

## The Opioid Epidemic: Lots of Data, Statistics and Questions but Few Answers

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The presenter has no conflicts of interest to disclose

### Objectives – Pharmacist

- Describe the history of the opioid epidemic.
- Analyze the effects the opioid epidemic has on society.
- Evaluate the effectiveness of local, state and federal programs put into place to address the opioid epidemic.
- Describe the role pharmacists can play in addressing the opioid epidemic.
- Describe resources available to pharmacists for use in educating the public regarding the opioid epidemic.

### Objectives – Pharmacy Technician

- Describe the history of the opioid epidemic.
- List three effects the opioid epidemic has on society.
- Discuss the effectiveness of local, state and federal programs put into place to address the opioid epidemic.
- Describe the role pharmacy technicians can play in addressing the opioid epidemic.
- Debate the value of today's efforts to address the opioid epidemic.

### How did we get here?

- In the 1950's, for heroin abuse, we just put them in jail.
- Remember Viet Nam, where \$5 a day could support a heroin habit?
- A Gallup poll issued in 1971 revealed that Americans of that era saw drugs and drug addiction as the third most serious threat to the nation.
- In a speech in 1971, Nixon called drug addiction “public enemy number one.”
- In 1971, Nixon ordered the creation of the first federal program for methadone treatment of opiate addiction.

[https://www.crchealth.com/addiction/heroin-addiction-treatment/heroin-detox/history\\_methadone/](https://www.crchealth.com/addiction/heroin-addiction-treatment/heroin-detox/history_methadone/) accessed 2/12/19

How did we get here?

First do no harm.

How did we get here?

<https://www.youtube.com/watch?v=Ez78Df5hvel>

[https://www.youtube.com/watch?v=r1a\\_M111114](https://www.youtube.com/watch?v=r1a_M111114)

How did we get here?

- In 2000, as part of a national effort to address the widespread problem of underassessment and undertreatment of pain, The Joint Commission (TJC, formerly the Joint Commission on Accreditation of Healthcare Organizations [JCAHO]) introduced standards for organizations to improve care for patients with pain.

<https://www.ncbi.nlm.nih.gov/pubmed/28241189> accessed 2/12/19

## HCAHPS (Hospital Consumer Assessment of Healthcare Providers and Systems)

Initial data collection began in 2007 & public reporting in 2009

### Core Questions

- communication with nurses and doctors
- responsiveness of hospital staff
- cleanliness and quietness of the hospital environment
- **pain management**
- communication about medicines
- discharge information
- overall rating of hospital
- would they recommend the hospital

<https://www.cms.gov/medicare/Quality-Initiatives-Patient-Assessment-Instruments/HospitalQualityInits/HospitalHCAHPS.html> accessed 2/12/19

## HCAHPS Pain Management Questions

12. During this hospital stay, did you need medicine for pain?

1  Yes  
2  No → If No, Go to Question 15

13. During this hospital stay, how often was your pain well controlled?

1  Never  
2  Sometimes  
3  Usually  
4  Always

14. During this hospital stay, how often did the hospital staff do everything they could to help you with your pain?

1  Never  
2  Sometimes  
3  Usually  
4  Always

[https://www.qualityreportingcenter.com/xwp-content/uploads/2016/01/DR\\_VBP\\_HCAHPS-and-Pain-Management\\_20160128\\_vFINAL508.pdf](https://www.qualityreportingcenter.com/xwp-content/uploads/2016/01/DR_VBP_HCAHPS-and-Pain-Management_20160128_vFINAL508.pdf), accessed 2/12/19

## HCAHPS (Hospital Consumer Assessment of Healthcare Providers and Systems)

- In January 2018, the three survey questions about pain management were replaced by three questions about communication about pain.
- The current Pain Management measure will be reported until December 2018. The new Communication About Pain measure will be reported on Hospital Compare beginning in October 2020.

