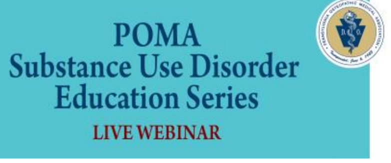

**Session I**

"MAT and the Disease Model of Addiction" – Karen Arscott, DO

"The Management of Withdrawal and Overdose" – Eric Milie, DO

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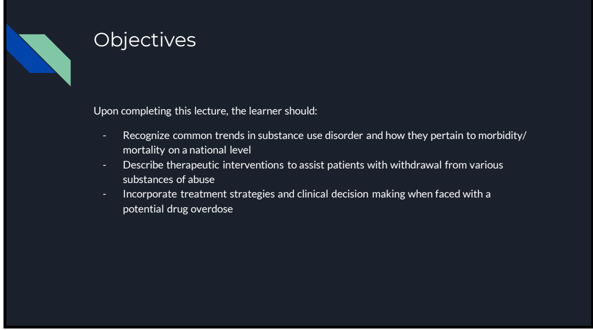


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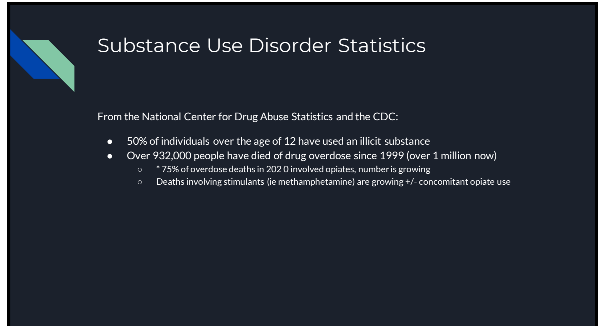


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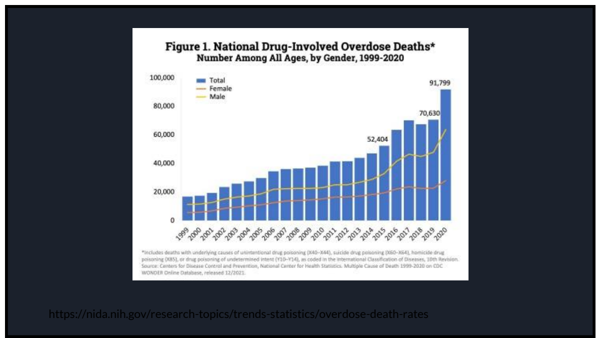


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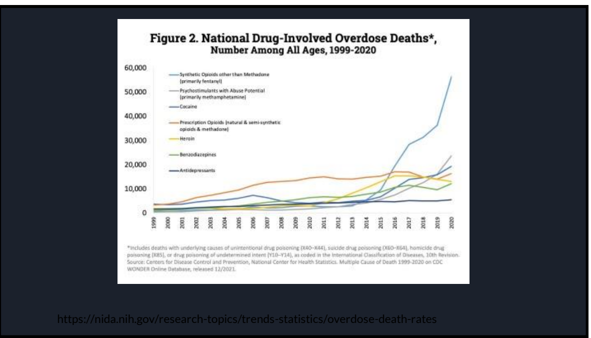


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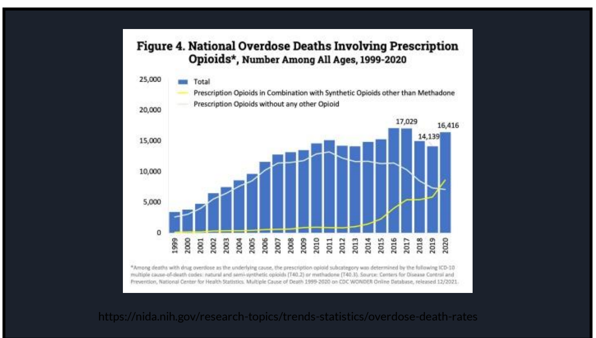


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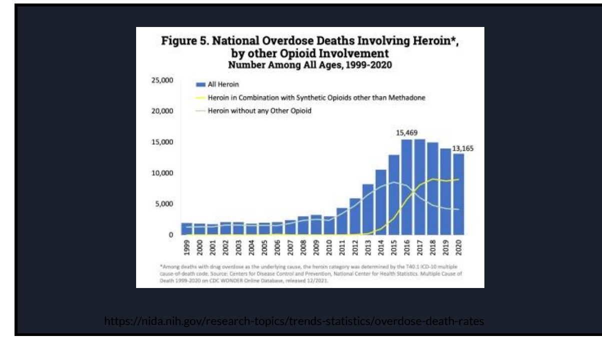


