



Drug screening: What's the best test?

**Choosing the method that's
right for your business**



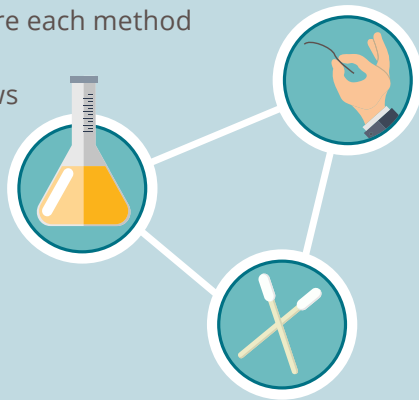
Drug screening: What's the best test?

Choosing the method that's right for your business



Whether for safety, productivity, compliance and/or liability reasons, drug testing is a critical component of employee screening and on-boarding, and often part of a larger drug-free workplace program. Currently, there are three predominant methods for drug testing – urine, oral fluid and hair. Do you know which you should use?

In this report, we'll review and compare each method – including the types of drugs each specimen can screen for, their windows of detection, any vulnerabilities due to subversion (i.e., cheating), and the average cost.

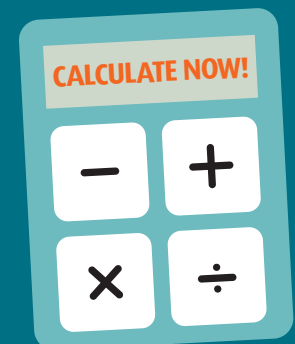


Did you know?

- Seventy percent of the 14.8 million Americans who use illegal drugs are employed
- Drug abuse costs employers \$81 billion annually
- Drug users typically work at about two-thirds of their predicted efficiency, largely due to unplanned absences.
- Drug users incur 300% higher medical costs than non-drug using employees
- Drug users are three to four times more likely to injure themselves or another person in a workplace accident
- Drug users have five times more workman's compensation claims

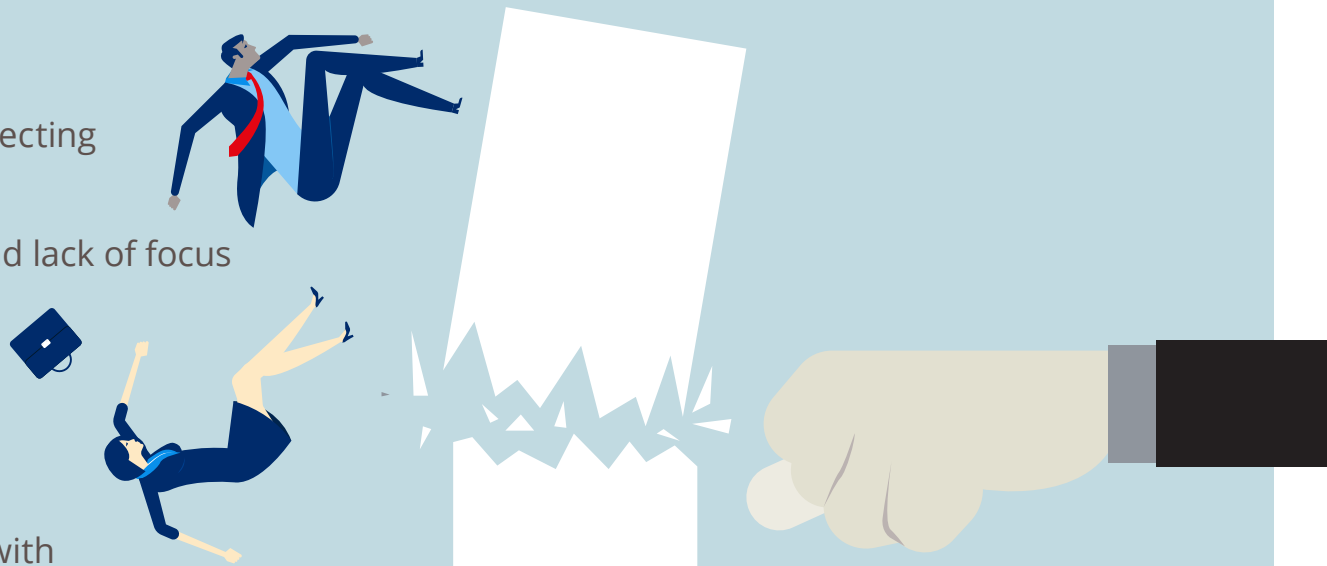
Substance Use Cost Calculator for Employers

