

The Addiction Epidemic: Impacts and Opportunities

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Objectives

01

Describe the changing landscape of the Opioid Mortality Crisis in 2018

02

Provide an Overview of the Evolving Federal and State Strategy to Combat the Crisis

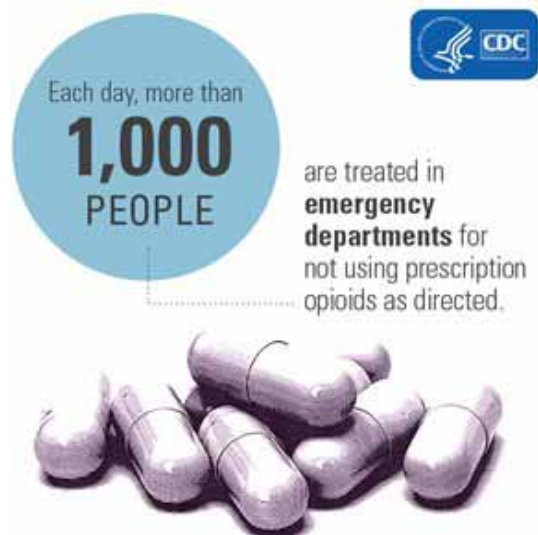
03

Share What We Can Do To Minimize Risk for Opioid Use Disorder, Overdose and Death

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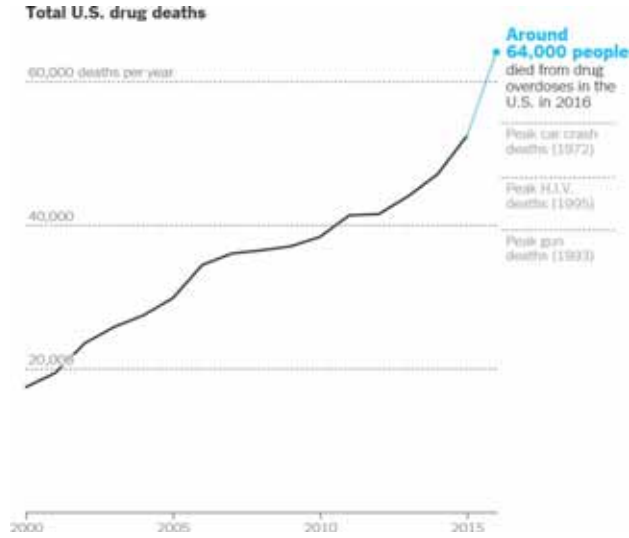
The Rapidly Changing Landscape of the Opioid Mortality Crisis in 2018

3



Total US Drug Deaths 2000-2016

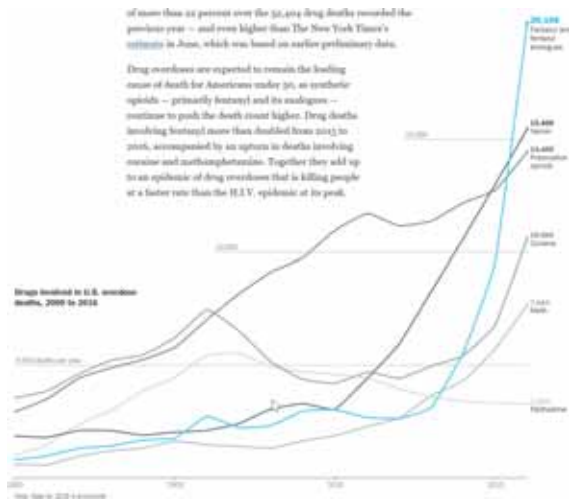
On average 142 people die each day



https://www.nytimes.com/interactive/2017/09/02/upshot/fentanyl-drug-overdose-deaths.html?_r=0
Adapted from CDC • National Center for Health Statistics • National Vital Statistics System as of 8/16/17

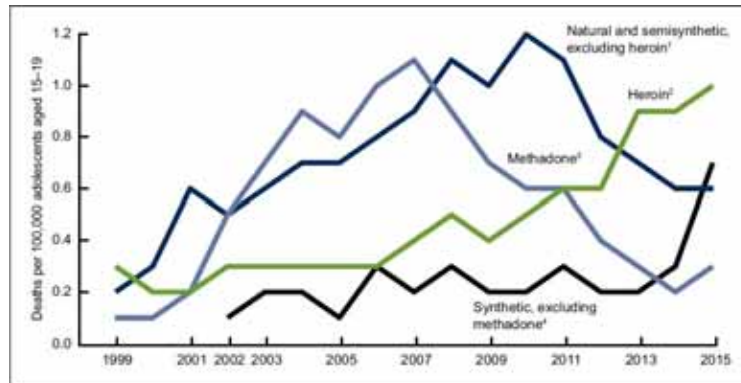
Drug Overdose Deaths in the US

2000-2016 Fentanyl, Fentanyl Analogues and Heroin are Outpacing Precipitation Opioid Deaths



https://www.nytimes.com/interactive/2017/09/02/upshot/fentanyl-drug-overdose-deaths.html?_r=0
Adapted from CDC • National Center for Health Statistics • National Vital Statistics System as of 8/16/17

Among Opioids, Rates of Drug Overdose Deaths Among Adolescents Aged 15–19 in 2015 Were Highest for Heroin



NCHS Data Brief ■ No. 282 ■ August 2017

Neonatal Abstinence Syndrome (NAS)


A 2012 study from the [University of Michigan](#) and the [University of Pittsburgh](#) published in the *Journal of the American Medical Association* analyzed information on 7.4 million discharges from 4,121 hospitals in 44 states, to measure trends and costs associated with NAS over the past decade

- The study indicated that between 2000 and 2009, the number of mothers using opiates increased from 1.19 to 5.63 per 1,000 hospital births per year
- Between 2000 and 2009, total hospital charges for NAS cases, adjusted for inflation, are estimated to have increased from \$190 million to \$720 million
- Newborns with NAS were 19% more likely than all other hospital births to have low birthweight and 30% more likely to have respiratory complications

Michigan Data Summary

OPIOID ADDICTION IS A GROWING PROBLEM.

In Michigan alone, an average of five people die from opioid overdose every day. Help us change the numbers and stop this deadly epidemic.



<p>All Drug Deaths</p> <p style="font-size: x-small;">Total number of overdose deaths in Michigan involving any drug.</p>	<p>2011</p> <p style="font-size: x-small;">1,359</p>	<p>2015</p> <p style="font-size: x-small;">1,981</p>	<p>Opioid Prescriptions</p> <p style="font-size: x-small;">Total number of opioid prescriptions written by any licensed prescriber in Michigan.**</p>	<p>2011</p> <p style="font-size: x-small;">10,441,714</p>	<p>2016</p> <p style="font-size: x-small;">11,028,495</p>	<p>NAS Cases</p> <p style="font-size: x-small;">Neonatal abstinence syndrome (NAS) is a group of conditions associated with drug withdrawal in newborns after being exposed in utero.</p>	<p>2011</p> <p style="font-size: x-small;">630</p>	<p>2016</p> <p style="font-size: x-small;">927**</p>	<p>People in SUD Treatment for Opioids or Heroin</p> <p style="font-size: x-small;">Total number of people receiving publicly funded drug treatment services in Michigan.</p>	<p>2011</p> <p style="font-size: x-small;">22,234</p>	<p>2016</p> <p style="font-size: x-small;">32,473</p>
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2015 data. *Preliminary data for 2016. Numbers are not finalized and may change.

