PQC-VT Webinar Series 2022-2023

VERMONT DEPARTMENT OF HEALTH

PERINATAL QUALITY COLLABORATIVE VERMONT

THE University of Vermont MEDICAL CENTER

VCHIP VERMONT CHILD HEALTH IMPROVEMENT PROGRAM
The University of Vermont | LARNER COLLEGE OF MEDICINE

Best Practices on Substance Use Screening

Michelle Shepard, MD
Marjorie Meyer, MD
Megan Mitchell, LCSW
Tony Folland

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Reminders

- Please mute yourself upon entry and keep yourself muted while listening.
- You are welcome to ask questions throughout the presentation. Feel free to use the chat function, raise your hand, or unmute to ask your question directly.
- This presentation will be recorded and will be available for view on our website. The recording will be emailed to registrants along with a short satisfaction survey.

Why screen during pregnancy?

- Vermont has some of the highest rates of substance use during pregnancy
- Impacts current and future health of individual and infant
- Universal screening of can identify substance use (and use disorders)
- Brief screening tools are available
- It's the standard of care!

Substance use in pregnant Vermonters

PRAMS data (2019)

- Tobacco: 15% smoking in the 3rd trimester (24% in 3 months prior to pregnancy)
- Alcohol: 11% drank during pregnancy (68% in 3 months prior to pregnancy)
- Cannabis: 10% used during pregnancy
- Prescription pain medications: 3% used during pregnancy
- 86% were asked about drug use!

https://www.healthvermont.gov/sites/default/files/documents/pdf/HS-Stats-PRAMS-Overview-2018.pdf

Substance Use Screening

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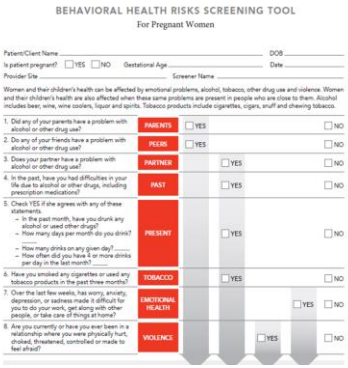
Drug Testing



BEHAVIORAL HEALTH RISKS SCREENING TOOL

For Pregnant Women

Patient/Client Name _____ DOB _____

Is patient pregnant? ☐YES ☐NO Gestational Age _____ Date _____

Provider Site _____ Screener Name _____

Women and their children's health can be affected by emotional problems, alcohol, tobacco, other drug use and violence. Women and their children's health are also affected when these same problems are present in people who are close to them. Alcohol includes beer, wine, wine coolers, liquor and spirits. Tobacco products include cigarettes, cigars, snuff and chewing tobacco.

1. Did any of your parents have a problem with alcohol or other drug use?	PARENTS	☐YES						☐NO	
2. Do any of your friends have a problem with alcohol or other drug use?	PEERS	☐YES						☐NO	
3. Does your partner have a problem with alcohol or other drug use?	PARTNER			☐YES				☐NO	
4. In the past, have you had difficulties in your life due to alcohol or other drugs, including prescription medications?	PAST			☐YES				☐NO	
5. Check YES if she agrees with any of these statements. – In the past month, have you drunk any alcohol or used other drugs? – How many days per month do you drink? _____ – How many drinks on any given day? _____ – How often did you have 4 or more drinks per day in the last month? _____	PRESENT			☐YES				☐NO	
6. Have you smoked any cigarettes or used any tobacco products in the past three months?	TOBACCO			☐YES				☐NO	
7. Over the last few weeks, has worry, anxiety, depression, or sadness made it difficult for you to do your work, get along with other people, or take care of things at home?	EMOTIONAL HEALTH					☐YES		☐NO	
8. Are you currently or have you ever been in a relationship where you were physically hurt, choked, threatened, controlled or made to feel afraid?	VIOLENCE				☐YES			☐NO	

American Academy of Pediatrics

FROM THE AMERICAN ACADEMY OF PEDIATRICS | POLICY STATEMENT | MARCH 01 2017

A Public Health Response to Opioid Use in Pregnancy

Stephen W. Patrick, MD ✉; Davida M. Schiff, MD; COMMITTEE ON SUBSTANCE USE AND PREVENTION; Sheryl A. Ryan, MD; Joanna Quigley, MD; Pamela K. Gonzalez, MD; Leslie R. Walker, MD

"The treatment of pregnant women with substance use disorder requires a coordinated, evidence-based, public health approach. The AAP reaffirms its position that punitive measures taken toward pregnant (people) are not in the best interest of the health of the (parent)-infant dyad."

