

# Using Drug Testing as a Therapeutic Tool

*Best Practices from the Field*

Presented by:  
Kevin Everhart  
Erica Burkholder



## Kevin Everhart

*Assistant Task Force Commander – Retired*

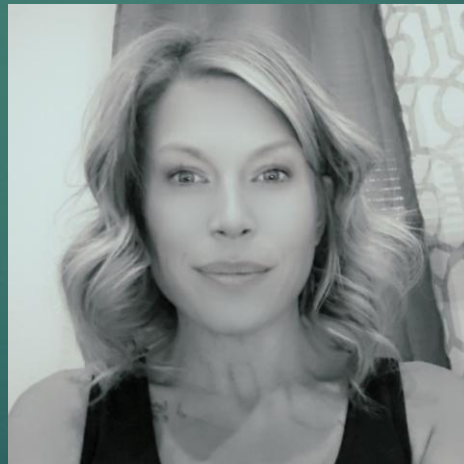
▶ Kevin Everhart has over 25 years of experience in Law Enforcement, including 22 years specializing in Narcotics and Vice investigations. For the last 10 years of his career, he served as the Assistant Task Force Commander for a Major Crimes Unit. As a Narcotics Detective, Mr. Everhart spent extensive time working undercover, including three years in deep cover operations infiltrating an Outlaw Motorcycle organization.

▶ Mr. Everhart has served on the DEA and Homeland Security Task Forces, investigating both federal narcotic crimes and organized crime.

▶ Mr. Everhart supervised the Clandestine Meth Amphetamine Laboratory Site Safety Unit for the Southern District of Ohio. He also served numerous years as a Special Response Team (S.R.T.) officer.

Mr. Everhart is a Certified Breath Alcohol Instrument Instructor and a Certified Instructor for Federal DOT Urine Collections. Mr. Everhart has testified as an Expert Witness in numerous Child Protective Services, Probation and Drug Court cases along with Domestic Relation cases on the interpretation of drug test results.

▶ Mr. Everhart carries a vast knowledge in the field of narcotics, drug testing and laboratory results interpretation.



## Erica Burkholder

*Fulton County Drug Court Coordinator  
Fulton County Common Pleas Court*

➤ Erica Burkholder serves as the Drug Court Coordinator for the Fulton County Common Pleas Court in Ohio, where she oversees the county's specialized docket under Judge Scott Haselman. With a Bachelor's degree in Sociology and a minor in Psychology from Bowling Green State University, Erica has built a career at the intersection of mental health, criminal justice, and behavioral intervention.

➤ Erica began her professional journey supporting individuals with disabilities, later transitioning to correctional mental health care. Erica provided direct services in the Wood County Jail before advancing to supervise mental health programs in 21 facilities across nine states. She has delivered training to correctional staff on topics such as Excited Delirium and Suicide Prevention.

➤ Since 2015, Erica has worked within the Fulton County court system, first facilitating Cognitive Behavioral Therapy and Theft Intervention courses, and since 2017, leading one of Ohio's specialized drug courts.

# TYPES OF DRUG TESTS

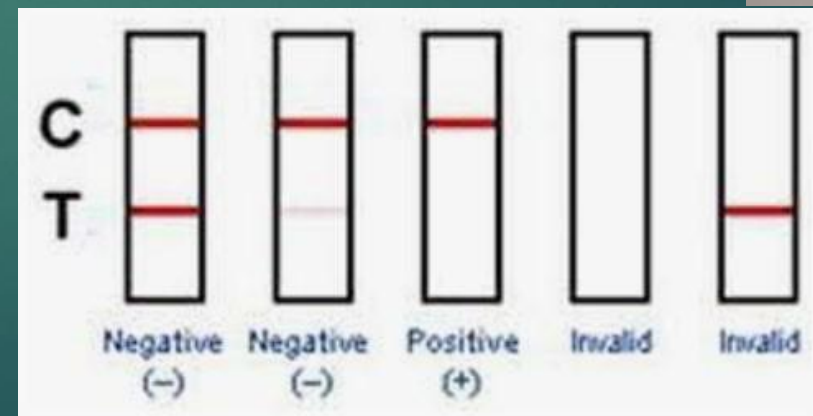


Urine  
Oral  
Fluid  
Blood  
Hair  
Follicle  
Sweat  
Patch



# INSTANT URINE DRUG SCREENS

- Instant Result
- Tests for drug groups along with individual Drugs
- Approximately 85% accurate.
- Subject to Cross-Reactivity
- Should not sanction based on results.



# Oral Fluid Testing

- Non-Invasive – Gender appropriate not required
- Window of Detection of only 5-48 hrs. from use
- Low adulteration issues
- Higher possibility of “Quantity Insufficient” due to lack of sufficient saliva





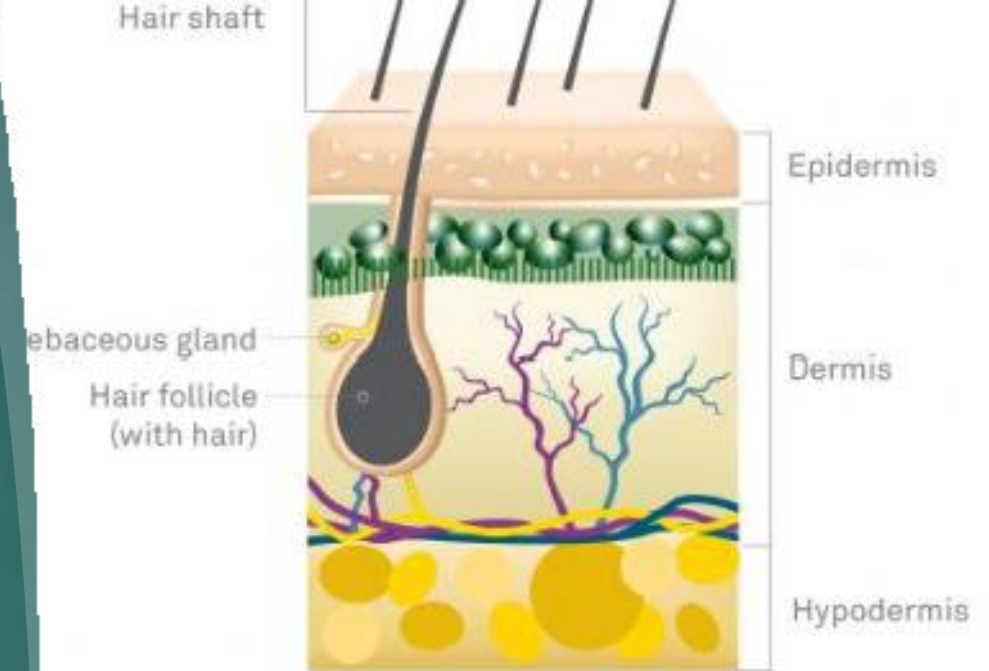
# Blood Test

- Will tell what is currently in their system at the time of the test
- Window of detection is 8-12 hrs., similar to a Breath Alcohol test
- Commonly used for Postmortem and OVI cases
- Literally impossible to adulterate or substitute
- Can be costly



