

Workforce Drug Testing Positivity Climbed to Highest Rate in 16 Years, New Quest Diagnostics Drug Testing Index™ Analysis Finds

Marijuana positivity climbed by double digits across nearly all employee testing categories, while opiate and heroin positivity decline

Analysis of more than nine million workplace drug test results showed cocaine and methamphetamine positivity surges in Midwest

SECAUCUS, N.J., August 25, 2020 –The rate of workforce drug positivity hit a sixteen-year high in 2019, according to a new analysis released today by Quest Diagnostics (NYSE: DGX), the world's leading provider of diagnostic information services. Positivity rates in the combined U.S. workforce increased in urine drug tests, climbing to the highest level since 2003 (4.5%) and more than 28% percent higher than the thirty-year low of 3.5 percent recorded between 2010 and 2012.

In addition to overall increases in workforce drug positives, specific regions of the United States, particularly the Midwest, experienced dramatic increases in positivity for cocaine and methamphetamine as well as marijuana.

The new findings of the Quest Diagnostics Drug Testing Index™, which include an analysis of industry-specific data, were unveiled in advance of the Substance Abuse Program Administrators Association (SAPAA) virtual conference taking place on August 25, 2020.

For an interactive map with positivity rates and trend lines by three-digit zip code in the United States, visit DTIDrugMap.com.

The Quest Diagnostics findings generally align with other research. Drug deaths in the United States rose 5 percent in 2019, driven largely by methamphetamine, cocaine and fentanyl, following a decline in 2018. During the first few months of 2020, drug deaths increased about 13 percent compared with last year, attributable partly to social isolation and other disruptions caused by COVID-19.ⁱ

"There is no question that before COVID-19, rates of workplace drug positivity were trending in the wrong direction, based on our Quest Diagnostics data. The enormous strain caused by COVID-19 may prove to be an accelerant on this disturbing trend," said Dr. Barry Sample, senior director of science and technology, Quest Diagnostics. "Organizations will need to consider the impact of COVID-19 not only on workplace safety but also as a health concern for their employees for some time to come."

Positivity rates for methamphetamine surged in the Midwest

Over the last five years, methamphetamine positivity in the general U.S. workforce testing increased nearly 12 percent (0.17% in 2015 versus 0.19% in 2019). The Midwest region experienced year-over-year increases, driven primarily by double-digit increases in the East North Central region during this period. Over the past five years, methamphetamine positivity in the Midwest increased nearly 78 percent (0.09% in 2015 versus 0.16% in 2019). Illinois (0.03% in 2015 versus 0.10% in 2019), Indiana (0.14% in 2015 versus 0.29% in 2019), Michigan (0.014% in 2015 versus 0.05 in 2019), and Ohio (0.04% in 2015 versus 0.11% in 2019) increased at least two-fold; while Wisconsin (0.05% in 2015 versus 0.09% in 2019) nearly doubled.

"While the national debate on drug misuse in the workforce has focused primarily on marijuana, increasing positivity rates for cocaine and methamphetamine are also cause for concern," said Dr. Sample. "Positivity by drug and region can be random and unpredictable. Our data is a reminder that it is important to remain vigilant about all drug misuse in the workforce.

Between 2019 and 2018, methamphetamine positivity inched up nearly 6 percent (0.18% in 2018 versus 0.19% in 2019) in general U.S. workforce tests and fell 6.3 percent (0.15% in 2018 versus 0.16% in 2019) in federally mandated, safety-sensitive testing. Methamphetamine positivity changed little in the general U.S. workforce (up 12 percent) and was flat in federally mandated, safety sensitive testing over five years.

The increased positivity rates for methamphetamine in urine test results were bolstered by similar patterns in other specimen types. Oral fluid methamphetamine positivity, which also assesses recent use, was up 4.3 percent since 2018 and up 69 percent since 2015; while methamphetamine positivity from hair tests, which gauges a pattern of drug use over time, was up 20 percent since 2018 and 60 percent since 2015.

"Testing with multiple specimen types can reveal a fuller understanding of patterns of misuse than one alone," said Dr. Sample. "Our data suggests that testing for methamphetamine with hair and oral fluid may be appropriate for employers with concerns about misuse of this particular drug to complement the standard urine drug screen."

Cocaine positivity increased in the Midwest and West

Cocaine positivity in the general U.S. workforce testing increased in the Midwest and West regions over the past five years. Cocaine positivity in the Midwest increased by 40 percent (0.20% in 2015 versus 0.28% in 2019) and in the West by 53 percent (0.15% in 2015 versus 0.23% in 2019). The Midwest was 20 percent less than the national rate in 2015 but 3.7 percent above the national rate in 2019, suggesting a surge in positivity in the region last year.

