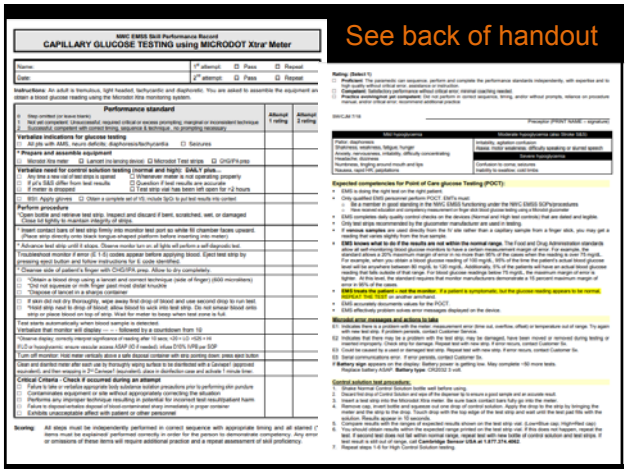
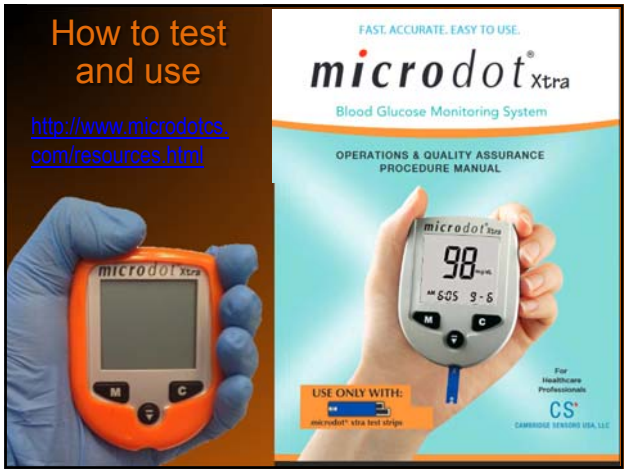
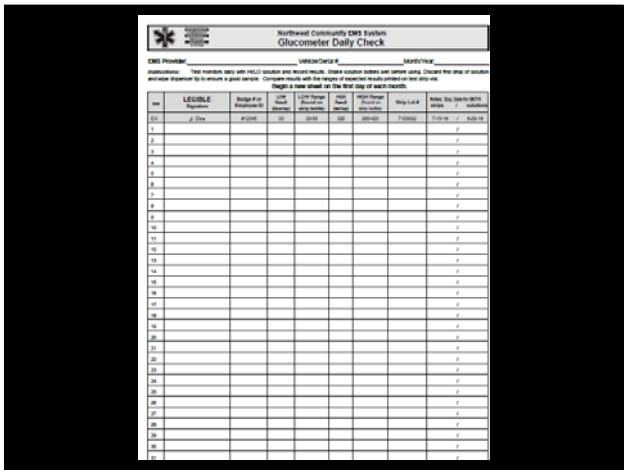

News You Can Use
New glucometers are here!


Features & why we switched
microdot Xtra
FAST. ACCURATE. EASY TO USE.
Large, easy to read display
Common care substances do not compromise test results
Strip eject button provides easy, safe disposal of used test strips
Test Results in 10 seconds
microdot® no code chip required
microdot® Xtra - No Code
Requires only 0.6µL sample
NEW! AUTO CODE


See back of handout
CAPILLARY GLUCOSE TESTING using MICRODOT Xtra Meter

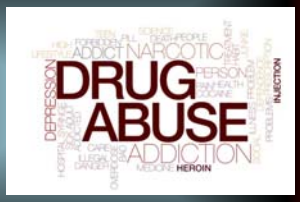

How to test and use
http://www.microdotcs.com/resources.html
FAST. ACCURATE. EASY TO USE.
microdot Xtra
Blood Glucose Monitoring System
OPERATIONS & QUALITY ASSURANCE PROCEDURE MANUAL
USE ONLY WITH:


Northwest Community EMS System
Glucometer Daily Check


The Fatal 5:
Rules of Engagement with Use and Abuse
Susan Wood, RN, Paramedic
NWC EMSS CE
July 2018

Today's goal…

Explore use and misuse of drugs and their addictive power

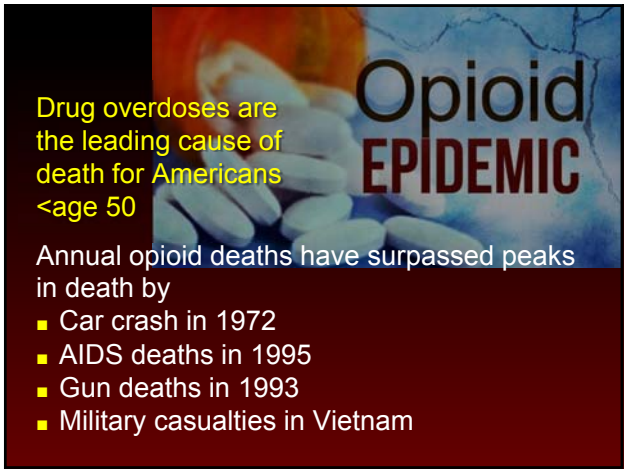


Physiologic changes occur as a result of drug use, but there are other reasons that people feel out of control

By the numbers – HOW big is this problem?

"With one American dying of a drug overdose every 9 minutes, there can be no doubt that we are facing the deadliest drug epidemic in our history,"

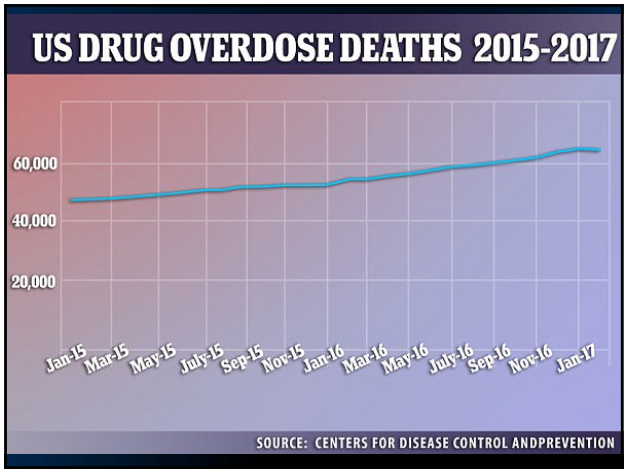
Attn Gen Jeff Sessions



Drug overdoses are the leading cause of death for Americans <age 50

Annual opioid deaths have surpassed peaks in death by

- Car crash in 1972
- AIDS deaths in 1995
- Gun deaths in 1993
- Military casualties in Vietnam



CDC: Illinois ERs see 66 percent spike in opioid overdoses

The CDC encouraged hospitals to do more to combat outbreaks and prevent repeat overdoses

Mar 11, 2018

By Alexia Elejalde-Ruiz
Chicago Tribune

WASHINGTON — Illinois emergency rooms experienced a 66 percent jump in opioid overdose visits last year, according to a new report that suggests the epidemic of heroin and prescription painkiller abuse is worsening in some states.

The federal Centers for Disease Control and Prevention released state emergency room data Tuesday in a report that encourages hospitals to do more to combat outbreaks and prevent repeat overdoses.

The report found opioid-related emergency room visits rose an average of 35 percent across 16 states between July 2016 and September 2017. The increase was worst in the Midwest and in large metropolitan areas.

www.medscape.com

Within Opioid Abuse Epidemic, Infectious Disease Epidemic Emerges

By Will Boggs MD

July 16, 2018

NEW YORK (Reuters Health) - There is a new epidemic of hepatitis C, HIV, and other infections within the opioid abuse epidemic, according to participants in a National Academies of Sciences, Engineering, and Medicine workshop.

There is an urgent need for actions to address this combined threat, they write in an article online July 13 in Annals of Internal Medicine.

"Opioid use disorder is like any other medical disorder, and through simple screening and starting medication treatment with the FDA-approved medications to prevent relapse to opioid use and decrease opioid craving, people can reduce acquiring infections," Dr. Sandra A. Springer from Yale School of Medicine, New Haven, Connecticut told Reuters Health by email. "For those who do have associated infections at the time of screening, then starting treatment for their opioid use disorder can help them recover from their infectious diseases as well. Two for the price of one."

Dr. Springer and colleagues from the National Academies of Sciences, Engineering, and Medicine convened a workshop, "Integrating Infectious Disease Considerations with Response to the Opioid Epidemic," to address these intersecting epidemics.

The participants agreed on five action steps:

-Action Step 1: all individuals who are evaluated in medical settings for overdose, heart valve infections, blood poisoning, HIV, hepatitis C, and other serious infections should be screened for opioid use disorder using a quick test like the Rapid Opioid Dependence Screen.

-Action Step 2: people found to have opioid use disorder should immediately receive prescriptions for an FDA-approved medication that treats the disorder and/or withdrawal symptoms and prevents relapse.

-Action Step 3: hospitals should develop processes that ensure treatment for opioid use disorder is started and that patients get linked to community-based treatment after discharge.

HHS.gov

U.S. Department of Health & Human Services

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- Public Health and Safety (20)

Integrating Infectious Disease Prevention and Treatment into the Opioid Response

July 17, 2018 | By: Corinna Dan, R.N., M.P.H., Viral Hepatitis Policy Advisor, Office of HIV/AIDS and Infectious Disease Policy, U.S. Department of Health and Human Services and Adm. Brett P. Giroir, M.D., Assistant Secretary for Health

Summary: Some communities that have been hardest hit by the opioid crisis have also seen associated increases in hepatitis B and C and other infections.

The opioid crisis in the United States is devastating the lives of millions of Americans. Perhaps overshadowed by the alarming rise in overdoses and deaths is the accompanying numbers of injection-related infectious diseases. Opioid overdose deaths increased fivefold from 1999 to 2016, and new hepatitis C infections more than tripled from 2010 to 2016.

Some communities that have been hardest hit by the opioid crisis have also seen associated increases in hepatitis B and C and other infections, such as endocarditis, septic arthritis and abscesses, driven by increases in the numbers of people who inject opioids.

Earlier this year, the HHS Office of the Assistant Secretary for Health's Office of HIV/AIDS and Infectious Disease Policy and the Office on Women's Health sponsored a workshop at the National Academies of Sciences, Engineering and Medicine to explore the infectious disease consequences of

Chicago Department of Public Health

Health Alert

HEALTHY CHICAGO

City of Chicago Rahm Emanuel, Mayor | www.chicagohan.org | Chicago Department of Public Health Julie Morita, MD, Commissioner

COCAINE CONTAINING FENTANYL IN CHICAGO
July 17, 2018

Key Messages and Action Steps

- Cocaine cut with fentanyl has been found in Chicago
- Fentanyl is an extremely potent opioid that is particularly dangerous because very small volumes of the drug can be fatal
- Individuals with low or no tolerance to opioids who are exposed to fentanyl are at especially high risk for fatal overdose
- Encourage all patients who report *any illicit drug use* to to **obtain and carry naloxone** (through a prescription, through standing order in a local pharmacy, or for free through local organizations, like Chicago Recovery Alliance or UIC Community Outreach Intervention Projects- see below for locations and hours of operation)

REPORTING/CONTACT INFORMATION: Gabrielle Nichols, gabrielle.nichols@cityofchicago.org

The Chicago Department of Public Health has received confirmation from the High Intensity Drug Trafficking Area (HIDTA) that they have confirmed seizure of cocaine cut with fentanyl. Similarly, we have also received confirmation from the Cook County Medical Examiner's Office that there have been overdose death cases that have been positive for cocaine and fentanyl (no heroin). This is in addition to the hundreds of overdose deaths already seen annually in Chicago with toxicology positive for both heroin and fentanyl.

