



EHSSSENTIALS 2018

Environmental, Health & Safety Symposium for Healthcare

APRIL 18, 2018

**The University of Texas
MD Anderson Cancer Center**

Houston, Texas



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Occupational Health Trends: Opioid Use



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Objectives

- Opioid epidemic
- Patterns of use & historical perspective
- Reducing diversion in health care settings
- Diversion & tampering
- Case studies
- Treatment

The Painkiller Addiction Epidemic

- 63, 632 drug overdose deaths
 - 174 deaths per day
 - One death every 8.28 minutes
 - 42,249 (66.4%) of those deaths were due to opioids
 - More deaths than firearms, homicide, suicide & MVAs

ER visits for opioid overdose up 30%, CDC study finds

By Jacqueline Howard, CNN

Updated 1:29 PM ET, Tue March 6, 2018



Photos: Opioids: Addictive painkillers

Prescription and illegal opioids are commonly abused because they are so addictive.

Opioid medications bind to the areas of the brain that control pain and emotions, driving up levels of the feel-good hormone dopamine in the brain's reward areas and producing an intense feeling of euphoria.



More from CNN



Scott Baio's wife has brain disease



What you need to know about the national school walkout

Today's Mortgage Rate

3.75% APR
15 Year Fixed

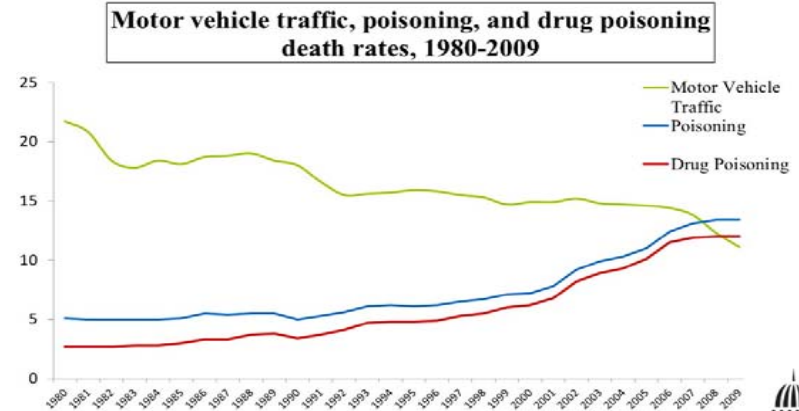


Select Loan Amount

The Painkiller Addiction Epidemic

- Lifetime prevalence of non-medical prescription drugs use/abuse @ 20% (48 million persons > 12 years old)
- Increase in past-month use among adolescents (3.3% of 12-17 year olds) and young adults (6.4% of 18-25 year olds)
- Increase use and vulnerability of a growing elderly population

Prescription Drug Overdose and Abuse: A Growing Problem



Source: National Center for Health Statistics, Drug Poisoning Deaths in the United States Databrief, 2011.



