# Alcohol & Drug Testing Services Catalog

**Alternative Specimens With Extended Panels** 

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#### About USDTL

United States Drug Testing Laboratories, Inc. (USDTL) is a privately-owned laboratory providing drug and alcohol toxicology services worldwide for healthcare facilities, child protection agencies, the Department of Defense, legal services, research, businesses, and analytical and forensic laboratories.

We are a specialty reference and research laboratory pioneering testing in alternate and advanced human specimens. Along with traditional specimen testing such as urine, we are the industry leader in advanced substance use toxicology with testing in nails, hair, and dried blood spot. Because of our extensive specimen offerings, and different detection windows, we have tests available for any phase of life, for anyone exposed to, or suspected of ingesting, substances of abuse.



#### **Accreditations & Oversight**

USDTL is one of only a few ISO 17025 accredited forensic drug testing laboratories in the world, an achievement and standard that is exponentially higher than any other laboratory standard currently available globally.



#### International Organization for Standardization (ISO):

ISO is an independent, non-governmental international organization that regulates standards for processes all over the world to keep us safe. ISO/IEC 17025 is an accreditation that specifies the general requirements for the competence, impartiality and consistent operation of laboratories. Laboratory customers, regulatory authorities, organizations and schemes using peer-assessment, accreditation bodies, and others use ISO/IEC 17025 in confirming or recognizing the competence of laboratories. This recognition assures global acceptance of ISO/IEC 17025-accredited laboratories' test reports for the purposes of free trade and regulatory acceptance.



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#### The College of American Pathologists (CAP):

CAP is the leading organization of board-certified pathologists, serving patients, pathologists, and the public by fostering and advocating excellence in the practice of pathology and laboratory medicine worldwide. CAP accreditation (*for both General and Forensic Drug Testing*) is recognized nationally as the gold standard accrediting organization for laboratories. This recognition assures patients that they will get accurate and quality test results from laboratories.

#### www.cap.org



#### The Clinical Laboratory Improvement Amendments (CLIA):

CLIA regulates laboratory testing and requires clinical laboratories to be certificated by their state as well as the Center for Medicare and Medicaid Services (CMS) before they can accept human samples for diagnostic testing. Three federal agencies are responsible for CLIA: The Food and Drug Administration (FDA), the Center for Medical Services (CMS), and the Center for Disease Control (CDC).

#### www.fda.gov | www.cms.gov | www.cdc.gov

## **Prepared to Launch**

#### Our History of Being 1<sup>st</sup> Speaks for Itself

As a leader in the field of substance use toxicology we have been the first laboratory to the market for many of the tests that seem commonplace today. We house our own research and development team, commanding a strategic advantage in the industry and making us readily adaptable to changing market needs. This means there is a much shorter window for us to get new tests to market, helping our partners offer the best tests to address the latest trends of substance use.



testing. (1991)

Psilocin in urine. (2025) 📃

SSRIs in umbilical cord tissue. (2024) 🍠

Carboxy-∆8-THC, carboxy-CBD in meconium. (2024)

Etizolam & flualprazolam in umbilical cord tissue. (2023)

Kratom for environmental exposure in hair for testing (ChildGuard®). (2022)

Gabapentin in keratinized specimens. (2020)

Kratom in keratinized specimens. (2020) A

Kratom in umbilical cord tissue. (2019)

Acetyl fentanyl in umbilical cord tissue. (2019) 🍠

Direct alcohol biomarker PEth in dried blood spots. (2010)

Direct alcohol biomarker PEth in whole blood. (2006)

Tramadol in meconium. (2005)

Environmental exposure hair testing (Childguard®). (1994)

We Are Innovators. We made history as the first laboratory to offer these cutting-edge tests to the market!

### **Forensically Defensible Testing**

We will never cut corners when it comes to the most advanced and reliable instrumentation or the quality of testing and validation we provide.

We focus exclusively on substance use toxicology and performing tests that are forensically defensible. Every positive result that is reported out through our laboratory goes through a separate confirmatory test from start to finish. This is the extra layer of protection that you can count on for every specimen that is tested at USDTL.