Clinical Relevance
Fentanyl is an extremely potent opioid that is particularly dangerous when used illicitly because very small volumes of the drug can be fatal. Individuals with low or no tolerance to opioids who are unknowingly exposed to fentanyl are at particularly high risk for fatal overdose. Such overdoses due to what opioid naïve individuals thought was cocaine have been reported in San Francisco recently. Fentanyl can be reversed with naloxone, though additional doses may be

Secure | https://www.medscape.com/viewarticle/899317?nlid=123823_5448&src=WNL_mdplsfeat_180717_mscpedit_emed&ua

Surgeon Gets Life in Prison for Role in Opioid Death

Marcia Frellick
July 13, 2018

77 Read Comments | Add to Email Alerts

Johnny Clyde Benjamin, MD, an orthopedic surgeon in Florida, was sentenced to life in prison on July 6 in a federal district court in Fort Lauderdale for his role in the overdose death of a 34-year-old woman, according to the US Department of Justice.

Dr Johnny Clyde Benjamin, Broward County

In April, a jury found that Benjamin, 52, used his Vero Beach office to make counterfeit oxycodone. The pills, which were laced with furanyl fentanyl, were linked in an investigation to the overdose death of Margaret "Maggie" Crowley, of Wellington, Florida, in Palm Beach County, according to the news site *TC Palm*. Fentanyl is much stronger than heroin or oxycodone.

Binge Drinking Negatively Affects Blood Pressure, Lipid Profiles

https://www.medscape.com/viewarticle/898918?nlid=123688_3802&src=WNL_mdplsnews_180706_mscpedit_card&uac=177ADY&spon=2&impID=1677767&faf=1

Elevated blood pressure and total cholesterol in men aged 18 to 45 may be a sign of repeated binge drinking, according to results of a new study published in the *Journal of the American Heart Association*.

Binge-drinking men had higher systolic blood pressure and total cholesterol levels than did their non–binge-drinking counterparts and women, irrespective of whether the women were binge drinkers or not.

"Binge drinking is one of the biggest health dangers facing young adults, and the consequences may extend beyond a bad hangover," lead study author Mariann Piano, PhD, RN, from Vanderbilt University School of Nursing, Nashville, Tennessee, said when interviewed.

In addition to being a leading cause of accidents and accidental death in young people, binge drinking is a known risk factor for developing prehypertension, hypertension, myocardial infarction, and stroke in middle-age and older adults. However, few studies have been conducted in younger adults even though they binge drink more than any other age group, so it isn't known whether binge drinking will have similar effects in a younger cohort.

Any Good News?

Drug overdose deaths fell in 14 states in 2017 according to preliminary data released by CDC 3-18

Tide of opioid overdoses is starting to turn mostly in western US

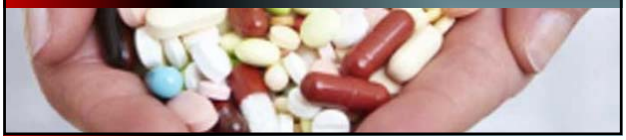
Midwestern and eastern states hit hardest by opioid OD deaths continue to see rises

Part of the problem may be burning itself out in a tragic way as many of the people abusing opioids have already died

https://www.ems1.com/naloxone/articles/376383048-CDC-Overdose-deaths-decline-in-14-states/

5 Things to Know

1. There's no such thing as just another OD…
2. It can happen to the best of us
3. Safety, safety, safety
4. Opportunities for education
5. You will never find what is NOT assessed!



1st thing: Forget stereotypes and Toxidromes are mixed…

Emergency Medicine News

MARCH 2017
VOL. 39, NO. 3
LIPPINCOTT WILLIAMS & WILKINS

THE MOST TRUSTED NEWS SOURCE IN EMERGENCY MEDICINE www.EM-News.com

Summa Shaken by Change in ED Group

No Such Thing Anymore as a 'Heroin' Overdose Patient

BY LEON GUSSOW, MD

Who is impacted?

Opioid addiction does not discriminate

1. There is no *typical* opioid addict anymore
2. Users become addicted in many ways
3. Addiction is not restricted to a certain age, social group, or type of person

What's being misused?

What are the leading causes of OD-related deaths?

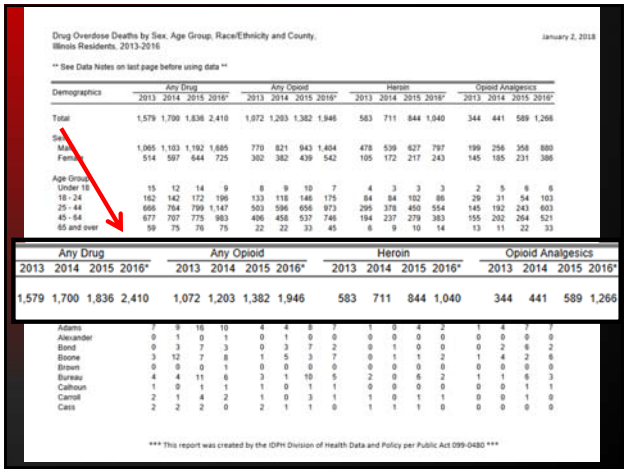
2011-12: Oxycodone #1; prescriptions curbed →

2012-14: Heroin #1; tripled (3,020 to 10,863 deaths)

A National Epidemic:
Prescription Drug Abuse

2016: Synthetic opioids (fentanyl) followed by prescription opioids and heroin

Jones CM, Einstein EB, Compton WM. Changes in synthetic opioid involvement in drug overdose deaths in the United States, 2010-2016. JAMA. 2018;319:1819-1821. https://jamanetwork.com/journals/jama/article-abstract/2679931?redirect=true.



Drug Overdose Deaths by Sex, Age Group, Race/Ethnicity and County, Illinois Residents, 2013-2016

January 2, 2018

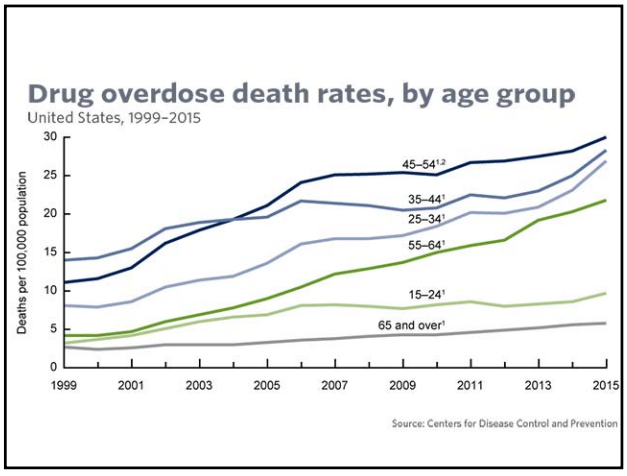
** See Data Notes on last page before using data **

Demographics	Any Drug 2013	2014	2015	2016*	Any Opioid 2013	2014	2015	2016*	Heroin 2013	2014	2015	2016*	Opioid Analgesics 2013	2014	2015	2016*
Total	1,579	1,700	1,836	2,410	1,072	1,203	1,382	1,946	583	711	844	1,040	344	441	589	1,266
Sex																
Male	1,065	1,103	1,192	1,685	770	821	943	1,404	478	539	627	797	199	256	358	880
Female	514	597	644	725	302	382	439	542	105	172	217	243	145	185	231	386
Age Group																
Under 18	15	12	14	9	8	9	10	7	4	3	3	3	2	5	6	6
18 - 24	162	142	172	196	133	118	146	175	84	84	102	86	29	31	54	103
25 - 44	666	764	799	1,147	503	596	656	973	295	378	450	554	145	192	243	603
45 - 64	677	707	775	983	406	458	537	746	194	237	279	383	155	202	264	521
65 and over	59	75	76	75	22	22	33	45	6	9	10	14	13	11	22	33

Any Drug 2013	2014	2015	2016*	Any Opioid 2013	2014	2015	2016*	Heroin 2013	2014	2015	2016*	Opioid Analgesics 2013	2014	2015	2016*
1,579	1,700	1,836	2,410	1,072	1,203	1,382	1,946	583	711	844	1,040	344	441	589	1,266

Adams	7	8	16	10	4	4	8	7	1	0	4	2	1	4	7	7
Alexander	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0
Bond	0	3	7	3	0	3	7	2	0	1	0	0	0	2	6	2
Boone	3	12	7	8	1	5	3	7	0	1	1	2	1	4	2	6
Brown	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Bureau	4	4	11	6	3	1	10	5	2	0	6	2	1	1	6	3
Calhoun	1	0	1	1	1	0	1	1	0	0	0	0	0	0	1	1
Carroll	2	1	4	2	1	0	3	1	1	0	1	1	0	0	1	0
Cass	2	2	2	0	2	1	1	0	1	1	1	0	0	0	0	0

*** This report was created by the IDPH Division of Health Data and Policy per Public Act 099-0480 ***



CDC reports opioids responsible for 1 in 5 young adult deaths

2016: Opioids responsible for 20% of deaths among young adults

>8,400 opioid-related deaths in those 25 to 34

Nearly 3,000 deaths in those 15 to 24

CDC WONDER database

Predictors of drug use

Exposure to each adverse experience = a 27% ↑ in drug use

ADVERSE CHILDHOOD EXPERIENCES
Physical abuse
Sexual abuse
Emotional abuse
Physical neglect
Emotional neglect
Intimate partner violence
Mother treated violently
Substance misuse in household
Household mental illness
Parental separation or divorce
Incarcerated household member

"I would never do heroin"

Myth:

People who do drugs such as heroin are "way out there."

Truth:

While opioid use frequently starts with prescription or pain meds, heroin is much cheaper to maintain a daily habit

Patterns of substance misuse

Heroin use is part of a larger substance abuse problem.

Nearly all people who used heroin also used at least 1 other drug.

Most used at least **3** other drugs.

Heroin is a highly addictive opioid drug with a high risk of overdose and **death** for users.

People who are addicted to...

ALCOHOL	MARIJUANA	COCAINE	Rx OPIOID PAINKILLERS
are 2x	are 3x	are 15x	are 40x

...more likely to be addicted to heroin.

SOURCE: National Survey on Drug Use and Health (NSDUH), 2011-2013.