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"The ACOG policy that universal substance use screening of all pregnant (people) via validated screening tools such as questionnaires should occur at routine health care visits and at several points throughout prenatal care and be applied equally to all (pregnant people), regardless of age, race, ethnicity, or socioeconomic status, should be supported."

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Academy of Breastfeeding Medicine

BREASTFEEDING MEDICINE
Volume 10, Number 3, 2015

DOI: 10.1089/bfm.2015.9992

ABM Protocol

ABM Clinical Protocol #21: Guidelines for Breastfeeding and Substance Use or Substance Use Disorder, Revised 2015

Sarah Reece-Stremtan,[1,2] Kathleen A. Marinelli,[3,4] and The Academy of Breastfeeding Medicine

"Infants of (pregnant people) with substance use disorders, at risk for multiple health and developmental difficulties, stand to benefit substantially from breastfeeding and human milk, as do their parents. A prenatal plan preparing the (pregnant person) for parenting, breastfeeding, and substance abuse treatment should be formulated through individualized, patient-centered discussions with each (individual)."

Properties of Screening Tools

- Sensitivity: ability of a test to correctly identify those with the disease (true positive rate)
- Specificity: ability of the test to correctly identify those without the disease (true negative rate)
- Reliability: ability to produce consistent results
- Validity: ability to discriminates between individuals with and without a problem

Screening vs. Assessment Tools

Screening

- Evaluates the possible presence of a particular problem
- Can be simple yes/no
- Determines whether a more thorough evaluation is warranted.
- Many require little or no special training

Assessment

- Defines the nature of the problem
- Determines diagnosis (DSM-5 criteria)
- Used to develop specific treatment recommendations
- Many require special training to administer and interpret

How to choose a tool

- Choose based on cost, ease of giving screen, ability to incorporate into EHR and workflow
- Some tools are for use in general adult population, others are specifically geared towards pregnant people.
- Some tools are free, others are copyrighted and must be purchased

Examples of available tools

- ASSIST (Alcohol, Smoking, and Substance Involvement Screening Test)
  - Screening for tobacco, alcohol, cannabis, cocaine, amphetamine type stimulants, sedatives, hallucinogens, inhalants, opioids, and other drugs.

- Parents, partner, past and pregnancy (4Ps) and 4Ps Plus
  - 4Ps screens for drug, alcohol, and tobacco use among pregnant people.
  - The 4Ps Plus includes additional questions about depression and domestic violence.

Validated-Screening-Tools-Final.pdf

VALIDATED SCREENING TOOLS*

INDIANA PERINATAL QUALITY IMPROVEMENT COLLABORATIVE [IPQIC]

Name	Description	Primary Population	Links
Parents, Peers, Partner, Pregnancy, and Past (The 5Ps) **Recommended by IPQIC**	Screening tool that detects tobacco, alcohol, and drug use, as well as domestic violence among pregnant women and women of reproductive age. *Focus: Drug, alcohol, and tobacco use*	Pregnant women	5 Ps PSU Screening Tool.pdf
NIDA Quick Screen _____ Alcohol, Smoking and Substance Involvement Screening Test (NIDA-Modified ASSIST) **Recommended by ACOG**	Screening tools that detect alcohol, tobacco, and drug use; tools can be used sequentially based on the individual's substance involvement score. *Focus: Drug, alcohol, and tobacco use*	Adults including pregnant women	The NIDA Quick Screen | NIDA Archives (drugabuse.gov) NIDA Drug Screening Tool (drugabuse.gov)
Car, Relax, Alone, Forget, Friends, Trouble (CRAFFT) **Recommended by ACOG**	Screening tool that identifies alcohol, drug use and substance-related driving risk among adolescents and young adults. *Focus: Drug and alcohol use; driving risk*	Women 26 years or younger	CRAFFT
Parents, Partners, Past and Pregnancy (The 4Ps)	Screening tool developed to detect dug, alcohol, and tobacco use among pregnant women and women of childbearing age. The 4Ps Plus includes additional questions about depression and domestic violence. *Focus: Drug, alcohol, and tobacco use*	Pregnant women	About the 4P's Plus — NTI Upstream
Tolerance, Anger/annoyance, Cut Down, Eye-opener (T-ACE)	Four-item screening tool that identifies risk-drinking in pregnant women. *Focus: Alcohol use*	Pregnant Women	The T-ACE questions: practical prenatal detection of risk-drinking - PubMed (nih.gov) t-ace_alcohol_screen.pdf (va.gov)
Tolerance, Worried, Eye-opener, Amnesia, Cut Down (TWEAK)	Five-item instrument that screens for risk drinking among obstetric patients. *Focus: Alcohol use*	Pregnant women	TWEAK (nih.gov)
Alcohol Use Disorders Identification Test (AUDIT)	10-item questionnaire that screens for alcohol consumption and alcohol-related problems. *Focus: Alcohol use*	Adults including pregnant women	Alcohol Use Disorders Identification Test (AUDIT) (nih.gov) Alcohol Use Disorders Identification Test (AUDIT) (drugabuse.gov)
Drug Abuse Screening Test (DAST)	Self-administered instrument that detects substance use or substance use disorders Focus: Drug Use	Adults and older youth	Instrument: Drug Abuse Screening Test (DAST-10) | NIDA CTN Common Data Elements DAST-10 (drugabuse.gov)

