



# Industry Insights

Quest Diagnostics Drug Testing Index™



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# Understanding the North American Industry Classification System

The North American Industry Classification System (NAICS) is the standard used by Federal statistical agencies of Canada, Mexico, and the U.S., in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the economy. Defining an industry using a production-oriented concept means companies with the same NAICS code share production processes and technologies when producing goods and services. Simply put, a NAICS code identifies a company's primary business activity and allows a comparison of companies in like industries across the continent.

Using a hierarchical structure, NAICS is a six-digit coding system that classifies all economic activity into twenty industry sectors. Five sectors produce goods and fifteen provide some type of service. Each digit in a NAICS code gradually narrows the categories. The first two digits of the NAICS code indicate the industry sector — the largest business sector in which a company operates. The third digit is the subsector and the fourth digit is the industry group. The fifth digit designates the NAICS industry and the sixth and final digit designates a company's national industry.

In 1997, the Standard Industrial Classification (SIC) 4-digit system was replaced by NAICS to simplify and modernize the comparison of industries. NAICS undergoes a planned review every five years to ensure it remains relevant.

Our data was classified by the industry sector identifier of a company's headquarters location using the most recent system, *2017 NAICS Manual: United States*, detailing 1,057 industries. For more information, visit [www.census.gov/eos/www/naics/](http://www.census.gov/eos/www/naics/).

## Methodology

This first-ever report of drug use patterns by industry is based on a three-year analysis of American companies who drug test with Quest. Data from more than ten million urine drug tests includes overall positivity rates by industry and by drug category for marijuana, cocaine, opiates, amphetamines, amphetamine, and methamphetamine.

- Data only includes laboratory-based urine drug tests submitted by the general U.S. workforce for routine testing. Rehabilitation, criminal justice, and federally-mandated, safety-sensitive testing data are excluded. Positive results are tabulated prior to Medical Review Officer (MRO) evaluation.
- Each company is categorized by a single NAICS code. If a company can be categorized by multiple NAICS codes, it is assigned one code based on its largest revenue-producing output.
- An industry must meet an annual minimum volume of at least 50,000 urine drug tests to be included in our output. Four NAICS sectors are not included in our data due to insufficient volume. Those sectors are: Agriculture, Forestry, Fishing and Hunting (11); Mining (21); Management of Companies & Enterprises (55); and Arts, Entertainment & Recreation (71).
- Shifts in customers and testing volume may influence positivity rates over time.
- More than ninety percent of our general U.S. workforce urine testing volume has been categorized. Data is excluded if a company is unable to be reliably classified into a category.



## 22 | Utilities

Activities of this sector are generating, transmitting, and/or distributing electricity, gas, steam, and water and removing sewage through a permanent infrastructure of lines, mains, and pipe.



## 23 | Construction

Activities of this sector are erecting buildings and other structures (including additions); heavy construction other than buildings; and alterations, reconstruction, installation, and maintenance and repairs.



## 31-33 | Manufacturing

Activities of this sector are the mechanical, physical, or chemical transformation of materials, substances, or components into new products.



## 42 | Wholesale Trade

Activities of this sector are selling or arranging for the purchase or sale of goods for resale; capital or durable nonconsumer goods; and raw and intermediate materials and supplies used in production, and providing services incidental to the sale of the merchandise.



## 44-45 | Retail Trade

Activities of this sector are retailing merchandise generally in small quantities to the general public and providing services incidental to the sale of the merchandise.



## 48-49 | Transportation & Warehousing

Activities of this sector are providing transportation of passengers and cargo, warehousing and storing goods, scenic and sightseeing transportation, and supporting these activities.



## 51 | Information

Activities of this sector are distributing information and cultural products, providing the means to transmit or distribute these products as data or communications, and processing data.



## 52 | Finance & Insurance

Activities of this sector involve the creation, liquidation, or change in ownership of financial assets (financial transactions) and/or facilitating financial transactions.



## 53 | Real Estate, Rental & Leasing

Activities of this sector are renting, leasing, or otherwise allowing the use of tangible or intangible assets (except copyrighted works), and providing related services.



## 54 | Professional, Scientific & Technical Services

Activities of this sector are performing professional, scientific, and technical services for the operations of other organizations.



## 56 | Administrative Support, Waste Management & Remediation Services

Activities of this sector are performing routine support activities for the day-to-day operations of other organizations.



## 61 | Educational Services

Activities of this sector are providing instruction and training in a wide variety of subjects.



## 62 | Health Care & Social Assistance

Activities of this sector are providing health care and social assistance for individuals.



## 72 | Accommodation & Food Services

Activities of this sector are providing customers with lodging and/or preparing meals, snacks, and beverages for immediate consumption.



## 81 | Other Services (except Public Administration)

Activities of this sector are providing services not elsewhere specified, including repairs, religious activities, grantmaking, advocacy, laundry, personal care, death care, and other personal services.



## 92 | Public Administration

Activities of this sector are administration, management, and oversight of public programs by Federal, State, and local governments.