Opiates

Naturally occurring: Derived from opium poppy plant - codeine, morphine and heroin

Semi-synthetic: Modified through chemical reactions in a lab into other active drugs. Ex: hydrocodone (e.g. Norco, Vicodin), hydromorphone (e.g. Dilaudid) and oxycodone (e.g. Oxycontin, Percocet)

Synthetic: Created in a lab -fentanyl, carfentanil, methadone, "U4" and "U-47700"

COMMON PRESCRIPTION OPIOIDS

CHEMICAL NAME	SELECT BRAND NAMES
Oxycodone	OxyContin, Percodan, Percocet
Propoxyphene	Darvon, Darvocet
Hydrocodone	Vicodin, Norco, Lortab, Lorcet
Hydromorphone	Dilaudid, Exalgo, Opana ER
Morphine	MS Contin, Kadian, Roxanol, Morphine Sulfate ER
Buprenorphine	Subutrex, Suboxone
Fentanyl	Duragesic, Sublimaze, Actiq, Fentora
Codeine	
Methadone	Dolophine, Methadose Diskets

Fentanyl analogues present serious risk

10,000 X more potent than morphine

Forms: powder, blotter paper, tablets, patch, spray Some can be absorbed through skin or inhaled

Takes much larger doses of naloxone

How do they get hooked?

Myth: Inability to quit is nothing more than lack of willpower

Truth: Drug exposure alters brain chemistry creating powerful cravings and a compulsion to use. These changes make it extremely difficult to stop by will alone.

https://www.youtube.com/watch?v=NDVV_M__CSI

https://www.emsworld.com/addiction 1:36 – 2:55

Essential understanding:

Addiction is a brain disease

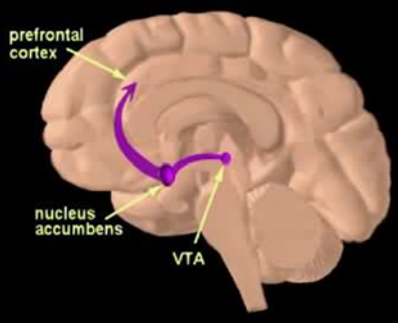
Prolonged use changes the brain in fundamental and long-lasting ways

The Brain And Reward

- The brain is pre-wired with a "pleasure center" to give feelings of reward.
- Behaviors like eating and sex activate this area since they are important for survival.
- Drugs hijack this area to cause extreme feelings of reward.
- This causes cravings and addiction.

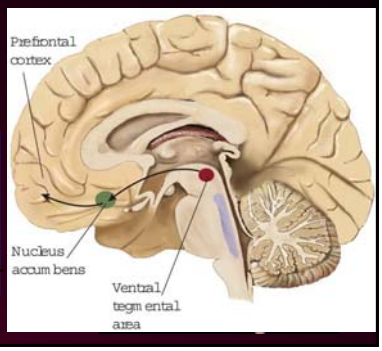
fppt.com

Meet Nucleus Accumbens – Your brain's pleasure center



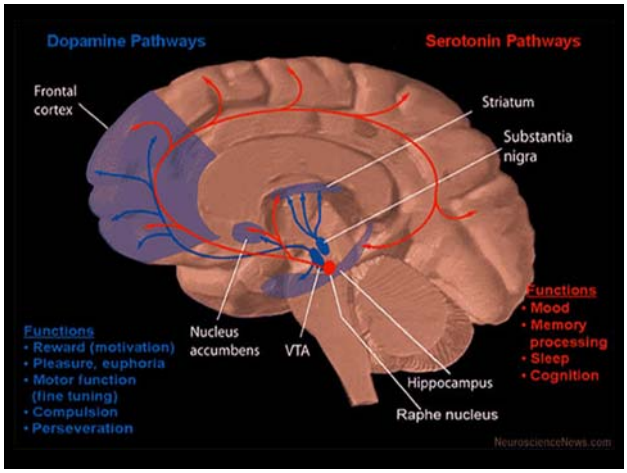
VTA-NA Common Reward pathway

Nucleus Accumbens – (NA)
A small region in the forebrain with ancient evolutionary origins, which helps regulate survival drives like food and thirst. Affected by drugs including cocaine, amphetamine, cannabinoids (e.g cannabis) and opioids (e.g. heroin).



Neurotransmitters

- Acetylcholine: memory
- Dopamine: reward/excitement/euphoria
- Norepinephrine: metabolic rate
- Serotonin: mood, sleep regulation; feel "normal"
- GABA: lowers anxiety
- Endorphins: pain relief, reward, cravings



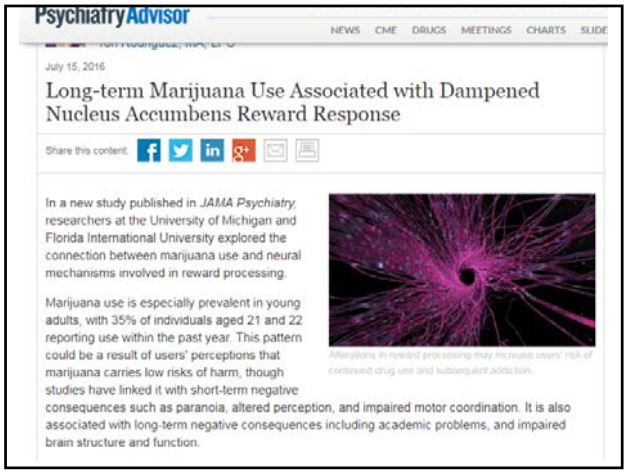
How It Works…

Stimulated by thinking of/doing pleasurable activities

Prompts dopamine release

Generates mild feeling of euphoria

Once fulfilled, dopamine release decreases



PsychiatryAdvisor

NEWS CME DRUGS MEETINGS CHARTS SLIDE

July 15, 2016

Long-term Marijuana Use Associated with Dampened Nucleus Accumbens Reward Response

Share this content:

In a new study published in *JAMA Psychiatry*, researchers at the University of Michigan and Florida International University explored the connection between marijuana use and neural mechanisms involved in reward processing.

Marijuana use is especially prevalent in young adults, with 35% of individuals aged 21 and 22 reporting use within the past year. This pattern could be a result of users' perceptions that marijuana carries low risks of harm, though studies have linked it with short-term negative consequences such as paranoia, altered perception, and impaired motor coordination. It is also associated with long-term negative consequences including academic problems, and impaired brain structure and function.

The Result - Compulsion

The "reward" is so significant that a compulsion develops

Overrides essential behaviors (former priorities) – eating, bathing, morality

And Addiction Begins

+

CRAVE

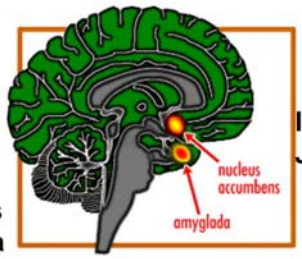
Dopamine storm craved more frequently

Body adapts to new levels of dopamine by increasing tolerance to the drug

Higher quantities of opiate needed to achieve effect

Craving

Trigger → Memory → Stimulation of Nucleus Accumbens & Amygdala → Focus on Drug → Anxiety Increases



Relapse ← Impaired Judgement ←

Coming down from the high

Because dopamine is the neurotransmitter in ***other anatomic systems***, they become dependent on higher levels as well

When levels return to normal, those body systems produce debilitating withdrawal symptoms

7/22/2018 Withdrawal Symptoms Following SNRI Discontinuation Investigated - Print Article - MPR

MPR

Diana Ernst, RPh
July 19, 2018

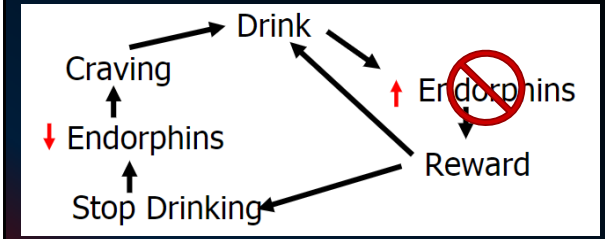
Withdrawal Symptoms Following SNRI Discontinuation Investigated

Typically, withdrawal symptoms occurred within a few days of discontinuing the drug and lasted a few weeks

Serotonin-noradrenaline reuptake inhibitors (SNRIs) should be added to the list of drugs that could potentially cause withdrawal symptoms following discontinuation, according to a new systematic review published in the journal *Psychotherapy and Psychosomatics*.

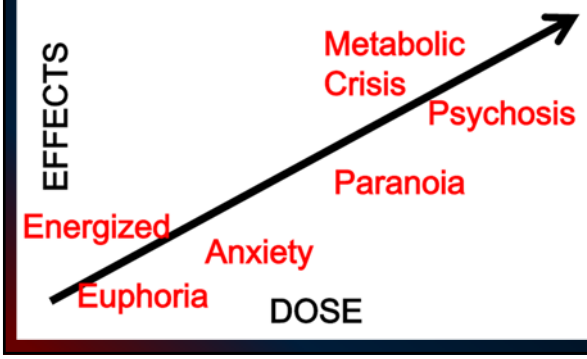
To better understand the frequency and features of SNRI discontinuation-emergent adverse effects, researchers searched various databases for studies that combined the terms "discontinuation," "withdrawal," or "rebound" with keywords such as duloxetine, venlafaxine, desvenlafaxine, milnacipran, levomilnacipran, SNRI, second generation antidepressant, or serotonin norepinephrine reuptake inhibitor; they identified 61 reports that met the inclusion criteria.

Endorphins after alcohol use



Block endorphins with naltrexone – break reward cycle

Dose response to cocaine



Your brain on fentanyl

https://www.youtube.com/watch?v=C0tW8FWBm1g

Friday, July 06, 2018 9:00 AM

3 Why should EMS be concerned?

Good Morning Managers and Resource Hospital Leadership,

This is to make everyone aware that we have **had two separate incidents this morning with Carfentanil/ Fentanyl resulting in EMS providers being exposed and having to be treated**. Please remind your discuss response and PPE with crews and services. As one of the Hazmat duty officers this morning I have taken multiple calls on proper PPE and decon. Our providers need to be trained in this prior to responding on the call. I have attached the recommendations that were sent out last year as a reminder. Let's keep our providers safe.

All EMS personnel are doing well at this time.