Find out the cost of substance use to your organization (including prescription drug abuse, alcohol abuse and misuse, opioid and heroin addiction, as well as, abuse of other illicit drugs) based on workplace size, industry and state.



The impact of drug dependence in the workplace:

- Premature death/fatal accidents
- Injuries/accident rates
- Increased absenteeism/extra sick leave
- Loss of production
- Tardiness/sleeping on the job
- After-effects (hangover, withdrawal) affecting job performance
- Poor decision making/concentration and lack of focus
- Loss of efficiency
- Theft
- Lower morale of co-workers
- Increased likelihood of having trouble with co-workers/supervisors or tasks
- Preoccupation with obtaining and using substances while at work, interfering with attention and concentration
- Illegal activities at work including selling illicit drugs to other employees
- Higher turnover
- Disciplinary problems



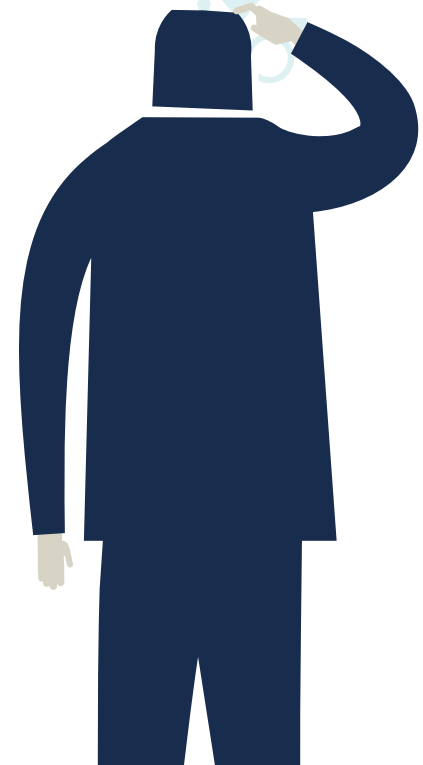
How Drug Testing Got Started?

First, some context. Drug testing, as we know it today, is largely a program built around deterring people from using versus trying to catch active users. Formalized testing began in the 1980s after two major accidents involving drugs drew widespread public and government attention.

The military was the first to implement drug testing and the U.S. government followed with a drug testing policy for all federal agency employees. In 1991, Congress passed the Omnibus Transportation Act, which required mandatory drug testing for truck drivers, pilots, train operators and other people who operate large equipment and are regulated by the Department of Transportation (DOT). Eventually, drug testing spread more broadly to private companies as a cost containment measure.

The financial incentive for a drug-free workplace is strong: Illicit drug users wind up filing five times the amount of workers compensation than non-users, they are injured more often, they require three times the healthcare costs of non-users; and they are highly inefficient – working, on average, at two-thirds of predicted efficiency, largely due to unplanned or unexcused absenteeism.

While widespread drug testing certainly hasn't eliminated drug use among workers, it has had a substantial impact. Employers with successful drug-free workplace programs report improvements in morale and productivity and decreases in absenteeism, accidents, downtime, turnover, and theft. Employers with long-standing programs report better health status among employees and family members and reduced healthcare costs, and some organizations with drug-free workplace programs qualify for incentives, such as decreased costs associated with short- and long-term disability and workers' compensation.