Total U.S. Drug Deaths

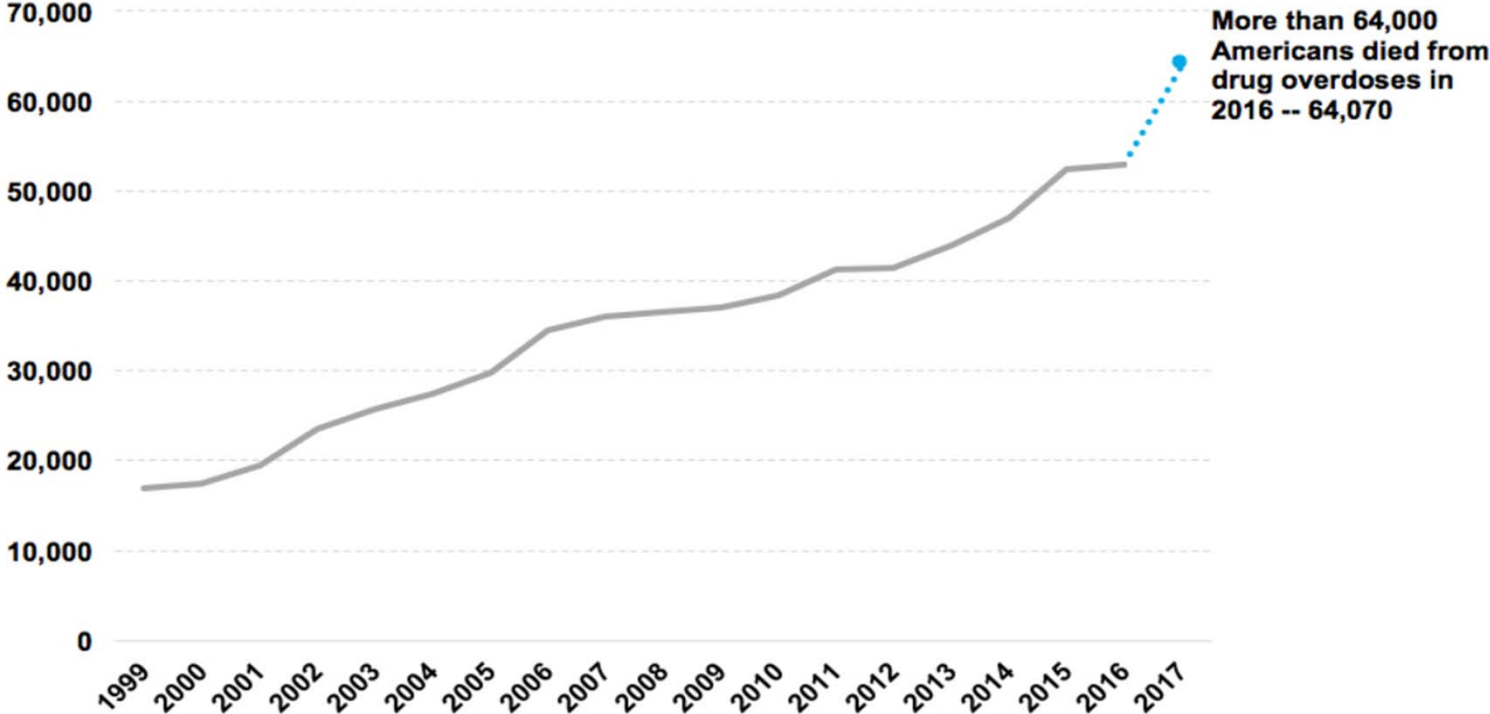
