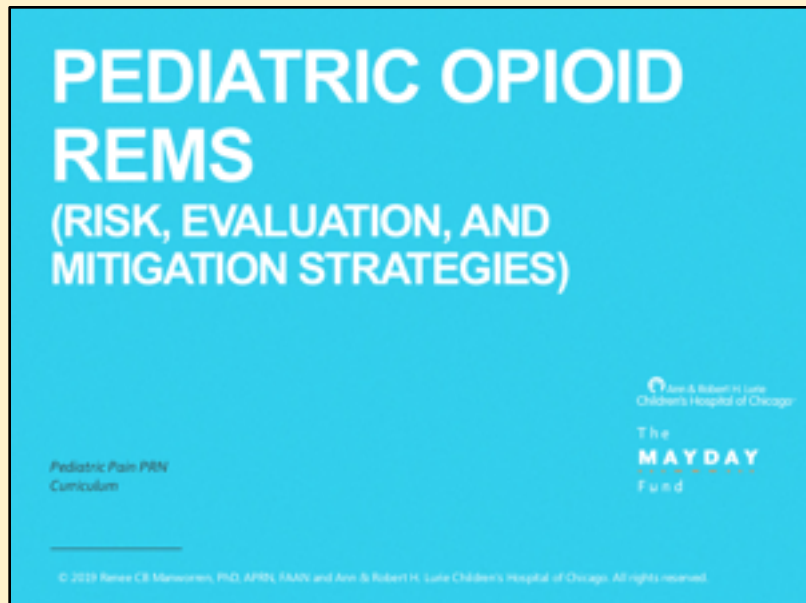


PRN Program: Opioids



Materials:

- Flip chart or whiteboard
- Markers
- Provide participant guide at least one week in advance

Room Setup:

- In tables of 4 or 6-8 depending on number of participants
- Display slide as participants walk in
- This session is 45 minutes

Welcome and Introductions: *Introduce facilitator if necessary*

READ: The learning objectives for this section are:

1. Define substance misuse, abuse, addiction, tolerance, physical dependence, and pseudo-addiction:
2. Develop a plan of care for patients requiring opioids as a medication in their multimodal pain treatment plan, include: risk assessment, monitoring for misuse, adverse effects, and safe methods to discontinue opioids if ineffective for treating pain or abuse identified.
3. Educate healthcare providers, patients, parents/guardians & the public on methods to secure, monitor & dispose of opioids.

PRN Program: Opioids

Opioids

Opioids are indicated for severe pain

Healthcare professionals must advocate for:

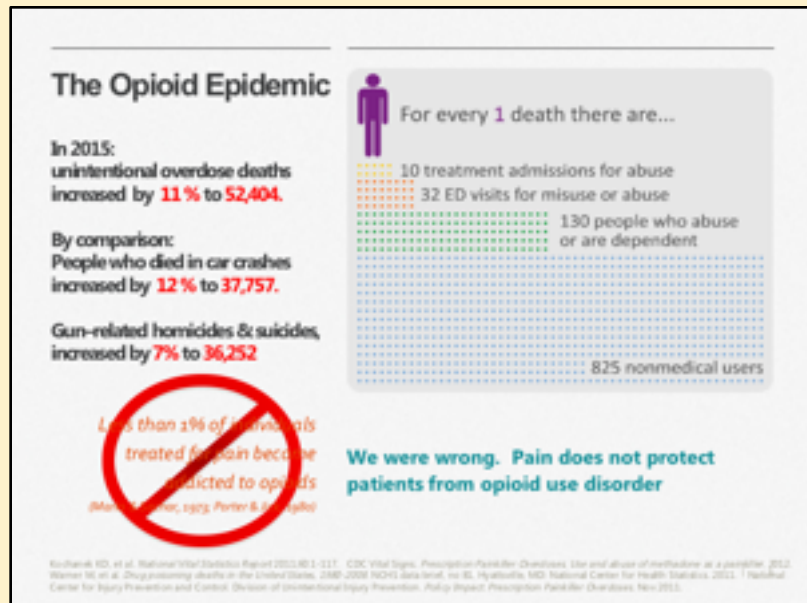
- Appropriate multimodal pain and opioid risk assessment,
- Optimal pain treatment, and
- Monitoring for adverse opioid effects
 - Sedation, Respiratory depression
 - Opioid use disorder
 - Constipation
- Anticipatory guidance for safe opioid use at home



READ:

- Healthcare professionals must advocate for appropriate pain assessment and optimal multimodal pain treatment, which may include the use of opioids.
- Healthcare professionals must also monitor for adverse treatment effects, including adverse effects from opioids, like respiratory depression and opioid use disorder.
- Healthcare professionals are critical for providing anticipatory guidance for safe opioid use at home.

