Policy #:	16.01.302
Issued:	August, 2023
Reviewed/ Revised:	
Section:	Maternal Child Health

Urine Toxicology Test of the Pregnant Patient

Purpose:

1. To evaluate maternal urine for the substances below* in order to:
    a. Evaluate the efficacy of recovery treatment for patients with substance use disorder**.
    b. Detect recent ingestion of a potentially harmful substance for purposes of patient safety and education.
2. To minimize bias, discrimination, and punitive use of urine toxicology testing in caring for patients and families.

* Substances evaluated include amphetamines, barbiturates, cocaine, opiates, benzodiazepines, buprenorphine, oxycodone, methadone, and fentanyl. THC is excluded from the institutional urine toxicology-testing panel because of its legal status in Massachusetts and its prolonged clearance, making timing of use difficult to discern.

** Includes patients who self-identify with substance use disorder, are prescribed medication for treatment of SUD (methadone, buprenorphine, naltrexone), or are receiving clinical treatment for SUD (care in RESPECT, residential treatment, 12-step program etc).

While data exist to support urine drug testing of the patient with known substance use disorder to monitor treatment and support recovery, little data exists to support the role of urine drug testing in the pregnant patient without a diagnosis of substance use disorder. Concurrently, multiple studies have demonstrated maternal/fetal harm from urine drug testing including deterrence from prenatal care and racial bias in testing[2–6]. False positive results have been reported with commonly used medications such as labetalol[7,8], and despite strong recommendations from American College of Obstetricians and Gynecologists (ACOG) and Society for Maternal-Fetal Medicine (SMFM) to obtain informed consent for any urine toxicology testing, studies suggest that this is infrequently performed[1,9]. Verbal screening with a validated tool is the recommended approach to diagnose substance use disorder among pregnant patients.[1]

Policy Statement:

1. The recommendation for a urine toxicology test including the indication, the patient's right to refuse, and the consequences of a positive test should be communicated to the patient and a written consent form reviewed and signed by patient and the Obstetric Care Provider (CNM or MD)[1]. **See Appendix A – consent form.**
2. Urine toxicology testing should not be used to identify a pregnant person with substance use disorder.
3. A written consent must be obtained from the patient during their pregnancy to perform a urine toxicology test see Appendix A: Consent for Urine Toxicology Testing in Pregnancy. A copy of the consent will be filed in the patient's medical record. At each subsequent request for a toxicology test, the presence of the consent must be reviewed by the LIP and a verbal consent obtained from the patient to confirm that the written consent is still valid.
4. The Obstetric LIP will place an order for a urine toxicology test with the relevant indication (see Application section below).

5. Supervised voids are not recommended.
6. All presumed positive tests for fentanyl will be automatically sent to an outside reference lab for confirmatory testing. Cross reactivity with labetalol leading to false positives[7] and fat sequestration leading to impaired clearance in pregnancy may compromise result interpretation.
7. Presumed positive tests will be communicated by the ordering LIP to the covering LIP and the covering social worker per the algorithm in **Appendix B – algorithm for communicating presumed positive toxicology results**.

Application:

Universal verbal screening is recommended on presentation to L&D triage or admission to L&D.

Urine toxicology is indicated in the following scenarios*, **:

1. Pregnant or postpartum patient with a known substance use disorder***.
2. On patient request.

*All urine specimens, when possible, should be collected on presentation to L&D triage, or on admission to the Labor and Delivery Unit. If a patient has a urine specimen collected after hospitalization or delivery, the patient's MAR should be reviewed by the ordering MD or CNM and a note made about substances given to the patient in-hospital which may lead to a positive toxicology test (i.e. fentanyl in the patient's epidural).

**Repeat toxicology is not routinely recommended when a patient with or without a known substance use disorder leaves the floor. If the patient's medical team, in conjunction with Social Work, NICU, or Pediatrics providers, feel that a repeat urine toxicology test may affect management for the birthing person/neonatal dyad, then the recommendation for a repeat test along with its rationale should be discussed with the patient by the MD or CNM and written consent again obtained.

*** Includes patients who self-identify with substance use disorder, are prescribed medication for treatment of SUD (methadone, buprenorphine, naltrexone), or are receiving clinical treatment for SUD (care in RESPECT, residential treatment, 12-step program etc).

Of note, providers should consider preemptive treatment with naloxone for any pregnant or postpartum patient who is unconscious or unresponsive without clear etiology. A urine drug test in this setting is not recommended, as it may delay care without changing management.