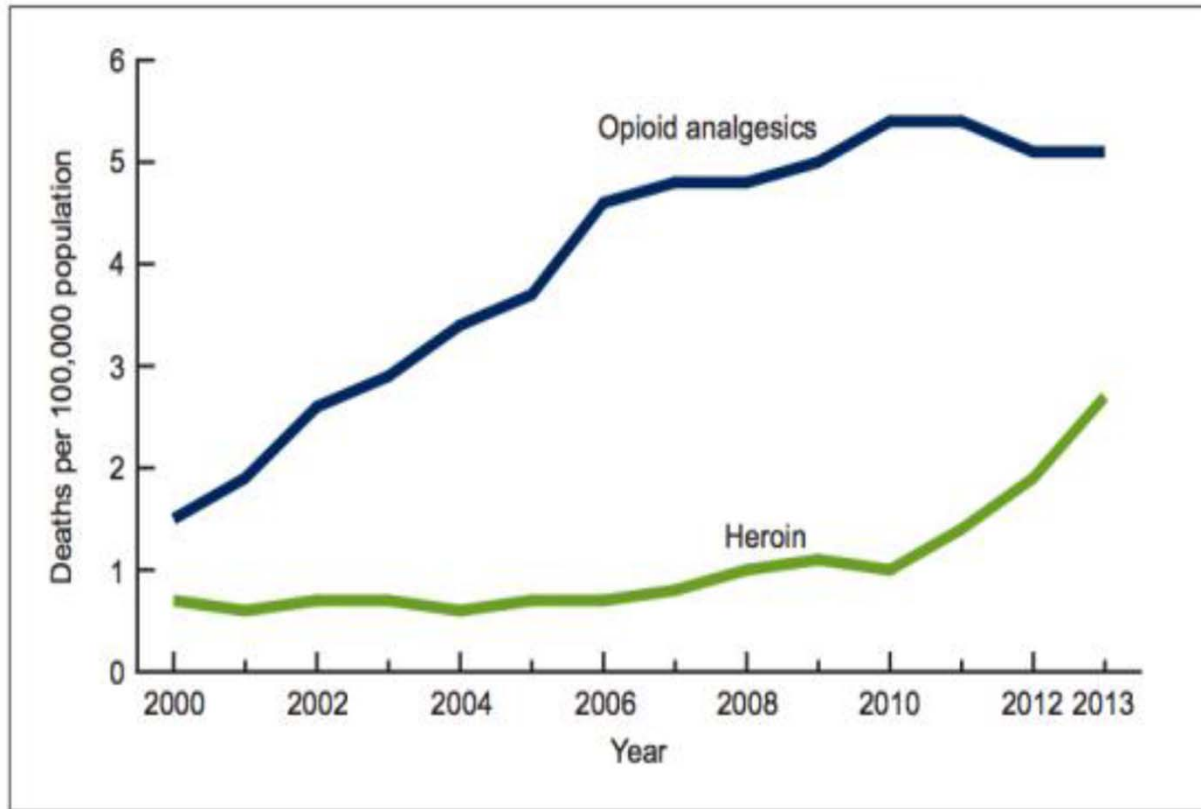
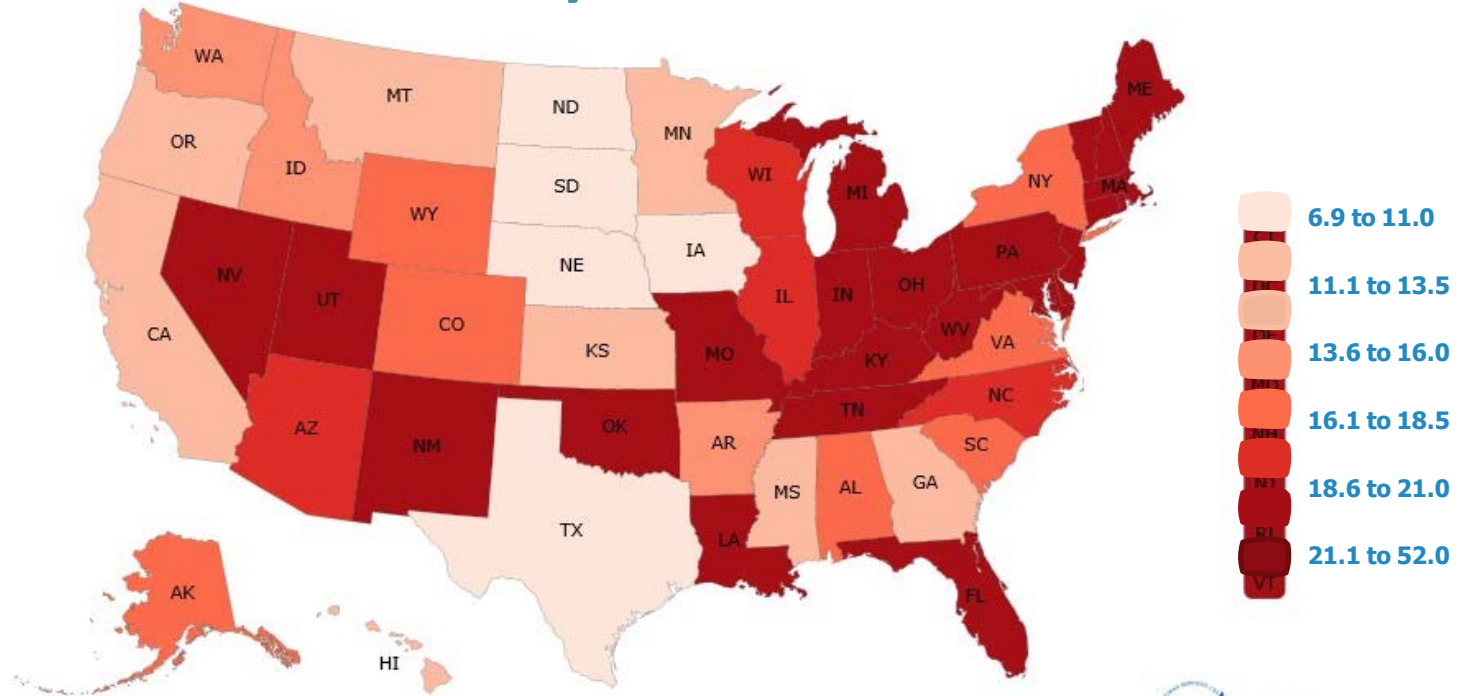