PRN Program: Opioids



READ:

- Prescription opioid misuse and opioid use disorder are at epidemic levels, and deaths from opioid misuse now outnumber deaths from car crashes.
- We were wrong. Pain does not protect patients from opioid use disorder. In the US, estimates of substance use disorder range from 6 to 15% . Therefore the risk of opioid use disorder in the general population is 6 to 15%; NOT less than 1% as many of us were taught.
- Healthcare professionals can dramatically curb opioid misuse by communicating the facts, monitoring opioid use, and providing patients and families with evidence-based anticipatory guidance

PRN Program: Opioids



Differentiate between the following terms:

- Drug abuse
- Drug misuse
- Nonmedical use
- Drug diversion
- Tolerance
- Physical dependence
- Pseudo-addiction
- Addiction
- Substance use disorder

READ: These terms are often used interchangeably despite their different definitions, which contributes to confusion among healthcare professionals.

ASK: What is the difference between the following terms:

For each pair of terms, select participants willing to share their definition [Limit to 1 min/pair]

- Drug abuse and Drug misuse
- Nonmedical use and Drug diversion
- Tolerance, physical dependence and pseudo-addiction
- Addiction and substance use disorder

[10 MINUTES of 45 minute session is complete]

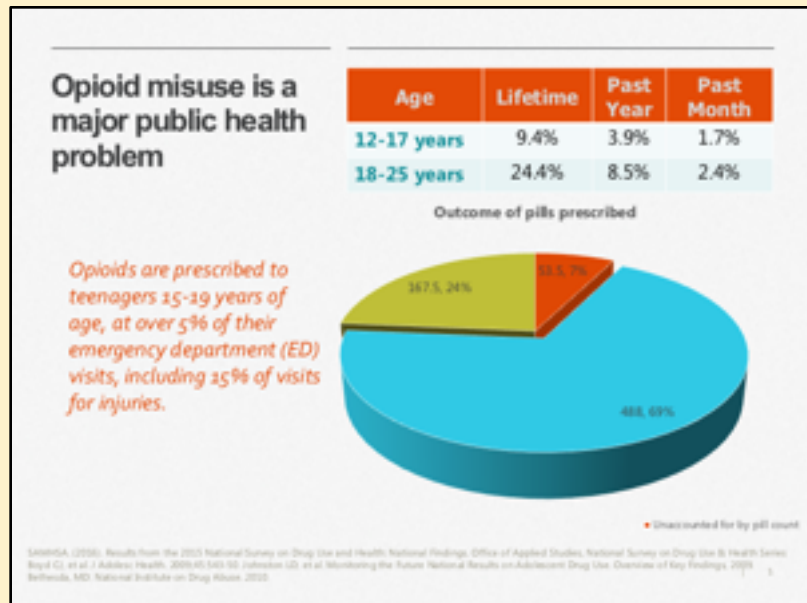
These are the specific differences If clarification is needed:

- **Abuse** is use of a drug for nontherapeutic, recreational purposes, psychotropic, or euphoric effects whereas **Misuse** is use of a drug prescribed for a medical purpose in a manner inconsistent with its intended purpose or prescribed use.
- **Nonmedical use** is use of a prescription drug by someone other than the person for whom it was prescribed, or in a manner for which it was not prescribed—for example, to achieve a euphoric effect, increasing dose without prescriber approval, unknowingly taking a larger dose than directed (misuse), or using the drug to attempt suicide or to make a suicidal gesture (suicide not intended), whereas **Drug diversion** is the illicit redirection of legitimately prescribed drugs.
- **Tolerance** is the need for increased amounts of the drug in order to achieve the same therapeutic effects, whereas **physical dependence** is a physiologic and biochemical adaptation of neurons to the drug and **abstinence** from the drug precipitates symptoms of **withdrawal**.
- **Pseudoaddiction** is vigilance in timing (watching the clock) and drug dose, often due to undertreatment of pain. This resolves when pain is controlled or relieved.
- In contrast, **Addiction** is a primary chronic neurobiological disease of reward, motivation, and memory and related circuitry, characterized by the “four Cs”: Compulsive use, impaired Control over use, Continued use despite harm, and strong Craving.; **Substance use disorder** is a newer term that replaces addiction. **This** is a maladaptive pattern of substance use leading to clinically significant impairment or distress, demonstrated by a recurrence of 2 or more of the events or behaviors listed in your participant guide within a year.