Source: United States Census Bureau, Office of Management and Budget



## Workforce drug positivity rises by double-digits in almost one-third of U.S. industry sectors

Drug use by the U.S. workforce increased each year -- and by double-digits over two years -- between 2015 and 2017, in five of 16 major U.S. industry sectors analyzed, according to a first-ever analysis of industry-specific data from more than ten million urine drug test results performed by Quest Diagnostics, the world's leading provider of diagnostic information services.

The data from the Quest Diagnostics Drug Testing Index™ industry analysis show that the Retail Trade (5.3%), Health Care and Social Assistance (4.7%), and Real Estate Rental and Leasing (4.6%) sectors had the highest overall positivity rates in 2017, while the Utilities (2.8%) and Finance and Insurance (2.6%) sectors had the lowest rates.

### **Five sectors experienced year-over-year increases with a double-digit increase in their positivity rates between 2015 and 2017:**

- Transportation and Warehousing (21.4%)
- Other Services (Except Public Administration) (15.4%)
- Finance and Insurance (13%)
- Retail Trade (12.8%)
- Wholesale Trade (11.8%)

“Our analysis suggests that employers can't assume that workforce drug use isn't an issue in their industry. In fact, drug test positivity in the majority of industry sectors analyzed is growing,” said Barry Sample, PhD, Senior director, science and technology, Quest Diagnostics Employer Solutions. “The highest rates were in consumer-facing industries, including jobs in Retail and Health Care and Social Assistance.”

In a 2017 survey by the National Safety Council, 71 percent of employers reported being directly impacted by prescription drug misuse in their workforce, including absenteeism, decreased productivity, and on-the-job near miss or injury.

Classifications were based on the North American Industry Classification System (NAICS), used by the U.S. Office of Management and Budget, Canada, and Mexico to group organizations into industries based on the similarity of their production processes. Sixteen of the 20 industry sectors were included in the Quest analysis; four classifications were excluded due to insufficient testing volume.

The highest rates were in consumer-facing industries, including jobs in Retail and Health Care and Social Assistance.

### **Barry Sample, PhD**

Senior director, science and technology,  
Quest Diagnostics Employer Solutions



### Marijuana tops the list as the most detected substance

Consistent with the annual Drug Testing Index report, marijuana was the most commonly detected substance, with the highest drug positivity rate of all drug classes across the majority of industry sectors. Marijuana positivity was highest in Accommodation and Food Services, at 3.5 percent in 2017, more than 34 percent higher than the national positivity rate of 2.6 percent for the general U.S. workforce.

Eight sectors experienced year-over-year increases with at least 20 percent increases in marijuana positivity rates between 2015 and 2017:

- Transportation and Warehousing (33.3%)
- Other Services (except Public Administration) (33.3%)
- Construction (26.7%)
- Wholesale Trade (23.5%)
- Manufacturing (23.1%)
- Accommodation and Food Services (20.7%)
- Administrative Support, Waste Management and Remediation Services (19.0%)
- Retail Trade (18.5%)

“As companies consider strategies to protect their workplaces, they should also consider the risks that employees who use drugs present to their co-workers, customers and the general public,” said Kimberly Samano, PhD, Scientific director, Quest Diagnostics Employer Solutions. “This new analysis suggests that an increasing number of applicants and employees across various industries may be misusing dangerous drugs.”

Other observations by drug category include:

The amphetamine positivity rate grew year-over-year and nearly 14 percent between 2015 and 2017 in the Educational Services sector, and rose by nearly

16 percent in the Health Care and Social Assistance sector. Amphetamine is a central nervous system stimulant and includes drugs such as Adderall® that may be prescribed for certain conditions, but which may also be used illicitly.

Methamphetamine positivity was highest in the Construction sector in each of the three years analyzed, and experienced a 15 percent increase during that period. Methamphetamine, which is a prescription drug but is most often associated with illicit use and production in clandestine laboratories, is a potent version of amphetamine that has more harmful effects on the central nervous system and has a high potential for misuse.

Cocaine positivity is higher in most sectors in 2017 as compared to 2015. The following sectors experienced the greatest year-over-year increases in cocaine positivity between 2015 and 2017:

- Retail Trade (42.9%)
- Administrative Support, Waste Management and Remediation Services (35.3%)
- Transportation and Warehousing (22.7%)

### Positivity varies significantly in prevalence and by drug among industry sectors

Among other industry-specific findings:

- The **Retail Trade** sector, with the highest 2017 positivity rate among the sixteen sectors reported, observed increases in overall positivity in each year between 2015 and 2017 (positivity rate of 4.7% in 2015, 5.1% in 2016, 5.3% in 2017). In addition to a nearly 43 percent growth in cocaine positivity between 2015 and 2017 -- overall twice the increase of the general U.S. workforce -- marijuana positivity increased more than 18 percent in the sector.