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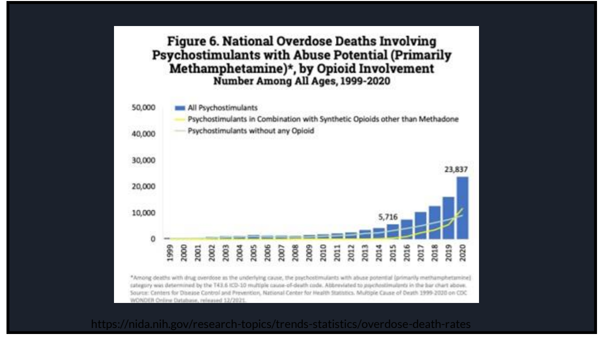


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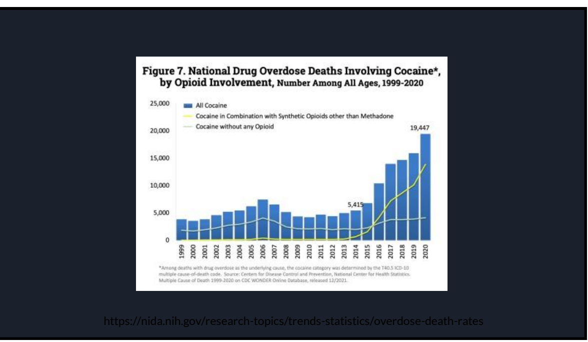


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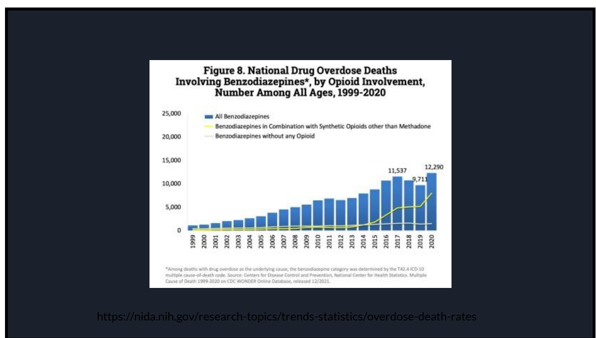


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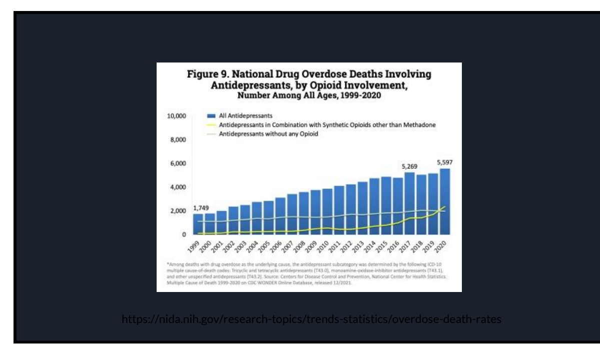


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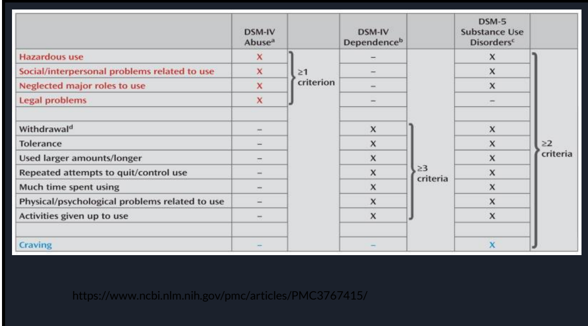

| | DSM-IV Abuse[a] | | DSM-IV Dependence[b] | | DSM-5 Substance Use Disorders[c] | |
|---|---|---|---|---|---|---|
| Hazardous use | X | ≥1 criterion | – | | X | ≥2 criteria |
| Social/interpersonal problems related to use | X | | – | | X | |
| Neglected major roles to use | X | | – | | X | |
| Legal problems | X | | – | | – | |
| | | | | | | |
| Withdrawal[d] | – | | X | ≥3 criteria | X | |
| Tolerance | – | | X | | X | |
| Used larger amounts/longer | – | | X | | X | |
| Repeated attempts to quit/control use | – | | X | | X | |
| Much time spent using | – | | X | | X | |
| Physical/psychological problems related to use | – | | X | | X | |
| Activities given up to use | – | | X | | X | |
| | | | | | | |
| Craving | – | | – | | X | |