<https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HospitalQualityInits/HospitalHCAHPS.html>, accessed 2/12/19

## HCAHPS – Then vs Now

During this hospital stay, did you need medicine for pain?

During this hospital stay, how often was your pain well controlled?

During this hospital stay, how often did the hospital staff do everything they could to help you with your pain?

During this hospital stay, did you have any pain?

During this hospital stay, how often did hospital staff talk with you about how much pain you had?

During this hospital stay, how often did hospital staff talk with you about how to treat your pain?

<https://www.oregon.gov/docs/default-source/industry-edge/issue-16--may-revised-hcahps-pain-management-questions-what-you-need-to-know.pdf?sfvrsn=2>, accessed 2/12/19

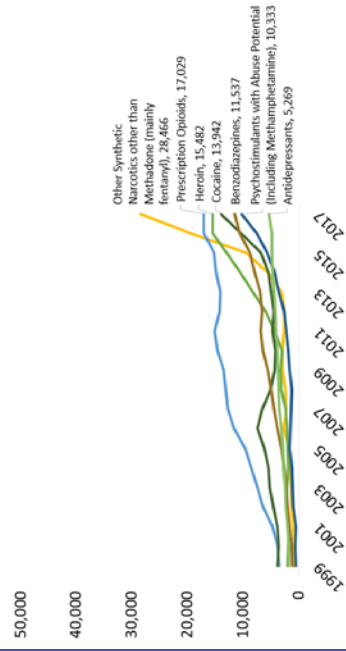
## How big is it?

On average, 130 Americans die every day from an opioid overdose

<https://www.cdc.gov/drugoverdose/epidemic/index.html>, accessed 2/12/19

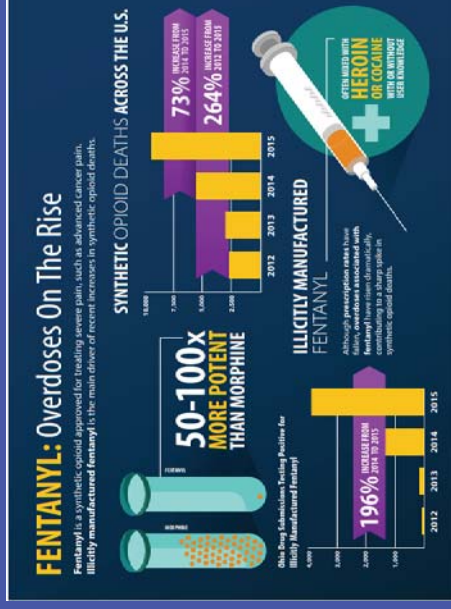
How big is it?

Figure 2. National Drug Overdose Deaths Number Among All Ages, 1999-2017



<https://www.drugabuse.gov/related-topics/trends-statistics/overdose-death-rates> accessed 2/12/19

Fentanyl: the 800-pound gorilla



<https://www.cdc.gov/drugoverdose/pdf/ibbsr/RR0107.pdf> accessed 2/12/19

2 mg of fentanyl, an acute lethal dose

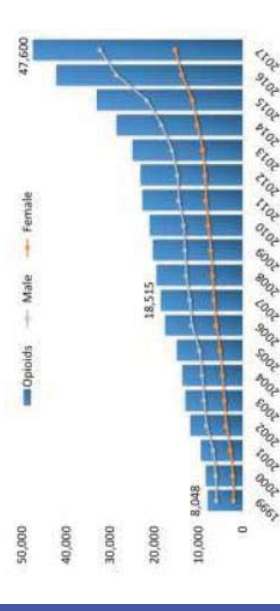


<https://www.dea.gov/galleries/drugs/images/fentanyl> accessed 3/13/19

How big is it?