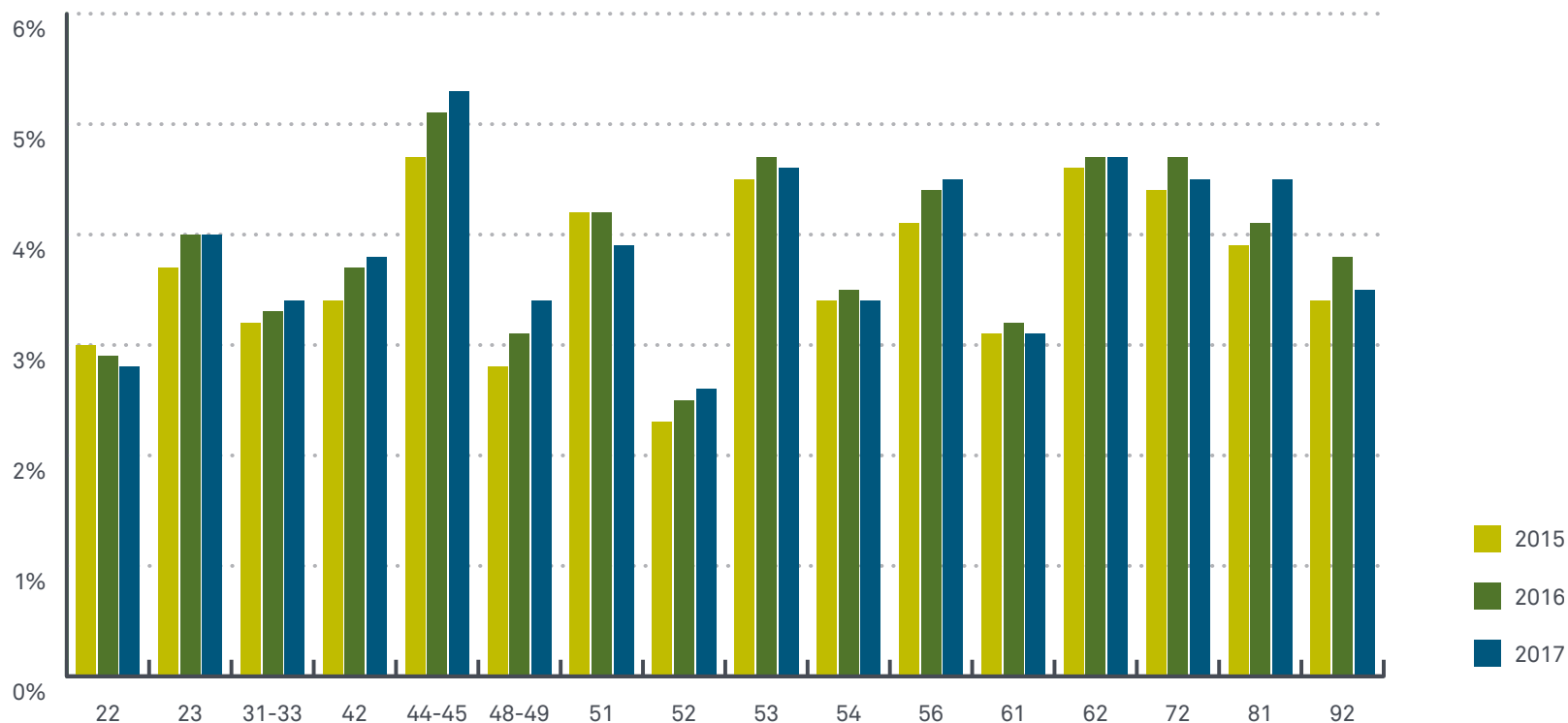


- Between 2015 and 2017, the **Transportation and Warehousing** sector experienced the largest overall positivity increase of any sector, in large part due to significant increases in both cocaine and marijuana positivity. Year-over-year cocaine positivity increased more than 22 percent between 2015 and 2017 (0.22% in 2015, 0.25% in 2016, and 0.27% in 2017). Marijuana positivity increased by more than 33 percent over the same timeframe.
- **Educational Services** topped the list for amphetamine positivity in all three years of the analysis (1.45% in 2015, 1.60% in 2016, and 1.65% in 2017), equating to an increase of nearly 14 percent. At the same time, the sector saw the largest year-over-year decline in methamphetamine positivity of any sector analyzed, declining nearly 29% between 2015 and 2017.
- The **Construction** sector ranked highest among industries for cocaine positivity (0.41% in 2017) – more than 33% higher the general U.S. workforce. The Construction sector also exhibited a more than 26 percent increase in marijuana positivity between 2015 and 2017.
- In the **Manufacturing** sector, both marijuana and methamphetamine positivity increased year-over-year, by more than 23 and 27 percent, respectively, between 2015 and 2017.
- The **Wholesale Trade** sector experienced double-digit growth in overall positivity from 2015 to 2017, largely related to the more than 36 percent and 24 percent increases in methamphetamine and marijuana positivity, respectively, during that time period.
- The **Information** sector showed the largest growth (more than 20%) in amphetamine positivity between 2015 and 2017, but was the only sector to experience a year-over-year decline (more than 8%) in marijuana positivity during that same three-year period.
- **Other Services (except Public Administration)** showed large increases in positivity for marijuana (more than 33%) and cocaine (19%) between 2015 and 2017.

For more information about the Quest Diagnostics Drug Testing Index, visit [www.QuestDiagnostics.com/DTI](http://www.QuestDiagnostics.com/DTI).