Exceptions:

We do not recommend urine toxicology testing for the indications of preterm labor, abruption or limited or no prenatal care.

Definitions:

Term	Definition
Verbal screening	This is a screen with a validated tool. It is the recommended approach to diagnose substance use disorder among pregnant patients[1].
Toxicology testing	The laboratory test to evaluate the presence of certain substances.

Procedure:

1. Review the Consent for Urine Toxicology in Pregnancy (see Appendix A) with the patient during their pregnancy and have the patient sign if they agree to consent.
    a. At subsequent visits, if a toxicology specimen is recommended, review the previously obtained written consent with the patient and obtain a verbal consent to collect a toxicology specimen.
2. If the patient agrees to and signs the consent, collect the specimen.

   a. All urine specimens, when possible, should be collected on presentation to Labor and Delivery (L&D) triage, or on admission to the L&D unit.
   b. If a patient has a urine specimen collected after hospitalization or delivery, the patient's MAR should be reviewed by the ordering LIP and a note made about substances given to the patient in-hospital which may lead to a positive toxicology test (e.g. fentanyl in the patient's epidural).
3. Refer to Appendix B: Algorithm for Communicating Presumed Positive Toxicology results for communicating positive results to the patient.

Responsibility:
OB LIP, RN, LPN, CNA, Social Worker

Attachments:
Appendix A: Consent for Urine Toxicology in Pregnancy
Appendix B: Algorithm for Communicating Presumed Positive Toxicology Results
Appendix C: Commonly Prescribed Medications in OB that may Result in False Positives
Appendix D: Patient Education on Inadvertent Fentanyl Exposure

Forms:
1000827 Consent for Urine Toxicology in Pregnancy (rev. 06/23)

Other Related Policies/Protocols/Guidelines:
16.02.090 - Breastfeeding in the Setting of Prenatal Substance Use Guidelines

References:
1. Ecker J., Abuhamad A., Hill W., et al. Substance use disorders in pregnancy: clinical, ethical, and research imperatives of the opioid epidemic: a report of a joint workshop of the Society for Maternal-Fetal Medicine, American College of Obstetricians and Gynecologists, and American Society of. *Am J Obstet Gynecol*. Published online 2019:1-24. doi:10.1016/j.ajog.2019.03.022
2. Tucker E.B.et al. Women's opinions of legal requirements for drug testing in prenatal care. *J Matern Fetal Neonatal Med*. 2017;30(14):1693-1698. doi:10.1080/14767058.2016.1222369
3. Roberts S.C.M., Nuru-Jeter A. Women's perspectives on screening for alcohol and drug use in prenatal care. *Womens Health Issues*. 2010;20(3):193-200. doi:10.1016/J.WHI.2010.02.003
4. Austin A.E., Naumann R.B., Simmons E. Association of State Child Abuse Policies and Mandated Reporting Policies With Prenatal and Postpartum Care Among Women Who Engaged in Substance Use During Pregnancy. *JAMA Pediatr*. 2022;176(11). doi:10.1001/JAMAPEDIATRICS.2022.3396
5. Ellsworth M.A., Stevens, T.P., D'Angio, C.T. Infant race affects application of clinical guidelines when screening for drugs of abuse in newborns. *Pediatrics*. 2010;125(6). doi:10.1542/PEDS.2008-3525
6. Perlman N.C., Cantonwine D.E., Smith N.A. Toxicology Testing in Pregnancy: Evaluating the Role of Social Profiling. *Obstet Gynecol*. 2020;136(3):607-609. doi:10.1097/AOG.0000000000003986
7. Wanar A., Isley B.C., Saia K., Field T.A. False-positive Fentanyl Urine Detection after Initiation of Labetalol Treatment for Hypertension in Pregnancy: A Case Report. *J Addict Med*. 2022;16(6). doi:10.1097/ADM.0000000000001010
8. Yee L.M., Wu D. False-positive amphetamine toxicology screen results in three pregnant women using labetalol. *Obstet Gynecol*. 2011;117(2 PART 2):503-506. doi:10.1097/AOG.0b013e318206c07c

9. Koenigs K.J., Chou J.H., Cohen S., et al. Informed consent is poorly documented when obtaining toxicology testing at delivery in a Massachusetts cohort. *Am J Obstet Gynecol MFM*. 2022;4(4). doi:10.1016/J.AJOGMF.2022.100621

Initiated by:
Project Respect
Perinatal Committee

Contributing Departments:
None

BOSTON MEDICAL CENTER

1000827

AFFIX PATIENT LABEL

or

Patient Name _____

Surgeon Name _____

MRN/DOB _____

Consent for Urine Toxicology Testing in Pregnancy

Your healthcare team recommends testing your urine during this pregnancy for drugs including amphetamines, barbiturates, cocaine, benzodiazepines, buprenorphine, oxycodone, methadone, and fentanyl. THC (cannabis) is not part of this test at BMC.