2017 opioid overdose deaths (includes prescription opioids (and methadone), heroin and other synthetic narcotics)

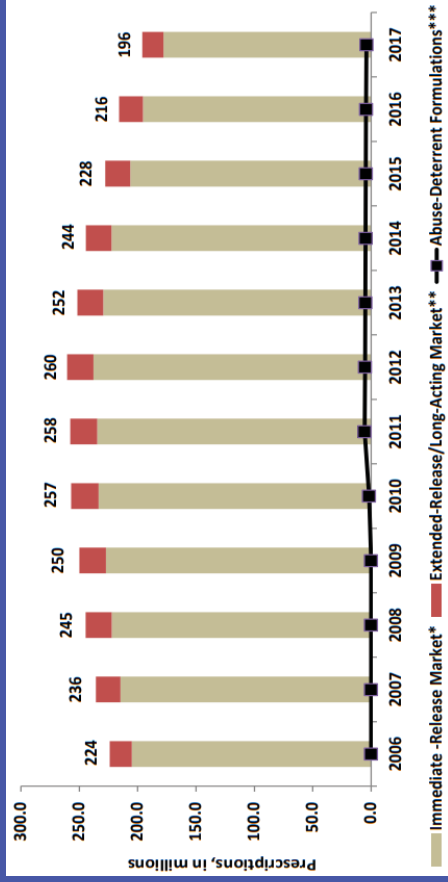
Figure 3. National Drug Overdose Deaths Involving Any Opioid, Number Among All Ages, by Gender, 1999-2017



<https://www.drugabuse.gov/related-topics/trends-statistics/overdose-death-rates> accessed 2/12/19

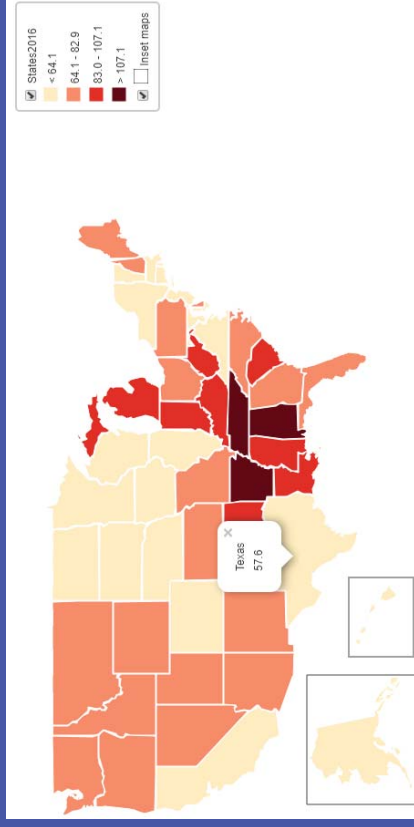


## National number of opioid retail prescriptions



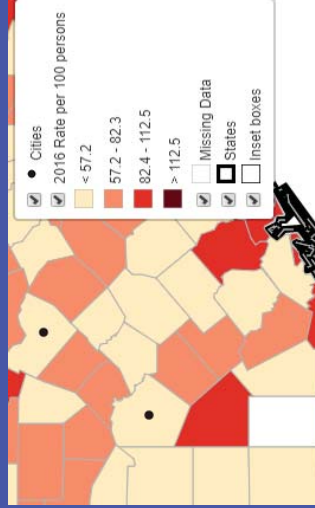
<https://www.fda.gov/downloads/aboutfda/centerforresearchandmanufacturing/cder/ucm601178.pdf> accessed 2/12/19

## Texas 2016 opioid Rx rate per 100 persons (national average was 58.7)



<https://www.cdc.gov/drugoverdose/maps/rxstate2016.html> accessed 2/12/19

## Bexar County 2016 opioid Rx rate per 100 persons

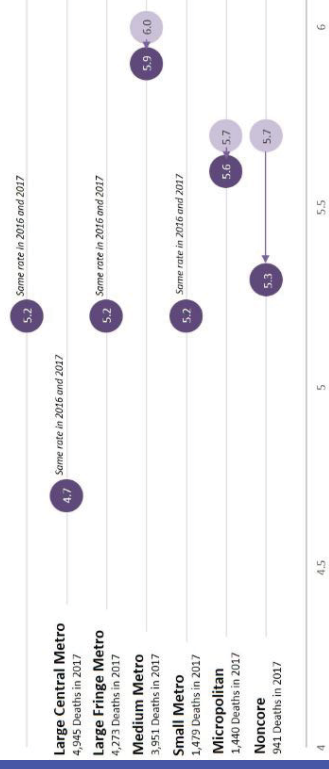


Bexar County 54.6, Atascosa County 88.8, Travis County 51.2  
Lamar County 151.0, La Salle County 0.4