Figure 1. Age-adjusted rates for drug-poisoning deaths, by type of drug: United States, 2000–2013



Overdose Rate by State



The United States is responsible for _____% of world-wide opioid consumption.



How Did We Get Here?



How Did We Get Here?

- 1804 - Morphine produced from opium
- 1839 - 1st Opium War (British take Hong Kong)
- 1853 - Hypodermic needle invented***
- 1899 - Bayer chemist invents heroin (diacetylmorphine)
- 1914 - Harrison Narcotics Act passed
- 1951- Drug advertising revolutionized (Arthur Sackler)
- 1952 - Sackler buys Purdue Fredrick
- 1960 - Sackler's campaign made Valium 1st \$100 million-dollar drug

How Did We Get Here?

- 1980 - NEJM publishes Porter & Jick
- 1984 - Purdue releases MS Contin
- 1986 - Foley & Portnoy publish in Pain
- 1996 - Purdue releases OxyContin marketing it with lessons learned from Valium marketing campaign
- 1996 - President of American Pain Society urges treating pain as fifth vital sign
- 1996 - Dr. David Proctor's clinic in South Shore, KY becomes first pill mill

How Did We Get Here?

- 1998 - VA & JCAHO adopts pain as 5th VS
- 2000s - Pill mills proliferate like wildfire
- 2001 - Injured workers in Washington State start dying of opiate overdose
- 2002 - Dr. David Proctor pleads guilty to drug trafficking (11 years)
- 2007 - Purdue and 3 executives plead guilty of false branding and pay \$634 million
- 1996 - Dr. David Proctor's clinic in South Shore, KY becomes first pill mill

How Did We Get Here?

- 2008 - Drug overdoses surpass MVA deaths as cause of accidental death
- 2011 - Ohio passes HB 93, regulating pain clinics
- 2001 - Injured workers in Washington State start dying of opiate overdose
- 2014 - Philip Seymour Hoffman dies, focusing widespread attention
- 2017 - CDC recommendations

Diversion in Facilities/Practices

- Nurses/medical professionals who divert controlled substances, pose significant threats to patient safety, and become a liability to the healthcare organizations
- Nurses/medical professionals who divert use the patients illness as a means to obtain the medications
- By doing this, the patient is put at risk

What to Look for in Charts

- Removing controlled substances with no “doctor’s orders”
- Removing controlled substances for patients “not assigned” to them
- Removing controlled substances for patients that have been discharged from their care
- Removing controlled substances and not documenting them on the “MAR” (Medication Administration Record)
- Patient charting reveals excessive pulls for “PRN” medication compared to other nurses assigned to that patient
- Discrepancies from PIXUS machines on a regular basis

What to Look for in Charts

- Pulling out controlled substances, tablets, in lower dosages in order to obtain more pills, when the exact dosage is available
- Pulling out larger dosages of injectables to obtain more waste
- Patient continuing to complain about pain
- Falsifying records
- Removing PRN medications too frequently
- Not documenting waste

Physicians Suspected of Diverting Controlled Substances

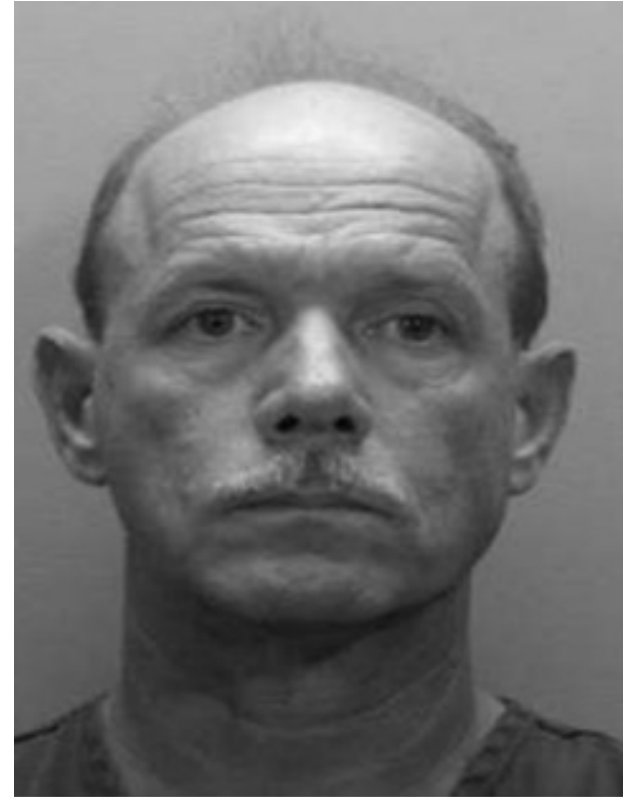
- Replace
 - under-treatment
- Waste
 - contamination
- Records

