REDUCING OPIOID MISUSE AND MANAGING PAIN SAFELY

OPIOIDS IN ALASKA

PUBLIC WEBINAR, MAY 5, 2022 ALASKA DEPARTMENT OF HEALTH AND SOCIAL SERVICES







Introductions

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- Dr. Coleman Cutchins, State Pharmacist, DHSS, DPH
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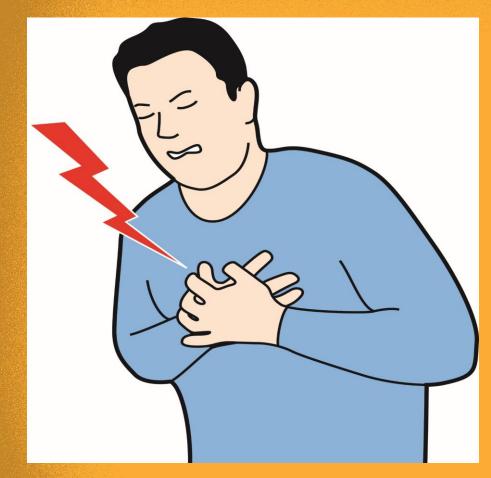


PAIN: A CLINICAL PERSPECTIVE





What is Pain?



Save a life.

An unpleasant sensory and emotional experience associated with, or resembling that associated with, actual or potential tissue damage.

- International Association for the Study of Pain, 2020

Types of Pain

- Nociceptive pain: sprains, bone fractures, burns, bumps, bruises, inflammation (from an infection or arthritic disorder), obstructions, and myofascial pain
- Inflammatory pain: Arthritis, delayed pain from a sunburn
- Neuropathic pain: Nerve trauma, cancer pain, carpal tunnel syndrome
- Noninflammatory/nonneuropathic pain: fibromyalgia



Emotional, Psychological and Spiritual Pain

Definitions:

the affective state associated with discrepancy between ideal and actual perception of self - Sandler

an aversive state of high selfawareness of inadequacy. - Baumeister, 1988

Exhibit 1: Social and Physical Pain Produce Similar Brain Responses

Brain scans captured through functional magnetic resonance imaging (fMRI) show the same areas associated with distress, whether caused by social rejection or physical pain. The dorsal anterior cingulate cortex (highlighted at left) is associated with the degree of distress; the right ventral prefrontal cortex (highlighted at right) is associated with regulating the distress.

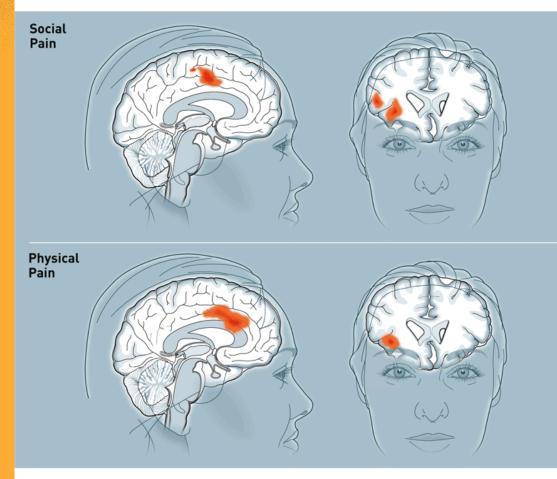


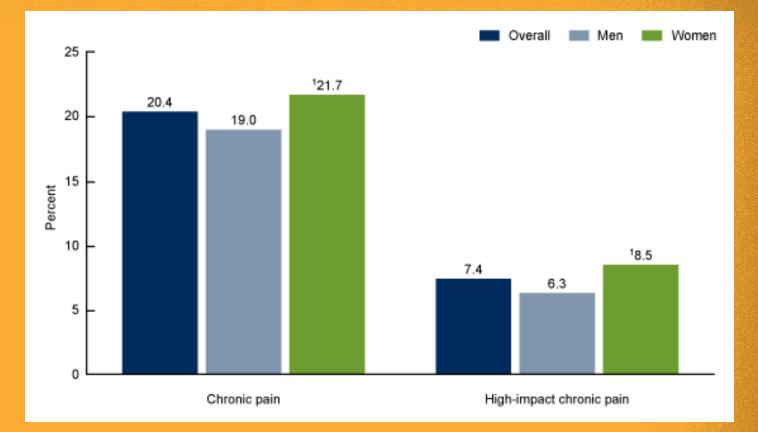
Illustration: Samuel Valasco

Source: Eisenberger, Lieberman, and Williams, Science, 2003 [social pain images]; Lieberman et al., "The Neural Correlates of Placebo Effects: A Disruption Account," Neuroimage, May 2004 [physical pain images]



Prevalence of Pain in the USA

Percentage of adults aged 18 and over with chronic pain and highimpact chronic pain in the past 3 months, overall and by sex: United States, 2019



Zelaya et al. 2020



Pain and How it Affects Us

It is so much more than just pain intensity. Over time, many [patients] find the effects of living with chronic pain impact their ability to work, engage in recreational and social activities, and for some, [perform] the most basic everyday activities that people just take for granted. Not surprisingly, pain begins to chip away at their mood, often leaving them angry, frustrated, anxious, and/or depressed. Our families suffer along with us, and many relationships are forever altered.