<https://www.cdc.gov/drugoverdose/maps/rxcounty2016.html> accessed 2/12/19

## A big city problem?

**Prescription Opioid\* Overdose Death Rate**  
Age-adjusted deaths per 100,000 population  
from 2016 to 2017, by county urbanization level



[https://www.cdc.gov/drugoverdose/data/prescribing.html#CDC\\_AA\\_refVal=https%3A%2F%2Fwww.cdc.gov%2Fdrugoverdose%2Fdata%2Foverdose.html](https://www.cdc.gov/drugoverdose/data/prescribing.html#CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fdrugoverdose%2Fdata%2Foverdose.html) accessed 2/12/19

## San Antonio “We’re #1”

### Feds say S.A. couple ran “most prolific dark net fentanyl vendor” in the country

By Guillermo Contreras | August 29, 2018 | Updated: August 29, 2018 11:33pm



<https://www.expressnews.com/news/local/article/Feds-say-SA-couple-ran-most-prolific-dark-13178651.php> accessed 2/12/19

## It isn't just a bunch of street dealers

- Insys settled with DOJ for \$225 million June 2019 (filed chapter 11 bankruptcy)
- Teva paying Oklahoma \$85 million June 2019
- Morris and Dickson to pay \$22 million May 2019
- Purdue Pharma settled with Oklahoma for \$270 million March 2019
- McKesson Corp \$150 million fine January 2017
- Cardinal Health \$44 million fine December 2017
- Walgreens paid \$80 million in 2013
- CVS paid \$22 million in 2015 due to activity in Florida
- Costco paid \$11.75 million in 2017
- UPS paid \$40 million in 2013 for delivery of illicit online pharmacies
- Massachusetts General Hospital -\$2,300,000 settlement in 2015
- University of Michigan Health System -\$4,300,000 settlement in 2018

## Which healthcare workers abuse drugs?

- 10-15% of all physicians develop a substance abuse problem in their lifetime
- 6-8% of nurses have used controlled substances in sufficient enough quantity to impair professional performance
- Abuse rate among pharmacists is twice that of general society
- One study reported that 46% of pharmacists and 62% of pharmacy students have used a prescription drug without having obtained a prescription
- 20% of pharmacists reported they had used a prescription drug without a prescription at least 5 times or more in their lifetime

<https://www.uspharmacist.com/article/dea-form-106-and-loss-of-controlled-substances> accessed 11/19/18

## Pharmacist abusers (estimated that 10-15% of healthcare workers take non-prescribed meds)

- 2014 University of Findlay College of Pharmacy Survey
- Surveyed 171 pharmacists in recovery programs (66% retail, 20% hospital, 14% both)
- Practiced with active addiction
  - ❖ <1 year 11%
  - ❖ 1-5 years 42%
  - ❖ 5-10 years 23%
  - ❖ >10 years 24%
- Classes of substances abused
  - ❖ Opiates 40%
  - ❖ Alcohol 30%
  - ❖ Benzos 12%
  - ❖ Stimulants 8%
  - ❖ Muscle relaxants/ barbiturates 6%
  - ❖ Other 4%

<http://www.usaprn.org/the-addicted-pharmacist-and.html> accessed 11/15/18

## How do we solve the problem?

- Florida 2010: Regulated pain clinics and stopped health care providers from dispensing prescription opioid pain relievers from their offices, in combination with establishing a prescription drug monitoring program (PDMP).
- 2012 Result: Saw more than 50% decrease in oxycodone overdose deaths.
- New York: 2012: Required prescribers to check the state's PDMP before prescribing opioids.
- 2013 Result: Saw a 75% drop in patients' seeing multiple prescribers for the same drugs.