In the West, where cocaine positivity has been historically far lower, the cocaine positivity rate rose from 40 percent below the national rate in 2015 to 14.8 percent below in 2019. These increases in the West were primarily driven by increasing positivity in Colorado (0.19% in 2015 versus 0.30% in 2019), Nevada (0.13% in 2015 versus 0.22% in 2019), and Oregon (0.09% in 2015 versus 0.13% in 2019).

Opiate positivity declines throughout United States

In the general U.S. workforce, positivity for opiates in urine drug testing continues to decline across all opiate categories. Urine drug test positivity for opiates (primarily codeine and/or morphine) in the general U.S. workforce declined more than 19 percent (0.31% in 2018 versus 0.25% in 2019) and 49 percent over five years (0.49% in 2015 versus 0.25% in 2019). Among the more specific tests for other prescription opiates, the positivity for the semi-synthetic opiates (hydrocodone and/or hydromorphone) dropped 26 percent over the past year (0.50% in 2018 versus 0.37% in 2019) and more than 45 percent over five years (0.68% in 2015 versus 0.37% in 2019). Similarly, positivity for oxycodones (oxycodone and/or oxymorphone) declined 21 percent (0.43% in 2018 versus 0.34% in 2019) over the past year and nearly 55 percent over five years (0.75% in 2015 versus 0.34% in 2019).

Marijuana most commonly detected drug in U.S. workforce

Marijuana continues to top the list of the most commonly detected illicit substances across all workforce categories (general U.S. workforce; federally mandated, safety-sensitive workforce; and combined U.S. workforce, which includes the prior two populations) and specimen types (urine, oral fluid, and hair).

In the general U.S. workforce, marijuana positivity increased nearly 11 percent in urine testing (2.8% in 2018 versus 3.1% in 2019) and 29 percent since 2015 (2.4%). In the Midwest, marijuana positivity outpaced national increases in positivity in 2018 and 2019. Marijuana positivity increased in the Midwest by nearly 14 percent (2.9% in 2018 versus 3.3% in 2019). The West region also outpaced national positivity and saw double digit increases, as compared to the previous year, in 2017 through 2019.

Marijuana positivity increased in the West by 24 percent (3.3% in 2018 versus 4.1% in 2019) and 78 percent since 2015 (2.3%).

“Marijuana continues to be an enduring presence in the U.S. workforce. Changing attitudes toward its use could pose heightened risks especially in safety-sensitive positions and those states exploring legalization,” said Dr. Sample.

Positivity rates for heroin continue to decline in general U.S. and federally mandated, safety-sensitive workforce testing

Urine drug test results for the general U.S. workforce for heroin use, indicated by the presence of the 6-acetylmorphine (6-AM) metabolite, declined 33 percent (0.03% in 2018 versus 0.02% in 2019) and 50 percent decline since its peak in 2015 and 2016 (0.04%).

Positivity for 6-AM in the federally mandated, safety-sensitive workforce declined 15 percent between 2018 and 2019 (0.013% versus 0.011%), with a decrease of more than 45 percent since 2015 (0.02%).

Workforce positivity increases significantly in multiple industries

The Quest Diagnostics Drug Testing Index Industry Insights of general U.S. workforce positivity rates, based on more than 18 million urine drug test results (between 2015 and 2019), shows year-over-year increases in overall workplace drug positivity in 15 of the 17 sectors reported. The Retail Trade industry had the highest overall positivity rate (4.7% in 2015, 5.1% in 2016, 5.3% in 2017, 5.4% in 2018 and 5.5% in 2019) across all five years of the analysis. The Other Services (not including Public Administration) category, which includes services not listed in the other categories such as grantmaking, advocacy, and providing personal services, also had a 5.5% positivity rate in 2019. The Accommodations and Food Service category had the highest workforce positivity for marijuana, at 4.8%, a relative increase of 65 percent over five years (2.9% in 2015 versus 4.8% in 2019).

Workforce Drug Testing Webinar

Barry Sample, PhD, senior director of science and technology, for Quest Diagnostics will discuss the latest data and analysis from the Drug Testing Index via a webinar on Thursday, September 10, 2020 at 2:00 PM EDT. Click [here](#) to register and attend.

About the Quest Diagnostics Drug Testing Index™

The Quest Diagnostics Drug Testing Index™ (DTI) is a series of reports that provide insights into trends in workforce drug use, based on positivity results for de-identified laboratory testing performed by Quest Diagnostics for a range of illicit, legal and prescription drugs. It examines test results according to three categories of workers: federally mandated, safety-sensitive workers; the general workforce; and the combined U.S. workforce. Federally mandated, safety-sensitive workers include pilots, bus and truck drivers, and workers in nuclear power plants, for whom routine drug testing is mandated by the U.S. Department of Health and Human Services.