–An advocate for people with chronic pain³

- Decreased quality of life
- Depression and anxiety
- Cardiovascular health

Save a life.

- Decreased socialization
- Sleep disturbances
- Brain function

OPIOIDS: WHAT ARE THEY AND HOW CAN THEY BE USED SAFELY





Definitions

What is an opioid?

Opioid analgesics/pain relievers

 Natural, synthetic, and semi-synthetic substances (excluding heroin) that bind to specific opioid receptors in the Central Nervous System, producing an agonist action. They increase the threshold to pain.

Heroin

 A semi-synthetic opiate synthesized from morphine. It is broken down into morphine.

Fentanyl

- A potent synthetic opioid drug approved by the Food and Drug Administration for use as an analgesic and anesthetic."
- There are also non-FDA approved fentanyl analogs (carfentanil, acetyl fentanyl,...) that can be in most illicit drugs, everything from meth, cocaine, heroine to counterfeit tablets that can look like prescription medications

Save a life.

LL0658 Naloxone Standing Order

"Is it an opioid?"

Some examples of opioid medication include:

- Codeine
- Fentanyl (Duragesic)
- Hydrocodone (Vicodin, Norco)
- Hydromorphone (Dilaudid)
- Meperidine (Demerol)
- Methadone
- Morphine (MS Contin, Kadian)
- Oxymorphone (Opana)
- Oxycodone (OxyContin, Percocet)
- Tramadol (Ultram)

Alaska Division of Public Health

Opioids and Why There Needs to be Caution With Use

Side effects depending on length of use:

- Sedation
- Dizziness (ie falls among elderly)
- Nausea
- Vomiting
- Constipation
- Physical dependence
- Tolerance
- Respiratory depression
- Increased pain sensitivity

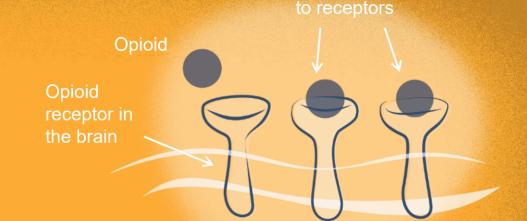


Other impacts

- Misuse
- Addiction
- Overdose
- Death

What is Overdose?

The brain has many opioid receptors. An overdose occurs when too much of an opioid (heroin, OxyContin, Percocet) fits in too many receptors, stopping the person's breathing



Opioids attached

How Does Naloxone Work?

Opioid receptor in the brain Opioids being knocked free of receptors Naloxone bonds more strongly to the opioid receptors than opioid drugs, so it knocks the opioids off the receptors for a short time. This blocks the effects of the overdose allowing the person to breathe again.

Save a life.

AN OVERDOSE IS A CONTINUUM

- Slow breathing
- Breathing stops
- Lack of oxygen may cause brain damage

Save a life.

- Heart stops
- Death

An opioid-involved overdose can result in the following:

- Opioid-induced respiratory depression
- Brain injury can result in:

- kidney failure, heart complications, neurologic consequences, seizures, nerve damage, temporary motor paralysis, fluid backup in the lungs, stroke, and pneumonia from inhaling
- Hypoxia can result in damage to the prefrontal cortex worsening addiction and increasing negative cognitive and mental health outcomes

Risk Factors for Overdose

- Access to substances
- Co-prescriptions
- Demand and Tolerance
- Injection use
- Physiological Factors
- Mixing substances/Polysubstance use



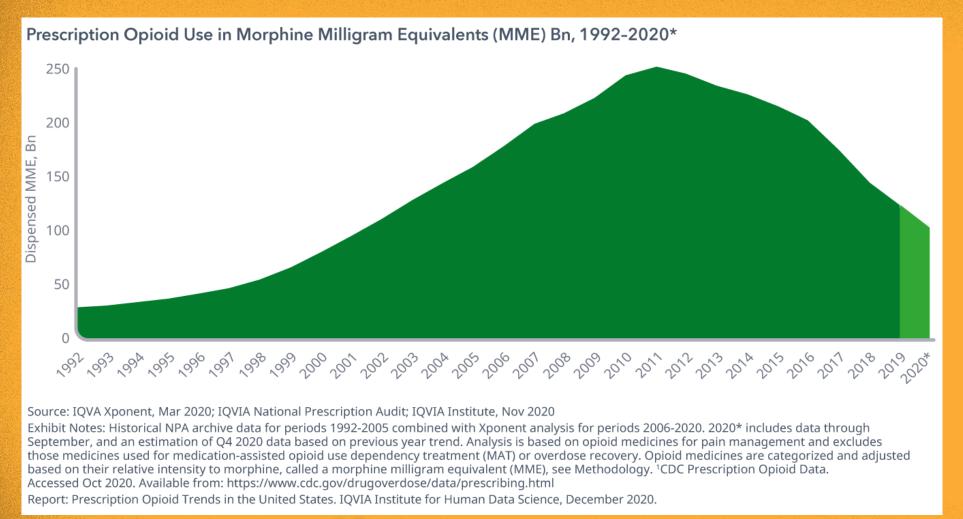
Non-modifiable Risk Factors for Overdose