<https://www.cdc.gov/drugoverdose/policy/successes.html> accessed 2/12/19

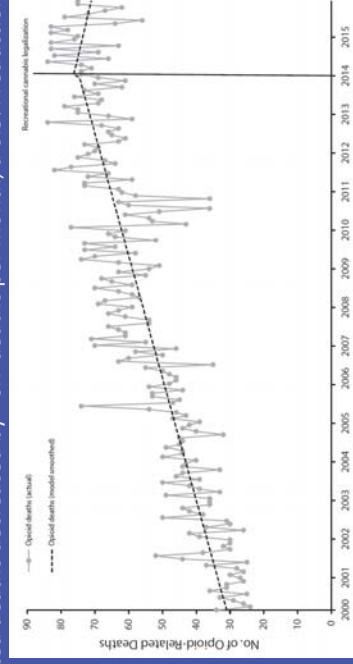
## How do we solve the problem?

- Tennessee 2012: Required prescribers to check the state's PDMP before prescribing opioids.
- 2013 Result: Saw a 75% drop in patients' seeing multiple prescribers for the same drugs.
- Oregon: Saw a 38% decline in prescription opioid overdose and a 58% rate of death decrease from methadone poisoning between 2006 – 2013.
  - PDMP to track controlled substances Rx
  - prior authorization for Methadone doses > 100mg/day under Medicaid;
  - education and access of lay persons to provide naloxone
  - physician and allied health care trainings

<https://www.cdc.gov/drugoverdose/policy/successes.html> accessed 2/12/19

## How do we solve the problem?

- Colorado legalized recreational cannabis in 2014
- Opioid-related deaths decreased by ~0.7 deaths per month, a 6.5% reduction



November 2017, Vol 107, No. 11 AIPH

## The Opioid Crisis Response Act of 2018

- lifts some limits on Medicaid paying for care at treatment facilities
- cracks down on illicit opioids being imported through the mail
- encourages the development of non-addictive painkillers
- require drug manufacturers create blister packs where opioids are administered in a limited three to seven day supply



## The Opioid Crisis: FDA's Priorities & Strategies

1. Decreasing Exposure & Prevent New Addiction
  - Appropriate Dose/Duration Labeling
  - Appropriate Packaging, Storage, and Disposal
  - Health Care Provider
2. Supporting the Treatment of Those With Opioid Use Disorder
  - Naloxone Medication Assisted
3. Fostering the Development of Novel Pain Treatment Therapies
  - Partnerships & Meetings
  - Abuse Deterrent Formulations (ADFs)
  - Pain Treatment Alternatives
4. Improving Enforcement & Assessing Benefit-Risk
  - Improving Enforcement
  - Assessing Benefit-Risk

<https://www.fda.gov/downloads/AboutFDA/CentersOffices/OfficesofMedicalProductsandTobacco/CDER/UCM609075.pdf/>

Naloxone – treats the symptom but not the issue



<https://www.rollingstone.com/culture-news/naloxone-how-overdose-reversing-drug-saved-demi-lovato-thousands-more-707518/>

## Perceptions count

### Three Defendants Indicted in One of Nation's Largest-Ever Fentanyl Seizures

- ...are charged with possession of 44.14 kilograms of fentanyl with the intent to distribute.
- ...just 3 milligrams is enough to kill an adult male, the 44.14 kilogram seizure represents over 14 million lethal doses.