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PRN Program: Opioids



READ:

- Leftover prescription opioids are a common source of misused opioids
- For example: Of 749 oxycodone and hydrocodone pills dispensed to 49 adolescents after appendectomy, 167.5 (24%) were reported as used as prescribed, 53.5 pills (8%) were unaccounted for by pill count, and 488 pills (68% or 2/3rd of the number prescribed) were returned to families for disposal.
- Over 1% of teenagers 12-17 years of age report opioid misuse in the past month, 19% in the past year, and almost 10% during their short lifetime
- By 25 years of age 1 in 4 young adults report that they have misused prescription opioids.

PRN Program: Opioids



READ: With your **table** discuss your answers to the question on this slide, and discuss how you could systemize this anticipatory guidance for securing opioids in patient's homes. Select a participant willing to share your groups' answers. ***This is a 5 minute activity.***

[Give groups 5 minutes to discuss]

Select groups to share their answers

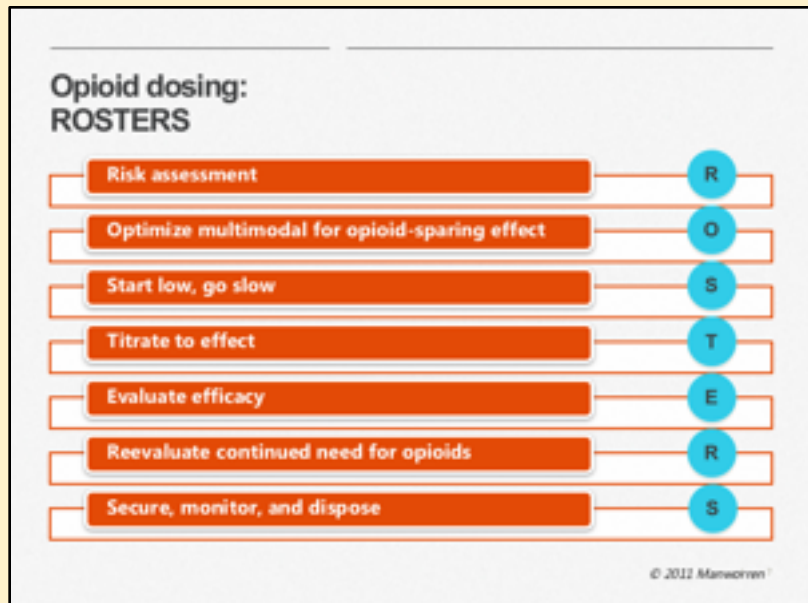
[Limit to 1 minute/group; total of 4 minutes]

READ:

Make sure you always include instructions to keep medications in a SECURE place, (for example a locked cabinet or medication safe) and to
Dispose of unneeded medications by taking them to a drug disposal site

[20 MINUTES of 45 minute session is complete]

PRN Program: Opioids



READ:

ROSTERS is an acronym of steps for opioid prescribing; and monitoring your roster of patients prescribed opioids.

READ: *slide*

PRN Program: Opioids

**Prescribed
Use or
Abuse?**


READ:

Over the next 10 minutes, we will review urine drug testing as a method used to monitor for use of prescribed opioids or opioids abuse.

As covered in your participant materials, we will analyze urine drug testing results and discuss next steps in the care of these simulated patients.

PRN Program: Opioids

Monitor opioid use



Obtain random urine drug screenings to:

- Help identify drug misuse before and during opioid treatment
- Confirm prescribed opioid use.
- Support decision to refer.

Testing frequency is based on clinical judgment.

If patient displays aberrant behavior, UDT alone is not sufficient to document adherence to treatment plan.

Check state regulations for requirements.

