



Drug Screening –Specimen Options

Determine the best fit for your program

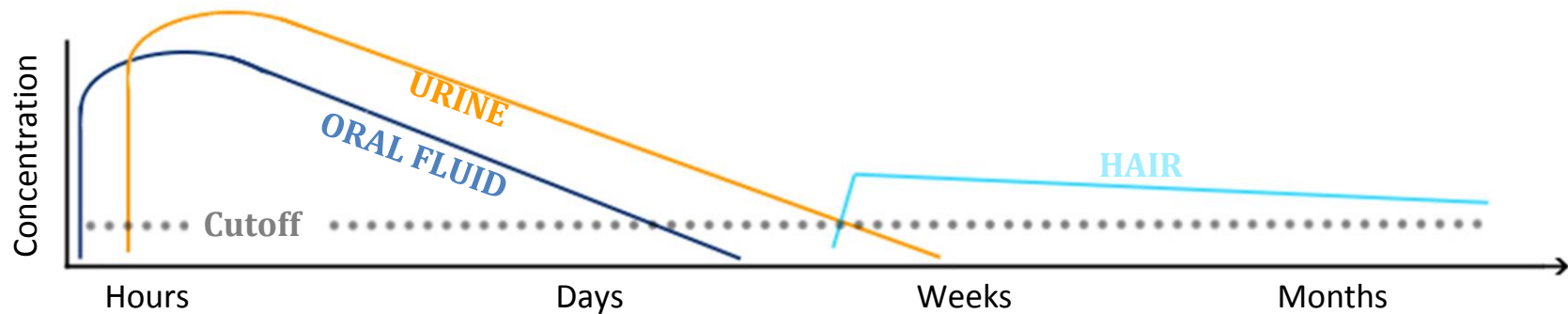
When implementing a drug screen program it is very important to determine the best specimen type for your needs. The answer will primarily depend on the following factors:

Federal Regulations • Detection Period • Cost • Accuracy • Reason for Test (ie. Pre-Employment, Random, etc.) • Availability

Each method comes with its own strengths and weakness and it is important to take both into consideration prior to implementing your program.

Collection Types Options At A Glance

Urine	Oral Fluid	Hair	Instant/POCT
Urine Testing is the most common, and the most familiar test types. As such, it is widely available both domestically and internationally. Urine is also the only specimen type acceptable for regulated DOT testing. Detects drug use within 1-3 days of specimen collection.	Major benefits of Oral Fluid tests are they are virtually tamper resistant. Minimally invasive collections can be conducted by professional collectors or employer trained personnel. Detects drug use within 1-2 days of specimen collection.	The main reason an employer may choose a hair screening program is it is the only method that detects drug use history for up to 90 days, making it a great method to detect long-term drug use patterns. As such, the positivity rate is nearly twice that of urine tests.	Instant or Point of Care Testing (POCT) is a great option for employer's that require rapid results. Negative results are supplied within minutes while non-negative results are confirmed by SAMHSA certified laboratories.



Urine Testing

Urine testing was, and still is for many employers, the "gold standard" in drug screening. Urine's primary benefits include simple collection process, affordable costs, accurate results and its familiarity.

Expansive Panel Options

Urine drug testing is by far the most flexible and customizable. With hundreds of different combinations of detectable drugs, order codes and cutoff levels, there's a urine test panel for almost any testing reason.

Amphetamines/Methamphetamines • Cocaine • Marijuana • Opiates •
 PCP Barbiturates • Benzodiazepines • Propoxyphene • Methadone
 Methaqualone
 MDMA (Ecstasy) • Urine Alcohol • Expanded Opiates • Fentanyl
 Meperidine Cotinine • ETG

Detection Window

Urine drug testing detects recent drug use in the previous 24 to 72 hours.

Collection Network

Widely available both domestically and internationally.