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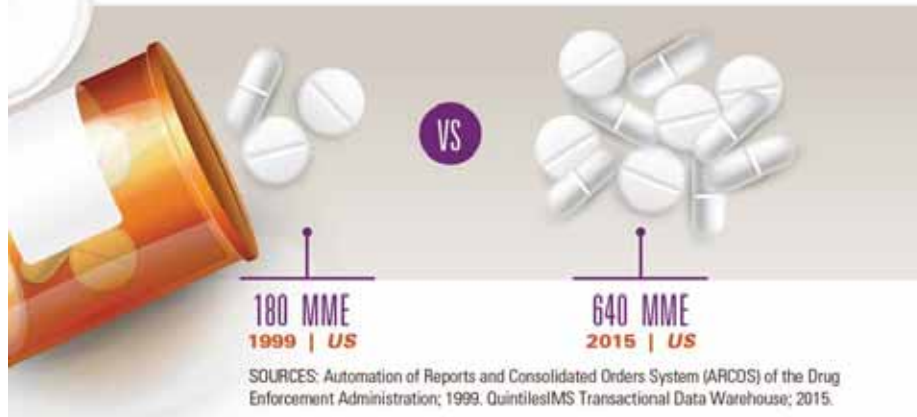
When the Prescription is the Problem

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When the Prescription Is the Problem

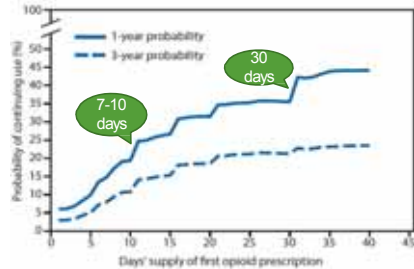
The amount of opioids prescribed per person was three times higher in 2015 than in 1999.*



*In 2010, the rate was 4x higher than 1999

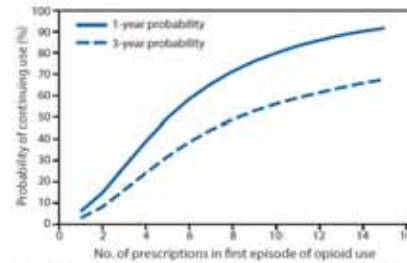
The Risk for Continued Opioid Use Goes Up with Days Supply and Number of Prescriptions in the First Episode of Care

FIGURE 1. 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



* Days' supply of the first prescription is expressed in days (1–40) in 1-day increments. If a patient had multiple prescriptions on the first day, the prescription with the longest days' supply was considered the first prescription.

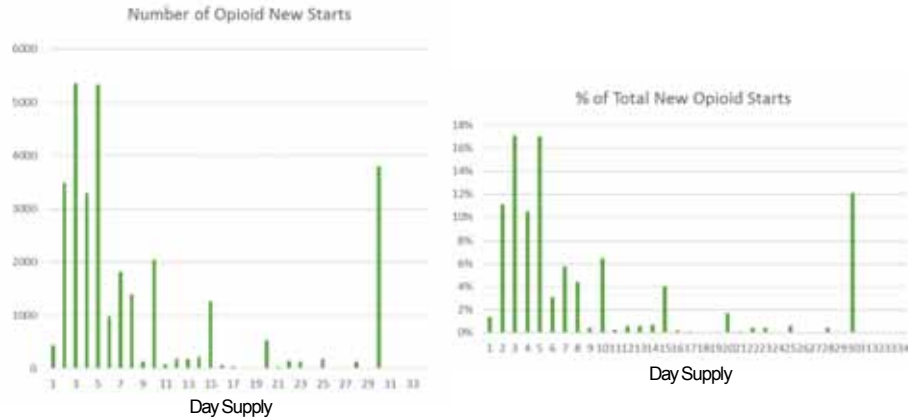
FIGURE 2. One- and 3-year probabilities of continued opioid use among opioid-naïve patients, by number of prescriptions* in the first episode of opioid use — United States, 2006–2015



* Number of prescriptions is expressed as 1–15, in increments of one prescription.

Distribution of New Opioid Prescriptions for Number of Days Prescribed – Michigan Medicaid (Treatment Naïve ≥ 6 Months – Oct 1, 2016 through March 31, 2017)

Goal is to limit prescription opioids for acute pain to 7 days, reevaluate, then limit additional use to prevent tolerance, dependence and addiction



Estimated Population Using Prescription Opioids ≥ 30 Days in Michigan in 2016

Goal is to decrease prescription rates for long term use, avoid tolerance and shrink supply for diversion

1/3 of the Population Has Some Form of Pain
1/6 of the Population Took an Opioid > 30 days

Prescriptions	Medicaid (Actual)	Commercial and No-Insurance (Estimated)	Total (Estimated)
30 Days	402,154	1,206,462	1,608,616
90 Days	115,841	347,523	463,364
365 Days	21,847	65,541	87,388

FFSMI Medicaid High MEDD w/ and w/o Benzodiazepines

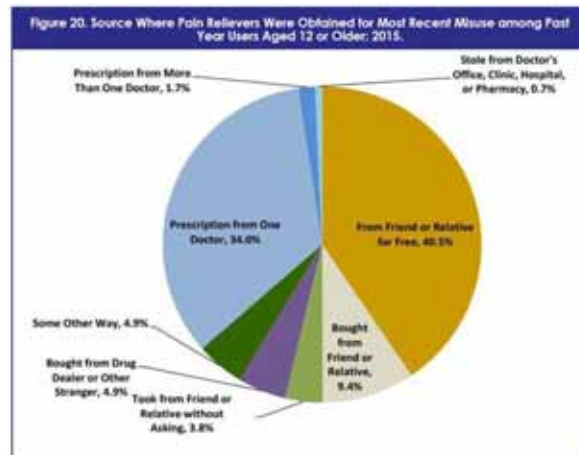
Goal is to decrease prescription rates for high dose opioids and concurrent use of benzodiazepines

August 2017 Data	Triggered Providers	Targeted Unique Members
High Morphine Equivalent Dosing (MED) - > 50 MED	1746	1671
High MED > 90	851	676
High MED > 120	601	462
High MED > 50 with Benzodiazepine Use	497	325
High MED > 90 with Benzodiazepine Use	225	128
High MED > 120 with Benzodiazepine Use	150	87
Multiple Controlled Substances from Multiple Doctor and pharmacies	103	20

Magellan Whole Health Rx

Data From Drug Users Responding to the DEANDTASurvey – 2/3 of Prescription Opioids Were Obtained For Free, Bought or Stolen