Safety
Safety
Safety

Brad Perry, EMT-P
Manager: Emergency Services
HSHS St. Elizabeth's Hospital
One St. Elizabeth's Hospital Blvd.
O'Fallon, IL 62269

THE INTERAGENCY BOARD August 2017

Recommendations on Selection and Use of Personal Protective Equipment and Decontamination Products for First Responders Against Exposure Hazards to Synthetic Opioids, Including Fentanyl and Fentanyl Analogues

I. BACKGROUND

Increased illicit use of opioids, including synthetic opioids such as fentanyl and its analogue carfentanil, is a source of increased risk to responders. Most routine encounters between patients or detainees and EMS or law enforcement do not present a significant threat of toxic exposure. While there are anecdotal reports of public safety personnel being exposed to opioids during operations, they are largely unconfirmed. To proactively address the potential risks, this document establishes guidance for personal protective equipment selection and use, decontamination, detection, and medical countermeasures for first responders who may be exposed to opioids in the course of their occupational activities. Throughout the remainder of this document, the term synthetic opioids will be used to include fentanyl, fentanyl analogues, morphine analogues, the U-series

The InterAgency Board for Equipment Standardization and Interoperability (IAB) is a voluntary collaborative panel of emergency preparedness and response practitioners from a wide array of professional disciplines that represents all levels of government and the public safety sector. Based on direct field experience, IAB members advocate for and assist in the development and implementation of performance criteria, standards, and test protocols, and technical, operating, and training

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Synthetic opioids (sufentanil, lofentanil, carfentanil, U-47700, and others) are highly toxic organic solids (UN 2811) Synthetic opioids may be found as powders, liquids, nasal sprays, and pills. The particulate size of synthetic opioid powders typically ranges from 0.2 to 2.0 mm, and the powders are easily aerosolized. The powders are both water and lipid soluble and present primarily a respiratory hazard. A secondary dermal hazard exists if there is direct skin contact with large bulk amounts of concentrated threat materials.

Powder-like substances can become airborne and present a respiratory hazard, particularly during activities such as "burping" containers of potential narcotics or "brushing" powdered residues from surfaces. Therefore, during encounters involving these types of materials, actions must be taken to avoid such aerosolization. Covering, wetting or leaving containers unopened are essential safety precautions. Use of proper personal protective equipment and standard safe work practices to prevent inhalation of powders and to minimize direct skin contact with residues should be instituted as soon as the potential presence of such materials is suspected.

Proceedings fron
2017 Fentany
Working Mee
May 1, 2018
Homeland Security

RECOMMENDATIONS

Recommendation 1. The FSLTT first responder community should establish a community of practice with the common goal of protecting the nation's first responders. This group would develop and maintain consistent and informed policy, guidance, messaging and procedures, adapted to fit unique missions of frontline first responders. In the future, such a community of practice can also serve as a unified information resource to address other legacy and emerging issues affecting the nation's responders.

Recommendation 2. First responders can and should incorporate into their operations an initial visual assessment of the response environment for the presence of free powder to determine necessary protective measures. Where suspicious free powder is present, first responders need to make every effort not to disturb the powder to avoid aerosolizing potential fentanyl and creating a risk of inhalation.

Recommendation 3. The FSLTT community should leverage all communication avenues available to reassure first responders that incidental dermal contact alone with fentanyl is unlikely to result in intoxication during routine first responder operations. The use of gloves as standard operating procedure, such as those used for protection against blood borne pathogens, would go a long way towards ensuring basic exposure protection.

Recommendation 4. The FSLTT first responder community of practice should educate first responders that inhalation and mucous membranes remain the routes of exposure of most concern for fentanyl intoxication. First responders should avoid disturbing suspicious free powder, which could create an inhalation hazard and should avoid direct skin contact that could result in transfer from skin surface to mucus membranes (eyes, nose, and mouth). The FSLTT first responder community should incorporate these considerations into policy, guidance, messaging, and procedure development.

Recommendation 5. Occupational exposure experts across the FSLTT should collaborate to develop strategies that include comprehensive data collection and sharing, and research in the area of first responder fentanyl exposure for both humans and canines.

Recommendation 6. The FSLTT first responder community of practice should develop a set of standardized Job Hazard Analyses (JHAs), representing the most common first responder work tasks. JHAs should be a key element for any first responder safety and health program and incorporate both human and working canine first responders. Any workplace controls, including Personal Protective Equipment (PPE), are based on, and identified in, the JHA.

Recommendation 7. First responders should remove suspected fentanyl from skin surfaces with soap and water and ***must avoid*** entirely the use of alcohol-based hand sanitizers, alcohol wipes, liquid bleach and bleach wipes for fentanyl-contaminated skin cleansing since alcohol and bleach enhance fentanyl skin absorption.

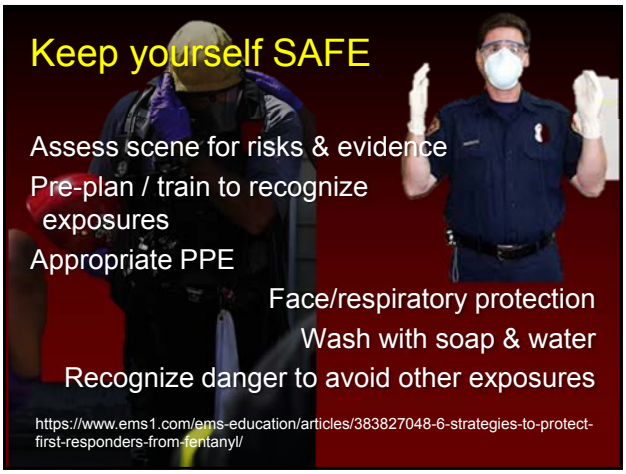
Recommendation 8. First responder departments should equip and train their frontline personnel in the use of Personal Protective Equipment (PPE) that protects them from ingestion, inhalation or other contact with fentanyl, with the appropriate level of PPE based on a JHA.

Recommendation 9. First responder departments should educate frontline personnel on signature fentanyl intoxication symptoms: slowed or no breathing, drowsiness or unresponsiveness, and constricted or pinpoint pupils.

Use great care when handling unknown substances (opening containers or brushing away powders)

http://www.jems.com/articles/2016/12/carfentanil-exposure-treatment-precautionary-measures-for-ems-providers.html

Keep yourself SAFE



- Assess scene for risks & evidence
- Pre-plan / train to recognize exposures
- Appropriate PPE
  - Face/respiratory protection
  - Wash with soap & water
  - Recognize danger to avoid other exposures

https://www.ems1.com/ems-education/articles/383827048-6-strategies-to-protect-first-responders-from-fentanyl/

EMERGENCY MEDICINE NEWS

Dangerous New Drugs Hit the Streets — and the ED

75-90 percent tetrahydrocannabinol (THC). Users say it will blow your mind.Home chemists say it also may blow you up.

Dab is manufactured by forcing a hydrocarbon solvent — usually butane — through a tightly packed mass of marijuana leaves, stems, and buds.The solvent extracts THC from the plant material, and the remaining resinous or waxy material after it is cooked can be smoked, vaporized, or ingested. It will, according to *Rolling Stone* magazine, make the user feel "cosmically baked." (http://roi.st/1ePMdsc.)

Of course, it doesn't take a genius to see a major problem here. Butane is extremely volatile and flammable. The vapor is heavier than air and tends to accumulate, especially in enclosed spaces. Dab is legal in Colorado for now, where it is manufactured under industrial conditions and sold in marijuana shops. But the seemingly straightforward extraction process has attracted many an amateur with a vision of "breaking dab" and becoming the Walter White of weed. A good number of these cooks have ended up in burn units after explosions destroyed their homes. The *Los Angeles Times*

Dab by any other name is, in this case, wax. A waxy material that can be smoked, vaporized, or ingested is left behind after butane extracts THC from marijuana.

methylone, drugs that increase catecholamine release. The observable stimulant effects of all these drugs are similar, however, because the final result of both mechanisms is increased catecholamine levels in synapses.

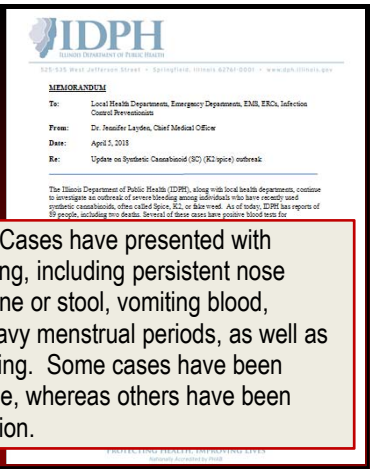
As if dab and gravel weren't enough for ERs, there's also the mystery of the strange cocaine adulterant.I missed on that a few years ago, asking: Who put the veterinary worm medicine in cocaine? (*EMN* 2010;32[4]:28; http://bit.ly/1jKGZcx.) The whodunitbegan when epidemiologists noticed a number of cases of agranulocytosis in cocaine users even though cocaine had not been previously associated with loss of white blood cells. Further investigation revealed that samples of cocaine used by these patients all contained levamisole, a dewormer used to treat large animals.

In fact, more than half of the cocaine samples intercepted coming into the United States contained levamisole. Why would anyone go to the trouble of obtaining this unusual adulterant and adding it to the cocaine supply, especially because it is far from benign? Exposure to levamisole has also been associated with some particularly nasty cases of necrotizing dermal vasculitis.

The mystery may have been solved. A laboratory investigation into the

#4: Opportunities for education

How can we stay informed?



IDPH

MEMORANDUM

To: Local Health Departments, Emergency Department, EMS, ICPs, Infection Control Preventionists

From: Dr. Jennifer Layden, Chief Medical Officer

Date: April 5, 2018

Re: Update on Synthetic Cannabinoid (SC) (K2 spice) outbreak

The Illinois Department of Public Health (IDPH), along with local health departments, continue to investigate an outbreak of severe bleeding among individuals who have recently used synthetic cannabinoids, often called Spice, K2, or fake weed. As of today, IDPH has reports of 59 people, including two deaths. Several of these cases have positive blood tests for

Clinical presentations: Cases have presented with various forms of bleeding, including persistent nose bleeds, blood in the urine or stool, vomiting blood, significant bruising, heavy menstrual periods, as well as with intra-cranial bleeding. Some cases have been hemodynamically stable, whereas others have been critically ill at presentation.

IDPH

MEMORANDUM

TO: Hospital Emergency Departments, EMS, Infection Control Professionals and Local Health Departments

FROM: Communicable Disease Control Section

DATE: July 6, 2018

SUBJECT: Additional Cases with Severe Bleeding Linked to Synthetic Cannabinoid (SC) Use

Summary:

1) Severe coagulopathy among synthetic cannabinoid users is an ongoing concern
2) Most of the cases in Illinois have been men and young adults
3) Ask patients who present with hematuria and other bleeding symptoms about recent SC use and check INR levels if SC use is suspected or reported.

Background: The Illinois Department of Public Health (IDPH) continues to receive reports of severe bleeding among individuals who have recently used synthetic cannabinoids (SCs). To date, more than 160 cases have been identified in Illinois, including a few deaths. Tested cases have been positive for brodifacoum, a long-acting anticoagulant used in rat poison which leads to a Vitamin K dependent coagulopathy. All cases have had highly elevated INR values. Other U.S. states have also reported cases of severe bleeding among SC users, including the surrounding states.

Recommendations:

Health care providers: Although the number of Illinois cases has declined, the link between SC use and severe bleeding continues to be a serious health threat. If a patient presents with unexplained bleeding, particularly hematuria, they should be asked about recent SC use. If SC use is suspected or reported, check an INR level. If the INR level is elevated, please contact the Illinois Poison Center (IPC) at 1-800-222-1222 to report the case and for clinical guidance. Information on accessing free outpatient oral Vitamin K to treat patients is available on the IDPH SC webpage.