# Hair Testing

- ▶ Testing for historical use
- ▶ Standard hair test are 90 days back, but can test further depending on the length of the hair
- ▶ Difficult to adulterate
- ▶ Limited on some specific drugs



# Sweat Patch

- ▶ After taking drugs, they leave a person's body in different ways. One of these ways is through sweat.
- ▶ The sweat patch is worn for approximately a 7-14 days
- ▶ The patch can be used to pick up traces of marijuana, cocaine, opiates, amphetamines, and phencyclidine
- ▶ The concentration levels of the drug are often significantly less than other forms of drug testing
- ▶ Risk of environmental contaminants or secondhand smoke can cause a false positive



# New All Rise Standards

## New All Rise Standards

- Should we look at levels, or just whether it is positive or negative, and why?

## BPS. J. RESULT EVALUATION P. 106

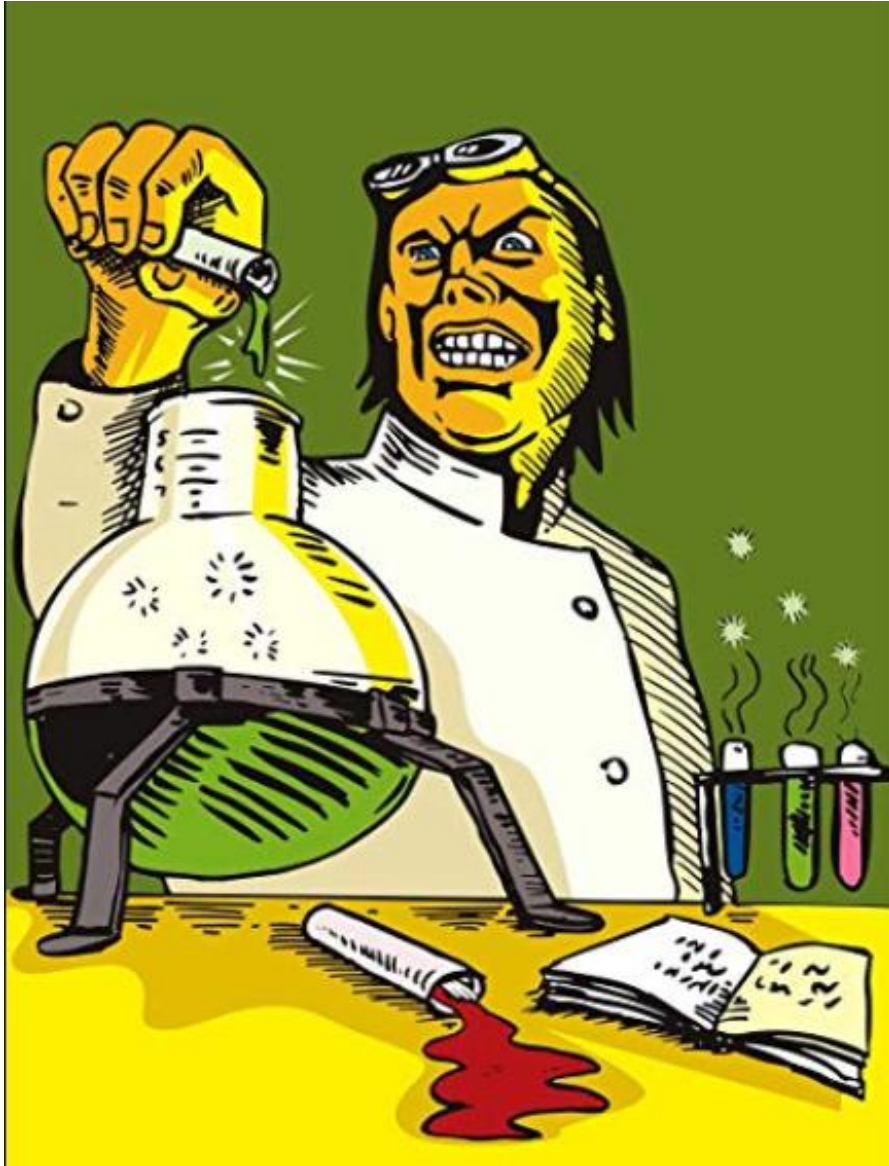
Treatment court programs must acknowledge that there is often a gap between the questions that the court would like to have answered by drug testing and the answers that science can legitimately provide. Court personnel sometimes draw unwarranted or unsupportable conclusions from drug-testing results that would not withstand scientific challenge or legal scrutiny. It is critical that treatment court team members do not engage in result interpretation that could lead to due process violations. Drug-testing cutoff levels represent an important safeguard for ensuring the reliability of testing results. Each testing method and each substance has a limit of detection (Needleman & Romberg, 1990). Below that limit, the test cannot accurately discriminate between samples that are absolutely drug free and samples that may have a trace amount of drugs present. At concentrations below the cutoff, drug tests can become unreliable at detecting the presence (or absence) of drugs. As a result of these analytical limitations, the goal of achieving a true zero-tolerance drug-testing program is unattainable (Cary, 2017). Treatment courts must not attempt to evaluate results that fall below the cutoff threshold (Cary, 2017). Drug-testing cutoffs serve to both maintain evidentiary standards and protect participant rights. Appropriate cutoffs are an important technological and legal benchmark designed to ensure that drug testing is both scientifically accurate and legally defensible. Due to the many testing methodologies and other variables associated with forensic drug and alcohol testing, All Rise does not maintain a standardized list of recommended or approved cutoff levels. Negative drug tests indicate that no drugs or their breakdown products (metabolites) were detected in the analyzed sample at the cutoff level of the test. Negative results do not necessarily suggest that there are no drugs present. A negative drug test may not always indicate abstinent behavior. Multiple consecutive negative tests are a true valid indicator of continued abstinence. It is not uncommon for an individual's urine to contain a drug concentration that is below the cutoff threshold. In other words, negative does not mean zero. Samples yielding a drug concentration below the cutoff level of the test are defined as "negative" or "none detected" because the test may not be capable of reliably detecting the drug at concentrations below the established cutoff for that test.