5 P's

BEHAVIORAL HEALTH RISKS SCREENING TOOL

For Pregnant Women

Patient/Client Name _____ DOB _____

Is patient pregnant? ☐ YES ☐ NO Gestational Age _____ Date _____

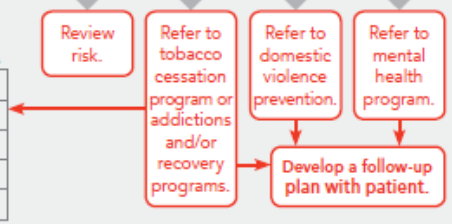
Provider Site _____ Screener Name _____

Women and their children's health can be affected by emotional problems, alcohol, tobacco, other drug use and violence. Women and their children's health are also affected when these same problems are present in people who are close to them. Alcohol includes beer, wine, wine coolers, liquor and spirits. Tobacco products include cigarettes, cigars, snuff and chewing tobacco.

1. Did any of your parents have a problem with alcohol or other drug use?	PARENTS	☐ YES	☐ NO
2. Do any of your friends have a problem with alcohol or other drug use?	PEERS	☐ YES	☐ NO
3. Does your partner have a problem with alcohol or other drug use?	PARTNER	☐ YES	☐ NO
4. In the past, have you had difficulties in your life due to alcohol or other drugs, including prescription medications?	PAST	☐ YES	☐ NO
5. Check YES if she agrees with any of these statements. – In the past month, have you drunk any alcohol or used other drugs? – How many days per month do you drink? ____ – How many drinks on any given day? ____ – How often did you have 4 or more drinks per day in the last month? ____	PRESENT	☐ YES	☐ NO
6. Have you smoked any cigarettes or used any tobacco products in the past three months?	TOBACCO	☐ YES	☐ NO
7. Over the last few weeks, has worry, anxiety, depression, or sadness made it difficult for you to do your work, get along with other people, or take care of things at home?	EMOTIONAL HEALTH	☐ YES	☐ NO
8. Are you currently or have you ever been in a relationship where you were physically hurt, choked, threatened, controlled or made to feel afraid?	VIOLENCE	☐ YES	☐ NO

PROVIDER USE ONLY

Brief Intervention/Brief Treatment	Y	N	NA
Did you **State** your medical concern?	☐	☐	☐
Did you **Advise** to abstain or reduce use?	☐	☐	☐
Did you **Check** patient's reaction?	☐	☐	☐
Did you **Refer** for further assessment?	☐	☐	☐
Did you **Provide** written information?	☐	☐	☐



Follow-up of positive screens

- Assess substance use further- assessment tool or interview
- Conduct a brief intervention using motivational interviewing
- Provide feedback and advice regarding cutting back or abstinence and facilitate goal setting by the patient
- Follow-up!!!!!