Local Health Departments (LHDs): IDPH will notify LHDs of new cases reported in their jurisdiction. Further LHD investigation can be pursued as resources allow.

Summary of Illinois cases:

Demographics
- Male (94%)
- Median age: 32 years
  - Age range: 18-65 years

Common Symptoms
- Blood in urine (hematuria) (81%)
- Side/lower back pain
- Abdominal pain
- Nose bleed
- Vomiting blood
- Bruising

IA symptomatic with cases, with most cases in:
- Tazewell
- Chicago
- Peoria
- Winnebago
- Cook

FYI: Government Action

- 30+ bills addressing opiod crisis
- HHS to provide ***coordinated care*** for pts w/ nonfatal OD at discharge
- HHS conducting program to test ***pain management alternatives***
- HHS conduct study: Barriers a***ccessing abuse-deterrent meds*** for Medicare pts

American Hospital Association

AHA TODAY

Your source of news and insight.

June 23, 2018 | www.aha.org/news

House Passes Package to Combat Opioid Crisis

The House of Representatives yesterday voted 396-14 to approve bipartisan legislation (H.R. 6) that will serve as a Senate vehicle for many of the House-passed bills to combat the opioid crisis and includes a number of AHA-supported provisions. Earlier this week, the House separately approved two key AHA-supported bills that would allow states to receive federal matching funds for up to 30 days per year for services provided to adult Medicaid beneficiaries for opioid and cocaine use disorder in an Institution for Mental Disease, and expand treatment coverage to individuals suffering from cocaine use disorder; and align 42 CFR Part 2 regulations with the Health Insurance Portability and Accountability Act to allow health care providers to responsibly share substance use disorder treatment information. The White House has expressed support for all three bills. The Senate is expected to consider opioid legislation as early as mid-July. **For more, see yesterday's column from AHA President and CEO Rick Pollack on "Making Progress Against the Opioid Epidemic."**

This is an official CDC HEALTH UPDATE

Distributed via the CDC Health Alert Network
July 11, 2018, 1300 ET (1:00 PM ET)
CDC HAN-00413

Rising Numbers of Deaths Involving Fentanyl and Fentanyl Analogs, Including Carfentanil, and Increased Usage and Mixing with Non-opioids

Summary

This Health Alert Network (HAN) Update is to alert public health departments, health care professionals, first responders, and medical examiners and coroners to important new developments in the evolving opioid overdose epidemic, which increasingly involves illicitly manufactured fentanyl and an array of potent fentanyl analogs (i.e., compounds that are chemically related to fentanyl). It is the second update to the original health advisory, HAN 384, issued October 26, 2015, which alerted the public to the increase in unintentional overdose fatalities involving fentanyl in multiple states, primarily driven by illicitly manufactured fentanyl. The first update to this health advisory was released on August 25, 2016 (HAN 395), describing the sharp increase in the availability of counterfeit pills containing varying amounts of fentanyl and fentanyl analogs, the continued increase of overdose deaths involving fentanyl across a growing number of states, and the widening array of fentanyl analogs being mixed with heroin or sold as heroin.

The current update includes information on: (1) the continued increase in the supply of fentanyl and fentanyl analogs detected by law enforcement, (2) the sharp rise in overdose deaths involving fentanyl and fentanyl analogs in a growing number of states, in particular the growing number of deaths involving the ultra-high potency fentanyl analog known as carfentanil; (3) the expanding number of poly-drug combinations implicated in opioid overdose deaths, which include non-opioids, such as cocaine; (4) the updated comprehensive guidance available to law enforcement and other emergency responders to prevent occupational exposure to fentanyl and fentanyl analogs; and (5) updated recommendations for public health professionals and health care providers regarding prevention and response efforts.

Background

The supply, distribution, and potency of illicitly manufactured fentanyl and fentanyl analogs in the U.S. drug market is continuously evolving. The Drug Enforcement Administration's (DEA) National Forensic Laboratory Information System (NFLIS), which systematically collects drug identification results from drug cases submitted for analysis to forensic laboratories (referred to as drug submissions), estimated that drug submissions testing positive for fentanyl more than doubled from 2015 to 2016, rising from 14,440 to 34,119. This increase continued into 2017, with an estimated 25,460 reports in the first six months of 2017 alone [1,2,3]. In 2016, states reporting the highest number of fentanyl drug submissions remained concentrated in the East and Midwest, with all being

A multi-disciplinary integrated approach is key with these patients

Future: Community Paramedic Programs

Focus: Recovery (vs resuscitation)
Approach: Brain disorder – not behavioral, criminal
Partner w/ rehab, detox, treatment ctrs

MIH CPs:
- Provide naloxone
- Partner w/ ***post-OD recovery care*** teams
- ***Visit*** pt ***after discharge*** to enroll in Tx

Post OD Response teams:
Home admin of buprenorphine daily post DC

EMS1.com

Responding to the Heroin Epidemic

PREVENT People From Starting Heroin
Reduce prescription opioid painkiller abuse.
Improve opioid painkiller prescribing practices and identify high-risk individuals early.

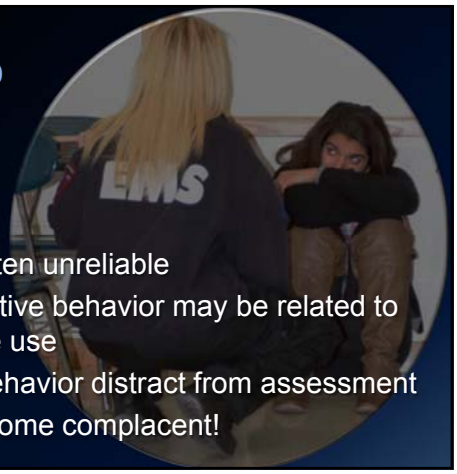
REDUCE Heroin Addiction
Ensure access to Medication-Assisted Treatment (MAT).
Treat people addicted to heroin or prescription opioid painkillers with MAT which combines the use of medications (methadone, buprenorphine, or naltrexone) with counseling and behavioral therapies.

REVERSE Heroin Overdose
Expand the use of naloxone.
Use naloxone, a life-saving drug that can reverse the effects of an opioid overdose when administered in time.

SOURCE: CDC Vitalsigns, July 2015

You will never find what is NOT assessed! #5

Size up



Patients often unreliable
Uncooperative behavior may be related to substance use
Don't let behavior distract from assessment
Do not become complacent!

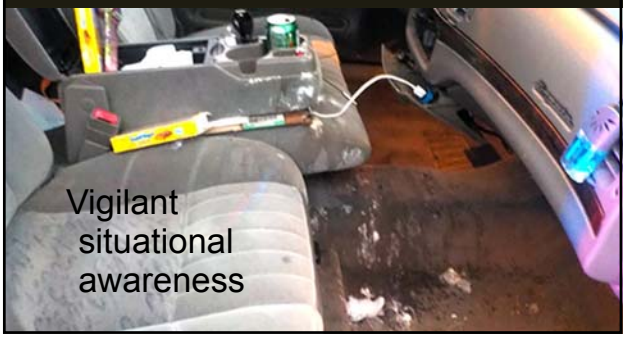
Size up

Look for signs of drug use / drug paraphernalia

Do not put your hand blindly into pockets - may contain needles

Safety first!

Accidental fentanyl OD and exposure

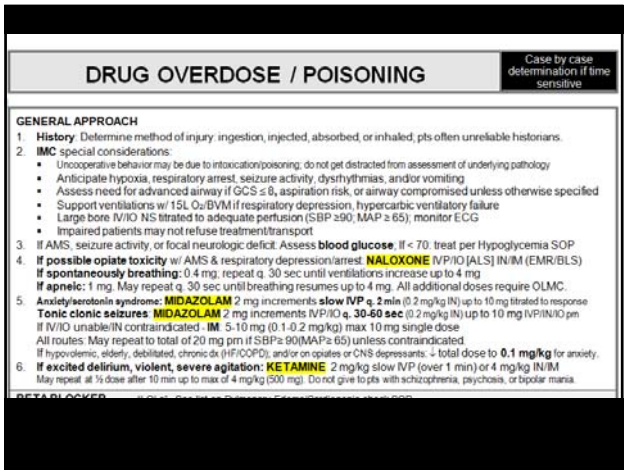


Vigilant situational awareness

Don't take insults and verbal abuse personally

Rule out other causes

Head trauma / stroke
Metabolic/ endocrine/ hypoxia
Hemorrhage / shock
Infection
Electrolyte imbalance
Hypothermia



DRUG OVERDOSE / POISONING — Case by case determination if time sensitive

GENERAL APPROACH

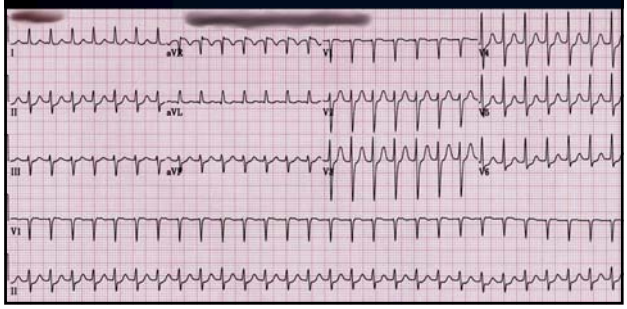
1. **History**: Determine method of injury: ingestion, injected, absorbed, or inhaled; pts often unreliable historians.
2. **IMC** special considerations:
   - Uncooperative behavior may be due to intoxication/poisoning; do not get distracted from assessment of underlying pathology
   - Anticipate hypoxia, respiratory arrest, seizure activity, dysrhythmias, and/or vomiting
   - Assess need for advanced airway if GCS ≤ 8, aspiration risk, or airway compromised unless otherwise specified
   - Support ventilations w/ 15L O_2/BVM if respiratory depression, hypercarbic ventilatory failure
   - Large bore IV/IO. NS titrated to adequate perfusion (SBP ≥90; MAP ≥ 65); monitor ECG
   - Impaired patients may not refuse treatment/transport
3. If AMS, seizure activity, or focal neurologic deficit: Assess **blood glucose**. If < 70: treat per Hypoglycemia SOP
4. **If possible opiate toxicity** w/ AMS & respiratory depression/arrest: **NALOXONE** IVP/IO [ALS] IN/IM (EMR/BLS)
   If spontaneously breathing: 0.4 mg; repeat q. 30 sec until ventilations increase up to 4 mg
   If apneic: 1 mg. May repeat q. 30 sec until breathing resumes up to 4 mg. All additional doses require OLMC.
5. **Anxiety/serotonin syndrome: MIDAZOLAM** 2 mg increments **slow IVP q. 2 min** (0.2 mg/kg IN) up to 10 mg titrated to response
   Tonic clonic seizures: **MIDAZOLAM** 2 mg increments IVP/IO **q. 30-60 sec** (0.2 mg/kg IN) up to 10 mg IVP/IN/IO prn
   If IV/IO unable/IN contraindicated - **IM**: 5-10 mg (0.1-0.2 mg/kg) max 10 mg single dose
   All routes: May repeat to total of 20 mg prn if SBP≥ 90(MAP≥ 65) unless contraindicated.
   If hypovolemic, elderly, debilitated, chronic dx (HF/COPD), and/or on opiates or CNS depressants: ↓ total dose to **0.1 mg/kg** for anxiety.
6. **If excited delirium, violent, severe agitation: KETAMINE** 2 mg/kg slow IVP (over 1 min) or 4 mg/kg IN/IM
   May repeat at ½ dose after 10 min up to max of 4 mg/kg (500 mg). Do not give to pts with schizophrenia, psychosis, or bipolar mania.