# Overall Positivity Rates

Urine Drug Tests - General U.S. Workforce



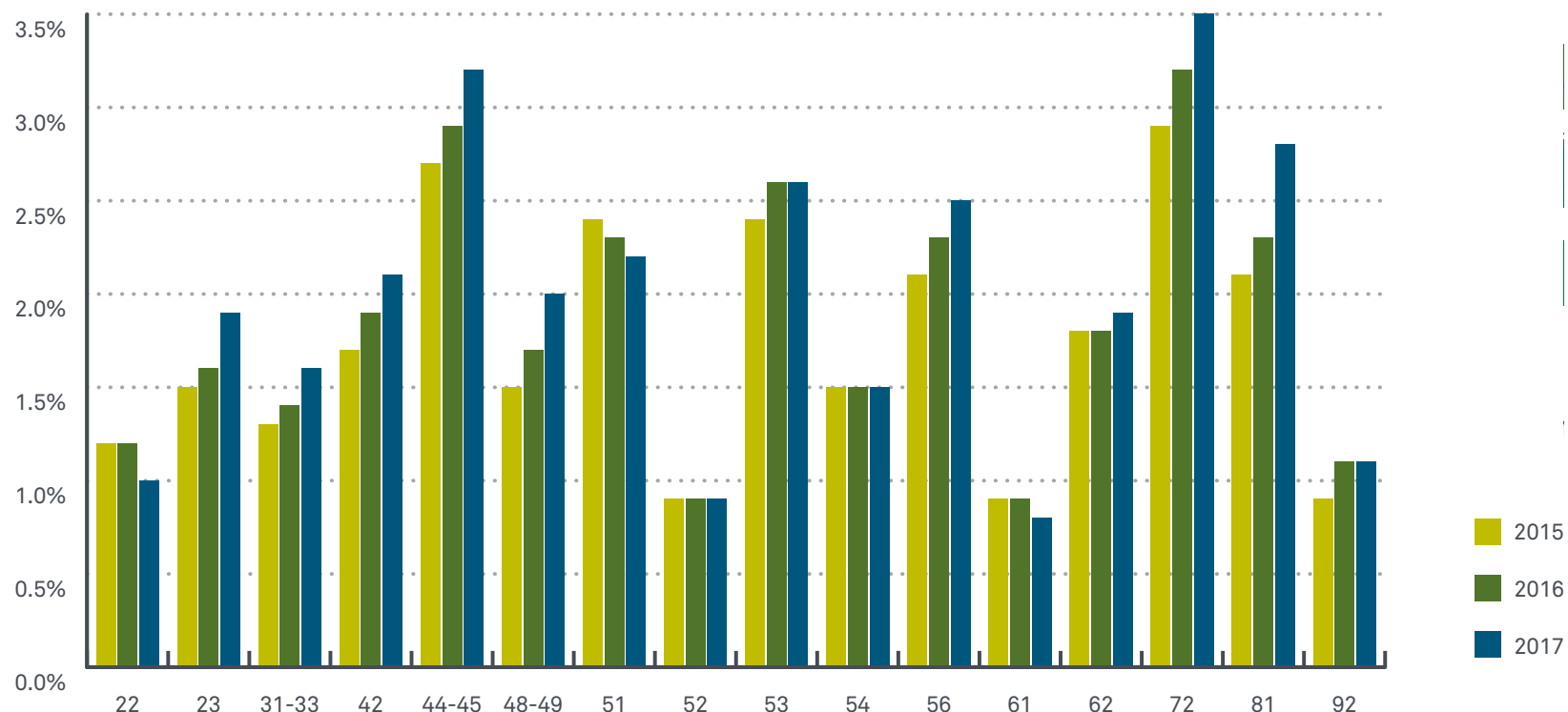
Industry	2015	2016	2017
Accommodation & Food Services <sup>72</sup>	4.4%	4.7%	4.5%
Admin Support, Waste & Remediation Services <sup>56</sup>	4.1%	4.4%	4.5%
Construction <sup>23</sup>	3.7%	4.0%	4.0%
Educational Services <sup>61</sup>	3.1%	3.2%	3.1%
Finance & Insurance <sup>52</sup>	2.3%	2.5%	2.6%
Health Care & Social Assistance <sup>62</sup>	4.6%	4.7%	4.7%
Information <sup>51</sup>	4.2%	4.2%	3.9%
Manufacturing <sup>31-33</sup>	3.2%	3.3%	3.4%

Industry	2015	2016	2017
Other Services (except Public Administration) <sup>81</sup>	3.9%	4.1%	4.5%
Professional, Scientific & Technical Services <sup>54</sup>	3.4%	3.5%	3.4%
Public Administration <sup>92</sup>	3.4%	3.8%	3.5%
Real Estate, Rental & Leasing <sup>53</sup>	4.5%	4.7%	4.6%
Retail Trade <sup>44-45</sup>	4.7%	5.1%	5.3%
Transportation & Warehousing <sup>48-49</sup>	2.8%	3.1%	3.4%
Utilities <sup>22</sup>	3.0%	2.9%	2.8%
Wholesale Trade <sup>42</sup>	3.4%	3.7%	3.8%