Substance Use Screening

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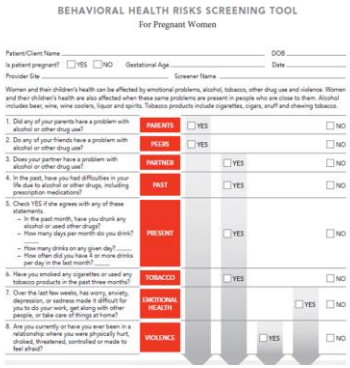
Drug Testing



BEHAVIORAL HEALTH RISKS SCREENING TOOL

For Pregnant Women

Patient/Client Name _____ DOB _____

Is patient pregnant? ☐YES ☐NO Gestational Age _____ Date _____

Provider Site _____ Screener Name _____

Women and their children's health can be affected by emotional problems, alcohol, tobacco, other drug use and violence. Women and their children's health are also affected when these same problems are present in people who are close to them. Alcohol includes beer, wine, wine coolers, liquor and spirits. Tobacco products include cigarettes, cigars, snuff and chewing tobacco.

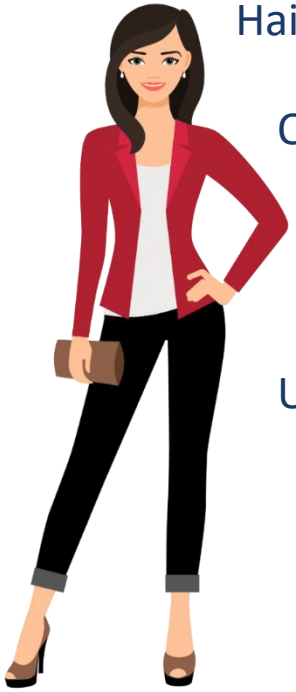
1. Did any of your parents have a problem with alcohol or other drug use?	PARENTS	☐YES			☐NO
2. Do any of your friends have a problem with alcohol or other drug use?	PEERS	☐YES			☐NO
3. Does your partner have a problem with alcohol or other drug use?	PARTNER		☐YES		☐NO
4. In the past, have you had difficulties in your life due to alcohol or other drugs, including prescription medications?	PAST		☐YES		☐NO
5. Check YES if she agrees with any of these statements. – In the past month, have you drunk any alcohol or used other drugs? – How many days per month do you drink? _____ – How many drinks on any given day? _____ – How often did you have 4 or more drinks per day in the last month? _____	PRESENT		☐YES		☐NO
6. Have you smoked any cigarettes or used any tobacco products in the past three months?	TOBACCO		☐YES		☐NO
7. Over the last few weeks, has worry, anxiety, depression, or sadness made it difficult for you to do your work, get along with other people, or take care of things at home?	EMOTIONAL HEALTH			☐YES	☐NO
8. Are you currently or have you ever been in a relationship where you were physically hurt, choked, threatened, controlled or made to feel afraid?	VIOLENCE			☐YES	☐NO

Know your test

- In the RARE cases where drug testing is indicated, make sure you know what the test you are using tells you
  - Screening tests are yes/no and cannot give you an amount
  - Confirmatory testing for positive screening tests helps identify false positives

- GET CONSENT and tell the parent who has access to the test results and the pros and cons of testing for themselves and their infant
  - Refusing a test is NOT a reason on its own to report to DCF

Sources of samples for testing



Hair

Oral Fluids

Blood

Urine

Most common body fluid used: Urine

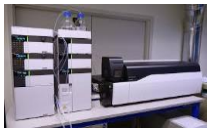
Pro's	Con's
• Easy access • Long window of detection • Broad test menus	• Difficult to establish time since last dose • Tampering issues arise

**the next few slides were adapted from a talk given by Dr. Jill Warrington and Dr. Clayton Wilburn for ICON in 2019

Traditional methods of testing

POCT

Lab immunoassays



Confirmation testing

	POCT	Lab immunoassays	Confirmation testing
Aka:	Screening cups Presumptive testing	Screening Presumptive testing	Definitive testing
Technique:	Immunoassay	Immunoassay	LCMSMS

Diagnostic Certainty: Low → High

Speed & Cost: High → Low

*Immunoassays rely on the ability of an antibody to detect a drug
Mass spectroscopy (MS) are chemical tests of drug metabolites

Drug *Target Analyte*	Detection Time in Urine [cutoff (ng/mL) initial; confirm]
Methamphetamine	
Analyte Not Specified	1–2 days [100] (single/infrequent use) 7–10 days [100] (prolonged use) 2–4 days [NS] (frequent use) 2–5 days [500; 250]
Amphetamine	2–4 days [1000; 200]
Methamphetamine	2–4 days [1000; 500] 1.5–6 days [2.5]
MDMA (Ecstasy)	
Analyte Not Specified	2 days [25] 1–3 days [NS]
MDMA	2 days [20]
Opiates	
Morphine	
Analyte Not Specified	2–5 days [300] 3 days [25] 1–3 days [NS]
Codeine	
Analyte Not Specified	1–3 days [300; 300] 1–2 days [300; 300] 3 days [25] 2–4 days [300]
Morphine	1–3 days [300; 300]
Oxymorphone	
Formulation Not Specified *Analyte Not Specified*	3 days [25]
Immediate-release *Analyte Not Specified*	36–60 hours [100]