BETA BLOCKER

ECGs

Monitor ECG; Treat per SOP based on cause

Polypharmacy common



Naloxone

If possible opiate OD w/ AMS ***AND*** resp depression / arrest:

Breathing:

0.4 mg, q 30 sec. prn until resp increase

Apneic:

1 mg. repeated q 30 sec. prn until breathing resumes

MAX DOSE 4 mg

Considerations

Caution when reversing ODs from poly-drugs

If doing speedballs (heroin + amphetamines), reversing opiate will wake them going 100 mph due to remaining stimulant

Opiate withdrawal S&S

Seizures, Anxiety and HTN

Common w/ stimulant use / overdose

Tonic – clonic generalized seizures:

Midazolam 2 mg IVP/IO q 30-60 sec, max 10 mg

0.02 mg/kg IN; 5-10 mg IM if IV/IO unable / IN contraindicated

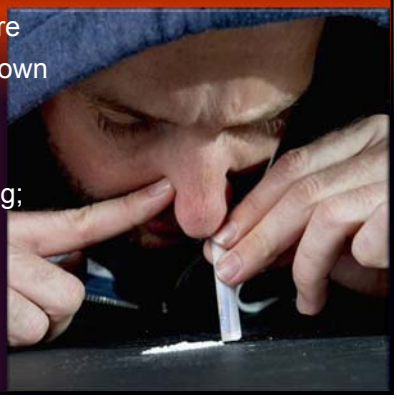
Anxiety/severe HTN/serotonin syndrome

Midazolam 2 mg ***slow*** IV/IO q 2 min max 10 mg

If excited delirium, violent, severe agitation:

KETAMINE 2 mg/kg slow IVP (over 1 min) or 4 mg/kg IN/IM

Obtain history as able



Route of exposure
Substances if known
Time if known
Amount if known
Note any vomiting; pill fragments?
Intentional vs. accidental?

History

✓date prescription filled and amount remaining; estimate amount missing
Taken with alcohol?
Antidotes self-administered, by police, bystanders?

History suggesting substance use

Sudden onset, unexplained S&S
CNS changes - altered LOC – seizures
GI complaints - particularly in child
Psych presentation - bizarre behavior
Trauma
Young person with dysrhythmias
Numerous medications
Pulmonary edema in young person

Secondary assessment as able…

Needle marks/ tracks – look for punctures within body art

Itching and sores from scratching (natural opiates cause histamine release)

Vital sign changes

Table 2. Diagnosing Toxicity From Vital Signs.

Bradycardia (PACED)
Propranolol or other beta-blockers, poppies (opiates), propafenone, phenylpropanolamine
Anticholinesterase drugs
Clonidine, calcium-channel blockers
Ethanol or other alcohols
Digoxin

Tachycardia (FAST)
Free base or other forms of cocaine
Anticholinergics, antihistamines, amphetamines
Sympathomimetics (cocaine, amphetamines), solvent abuse
Theophylline

Hypothermia (COOLS)
Carbon monoxide
Opiates
Oral hypoglycemics, insulin
Liquor
Sedative-hypnotics

Hyperthermia (NASA)
Neuroleptic malignant syndrome, nicotine
Antihistamines
Salicylates, sympathomimetics
Anticholinergics, antidepressants

Hypotension (CRASH)
Clonidine, calcium-channel blockers
Reserpine or other antihypertensive agents
Antidepressants, aminophylline
Sedative-hypnotics
Heroin or other opiates

Hypertension (CT SCAN)
Cocaine
Thyroid supplements
Sympathomimetics
Caffeine
Anticholinergics, amphetamines
Nicotine

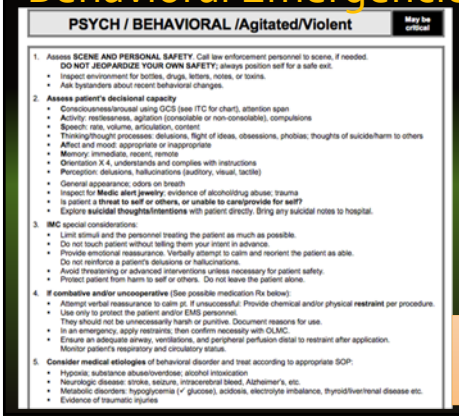
Rapid respiration (PANT)
PCP, paraquat, pneumonitis (chemical)
ASA and other salicylates
Non-cardiogenic pulmonary edema
Toxin-induced metabolic acidosis

Slow respiration (SLOW)
Sedative-hypnotics (including GHB)
Liquor
Opiates, sedative-hypnotics
Weed (marijuana)

Notable findings

Confusion to coma
Agitation to violence
Blue, green or some other discoloration
Nystagmus, ataxia
Resp depression, apnea
Tachycardia, bradycardia
Hypo & hypertension
Hot or cold
Tremors, seizures
Hallucinations
Vomiting, bleeding

Behavioral Emergencies


PSYCH / BEHAVIORAL /Agitated/Violent

May be critical

1. Assess **SCENE AND PERSONAL SAFETY**. Call law enforcement personnel to scene, if needed.
   DO NOT JEOPARDIZE YOUR OWN SAFETY; always position self for a safe exit.
   - Inspect environment for bottles, drugs, letters, notes, or toxins.
   - Ask bystanders about recent behavioral changes.
2. **Assess patient's decisional capacity**
   - Consciousness/arousal using GCS (see ITC for chart), attention span
   - Activity: restlessness, agitation (consolable or non-consolable), compulsions
   - Speech: rate, volume, articulation, content
   - Thinking/thought processes: delusions, flight of ideas, obsessions, phobias; thoughts of suicide/harm to others
   - Affect and mood: appropriate or inappropriate
   - Memory: immediate, recent, remote
   - Orientation X 4, understands and complies with instructions
   - Perception: delusions, hallucinations (auditory, visual, tactile)
   - General appearance; odors on breath
   - Inspect for **Medic alert jewelry**; evidence of alcohol/drug abuse; trauma
   - Is patient a **threat to self or others, or unable to care/provide for self?**
   - Explore **suicidal thoughts/intentions** with patient directly. Bring any suicidal notes to hospital.
3. **IMC** special considerations:
   - Limit stimuli and the personnel treating the patient as much as possible.
   - Do not touch patient without telling them your intent in advance.
   - Provide emotional reassurance. Verbally attempt to calm and reorient the patient as able.
     Do not reinforce a patient's delusions or hallucinations.
   - Avoid threatening or advanced interventions unless necessary for patient safety.
   - Protect patient from harm to self or others. Do not leave the patient alone.
4. **If combative and/or uncooperative** (See possible medication Rx below):
   - Attempt verbal reassurance to calm pt. If unsuccessful: Provide chemical and/or physical **restraint** per procedure.
   - Use only to protect the patient and/or EMS personnel.
     They should not be unnecessarily harsh or punitive. Document reasons for use.
   - In an emergency, apply restraints; then confirm necessity with OLMC.
   - Ensure an adequate airway, ventilations, and peripheral perfusion distal to restraint after application.
     Monitor patient's respiratory and circulatory status.
5. **Consider medical etiologies** of behavioral disorder and treat according to appropriate SOP:
   - Hypoxia; substance abuse/overdose; alcohol intoxication
   - Neurologic disease: stroke, seizure, intracerebral bleed, Alzheimer's, etc.
   - Metabolic disorders: hypoglycemia (✓ glucose), acidosis, electrolyte imbalance, thyroid/liver/renal disease etc.
   - Evidence of traumatic injuries

SOP
(p. 34)

Behavioral Emergencies: Scene Safety

Risk factors for violence:
Locations w/ alcohol
Crowds
Scene of violence
Substance use
Known mental illness or delirium
Potential for concealed weapons

Scene Safety

Warnings of Potentially Violent Situation
Posture
Speech

Motor activity
Body language
Patient perceives danger
Weapons present

Images for DT4EMS, LLC by Guardrail Photography

Behavioral emergencies: General Approach

Identify yourself
Gain patient's confidence
Actively listen
Consider / attempt to evaluate for possible physiologic causes
Assess decisional capacity & potential danger
- Observe; direct exam
- Reports from family, bystanders, PD

Behavioral Emergency: 6 Tips

1. Be vigilant about safety
- Circumstances can change rapidly
- Trust your gut
- Confirm absence of weapons
- Add'l personnel as needed
- Keep a safe distance
- Nothing between you and the door
- BE PROACTIVE – DON'T WAIT FOR THE SITUATION TO DETERIORATE!

https://www.ems1.com/violent-patient-management/articles/54846048-Behavioral-emergency-6-EMS-success-tips

2. Search for medical cause

Hypoxia
Head trauma
Brain bleed
Hypoglycemia
Alcohol or drug withdrawal
Dementia

https://www.ems1.com/violent-patient-management/articles/54846048-Behavioral-emergency-6-EMS-success-tips

3. Relax the environment

Remove others who may trigger pt

Turn down music / limit background noise
Bring only essential equipment

https://www.ems1.com/violent-patient-management/articles/54846048-Behavioral-emergency-6-EMS-success-tips

4. Stay calm in the midst of a storm

Speak to pt directly
Eye contact
Affirm you are there to help
Give them a task (write down meds)
Avoid sudden movement

https://www.ems1.com/violent-patient-management/articles/54846048-Behavioralemergency-6-EMS-success-tips

5. Listen actively. Speak the truth.

Listen mindfully
Listen with compassion
Always be honest
Do not belittle or accuse
Find out what they really need or want
Provide hope. Encourage.

Never underestimate the healing power of a compassionate responder!

6. Debrief with your team.

What worked? What didn't?
How could you improve next time?

Decisional capacity: Affect and Mood

Sustained and pervasive emotional state
Outward expression of a person's mood
Consider if *appropriate* for the situation

Decisional capacity: Behavior

What is the patient doing? Are they able to remain in control?

Cognitive function

Level of consciousness
Orientation X4
Attention / concentration
Memory
Fund of information

Can patient pay attention, concentrate and retain information adequately to process the information given to them, to verbalize *their* understanding of it, and make a rational decision? Or are they lost in the fog?

Thought Processes & Content

May be disordered in *progression* or *content*

Ask yourself as you listen:
What is on his or her mind?
Is the person making sense?
Is there anything unusual about their reasoning?
Are they expressing flawed ideas?