The strengths of the DTI analysis include its large, nationally representative sample size, longitudinal monitoring, a testing population that is generally reflective of the U.S. workforce and the quality of the company's drug testing services to confirm positive results. Limitations include analysis only of employers that perform drug testing with the company, and a lack of exact cross-specimen comparisons due to variations in substances for which employers test. Quest Diagnostics has analyzed annual workplace drug testing data since 1988 and publishes the findings as a public service.

In addition to workplace drug testing, Quest is a leader in clinician-ordered drug testing services through its Clinical Drug Monitoring program to aid the detection of potentially dangerous forms of prescription and illicit drug use. For more information on Quest's drug monitoring services for healthcare providers, visit QuestDrugMonitoring.com

About Quest Diagnostics

Quest Diagnostics empowers people to take action to improve health outcomes. Derived from the world's largest database of clinical lab results, our diagnostic insights reveal new avenues to identify and treat disease, inspire healthy behaviors and improve health care management. Quest annually serves one in three adult Americans and half the physicians and hospitals in the United States. Our 47,000 employees understand that, in the right hands and with the right context, our diagnostic insights can inspire actions that transform lives. [QuestDiagnostics.com](https://questdiagnostics.com).

B-Roll For Media: <https://app.box.com/folder/121354135270?s=bk6vmp9sl5ds5gupvzt2v3xb6m35l0d6>

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ⁱ [*In the shadow of the pandemic, overdose deaths in the U.S. have soared.*](#) The New York Times, July 15, 2020.

Quest Diagnostics Drug Testing Index™

Annual report | Full year 2019 tables

**Table 1. Annual Positivity Rates – Urine Drug Tests
 (For Combined U.S. Workforce)**

(More than 8 million tests from January to December 2019)

Year	Drug Positivity Rate
1988	13.6%
1989	12.7%
1990	11.0%
1991	8.8%
1992	8.8%
1993	8.4%
1994	7.5%
1995	6.7%
1996	5.8%
1997	5.0%
1998	4.8%
1999	4.6%
2000	4.7%
2001	4.6%
2002	4.4%
2003	4.5%
2004	4.4%
2005	4.0%
2006	3.8%
2007	3.8%
2008	3.6%
2009	3.6%
2010	3.5%
2011	3.5%
2012	3.5%
2013	3.7%
2014	3.9%
2015	4.0%
2016	4.2%
2017	4.2%
2018	4.4%
2019	4.5%

Table 2. Positivity Rates by Testing Category – Urine Drug Tests

Testing Category	2015	2016	2017	2018	2019
Federally Mandated, Safety-Sensitive Workforce	1.8%	2.0%	2.1%	2.7%	2.4%
General U.S. Workforce	4.8%	4.9%	5.0%	5.1%	5.3%
Combined U.S. Workforce	4.0%	4.2%	4.2%	4.4%	4.5%

**Table 3. Positivity Rates by Testing Reason – Urine Drug Tests
(For Federally Mandated, Safety-Sensitive Workforce)***(More than 2.4 million tests from January to December 2019)*

Testing Reason	2015	2016	2017	2018	2019
Follow-Up	3.1%	3.4%	3.9%	5.3%	5.1%
For Cause	11.0%	11.7%	13.1%	13.1%	13.0%
Post-Accident	2.8%	3.0%	3.1%	4.7%	4.5%
Pre-Employment	1.9%	2.0%	2.1%	2.6%	2.4%
Random	1.5%	1.7%	1.8%	2.4%	2.2%
Return to Duty	3.4%	3.2%	3.4%	5.5%	5.0%

**Table 4. Positivity Rates by Testing Reason – Urine Drug Tests
(For General U.S. Workforce)***(More than 6 million tests from January to December 2019)*

Testing Reason	2015	2016	2017	2018	2019
Follow-Up	8.6%	8.9%	7.8%	8.4%	8.3%
For Cause	31.9%	32.9%	33.0%	33.7%	35.7%
Post-Accident	6.9%	7.4%	7.7%	8.4%	9.1%
Pre-Employment	4.2%	4.4%	4.6%	4.7%	4.9%
Random	5.5%	5.5%	5.6%	5.7%	5.6%
Return to Duty	6.3%	6.3%	6.4%	6.4%	6.8%

**Table 5. Positivity Rates by Drug Category – Urine Drug Tests
(For Federally Mandated, Safety-Sensitive Workforce, as a percentage of all such tests)**

(More than 2.4 million tests from January to December 2019)

Drug Category	2015	2016	2017	2018	2019
6-AM	0.02%	0.02%	0.019%	0.013%	0.011%
Amphetamines (Amphetamine/Methamphetamine)	0.58%	0.63%	0.68%	0.68%	0.68%
Cocaine	0.26%	0.28%	0.31%	0.28%	0.25%
Marijuana	0.71%	0.78%	0.84%	0.88%	0.88%
MDMA (MDMA/MDA)	0.005%	0.005%	0.005%	0.003%	0.003%
Opiates (Codeine/Morphine)	0.21%	0.21%	0.19%	0.15%	0.12%
Opiates (Hydrocodone/Hydromorphone)	-	-	0.35% ¹	0.45%	0.35%
Oxycodones (Oxycodone/Oxymorphone)	-	-	0.25% ¹	0.34%	0.26%
PCP	0.03%	0.03%	0.03%	0.013%	0.011%