Generally speaking, a negative test result should not be interpreted in any manner other than negative (Cary, 2017).

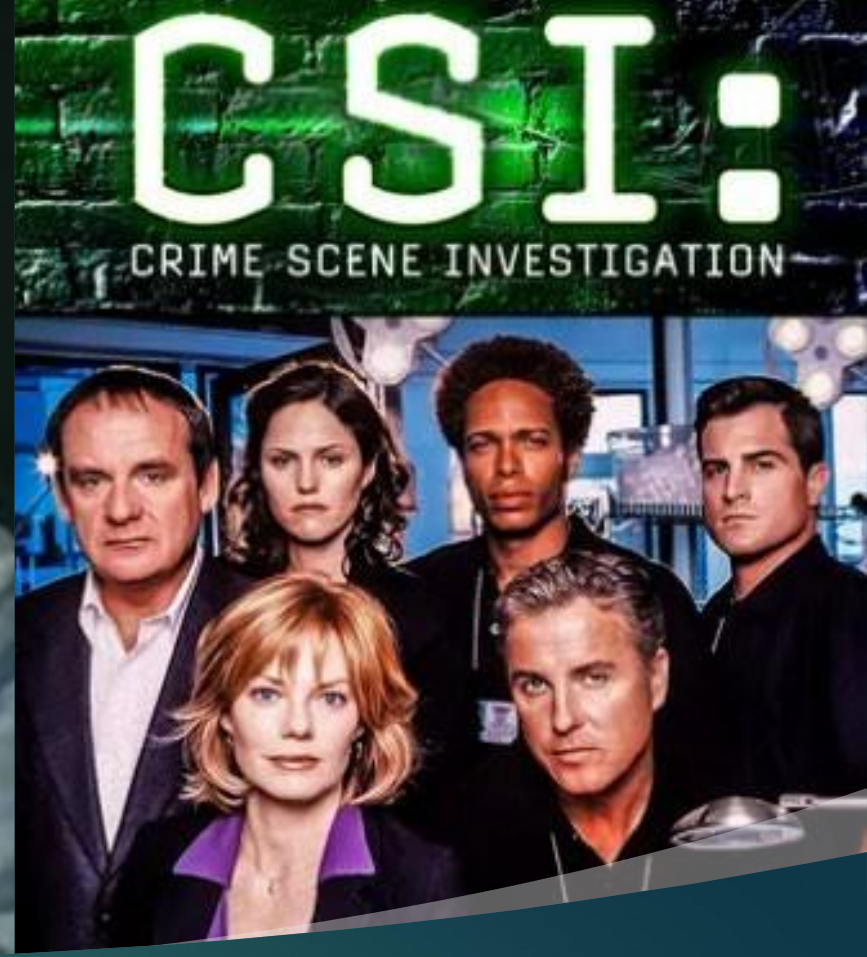
Testing by a court is to gauge compliance and to be used for incentives and sanctions

Testing by treatment providers is to assess clinical need and used for service adjustments

Courts should avoid relying on providers for testing as it could interfere with therapeutic alliance.



# How To Interpret Drug Results



This Isn't CSI

# Immunoassay Screen

Why didn't the Immunoassay Screen Confirm Positive?

Imagine a bowl of M&M and Skittles. Green Skittles are prohibited to consume. Immunoassay will detect Green Candy but cannot distinguish between Green M&M or Green Skittles. It will report out as positive because they are green.

A Confirmation Test will look for the parent drug along with the drug metabolites.

Metabolites are referred to as Drug Fingerprints.



An **LC/MS Confirmation Test** stands for **Liquid Chromatography / Mass Spectrometry**.

• **Purpose:** It's a confirmation test used after an initial drug screen (like a urine immunoassay) comes back positive. Its job is to verify the result with precision.

• **How it works:**

- **Liquid Chromatography (LC):** Separates the different compounds in the urine sample.
- **Mass Spectrometry (MS):** Identifies and measures those compounds at the molecular level by looking at their “molecular fingerprint.”

• **Why it's important:**

- **Extremely accurate and specific (far less chance of false positives).**
- **Can measure the exact drug and its concentration.**
- **Courts, employers, and treatment programs often require this step before taking action based on a positive drug test.**

An LC/MS confirmation test is the gold standard for drug testing because it confirms whether a drug is truly present in the sample and rules out false positives.

# Understanding Drug Test Cutoff Levels

Cut-off levels in drug tests refer to the minimum concentration of a drug or its metabolite that must be present in a biological specimen (like urine, hair, oral fluid, or sweat) for the test to be reported as **positive**. If the concentration is below this threshold, the result is considered **negative**, even if trace amounts are detected.

## Key Concepts of Cut-Off Levels

- **Purpose:** To distinguish between actual drug use and incidental exposure (e.g., secondhand smoke or trace contamination).
- **Units:** Typically measured in nanograms per milliliter (ng/mL) for fluids or picograms per milligram (pg/mg) for hair.
- **Two-Tier Testing:**
  - **Initial Screen:** Uses immunoassay to quickly flag potential positives.
  - **Confirmation Test:** Uses more precise methods like GC-MS or LC-MS/MS to verify results and quantify drug levels

# Understanding Drug Test Cutoff Levels

## Immunoassay (Screening Test)

- **Purpose:** Rapidly detect the possible presence of drugs or metabolites.
- **Method:** Uses antibodies to identify drug classes in biological samples like urine, saliva, or blood.
- **Cutoff Levels:** Higher, to reduce false positives from cross-reactivity.
- **Result:** Yields a **negative** or presumptive positive result.

## Confirmation Test (GC-MS or LC-MS/MS)

- Purpose:** Verify and quantify specific drugs and/or metabolites after a presumptive positive.
- Method:** Uses gas or liquid chromatography coupled with mass spectrometry.
- Cutoff Levels:** Lower, due to higher sensitivity and specificity.
- Result:** Provides a definitive positive or negative result.