READ: State laws may have specific requirements for monitoring opioid use. For example, some states require the prescription drug monitoring program be checked before every opioid prescription; other states require more limited checks, and still others don't legally require checks. **Be aware of the requirements in your state.**

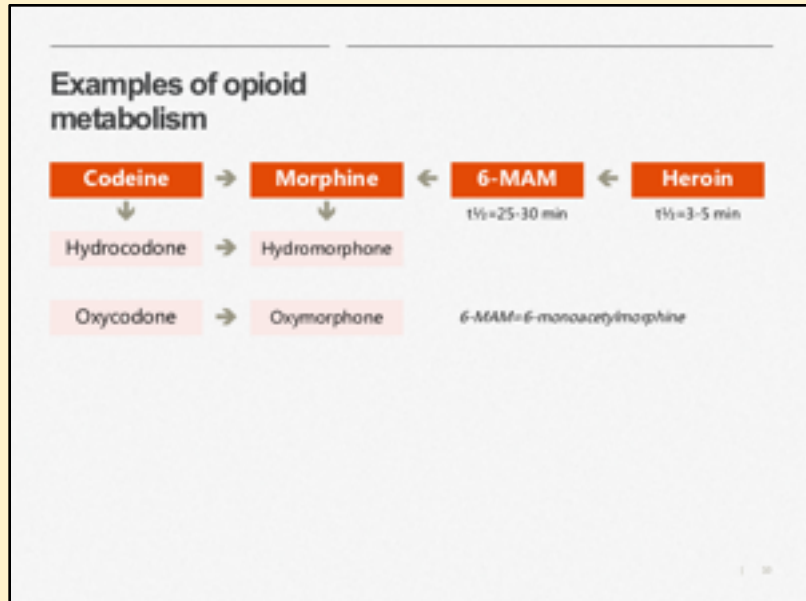
ASK: How often should patients receiving prescribed opioids have urine drug testing in order to confirm the patient is actually taking the prescribed opioid?

Select participants willing to share their responses to these questions.

*Write on flipchart or board **[Limit to 2 minute]***

READ: While testing frequency is based on clinical judgment, a standard should be established to prevent biased testing of individuals of certain gender, age, race/ethnicity, diagnosis, or socioeconomic status.

PRN Program: Opioids



READ:

This slide shows some examples of opioid metabolism. It is not a diagram of comprehensive pathways, but may explain presence of apparently un-prescribed drugs.

I'll use the first case as an example of how to read and interpret urine drug test results.

PRN Program: Opioids

Medication prescribed: Oxycodone				
Analyte	Results	Comment	Cut-off	Unit
Amphetamines	Negative		500	ng/mL
Barbiturates	Negative		200	ng/mL
Benzodiazepines	Negative		75	ng/mL
Buprenorphine/metabolite	Negative		5	ng/mL
Cannabinoids	Negative		20	ng/mL
Cocaine metabolite	Negative		150	ng/mL
Fentanyl	Negative		1.0	ng/mL
Methadone metabolite	Negative		100	ng/mL
Opiates	POSITIVE		50	ng/mL
• Hydrocodone, Quant	POSITIVE	INCONSISTENT 145	10	ng/mL
• Hydromorphone, Quant	POSITIVE	INCONSISTENT 68	10	ng/mL
• Oxycodone	Negative	INCONSISTENT	10	ng/mL
• Oxymorphone	Negative		10	ng/mL
Alcohols	Negative		0.02	%
Acetaminophen	Negative		10	ug/mL
Creatinine	Normal	50	5	mg/dL
pH		6.8		

READ: Oxycodone was prescribed as noted at top of slide. If oxycodone was taken in the past 2-3 days, the urine drug test will be opiate, oxycodone & oxymorphone positive. The results show urine is opiate positive, but negative for oxycodone and it's metabolite, oxymorphone. Unexpectedly, hydrocodone and it's metabolite, hydromorphone, are detected in the urine! Hydromorphone is also an opiate. These urine drug test results suggest the patient has not taken the prescribed oxycodone, but **has** taken hydrocodone and **may** have taken hydromorphone in the last 2-3 days.

ASK: So now what do you want to do?

READ: Raise your hand to indicate which of these 4 actions you would recommend:

1. Discontinue prescribing and report patient/family to authorities
2. Refer patient/family to a substance abuse treatment program
3. Share finding with patient and/or family (based on laws) and assess suspected lack of treatment plan adherence
4. Prescribe oxycodone for a limited time to wean patient off opioids and establish another treatment plan.