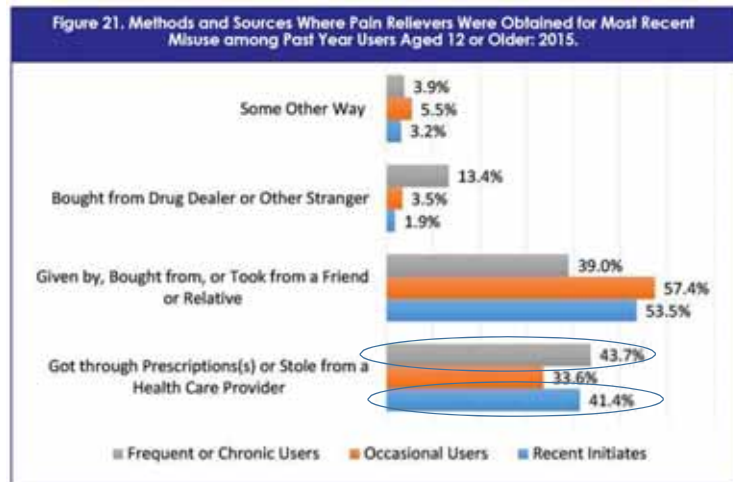
- Much of This Use Started for Recreational and Not Medicinal Purposes



Source: Substance Abuse and Mental Health Services Administration, National Survey on Drug Use and Health (NSDUH)

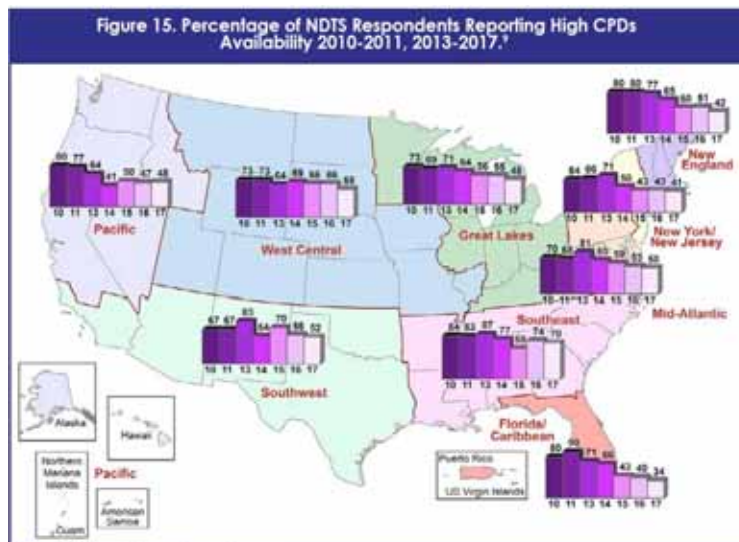
2017 National Drug Threat Assessment

About 40% of Frequent Chronic Users and Recent Initiates Still Receive Their Prescription Opioid From A Provider – By Prescription or Stealing It



Source: Substance Abuse and Mental Health Services Administration, National Survey on Drug Use and Health (NSDUH)

2017 National Drug Threat Assessment



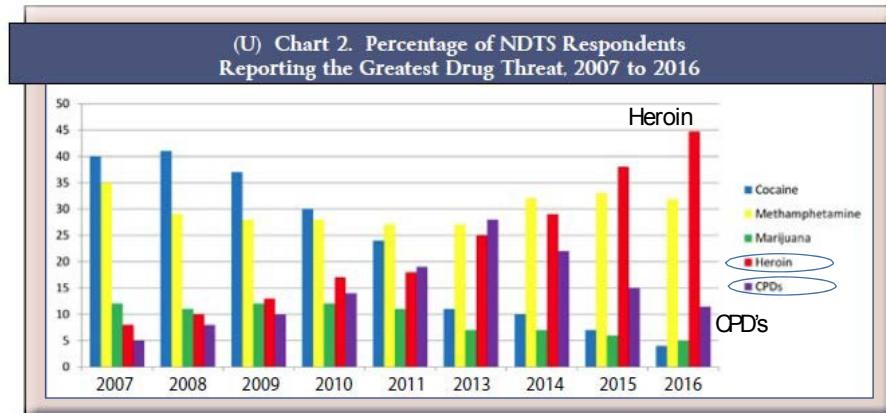
Source: National Drug Threat Survey

When Heroin is the Problem

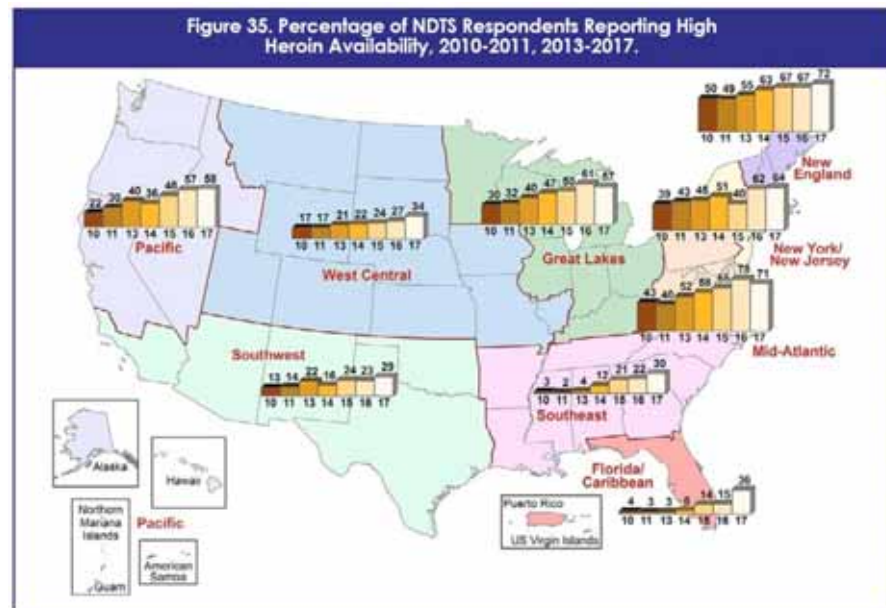
The National Heroin Threat is the Greatest in the Northeast Corridor, Midatlantic States and the Midwest



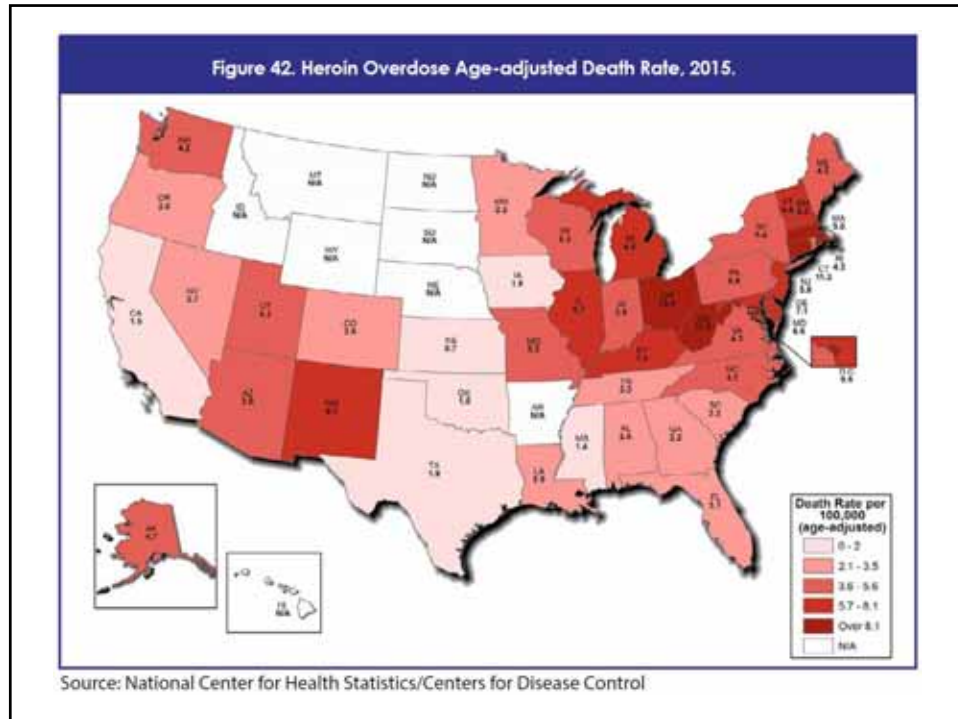
2015-16: Heroin Became the Greatest National Threat As the Controlled Prescription Drug (CPD) Threat Diminished