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3767415/

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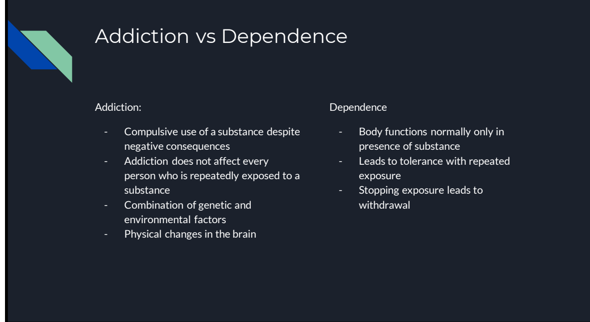


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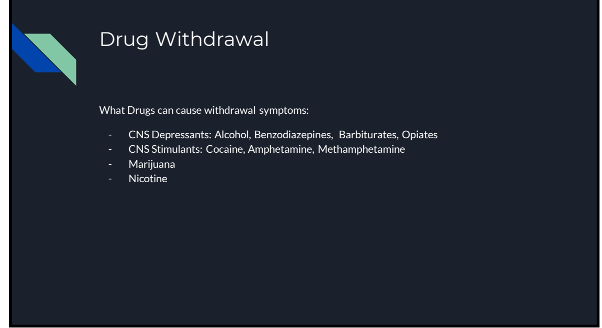


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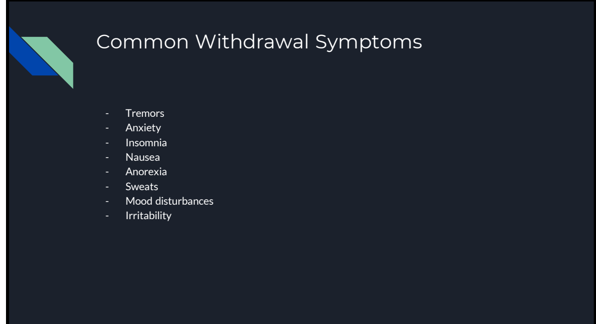


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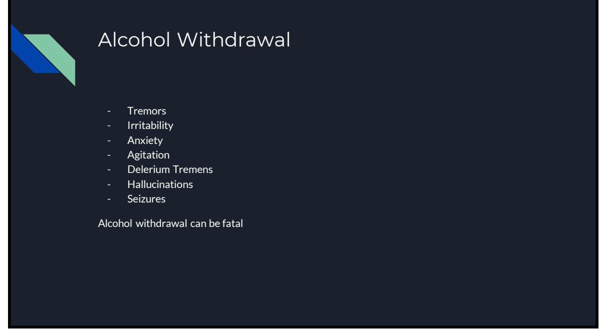


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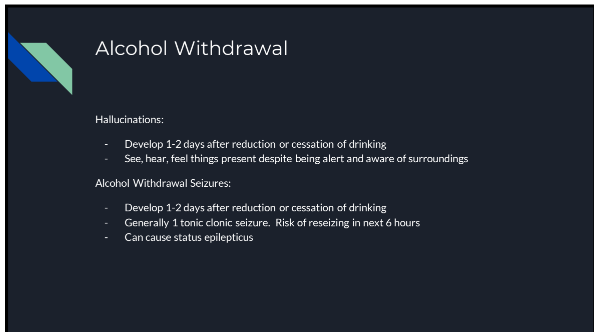


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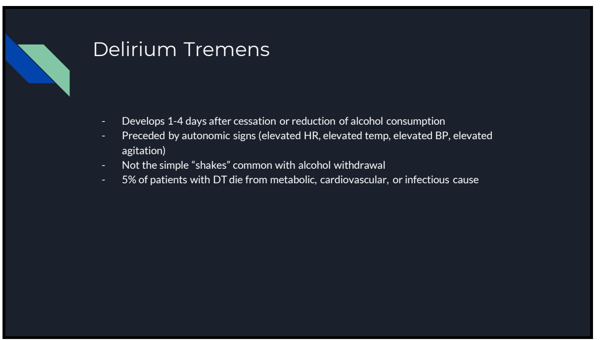