- Sleep-Disordered Breathing, Including Sleep Apnea
- Pregnant Women
 - Associated with: stillbirth, poor fetal growth, pre-term delivery, birth defects, Neonatal withdrawal
 - For mothers with OUD MAT with buprenorphine or methadone improved MATERNAL outcomes
- Renal or Hepatic Insufficiency decreased clearance, increased risk of UIOD
- Aged \geq 65 Years Increased risk: UIOD, fall, cognitive impairment
- Mental Health Conditions
 - Psychological distress interferes with improvements in pain and function

- Anxiety, PTSD, depression
- Patients with Harm risk
- History of Substance Use Disorder
- Prior Nonfatal Overdose



Prescription Opioid Use Statistics

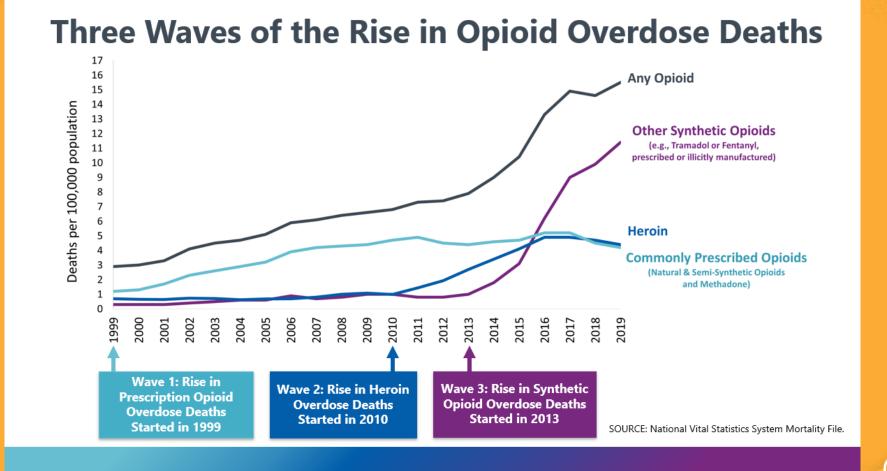


Get naloxone and keep it with you



IQVIA, 2020

Trends in Opioid Overdose Deaths





Overdose Surge - Warning Alaskans

Warning to Alaskans

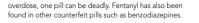
Counterfeit pills containing fentanyl can cause an overdose death. Help keep Alaskans safe

Governor Mike Dunleavy, with the Alaska Department of Health and Social Services (DHSS), is alerting Alaska residents, families and schools about the threat of overdose due to counterfeit pills containing fentanyl. According to the Drug Enforcement Administration (DEA), nationally, 40% of all counterfeit pills in circulation contain fatal amounts of fentanyl. Alaska has seen a 71% increase in overdose deaths based on preliminary 2021 data, with 75% of all of the opioid overdose deaths involving fentanyl. A very small amount of fentanyl can cause someone to overdose and die. This bulletin contains guidance for Alaskans to help keep people safe.

What is fentanyl?

Fentanyl is a synthetic opioid that is 50 times stronger than heroin and 100 times stronger than morphine. Although fentanyl is made and used pharmaceutically, it is also produced illegally in other countries and trafficked into the United States, usually as powder and pills. Fentanyl is frequently added into other substances such as heroin, methamphetamine and cocaine.

In Alaska, fentanyl is commonly seen in blue pills made to look like pharmaceutical oxycodone. People who sell or purchase drugs may call these pills "M-30s," "blues," or "dirty 30's". These fake pills are usually blue in color and stamped to look like real oxycodone pills you would get from a pharmacist. Because it takes a very small amount of fentanyl to cause an





Counterfeit pills often contain fentanyl and are more lethal than ever before

FAKE PRESCRIPTION PILLS . WIDELY AVAILABLE . INCREASINGLY LETHAL

DEA LAB TESTING REVEALS THAT

4 OUT OF EVERY

WITH FENTANYL CONTAIN A POTENTIALLY

LETHAL DOSE

Get naloxone and keep it with you

OVERDOSE IS CLOSER THAN YOU THINK.

Four things you can do to be safer from possible fentanyl exposure.