PRN Program: Opioids

Medication prescribed: Oxycodone				
Analyte	Results	Comment	Cut-off	Unit
Amphetamines	Negative		500	ng/mL
Barbiturates	Negative		200	ng/mL
Benzodiazepines	Negative		75	ng/mL
Buprenorphine/metabolite	Negative		5	ng/mL
Cannabinoids	Negative		20	ng/mL
Cocaine metabolite	Negative		150	ng/mL
Fentanyl	Negative		1.0	ng/mL
Methadone metabolite	Negative		100	ng/mL
Opiates	POSITIVE		50	ng/mL
• Hydrocodone	Negative		10	ng/mL
• Hydromorphone	Negative		10	ng/mL
• Oxycodone, Quant	POSITIVE	CONSISTENT, 52	10	ng/mL
• Oxymorphone, Quant	POSITIVE	CONSISTENT, 36	10	ng/mL
Alcohols	Negative		0.02	%
Acetaminophen	Negative		10	ug/mL
Creatinine	Normal	50	5	mg/dL
pH		6.8		

ASK: Who wants to explain these results to the group?

Select participants willing to share their responses to this question.

Write on flipchart or board [Limit to 2 minute]

READ: Case interpretation (*if not included by participants*):

Oxycodone was prescribed as noted at top of slide.

If oxycodone was taken in the past 2-3 days, the urine drug test will be opiate, oxycodone and oxymorphone positive and negative for other opioids and opiate metabolites.

These urine drug test results suggest the patient has taken oxycodone in the last 2-3 days.

READ: We can NOT determine if the patient took the right dose at the right time and the right frequency.

PRN Program: Opioids

Medication prescribed: Morphine				
Analyte	Results	Comment	Cut-off	Unit
Amphetamines	Negative		500	ng/mL
Barbiturates	Negative		200	ng/mL
Benzodiazepines	Negative		75	ng/mL
Buprenorphine/metabolite	Negative		5	ng/mL
Cannabinoids	Negative		20	ng/mL
Cocaine metabolite	Negative		150	ng/mL
Fentanyl	Negative		1.0	ng/mL
Methadone metabolite	Negative		100	ng/mL
Opiates	POSITIVE		50	ng/mL
• Morphine, Quant	POSITIVE	CONSISTENT, 10,000	10	ng/mL
• 6-monoacetylmorphine, Quant	POSITIVE	INCONSISTENT, 985	10	ng/mL
• Codeine, quant	Negative	INCONSISTENT, 852	10	ng/mL
Alcohols	Negative		0.02	%
Acetaminophen	Negative		10	ug/mL
Creatinine	Normal	50	5	mg/dL
pH		6.8		

ASK: Who wants to explain these results to the group?

Select participants willing to share their response to this question.

Write on flipchart or board [Limit to 2 minute]

READ: Case interpretation (**if not included by participants**):

Morphine was prescribed as noted at top of slide.

If morphine was taken in the past 2-3 days, the urine drug test will be opiate and morphine positive, and negative for other opioids and opiate metabolites.

This urine drug test indicates the patient is positive for morphine and 6-MAM,

These results suggest the patient has taken heroin and may or may not have also taken morphine

ASK: What is your next recommendation?

READ: Key point (**if not included by participants**):

This patient should be immediately referred for substance abuse treatment program

PRN Program: Opioids

Medication prescribed: Methadone				
Analyte	Results	Comment	Cut-off	Unit
Amphetamines	Negative		500	ng/mL
Barbiturates	Negative		200	ng/mL
Benzodiazepines	Negative		75	ng/mL
Buprenorphine/metabolite	Negative		5	ng/mL
Cannabinoids	Negative		20	ng/mL
Cocaine metabolite	Negative		150	ng/mL
Fentanyl	Negative		1.0	ng/mL
Methadone metabolite, Quant	POSITIVE	CONSISTENT, >50,000	100	ng/mL
EDDP	NEGATIVE	INCONSISTENT	100	ng/mL
Opiates	POSITIVE		50	ng/mL
• Oxycodone	POSITIVE	INCONSISTENT	10	ng/mL
Alcohols	Negative		602	%
Acetaminophen	Negative		10	ug/mL
Creatinine	Normal	50	5	mg/dL
pH		6.8		

ASK: Who wants to explain these results to the group?