# Why Does This Matters

- ▶ Immunoassays are fast, cost efficient but can misidentify substances.
- ▶ Confirmation tests protect individuals from wrongful dismissal or legal consequences by ensuring accuracy.



# Opiates V. Opioids

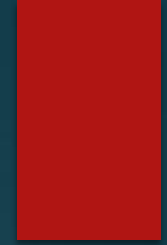
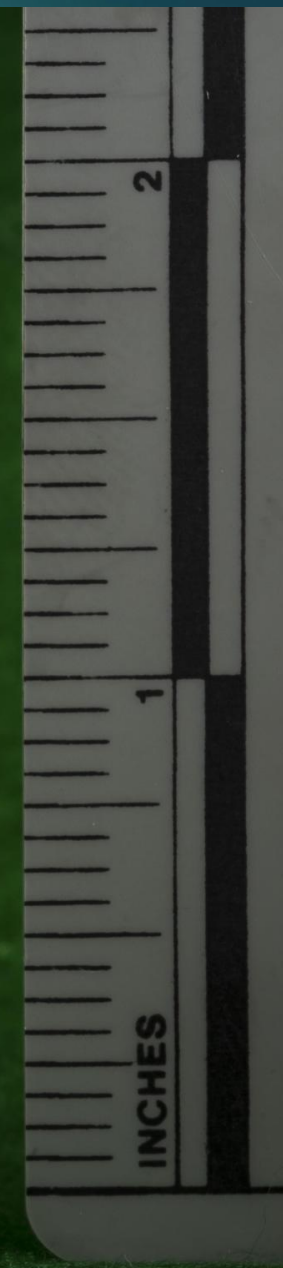
Opiates are a naturally occurring substance derived from the poppy plant.

- Codeine
- Morphine



Opioids are a synthetic or semi-synthetic substance

- Heroin
- Hydrocodone, Hydromorphone
- Oxycodone, Oxymorphone, Opana
- Fentanyl, Tramadol, Methadone, Buprenorphine



# What Is ETG Alcohol Tests

- ▶ What is ETG? ETG stands for Ethyl Glucuronide/Ethyl Sulfate which is a way to measure alcohol in the urine
- ▶ An ETG test has a window of detection of 72-80 hrs.
- ▶ Positive for levels for ETG and ETS are consistent with alcohol consumption.
- ▶ Negative ETG and ETS means negative for Alcohol consumption.
- ▶ An ETG negative and ETS positive is consistent with alcohol consumption.
- ▶ A negative ETS and a positive ETG may not indicate alcohol consumption.

# Positive ETG with Negative ETS

Levels between 250 and 500 ng/ml most likely result from ingestion of ethanol but cannot be used to rule out recent extraneous exposure.


Concentrations from 500 – 1000 ng/ml are the result of ingestion, or else very intense and recent incidental exposure (use of hand sanitizer or mouthwash far in excess of normal accepted practice).

ETG concentrations in urine that are confirmed by LC/MS/MS and are greater than 1000 ng/ml are the result of ethanol ingestion – there is no evidence in studies that realistic incidental exposure can result in this level of ETG in urine



ETG and ETS Confirmation Reference Chart				
ETG Result	ETS Result	Result	Indication	Supervision Suggestion
<b>+</b>	<b>+</b>	<b>Confirmed Positive</b>	Indicates alcohol consumption within detection window	Address with client and sanction as needed
<b>-</b>	<b>+</b>	<b>Confirmed Positive</b>	Indicates alcohol consumption within detection window, E. coli bacteria may have degraded ETG concentration below the cutoff	Address with client and sanction as needed
<b>+</b>	<b>-</b>	<b>*Unable to Confirm Positive</b>	Indicates possibility of casual, inadvertent, or extreme environmental exposure to alcohol with ETS below the cutoff, also possible bacterial activity	Address with client but do not sanction with continued denial - look for a pattern of this continuing to happen before sanctioning or figure out what substance they have been exposed to and send to the lab
<b>-</b>	<b>-</b>	<b>Confirmed Negative</b>	Indicates <b>NO</b> alcohol consumption within detection window	No sanction

# Positive ETG Result

Alcohol	ETG 500	Positive	-	666.7 ng/ml	500 ng/ml	2000 ng/ml	Urine	Immunoassay
	ETG	Positive	-	1325.63 ng/mL	300 ng/mL	25000 ng/mL	Urine	LC-MS/MS
	ETS	Positive	-	327.81 ng/mL	100 ng/mL	25000 ng/mL	Urine	LC-MS/MS

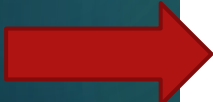
Alcohol	ETG	Positive	-	0 -	500 -	0 -	Urine	POCT
	ETG	Positive	-	25000 ng/mL	300 ng/mL	25000 ng/mL	Urine	LC-MS/MS
	ETS	Negative	-	0 ng/mL	100 ng/mL	25000 ng/mL	Urine	LC-MS/MS

# Fentanyl Positive

Fentanyl	Fentanyl	Positive	-	2.7 ng/ml	2 ng/ml	16 ng/ml	Urine	Immunoassay
	Acetyl Fentanyl	Negative	-	0 ng/mL	1 ng/mL	500 ng/mL	Urine	LC-MS/MS
	Acryl Fentanyl	Negative	-	0 ng/mL	1 ng/mL	500 ng/mL	Urine	LC-MS/MS
	Alfentanil	Negative	-	0 ng/mL	1 ng/mL	500 ng/mL	Urine	LC-MS/MS
	Benzyl Carfentanil	Negative	-	0 ng/mL	1 ng/mL	500 ng/mL	Urine	LC-MS/MS
	beta-Hydroxy Fentanyl	Negative	-	0 ng/mL	1 ng/mL	500 ng/mL	Urine	LC-MS/MS
	Butyryl Fentanyl	Negative	-	0 ng/mL	1 ng/mL	500 ng/mL	Urine	LC-MS/MS
	Carfentanil	Negative	-	0 ng/mL	1 ng/mL	500 ng/mL	Urine	LC-MS/MS
	Cyclopropyl Fentanyl	Negative	-	0 ng/mL	1 ng/mL	500 ng/mL	Urine	LC-MS/MS
	<b>Fentanyl</b>	<b>Positive</b>	-	<b>3.8 ng/mL</b>	<b>1 ng/mL</b>	<b>500 ng/mL</b>	<b>Urine</b>	<b>LC-MS/MS</b>
	Fluorobutyryl Fentanyl	Negative	-	0 ng/mL	1 ng/mL	500 ng/mL	Urine	LC-MS/MS
	Furanyl Fentanyl	Negative	-	0 ng/mL	1 ng/mL	500 ng/mL	Urine	LC-MS/MS
	Methoxyacetyl Fentanyl	Negative	-	0 ng/mL	1 ng/mL	500 ng/mL	Urine	LC-MS/MS
	Methylfentanyl	Negative	-	0 ng/mL	1 ng/mL	500 ng/mL	Urine	LC-MS/MS
	<b>Norfentanyl</b>	<b>Positive</b>	-	<b>53.2 ng/mL</b>	<b>1 ng/mL</b>	<b>500 ng/mL</b>	<b>Urine</b>	<b>LC-MS/MS</b>
	Sufentanil	Negative	-	0.0 ng/mL	1 ng/mL	500 ng/mL	Urine	LC-MS/MS
	Thienyl Fentanyl	Negative	-	0 ng/mL	1 ng/mL	500 ng/mL	Urine	LC-MS/MS