You can stop a heroin or opioid overdose with aloxone nasal spray. Keep it with you



Make sure someone is around to administer



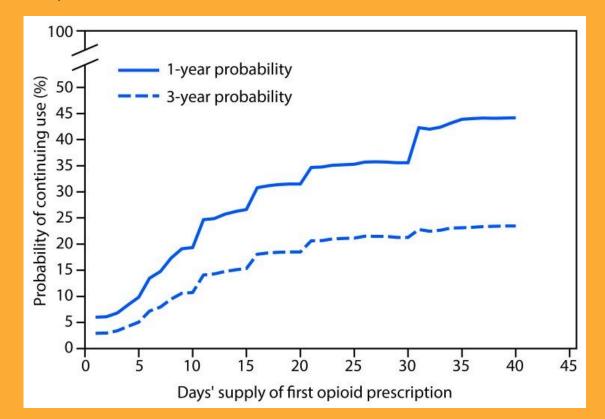
Call 911 even after administering naloxone. A person can slip back into overdose after the naloxone wears off.



Warning to Alaskans https://dhss.alaska.gov/dph/Director/Documents/opioids/FentanylBulletin.pdf



One- and 3-year probabilities of continued opioid use among opioid-naïve patients, by number of days' supply* of the first opioid prescription – United States, 2006–2015



Source: CDC, MMWR, 3/17/2017



Opioid Risk Factors (Think 2015)

Prescription

- More than a third of Americans in past two years
- Misuse
 - Up to 29% prescribed
- Opioid Use Disorder and/or Heroin

- 8-12% OUD
- 4-6% Heroin Use



In 2020, Unintentional Injuries Were the Leading Cause of Death Among Alaskans Aged 20-44 Years

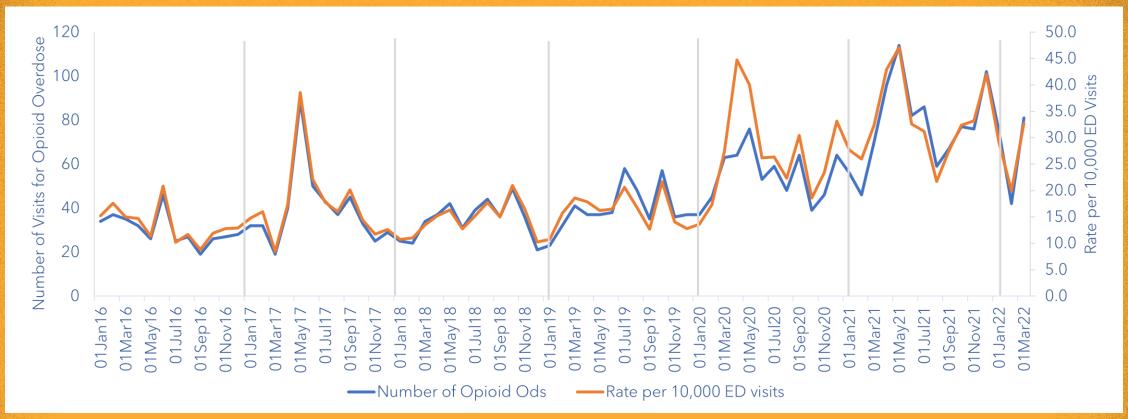
Rank of Leading Causes of Death (Among Alaskans 20-44 Years)	Number of Deaths
1. Accidents/Unintentional Injuries	182
2. Intentional Self-Harm	114
3. Chronic Liver Disease and Cirrhosis	54
4. Diseases of Heart	48
5. Malignant Neoplasms	33
All Causes of Death	614

In 2020, 54% (98) of unintentional injury deaths among Alaskans aged 20-44 years were due to accidental poisonings

Source: Alaska Division of Public Health, Health Analytics and Vital Records Section. Accessed 3/18/2022.



Emergency Department Visits for Opioid Overdoses in Alaska, Jan 2016-Mar 2022



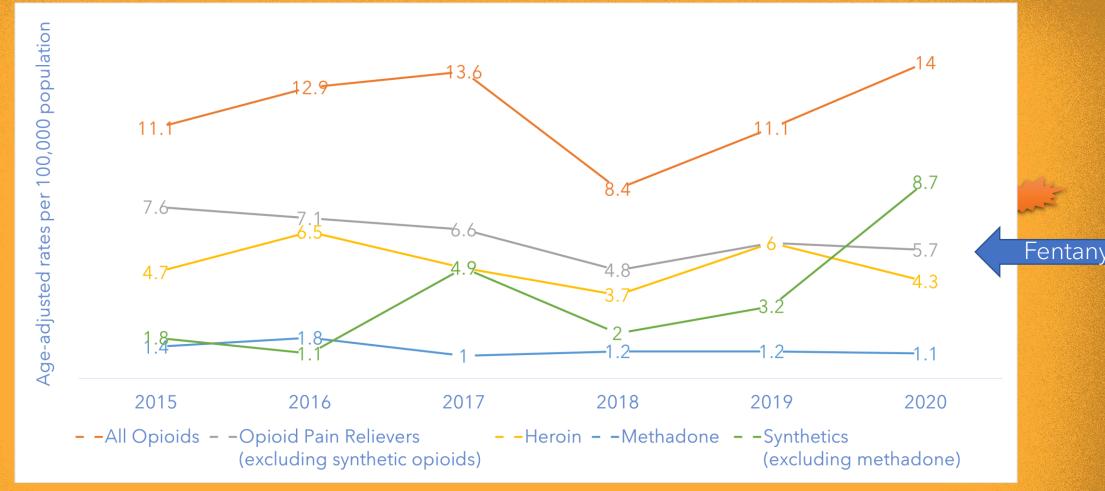
Source: Alaska Division of Public Health, Section of Epidemiology, Syndromic Surveillance Data. Accessed 4/26/2022.

