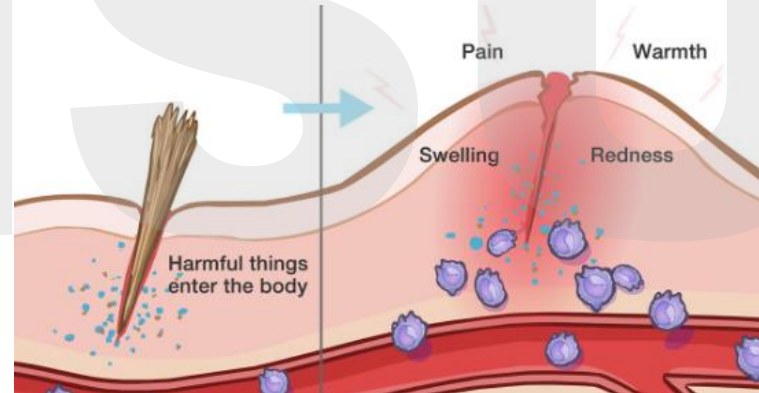
CDC 2022 Guidelines

“ Removing the Line in the Sand”

CPD

Why Inflammation Hurts

- Buildup of fluid leads to swelling
- Swollen tissues push against sensitive nerve endings
- Prostaglandin release contributes
- Nerves change their firing processes



Mu

Delta

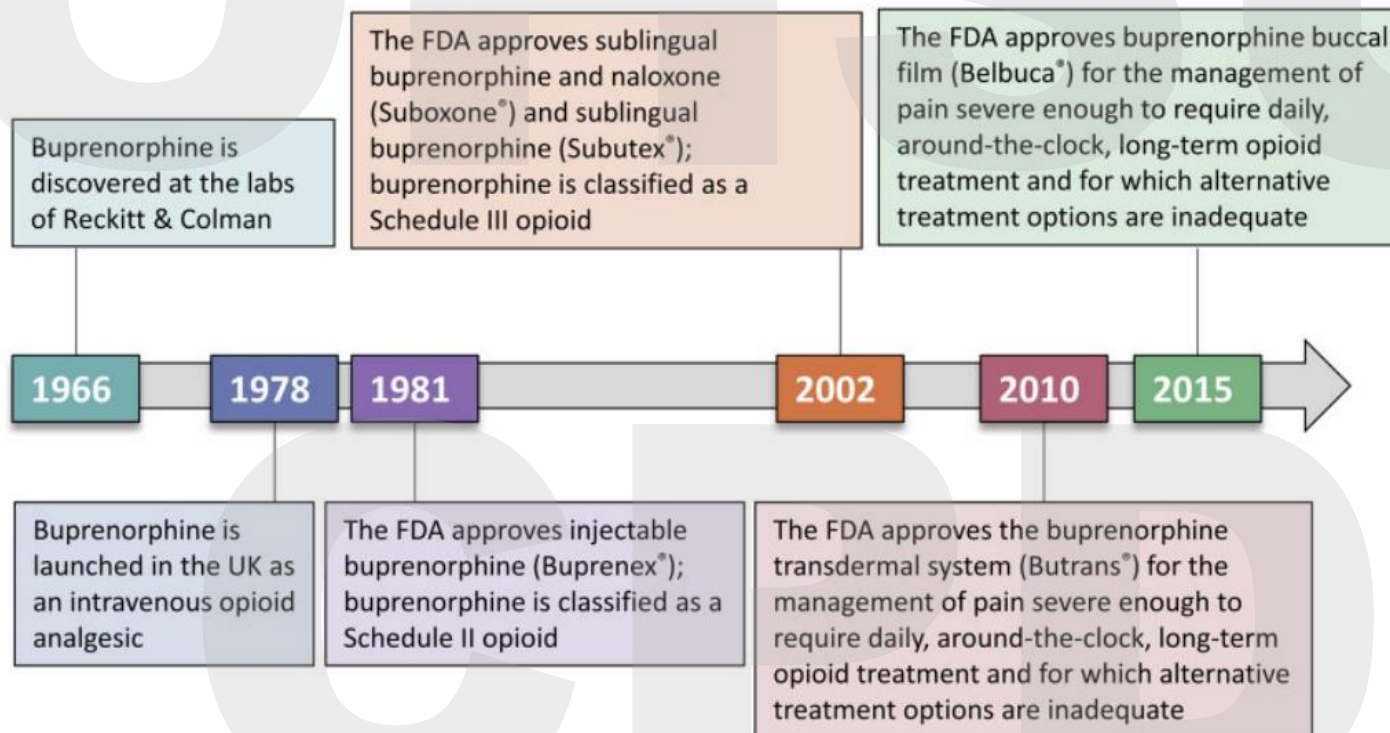
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Opioid Trends

- We used to do long-acting opioids
- Now only short-acting and limited
- Moving towards buprenorphine not just for medication-assisted treatment but pain in general.