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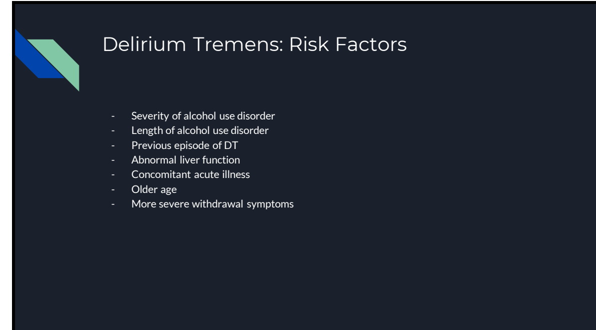


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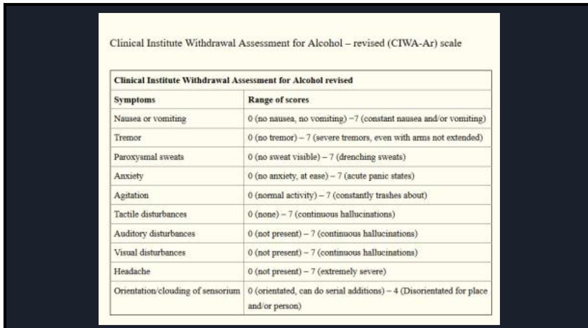

Clinical Institute Withdrawal Assessment for Alcohol – revised (CIWA-Ar) scale

| Clinical Institute Withdrawal Assessment for Alcohol revised | |
|---|---|
| **Symptoms** | **Range of scores** |
| Nausea or vomiting | 0 (no nausea, no vomiting) –7 (constant nausea and/or vomiting) |
| Tremor | 0 (no tremor) – 7 (severe tremors, even with arms not extended) |
| Paroxysmal sweats | 0 (no sweat visible) – 7 (drenching sweats) |
| Anxiety | 0 (no anxiety, at ease) – 7 (acute panic states) |
| Agitation | 0 (normal activity) – 7 (constantly trashes about) |
| Tactile disturbances | 0 (none) – 7 (continuous hallucinations) |
| Auditory disturbances | 0 (not present) – 7 (continuous hallucinations) |
| Visual disturbances | 0 (not present) – 7 (continuous hallucinations) |
| Headache | 0 (not present) – 7 (extremely severe) |
| Orientation/clouding of sensorium | 0 (orientated, can do serial additions) – 4 (Disorientated for place and/or person) |

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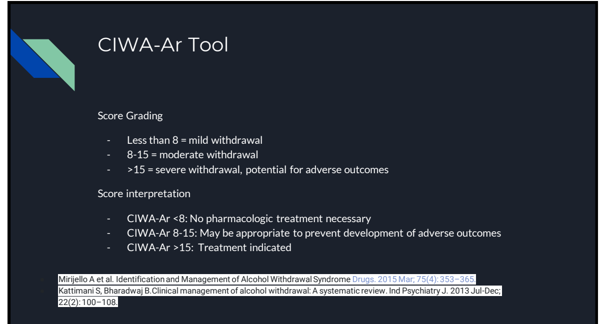


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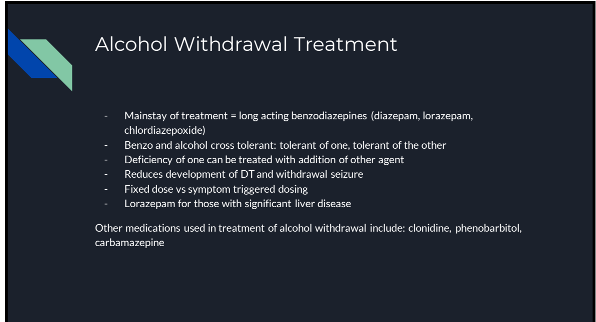