¹2017 Federal employee testing October through December

**Table 6. Positivity Rates by Drug Category – Urine Drug Tests
(For General U.S. Workforce, as a percentage of all such tests)**

(More than 6 million tests from January to December 2019)

Drug Category	2015	2016	2017	2018	2019
6-AM	0.04%	0.04%	0.03%	0.03%	0.02%
Amphetamines (Amphetamine/Methamphetamine)	1.1%	1.2%	1.2%	1.2%	1.3%
Barbiturates	0.22%	0.22%	0.25%	0.22%	0.20%
Benzodiazepines	0.68%	0.66%	0.61%	0.52%	0.43%
Cocaine	0.25%	0.28%	0.30%	0.28%	0.27%
Marijuana	2.4%	2.5%	2.6%	2.8%	3.1%
MDMA (MDMA/MDA)	0.005%	0.004%	0.005%	0.006%	0.008%
Methadone	0.18%	0.18%	0.18%	0.18%	0.16%
Opiates	0.49%	0.47%	0.39%	0.31%	0.25%
Opiates (Hydrocodone/Hydromorphone)	0.68%	0.63%	0.51%	0.50%	0.37%
Oxycodones (Oxycodone/Oxymorphone)	0.75%	0.69%	0.61%	0.43%	0.34%
PCP	0.016%	0.013%	0.013%	0.012%	0.011%
Propoxyphene	0.003%	0.002%	0.001%	0.001%	0.000%

**Table 7. Positivity Rates by Drug Category – Urine Drug Tests
(For Combined U.S. Workforce, as a percentage of all such tests)**

(Nearly 9 million tests from January to December 2019)

Drug Category	2015	2016	2017	2018	2019
6-AM	0.03%	0.03%	0.02%	0.019%	0.015%
Amphetamines (Amphetamine/Methamphetamine)	0.97%	1.1%	1.1%	1.1%	1.1%
Barbiturates	0.22%	0.22%	0.25%	0.22%	0.20%
Benzodiazepines	0.68%	0.66%	0.61%	0.52%	0.43%
Cocaine	0.25%	0.28%	0.30%	0.28%	0.26%
Marijuana	1.9%	2.0%	2.1%	2.3%	2.5%
MDMA (MDMA/MDA)	0.005%	0.004%	0.005%	0.005%	0.005%
Methadone	0.18%	0.18%	0.18%	0.18%	0.16%
Opiates	0.41%	0.40%	0.34%	0.27%	0.22%
Opiates (Hydrocodone/Hydromorphone)	0.68%	0.63%	0.50%	0.46%	0.35%
Oxycodones (Oxycodone/Oxymorphone)	0.75%	0.69%	0.60%	0.38%	0.30%
PCP	0.019%	0.016%	0.016%	0.012%	0.011%
Propoxyphene	0.003%	0.002%	0.001%	0.001%	0.000%

**Table 8. Non-Negative Rates by Specimen Validity Test (SVT)² Category – Urine Drug Tests
(For Federally Mandated, Safety-Sensitive Workforce, as a percentage of all such tests)**

(More than 2.4 million tests from January to December 2019)

SVT Category	2015	2016	2017	2018	2019
Acid-Base	0.02%	0.03%	0.02%	0.013%	0.010%
Invalid	0.09%	0.10%	0.15%	0.27%	0.21%
Oxidizing Adulterants	0.000%	0.000%	0.000%	0.000%	0.000%
Substitution	0.05%	0.05%	0.05%	0.019%	0.017%

²Specimen validity testing is the evaluation of a specimen to determine if it is consistent with a normal human specimen. Tests for specimen validity include tests to determine whether a specimen is adulterated or substituted.

**Table 9. Non-Negative Rates by Specimen Validity Test (SVT) Category – Urine Drug Tests
(For General U.S. Workforce, as a percentage of all such tests)**

(More than 6 million tests from January to December 2019)

SVT Category	2015	2016	2017	2018	2019
Acid-Base	0.001%	0.002%	0.004%	0.010%	0.009%
Invalid	0.11%	0.12%	0.15%	0.21%	0.18%
Oxidizing Adulterants	0.000%	0.000%	0.000%	0.000%	0.000%
Substitution	0.017%	0.015%	0.014%	0.014%	0.015%

**Table 10. Non-Negative Rates by Drug/SVT Category – Urine Drug Tests
(For Federally Mandated, Safety-Sensitive Workforce, as a percentage of all non-negatives)**

(Nearly 70 thousand non-negative test results from January to December 2019)