The displayed timeframe includes the COVID-19 pandemic, during which ED volume fluctuated greatly. We recommend considering trends in both absolute numbers and rates when assessing activity during this timeframe. Not all emergency departments participate in syndromic surveillance, and some have onboarded at different times. Syndromic Surveillance data are based on queries of emergency department notes and diagnosis codes suggestive of the condition of interest and are therefore approximate. Data are best suited for trend analysis, rather than final counts.

Get naloxone and keep it with you

Save a life.

Opioid Overdose Death Rates

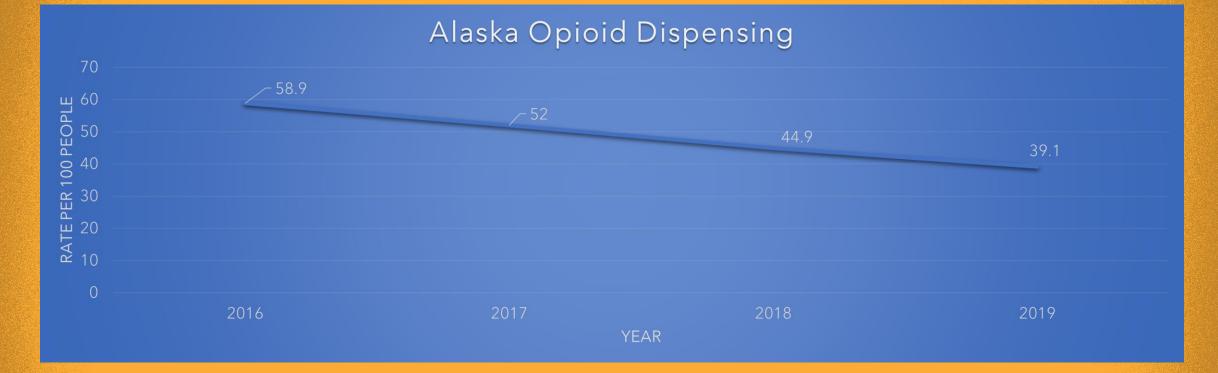


Get naloxone and keep it with you

*2020 data are preliminary and subject to change



CDC Prescription Data





OPIOID: TOOLS TO KEEP ALASKANS SAFE

- SAFE STORAGE AND DISPOSAL
- NALOXONE
- PRESCRIPTION DRUG MONITORING





Medication Storage and Disposal

The importance:

- Risk of sharing
- Risk to children and youth

The interventions:

- Medication kiosks
- Medication disposal bags
- Medication lockboxes
- Sharing is not caring





Provider and Patient Education

Clinicians: caring for patients with complex pain medication regimens?

We're behind you.

A new partnership between State of Alaska and University of Washington:

UW Medicine Pain and Opioid Consult Hotline for Alaskan Clinicians

1-844-520-PAIN (7246)

UW Medicine pain pharmacists and physicians are available Monday through Friday, 7:30 a.m. to 3:30 p.m AKT (excluding holidays) to provide clinical advice at no charge to you.

Consultations for clinicians treating patients with complex pain medication regimens, particularly high dose oploids:

- Individualized opioid taper plans
- · Systematic management of withdrawal syndrome
- Evaluate/recommend non-opioid/adjuvant analgesic treatment
- Triage and risk screening
- Individualized case consultation for client care and medication management
- Explain/review Center for Disease Control and Prevention (CDC) opioid guidelines: <u>https://</u> www.cdc.gov/mmwr/volumes/65/m/rr6501e1. htm

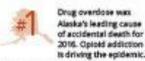
UW TelePain Services: Available Wednesdays 11am to 12:30 p.m AKT. <u>http://depts.washington.edu/aresth/</u> care/pain/felepain

WHAT ALASKANS SHOULD KNOW



WHY BE CAUTIOUS WITH OPIOIDS?

Opioid medications are chemically similar to heroin, with serious risk of addiction and overdose, even when taken as directed:



Alaska Department of Health and Social Services

Nationally, 4 out of 5 heroin users started out misusing prescription opioids.

American Society of Addicsion Medicine

Learn more: WWW.OPIOIDS.ALASKA.GOV

<image>

▶ ▶| ◄ 0:97

Pentanyi (Duragesic) Hydroxodone (Hocolin, Noroo) Hydromorphone (Dilaudid) Mepericine (Demerol) Methadone Morphane (MS Contin, Kadiaro) Coynorphone (Opana) Coynochone (CoyContin, Percocet) Tramadol (Ultram)

If you've had an injury,

bagbrg.

surgery or dental work, you are likely to have pain. Some

pain can be a normal part of

Talk with your doctor to find

the most effective treatment

"IS IT AN OPIOID?"

medication include:

Codetne

Some examples of optotd

with the least risk.