# Positive Heroin Results

Drug Name	Result	Cutoff Level	Quantitative Level
Amphetamines	Negative	500 ng/mL	
Buprenorphine	Negative	5 ng/mL	
Benzodiazepines	Negative	300 ng/mL	
Cocaine	Positive	50 ng/mL	See Below
<b>Metabolites Comment:</b> Cocaine metabolite 1843 ng/mL			
Ethanol	Negative	0.020 gm/dL	
Ecstasy	Negative	500 ng/mL	
Methadone	Negative	300 ng/mL	
Nitrites	Negative	500 ng/mL	
Opiates	Positive	100 ng/mL	See Below
<b>Metabolites Comment:</b> 6-acetylmorphine (Heroin) >200 ng/mL Morphine 172719 ng/mL Codeine 1010 ng/mL			
Oxycodone	Negative	100 ng/mL	
Propoxyphene	Negative	300 ng/mL	
Marijuana	Negative	20 ng/mL	
pH Level	In Range	4.5 and 8.9 mg/dL	6.7 mg/dL
Creatinine	In Range	20 mg/dL	>200.0 mg/dL





# The Poppy Seed Defense

## WHAT YOU NEED TO KNOW IF POPPY SEED IS THE DEFENSE

Poppy Seeds can produce a positive result in a urine test



The metabolite levels have to be below 1000 ng/ml



Must have both the Morphine and Codeine Metabolites

# Positive Cocaine Results

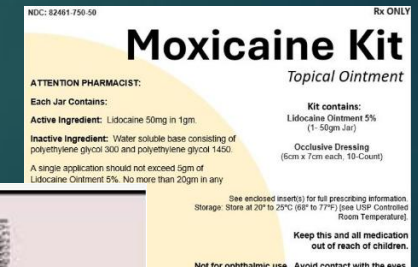
Cocaine	Cocaine 300	Positive	-	836 ng/ml	300 ng/ml	1000 ng/ml	Urine	Immunoassay
	Benzoylcegonine	Positive	-	983.9 ng/mL	50 ng/mL	10000 ng/mL	Urine	LC-MS/MS

## “The Caine Defense”

Just because it ends in “Caine” **doesn’t mean** it will test positive for cocaine.

Lidocaine - Novocaine – Xylocaine – Tetracaine – Moxicaine – Benzocaine

Not even Michael Caine



# Positive Amphetamines Results

Final Positive (LC/MS/MS or GC/MS)

Drug Name	Result	Cutoff Level	Quantitative Level
Amphetamines	Positive	500 ng/mL	See Below
<b>Metabolites Comment:</b> Amphetamine >8000 ng/mL			
Buprenorphine	Negative	5 ng/mL	
Benzodiazepines	Negative	300 ng/mL	
Cocaine	Negative	300 ng/mL	
Ethyl Glucuronide	Negative	500 ng/mL	
Methadone	Negative	300 ng/mL	
Opiates	Negative	300 ng/mL	
Oxycodone	Negative	300 ng/mL	
Phencyclidine	Negative	25 ng/mL	
Marijuana	Negative	50 ng/mL	
Creatinine	In Range	20 mg/dL	98.3 mg/dL

Majority Amphetamine positives are the results of Adderall or Vyvanse which are used to treat ADHD

# Positive Methamphetamines Results

Final Positive (LC/MS/MS or GC/MS)

Drug Name	Result	Cutoff Level	Quantitative Level
Amphetamines	Positive	500 ng/mL	See Below
<b>Metabolites Comment:</b> Amphetamine 35280 ng/mL Methamphetamine >40000 ng/mL			
Benzodiazepines	Negative	300 ng/mL	
Buprenorphine	Negative	5 ng/mL	
Cocaine	Negative	300 ng/mL	
Ethyl Glucuronide	Negative	500 ng/mL	
Methadone	Negative	300 ng/mL	
Opiates	Negative	300 ng/mL	
Phencyclidine	Negative	25 ng/mL	
Marijuana	Negative	50 ng/mL	
Oxycodone	Negative	300 ng/mL	
Creatinine	In Range	20 mg/dL	151.7 mg/dL

# Positive Gabapentin Results

Gabapentin	Gabapentin	Positive	-	11 mcg/mL	1.5 mcg/mL	10 mcg/mL	Urine	Immunoassay
	Gabapentin	Positive	-	12000 ng/mL	100 ng/mL	12000 ng/mL	Urine	LC-MS/MS



- Gabapentin Brand Name: Neurontin
- Used to treat Epilepsy/seizures along with nerve pain such as shingles and restless leg syndrome
- Gabapentin is not a narcotic but can have withdrawal symptom.



# Marijuana The Plant

- ▶ Marijuana now comes in several forms.
- ▶ Most common is the plant form where the majority is smoked either in what is referred to as a joint or pipe.
- ▶ The window of detection for Marijuana in the plant form is anywhere from 2 weeks to 30 plus days, depending on how often it is abused.