Drug/SVT Category	2015	2016	2017	2018	2019
6-AM	1.1%	0.99%	0.82%	0.40%	0.40%
Acid-Base	1.1%	1.2%	1.0%	0.41%	0.34%
Amphetamines (Amphetamine/Methamphetamine)	29.5%	29.9%	29.5%	22.1%	24.3%
Cocaine	13.1%	13.3%	13.7%	9.2%	9.1%
Invalid	4.6%	4.5%	6.4%	8.7%	7.5%
Marijuana	35.9%	36.7%	36.8%	28.4%	31.5%
MDMA (MDMA/MDA)	0.24%	0.21%	0.23%	0.09%	0.09%
Opiates (Codeine/Morphine)	10.7%	9.7%	8.2%	4.7%	4.2%
Opiates (Hydrocodone/Hydromorphone)	-	-	-	14.2%	12.3%
Oxidizing Adulterants	0.000%	0.000%	0.000%	0.000%	0.000%
Oxycodones (Oxycodone/Oxymorphone)	-	-	-	10.9%	9.3%
PCP	1.3%	1.2%	1.1%	0.41%	0.41%
Substituted	2.5%	2.3%	2.2%	0.62%	0.61%

**Table 11. Non-Negative Rates by Drug/SVT Category – Urine Drug Tests
(For General U.S. Workforce, as a percentage of all non-negatives)**

(More than 360 thousand non-negative test results from January to December 2019)

Drug/SVT Category	2015	2016	2017	2018	2019
6-AM	0.16%	0.15%	0.12%	0.12%	0.09%
Acid-Base	0.03%	0.03%	0.07%	0.17%	0.16%
Amphetamines (Amphetamine/Methamphetamine)	21.3%	22.3%	22.4%	22.3%	22.7%
Barbiturates	2.8%	2.6%	3.0%	2.5%	2.2%
Benzodiazepines	8.2%	7.8%	7.1%	5.8%	4.6%
Cocaine	4.9%	5.2%	5.5%	5.1%	4.7%
Invalid	2.2%	2.3%	2.7%	3.7%	3.1%
Marijuana	45.2%	45.5%	47.4%	49.3%	53.1%
MDMA (MDMA/MDA)	0.03%	0.03%	0.03%	0.04%	0.05%
Methadone	2.1%	2.1%	2.0%	1.9%	1.7%
Opiates	9.8%	8.7%	7.2%	5.6%	4.5%
Opiates (Hydrocodone/Hydromorphone)	-	-	-	0.91%	0.87%
Oxidizing Adulterants	0.000%	0.000%	0.000%	0.000%	0.000%
Oxycodones (Oxycodone/Oxymorphone)	2.6%	2.6%	2.1%	2.2%	1.9%
PCP	0.31%	0.24%	0.24%	0.20%	0.20%
Propoxyphene	0.03%	0.02%	0.016%	0.010%	0.005%
Substituted	0.32%	0.28%	0.26%	0.24%	0.26%

**Table 12. Non-Negative Rates by Drug/SVT Category – Urine Drug Tests
(For Combined U.S. Workforce, as a percentage of all non-negatives)**

(More than 430 thousand non-negative test results from January to December 2019)

Drug/SVT Category	2015	2016	2017	2018	2019
6-AM	0.28%	0.25%	0.21%	0.17%	0.14%
Acid-Base	0.16%	0.17%	0.20%	0.21%	0.19%
Amphetamines (Amphetamine/Methamphetamine)	22.3%	23.2%	23.4%	22.3%	22.9%
Barbiturates	2.5%	2.3%	2.6%	2.0%	1.8%
Benzodiazepines	7.2%	6.9%	6.2%	4.8%	3.9%
Cocaine	5.9%	6.2%	6.5%	5.8%	5.4%
Invalid	2.5%	2.6%	3.2%	4.5%	3.8%
Marijuana	44.1%	44.5%	46.0%	45.8%	49.7%
MDMA (MDMA/MDA)	0.06%	0.05%	0.06%	0.05%	0.06%
Methadone	1.9%	1.8%	1.7%	1.6%	1.4%
Opiates	9.9%	8.9%	7.3%	5.5%	4.4%
Opiates (Hydrocodone/Hydromorphone)	-	-	-	3.2%	2.7%
Oxidizing Adulterants	0.000%	0.000%	0.000%	0.000%	0.000%
Oxycodones (Oxycodone/Oxymorphone)	2.3%	2.3%	1.9%	3.7%	3.1%
PCP	0.43%	0.36%	0.35%	0.24%	0.23%
Propoxyphene	0.03%	0.02%	0.014%	0.008%	0.004%
Substituted	0.58%	0.52%	0.51%	0.31%	0.31%

**Table 13. Positivity Rates by Testing Category – Oral Fluid Drug Tests
(For General U.S. Workforce)**

(More than 1.6 million tests from January to December 2019)