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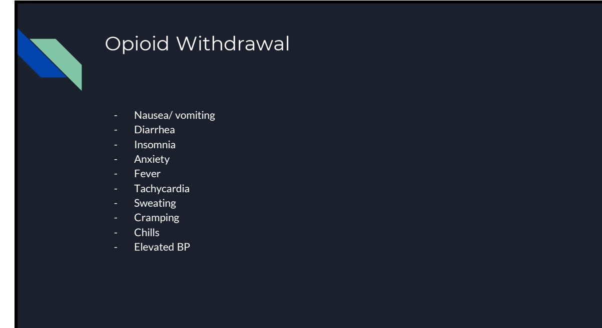


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Table 1. Typical Withdrawal Characteristics of Various Opioids

| Opioid | Half-Life (Adults) | Onset of Withdrawal Symptoms After Exposure | Onset of Withdrawal Symptoms After Prenatal Exposure | Typical Duration of Withdrawal |
|---|---|---|---|---|
| Heroin | 2-6 min[a] | 6 h | 24-48 h | 8-10 days |
| Methadone | 8-150 h (mean 35 h) | 24-96 h | 48-72 h | 10-14 days, secondary withdrawal as long as 6 mo |
| Buprenorphine | Mean 37 h | 6-24 h | 36-60 h | Milder withdrawal than other opioids. Usually resolves within 7 days, but may be prolonged in neonates |
| Morphine | 1.5-7 h | 8-12 h | ND | 7-10 days |
| Oxycodone | 3-5 h | 6-12 h | 36-72 h | 7-14 days, secondary withdrawal as long as 6 mo |
| Hydrocodone | 7-9 h | 8-12 h | 24-96 h | 5-14 days, secondary withdrawal as long as 6 mo |
| Fentanyl | 11-36 h (mean 21 h) | 3-5 h | ND | 4-5 days |

*[a] Heroin is metabolized to morphine-6-glucuronide and morphine.*
*min: minute; ND: no data available.*
*Source: References 4, 5, 11, 12, 14, 16, 18, 25.*

https://www.uspharmacist.com/article/acute-opioid-withdrawal-identification-and-treatment-strategies

27

Wesson & Ling, J Psychoactive Drugs. 2003 Apr-Jun;35(2):253-9.

**COWS Clinical Opiate Withdrawal Scale**

| | |
|---|---|
| Resting Pulse Rate: ________ beats/minute<br>*Measured after patient is sitting or lying for one minute*<br>0 Pulse rate 80 or below<br>1 Pulse rate 81-100<br>2 Pulse rate 101-120<br>4 Pulse rate greater than 120 | GI Upset: *over last 1/2 hour*<br>0 No GI symptoms<br>1 Stomach cramps<br>2 Nausea or loose stool<br>3 Vomiting or diarrhea<br>5 Multiple episodes of diarrhea or vomiting |
| Sweating: *over past 1/2 hour not accounted for by room temperature or patient activity.*<br>0 No report of chills or flushing<br>1 Subjective report of chills or flushing<br>2 Flushed or observable moistness on face<br>3 Beads of sweat on brow or face<br>4 Sweat streaming off face | Tremor *observation of outstretched hands*<br>0 No tremor<br>1 Tremor can be felt, but not observed<br>2 Slight tremor observable<br>4 Gross tremor or muscle twitching |
| Restlessness *Observation during assessment*<br>0 Able to sit still<br>1 Reports difficulty sitting still, but is able to do so<br>3 Frequent shifting or extraneous movements of legs/arms<br>5 Unable to sit still for more than a few seconds | Yawning *Observation during assessment*<br>0 No yawning<br>1 Yawning once or twice during assessment<br>2 Yawning three or more times during assessment<br>4 Yawning several times/minute |
| Pupil size<br>0 Pupils pinned or normal size for room light<br>1 Pupils possibly larger than normal for room light<br>2 Pupils moderately dilated<br>5 Pupils so dilated that only the rim of the iris is visible | Anxiety or irritability<br>0 None<br>1 Patient reports increasing irritability or anxiousness<br>2 Patient obviously irritable anxious<br>4 Patient so irritable or anxious that participation in the assessment is difficult |
| Bone or Joint aches *If patient was having pain previously, only the additional component attributed to opiates withdrawal is scored*<br>0 Not present<br>1 Mild diffuse discomfort<br>2 Patient reports severe diffuse aching of joints/ muscles<br>4 Patient is rubbing joints or muscles and is unable to sit still because of discomfort | Gooseflesh skin<br>0 Skin is smooth<br>3 Piloerection of skin can be felt or hairs standing up on arms<br>5 Prominent piloerection |
| Runny nose or tearing *Not accounted for by cold symptoms or allergies*<br>0 Not present<br>1 Nasal stuffiness or unusually moist eyes<br>2 Nose running or tearing<br>4 Nose constantly running or tears streaming down cheeks | Total Score ________<br>The total score is the sum of all 11 items<br>Initials of person completing Assessment: ______________ |