Tampering

- The most dangerous part of diversion
- The nurse/medical professional diverts the medication and replaces it with another substance; the patient receives this unknown substance instead of the correct medication (saline is commonly used)
- The nurse/medical professional uses patient's syringe/needle to inject themselves

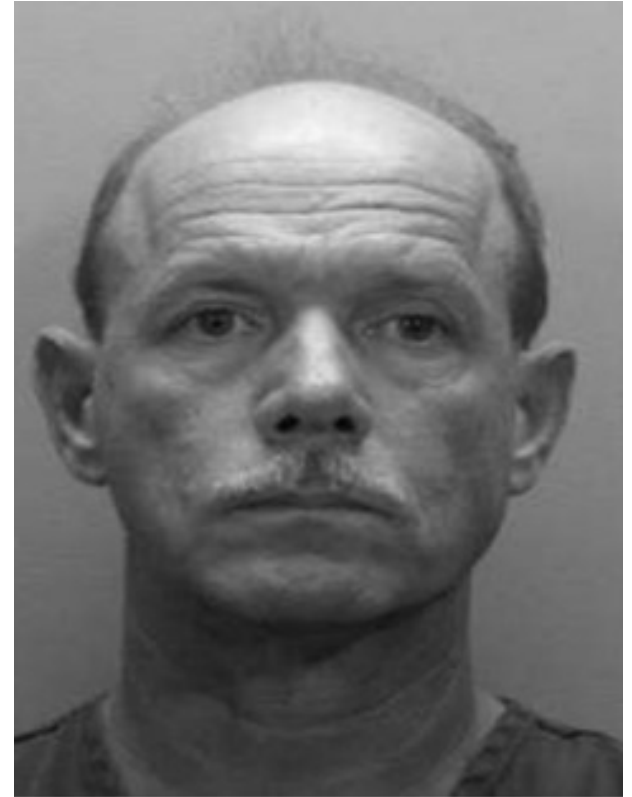
Tampering

- Radiology technologist Steven Larry Beumel
 - Employee at Mayo Clinic Jacksonville
 - Addicted to Fentanyl since 2006
- 5 patients were infected with HCV



Tampering

- Mr Beumel eventually acknowledged diverting fentanyl – he would replace the removable needle of the prefilled syringe with a smaller-gauge needle and replace the administered fentanyl with saline then return the filled syringe to patient care



Tampering

- Exeter Hospital – New Hampshire
- Traveling hospital technician David Kwiatkowski, 32, worked in the Cardiac Catheterization Lab
- Diverted fentanyl for personal use
- Grabbed the loaded syringes when he brought lead aprons into the procedure room
- They suspect Kwiatkowski then replaced the fentanyl syringes with saline syringes that were tainted with his strain of Hepatitis C



Tampering

- Erratic behavior, excessive sweating, bathroom trips
- “Fresh track marks”
- “A red face, red eyes, and white foam around his mouth”
- Tendency to lie, employees told investigators
- Bloodshot eyes, claimed crying all night about a dead aunt who never existed



Tampering

- 30 people were infected with Hep C
- December 2, 2013, Kwiatkowski pleaded guilty to seven counts of tampering with a consumer product and seven counts of obtaining controlled substances by fraud
- The U.S. District Court in New Hampshire sentenced him to 39 years in prison



Tampering

- In Colorado three years ago, a hospital surgical technician was let go after she was found to have replaced fentanyl taken through syringes with saline, sometimes in syringes that had been previously used. The nurse/medical professional diverts the medication and replaces it with another substance. The patient receives this unknown substance instead of the correct medication (saline is commonly used).
- She was only caught after a syringe in the tech's pocket pricked a co-worker
- The hospital had to track down 5,700 potential exposures
- Before the case was closed, she had re-infected 36 individuals with hepatitis C