Primary Drug Testing Methods

Now let's take a closer look at each of the three primary drug testing methods.



Urine testing – in which an individual's urine is screened for the presence of drugs - has been the gold standard for employee drug testing since it first began. It's what the federal government and DOT-regulated industries use to monitor their workers and applicants. And in fact, it's currently the only method approved for any federally-mandated drug testing.



Window of detection

Urine has a window of detection of approximately seven days for most drugs, meaning any use of those drugs within the past week will show up on a screen. Some drugs such as cocaine and methamphetamine have a shorter window and are typically undetectable in urine 72 hours after use.

Drugs it can screen for

Urine-based drug screening offers a great deal of flexibility and customization as it can be tested for a wide range of substances. As Quest Diagnostic reports, "With hundreds of different combinations of detectable drugs, order codes and cutoff levels, there's a urine test panel for almost any testing reason."

Cost

The cost for a urine drug test is \$30-50 per test.

Know Your Terms:



- **Drug panel:** The term "panel" simply refers to the drug or drug family included in a drug test. More panels mean a wider screening. Five panel drug screens are the most common.
- **Window of detection:** The timeframe for which drugs can be detected (above a specified cut-off level) within a specimen.

Urine Testing



Drawbacks

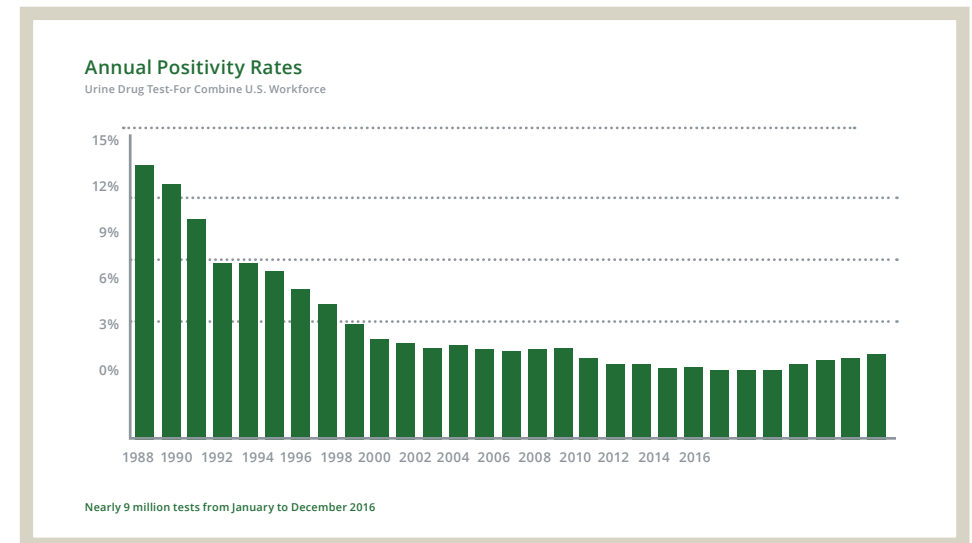
Although it is certainly a valuable, viable and widely used method for drug screening, urine testing is not without its problems. The main drawbacks of urine testing are:

- Collection events are not observed. Donors need privacy to produce their urine sample, which means a technician cannot be certain that the provided sample is, in fact, from the individual being tested.
- There are a number of ways to cheat the system, using:
 - **Dilution:** Watering down the sample to increase the likelihood of a negative result.
 - **Substitution:** Using a synthetic urine product – or another individual's urine – in place of the person's being tested.
 - **Adulteration:** Adding chemicals or other substances to the urine designed to break up any evidence of drugs in the sample.

As a quick Internet search will reveal, there are a proliferation of products available to help people “beat their urine drug test” and these solutions continue to advance in complexity. As an example, there are now “stealth” dual-release tablets that have an outer shell that “cleans” the urine with an oxidizing agent, and an inner core that then reverses the process so it's undetectable.