Drug *Target Analyte*	Detection Time in Urine [cutoff (ng/mL) initial; confirm]
Methadone	
Analyte Not Specified	3–11 days [300] (maintenance dose)
Methadone	2–4 days [300; 300] 7 days [100]
EDDP	7 days [100]
Buprenorphine	
Analyte Not Specified	4 days [0.5]
Buprenorphine	7 days [0.5]
Norbuprenorphine	7 days [0.5]
Benzodiazepines	
Short Acting *Analyte Not Specified*	24 hours [300] 2 days [100]
Intermediate Acting *Analyte Not Specified*	1–12.5 days [300] 5 days [100]
Long Acting *Analyte Not Specified*	30 days [200; 200]

Drug *Target Analyte*	Detection Time in Urine [cutoff (ng/mL) initial; confirm]
Cannabis	
THC	1–3 days [100, 50, 20; 15] (casual use) 3 days [NS] (single use) 30 days [100, 50, 20; 15] (chronic use) 36 days [NS] (chronic heavy use)

Windows of Detection Table

Detection time in urine varies for every substance, be careful trying to estimate time since last use

[ASAM Drug Testing Pocket Guide - Drug Testing Pocket Guide (guidelinecentral.com)]

Common causes of false positives

Cross-reactivity of immunoassay (most common)

- Antibody
- Drug of interest
- Illicit drugs
- Over the Counter drugs
- Some foods/drinks
- Bacterial production (!)

Antibodies can (incorrectly) pick up on Some/any of these

Interfering substance in confirmation testing (very rare)

Unlike in immunoassay, this will be identifiable and called out on the patient report

False positives in amphetamine testing

Generally considered the test with the most false positives of any urine drug test*

Examples include:

Phentermine	MDA
Ephedrine	MDEA
Synephrine	MDMA
Pseudoephdrine	Erythro-dihydro buproprion
Phenylephrine	Hydroxy-buproprion
Trazodone metabolite	Ranitidine
Fenofibrate	Labetalol
Tranylcypromine	Dimethylamylamine (DMAA)

* Likely exception is fentanyl immunoassay

Hoffman RJ, Testing for Drugs of Abuse, UpToDate
J Anal Toxicol. 2016 Jan; 40(1): 37–42.
Gasgupta A, Hammett-Stabler. Herbal Supplements; ISBN-13: 978-0470433508

Infant testing

Sample Type	Exposure Period Evaluated	Pros	Cons
Urine	1-5 days surrounding birth	• Represents most recent exposure	• Difficult to collect • Little urine made in 1st 48h of life • Unique metabolism
Meconium	In-utero late 2nd Trimester on	• Longest exposure history • Gold Standard • Drug deposition well understood	• Difficult collection • Expulsion in-utero • Long TAT (sample prep) • Possible limited menu
Cord Tissue	In-utero (shorter than meconium)	• Simple collection • Always available • Expanded drug menu	• Drug deposition not well studied • Decreased diagnostic sensitivity

Take home points

- The American Academy of Pediatrics (AAP), the ACOG, and the American Society of Addiction Medicine recommend that all people considering pregnancy, pregnant individuals throughout their pregnancy, and those attending predelivery pediatric visits be screened routinely for substance use, using a validated screening questionnaire.