#### **Efficient Turnaround Time**

Generally, the standard turnaround time for reporting negative screening test results is the next business day, with an additional 1-2 business days for specimens that require confirmatory testing. Turnaround time begins from receipt of the valid specimen –accompanied by a properly documented valid order– into the laboratory. Some tests require additional time to process and will fall outside the standard turnaround time window, these times are noted at the bottom of the individual specimen testing pages.

## **Training & Support**

We offer training and support for all members of your organization, from training videos, to virtual group training sessions to bring on new staff, or help existing staff remain consistent. Your staff also has direct access to our highly-trained, in-house Client Services Department to answer questions as they arise.

Our commitment to helping you train your staff on-demand helps lead to fewer rejections of specimens and a better bottom line.

### **Hyper-focused Experts**

We are one of the only laboratories in the nation focusing exclusively on alcohol and substance use testing. We help make sure you have the information you need to be confident in your drug testing program.

Getting quality results faster means happier clients.

## **Litigation Support Services**

We are here if you need us. Our leading toxicologists are experienced experts in the field of forensic toxicology and can add value to cases that require their expertise.

Our support doesn't stop with reporting results.

#### **Educational Resources**

We create and share many educational resources for our partners to use. If you can't find what you are looking for you can contact us and we will get you what you need.

We know that understanding substance use toxicology might not be your top priority but, we are here if you want to learn more about it.

## Hair and Fingernail Testing - Alcohol & Other Drugs

Hair and Fingernail Drug Panels											
Panels:	19	18	17	16	15	14	12	10	9	7	5
Amphetamines amphetamine, MDA, MDEA, MDMA, methamphetamine*											
Cannabinoids carboxy-Δ9-THC											
Cocaine benzoylecgonine, cocaethylene, cocaine, norcocaine											
Opiates 6-MAM, codeine, hydrocodone, hydromorphone, morphine, norhydrocodone											
Phencyclidine phencyclidine (PCP)											
Benzodiazepines alprazolam, diazepam, midazolam, nordiazepam, oxazepam, temazepam		•		•	•	•	•	•	•	•	
Barbiturates amobarbital, butalbital, pentobarbital, phenobarbital, secobarbital				•		•		•	•	•	
Methadone EDDP, methadone											
Propoxyphene norpropoxyphene, propoxyphene											
Oxycodone noroxycodone, oxycodone, oxymorphone											
Meperidine normeperidine											
Tramadol tramadol											
Fentanyl acetyl norfentanyl, fentanyl, norfentanyl											
Sufentanil alfentanil, norsufentanil, sufentanil											
Ketamine ketamine, norketamine											
Buprenorphine buprenorphine, norbuprenorphine											
Zolpidem zolpidem (e.g. Ambien <sup>®</sup> )											
Kratom 7-hydroxymitragynine, mitragynine											
Gabapentin gabapentin											

\*D/L Methamphetamine Isomer testing is available upon request for specimens that test positive for methamphetamine. Turnaround time is 5-7 business days. Turnaround time is 2-4 business days for additional add-ons or for any testing of hair or fingernail 15-panel and above.

#### Hair Detection Window: Up to approximately 3 Months Fingernail Detection Window: Up to approximately 3-6 Months

Additional Add-Ons and Available Options	Add-On	Stand Alone
Diphenhydramine diphenhydramine	$\checkmark$	$\checkmark$
High-Potency Opioids (HPOs) 6-β-Naltrexol (naltrexone metabolite), butorphanol (e.g. Stadol <sup>®</sup> ), nalbuphine (e.g. Nubain <sup>®</sup> ), naloxone (e.g. Narcan <sup>®</sup> ), naltrexone (e.g. Revia <sup>®</sup> )	$\checkmark$	$\checkmark$
EtG (Direct Ethanol Biomarker) ethyl glucuronide	$\checkmark$	$\checkmark$
Propofol Glucuronide propofol glucuronide (e.g. Diprivan <sup>®</sup> )	$\checkmark$	$\checkmark$
Kratom 7-hydroxymitragynine, mitragynine	$\checkmark$	$\checkmark$
Gabapentin gabapentin	$\checkmark$	$\checkmark$
Cotinine cotinine, nicotine	$\checkmark$	$\checkmark$