Urine positives on the decline

In 1988, nearly 13% of urine specimens tested positive for illegal substances according to Quest Diagnostics. In 2016, that number was under five percent. HireRight's own internal data tells the same story, with the number of Medical Review Officer (MRO) verified positive specimens in 2017 at less than two percent. And while drug awareness, prevention and testing accounts for some of this change, the percentages are artificially lowered because people have gotten used to drug screening. Many drug users know how to study for – and beat – the test.



Taking all the positives and negatives into account, **urine-based drug screening continues to be the gold standard** for employment drug testing. It is an especially good method for employers that require a multitude of collection sites.

Oral Fluid Testing



Another top drug screening method is oral fluid, through which saliva and cellular debris is collected by swabbing the inside of a donor's mouth and is tested for the presence of drugs. Oral fluid testing was first pioneered by a company called Lab One, now part of Quest Diagnostics.



Window of detection

Oral fluid is great for detecting recent drug use. The window of detection for oral fluid is two to three days for all substances with the exception of marijuana.

The marijuana detection window is within 24 hours of the last usage. This narrow timeframe for marijuana mirrors the impairment window – the duration of time an individual is impaired by marijuana use. A study performed by [Leirer VO](#), suggests that the impairment window for marijuana is as long as 24 hours after use; therefore, if someone gets a positive marijuana result on an oral fluid drug screen, he or she was impaired at the time the sample was collected.

What happens when a test comes back positive

Positive drug test result found at the lab level

MRO reviews with patient to see if there's any medical explanation, if no explanation can be made the MRO reports the drug test as verified positive

Drugs it can screen for

The majority of oral fluid screens are 5-panel tests that look for cocaine, amphetamine, opiates, phencyclidine and cannabinoids (THC). There are some broader panels available at some labs that include barbiturates and selected benzodiazepines.

Oral Fluid Testing



Cost

The cost for an oral fluid drug screening is \$25-35 if the employer has the capability to collect it themselves, or \$40-50 if the sample is collected by a third party. As with all screening methods, costs will also vary by the number of panels included in the test – the more drugs included, the higher the price.

Drawbacks

As with all other methods, there are some downsides to oral fluid drug screening. The most significant is that for pre-employment testing, the window of detection is brief. If an employer just uses oral fluid testing for pre-employment drug screening, the candidate simply needs to abstain from drugs for the few days prior. Even heavy drug users may be able to “white knuckle it” for such a short duration, in order to get a clean result. For this reason, oral fluid testing shouldn’t necessarily be a “one and done.” Oral fluid works better for companies that perform random screening as part of a drug-free workplace program, or for testing when there is reasonable cause to suspect an employee is under the influence of drugs.

Benefits

The benefits of oral fluid are that it is:

- Easily collected
- Collected under the observation of the tester
- Very accurate
- FDA-approved
- Not vulnerable to subversion – there is nothing reliable one can do to “beat” an oral fluid drug test

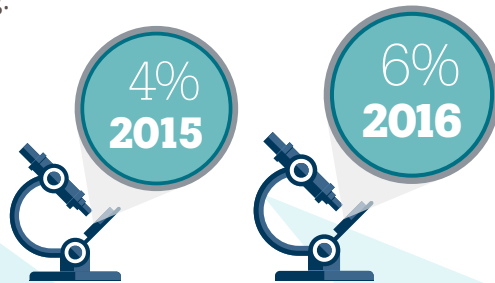


Oral Fluid Testing



Oral fluid positives on the rise

While positive rates for urine-based screening have been declining as people learn how to cheat the test, positives for oral fluid have been increasing year-over-year, which reveal a more accurate view of current usage. Our HireRight data shows the rate of MRO verified positives using oral fluid testing was **four percent in 2015** and rose to **six percent in 2016**. The number of positives discovered through oral fluid testing is over three points higher than urine-based screening.