Possible reason(s) for testing your urine:

- You have used or received substances not prescribed to you either currently or in the past
- You have a history of substance use disorder either currently active or in the past
- You requested this test

How might this urine test help me, my pregnancy, or my child?

- For many patients with a history of substance use disorder, urine drug testing at each interaction with the hospital or clinic is:
  - a helpful tool to stay sober
  - a way to show commitment to recovery to yourself, healthcare team, friends/family, or other systems that may be involved (probation, drug court, Department of Children and Families (DCF))
- Urine drug testing may show a substance in your system that you did not know you were taking and that could be harmful to you or your pregnancy (e.g. pills laced with fentanyl).
- Results may be a chance for your healthcare team to offer you support for substance use disorder and to improve the safety of your treatment plan.

Do I have to do a urine toxicology test? What may happen if I do not do one?

- You have the right to decline a urine toxicology test
- If you choose not to be tested:
  - Your care will not be delayed, however, this may delay treatment of a substance use disorder
  - If you are in a caregiving role to an infant or child under 18, your care team may recommend a safety and risk assessment
  - Your baby's doctor may obtain a urine drug test from your baby after delivery. Breastmilk containing high levels of opioids may cause a baby to stop breathing. We know that small amounts, like those prescribed by your doctor for pain, are safe with breastfeeding, but we do not have good scientific information on the safety of breastmilk containing non-prescribed substances like opioids, fentanyl or cocaine. This is why our hospital policy on breastfeeding states that postpartum patients with substance use disorder during their pregnancies and without a urine drug test at delivery are ineligible to provide breastmilk to the baby until an appropriate urine drug test has returned.

What happens if my test is positive for a substance that I am not prescribed?

- The results will be available to you and your healthcare team but not directly accessible to anyone outside of your hospital healthcare team. Your healthcare team will discuss the results with you and if a substance is detected that you didn't know you used or received:
  - a follow-up test may be sent to confirm or we may request that you repeat the test

BOSTON MEDICAL CENTER

Consent for Urine Toxicology Testing in Pregnancy

- your team will review your medication list and talk with you to see if you are at risk for false positive results

- If you have a urine drug test that is confirmed positive for un-prescribed substances, we recommend that you meet with our social work team. If you are in a caregiving role to an infant or child under 18, our social work team will complete a safety and risk assessment and a mandated report may be filed with the department of Children and Families (DCF) if there are concerns for child safety.

☐ I authorize Boston Medical Center to perform a urine toxicology test

☐ I **do not** authorize Boston Medical Center to perform a urine toxicology test