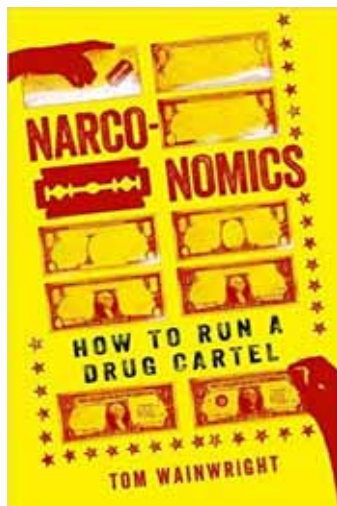
Source: National Drug Threat Survey



Source: 2017 National Drug Threat Survey



2016 - Heroin Deaths are Related to Large Corporate-like Success of Drug Cartels

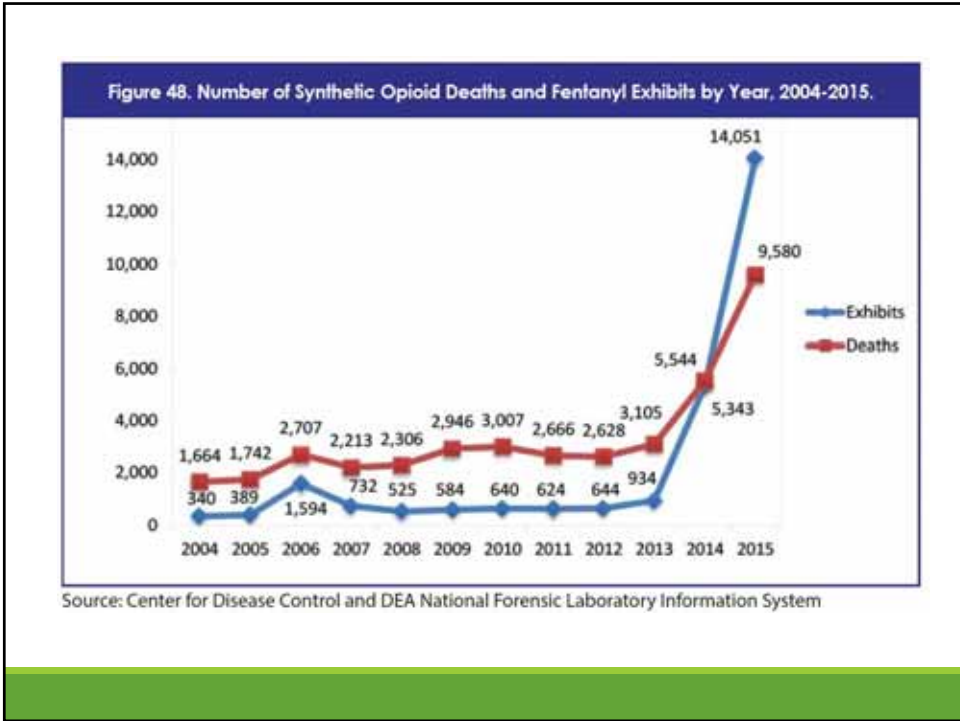


- \$300 billion illegal drug business run predominately by 6 Mexican Cartels
- Adoption of the strategy and tactics used by large global corporations such as Walmart, McDonald's, and Coca-Cola.
- Highly sophisticated agricultural, manufacturing, sales, and distribution practices including creating brand value and fine-tuning customer service
- Leverages smart phone technologies and the dark internet

\$300B of Heroin Revenues are As High as the Largest Global Corporations

Ranking	Name	Industry	Revenue (USD billions)	Revenue growth	Headquarters
1	Walmart	Retail	\$482	0.7%	Bentonville, Arkansas
2	State Grid	Electric utility	\$330	2.9%	Beijing
3	China National Petroleum	Oil and gas	\$299	30.2%	Beijing
4	Sinopec Group	Oil and gas	\$294	34.1%	Beijing
5	Royal Dutch Shell	Oil and gas	\$272	36.9%	The Hague
6	Exxon Mobil	Oil and gas	\$246	35.6%	Irving, Texas
7	Volkswagen	Automotive	\$237	11.9%	Wolfsburg
8	Toyota	Automotive	\$237	4.5%	Toyota, Aichi
9	Apple	Consumer electronics	\$234	27.9%	Cupertino, California
10	BP	Oil and gas	\$223	37%	London

When Fentanyl and Fentanyl Analogues Are the Problem

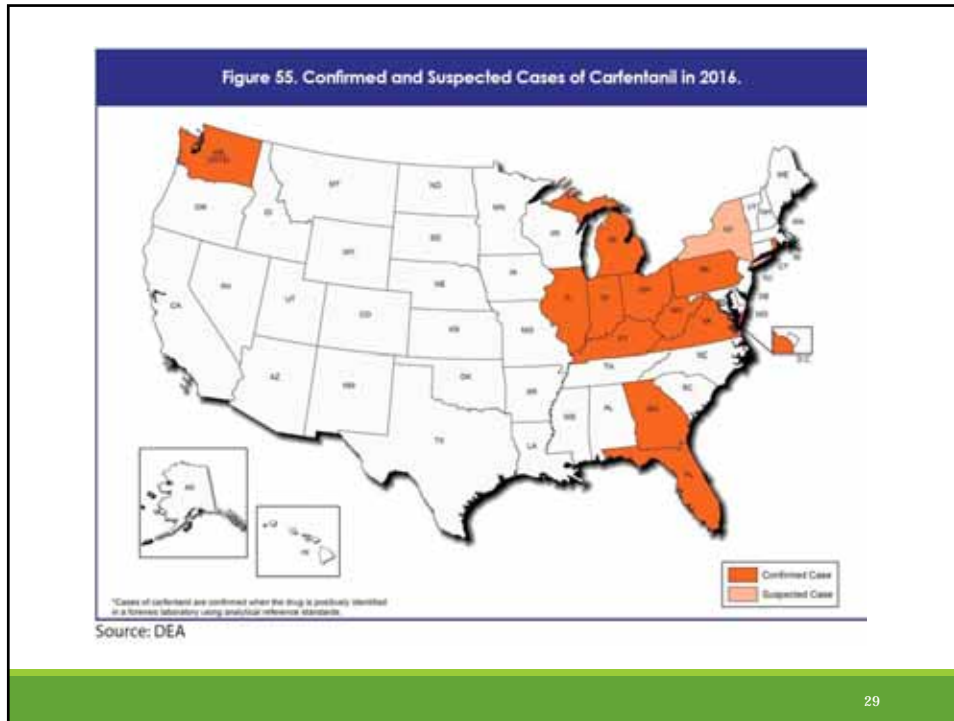


Six Days of Drug Overdose: Cincinnati



- In a six day period (August 19-24, 2016) Cincinnati area experienced 174 opioid overdose reactions.
- The culprit responsible was heroin cut with a fentanyl analogue: Carfentanyl.
- Carfentanyl is 10,000 times as potent as morphine.
- Carfentanyl is used to tranquilize elephants

https://www.washingtonpost.com/news/morning-mix/wp/2016/08/29/this-is-unprecedented-174-heroin-overdoses-in-6-days-in-cincinnati/?utm_term=.c8e4154fc9e6



When Fentanyl Analogues Are the Problem — Overdose Deaths in Ohio, January–February 2017

The Cause For Many Overdose Deaths Cannot Be Determined When Synthetic Opioids Are Not Measured

Summary

What is already known about this topic?

