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<th>Drug Screen (Positive Cutoff)</th>
<th>Drug (Trade Names)</th>
<th>Urine Detection Window</th>
<th>Urine Drug Screen Comment CR = Cross reactivity, Eq = Equivalent</th>
<th>Recommendations for quantitative urine confirmation testing performed by LC-MSMS or GC-MSMS</th>
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| Opiates (300 ng/mL)           | Morphine (MS-Contin and various other preparations), Codeine (various other preparations), Hydrocodone (Vicodin and various other preparations), Hydromorphone (Dilaudid and various other preparations), Heroin | 1-3 days | ● Detects Morphine, Codeine, 6-Acetylmorphine well  
  ➢ Morphine: 100% CR, 300 ng/mL  
  ➢ Codeine: 134% CR, 224 ng/mL Eq  
  ➢ 6-Acetylmorphine: 78% CR, 386 ng/mL Eq – this is a metabolite specific to heroin. 
  ● Lower sensitivity for Hydrocodone and Hydromorphone  
  ➢ Hydrocodone: 28% CR, 1,086 ng/mL Eq  
  ➢ Hydromorphone: 21% CR, 1,425 ng/mL Eq | Opiates Confirmation --- Use ALI Test Code OPIATES. 
  ● Identifies and quantitates Morphine, Codeine, Oxycocdone, Oxymorphone, Hydrocodone, Hydromorphone, 6-AM (6 acetyl morphine) using a 20 ng/mL cutoff. 
  Buprenorphine Confirmation --- Use ARUP code BUPR UR 
  ● Identifies and quantitates Buprenorphine and Norbuprenorphine using a 2 ng/mL cutoff, glucuronide metabolites using a 5 ng/mL cutoff, and Naloxone using a 100 ng/mL cutoff. 
  Fentanyl Confirmation --- Use ARUP code CDCO FENU 
  ● Identifies and quantitates Fentanyl and Norfentanyl using a 1 ng/mL cutoff. 
  Meperidine Confirmation --- Use ARUP code 3000248 
  ● Identifies and quantitates Meperidine and Normeperidine using a 40 ng/mL cutoff. 
  Tramadol Confirmation --- Use ARUP code TRAMAD UR 
  ● Identifies and quantitates Tramadol and O-desmethyltramadol using a 25 ng/mL cutoff. 
  Additional Confirmation Tests are available upon request, please consult with the laboratory. |
|                              | Oxycodone (Oxycontin, Percocet, Percodan) Oxymorphone (Numorphan, Opana) | 1-3 days | ● Detects Oxycodone and Oxymorphone  
  ➢ Oxycodone: 100% CR, 100 ng/mL  
  ➢ Oxymorphone: 103% CR, 97 ng/mL |  |
| Oxymorphone / Oxymorphone (100 ng/mL) | Cizdol, Subutex, Suboxone, Temgesic, Buprenex, Norspan, Butrans | 1-7 days | ● Detects Buprenorphine and Buprenorphine-3-β-D Glucuronide  
  ➢ Buprenorphine: 100 CR, 10 ng/mL  
  ➢ Buprenorphine-3-β-D Glucuronide: 98% CR, ~11 ng/mL |  |
| Fentanyl (2 ng/mL)            | Sublimaze (IV admin.) Duragesic (transdermal patch) Actiq (transmucosal lozenge) | 1-3 days | ● Detects Fentanyl, with some sensitivity to Fentanyl analogs  
  ➢ Fentanyl: 100% CR, 2 ng/mL  
  ➢ Carfentanil: 33.3% CR, 6 ng/mL |  |
| Amphetamines (500 ng/mL)      | Amphetamine (Adderall, Benzedrine, Dexedrine, Vyvanse) Methamphetamine (Desoxyn, Methedrine, Vicks inhaler) MDA, MDMA (Ecstasy), Selegeline, Speed | 1-4 days | ● Detects Amphetamines and Methamphetamines  
  ➢ d-Methamphetamine: 102% CR, 488 ng/mL  
  ➢ d-Amphetamine: 101% CR, 494 ng/mL Eq  
  ➢ MDA: 127% CR, 394 ng/mL Eq  
  ➢ MDMA: 255% CR, 196 ng/mL Eq  
  ➢ MDEA: 75% CR, 668 ng/mL Eq | Amphetamines Confirmation --- Use ARUP code AMPS UR 
  ● Identifies and quantitates Amphetamine, Methamphetamine, Phentermine, MDA, MDMA and MDEA using a cutoff of 200 ng/mL for all, except Amphetamine cutoff is 50 ng/mL. 