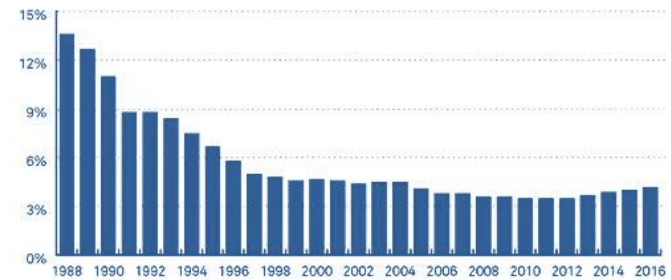


- Inexpensive
- Detects recent drug use (previous 24-72 hours)
- Wide range of panel's available
- Approved for federal testing (including DOT)
- Proven track record
- Applicable for a variety of testing reasons including – pre-employment, random, post-accident, reasonable suspicion, follow-up and return-to-duty screening

Subject to Tampering?

Urine tests familiarity has also has, many believe, made urine testing subject to tampering/subversion. As detailed below, urine positivity rates are below self-reported illicit drug use based on a study by the National Institute on Drug Abuse (NIDA).

Annual Positivity Rates
 Urine Drug Tests - For Combined U.S. Workforce



Nearly 9 million tests from January to December 2016

<http://www.questdiagnostics.com/home/physicians/health-trends/drug-testing/table1.html>

Drug Use: Self-Reported vs. Quest Rates



<http://www.samhsa.gov/data/sites/default/files/NSDUHresultsPDFWHTML2013/Web/NSDUHresults2013.pdf>

As urine collections are largely conducted in unmonitored situations, donors have an opportunity to tamper/substitute their sample (either with another individual's or synthetic urine). Not to mention the possibility of dilution or other "tricks" prior to the collection process.



- Easily manipulated
 - Adulteration
 - Dilution (drinking a lot of water over a short period of time)
 - Substitution (using fluid other than the donor's own urine)
- Collection process is not observed
- Cannot measure frequency of illicit drug use

Oral Fluid Testing

Oral Fluid testing is a great option for employers who favor ease of collection and short detection windows. These characteristics not only make Oral Fluid testing a consideration for Pre-Employment but also make it a very good fit for Random, Reasonable Suspicion and Post Accident testing.

Detection Window

Oral Fluid is the best method for detecting recent drug use, with a detection window in the previous 24 to 48 hours.

Tamper Resistant

Observed collections make this method virtually tamper resistance.

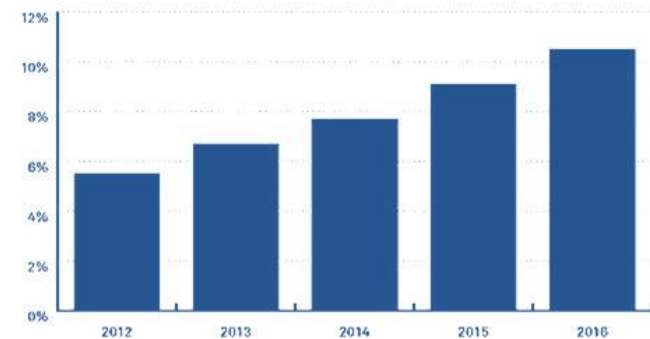
Cost

Oral fluid collections are simple to perform and are can be conducted at the place of employment, eliminating collection fees and reducing lost productivity.

Positivity Rates

Oral screenings positivity rates are twice as high to urine screenings, likely due to reduced tampering.

Positivity Rates by Testing Category
Oral Fluid Drug Tests – For General U.S. Workforce



More than 1.3 million tests from January to December 2016

<http://www.questdiagnostics.com/home/physicians/health-trends/drug-testing/table1.html>

Screening Options:	Amphetamines/ Methamphetamines	Cocaine	Marijuana	Opiates (Codeine & Morphine)	Expanded Opiates (Hydrocodone & Hydromophone and/or Oxycodone & Oxymorphone)	PCP	MDMA (Ecstasy)
<p>+</p> <ul style="list-style-type: none"> Inexpensive Detects recent drug use (previous 48 hours) Sample collected under direct observation (difficult to cheat) Lab-based testing has proven to be scientifically accurate (equivalent to urine) Applicable for a variety of testing reasons including – pre-employment, random, post-accident, reasonable suspicion, follow-up and return-to-duty screening 							
							<p>-</p> <ul style="list-style-type: none"> Does not detect illicit drug use beyond 48 hours Cannot measure frequency of illicit drug use Not currently approved for federal testing (SAMHSA is seeking approval for future federal testing)

Hair Testing

Hair tests are a great choice for employers who wish to have a broader detection window and identify historical patterns of drug use.