DHSS OSMAP Academic Detailing Pilot

Save a life.

PDMP: A Tool to Support Patients

- Querying
 - Then having the conversation with the provider and patient (The Pharmacist and the ED provider)

- Using the alerts
 - NarxCare Alerts
 - Clinical Alerts
- Communication and continuity of care
 - Communications Module



Learn the Signs of an Overdose



FACE is clammy to touch and has lost color. Has trouble speaking. Center part of their eye very small, sometimes called "pinpoint pupils."



BREATHING is slow or has stopped.



BODY is limp. Fingernails or lips are turning blue or purple.



Get naloxone and keep it with you

BREATHING is slow or has stopped.



SLEEP is deep and person cannot be woken. Will not respond to your voice or touch.



Naloxone Distribution

- Universal, opt-out co-prescribing naloxone
 - Cost-effective and life saving:
 - One-time pharmacy of naloxone prevented 14 additional overdose deaths per 100 000 persons, with an incremental cost-effectiveness ratio (ICER) of \$56 699 per QALY. -Acharya et al., 2020
 - In the US, one-time pharmacy distribution of naloxone would lead to overdose death reductions 64% of the time. Acharya et al., 2020
- Especially distribute for elevated risk prescriptions
- Incorporate the device into the bag with the opioid prescription, and/or offer education about it



Get naloxone and keep it with you

Save a life.

Naloxone Saves Lives

- Naloxone is an overdose reversal drug that is safe, has no potential for abuse, and reverses overdoses 75% to 100% of the time. Narcan is a brand of naloxone.
- A person who has a fentanyl-involved overdose may only have 2 minutes before his/her/their death.
- Studies show overdoses are reversed and lives are saved when lay people carry and use naloxone.



Find out how to use and get naloxone at https://dhss.alaska.gov/osmap/Pages/hope.aspx



Naloxone is Effective Against Opioids Such As:



- Heroin
- Methadone
- OxyContin
- Vicodin

- Percocet
- Codeine
- Fentanyl

Naloxone Will NOT Reverse Overdose from Drugs Such As:

- Cocaine
- Meth (Methamphetamine)
- Alcohol

Stimulants

Get naloxone and keep it with you

 Benzos (Benzodiazepines such as Xanax and Valium)

Carry naloxone regardless as those who are using illicit substances may not know their substance is contaminated with an opioid.



Get the Rescue Kit

Save a life.

The rescue kit includes

- Two doses of naloxone nasal spray
- Instructions on how to stop an overdose with naloxone nasal spray
- Fentanyl testing strip
- Instructions on how to the test strip

Get naloxone and keep it with you

Latex protective gloves

ALTERNATIVE PAIN MANAGEMENT APPROACHES

- MULTIMODAL APPROACHES
- NON-OPIOID PAIN MANAGEMENT
- NON-PHARMACOLOGICAL PAIN MANAGEMENT
- PRESCRIPTION DRUG MONITORING





Three Main Messages of Guidelines

- Determining when to initiate or continue opioids for chronic pain
- 2. Opioid selection, dosage, duration, follow-up, and discontinuation
- 3. Assessing risk and addressing harms of opioid use

GUIDELINE FOR PRESCRIBING OPIOIDS FOR CHRONIC PAIN

IMPROVING PRACTICE THROUGH RECOMMENDATIONS

Get naloxone and keep it with you

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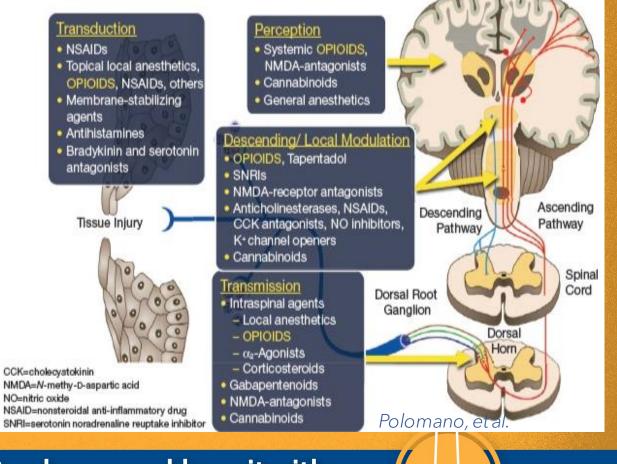
Effects on The Brain

Transduction

- NSAIDS
- Membrane-stabilizing agents
- Antihistamines
- Bradykinin and serotonin antagonists
- Perception
 - Systemic Opioids, NMDA-antagonists
 - Cannabinoids
 - General Anesthetics
- Descending/ Local Modulation
 - Opioids, Tapentadol
 - SNRIs
 - NMDA- receptor antagonists
 - Anticholinesterases, NSAIDS, OCK antagonists, NO inhibitors, K+ channel openers
 - Cannabinoids
- Transmission
 - Gabapentenoids
 - NMDA- antagonists
 - Cannabinoids
 - Intraspinal agents
 - Local anesthetics
 - OPIOIDS
 - Agonists
 - Corticosteroids