A method that's gaining momentum

The federal government is currently exploring whether oral fluid screening can be used to the same extent as urine testing. It is currently FDA approved for drug-free workplace programs, but the government has not yet made it permissible for government employees or DOT sensitive roles; urine is still the only specimen accepted for screens within those arenas.

Did You Know?
In 2016, drug positivity among the U.S. workforce reached its highest rate in 12 years, driven in part by increased use of cocaine and marijuana.

Source: Quest Diagnostics

What about Medical Marijuana?

Changing state laws on recreational use of marijuana and medical marijuana have made testing a bit trickier for employers, as marijuana use is permitted in certain states.

What's important to know, particularly for safety concerns, is that marijuana has an impairing effect that lasts 24 hours.

Regardless of your state laws on marijuana, employers do not need to accommodate an employee who is impaired during working hours.



Hair Testing



The third most prominent drug screen is a hair test, which analyzes an individual's hair shaft for the presence of drugs. These tests typically use a small sample cut from one's head, although hair from the armpit, chest or other areas can also be used.

Window of detection

A standard test of one and one-half inches of head hair cut close to the scalp can provide a several month window to detect drug ingestion – typically starting from seven days before the test to as far as 90 days back. The downside of this, of course, is that there is no temporal relationship to current use; therefore, it is not useful for reasonable suspicion or post-accident testing. In these cases an individual could be heavily under the influence of drugs at the time of sample collection, but this test cannot be used to detect this recent usage.

Drugs it can screen for

Of the three drug screening methods, hair has the smallest array of panels available. The typical hair test is a five panel screen that may be extended to include Oxycodone.

Like oral fluid, hair testing is highly resistant to any adulteration or substitution – and of the three, hair drug screening would be the most difficult for a heavy or even regular drug user to pass.

Cost

At \$80 to \$100 per test, hair testing is the most expensive of the three main drug screening options.

By the numbers

Hair testing has the highest lab positive rate. [Quest Diagnostics' Drug Testing Index](#) shows the lab positive rates for 2015 and 2016 were **10.3% and 10.5% respectively**. The FY16 HireRight MRO verified positive rate for hair was **5.8%**.

“FAKE weed” becoming a REAL problem



Synthetics are a relatively new and growing drug category. Synthetic cannabinoids are “man-made mind-altering chemicals” that are similar to chemicals found on the marijuana plant. Sometimes referred to as “synthetic marijuana,” these products are legally available on the market since they are labeled “Not for human consumption” (even though that’s how they are used). These drugs are powerful and some companies are now testing for them. Urine and oral fluid will detect synthetic cannabinoids, but hair will not.

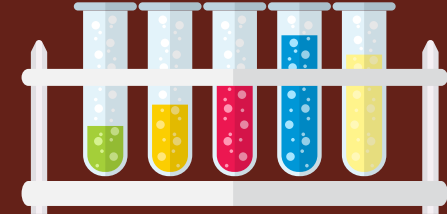
Drug Testing Methods at a Glance



Below is a summary comparison of urine, oral fluid and hair testing to help you determine which test or combination of drug screening is right for your business and/or situation.

	Urine	Oral Fluid	Hair
Drugs it can screen for	Tests for the widest array of substances.	Typically uses a standard 5 panel test for cocaine, amphetamine, opiates, phencyclidine and cannabinoids (THC); larger panels are available	A standard 5 panel test may be extended to include Oxycodone
Window of detection	7 days	1-3 days	No sooner than 7 days to as far back as 90 days
Can donors "beat" the test?	Yes – using dilution, substitution or adulteration	No	No – although the person being tested can be impaired at the time of collection and it wouldn't show
Average cost per test	\$30-50	\$25-35 if the employer collects; \$40-50 if collected by a third party	\$80 to \$100
Particularly good for	Companies that require a broad and dynamic collection site network	Companies who have static facilities	Pre-employment screening

What are the Different Drug Panels?