History of Buprenorphine



Webster, L., Gudín, J., Raffa, R. B., Kuchera, J., Rauck, R., Fudin, J., Adler, J., & Mallick-Searle, T. (2020). Understanding Buprenorphine for Use in Chronic Pain: Expert Opinion. *Pain Medicine (Malden, Mass.)*, 21(4), 714–723. <https://doi.org/10.1093/pm/pnz356>

Buprenorphine Regulation

- In the United States, buprenorphine and buprenorphine with naloxone were approved for opioid use disorder by the FDA in October 2002.
- Right before this approval, buprenorphine was moved from schedule V to schedule III.
- In Europe, buprenorphine was approved for opioid use disorder in September 2006

Buprenorphine

- Buprenorphine was patented in 1965
- Approved for medical use in the United States in 1981
- In 2020, it was the 186th most commonly prescribed medication in the U.S.
- In 2020, more than 2.8 million prescriptions.
- Schedule III controlled substance in the U.S

Pharmacodynamics

- U-opioid receptor (MOR): Very high affinity partial agonist
- K-opioid receptor (KOR): High affinity antagonist
- D-opioid receptor (DOR): High affinity antagonist
- Nociception receptor (NOR, ORL-1): Weak affinity, very weak partial agonist

Buprenorphine

- Pain relief which is 20 to 30 times greater than what is achieved through morphine.

Buprenorphine Preparations

- Alkaloid of morphine
- Thebaine
- 30 times as potent as morphine
- Half life is 37 hours
- Onset of action is 30-60 minutes with sublingual
- Onset of action is 5-15 minutes with IV preparation

- Naloxone and buprenorphine have poor absorption orally
- Naloxone and buprenorphine have high bioavailability parenterally
- Buprenorphine is highly bioavailable sublingually
- Naloxone is poorly absorbed sublingually

Challenges of acute pain management with buprenorphine

- Acute pain control may be difficult
- Traditional recommendations: consider discontinuation
- Trends now include the following:
 - Continue buprenorphine at current or lower dose
 - Consider adding traditional full opioid antagonists
 - Use multimodal analgesia – ketamine and other adjuncts
 - Use regional anesthesia techniques

The X Waiver

- Effective immediately, waiver applications will no longer be accepted. All prescriptions for buprenorphine will now only require a standard DEA registration number. The previously used DATA-Waiver (also known as X-Waiver) registration numbers are no longer needed for any prescription.
- This went into effect January 2023.

Naloxone



Oregon State Legislature

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Session



Bills



Committees



More

2023 Regular Session

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Overview

Text ▾

Analysis

Amendments

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Overview ▾

At the request of:

(at the request of Governor Tina Kotek)

Chief Sponsors:

[Senator Wagner](#)

Regular Sponsors:

[Senator Lieber, Sollman, Representative Andersen, Dexter, Gamba, Hartman, Hieb, Levy E, Nelson](#)

Bill Title:

Relating to opioid overdose reversal medication.

Catchline/Summary:

Requires hospitals and other specified facilities that provide substance use disorder treatment to provide to specified patients upon discharge or release two doses of opioid overdose reversal medication and necessary medical supplies to administer medication. [+](#)

Chapter Number:

Chapter 297

Fiscal Impact:

Has Minimal Fiscal Impact

Revenue Impact:

No Revenue Impact

Measure Analysis:

[Staff Measure Summary / Impact Statements](#)

Current Location:

Chapter Number Assigned

Current Committee:

Current Subcommittee:

Subsequent Referral(s):

Potential Conflicts of Interest/Vote Explanations:

[Potential Conflicts of Interest/Vote Explanation Documents](#)

Measure History >

Scheduled Events >

Oregon's Resources

January 2020

>> Oregon Opioid Tapering Guidelines

Recommendations for individualized care to
reduce harm from **opioid use**

What do we taper opioids?

- The most commonly cited motivation for tapering opioids over the last year was the new CDC guidelines with 50% of respondents identifying that as one of the reasons they have tapered.
- The second most prevalent reason was patient misuse at 32%.
- Patient request and insurance regulations tied for third most commonly identified reason for tapering opioids with 29% of respondents citing each as one of the reasons they have tapered opioids in the last year.

Oregon's Resources



2017-2018

» Oregon Opioid Prescribing Guidelines:

Recommendations for the Safe Use
of Opioid Medications

- Part 1** Determining when to initiate or continue opioids for chronic pain
- Part II** Opioid selection, dosage, duration, follow-up and discontinuation
- Part III** Assessing risk and addressing harms of opioid use
- Part IV** Additional considerations: Marijuana and Safe Storage and Disposal

Thank You!

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"Yeah, Clem, I hurt. But y'know, it's a good kind of hurt."