- Screening and brief intervention techniques are recommended to counsel and to refer those individuals' meeting criteria for substance use disorder for appropriate treatment

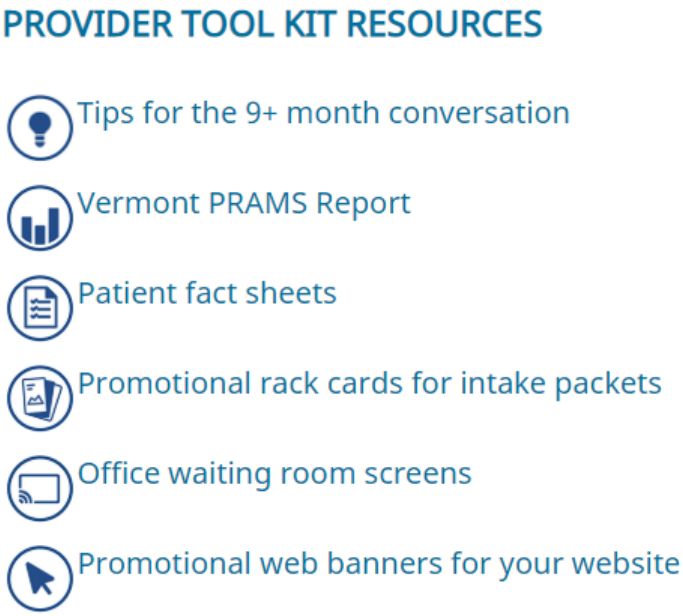
- Routine TESTING for substance use in pregnant individuals is NOT recommended

One More Conversation

Patient educational materials reviewed and revised by healthcare providers on:

- Alcohol
- Cannabis
- Opioids
- Tobacco

https://www.healthvermont.gov/family/pregnancy/substance-use-pregnancy



https://www.healthvermont.gov/family/pregnancy/substance-use-pregnancy-information-providers

One More Conversation Can Make The Difference

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NNEPQIN

NORTHERN NEW ENGLAND PERINATAL QUALITY IMPROVEMENT NETWORK

SCREENING FOR ALCOHOL, TOBACCO AND DRUG USE IN PREGNANCY - 2018 UPDATE

TOOLKIT FOR THE PERINATAL CARE OF WOMEN WITH SUBSTANCE USE DISORDERS - 2020 UPDATE

This toolkit was developed by a multidisciplinary group of obstetric, pediatric, neonatal, and addiction treatment providers and nurses to assist front-line perinatal care providers to improve the quality and safety of care provided to pregnant women with substance use disorders in northern New England.

- NNEPQIN_Toolkit_final
  - NNEPQIN_Toolkit_Section 1_Screening & Assessment
  - NNEPQIN_Toolkit_Section 2_By Substance
  - NNEPQIN_Toolkit_Section 3_Tools To Support Patients Needs
  - NNEPQIN_Toolkit_Section 4_QI & Best Practices
  - NNEPQIN_Toolkit_Section 5_Learning Opportunities
  - NNEPQIN_Toolkit_Section 6_Additional References

Resources

- Screening and Assessment Tools Chart | National Institute on Drug Abuse (NIDA) (nih.gov)
- Validated-Screening-Tools-Final.pdf
- ASAM Drug Testing Pocket Guide - Drug Testing Pocket Guide (guidelinecentral.com)
- https://vthelplink.org/app/Pregnant_and_Parenting
- National Center on Substance Abuse and Child Welfare: https://ncsacw.samhsa.gov/topics/pregnant-postpartum-women.aspx
- https://www.healthvermont.gov/sites/default/files/documents/pdf/HS-Stats-PRAMS-Overview-2018.pdf

Screening for opioid and illicit substances in pregnancy

- Screening based only on factors such as poor adherence to prenatal care or prior adverse pregnancy outcome can lead to missed cases, and may add to stereotyping and stigma
- Screening should be universal
- All women should be routinely asked about their use of alcohol and drugs, including prescription opioids and other medications used for nonmedical reasons.
- The patient should be informed that these questions are asked of all pregnant women to ensure they receive the care they require. Maintaining a caring and nonjudgmental approach, as well as screening when the patient is alone, are important and will yield the most inclusive disclosure.
- Obstetric care providers should protect patient autonomy, confidentiality, and the integrity of the patient–physician relationship to the extent allowable by laws regarding disclosure of substance use disorder (available at www.guttmacher.org/state-policy/explore/substance-abuse-during-pregnancy.
- Vermont: a positive warrants more information and assessment for treatment and counseling
- There is no DCF report unless there is concern for newborn well being; there may be an anonymous report to the state

ACOG, 2017

Substance use screening in pregnancy

All pregnant patients should be screened for substance use in pregnancy (licit and illicit)

Google Doodle honors Lucy Wills, an English haematologist whose discovery changed the face of preventive prenatal care for women

Lucy Wills, MD: identified that laboratory monkey's health improved after being fed the British breakfast spread Marmite, made of a cheap yeast extract.
Her discovery was the first step toward creation of folic acid. For many years it was the Wills Factor until folic acid was named in 1941 when it was isolated from spinach.