MUST RECORD DATE/TIME

Sign Name: _____ Print Name: _____ Date: _____ Time: _____
Patient

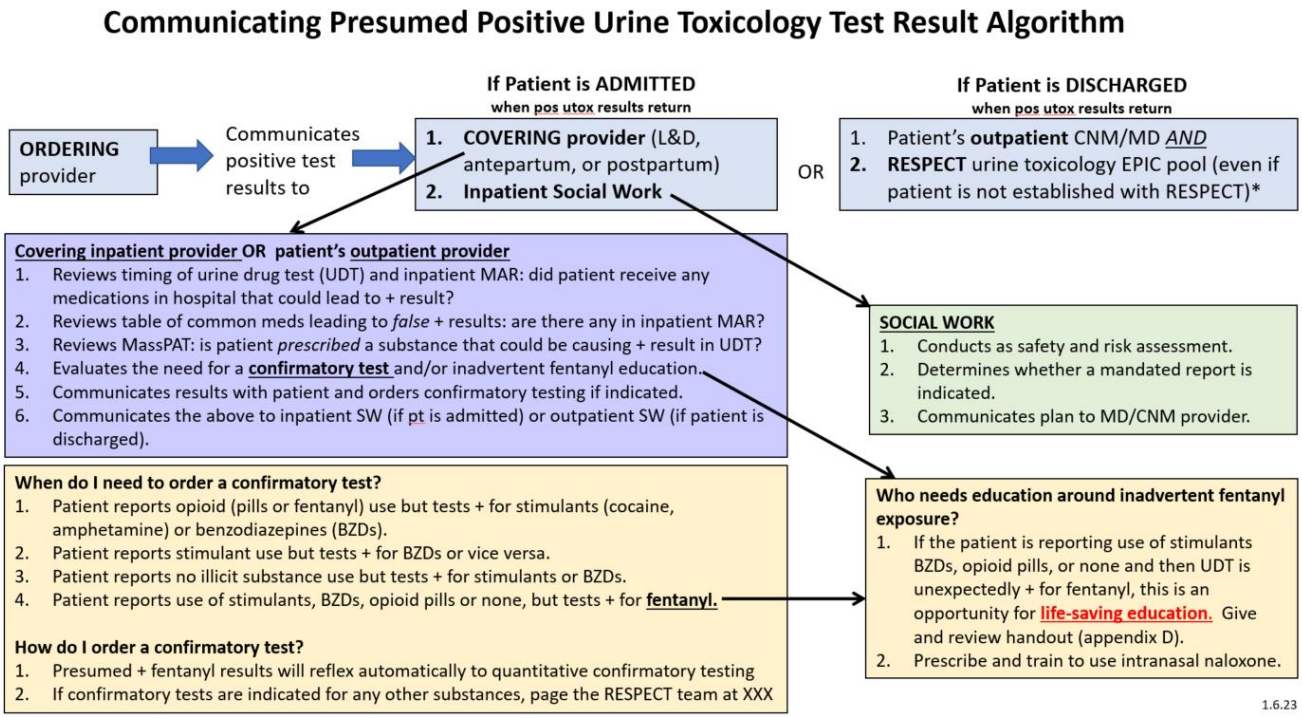
Sign Name: _____ Print Name: _____ Date: _____ Time: _____
Parent/Guardian Surrogate (if applicable)

Sign Name: _____ Print Name: _____ Date: _____ Time: _____
Provider/Physician/Surgeon

I interpreted the provider's explanation. (Interpreter must sign below, if applicable)

Sign Name: _____ Print Name: _____ Date: _____ Time: _____

Appendix B: Algorithm for communicating presumed positive toxicology results



Appendix C: Commonly Prescribed Medications in OB that May Result in False Positives

Commonly prescribed medications in OB that may result in false positives*						
	Amphetamine/ Methamphetamine	Benzodiazepine	Barbiturate	Methadone	Fentanyl	Buprenorphine
Aripiprazole	X					
Bactrim						X
Bupropion	X					
Chlorpromazine	X			X		
Decongestants (e.g. pseudoephredrine)	X					
Diphenhydramine				X		
Doxylamine				X		
Esmolol	X					
Fioricet/Fiorinal			X			
Fluoroquinolones (e.g. levofloxacin)	X					X
Hydroxychloroquine						X
Labetalol	X				X	
Loperamide					X	
Methyldopa	X					
Metformin	X					
Mexiletine	X					
Promethazine	X					
Propafenone				X		X
Quetiapine (≥ 125 mg)				X		
Ranitidine	X					
Risperidone					X	
Sertraline (≥150 mg)		X				
Thioridazine				X		
Trazadone	X					
Verapamil				X		

This is not a comprehensive list. False positivity rates are influenced by many variables including but not limited to immunoassay sensitivity and specificity, medication concentrations, acute versus chronic medication use, and patient specific factors among many others

Appendix D – Patient Education on Inadvertent Fentanyl Exposure

Fentanyl moving through the street market has increasingly been found in other drugs like meth, cocaine and counterfeit or "pressed" pills. This can lead to overdose or death from an overdose in someone who has never used opioids before.

If you do **not** use opioids but use cocaine, meth, benzos or non-prescription pills (i.e. any pills not directly from a pharmacy), these are some important ways you can **reduce** your risk:

- Avoid using pills that you have not received directly from the pharmacy (including benzos, Adderall or Vyvanse, and opioids like Percocet, OxyContin or Vicodin)
- Assume that there is a risk of overdose no matter what drug you are using
- Consider use of fentanyl test strips (to test the drugs you plan to use to see if they contain fentanyl)
- Try to avoid using alone
- If you must use alone:
    - Have someone check on you regularly
    - Call **Never Use Alone Hotline** @ 800-484-3731 and an operator will stay on the line with you while you use to ensure you are safe
- Download the **Brave App** to connect to someone while you use or the **Canary App** that you can set to alert someone if you do not respond to a phone alarm within a couple minutes
- Always carry naloxone and make sure that family or friends you trust know where it is located and know how to use it