# Normalization Report

THC divided by Creatinine X 100 = Value

Offender/Defendant Name	Case #
[REDACTED]	[REDACTED]
Henschen ID #	[REDACTED]

Date of Collector	Previous Test
8/5/2025	Raw THC Level 95
Date Reported	Creatinine Ratio 109.2
8/6/2025	Normalized THC Level 86.9963
<b>**Raw Level/Creatinine Ratio x 100 - Normalized THC Level</b>	
	Days Between Tests
	11

Date of Collector	New Test
8/16/2025	Raw THC Level 91
Date Reported	Creatinine Ratio 132.1
8/19/2025	Normalized THC Level 68.8872
<b>**Raw Level/Creatinine Ratio x 100 - Normalized THC Level</b>	

Normalized THC Level (Previous Test)	86.996337
Normalized THC Level (New Test)	68.88720666
<b>New Use Ratio of</b>	<b>0.791840312</b>
<b>***Normalized (New Test)/Normalized (Previous Test)-New Use Ratio</b>	

New Use Ratios	
Ratio of 0.01-0.49	= Previous Use
Ratio of 0.50-0.99	= Questionable
Ratio of 1.00-1.49	= Indicative of New Use
Ratio of 1.50 & above	= Difinitively New Use & Legally Defensible with Reasonable & Scientific Certainty.

Offender/Defendant Name	Case #
[REDACTED]	[REDACTED]
Henschen ID #	[REDACTED]

Date of Collector	Previous Test
8/16/2025	Raw THC Level 91
Date Reported	Creatinine Ratio 132.1
8/19/2025	Normalized THC Level 68.8872
<b>**Raw Level/Creatinine Ratio x 100 - Normalized THC Level</b>	
	Days Between Tests
	3

Date of Collector	New Test
8/19/2025	Raw THC Level 97
Date Reported	Creatinine Ratio 149.9
8/20/2025	Normalized THC Level 64.7098
<b>**Raw Level/Creatinine Ratio x 100 - Normalized THC Level</b>	

Normalized THC Level (Previous Test)	68.88720666
Normalized THC Level (New Test)	64.70980654
<b>New Use Ratio of</b>	<b>0.93935884</b>
<b>***Normalized (New Test)/Normalized (Previous Test)-New Use Ratio</b>	

New Use Ratios	
Ratio of 0.01-0.49	= Previous Use
Ratio of 0.50-0.99	= Questionable
Ratio of 1.00-1.49	= Indicative of New Use
Ratio of 1.50 & above	= Difinitively New Use & Legally Defensible with Reasonable & Scientific Certainty.

Offender/Defendant Name	Case #
[REDACTED]	[REDACTED]
Henschen ID #	[REDACTED]

Date of Collector	Previous Test
8/19/2025	Raw THC Level 97
Date Reported	Creatinine Ratio 149.9
8/20/2025	Normalized THC Level 64.7098
<b>**Raw Level/Creatinine Ratio x 100 - Normalized THC Level</b>	
	Days Between Tests
	2

Date of Collector	New Test
8/21/2025	Raw THC Level 91
Date Reported	Creatinine Ratio 138.3
8/26/2025	Normalized THC Level 65.799
<b>**Raw Level/Creatinine Ratio x 100 - Normalized THC Level</b>	

Normalized THC Level (Previous Test)	64.70980654
Normalized THC Level (New Test)	65.79898771
<b>New Use Ratio of</b>	<b>1.016831779</b>
<b>***Normalized (New Test)/Normalized (Previous Test)-New Use Ratio</b>	

New Use Ratios	
Ratio of 0.01-0.49	= Previous Use
Ratio of 0.50-0.99	= Questionable
Ratio of 1.00-1.49	= Indicative of New Use
Ratio of 1.50 & above	= Difinitively New Use & Legally Defensible with Reasonable & Scientific Certainty.

# Kratom



Test Class	Assay / Analyte	Result	Not Tested Reason	Level	Cut-Off	ULOL	Sample Type	Testing Method
Kratom	Mitragynine 1	Positive	-	>100	5 ng/mL	100 ng/mL	Urine	LC-MS/MS



# Tranq Dope

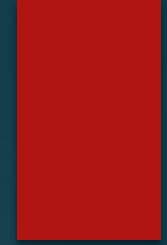
## Deadly drug: Tranq-dope found in Ohio



- ▶ “Tranq Dope” is the new trend hitting the Columbus and Cincinnati areas.
- ▶ “Tranq Dope” is a combination of opioids and a powerful sedative known as xylazine.
- ▶ Xylazine, a non-opioid veterinary tranquilizer not approved for human use, has been linked to an increasing number of overdose deaths nationwide.
- ▶ We have been seeing where they mix the xylazine with fentanyl, with heroin or other drugs.
- ▶ Xylazine and the opioids like fentanyl and the even more powerful Carfentanil can combine to suppress the user’s breathing functions potentially leading to death.
- ▶ “Tranq Dope” is resistant to anti-overdose treatments like Narcan or Naloxone.