Broad-Spectrum Analgesics



2016 CDC Opioid Guidance for Pain #1 "Nonpharmacologic Therapy and Nonopioid Pharmacologic Therapy are Preferred"

PT, weight loss, exercise, psychology behavioral modification

- Hip or knee osteoarthritis improved function and reduced chronic pain
- Low back pain and fibromyalgia improved function and well-being
 - No evidence for decreased pain or improved function with long-term use of opioids for: low back pain, headache, or fibromyalgia

Non-opioid pharmacotherapy

- Pain: neuropathic or nociceptive
 - NSAID better for nociceptive
 - Tricyclic, anticonvulsants, TD lidocaine better for neuropathic
- Non-Opioid are generally not associated with substance use disorder
- Numbers of fatal overdoses associated with nonopioid medications are a fraction of those associated with opioid medications

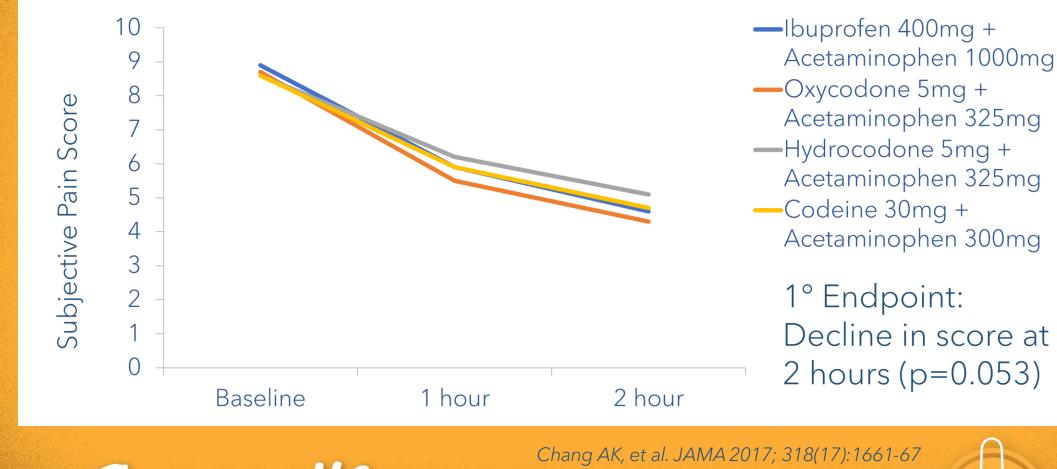
Get naloxone and keep it with you

- 2010 APAP+NSAIDs ~100x less then opioids
- When multimodal approach is used with opioids MMEs ~3x4x lower

Fransen, et al., Hayden et al., Hamrick, et al.



RCT of 410 Pts: Management of Extremity Pain (Sprain, Fracture, MS Pain) in the ED





Multimodal Approaches to Pain

<u>Strategies for Managing Pain and</u> <u>Associated Disability</u>

- 1. Pharmacotherapy
 - AP AP, NSAIDs, TCAs, opioids, topical agents
- 2. Physical Medicine and Rehabilitation
 - Assistive devices, electrotherapy
- 3. Complementary and Alternative Medicine
 - Massage, supplements
- 4. Lifestyle Change
 - Exercise, weight loss
- 5. Psychological Support
 - Psychotherapy, group support
- 6. Interventional Approaches
 - Injections, neurostimulation

Multimodal Treatment



Get naloxone and keep it with you

https://paininjuryrelief.com/wp-content/uploads/2012/09/multimodalapproach.jpg

Save a life.

Restorative Therapies

- Massage Therapy
 - Though the evidence is supportive of massage therapy, studies are lacking in quality so it is tough to determine the overall effectiveness of massage therapy in pain management.
- Therapeutic Exercise
 - A recent meta-analysis (2015) evaluated the role of exercise inpatients with knee osteoarthritis. Data from 44 trials (3,537participants) indicated that therapeutic exercise provides short-term benefits such as reduced pain, improved physical function and improved quality of life.
- Transcutaneous electric nerve stimulation
 - TENS uses low voltage electrical currents to provide pain relief. These electrical impulses are delivered via electrodes that are placed on the surface of the skin near nerves or where the pain trigger points are located.