Illicitly manufactured fentanyl has become a significant contributor to unintentional overdose deaths in the United States.

What is added by this report?

Approximately 90% of unintentional overdose deaths examined in 24 Ohio counties that occurred during January–February 2017 involved fentanyl, fentanyl analogs, or both, whereas heroin was identified in the minority (6%) of cases, with somewhat higher prevalence in Appalachian counties. Fentanyl is commonly appearing in combination with other analogs.

What are the implications for public health practice?

These findings highlight the urgent need to make illicitly manufactured fentanyl testing a part of standard toxicology panels for biological specimens. Because multiple naloxone doses are often required to reverse overdoses from illicitly manufactured fentanyl, assuring that sufficient supplies are provided to first responders and distributed through community overdose prevention programs can mitigate the effects of opioid overdoses.

Synthetic opioids/Fentanyl analogs/Metabolites

Fentanyl	253 (90.0)
Norfentanyl	157 (55.9)
Acryl fentanyl	136 (48.4)
Despropionylfentanyl (4-ANPP)	118 (42.0)
Despropionyl para-Fluorofentanyl	1 (0.4)
Fuzanyl Fentanyl	87 (31.0)
Fuzanyl Norfentanyl	2 (0.7)
Carfentanil	21 (7.5)
Acetyl fentanyl	4 (1.4)
Butyryl/isobutyrylfentanyl	4 (1.4)
Butyryl norfentanyl	2 (0.7)
Fluorobutyryl/Fluoroisobutyrylfentanyl	3 (1.1)
U-47700 [†]	2 (0.7)
Any type of fentanyl/analog	259 (92.2)

Six Days of Drug Overdose: Cincinnati



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Carfentanyl Deaths in Michigan

- September 15, 2016 - First documented carfentanyl overdose seen in Kent County
- October 6, 2016 19 confirmed carfentanyl overdose deaths in Wayne County since July



U-47700 Death in Michigan

- October 5, 2016 - First documented U47700 (aka, pink) overdose seen in White Lake, MI
- The then legal drug was purchased over the internet and shipped from China
- It was designated as a Schedule I restricted drug in November, 2016



Grey Death in GA, FL, OH and WV

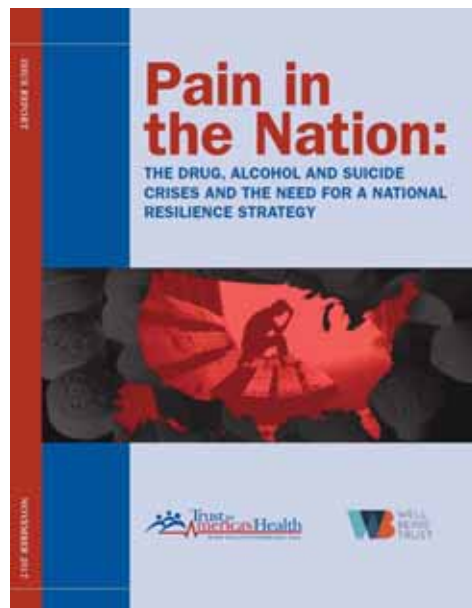
- May 4, 2017 - Gray Death is a combination of several powerful substances such as Heroin, Fentanyl, Carfentanil and a synthetic opioid called U-47700
- The drug has the appearance of a concrete rock. It is chunky and solid, created from compressed and cooked powder
- At least 50 people have reportedly overdosed, some dying after their first dose of the drug



<http://www.cbsnews.com/news/gray-death-opioid-dangerous-drug-combination/>

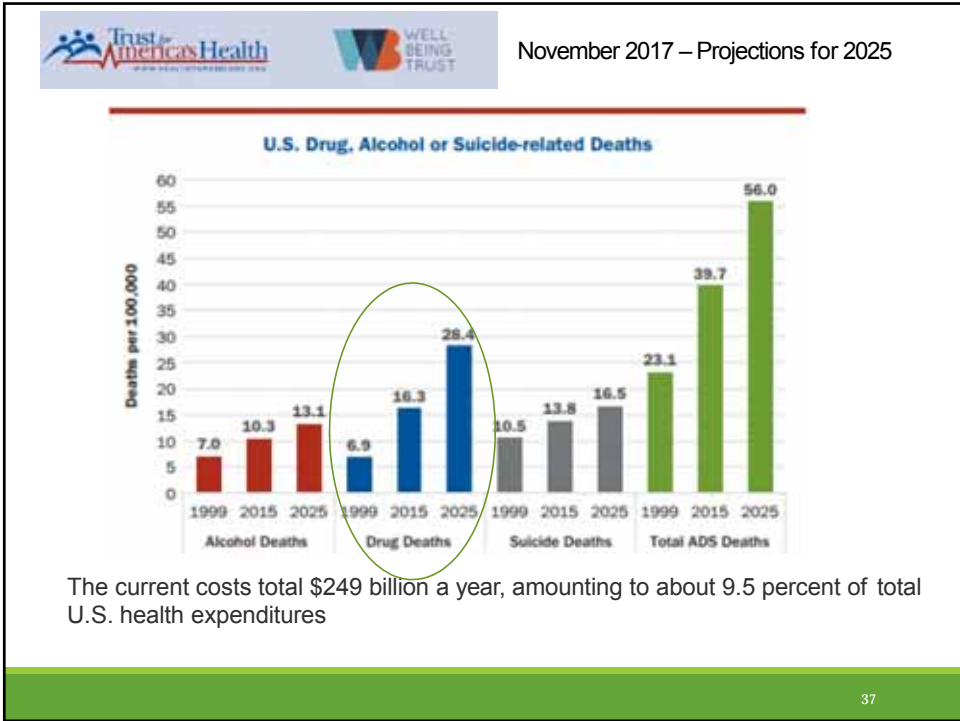
What Can Be Done to Decrease Death Rates and Prevent Addiction

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<http://www.tfah.org/assets/files/TFAH-2017-PainNationRpt-FINAL.pdf>

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Presidents Commission Final Report – November 1, 2017



**THE PRESIDENT'S COMMISSION
ON COMBATING DRUG
ADDICTION AND THE OPIOID
CRISIS**

Roster of Commissioners

Governor Chris Christie, Chairman
Governor Charlie Baker
Governor Roy Cooper
Congressman Patrick J. Kennedy
Professor Bertha Madras, Ph.D.
Florida Attorney General Pam Bondi



https://www.whitehouse.gov/sites/whitehouse.gov/files/images/Final_Report_Draft_11-1-2017.pdf