# Positivity Rates by Drug: Marijuana

Urine Drug Tests - General U.S. Workforce

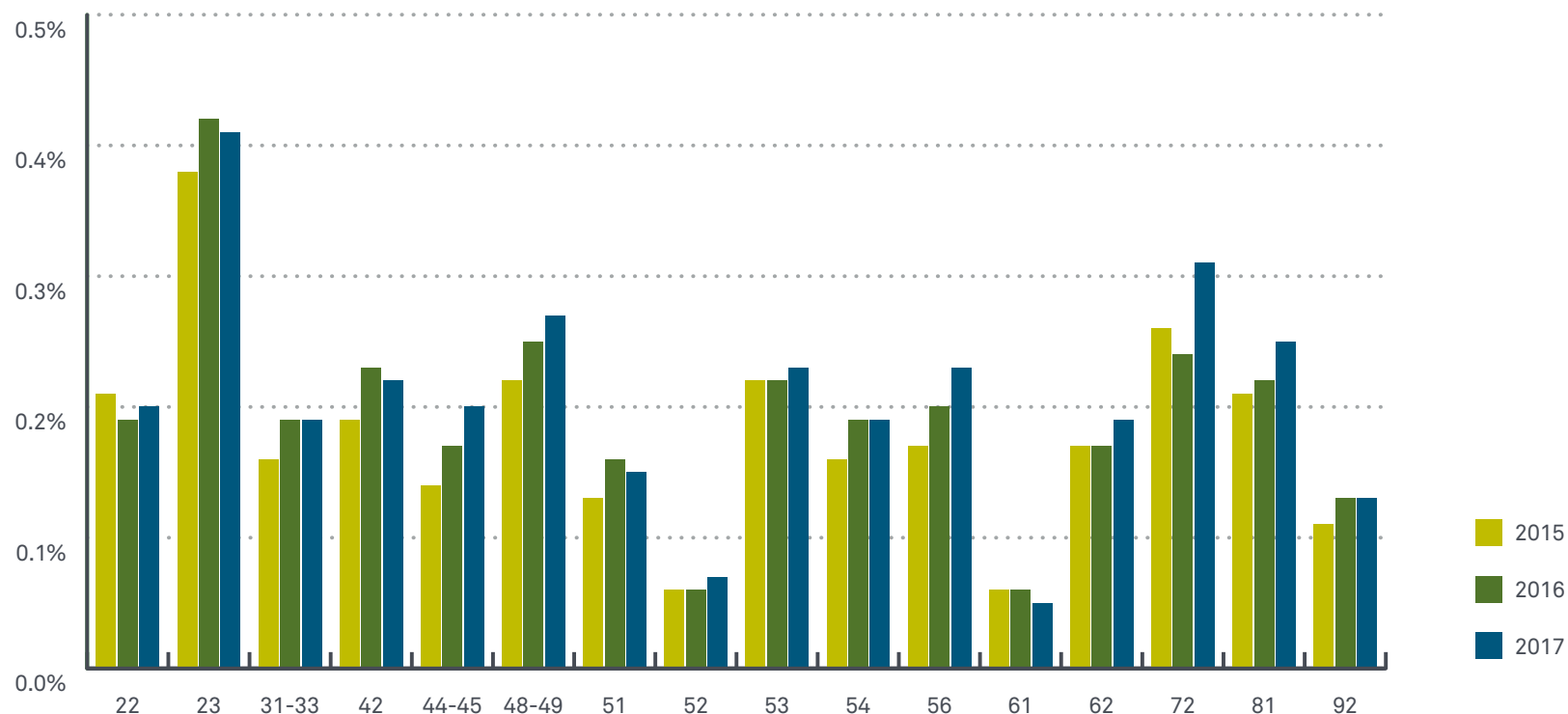


Industry	2015	2016	2017
Accommodation & Food Services <sup>72</sup>	2.9%	3.2%	3.5%
Admin Support, Waste & Remediation Services <sup>56</sup>	2.1%	2.3%	2.5%
Construction <sup>23</sup>	1.5%	1.6%	1.9%
Educational Services <sup>61</sup>	0.9%	0.9%	0.8%
Finance & Insurance <sup>52</sup>	0.9%	0.9%	0.9%
Health Care & Social Assistance <sup>62</sup>	1.8%	1.8%	1.9%
Information <sup>51</sup>	2.4%	2.3%	2.2%
Manufacturing <sup>31-33</sup>	1.3%	1.4%	1.6%

Industry	2015	2016	2017
Other Services (except Public Administration) <sup>81</sup>	2.1%	2.3%	2.8%
Professional, Scientific & Technical Services <sup>54</sup>	1.5%	1.5%	1.5%
Public Administration <sup>92</sup>	0.9%	1.1%	1.1%
Real Estate, Rental & Leasing <sup>53</sup>	2.4%	2.6%	2.6%
Retail Trade <sup>44-45</sup>	2.7%	2.9%	3.2%
Transportation & Warehousing <sup>48-49</sup>	1.5%	1.7%	2.0%
Utilities <sup>22</sup>	1.2%	1.2%	1.0%
Wholesale Trade <sup>42</sup>	1.7%	1.9%	2.1%