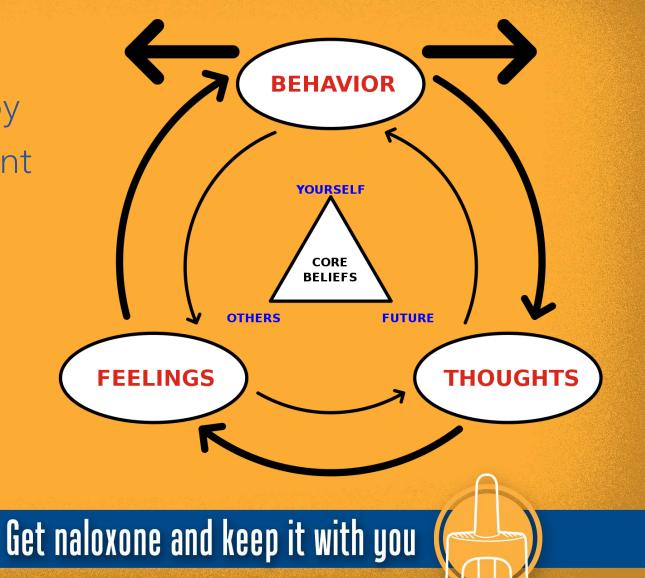


Behavioral Health Approaches

- Behavioral therapy
- Cognitive-behavioral therapy
- Acceptance and commitment therapy
- Mindfulness-based Stress Reduction

Save a life.

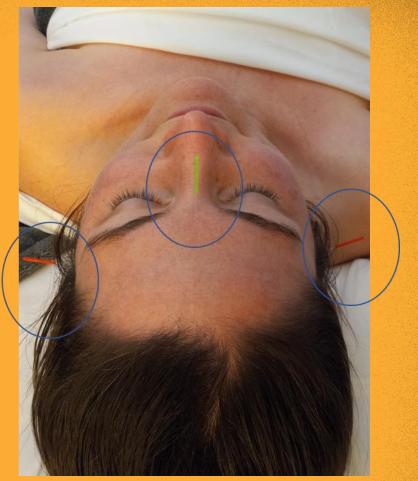
 Psychophysiological Approaches



Complimentary and Integrative Health

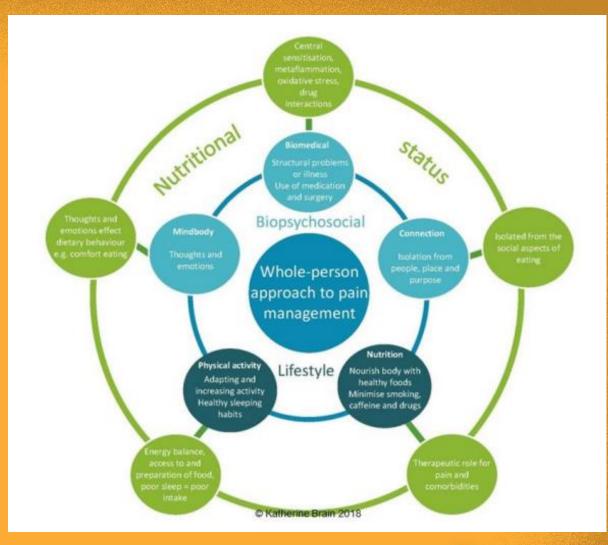
- Acupuncture
 - Evidence is building for the importance of acupuncture in pain management depending on the condition.
- Yoga
 - Depending on the medical condition, yoga can be very beneficial according to the evidence.
- Tai Chi
 - The evidence indicates Tai Chi to be beneficial for immediate relief of chronic pain.





Importance of Nutrition

- Lifestyle
 - Adapting and increasing activity
 - Healthy sleeping habits
- Nutritional Status
 - Thoughts and emotions effect dietary behavior e.g. comfort eating
 - Isolated from social aspects of eating
 - Energy balance, and access to and preparation of food
 - Poor sleep = poor intake
 - Therapeutic role for pain and comorbidities
- Biopsychosocial
 - Biomedical : structural problems or illness
 - Use of medication and surgery
 - Connection : isolation from people, place or purpose
 - Mindbody: thoughts and emotions



Get naloxone and keep it with you

Save a life.

Safely and Effectively Managing Pain

To find effective treatment options, talk to your doctor about managing your pain safely.

A conversation with your doctor can help you understand nonopioid pain management options. Talk to your doctor about:

- your health history
- how your activities have been impacted by pain
- what you hope to gain from managing your pain
- a complete list of all your medications

Having detailed discussions with your doctor about your pain management and function goals can help your doctor identify the best treatment with the lowest level of risk.



Treatment Resources

Alaska Community Resources

- State of Alaska DBH page
 - Links to Substance Use Disorder Treatment Provider Lists
 - https://dhss.alaska.gov/dbh/Pages/default. aspx
 - OpenBeds
 - www.treatmentconnection.com
 - Provides a list of treatment providers based on real time availability
 - Not all providers are listed

Save a life.

SAMHSA

- <u>https://www.samhsa.gov/medication-assisted-treatment/find-treatment</u>
- Medication for Addiction Treatment Locator
 - Buprenorphine Practitioner Locater
 - Opioid Treatment Program Directory
- Behavioral Health Treatment Locator
- SAMHSA Helpline: 1-800-662-HELP (4357)

"THE OPPOSITE OF ADDICTION ISN'T SOBRIETY. IT'S CONNECTION."

- JOHANN HARI, CHASING THE SCREAM: THE FIRST AND LAST DAYS OF THE WAR ON DRUGS









opioids.alaska.gov email: osmap@alaska.gov





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