Extended Detection Window

Hair drug testing detects drug use for up to 90 days.

Unlike oral or urine tests, which a donor can attempt to delay testing to disrupt drug detection, hair testing would make it far more difficult for a habitual user to use such a method.

Tamper Resistant

Observed collections make this method virtually tamper resistance.

Cost

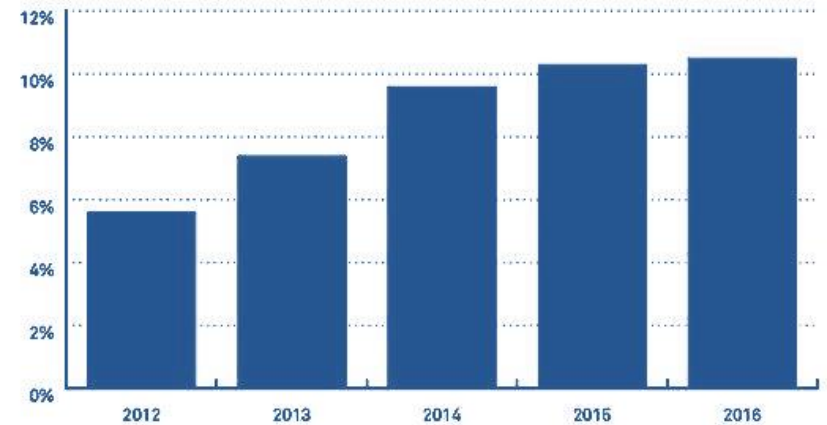
Cost can be a deterrent as fees can be up to 2-3 times urine screening.

Positivity Rates

Hair screenings positivity rates are twice as high to urine screenings, likely due to reduced tampering and increased detection window

Positivity Rates by Testing Category

Hair Drug Tests – For General U.S. Workforce



More than 170 thousand tests from January to December 2016

<http://www.questdiagnostics.com/home/physicians/health-trends/drug-testing/table1.html>

Screening Options	Amphetamines/ Methamphetamines	Cocaine	Marijuana	Opiates (Codeine & Morphine)	Expanded Opiates (Hydrocodone & Hydromorphone and/or Oxycodone & Oxymorphone)	PCP	MDMA (Ecstasy)
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>+ Long detection window (up to 90 days)</p> <p>Higher rate of positive results</p> <p>Can reveal historical patterns of drug use</p> <p>Not easily subverted</p> <p>Suitable for pre-employment and return-to-duty testing</p> </div> <div style="width: 45%;"> <p>- Relatively high cost</p> <p>Detection takes approx. 5 to 10 days from the time of drug use</p> <p>Poor specimen to detect sporadic drug use, including marijuana</p> <p>Longer turnaround times</p> <p>Challenging when donor has shaved or is void of head/body hair</p> <p>Not approved for DOT federal testing</p> <p>Not appropriate for post-accident or reasonable suspicion because of detection window</p> </div> </div>							

Instant/Point of Care

Instant/Point of Care urine testing includes all the benefits of traditional Urine Lab based testing with the add benefit of non-negative results reported in only minutes, allowing faster decision making & greater program efficiency.

Detection Window

Urine drug testing detects recent drug use in the previous 24 to 72 hours.

Limited Panel Options

Panel options are limited to standard 5 Panel or 10 Panel.

Cost

Fee's are generally slightly higher than standard laboratory based

Non-Negative Confirmations

While negative tests can be reported within minutes, non-negative results require laboratory confirmation. Final lab results are typically reported within 48-72hrs of the specimen's arrival.

Subject to Tampering?

Instant Urine tests share the same risk of tampering as lab based screening, as both are subject to unsupervised collection.



Detects recent drug use (previous 24-72 hours)
Rapid results
Applicable for a variety of testing reasons including – pre-employment, random, post-accident, reasonable suspicion, follow-up and return-to-duty screening



Higher Costs
Not approved for DOT federal testing
Easily manipulated

- Adulteration
- Dilution (drinking a lot of water over a short period of time)
- Substitution (using fluid other than the donor's own urine)

Collection process is not observed

For More Information

For more information on Cisive's Drug Screening solutions, contact your dedicated Cisive Client Services Representative or call us at 1.866.557.5984 or email sales@cisive.com.