#### Additional Add-Ons and Available Options For Hair and Fingernail

### Hair Exposure Drug Testing (ChildGuard®)

Detection Window: Up to approximately 3 Months

Hair Exposure (C	ChildGuard®) Drug Panels	Panels:	13	10	9	7	5
Amphetamines	amphetamine, MDA, MDEA, MDMA, methamphetamine						
Cannabinoids	$\Delta$ 8-THC, $\Delta$ 9-THC, $\Delta$ 10-THC, cannabidiol (CBD), carboxy- $\Delta$ 9-T	HC					
Cocaine	benzoylecgonine, cocaethylene, cocaine, norcocaine						
Opiates	6-MAM, codeine, hydrocodone, hydromorphone, morphine, norhydrocodone						
Phencyclidine	phencyclidine (PCP)						
Benzodiazepines	alprazolam, diazepam, midazolam, nordiazepam, oxazepam, temazepam						
Barbiturates	amobarbital, butalbital, pentobarbital, phenobarbital, secobarbi	ital					
Methadone	EDDP, methadone						
Propoxyphene	norpropoxyphene, propoxyphene						
Oxycodone	noroxycodone, oxycodone, oxymorphone						
Meperidine	normeperidine						
Tramadol	tramadol						
Fentanyl	acetyl fentanyl, acetyl norfentanyl, fentanyl, norfentanyl						

#### Hair Testing: THC Ingestion



#### Presence of Carboxy-Δ9-THC in a hair specimen indicates INGESTION.

#### Hair Testing: THC Exposure



Presence of <u>only</u>  $\triangle$ 9-THC in a hair specimen indicates EXPOSURE.

#### Benefits of Using Hair Exposure (ChildGuard®) Testing



#### Phosphatidylethanol (PEth)- Alcohol Testing in Blood

Phosphatidylethanol (PEth) is a mid-to-long-term alcohol biomarker created in red blood cells, where it exists as part of the cell membrane. We offer PEth testing in dried blood spots and whole blood (venipuncture). PEth may be detected in blood for up to approximately 2-4 weeks. However, there may be isolated circumstances where PEth may be detected at 6 weeks or more.

Unlike venipuncture, dried blood spot (DBS) collection is performed by the specimen donor and can be observed by any staff member after a short training session. No medical personnel is needed. Once dry, the special filter paper creates a specimen collection that is not considered a biohazard. No special storage or shipping is needed.

#### Dried Blood Spot Collection is as easy as:



#### PEth testing has been:

- · Shown to improve self-reporting of alcohol use in several research studies
- Used successfully to reduce recidivism rates in Wisconsin's 12-month driver's safety plan following DUI convictions
- Beneficial in child custody cases, drug courts, and professional health programs

\*Please contact adultandchild@usdtl.com if you would like to receive detailed information about these studies.

#### When choosing a test that's best for you, consider these 5 factors:

1 The substances that need to be detected (drug panel selection)

- 2 Desired detection window
- Specimen type
- 4 Level of adulteration potential
- 5 Notice required before collection



The "~" indicates "up to approximately".

\*Collection of toenail and body hair should only be used if the primary matrices are not available. Regarding collection: fingernail and toenail cannot be mixed; head hair and body hair cannot be mixed. \*\* PEth may be detected in blood for up to approximately 2-4 weeks. However, there may be isolated circumstances where PEth may be detected at 6 weeks or more. As a general guideline for alcohol testing, think 3-3-3 — three months, three weeks, three days — to figure out which specimen test and detection window meets your needs.



The most objective alcohol testing results are garnered using direct alcohol biomarkers such as phosphatidylethanol (PEth), ethyl glucuronide (EtG), and ethyl sulfate (EtS). PEth, EtG, and EtS are direct products of alcohol metabolism. In contrast, indirect biomarkers (e.g. MCV and CDT, among others) indicate the physiological effects of alcohol consumption on the body and can often be confounded by non-alcohol-related factors such as disease states, changes in liver function, infection, and even pregnancy.