Select participants willing to share their responses to this question.

Write on flipchart or board [Limit to 2 minutes]

READ: Case interpretation (**if not included by participants**):


Methadone was prescribed as noted at top of slide.

If methadone was taken in the past 2-3 days, the urine drug test will be opiate, methadone, and EDDP positive, and negative for other opioids and opiate metabolites. This urine drug test indicates the patient is positive for oxycodone and methadone but not it's metabolite. These results suggest the patient may have slipped methadone into the urine test cup without taking it by mouth. The oxycodone metabolite is not listed, but oxycodone wasn't prescribed and so it should not be present.

[30 MINUTES of 45 minute session is complete]

PRN Program: Opioids

Iatrogenic
Withdrawal
Syndrome (IWS)



Increased risk after 5 days of continuous opioid or benzodiazepine infusion

Use Standardized instruments when weaning opioids or benzodiazepines infused ≥ 5 days

- Withdrawal Assessment Tool version 1 (WAT-1) (ICU only)
- Sophia Observation withdrawal Symptoms-scale (SOS)
- Modified Finnegan
- Neonatal abstinence scale

Increased risk of tolerance and physical dependence with prolonged infusions of short-acting opioids

READ: To prevent or reduce opioid tolerance and reduce cases of Iatrogenic withdrawal syndrome, expose critically ill patients to fewer days of opioids and sedative drugs.

- Titrate opioids to adequate pain management and adjust to minimally effective doses
- Frequently re-evaluate if continued use is needed
- Use longer-acting opioids for persistent pain
- Consider daily interruption of sedatives
- Gradually wean patients at risk
- Recommendations range from 10% of current dose every other day to 20% of total dose every day
- Pharmacological treatments such as methadone, and clonidine (alternatives e.g. dexmedetomidine, buprenorphine)


PRN Program: Opioids

**Education
about Opioids**

READ:

Evidence identifies teach back as the most effective method of ensuring patient/family understanding of instructions and care plan.

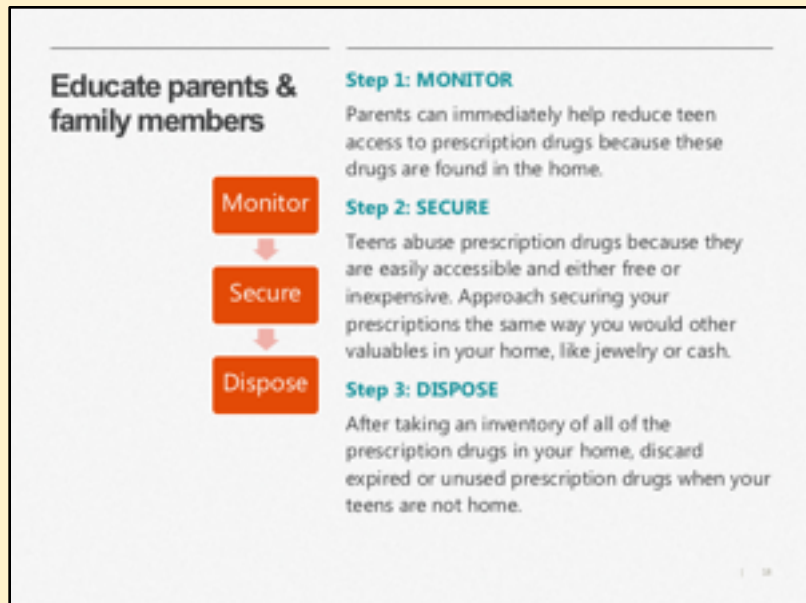
PRN Program: Opioids

Educate patients and families	Caution patients
	<ul style="list-style-type: none">• Sharing opioids with others may cause them to have serious adverse effects, including death• Selling or giving away opioids is against the law.
	Storage
	<ul style="list-style-type: none">• Store opioids in a safe and secure place• Dispose of any opioids when no longer needed• Read product-specific disposal information included• May be flushed if drug take-back program not immediately available

READ:

- Teach patients and families the intended and appropriate use of the opioids for the patient's specific need.
- Be sure to include cautions about diversion and help families determine where and how they will secure and dispose of opioids.

PRN Program: Opioids



READ: Ready availability of prescription drugs in patients' own homes reinforces the need for education targeting parents and family members to safeguard and monitor prescription drugs in their homes so they do not act as "unintentional enablers."