Score: 5-12 mild; 13-24 moderate; 25-36 moderately severe; more than 36 = severe withdrawal

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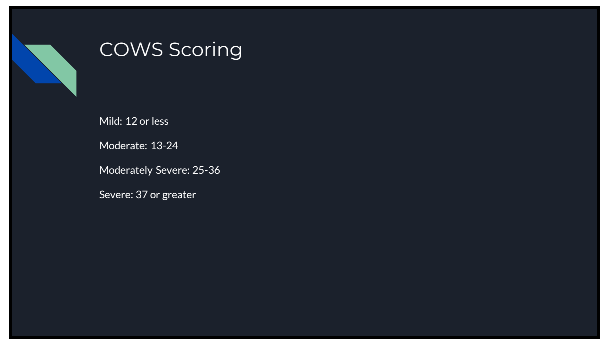


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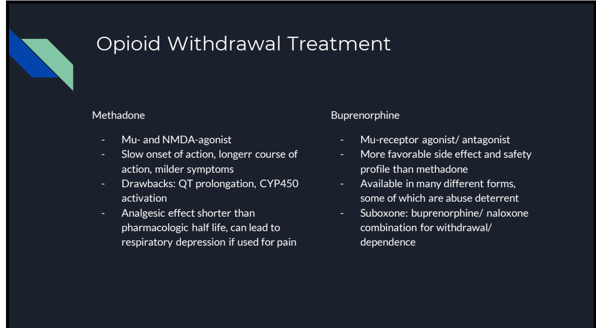


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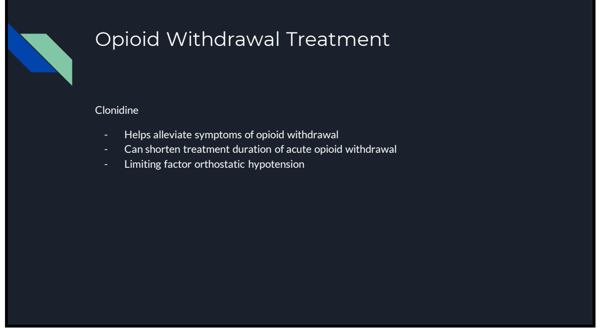


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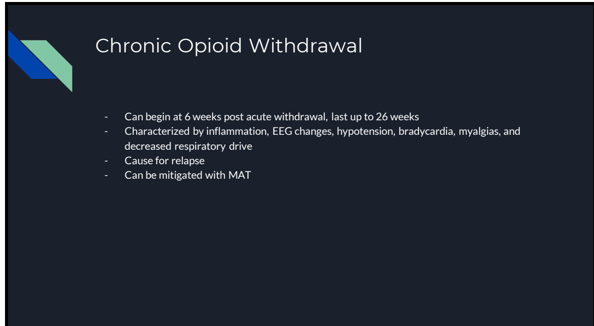


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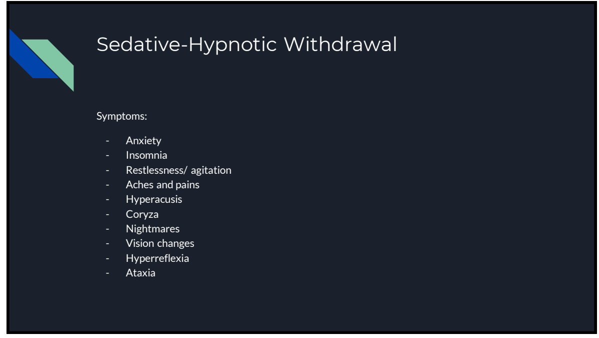