Direct biomarker testing is accomplished using several different specimen types, including matrices such as urine, blood, hair, and fingernails.

- EtG may be detectable in fingernail and hair for up to approximately <u>3 months</u>.
- PEth may be detected in blood for up to approximately 2-4 weeks. However, there may be isolated circumstances where PEth may be detected at 6 weeks or more. For this example we are referring to an average detection window of about <u>3 weeks</u>.
- EtG/EtS may be detectable in urine for up to approximately <u>3 days</u>.

## Alcohol & Drugs Detected in Adult & Child Specimen Panels

This chart allows you to quickly see the most common drugs or drug metabolites (alphabetical order) available in each specimen type tested. See individual specimen pages for all possible add-ons.

Drug / Metabolite	Nail	Hair	ChildGuard®	Urine	Blood
<b>Δ8-THC</b> , <b>Δ9-THC</b> , <b>Δ10-THC</b> (Cannabinoids)					
6-MAM (Opiates)					
<b>6-β-naltrexol</b> (High Potency Opioids)					
7-hydroxymitragynine (Kratom)					
acetyl fentanyl (Fentanyl)					
acetyl norfentanyl (Fentanyl)					
alfentanil (Fentanyl)					
alprazolam (Benzodiazepines)					
amobarbital (Barbiturates)					
amphetamine (Amphetamine)					
benzoylecgonine (Cocaine)					
bufotenine (Psilocin)					
buprenorphine (Buprenorphine)					
butalbital (Barbiturates)					
butorphanol (e.g. Stadol®)					
cannabidiol (CBD) (Cannabinoids)					
carboxy-cannabidiol (CBD) (Cannabinoids)					
carboxy-∆9-THC (Cannabinoids)					
carboxy-∆8-THC (Cannabinoids)					
carisoprodol (e.g. Soma®) (Carisoprodol)					
clonazepam (Benzodiazepines)					
cocaethylene (Cocaine)					
cocaine (Cocaine)					
codeine (Opiates)					
diazepam (Benzodiazepines)					
EDDP (Methadone)					
ethanol (1 drink/hour) (Ethanol)					
ethyl glucuronide (EtG) (Ethanol)					
ethyl sulfate (EtS) (Ethanol)					
fentanyl (Fentanyl)					
flunitrazepam (Benzodiazepines)					
flurazepam (Benzodiazepines)					
gabapentin (gabapentin)					
hydrocodone (Opiates)					
hydromorphone (Opiates)					
ketamine (Ketamine)					
lorazepam (Benzodiazepines)					
MDA (Amphetamine)					
MDEA (Amphetamine)					

Drug / Metabolite	Nail	Hair	ChildGuard®	Urine	Blood
MDMA (Amphetamine)					
meperidine (Meperidine)					
meprobamate (Carisoprodol)					
methadone (Methadone)					
methamphetamine (Amphetamine)					
midazolam (Benzodiazepines)					
mitragynine (Kratom)					
morphine (Opiates)					
nalbuphine (e.g. Nubain®) (High Potency Opioids)					
naloxone (e.g. Narcan®) (High Potency Opioids)					
naltrexone (e.g. Revia®) (High Potency Opioids)					
nitrazepam (Benzodiazepines)					
norbuprenorphine (Buprenorphine)					
norcocaine (Cocaine)					
nordiazepam (Benzodiazepines)					
norfentanyl (Fentanyl)					
norhydrocodone (Hydrocodone)					
norketamine (Ketamine)					
normeperidine (Meperidine)					
noroxycodone (Oxycodone)					
norpropoxyphene (Propoxyphene)					
norsufentanil (Sufentanil)					
oxazepam (Benzodiazepines)					
oxycodone (Oxycodone)					
oxymorphone (Oxycodone)					
pentobarbital (Barbiturates)					
phencyclidine (PCP) (Phencyclidine)					
phenobarbital (Barbiturates)					
phosphatidylethanol (PEth) (Ethyl Alcohol)					
propofol glucuronide (Propofol)					
propoxyphene (Propoxyphene)					
psilocin (Psilocin)					
secobarbital (Barbiturates)					
sufentanil (Sufentanil)					
temazepam (Benzodiazepines)					
tramadol (Tramadol)					
triazolam (Benzodiazepines)					
zolpidem (e.g. Ambien®) (Zolpidem)					
zolpidem phenyl-4-carboxylic acid (Zolpidem)					

Note: Drugs / metabolites are listed in bold. Drug classes are listed in parentheses, when applicable.