<https://www.newsmax.com/newsfront/DEA-fentanyl-bust-drugs-seizure/2017/06/20/id/7997243/>, accessed 3/5/19

## Online purchasing – too easy? Search engine results – “fentanyl online purchase”

• Google – accessed 3/5/19

The Surprising Ease of Buying Fentanyl Online - The Atlantic  
<https://www.theatlantic.com/health/archive/2018/01/buying-fentanyl-online/55191/> ▼  
 Jan 31, 2018 - The Surprising Ease of Buying Fentanyl Online. To get extremely potent opioids, users turn to the dark web—and sometimes, Google.

Is Ohio's Fentanyl Crisis Linked to International Online Purchases ...  
<https://www.columbusrecoverycenter.com/~/ohios-fentanyl-crisis-linked-international...> ▼  
 Feb 26, 2018 - You might be alarmed to learn the shocking ease with which almost anyone can find addictive drugs like Fentanyl online and have it sent right...

Fentanyl - Streetdrugs.org  
<https://streetdrugs.org/store-2/fentanyl/> ▼  
 Another serious drug threat that has recently emerged is the growing illegal manufacturing and use of fentanyl. Fentanyl, which is 50 times more powerful than...

• DuckDuckGo – accessed 3/5/19

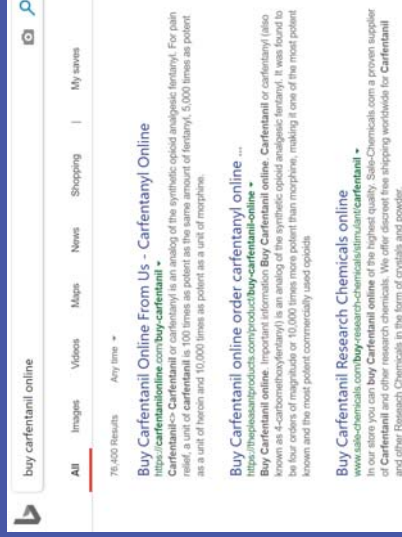
buy fentanyl powder online - Omegax research chemicals  
<https://omegaxresearchchem.com/product/buy-fentanyl-powder-online/>  
 For a short time after you receive fentanyl, using other medicines that make you sleepy or slow your breathing can cause dangerous or life-threatening side effects. Ask your doctor before taking a sleeping pill, narcotic pain medicine, muscle relaxer, or medicine for anxiety, depression, or seizures.

The Surprising Ease of Buying Fentanyl Online - The Atlantic  
<https://www.theatlantic.com/health/archive/2018/01/the-surprising-ease-of-buying-fen...>  
 The Surprising Ease of Buying Fentanyl Online. Subcommittee on Investigations Googled "buy fentanyl online" on the open internet, then honed in on the six sites that were most responsive...

Home - Buy Fentanyl Online  
<https://fentanylvendor.com>  
 Fentanyl supplier specializing in Patches, Powder, Pills, lozenges and Injection solutions. We provide original top branded Fentanyl products in their official packaging and also generic alternatives with at least 99% purity.

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- Bing – accessed 3/13/19



## May 2019 Office of National Drug Control Policy



Nine strategic goals and objectives to reduce the demand for, and availability of, illicit drugs and their consequences

[https://www.whitehouse.gov/wp-content/uploads/2019/05/ONDSCP\\_PRS.pdf](https://www.whitehouse.gov/wp-content/uploads/2019/05/ONDSCP_PRS.pdf) accessed 5/9/19

1. Reduce the number of drug overdose deaths by 15 percent within 5 years
2. Educate the public, especially adolescents, about drug use, specifically opioids by 2022
  - a) Reduce the rate of past year use of any illicit drug among youth by 15%
  - b) Reduce the rate of past year use of opioids among youth by 15%
3. Evidence-based addiction treatment, including Medication-Assisted Treatment for opioid addiction, is more accessible nationwide within 5 yrs
  - a) Increase percentage of specialty treatment facilities by 100%
  - b) Increase percentage of buprenorphine prescribers by 10%
4. Increase mandatory prescriber education and continuing training on best practices and current clinical guidelines
5. Reduce opioid prescription fills by 33% within 3 years and maintain that reduction in years 4 and 5