Understand and Respond to the Clues of Addictive Behavior

1. Sudden change in baseline behavior
2. Loss of Personal Hygiene
3. Loss of interest in school or work
4. Inability to constrain personal spending within available financial resources
5. Sudden changes in typical relationship networks
6. Sudden defiant behavior and unwillingness to discuss changes in behavior
7. Drugs or drug paraphernalia immediately in sight

Know the Signs of Opioid Withdrawal – First 24 Hours

Early symptoms typically begin in the first 24 hours after you stop using the drug, and they include:

- muscle aches
- restlessness
- anxiety
- lacrimation (eyes tearing up)
- runny nose
- excessive sweating
- inability to sleep
- yawning very often

Know the Signs of Opioid Withdrawal – Days 2-4

Later symptoms, which can be more intense, begin after the first day or so. They include:

- diarrhea
- abdominal cramping
- goose bumps on the skin
- nausea and vomiting
- dilated pupils and possibly blurry vision
- rapid heartbeat
- high blood pressure

Although very unpleasant and painful, symptoms usually begin to improve within 72 hours, and within a week there is a significant decrease in the acute symptoms of opiate withdrawal.

Promising actions for safer opioid prescribing.

Problem: High prescribing
Solution: Safer prescribing practices

Problem: Too many prescriptions
Solution: Fewer prescriptions

Problem: Too many days
Solution: Fewer days

Problem: Too high a dose
Solution: Lower doses

Other Non-opioid Pain Management Strategies Including Cross-functional Team Approaches

1. Osteopathic and Chiropractic Manual Medicine
2. Epidural and Facet Blocks (for spinal pain)
3. Radiofrequency Ablation
4. Complex Regional Pain Syndrome Techniques
5. Meditation and Yoga Techniques

What Else Can You Do to Prevent Addiction, Overdose and Death – Starting On Monday

1. Don't Abandon Patients with Life-altering Pain or Force Patients Taking Long Term Opioids to the Street
2. Stay abreast with the constantly evolving facts that uncover the root causes the Opioid Epidemic
3. Take a Team-based approach and Don't Go it Alone – Surgery, Rehabilitation Medicine, Pain Management, Addiction Management, Behavioral Health
4. Remember Opioid Tolerance Starts Somewhere Between 5-7 days, so either avoid opioids whenever possible and stop them ASAP after starting them
5. Start Conversations at the First Day of Prescribing Opioids and Continue Them until they are stopped
6. Utilize Patient Contracts That Include Meaningful Informed Consent
7. Monitor and Screen for Tolerance, Dependence, Addiction and Risk for Overdose and Death
8. Learn How to Appropriately Taper Existing Opioids and Determine If An Underlying Opioid Use Disorder (OUD) Exists
9. Use MAPS Frequently To Detect Patterns of Misuse or Abuse and Ensure Both Coordination & Continuity of Care with Other Providers
10. Use Urine Drug Screens to Check for Compliance and Potential Illicit Drug Use
11. Treat or Refer Early
12. Write for naloxone to patients who are at high risk for overdose
13. Obtain a xDEA waiver to help stabilize patients with Opioid Use Disorder (Regardless of the Reason)
14. Get Involved with Your Community to Stop Cultural Expectations That Encourage Illicit Drug Use
15. Work Through Your Professional Societies and Personally Talk to Your Legislators and Regulators to Share Your Experiences and What They Can Do to Help You

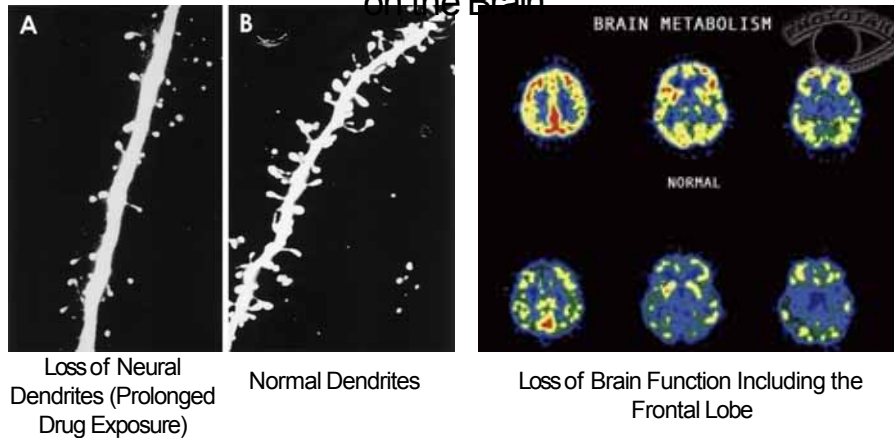
Summary

1. The root causes for the opioid epidemic are complex and multifactorial
2. It is imperative to shrink supply and demand for both prescription opioids and heroin/fentanyl analogues
3. A well organized Michigan-wide and nation-wide plan is necessary to avoid abandoning patients with “true” pain and also not send people to the street for heroin and synthetic opioids
4. Focusing only on prescription opioids without simultaneously addressing “heroin and fentanyl trafficking” will dramatically shrink probability of success
5. Most of all it will “take a village” – “every village” here in Michigan
6. Health professionals are well positioned to help lead the way

Additional Themes

Understanding The Neurological
Basis and Social Consequences of
Opioid Addiction

Addiction Is A Neurodegenerative and Neurocognitive Disorder From Prolonged Exposure of External Chemicals on the Brain



Biological and Social Consequences of Ongoing Addiction

- Prolonged exposure leading to downregulated structure and function (decreased neurotransmitters, receptors and structural proteins)
- Loss of self control and executive function, ie, judgement
- Inability to calculate risk versus benefit
- Severe uncontrollable drug seeking to satisfy craving and avert withdrawal symptoms
- Loss of Family, Job and Shelter
- Petty Theft Leading to Larger Crimes, Arrest and Incarceration
- Accidental overdose, respiratory arrest and death

Neonatal Abstinence Syndrome (NAS)

- Drug and alcohol use during pregnancy can lead to many health problems in the baby besides NAS, including --
 - Birth defects
 - Low birth weight
 - Premature birth
 - Small head circumference
 - Sudden infant death syndrome (SIDS)
 - Problems with development and behavior
- Neonatal abstinence syndrome treatment can last from 1 week to 6 months
- Even after medical treatment for NAS is over and babies leave the hospital, they may need continued treatment for weeks or months

Neonatal Abstinence Syndrome (NAS)

- Generally, an infant going through withdrawal has a distinctive cry.
 - It can be described as being high-pitched, non-stop and shrill.
- A newborn withdrawing from drugs or alcohol have neurological problems.
 - Fever, increased muscle tone and have convulsions.
 - Seizures, increased Moro reflex, tremors, irritability, and disturbed sleep patterns can be observed.
 - The sucking reflex can be incessant and uncoordinated.
- Respiratory symptoms of withdrawal include tachypnea, apnea, nasal congestion, nasal flaring, blotchy skin, and yawning.
- Withdrawal can produce gastro-intestinal symptoms such as poor appetite, regurgitation, projectile vomiting and diarrhea.
- Babies of mothers who use other addictive drugs (e.g. nicotine, amphetamines, cocaine, marijuana) may have long-term problems.

What We Know About Drug Addiction on Parents and its Impact on Young Children

Envision . . .

...the impact of an 8-year witnessing the death of a parent due to an opioid overdose.