Tampering

- Private causes of action from the Colorado case:
 - Suits against the hospital and the anesthesiologists
 - Medical negligence (anesthesiologists; duty to lock meds)
 - Negligent hiring by hospital
 - Negligent retention, training, and supervision
 - *Respondeat Superior* – responsible for the actions taken by one of its employees within the scope of that person's employment
 - Reckless and intentional infliction of emotional distress
 - Violations of Consumer Protection Act

It's Not Always Nurses Taking Pills: What To Look For With Support Staff

- These are individuals that cannot access a pixus-type machine
- Radiologic Technologist
- Surgical Technicians
- Certified Nursing Assistants
- Employees that always want to help with disposing of the waste
- Employees that hang around after their services are complete
- Employees that volunteer to help everyone
- Employees unnecessarily touching syringes for procedures
- Employees in areas they should not be in

Possible Signs of Impairment



Health Care Professions

- Health Care Professionals have an ethical duty to protect patients, colleagues, the profession and the community
- Part of this duty is to report impaired professionals and ensure that they receive the proper help
- Drug diversion affects everyone

Goal

- The goal as a nurse, nurse manager, or other hospital employee is to make sure that the professionals that you work with everyday are not in distress



Important!

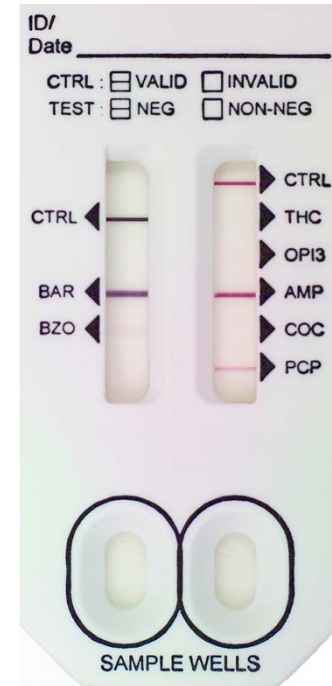
- Good relationships with local law enforcement
- Know who to call
- Cell phone numbers
- Similarly: physician groups having good relationships with pharmacies
- Train staff on how to detect and to whom they should report

Prevention

- Review and audit
- Create controls & identify potential concerns
- Training
- Camera surveillance – high-risk areas
- Minimize risk of diversion
- Maintain chain of custody and use witnesses

Facility Controlled Substance Diversion Prevention Program

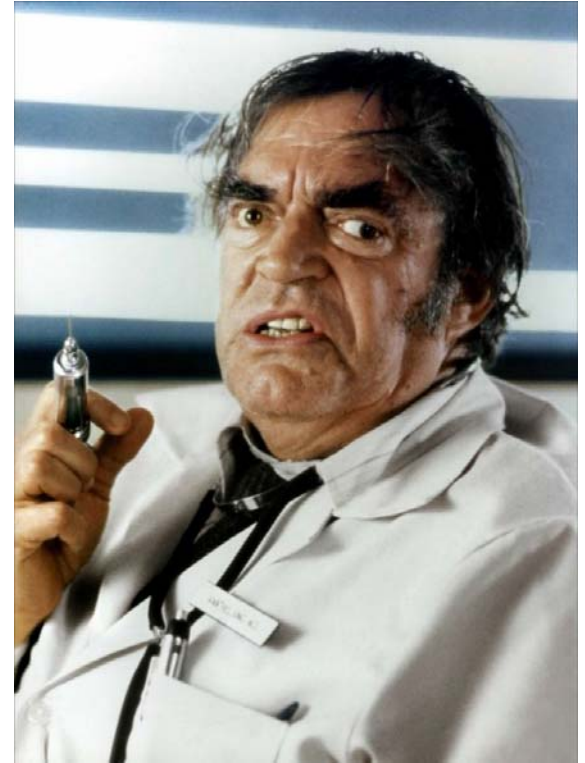
- Processes to resolve
- Processes to investigate
- Test controlled substance waste
- Drug testing policy



Diversion by Patients



Diversion by Physicians



Treatment



Questions?