# Positivity Rates by Drug: Cocaine

Urine Drug Tests - General U.S. Workforce

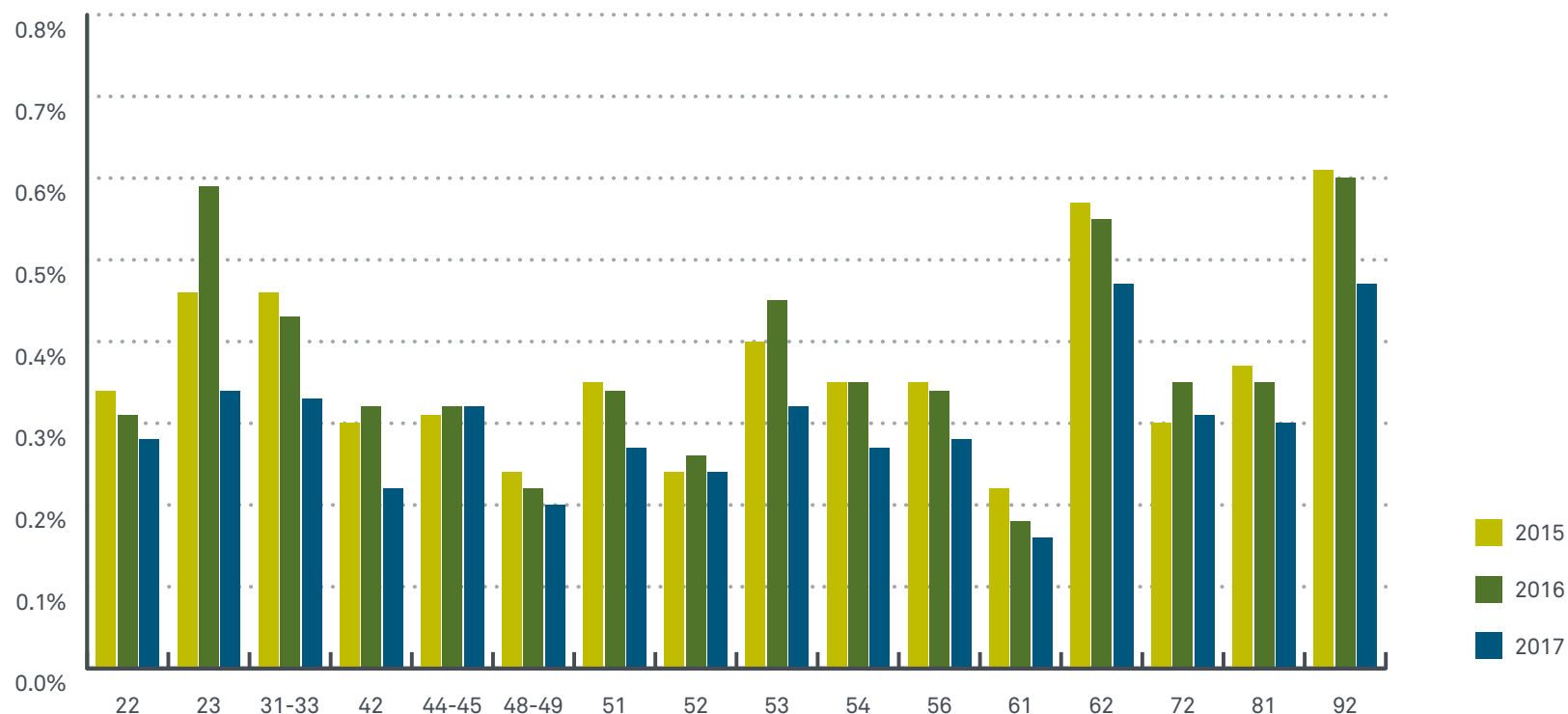


Industry	2015	2016	2017
Accommodation & Food Services <sup>72</sup>	0.26%	0.24%	0.31%
Admin Support, Waste & Remediation Services <sup>56</sup>	0.17%	0.20%	0.23%
Construction <sup>23</sup>	0.38%	0.42%	0.41%
Educational Services <sup>61</sup>	0.06%	0.06%	0.05%
Finance & Insurance <sup>52</sup>	0.06%	0.06%	0.07%
Health Care & Social Assistance <sup>62</sup>	0.17%	0.17%	0.19%
Information <sup>51</sup>	0.13%	0.16%	0.15%
Manufacturing <sup>31-33</sup>	0.16%	0.19%	0.19%

Industry	2015	2016	2017
Other Services (except Public Administration) <sup>81</sup>	0.21%	0.22%	0.25%
Professional, Scientific & Technical Services <sup>54</sup>	0.16%	0.19%	0.19%
Public Administration <sup>92</sup>	0.11%	0.13%	0.13%
Real Estate, Rental & Leasing <sup>53</sup>	0.22%	0.22%	0.23%
Retail Trade <sup>44-45</sup>	0.14%	0.17%	0.20%
Transportation & Warehousing <sup>48-49</sup>	0.22%	0.25%	0.27%
Utilities <sup>22</sup>	0.21%	0.19%	0.20%
Wholesale Trade <sup>42</sup>	0.19%	0.23%	0.22%