...the impact of a 3-year dying from an overdose after taking several opioid pain medication from an open bottle.

...the impact on the nervous system of being born addicted to opioids at birth.

Adverse Childhood Events (ACES): Common Challenges for Families of Young Children

1. Stressful or traumatic events, including abuse and neglect
2. May include household dysfunction, including substance use disorders or witnessing domestic violence
3. Strongly related to the development/prevalence of a wide range of health problems across a person's lifespan, including those associated with substance misuse

The Relationship Between ACEs and a Variety of Known Risk Factors for Disease, Disability, and Early Mortality

- The Division of Violence Prevention at the Centers for Disease Control and Prevention (CDC), in partnership with Kaiser Permanente, conducted a landmark ACE study from 1995 to 1997 with more than 17,000 participants. The study found:
 - ACEs are common
 - ACEs cluster
 - ACEs have a dose-response relationship with many health problems
 - Furthermore, many problems related to ACEs tend to be comorbid or co-occurring

<https://www.samhsa.gov/capt/practicing-effective-prevention/prevention-behavioral-health/adverse-childhood-experiences>

Adverse Childhood Experiences (ACEs) Include

- Physical abuse
- Sexual abuse
- Emotional abuse
- Physical neglect
- Emotional neglect
- Intimate partner violence
- Mother treated violently
- Substance misuse within household
- Household mental illness
- Parental separation or divorce
- Incarcerated household member

<https://www.samhsa.gov/capt/practicing-effective-prevention/prevention-behavioral-health/adverse-childhood-experiences>

ACEs Were Found To Increase the Risk For:

- | | |
|--|--|
| • Alcoholism and alcohol abuse | • Sexually transmitted diseases (STDs) |
| • Chronic obstructive pulmonary disease (COPD) | • Smoking |
| • Depression | • Suicide attempts |
| • Fetal death | • Unintended pregnancies |
| • Health-related quality of life | • Early initiation of smoking |
| • Illicit drug use | • Early initiation of sexual activity |
| • Ischemic heart disease (IHD) | • Adolescent pregnancy |
| • Liver disease | • Lung cancer |
| • Risk for intimate partner violence | |
| • Multiple sexual partners | |

Weiss, J.S., Wagner, S.H. *American Journal of Preventive Medicine* 1998;14:356-360.

The Cyclical Nature of Aberrant Behaviors and ACEs

Landmark study of 17,000 participants from 1995-1997 by the Centers for Disease Control in partnership with Kaiser Permanente

Aberrant Behaviors Increase Risk for ACEs

- Physical abuse
- Sexual abuse
- Emotional abuse
- Physical neglect
- Emotional neglect
- Intimate partner violence
- Mother treated violently
- Substance misuse within household
- Household mental illness
- Parental separation or divorce
- Incarcerated household member

Findings: A person's ACE score has a strong relationship to numerous health, social and behavioral problems across a lifespan, including substance use disorders

ACEs Increase Risk for Aberrant Behaviors

- Alcoholism and alcohol abuse
- Chronic obstructive pulmonary disease (COPD)
- Depression
- Fetal death
- Health-related quality of life
- Illicit drug use
- Ischemic heart disease (IHD)
- Liver disease
- Risk for intimate partner violence
- Multiple sexual partners
- Sexually transmitted diseases (STDs)
- Smoking
- Suicide attempts
- Unintended pregnancies
- Early initiation of smoking
- Early initiation of sexual activity
- Adolescent pregnancy
- Diabetes
- Lung cancer

<https://www.samhsa.gov/capt/practicing-effective-prevention/prevention-behavioral-health/adverse-childhood-experiences>

Michigan Quality Improvement Consortium Guideline
Opioid Prescribing in Adults

FINAL DRAFT

Draft v1E

Key Component	Recommendation and Level of Evidence	Rationale															
Initial starting opioid	Treat acute and chronic pain with non-opioid strategies (non-drug therapy and non-opioid medications), if possible. Initial opioid exposure is associated with a substantial risk of dependence in some patients. Opioid dependency often begins with treatment of acute pain. Clinicians should consider opioid therapy and duration only if expected realistic benefits for both pain and function are anticipated to outweigh risks to the patient.																
If considering opioids, assess risk of dependence	Screen for risk of dependence using "OAPPI" or "ORIT". There is no safe lower limit of dose or duration for opioid use. After seven days of use, the risk of chronic use rises 2.4-fold. Chronic use with pain risks including dependency, overdose and death, and lack of evidence of response to NSAIDs. [B4] Risk of death from overdose increases with daily dosage. Relative risk is about 3x higher for high dose versus low dose use. [C1] [B4] (10) [B4] (day = 10) [B4] (hydrocodone + 33 mg/day) [B4] (hydrocodone)	<table border="1" style="width: 100%; border-collapse: collapse; font-size: x-small;"> <thead> <tr> <th>Dose</th> <th>Relative Risk</th> <th>95% CI</th> </tr> </thead> <tbody> <tr> <td>1-9</td> <td>1.0</td> <td>0.40-2.60</td> </tr> <tr> <td>10-29</td> <td>2.4</td> <td>1.6-3.6</td> </tr> <tr> <td>30-59</td> <td>2.0</td> <td>1.3-3.0</td> </tr> <tr> <td>60-99</td> <td>2.9</td> <td>1.9-4.4</td> </tr> </tbody> </table>	Dose	Relative Risk	95% CI	1-9	1.0	0.40-2.60	10-29	2.4	1.6-3.6	30-59	2.0	1.3-3.0	60-99	2.9	1.9-4.4
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When starting opioids	Assess patient's history of controlled substance use. Consider a Prescription Drug Monitoring Program report, e.g. MDHS , when starting opioid therapy, and periodically throughout therapy, e.g., every prescription, or every three months. [A4] If opioids are used, prescribe the lowest effective dose of immediate-release opioids and the greatest quantity that would be expected to address the patient's pain without enough to require refills, three days of pills for acute pain; more than seven days will rarely be needed. [A4] Use opioids as part of a pain management program that includes non-opioid medications and non-drug therapy, an appropriate opioid prescribing contract with boundaries, urine screens and Naloxone [A4], due to the high risk of death. Discuss realistic goals for pain and function, and how opioid therapy will be discontinued if benefits do not outweigh risks. Obtain a urine or saliva drug screen at the time of starting therapy when clinical suspicion warrants. [B4] Consider offering patient and family education when risk factors for overdose are present, e.g., history of overdose or substance use disorder, higher opioid dosages (> 30 MME/day), or concurrent benzodiazepine use. [A4] Naloxone duration is less than an hour. Following any naloxone use, patient should be seen immediately in a hospital Emergency Department.																
When considering continuing opioid therapy or refilling dose	<ul style="list-style-type: none"> Continue opioid therapy only if there is clinically meaningful improvement in pain and function that outweighs risks to patient safety. [A4] Reassess known risks and realistic benefits throughout opioid therapy, including patient and clinician responsibilities for managing therapy. [A2] If benefits of therapy do not outweigh potential harms, explore other therapies, and work with patient to taper opioids to lower doses, or taper to discontinue. [A4] Consider a formalized treatment plan¹ including informed consent and/or an opioid treatment agreement (controlled substance agreement). [B4] Re-evaluate pain and function, obtain MMEs, consider urine drug screen, consider a pain and function assessment tool, e.g., PROMIS, every three months, or more frequently if needed. [A4] Use urine drug testing to assess for prescribed medications as well as other controlled or illegal substances. [B4] Absence of prescription medication may indicate diversion. Perform testing at least annually, more frequently (every 3-6 months) if warranted. When considering continuing therapy to a 30 MME/day, reassess avoidance of individual benefits and risks, avoid increasing dosage to a 30 MME/day or carefully justify, and document the decision. [A2] Avoid concurrent use of a risk. [B4] 																
Identify substance use disorder	Screening is more likely to identify substance use disorder, patient willingness to be referred, availability and coverage. Use evidence-based assessment, usually made about pain behavioral therapy. [B4] Use SAMHSA's Screening, Brief Intervention, and Referral to Treatment (SBIRT) guidelines .																
Screening and Brief Assessment in Patients with Controlled Substance																	
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¹Michigan Quality Improvement Consortium Guideline: Opioid Prescribing in Adults. Version 1.0. Copyright 2017. Michigan Quality Improvement Consortium. All rights reserved.