  Methylenphenidate Confirmation --- Use ALI test code METHPHENUR 
  ● Identifies and quantitates Methylphenidate using a 10 ng/mL cutoff and Ritalinic Acid using a 100 ng/mL cutoff. |
| Barbiturates (200 ng/mL)       | Amobarbital (Amytal) Butabarbital (Butisol) Pentobarbital (Nembutal) Phenobarbital (Luminal) Secobarbital (Seconal) | 1-6 days | ● Sensitivity depends on the type of Barbiturate  
  ➢ Secobarbital: 100% CR, 200 ng/mL  
  ➢ Butalbital: 71% CR, 281 ng/mL Eq  
  ➢ Pentobarbital: 36% CR, 561 ng/mL Eq  
  ➢ Amobarbital: 29% CR, 702 ng/mL Eq  
  ➢ Phenobarbital: 22% CR, 925 ng/mL Eq | Barbiturates Confirmation --- Use ARUP code BARB UR 
  ● Identifies and quantitates Secobarbital, Butalbital, Amobarbital, Pentobarbital, and Phenobarbital using a cutoff of 50 ng/mL. |
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<td>Benzodiazepines (300 ng/mL)</td>
<td>Alprazolam (Xanax) Clonazepam (Klonopin) Diazepam (Valium) Lorazepam (Ativan) Oxazepam (Serax)</td>
<td>1-2 days (short acting) 1-4 days (intermediate acting) 1-7+ days (long acting)</td>
<td>- Detects a variety of Benzodiazepines (not a complete list):  🔄 Nordiazepam: 100% CR, 300 ng/mL  🔄 Diazepam: 88% CR, 340 ng/mL Eq  🔄 Alprazolam: 89% CR, 338 ng/mL Eq  🔄 Oxazepam: 75% CR, 398 ng/mL Eq  🔄 Rohypnol (Flunitrazepam): 71% CR, 424 ng/mL Eq  🔄 Clonazepam: 67% CR, 445 ng/mL Eq  🔄 Midazolam: 64% CR, 467 ng/mL Eq  🔄 Lorazepam: 62% CR, 487 ng/mL Eq</td>
<td>Benzodiazepines Confirmation --- Use ALI test code BENZOS  • Identifies and quantitates Alprazolam, Alpha-hydroxyalprazolam, Clonazepam, 7-aminoconlazepam, Desalkylflurazepam, Diazepam, Alpha-hydroxyethylflurazepam, Lorazepam, Nordiazepam, Oxazepam, Temazepam, and Alpha-hydroxytriazolam using a 20 ng/mL cutoff.</td>
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<tr>
<td>Methadone Confirm (300 ng/mL)</td>
<td>Methadone (Dolophine, Methadose)</td>
<td>1-3 days</td>
<td>- Detects EDDP, a metabolite of Methadone: 100% CR at 300 ng/mL  🔄 Methadone is rapidly metabolized / excreted by the kidneys; therefore, assays rely on detection of its metabolite.</td>
<td>Methadone Confirmation --- Use ARUP code CDCO METH  • Identifies and quantitates Methadone and EDDP (metabolite) using a 10ng/mL cutoff.</td>
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<tr>
<td>THC (Cannabinoids) (50 ng/mL)</td>
<td>9-carboxy-THC, Cannabis, Cannabinoids, Dronabinol, Marijuana, Marinol, THC</td>
<td>&lt;1-30+ days, depending upon usage</td>
<td>- Detects the major THC metabolite Δ9 COOH-THC: 100% CR at 50 ng/mL. Other metabolites may be detected with lesser sensitivity.</td>
<td>THC metabolite confirmation --- Use ARUP code CDCO THC  • Identifies and quantitates 11-Nor-9-carboxy-THC using a 5 ng/mL cutoff.</td>
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<tr>
<td>Acetone (10 mg/dL)</td>
<td>Acetone, nail polish remover, may be seen in diabetic ketoacidosis (DKA), or as a metabolite of isopropanol</td>
<td>Not well-established</td>
<td>- Detects acetone by Gas Chromatography  The presence of acetone may indicate exposure to acetone; it is also a metabolite of isopropanol and may be present with ketoacidosis.</td>
<td>Verification with serum/plasma level is recommended if acute poisoning is suspected; use ALI code ACETONE. If more than one volatile is detected, and confirmation and level are indicated, use ALI code VOLATILES.</td>
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<tr>
<td>Ethanol (10 mg/dL)</td>
<td>Ethanol, ethyl alcohol, alcohol, spirits</td>
<td>10-12 hours, depending upon amount ingested Up to 3 days (applicable to Ethyl Glucuronide and Ethyl Sulfate testing)</td>
<td>- Detects ethanol by Gas Chromatography  The presence of ethanol indicates exposure which may result in intoxication, CNS depression, and metabolic acidosis.</td>
<td>Confirmation of a positive urine ethanol result is not typically necessary if the result is expected.  Verification with serum/plasma level is recommended if acute poisoning is suspected; use ALI code ETOH. If more than one volatile is detected and confirmation and levels are indicated, use ALI code VOLATILES.  For follow-up testing of a presumptive result or assessment of ethanol exposure in the contexts of compliance and/or abuse, Ethyl Glucuronide and Ethyl Sulfate, Urine, Quantitative ARUP code 2007909 is recommended. Results do not accurately correlate with amount or frequency of ethanol use.</td>
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<tr>
<td>Isopropanol (10 mg/dL)</td>
<td>Isopropanol, isopropyl alcohol, rubbing alcohol</td>
<td>Not well-established</td>
<td>- Detects isopropanol by Gas Chromatography  The presence of isopropanol indicates exposure which may result in intoxication and CNS depression. Ingestion of isopropanol can be fatal if patients do not receive immediate medical treatment.</td>
<td>Verification with serum/plasma level is recommended if acute poisoning is suspected; use ALI code ISOPRO. If more than one volatile is detected and confirmation and levels are indicated, use ALI code VOLATILES.</td>
</tr>
<tr>
<td>Methanol (10 mg/dL)</td>
<td>Methanol, methyl alcohol, wood alcohol</td>
<td>Not well-established</td>
<td>- Detects methanol by Gas Chromatography  The presence of methanol indicates exposure which may result in intoxication, central nervous system (CNS) depression, and metabolic acidosis. Ingestion of methanol can be fatal if patients do not receive immediate medical treatment.</td>
<td>Verification with serum/plasma level is recommended if acute poisoning is suspected; use ALI code METH. If more than one volatile is detected and confirmation and levels are indicated, use ALI code VOLATILES.</td>
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