## **Urine Drug Panels**

Panels:	18	15	12
Amphetamines amphetamine, MDA, MDEA, MDMA, methamphetamine			
Cannabinoids carboxy-Δ8-THC, carboxy-Δ9-THC, carboxy-cannabidiol (CBD)			
Cocaine benzoylecgonine			
Opiates codeine, hydrocodone, hydromorphone, morphine			
Phencyclidine phencyclidine (PCP)	•		
Benzodiazepines α-hydroxyalprazolam*, α-hydroxymidazolam, α-hydroxytriazolam, 2-hydroxyethylflurazepam, 7-aminoclonazepam, 7-aminoflunitrazepam, 7-aminonitrazepam, lorazepam*, nordiazepam*, oxazepam*, temazepam*	•	•	•
Barbiturates amobarbital, butalbital, pentobarbital, phenobarbital, secobarbital			
Methadone EDDP, methadone	•		
Propoxyphene norpropoxyphene	•		
Oxycodone oxycodone, oxymorphone			
Meperidine normeperidine			•
Tramadol tramadol			
Fentanyl alfentanil, fentanyl, norfentanyl			
Sufentanil norsufentanil, sufentanil (e.g. Sufenta®)			
Buprenorphine buprenorphine, norbuprenorphine			
Carisoprodol carisoprodol (e.g. Soma®), meprobamate (e.g. Equagesic®)			
Zolpidem zolpidem (e.g. Ambien®), zolpidem phenyl-4-carboxylic acid			
Ketamine ketamine, norketamine			

#### Additional Add-Ons and Available Options for Urine

Additional Add-Ons and Available Options	Add-On	Stand Alone
6-MAM 6-MAM	$\checkmark$	Х
Direct Ethanol Biomarkers ethanol, ethyl glucuronide, ethyl sulfate	$\checkmark$	$\checkmark$
Propofol Glucuronide propofol glucuronide (e.g. Diprivan <sup>®</sup> )	$\checkmark$	$\checkmark$
Kratom mitragynine	$\checkmark$	$\checkmark$
Psilocin bufotenine, psilocin	$\checkmark$	$\checkmark$

Urine provides the middle ground in drug testing, showing a history shorter than fingernails and hair, but longer than oral fluid (not offered at USDTL). Drug and alcohol biomarkers may be detectable in urine for up to approximately 2-3 days. We confirm all screening results by LC-MS/MS or GC-MS, offering urine testing panels with over 50 drug and alcohol biomarkers.

Kratom turnaround time: approximately 2 weeks.

### Chain of Custody For All Specimens

The movement and location of physical evidence from the time it is obtained until the time it is presented in court is the legal definition of chain of custody. The results of any alcohol or substance use test performed at USDTL may eventually be presented as evidence in a court of law (forensic). This is why USDTL maintains universal chain of custody for all specimens regardless of the client source of testing specimens. A well-maintained and legal chain of custody begins at the time of specimen collection and continues uninterrupted until test results have been presented in court, if necessary.

There are several key elements that must be present when specimens arrive at USDTL:

- 1. The specimen container must be sealed with an intact security seal.
- 2. The specimen must be accompanied by a Custody and Control Form with an ID number matching the number on the specimen container.
- 3. The Custody and Control Form must be signed and dated by an authorized agent from the client.

An unbroken chain of custody ensures specimen integrity in several ways that preserve the legal usefulness of alcohol and drug testing results.

USDTL offers litigation support. For more information contact client services at 800.235.2367.



## **Advance Your Drug Testing Today!**

Call us or visit us online: www.USDTL.com 800.235.2367 - AdultandChild@USDTL.com



Our services are not intended to diagnose, treat, cure, or prevent any disease. For forensic use only. Information up-to-date as of: 01.13.2025