August 2017

MQIC Michigan Quality Improvement Consortium Guidelines
Screening, Diagnosis and Referral for Substance Use Disorders

The following guideline recommends detection, diagnosis and referral considerations for substance use disorders, including alcohol.


Eligible Population	Key Components	Recommendations and Level of Evidence
Adolescents and adults, including older adults	<p>Screening for Substance Use Disorder and Risky Substance Use</p> <ul style="list-style-type: none"> Use a validated screening tool improves accuracy. Maintain high index of concern for substance use in persons with: <ul style="list-style-type: none"> Family history of substance use disorder [B] Recent stressful life events and lack of social supports Chronic pain or illness, history of trauma, injuries or adverse childhood experiences Mental illness (e.g. depression, bipolar disorder, anxiety) For at risk patients, obtain a Prescription Drug Monitoring Program, e.g. (MDPS), report and urine drug screen. 	<p>Diagnosis of Substance Use Disorder (indicates a hazardous pattern of substance use resulting in clinically significant impairment or distress)</p> <ul style="list-style-type: none"> Use in larger amounts or over a longer period than intended Persistent desire or unsuccessful efforts to cut down or control use Great deal of time spent obtaining, using or recovering from use Craving or a strong desire or urge to use Recurrent use resulting in a failure to fulfill major work, school, or home obligations Continued use despite related social or interpersonal problems
Patients with Substance Use Disorder or Risky Substance Use*	<p>Patient Education and Brief Intervention by PCP or Trained Staff (e.g. RN, MSW) [A]</p> <ul style="list-style-type: none"> If diagnosed with substance use disorder or risky substance use, initiate an intervention within 14 days. Frequent follow-up is helpful to support behavior change, preferably 2 visits within 30 days. Express concern, advise the patient to cut back on usage or quit, using motivational interviewing techniques. Provide feedback regarding risky use. Explore pros and cons and assess patient's readiness to change. Discuss the risk of substance use and its connection to current medical, psychological, legal and family problems. Negotiate goals and strategies for reducing consumption and other change. Create an action plan identifying patient strengths and supports. Involve family and friends. 	<p>Referral (for high risk behavior, or symptoms)</p> <ul style="list-style-type: none"> Decision to refer should take into account: PCP comfort treating substance use disorder, patient willingness to be referred, availability and coverage. Refer to a substance abuse health specialist, an addiction physician specialist, or a physician experienced in pharmacologic management of addiction [B]. Also consider referrals to community-based services (e.g. AA, NA, etc.) or an Employee Assistance Program.

*Substance Abuse and Mental Health Services Administration (SAMHSA) - [NIDA Center for Integrated Health Solutions, Drug and Alcohol Use Screening Tools](#)
 *American Medical Association (AMA) - [Practice Guidelines: Substance Use](#)
 *The National Center for Addiction and Substance Abuse, [Addiction Risk Factors](#)

Levels of Evidence for the most significant recommendations: A = randomized controlled trial, B = controlled trial, nonrandomized study, C = observational study, D = expert opinion
 No guideline management recommendation for nonrandomized health services. A is based on: literature, Agency for Healthcare Research and Quality (AHRQ) Evidence-Based Practice Centers for Management of Substance Use Disorders, Washington (DC) Department of Veterans Affairs, Department of Defense, 2004 Aug; 10(3), and Practice Guidelines for the Treatment of Patients With Substance Use Disorders, Second Edition, 2005
 Approved by MQIC, Michigan Quality Improvement Consortium, 2014, 2015, 2017.

Next MQIC Guideline – When and How to Taper Opioids

WHEN TO TAPER



Consider tapering to a reduced opioid dosage or tapering and discontinuing opioid therapy when your patient:

- exhibits dosage reduction
- does not have clinically meaningful improvement in pain and function (e.g., at least 30% improvement on the 3-item PEG scale)
- is on dosages > 50 MME/day without benefit or opioids are combined with benzodiazepines
- shows signs of substance use disorder (e.g. work or family problems related to opioid use, difficulty controlling use)
- experiences overdose or other serious adverse event
- shows early warning signs for overdose risk such as confusion, retention, or slurred speech


*Michigan Opioid Research

HOW TO TAPER

Tapering plans should be individualized and should minimize symptoms of opioid withdrawal while maximizing pain treatment with nonpharmacologic therapies and nonopioid medications, as general:

- Go Slow**: A decrease of 20% of the original dose per week is a reasonable starting point. Some patients who have taken opioids for a long time might find even slower tapers (e.g., 10% per month) easier. *Always get feedback from the patient early when to a patient-preferred taper plan.*
- Prevent Triggers**: Coordinate with specialists and treatment supports as needed—especially for patients at high risk of harm such as pregnant women or patients with an opioid use disorder. *Use extra caution during pregnancy due to possible risk to the pregnant patient and to the fetus if the patient goes into withdrawal.*
- Support**: Make sure patients receive appropriate psychosocial support. If needed, work with mental health providers, arrange for treatment of opioid use disorder, and offer resources for exercise prescription.
- Monitor**: Monitor for signs of anxiety, depression, and opioid use disorder during the taper and offer support as needed.
- Empower**: Let patients know that most people have improved function without some pain after tapering opioids. Some patients even have improved pain after a taper, even though pain might initially get worse at first. *Ask patients: "I know you can do this" or "I'll be right here through this."*

CONSIDERATIONS



- Adjust the rate and duration of the taper according to the patient's response.
- Don't rewrite the taper, however, the rate may be slowed or paused while monitoring and managing withdrawal symptoms.
- Once the smallest available dose is reached, the interval between doses can be extended and opioids may be stopped when lower risk than once a day.

RESOURCES:

- [CDC Guideline for Prescribing Opioids for Chronic Pain](#) ([www.cdc.gov/painmanagement/painmanagement](#))
- [Washington State Opioid Taper Plan Calculator](#) ([www.aphis.wa.gov/medvet/medvet/2017/03/02/20170302opioidtapering.pdf](#))
- [Tapering Long-Term Opioid Therapy in Chronic Pain: A Practical Approach](#) ([www.uptodate.com/contents/tapering-long-term-opioid-therapy-in-chronic-pain-a-practical-approach](#))

U.S. Department of Health and Human Services
 www.cdc.gov/odasap