How To Screen for OUD: Validated Tools (* on NIDA website)

General SUD/OUD (not opiod specific)	OUD: Initial visit prescription	OUD: Refill an opioid prescription	OUD misuse risk: chronic pain and long term opioid therapy
NIDA Quick Screen+ASSIST* (any patient, any time)	Opioid Risk Tool (ORT*): initial visit prior to starting opioids for pain management: predicts risk for future opioid abuse before initial prescription	Prescription Drug Use Questionnaire (self report): predicts opioid misuse or dependence with pts with chronic pain on opioid therapy	Addiction Behaviors Checklist (ABC): Track behaviors of addiction related to prescription opioid prescribing for chronic pain
CRAFFT* (adolescents, young adults)	SOAPP* (Screener and Opioid Assessment for Patients with Pain): assesses risk of opioid misuse with long term treatment	DIRE (Diagnosis, Intractability, Risk Efficacy): predicts whether a patient is a good candidate for long term opioid therapy	Current Opioid Misuse Measure (COMM)*: used to determine if patients already on long term opioid therapy are exhibiting aberrant medication-related behaviors
DAST-10*: degree of risk associated with drug misuse		SOAPP (Screener and Opioid Assessment for Patients with Pain): assesses risk of opioid misuse with long term treatment	Pain Assessment and Documentation Tool *: automated note for documenting response to opioids for pain and potential misuse

Validated Screens: NIDA Quick Screen is basically standard H&P

NIDA *Quick Screen* Question: In the past year, how often have you used the following?	Never	Once or Twice	Monthly	Weekly	Daily or Almost Daily
Alcohol • For men, 5 or more drinks a day • For women, 4 or more drinks a day					
Tobacco Products					
Prescription Drugs for Non-Medical Reasons					
Illegal Drugs					

Have systems in your office for any patient that screens positive: generally brief intervention:
Feedback, advice, referral to treatment

Our duty as health care providers:

- Identifying patients with substance use disorders using validated screening tools, offering brief interventions (such as engaging a patient in a short conversation, providing feedback and advice), and referring for specialized care, as needed, are essential elements of care

- It is important to advocate for this often-marginalized group of patients, particularly in terms of working to improve availability of treatment and to ensure that pregnant women with opioid use disorder who seek prenatal care are not criminalized.

- Obstetric care providers have an ethical responsibility to their pregnant and parenting patients with substance use disorder to discourage the separation of parents from their children solely based on substance use disorder, either suspected or confirmed.

- In states that mandate reporting, policy makers, legislators, and physicians should work together to retract punitive legislation and identify and implement evidence-based strategies outside the legal system to address the needs of women with addictions

ACOG

Summary of Universal Biochemical Screening in Pregnancy: Do not perform universal urine drug testing

- The official position of the American Society of Addiction Medicine (ASAM) and the American College of Obstetricians and Gynecologists is that all women should be screened using a validated screening test, and not biochemical measures
- (ACOG Committee on Health Care for Underserved Women and American Society of Addiction Medicine, 2012; American Society of Addiction Medicine, 2017).
- Patients may delay or avoid prenatal care for fear of biochemical testing
- Unconscious bias may create inequity of care re: screening for illicit substances
- There is no health benefit of biochemical testing for mother or neonate

Do universal drug screening: Use a validated screening questionnaire

Clinical Situations in which Biochemical Screening for licit and illicit substances may be considered in pregnancy:

Hawaii protocol:

- Signs and symptoms consistent with intoxication or withdrawal
- Signs and symptoms consistent with heart failure or cardiomyopathy without an obvious cause
- Facilitate hospital policy for breastfeeding (cocaine, stimulant use suspected)
- Facilitate medication assisted treatment for substance use disorders

UCSF protocol (my favorite):

Indications for urine toxicology testing are to be driven by the need for a change in clinical management based on toxicology results.