# Positivity Rates by Drug: Opiates

Urine Drug Tests - General U.S. Workforce

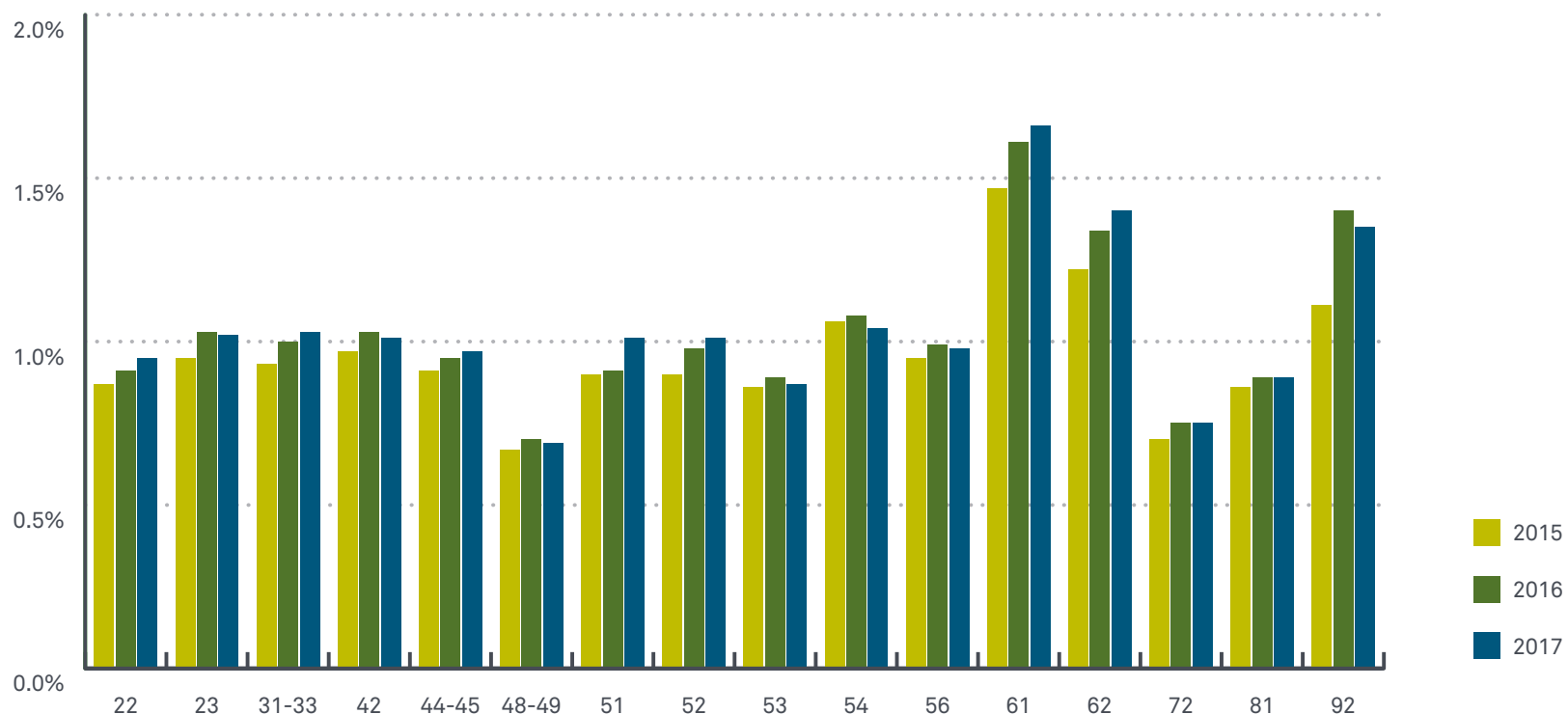


Industry	2015	2016	2017
Accommodation & Food Services <sup>72</sup>	0.30%	0.35%	0.31%
Admin Support, Waste & Remediation Services <sup>56</sup>	0.35%	0.34%	0.28%
Construction <sup>23</sup>	0.46%	0.59%	0.34%
Educational Services <sup>61</sup>	0.22%	0.18%	0.16%
Finance & Insurance <sup>52</sup>	0.24%	0.26%	0.24%
Health Care & Social Assistance <sup>62</sup>	0.57%	0.55%	0.47%
Information <sup>51</sup>	0.35%	0.34%	0.27%
Manufacturing <sup>31-33</sup>	0.46%	0.43%	0.33%

Industry	2015	2016	2017
Other Services (except Public Administration) <sup>81</sup>	0.37%	0.35%	0.30%
Professional, Scientific & Technical Services <sup>54</sup>	0.35%	0.35%	0.27%
Public Administration <sup>92</sup>	0.61%	0.60%	0.47%
Real Estate, Rental & Leasing <sup>53</sup>	0.40%	0.45%	0.32%
Retail Trade <sup>44-45</sup>	0.31%	0.32%	0.32%
Transportation & Warehousing <sup>48-49</sup>	0.24%	0.22%	0.20%
Utilities <sup>22</sup>	0.34%	0.31%	0.28%
Wholesale Trade <sup>42</sup>	0.30%	0.32%	0.22%