The term “panel” refers to a drug or family of drugs included in a drug test. The more panels included in the screening the greater the scope of the test. Although there is no strict definition of which drugs must be tested, there are certainly best practices based on job positions, industry, state/ federal laws and corporate screening policies.

Although a standard 5-panel urine drug test is a sensible choice for many companies, a more extensive panel may be needed if there is concern about the abuse of prescription drugs and painkillers.

Common Non Dot Panel Options

Drug	Classification	5	9	10
Marijuana	Hallucinogens	X	X	X
Opiates	Narcotics/Analgesics/Opiates	X	X	X
Phencyclidine(PCP)	Hallucinogens	X	X	X
Cocaine	Stimulants	X	X	X
Amphetamines (Methamphetamine)	Stimulants	X	X	X
Barbiturates	Depressants/Sedatives/Hypnotics		X	X
Benzodiazepines	Depressants/Sedatives/Hypnotics		X	X
Methadone	Narcotics/Analgesics/Opiates		X	X
Propoxyphene	Narcotics/Analgesics/Opiates		X	X
Methaqualone	Narcotics/Analgesics/Opiates			X

Common Add On Panels

Expanded Opiates Hydrocodone, Oxycodone, Hydromorphone, Oxymorphone	Narcotics/Analgesics/Opiates
Meperidine	Narcotics/Analgesics/Opiates
Fentanyl	Narcotics/Analgesics/Opiate
K2 / Spice	Synthetic Marijuana
MDMA (Ecstasy)	Stimulants

DOT Panel

Drug	Classification
Marijuana	Hallucinogens
Opiates	Narcotics/Analgesics/Opiates
Phencyclidine(PCP)	Hallucinogens
Cocaine	Stimulants
Amphetamines (MSMA/Methamphetamine)	Stimulants

Choosing the Method that's Right for Your Company



If there was one perfect specimen for all employment drug testing situations, it would be the one that would always be used. Unfortunately no such perfect specimen exists and there are pros and cons to all the available options.

As your company considers various drug screening options, ask yourself:

- **What problem(s) are you trying to solve for?**

- Is this pre-employment only?
- Will you drug screen current employees for reasonable cause?
- Are you building a drug-free workplace program in which random testing would be helpful?



- **Are there special circumstances related to your business that may require more, or specific types, of drug screening?**

- **What level of risk is your company comfortable with?**

- **How much is your company willing to spend to have a drug-free workforce?**

When you take into account your company's risk profile, how and to what extent your drug-free workplace program is configured, your overall screening goals and the ROI you require, one method may be clearly better for your needs.



HireRight Can Help

If you are looking to implement a new drug screening program or to modify your existing one, HireRight can help. We offer customizable solutions to make drug testing simple, affordable and convenient with 20,000+ national collection sites, including patient service centers, national third-party collection sites, and mobile collectors.

Trained and board-certified Medical Review Officers (MROs) are on staff to help you remain compliant with federal and state regulations. MROs review screening results to ensure accuracy, determine permissible use of controlled substances, and maintain detailed records.

All HireRight drug and health tests can be fully integrated with our background screening services through a single interface, giving you much-needed visibility across your hiring and retention needs, saving you time, and better managing costs with a closed-loop solution.



About HireRight

HireRight delivers global background checks, drug testing, and electronic Form I-9 and E-Verify solutions through an innovative platform to help companies hire the right candidates, so they can grow successfully, and efficiently—no matter their size or where they operate. HireRight offers extensive screening solutions that can be tailored to the unique needs of the organization, giving employers additional peace of mind about their people and vetting processes. HireRight's platform can be integrated with existing HR platforms, making it easy to use and giving candidates the best possible experience.

Contact Us

Call 800.400.2761 or visit us online at <https://www.hireright.com/solutions/drug-health-screening/>

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