Decisional Capacity: E-1 Policy

Policy Title: EMOTIONAL ILLNESS and BEHAVIORAL EMERGENCIES Use of Petition forms; restraints			No. E - 1
Board approval: 4/05	Effective: 3/1/10	Supersedes: 6/1/08	Page: 1 of 5

I. DEFINITIONS

A. **Behavioral emergencies** are those in which the patient's problem is that of mood, thought, or behavior that is dangerous or disturbing to himself/herself or to others.

B. **Behavioral health services** is the contemporary term for mental health, chemical dependency, and mental retardation/developmental disabilities services for which care is provided in settings such acute, long term, and ambulatory care (JCAHO).

Decisional capacity: Decisional capacity is determined by evaluating the patient's affect, behavior, and cognitive (intellectual) ability. Psychiatric signs and symptoms are grouped into the systems that they affect: consciousness; motor activity; speech; thought; affect; memory; orientation; and perception. The components may be remembered by the mnemonic **CAST-A-MOP**. The **determination of decisional capacity** generally depends on the person's ability to

1. communicate a choice;
2. understand relevant information;
3. appreciate the situation and its consequences; and
4. weigh the risk and benefits of options and rationally process this information before making a decision (Miller, 2001).

Decisional Capacity: R-6 Policy

1. **Test of decisional capacity:** Whether or not a patient understands their condition, the nature of the medical advice given, and the consequences of refusing to consent. This can be determined by a combination of the following assessments:
   a. Alertness and orientation: A&O X person, place, time and situation
   b. Speaking in full sentences with clear speech and normal speech tempo
   c. **Affect**: Is the patient's behavior consistent with the environmental stimuli?
   d. **Behavior**: Is the patient able to remain in control?
   e. **Cognition/judgment**: Does the person understand the relevant information? Do they have the ability to manipulate the information? Can they draw reasonable conclusions based on facts? Can they communicate a choice?
   f. **Insight**: Can the patient pull all of these together to appreciate the implications of the situation and the consequences of their decision?
2. **Decisional capacity could be impaired** by the presence of hypoxia, hypoperfusion, hypoglycemia, electrolyte imbalance, brain injury/stroke, acidosis, drug or alcohol intoxication, delirium, dementia, or mental illness. See SOP for a full listing of causes of altered mental status.

Decisional Capacity: SOP

1. Assess **SCENE AND PERSONAL SAFETY**. Call law enforcement personnel to scene, if needed. **DO NOT JEOPARDIZE YOUR OWN SAFETY;** always position self for a safe exit.
   - Inspect environment for bottles, drugs, letters, notes, or toxins.
   - Ask bystanders about recent behavioral changes.
2. **Assess patient's decisional capacity**
   - **C**onsciousness/arousal using GCS (see ITC for chart), attention span
   - **A**ctivity: restlessness, agitation (consolable or non-consolable), compulsions
   - **S**peech: rate, volume, articulation, content
   - **T**hinking/thought processes: delusions, flight of ideas, obsessions, phobias; thoughts of suicide/harm to others
   - **A**ffect and mood: appropriate or inappropriate
   - **M**emory: immediate, recent, remote
   - **O**rientation X 4, understands and complies with instructions
   - **P**erception: delusions, hallucinations (auditory, visual, tactile)
   - General appearance; odors on breath
   - Inspect for **Medic alert jewelry**; evidence of alcohol/drug abuse; trauma
   - Is patient a **threat to self or others, or unable to care/provide for self?**
   - Explore **suicidal thoughts/intentions** with patient directly. Bring any suicidal notes to hospital.

Questions To Ask

What is your understanding of your condition / what I just told you?

What is your understanding of what happens if you don't go to the hospital / get treatment for this / do nothing?

Assessment

B. **Primary assessment**

1. Limit number of people around patient, isolate patient if necessary.
2. Determine presence of life threatening medical conditions.
3. Rapid assessment of ABCs with interventions if required.
4. Observe overt behavior (affect) of patient and body language (posture, gestures).
5. Note evidence of rage, elation, hostility, depression, fear, anger, anxiety, confusion

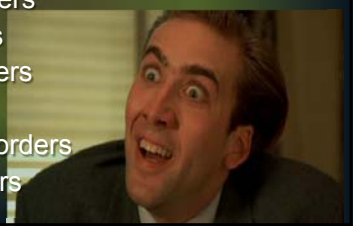
C. **Secondary assessment**

1. Remove patient from crisis or disturbing situation
2. Use your thinking processes to evaluate someone else's thinking processes, your perceptions to evaluate someone else's perceptions, and your feelings to measure another's feelings.
3. When evaluating a patient with behavioral problems, virtually all of the diagnostic information must come from talking with the patient or other involved parties.
4. Voice and manner may influence a patient's condition as soon as you speak to him. Simply listening to the person describe the problem may help greatly. It is important to be aware of your own professional limitations and intervene only to the extent that you feel competent.

Restraints only if needed

Many types of disorders

Cognitive disorders: delirium & dementia
Schizophrenia and other psychotic disorders
Mood disorders; Anxiety disorders
Substance-related disorders
Somatoform disorders
Factitious disorders
Dissociative disorders
Eating disorders
Impulse control disorders
Personality disorders



Depression

https://www.youtube.com/watch?v=-Qe8cR4JI10

Why We Need to Talk About Depression

www.medscape.com

Depression Screening Rates Up, but Still Fall Far Short

Batya Swift Yasgur, MA, LSW

July 13, 2018

More people are being screened for depression now than they were 10 years ago, but screening rates still remain low, new research suggests.

Investigators used data from the National Ambulatory Medical Care Survey to review close to 300,000 adult nonpsychiatric healthcare visits from 2005 to 2015.

They found that although screening rates had risen from less than 1% in 2008, they continued to remain low, with only 3% of adults screened during office visits in 2015.

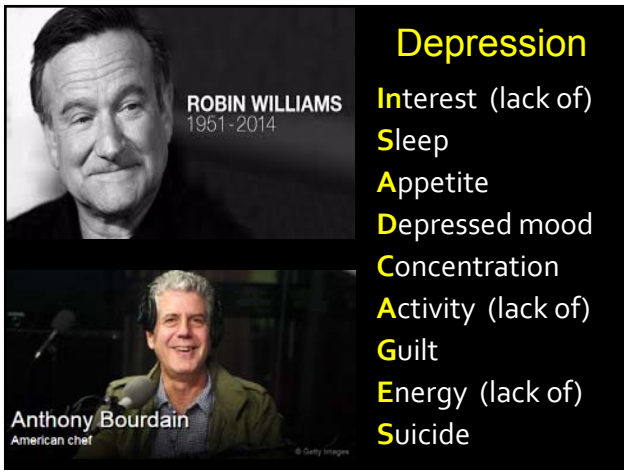
"We need more awareness of the necessity of depression screening among adults," lead author Sandipan Bhattacharjee, PhD, assistant professor, Department of Pharmacy Practice and Science, College of Pharmacy, University of Arizona, Tucson, told *Medscape Medical News*.

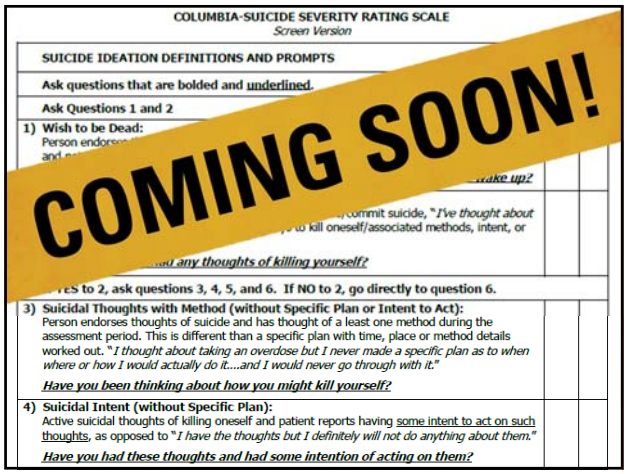
"Healthcare providers and large healthcare systems should routinely use depression screening in their practice so that necessary interventions can be put in place at the right stage to prevent negative outcomes associated with depression, as well as overcome the underdiagnosis of depression," he said.

The study was published online July 9 in *Psychiatric Services*.

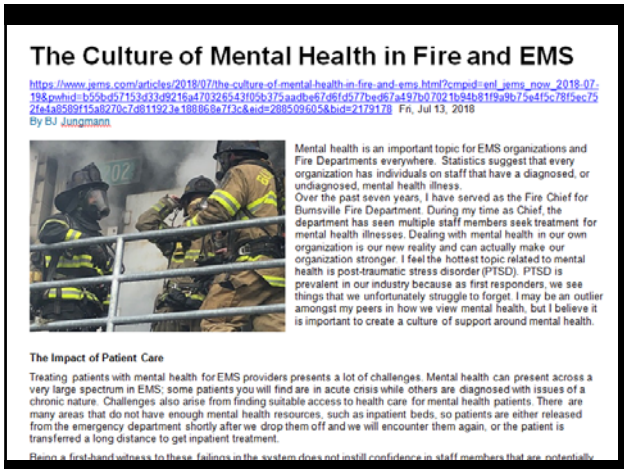
Depression

Persistent, sadness or irritability
Loss of interest and pleasure in usual activities; severe enough to impair daily functioning
Crying easily
↓ appetite & wt. loss, or ↑ appetite & wt. gain
May be some delusions, but no cognitive dysfunction suggesting delirium

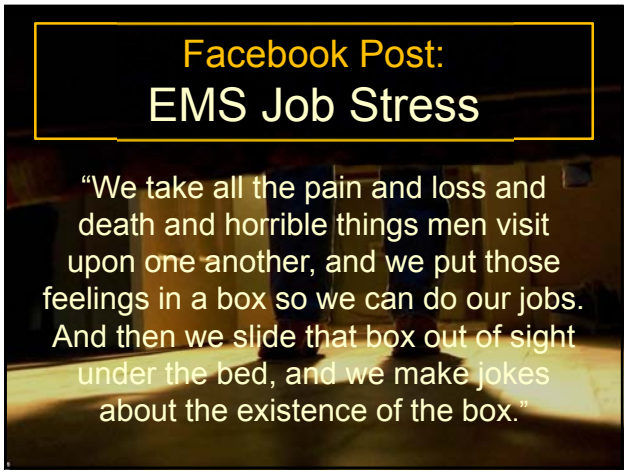

ROBIN WILLIAMS
1951-2014
Anthony Bourdain
American chef
Depression
Interest (lack of)
Sleep
Appetite
Depressed mood
Concentration
Activity (lack of)
Guilt
Energy (lack of)
Suicide

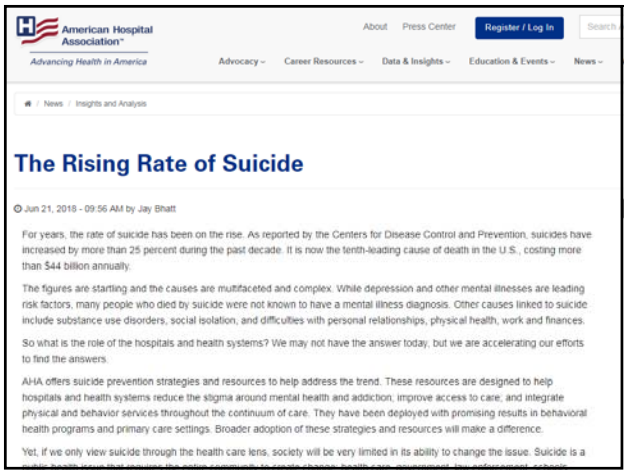

COLUMBIA-SUICIDE SEVERITY RATING SCALE
Screen Version
SUICIDE IDEATION DEFINITIONS AND PROMPTS
Ask questions that are bolded and underlined.
Ask Questions 1 and 2
1) Wish to be Dead:
COMING SOON!
3) Suicidal Thoughts with Method (without Specific Plan or Intent to Act):
Person endorses thoughts of suicide and has thought of a least one method during the assessment period. This is different than a specific plan with time, place or method details worked out. "I thought about taking an overdose but I never made a specific plan as to when where or how I would actually do it....and I would never go through with it."
Have you been thinking about how you might kill yourself?
4) Suicidal Intent (without Specific Plan):
Active suicidal thoughts of killing oneself and patient reports having some intent to act on such thoughts, as opposed to "I have the thoughts but I definitely will not do anything about them."
Have you had these thoughts and had some intention of acting on them?