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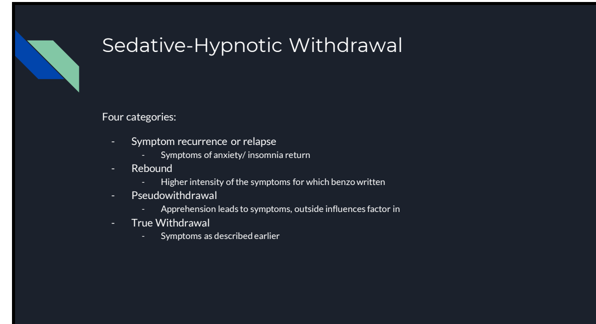


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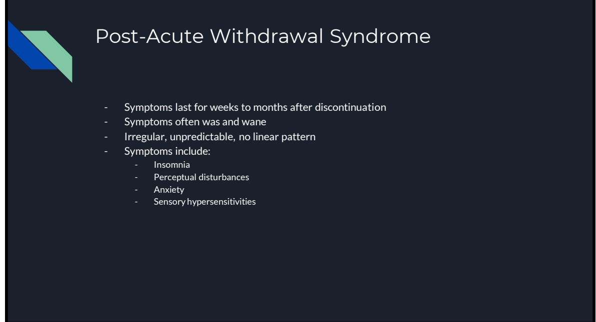


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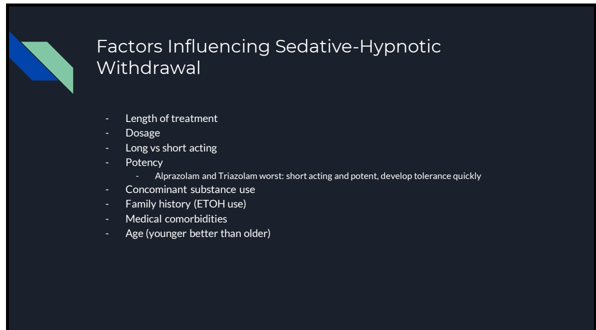


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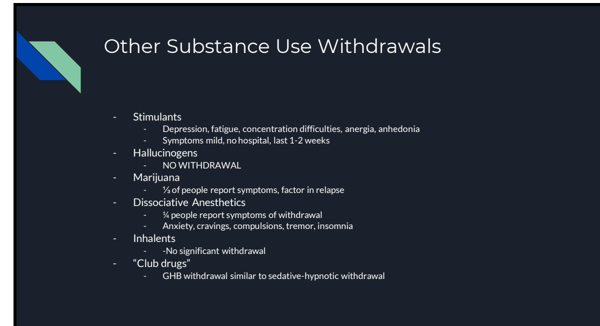


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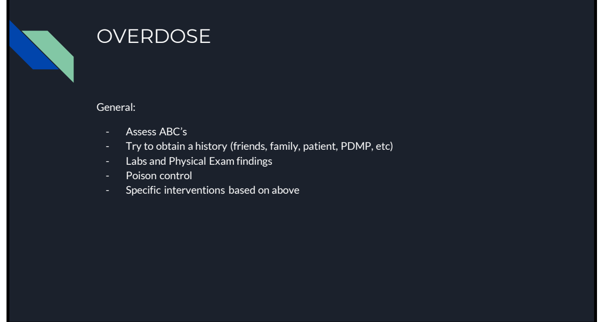


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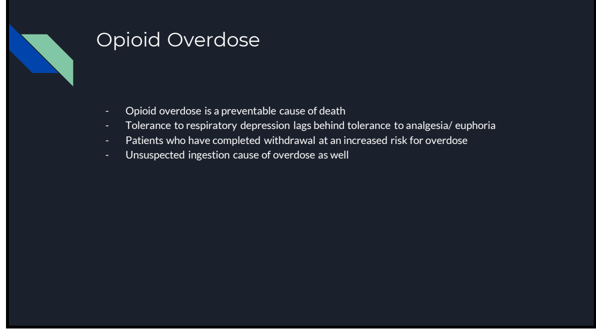


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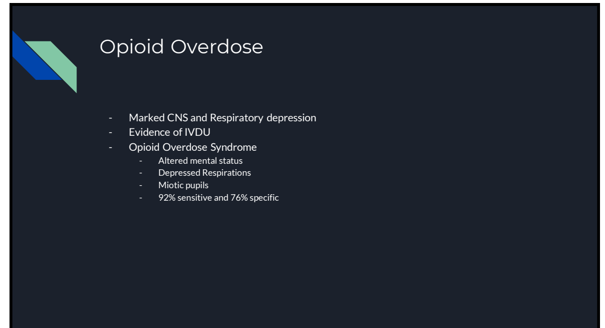