2015	2016	2017	2018	2019
9.1%	10.5%	10.4%	10.2%	10.5%

**Table 14. Positivity Rates by Testing Reason – Oral Fluid Drug Tests
(For General U.S. Workforce)**

(More than 1.6 million tests from January to December 2019)

Testing Reason	2015	2016	2017	2018	2019
Post-Accident	5.7%	5.9%	5.7%	5.8%	5.4%
Pre-Employment	9.4%	10.8%	10.6%	10.5%	10.7%
Random	5.5%	6.3%	6.1%	6.2%	6.0%

**Table 15. Positivity Rates by Drug Category – Oral Fluid Drug Tests
(For General U.S. Workforce)**

(More than 1.6 million tests from January to December 2019)

Drug Category	2015	2016	2017	2018	2019
Amphetamine	0.56%	0.66%	0.66%	0.73%	0.67%
Cocaine/Metabolite	0.46%	0.63%	0.73%	0.59%	0.57%
Marijuana	7.5%	8.9%	8.8%	8.7%	9.1%
Methamphetamines	0.29%	0.42%	0.43%	0.47%	0.49%
Opiates	0.78%	0.71%	0.57%	0.44%	0.35%
Oxycodones	-	-	-	0.31%	0.28%
PCP	0.04%	0.05%	0.06%	0.04%	0.05%

**Table 16. Positivity Rates by Testing Category – Hair Drug Tests
(For General U.S. Workforce)**

(More than 120 thousand tests from January to December 2019)

2015	2016	2017	2018	2019
10.3%	10.5%	10.3%	10.9%	11.2%

**Table 17. Positivity Rates by Testing Reason – Hair Drug Tests
(For General U.S. Workforce)**

(More than 120 thousand tests from January to December 2019)

Testing Reason	2015	2016	2017	2018	2019
Pre-Employment	8.8%	9.5%	8.9%	9.4%	9.0%
Random	11.5%	10.0%	10.6%	10.1%	12.0%

**Table 18. Positivity Rates by Drug Category – Hair Drug Tests
(For General U.S. Workforce)**

(More than 120 thousand tests from January to December 2019)

Drug Category	2015	2016	2017	2018	2019
Amphetamines (Methamphetamine)	1.5%	1.5%	2.0%	2.0%	2.4%
Cocaine	2.6%	2.7%	3.2%	3.4%	3.2%
Marijuana	7.0%	7.3%	6.4%	6.8%	7.1%
Opiates	0.32%	0.27%	0.38%	0.39%	0.32%
PCP	0.012%	0.012%	0.014%	0.016%	0.012%

For more information, visit [QuestDiagnostics.com/DTI](https://www.questdiagnostics.com/dti).

Industry Insights

Quest Diagnostics Drug Testing Index™

**Table 1. Overall Positivity Rates
Urine Drug Tests - General U.S. Workforce**

(More than 18 million tests from 2015 - 2019)

Industry	2015	2016	2017	2018	2019
Accommodation and Food Services	4.4%	4.7%	4.6%	4.9%	5.1%
Admin Support, Waste & Remediation Services	4.2%	4.4%	4.5%	4.6%	4.7%
Construction	3.7%	4.0%	4.1%	4.1%	4.2%
Educational Services	3.3%	3.2%	3.1%	3.1%	3.2%
Finance and Insurance	2.3%	2.6%	2.7%	2.6%	2.8%
Health Care and Social Assistance	4.5%	4.7%	4.6%	4.6%	4.5%
Information	4.2%	4.1%	3.9%	3.6%	3.7%
Manufacturing	3.3%	3.4%	3.5%	3.7%	3.8%
Mining	3.6%	3.5%	3.8%	3.7%	3.5%
Other Services (except Public Administration)	4.0%	4.2%	4.6%	5.2%	5.5%
Professional, Scientific, and Technical Services	3.6%	3.5%	3.2%	3.2%	3.3%
Public Administration	3.2%	3.5%	3.3%	3.5%	3.3%
Real Estate Rental and Leasing	4.6%	4.7%	4.5%	4.5%	4.8%
Retail Trade	4.7%	5.1%	5.2%	5.4%	5.5%
Transportation and Warehousing	2.9%	3.1%	3.5%	3.9%	4.0%
Utilities	3.1%	3.0%	2.8%	2.9%	3.4%
Wholesale Trade	3.6%	3.9%	4.1%	4.3%	4.5%

**Table 2. Positivity Rates by Drug: Marijuana
Urine Drug Tests - General U.S. Workforce**

(More than 18 million tests from 2015 - 2019)