It Can Happen to Anyone…
CRITICAL STRESS
JEMS
Survey Reveals Alarming Rates of EMS Provider Stress and Thoughts of Suicide
Data suggests ways to reduce the impact of critical stress on EMTs and paramedics
Increasing suicide rates among first responders spark concern
A survey of more than 4,000 first responders found that 6.6 percent had attempted suicide, which is more than 10 times the rate in the general population
Earlier Than Too Late: Stopping Stress and Suicide Among Emergency Personnel
EMS: Suicides Among Fire & EMS Professionals
EMSWORLD
FIREHOUSE
LEADERSHIP APPARATUS RESCUE


The Culture of Mental Health in Fire and EMS
https://www.jems.com/articles/2018/07/the-culture-of-mental-health-in-fire-and-ems.html?cmpid=enl_jems_now_2018-07-19&pwhid=b55bd57153d33d9216a470326543f05b375aadbe67d6fd577bed67a497b07021b94b81f9a9b75e4f5c78f5ec752fe4a8589f15a8270c7d811923e188868e7f3c&eid=288509605&bid=2179178 Fri, Jul 13, 2018
By BJ Jungmann
Mental health is an important topic for EMS organizations and Fire Departments everywhere. Statistics suggest that every organization has individuals on staff that have a diagnosed, or undiagnosed, mental health illness.
Over the past seven years, I have served as the Fire Chief for Bumsville Fire Department. During my time as Chief, the department has seen multiple staff members seek treatment for mental health illnesses. Dealing with mental health in our own organization is our new reality and can actually make our organization stronger. I feel the hottest topic related to mental health is post-traumatic stress disorder (PTSD). PTSD is prevalent in our industry because as first responders, we see things that we unfortunately struggle to forget. I may be an outlier amongst my peers in how we view mental health, but I believe it is important to create a culture of support around mental health.
The Impact of Patient Care
Treating patients with mental health for EMS providers presents a lot of challenges. Mental health can present across a very large spectrum in EMS; some patients you will find are in acute crisis while others are diagnosed with issues of a chronic nature. Challenges also arise from finding suitable access to health care for mental health patients. There are many areas that do not have enough mental health resources, such as inpatient beds, so patients are either released from the emergency department shortly after we drop them off and we will encounter them again, or the patient is transferred a long distance to get inpatient treatment.

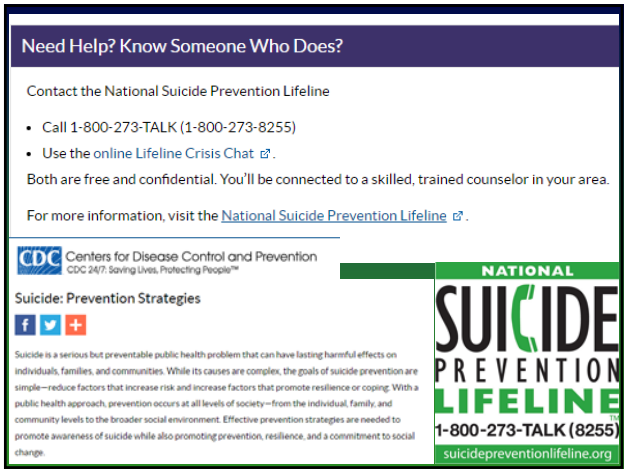

Silent suffering increasingly in the news
The Other Victims: First Responders To Horrific Disasters Often Suffer In Solitude
By Heidi de Marco • JULY 6, 2018

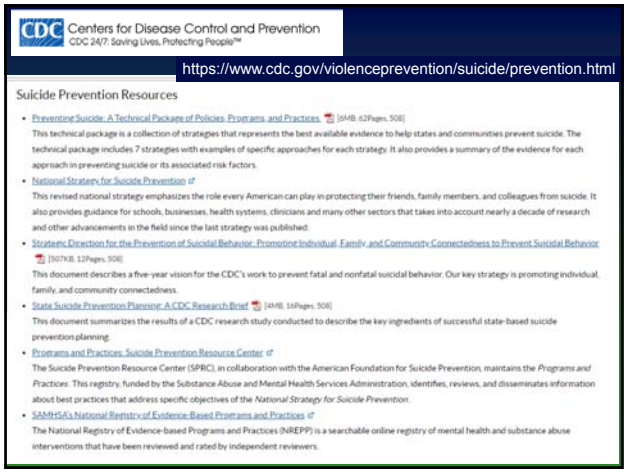

Facebook Post:
EMS Job Stress
"We take all the pain and loss and death and horrible things men visit upon one another, and we put those feelings in a box so we can do our jobs. And then we slide that box out of sight under the bed, and we make jokes about the existence of the box."

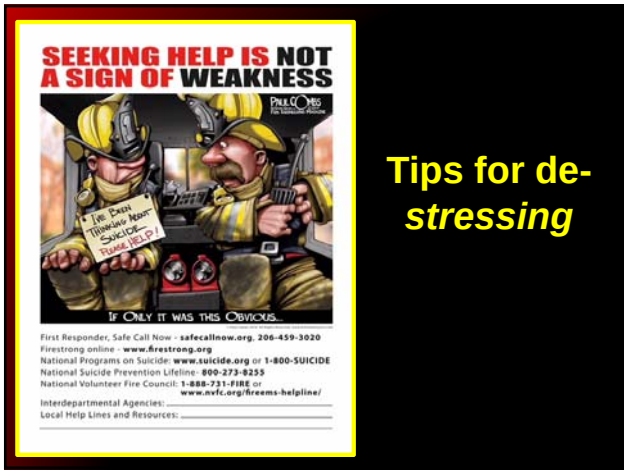


Suicide

- Increased by >25% during past decade
- 10th-leading cause of death in the U.S., costing more than $44 billion annually
- Causes are multifaceted and complex
- Leading risk factors: Depression and other mental illnesses, many who died by suicide were not known to have a mental illness
- Other causes: Substance use disorders, social isolation, and difficulties with personal relationships, physical health, work and finances



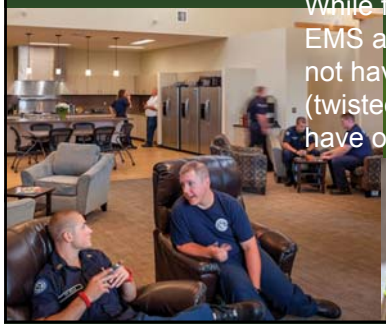




Tips for de-*stressing*

#1 Talk it out

- Your coworkers may very well be your best friends
- While friends outside of EMS are good, they do not have the same (twisted) perspective we have on the "inside."



#2 Live a Balanced Life

- Exercise
- Have social time
- Personal hobbies (fishing, sports)
- Eat well
- Enjoy your family
- Celebrate life

#3 Don't be afraid to ask for help

There are counselors and therapists who specialize in first responder issues

There are national organizations available

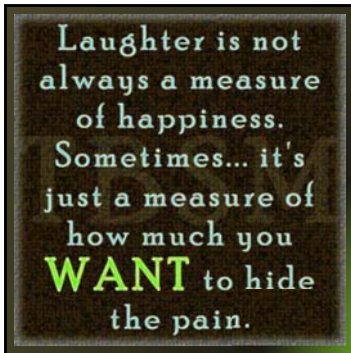
There is NO SHAME in seeking out resources to help in time of need

#4 LAUGH

EMS HUMOR

They can't stop our fun.

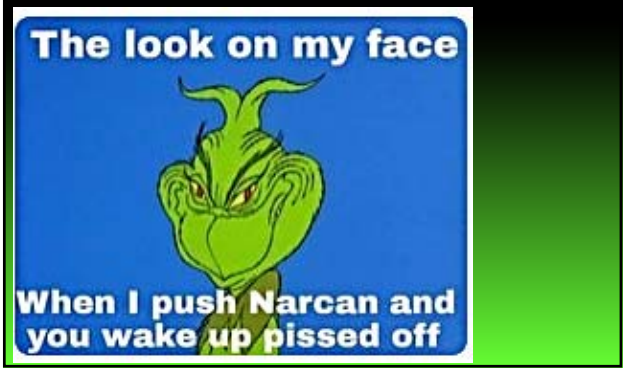
Most of us have an irreverent and twisted sense of humor…it's okay – it's therapy!



Don't laugh to *hide* the pain, laugh to *heal* the pain

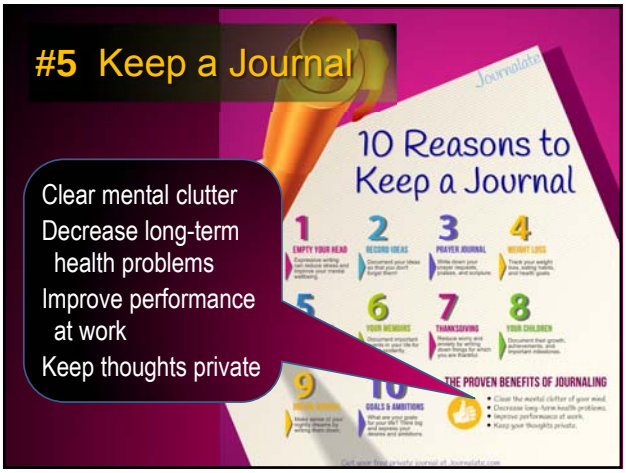
LAUGH

Laugh again



#5 Keep a Journal

- Clear mental clutter
- Decrease long-term health problems
- Improve performance at work
- Keep thoughts private



Other healthy ways to release stress?

https://www.youtube.com/watch?v=FgXX73IHlIU