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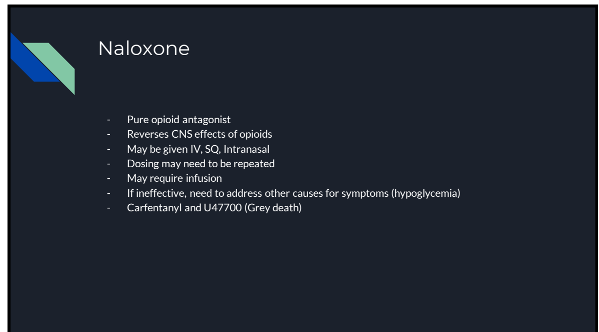


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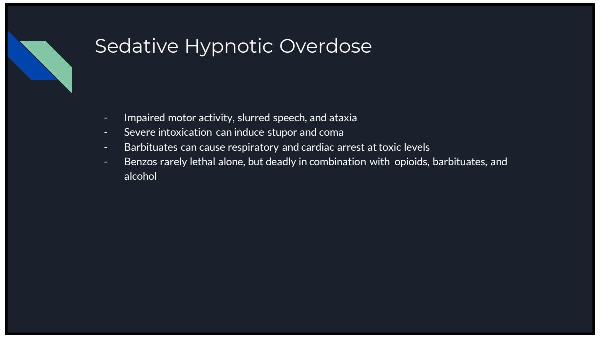


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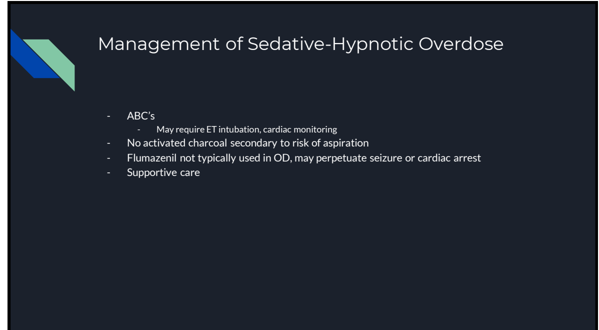


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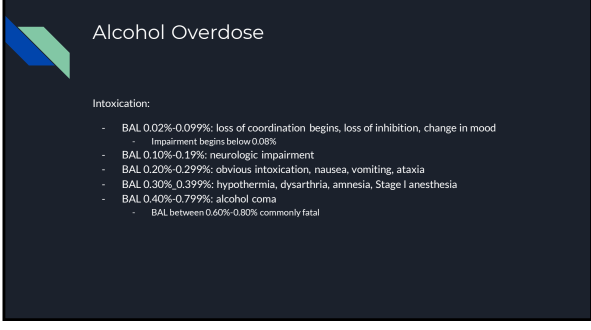


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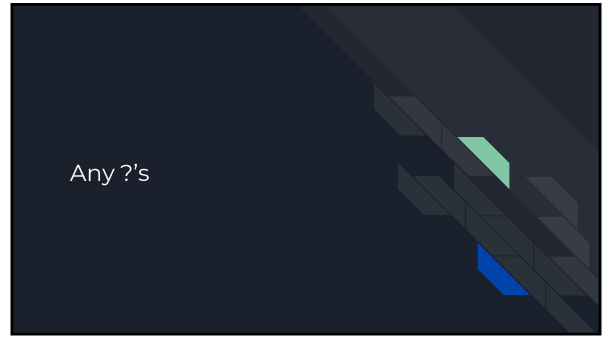


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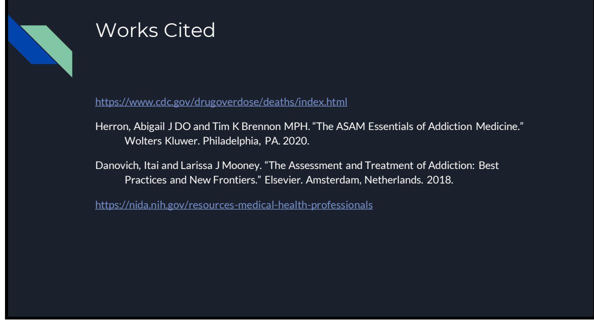


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