6. Increase Prescription Drug Monitoring Program interoperability and usage
  - a) Increase the number of states integrating electronic health records with their Prescription Drug Monitoring Programs to 30 by 2022
7. Significantly reduce availability of US illicit drugs preventing production outside the United States within 5 years
  - a) Reduce potential production of cocaine (pure metric tons) in Colombia by 42%
  - b) Reduce potential production of heroin (pure metric tons) in Mexico by 25%
8. Significantly reduce the availability of illicit drugs in the United States by disrupting their sale on the internet, and stopping their flow into the country through the mail and express courier environments, and across our borders

9. Illicit drugs are less available in the United States as reflected in increased price and decreased purity as measured by price per pure gram by 2022
- a) Average price per pure gram of cocaine to \$250
  - b) Average price per pure gram of heroin to \$1,400
  - c) Average price per pure gram of methamphetamine to \$120
  - d) Cost of fentanyl (purity not known) per kilogram to customers by 10%

## Are We Making a Difference?

JAMA article published February 2019 giving prediction for change from 2015 – 2025

- annual opioid overdose deaths projected to increase from 33,100 to 81,700 (147% increase)
- 700,400 deaths from opioid overdose predicted (80% attributable to illicit opioids)
- 61% increase in the number of illicit opioid users (0.93 million to 1.50 million)
- Combining all interventions, the incidence of **prescription** opioid misuse from 2015 levels is projected to decrease **overdose deaths** by only 3.0% to 5.3%

<https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2723405> accessed 5/8/19

## What can I do as a business?

- Cameras in key locations
- Drug testing
- Use of outside consultants (expensive, cost vs benefits?)
- Secure storage and delivery
- Waste disposal (Cactus sinks, RxDestroyer, Drug Dispose All, etc.)
- Become a DEA Public Controlled Substance Disposal Location
- Diversion monitoring software – statistically assess use [probably not a viable option at a retail community location]

## What can I do as a pharmacist or technician?

- Monitor “days supply” and early refills
- Do they usually have insurance but are paying for opiate prescriptions out of pocket?
- Be receptive and non-judgmental – give them a chance to ask for help
- You’re the medication expert--share your knowledge
- Operation Prevention: <https://www.operationprevention.com/>
- National Institute on Drug Abuse: <https://teens.drugabuse.gov/>
- Partnership for Drug-Free Kids: <https://drugfree.org/>
- Health Resources & Services Administration: <https://www.hrsa.gov/opioids>

## Assessment

Efforts of some governmental agencies and regulatory groups may have inadvertently contributed to the current opioid epidemic?

T/F

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T

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Which of the following is accurate related to the opioid epidemic?

- There has been an overall reduction in “heroin” related overdose deaths since 2006
- Total deaths from opioid prescriptions in 2017 was significantly less than 2016.
- There has been an marked overall increase in “other synthetic opioids” related overdose deaths since 2006
- Use of marijuana has proven to increase the risk of opioid related deaths.

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Which of the following contributed to a decrease in the incidence of oxycodone overdose deaths?

- Regulation of pain clinics and implementation of PDMP in Florida
- Revocation of New York's PDMP requirement
- Tennessee's requirement for two physicians to co-sign all CII prescriptions
- Conversion by the DEA of oxycodone from a CII to a CIII

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Steps to reduce drug diversion at the local level might include:

- Ensure doses are wasted into red sharps containers
- Retrospective review of statistical analysis
- Decreased regulatory agency reporting
- Destruction of all returned narcotics in-house by pharmacy staff

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Which of the following is true regarding the current opioid epidemic?

- a. Efforts to date have resulted in limited reductions in use of opioids
- b. Lack of regulation in Texas led to higher opioid-related deaths than at the national average
- c. Bexar County has one of the highest incidents of opioid-related deaths in Texas
- d. Small towns and rural communities experience a lower incidence of opioid-related deaths than large metropolitan areas

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Questions???