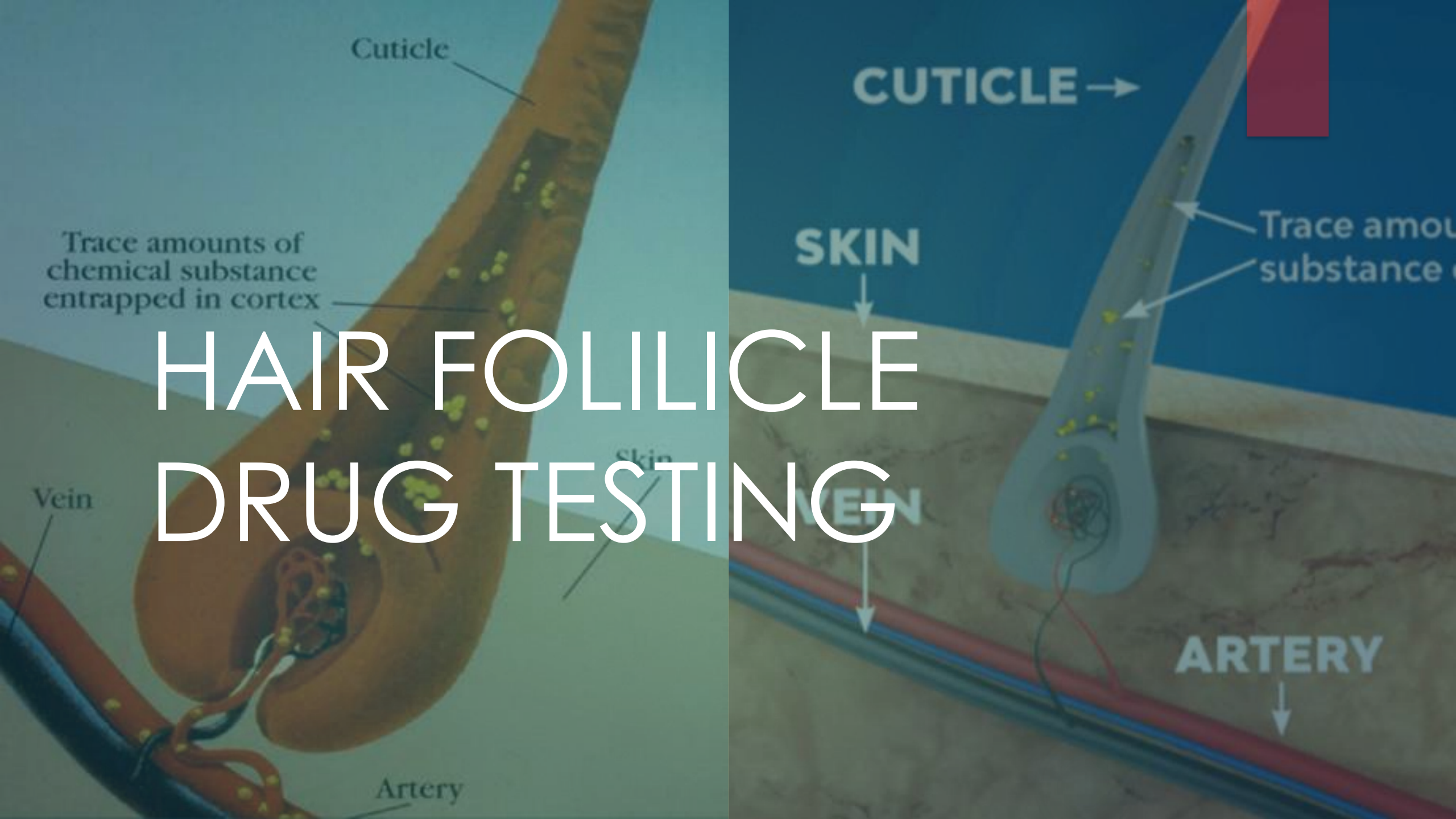
Test Class	Assay / Analyte	Result	Not Tested Reason	Level	Cut-Off	ULOL	Sample Type	Testing Method
Xylazine	4-hydroxy Xylazine	Negative	-	0 ng/mL	10 ng/mL	500 ng/mL	Urine	LC-MS/MS
	Xylazine 1	Negative	-	0 ng/mL	10 ng/mL	500 ng/mL	Urine	LC-MS/MS

# ZOMBIE DUST



## Cocaine Mixed With Xylazine





# HAIR FOLLICLE DRUG TESTING

# Hair Follicle Drug Testing



Hair Follicle Drug Testing was designed for the habitual user and not the recreational user.



Hair Testing can go back as long as the hair is. Every 1½ inches of hair equals 90 days.



Practically impossible to alter a hair follicle test result.

# Hair Testing FAQs

## Frequently Asked Questions: Hair Testing

### 1. What is Hair drug testing?

Hair testing analyzes a hair sample for parent drugs and their metabolites. A hair specimen, collected from a donor's head or body, is sent to the laboratory and is screened for illicit substances.

### 2. What drugs can Omega test for with hair?

Omega's 5-panel hair test can detect cocaine, marijuana, opiates (codeine, morphine & 6-acetylmorphine), amphetamines (amphetamine, methamphetamine, MDMA, MDA), and phencyclidine (PCP). Omega's Extended Opiates panel adds oxycodone, oxymorphone, hydrocodone, and hydromorphone

### 3. How effective is hair testing in detecting drug users?

Omega clients regularly report finding five times as many users compared to laboratory based urine testing programs.

### 4. What time period does hair testing cover?

The typical length of head hair tested is 1½ inches from the root end. Since the average growth rate of human head hair is approximately ½ inch (1.3 cm) per month a hair analysis covers an approximate 90 day time frame. This time frame is an approximation only since an individual's actual hair growth rate may vary from the average.

### 5. Does body hair give the same type of results as head hair?

Body hair can be used for testing. However, while body hair is generally acknowledged as representing a more distant time frame than head hair, the approximate time period cannot be identified due to the high variability of growth rates.

### 6. How soon after use can a drug be detected in hair?

It takes approximately 5-10 days from the time of drug use for the hair containing drug to grow above the scalp where it can be collected.

### 7. What methodology do you employ?

Hair samples are first screened in our laboratory using Enzyme-Linked Immunosorbent Assay (ELISA) methodology, which has been proven reliable for routine drug testing. Any samples that test presumptively positive in the screening process are then subjected to gas chromatography/mass spectrometry (GC/MS), gas chromatography/tandem mass spectrometry (GC/MS/MS), or liquid chromatography/tandem mass spectrometry (LC/MS/MS) confirmation testing.

### 8. How does Omega Laboratories establish its cut-off levels?

Omega follows the cut-off levels generally accepted industry-wide which are similar to the cut-off levels in the 2004 proposed Substance Abuse and Mental Health Services Administration (SAMHSA) guidelines.





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#### **9. What is the turnaround time?**

Samples received by Omega Laboratories will report out within 1-3 business days.

#### **10. Is Omega Laboratories' internal chain-of-custody comparable to a urinalysis laboratory test procedure?**

Omega's internal chain-of-custody is modeled after Federal guidelines (SAMHSA) as well as other accrediting agencies, such as the College of American Pathologists (CAP).

#### **11. How long are excess hair and test reports saved?**

Any hair remaining after initial testing is completed is retained for a one year period. Test results are retained for a period of two years.

#### **12. How is the data reported?**

As with all Omega testing, results are reported to the designated party and Medical Review Officer, if appropriate. This may be done via the Omega Extranet, fax or electronic data exchange of test results.

#### **13. Does Omega Laboratories wash the hair prior to analysis?**

All hair specimens are washed prior to confirmation testing to remove possible external contamination. Omega's wash procedures were reviewed by the FDA as part of our 510(k) clearances.

#### **14. Can external exposure to drugs (marijuana smoke, crack smoke, etc.) have an effect on the hair test results?**

Along with a wash procedure, Omega looks for both the parent drug and metabolite (bi-product) of drug usage (where appropriate). For marijuana analysis, Omega detects only the metabolite (THC-COOH). This metabolite is only produced by the body and cannot be an environmental contaminant.