Step 1: MONITOR

- Note how many pills in each prescription bottle or pill packet
- Keep track of refills for all household members
- If your teen has been prescribed a drug, coordinate & monitor dosages and refills

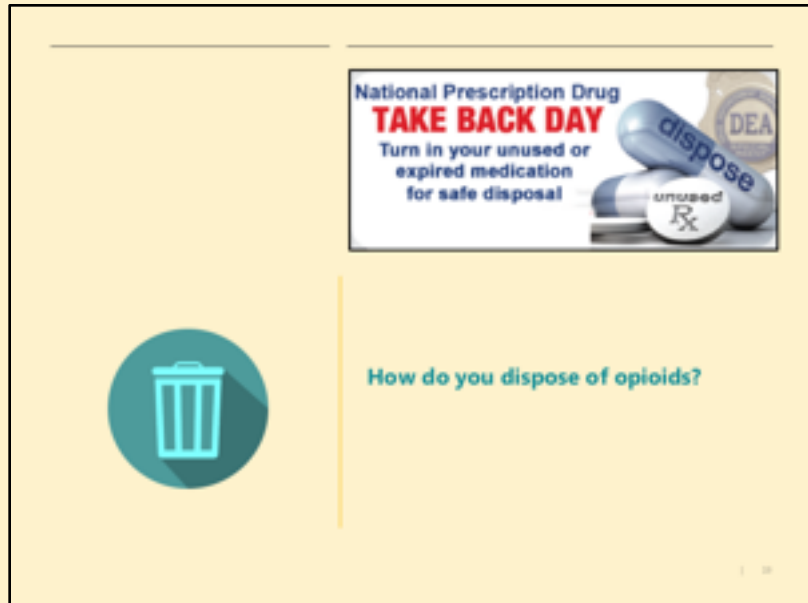
Step 2: SECURE

- Do not store prescription drugs in the medicine cabinet
- Keep prescription drugs in a safe place (eg, locked cabinet)
- Tell friends and relatives to lock meds or keep in a safe place
- Encourage parents of your teen's friends to secure meds

Step 3: DISPOSE

- Take inventory of all prescription drugs in your home
- Discard expired or unused meds

PRN Program: Opioids



ASK: How do you dispose of opioids?

Select participants willing to share their responses to this question.

[Limit to 5 minutes]

[40 MINUTES of 45 minute session is complete]

PRN Program: Opioids



READ:

Here is the website for DEA approved take-back sites.
Simply type zip code into website to find a site.
Try it now on your mobile phone.

If there is not a disposal program readily available,
instruct caregivers to:

- Flush medications that could be dangerous to a child or pet- this includes ALL opioids!
- OR

PRN Program: Opioids



READ:

Mix medications with an undesirable substance, (like coffee grounds), put in a sealed plastic bag, and throw them out in the trash

PRN Program: Opioids




READ:

Be ready to refer for substance abuse treatment

Try to find referral programs now on your mobile phone.

PRN Program: Opioids

Key Points



Check the prescription drug monitoring program (PDMP)

Opioids are indicated for severe pain and healthcare professionals must advocate for appropriate pain assessment, optimal multimodal pain treatment and monitor for adverse treatment effects including adverse effects from opioids.

There is an opioid epidemic

- Almost 1 in 4 young adults report non-medical use of opioids during their lifetime.
- Legitimately prescribed opioid use before high school graduation is independently associated with a 35% increase in risk of future opioid misuse as a young adult (before 23 years of age).

Opioid dosing: ROSTERS

- Risk assessment
- Optimize multimodal for opioid-sparing effect
- Start low, go slow
- Titrate to effect
- Evaluate efficacy
- Reevaluate continued need for opioids
- Secure, monitor, and dispose

Educate: What to Do

Educate parents on how to:

1. Secure the medications
2. Monitor opioid usage
3. Dispose of unused drugs
 - Take Back Days
 - DEA approved take-back sites
 - Disposal or Flush

Refer for substance use disorder treatment

READ: *The key points on the slide*

PRN Program: Assessment of Pain



- How would you rate your ability to develop a plan of care for patients requiring opioids?
- What resources do you need for your team to systemize anticipatory guidance for securing opioids in patients' homes?
- What is your next step?

ASK: Are there any questions?

[45 MINUTES SESSION COMPLETE]