Industry	2015	2016	2017	2018	2019
Accommodation and Food Services	2.9%	3.2%	3.5%	4.0%	4.8%
Admin Support, Waste & Remediation Services	2.1%	2.3%	2.5%	2.8%	3.1%
Construction	1.6%	1.6%	2.0%	2.1%	2.2%
Educational Services	1.0%	0.92%	0.81%	0.92%	1.0%
Finance and Insurance	0.88%	0.97%	1.0%	1.1%	1.4%
Health Care and Social Assistance	1.7%	1.8%	1.9%	1.9%	2.0%
Information	2.4%	2.3%	2.2%	2.1%	2.2%
Manufacturing	1.3%	1.4%	1.6%	1.8%	2.0%
Mining	0.81%	0.71%	1.1%	1.2%	0.91%
Other Services (except Public Administration)	2.1%	2.3%	2.9%	3.5%	3.8%
Professional, Scientific, and Technical Services	1.5%	1.5%	1.4%	1.5%	1.6%
Public Administration	0.85%	0.89%	0.98%	1.2%	1.3%
Real Estate Rental and Leasing	2.4%	2.6%	2.6%	2.8%	3.3%
Retail Trade	2.7%	2.9%	3.2%	3.5%	3.9%
Transportation and Warehousing	1.6%	1.7%	2.1%	2.4%	2.6%
Utilities	1.2%	1.2%	1.0%	1.0%	1.6%
Wholesale Trade	1.8%	2.0%	2.3%	2.5%	2.9%

**Table 3. Positivity Rates by Drug: Cocaine
Urine Drug Tests - General U.S. Workforce**

(More than 18 million tests from 2015 - 2019)

Industry	2015	2016	2017	2018	2019
Accommodation and Food Services	0.26%	0.23%	0.31%	0.30%	0.27%
Admin Support, Waste & Remediation Services	0.17%	0.21%	0.24%	0.21%	0.20%
Construction	0.37%	0.41%	0.41%	0.39%	0.35%
Educational Services	0.07%	0.07%	0.05%	0.05%	0.04%
Finance and Insurance	0.05%	0.06%	0.07%	0.06%	0.06%
Health Care and Social Assistance	0.15%	0.16%	0.18%	0.17%	0.14%
Information	0.13%	0.16%	0.15%	0.13%	0.10%
Manufacturing	0.18%	0.19%	0.20%	0.19%	0.17%
Mining	0.22%	0.22%	0.27%	0.22%	0.17%
Other Services (except Public Administration)	0.22%	0.22%	0.25%	0.26%	0.23%
Professional, Scientific, and Technical Services	0.17%	0.18%	0.17%	0.13%	0.12%
Public Administration	0.10%	0.11%	0.12%	0.14%	0.14%
Real Estate Rental and Leasing	0.23%	0.23%	0.23%	0.22%	0.26%
Retail Trade	0.14%	0.18%	0.20%	0.19%	0.20%
Transportation and Warehousing	0.23%	0.26%	0.28%	0.27%	0.25%
Utilities	0.21%	0.19%	0.20%	0.16%	0.19%
Wholesale Trade	0.20%	0.24%	0.26%	0.26%	0.25%

**Table 4. Positivity Rates by Drug: Opiates
Urine Drug Tests - General U.S. Workforce**

(More than 18 million tests from 2015 - 2019)

Industry	2015	2016	2017	2018	2019
Accommodation and Food Services	0.31%	0.38%	0.34%	0.35%	0.25%
Admin Support, Waste & Remediation Services	0.37%	0.35%	0.27%	0.21%	0.18%
Construction	0.45%	0.55%	0.32%	0.23%	0.19%
Educational Services	0.26%	0.20%	0.17%	0.16%	0.12%
Finance and Insurance	0.24%	0.25%	0.23%	0.13%	0.13%
Health Care and Social Assistance	0.57%	0.56%	0.48%	0.39%	0.33%
Information	0.34%	0.33%	0.27%	0.19%	0.12%
Manufacturing	0.45%	0.42%	0.33%	0.28%	0.21%
Mining	0.63%	0.73%	0.62%	0.57%	0.57%
Other Services (except Public Administration)	0.37%	0.36%	0.25%	0.26%	0.21%
Professional, Scientific, and Technical Services	0.38%	0.36%	0.23%	0.19%	0.15%
Public Administration	0.45%	0.43%	0.32%	0.28%	0.21%
Real Estate Rental and Leasing	0.38%	0.42%	0.30%	0.27%	0.21%
Retail Trade	0.31%	0.33%	0.33%	0.26%	0.23%
Transportation and Warehousing	0.25%	0.24%	0.21%	0.17%	0.14%
Utilities	0.35%	0.31%	0.29%	0.24%	0.18%
Wholesale Trade	0.31%	0.34%	0.25%	0.20%	0.16%

**Table 5. Positivity Rates by Drug: Amphetamines (Amphetamine and Methamphetamine)
Urine Drug Tests - General U.S. Workforce**

(More than 18 million tests from 2015 - 2019)