American Society of Addiction Medicine Toxicology Testing Recommendations

- Clarify the **Clinical Value & Necessity** of Testing
  - **Individualized**
  - Understand the purpose of the test as well as strengths and limitations.
- Identification of Substances Of Interest
  - Patient history and/or regional drug trends
- Understanding the **Advantages and Disadvantages**: detection times, inaccurate results

Toxicology (Drug) Testing Considerations

- What question are we trying to answer (Diagnostic support, Diversion control, Treatment adherence, Forensic monitoring, etc.) and is drug testing the right/best/effective way to get to the answer?
- Strengths/limitations of each testing strategy
- Potential unintended consequences of testing (ex. Patients feeling stigmatized, patients leaving or avoiding care)
- Results are a single data element in clinical decision making

Goals of Toxicology (Drug) Testing

- Diagnostic Support/Clarification (ASAM)
- Treatment Plan Adherence/Medication Adherence (ASAM)
- **Monitoring for Drugs of Abuse/Illicit Use (ASAM)**
- Forensic Monitoring (ASAM)

- Assessing Lethality Potential: Overdose risk or Prophylactic need
- Patient Accountability
- Regulatory Adherence

Urine Toxicology-Advantages and Disadvantages

pros

- Most well studied and established
- **Specific drug detection windows vary, but 1-4 days for most**
- Wide variety of products in all cost ranges (POCT and Lab Based)
- Validity measures available at all levels of screening/testing (Temperature strips for POCT; Creatine, Ph, Specific Gravity with immunoassay labs)

cons

- Substitution, dilution, and adulteration susceptibility
- Invasiveness and resource intensity
- Not all substances are best detected via urine
- **Specific drug detection windows vary, but 1-4 days for most**

Drug Detection Windows

Drug Test Detection Times

		SALIVA		URINE		HAIR	
		Appears Within	Disappears After	Appears Within	Disappears After	Appears Within	Test Cutoff*
Amphetamine	AMP	5-10 min	1-3 days	2-5 hours	1-4 days	5-7 days	90 days
Methamphetamine	mAMP	5-10 min	1-3 days	2-5 hours	3-5 days	5-7 days	90 days
Cocaine	COC	5-10 min	1-3 days	2-5 hours	1-3 days	5-7 days	90 days
Opiates	OPI	5-10 min	1-2 days	2-5 hours	2-4 days	5-7 days	90 days
Marijuana	THC	5-10 min	6-24 hours	2-5 hours	3-30 days	5-7 days	90 days
Phencyclidine	PCP	-	-	2-5 hours	7-14 days	5-7 days	90 days
Oxycodone	OXY	5-10 min	1-2 days	2-5 hours	2-4 days	5-7 days	90 days
Ecstasy	MDMA	-	-	2-5 hours	1-3 days	5-7 days	90 days
Benzodiazepines	BZO	5-10 min	1-3 days	2-5 hours	3-7 days	5-7 days	90 days
Buprenorphine	BUP	5-10 min	1-3 days	2-5 hours	1-3 days	5-7 days	90 days
Barbiturates	BAR	-	-	2-5 hours	4-7 days	5-7 days	90 days
Methadone	MTD	5-10 min	1-3 days	2-5 hours	3-5 days	5-7 days	90 days
Fentanyl	FTY	-	-	1-4 hours	1-3 days	5-7 days	90 days
Tramadol	TRA	-	-	8-12 hours	3-7 days	5-7 days	90 days

Detection times will vary based on a number of factors including frequency of use, route of administration, body mass, and age.

Information on urine and saliva detection times provided by Alere Technologies.

Information on hair detection times for the consumer market provided by Confirm Biosciences.

*Hair Test Cutoff - 90 days is the standard cutoff with hair from the head in the consumer market and for many businesses employing hair drug testing as a testing method. However, drugs do remain in the hair beyond 90 days and hair analysis can go back beyond even a year in workplace and legal situations. It should also be noted that hair from the body has a different detection period than hair from the head. Body hair grows more slowly so drugs will not appear in the hair as quickly. An inch and a half of body hair generally represents a period of 6 months to a year.

Questions to Consider

- Does a negative test mean my patient hasn't used?

  Maybe or maybe not

- Does a positive test mean they used?

  Maybe or maybe not

- Does a positive test equate to a diagnosis?

  No

- Does a negative test indicate no diagnosis?

  No

Take-Aways

- It is important to talk to all of your patients about substance use as a part of whole-person healthcare.
- Normalizing conversations and universal screening for substance use along with other health conditions/contributors like social determinates, intimate partner violence, mental health concerns helps break down stigma.
- Universal urine toxicology testing is not the tool for the job.

Thank You

Michelle Shepard, MD, PhD
Marjorie Meyer, MD
Megan Mitchell, LCSW
Tony Folland