#### **15. Can a hair test be beaten/adulterated?**

At this time there are no known successful commercial adulterants for hair tests and the recommended use of normal hair care products/procedures (shampoos, dyes, permanents, relaxers, bleaches) do not have a significant effect on results. The effects of these products were reviewed by the FDA as part of our 510(k) clearances.

#### **16. Does hair color effect results?**

Hair color is determined by the amount of melanin in the hair. It has been shown experimentally, through actual hair samples, as well as determined in court that hair color has no significant impact on results.

#### **17. Can hair collected from a brush be used?**

Yes, but the test will be reported as having an "anonymous" donor. We cannot attribute the sample to any specific person and we cannot determine the time frame of the test, so the test result is not legally defensible.




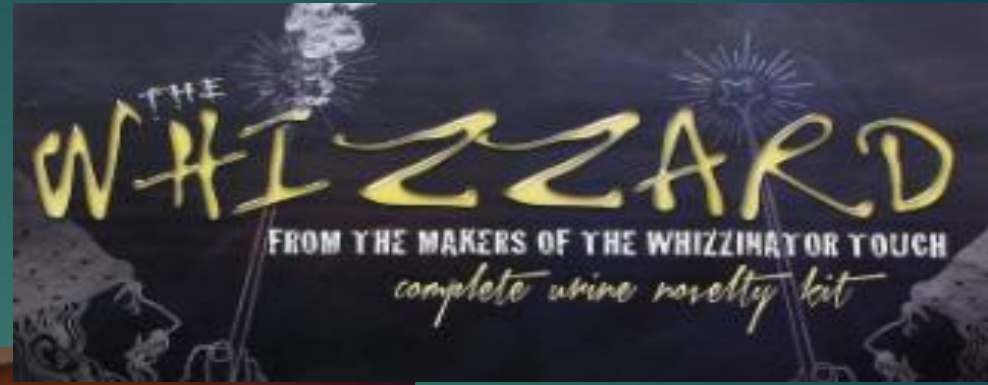
# Creatinine

- ▶ **Creatinine in Urine Testing**
- ▶ **What it is:** Creatinine is a natural waste product created by the normal breakdown of muscle tissue in the body.
- ▶ **Constant production:** The body produces creatinine around the clock, regardless of activity level.
- ▶ **Normal levels:** A typical creatinine level in urine is 125–285 mg/dL.
- ▶ **Low levels (dilution):** Anything **20 mg/dL or below** is generally considered evidence of **intentional flushing** (drinking excessive fluids to dilute a urine sample).
- ▶ **Important note:** Creatinine should not be confused with **creatine powder** (a fitness supplement).



# Catch Me If You Can





Synthetic Urine - Fake Urine for Understanding Urinalysis Education and Lab Testing.  
3.7★☆☆☆☆ 95  
\$23.99





# Urine Collection Hat For Toilets



# Soda Bomb



This is a recipe that people attempt to mask drug use:



**One Part Water**

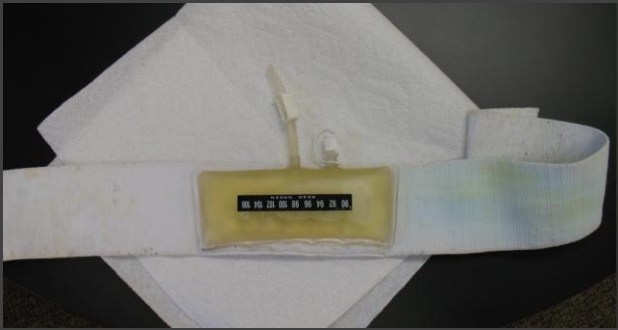
**One Part Baking Soda**

**One Part Bleach**

**Drink**

Will Not Mask Drug Results, will only make them deathly sick!!!







# POPULAR DRUG SLANG

**Percocet** Perks, Jerks

**Xanax** Xannies, Bars, Z-Bars, Footballs

**Adderall** Addys, Uppers, Beans

**Ecstasy (MDMA)** X, E, Molly, Rolls, Scooby Snacks

**Marijuana** Weed, Bud, Gas Pressure, Dope, Herb, Hemp

**Exotic Marijuana** Strain

**DABS** Cart, Dab Cart

# TEXTING DRUG CODES

## Prescription Painkillers

- Dones
- Idiot pills
- Lemonade
- Cotton
- Kickers
- Miss Emma
- Monkey
- Roxy
- 512s
- M-30s
- Paulas
- White Stuff

## Heroin

- Black shirt
- Boy
- Butter
- Dark kind
- Dragon
- Goat
- Mexican food
- Scramble
- Soda
- Thunder
- Weights

## Amphetamines:

- Crosses
- Dexies
- Geeked up
- Pastas

## ADD and ADHD Medications:

- A-Train
- Abby
- Diet Coke
- Pineapple
- Rids
- Smarties
- Study buddies

## Methamphetamine:

- Amp
- Chicken feed
- Chris
- Cold one
- Ice
- Ice water
- Paint
- Small girl
- Yellow cake



## Marijuana

- 420
- Alfalfa
- Blue dream
- Fattie
- Fufu
- Gas
- Girl Scout cookies
- Hoja
- Loud
- MMJ
- My brother
- Pink Panther
- Tigitty
- Top Shelf
- Zip

## Inhalants

- Air Blast
- Bolt
- Highball
- Huff
- Oz
- Snotballs
- Toilet water
- Whippets
- Whiteout

## Ecstasy

- Bombs
- Go
- Green apple
- Malcolm X
- Pingers
- Smacks
- Vowels
- XTC

## LSD

- Cid
- Looney tunes
- Lucy
- Bomba
- Pop
- Superman

## Psilocybin

- Blue meanies
- Cubes
- Lasers
- Musk
- Silly putty
- Stemmies

## Peyote/Mescaline

- Buttons
- Love Flip
- Microdot
- Moons
- Shaman

## Cocaine

- Adidas
- Apache
- Big Bird
- Girl
- HHJ
- Ice cream
- Jump rope
- LV
- Richie
- Wall
- White wall tires

## Fentanyl

- Freddy
- Freddy Mercury
- Pinks
- Blues
- Roxies

Not Everything Dr. Google tell us is  
exactly accurate





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