Industry	2015	2016	2017	2018	2019
Accommodation and Food Services	0.69%	0.76%	0.72%	0.72%	0.69%
Admin Support, Waste & Remediation Services	0.96%	1.0%	0.97%	0.97%	0.99%
Construction	0.94%	1.0%	1.0%	1.0%	1.1%
Educational Services	1.5%	1.6%	1.6%	1.6%	1.6%
Finance and Insurance	0.90%	0.97%	1.0%	1.1%	1.1%
Health Care and Social Assistance	1.2%	1.3%	1.4%	1.4%	1.4%
Information	0.91%	0.91%	1.0%	0.97%	1.1%
Manufacturing	0.96%	1.0%	1.0%	1.1%	1.2%
Mining	1.4%	1.4%	1.3%	1.4%	1.6%
Other Services (except Public Administration)	0.87%	0.89%	0.87%	0.92%	1.0%
Professional, Scientific, and Technical Services	1.1%	1.1%	1.0%	1.1%	1.2%
Public Administration	1.1%	1.4%	1.4%	1.4%	1.3%
Real Estate Rental and Leasing	0.85%	0.88%	0.87%	0.88%	0.90%
Retail Trade	0.91%	0.95%	0.97%	1.0%	1.0%
Transportation and Warehousing	0.67%	0.69%	0.70%	0.74%	0.71%
Utilities	0.88%	0.94%	0.96%	1.0%	1.1%
Wholesale Trade	1.0%	1.1%	1.1%	1.0%	1.0%

**Table 6. Positivity Rates by Drug: Amphetamine
Urine Drug Tests - General U.S. Workforce**

(More than 18 million tests from 2015 - 2019)

Industry	2015	2016	2017	2018	2019
Accommodation and Food Services	0.67%	0.72%	0.69%	0.68%	0.64%
Admin Support, Waste & Remediation Services	0.93%	0.97%	0.94%	0.94%	0.96%
Construction	0.88%	0.98%	0.97%	0.98%	1.0%
Educational Services	1.5%	1.6%	1.6%	1.6%	1.6%
Finance and Insurance	0.89%	0.97%	1.0%	1.1%	1.1%
Health Care and Social Assistance	1.2%	1.3%	1.3%	1.3%	1.4%
Information	0.89%	0.90%	1.0%	0.94%	1.1%
Manufacturing	0.94%	1.0%	1.0%	1.1%	1.1%
Mining	1.4%	1.3%	1.3%	1.3%	1.6%
Other Services (except Public Administration)	0.84%	0.87%	0.85%	0.90%	1.0%
Professional, Scientific, and Technical Services	1.0%	1.1%	1.0%	1.1%	1.2%
Public Administration	1.1%	1.4%	1.4%	1.3%	1.3%
Real Estate Rental and Leasing	0.82%	0.85%	0.84%	0.84%	0.86%
Retail Trade	0.89%	0.93%	0.95%	1.0%	0.99%
Transportation and Warehousing	0.65%	0.67%	0.67%	0.72%	0.69%
Utilities	0.85%	0.91%	0.95%	1.0%	1.1%
Wholesale Trade	0.98%	1.0%	1.0%	0.99%	0.97%

**Table 7. Positivity Rates by Drug: Methamphetamine
Urine Drug Tests - General U.S. Workforce**

(More than 18 million tests from 2015 - 2019)

Industry	2015	2016	2017	2018	2019
Accommodation and Food Services	0.11%	0.16%	0.14%	0.17%	0.18%
Admin Support, Waste & Remediation Services	0.10%	0.11%	0.13%	0.12%	0.13%
Construction	0.20%	0.22%	0.24%	0.24%	0.24%
Educational Services	0.07%	0.05%	0.04%	0.04%	0.03%
Finance and Insurance	0.03%	0.02%	0.03%	0.02%	0.03%
Health Care and Social Assistance	0.15%	0.19%	0.18%	0.16%	0.14%
Information	0.09%	0.08%	0.07%	0.10%	0.11%
Manufacturing	0.11%	0.13%	0.14%	0.14%	0.15%
Mining	0.15%	0.14%	0.18%	0.14%	0.14%
Other Services (except Public Administration)	0.12%	0.10%	0.12%	0.13%	0.13%
Professional, Scientific, and Technical Services	0.08%	0.10%	0.08%	0.08%	0.08%
Public Administration	0.05%	0.07%	0.07%	0.09%	0.08%
Real Estate Rental and Leasing	0.12%	0.14%	0.12%	0.16%	0.16%
Retail Trade	0.09%	0.09%	0.09%	0.11%	0.12%
Transportation and Warehousing	0.10%	0.10%	0.11%	0.12%	0.12%
Utilities	0.07%	0.08%	0.05%	0.08%	0.07%
Wholesale Trade	0.12%	0.13%	0.16%	0.16%	0.17%