# Positivity Rates by Drug: Amphetamines (Amphetamine and Methamphetamine)

Urine Drug Tests - General U.S. Workforce

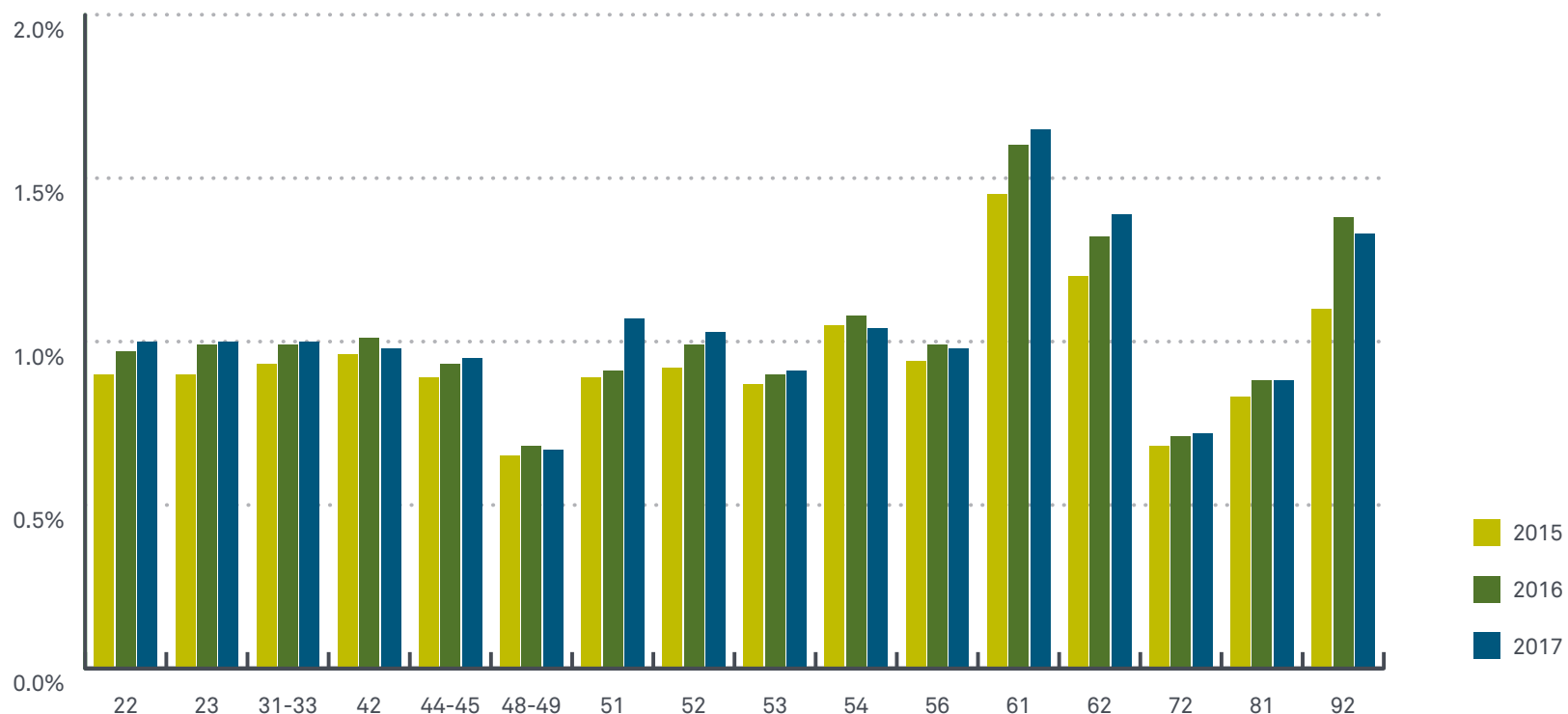


Industry	2015	2016	2017
Accommodation & Food Services <sup>72</sup>	0.70%	0.75%	0.75%
Admin Support, Waste & Remediation Services <sup>56</sup>	0.95%	0.99%	0.98%
Construction <sup>23</sup>	0.95%	1.03%	1.02%
Educational Services <sup>61</sup>	1.47%	1.61%	1.66%
Finance & Insurance <sup>52</sup>	0.90%	0.98%	1.01%
Health Care & Social Assistance <sup>62</sup>	1.22%	1.34%	1.40%
Information <sup>51</sup>	0.90%	0.91%	1.01%
Manufacturing <sup>31-33</sup>	0.93%	1.00%	1.03%

Industry	2015	2016	2017
Other Services (except Public Administration) <sup>81</sup>	0.86%	0.89%	0.89%
Professional, Scientific & Technical Services <sup>54</sup>	1.06%	1.08%	1.04%
Public Administration <sup>92</sup>	1.11%	1.40%	1.35%
Real Estate, Rental & Leasing <sup>53</sup>	0.86%	0.89%	0.87%
Retail Trade <sup>44-45</sup>	0.91%	0.95%	0.97%
Transportation & Warehousing <sup>48-49</sup>	0.67%	0.70%	0.69%
Utilities <sup>22</sup>	0.87%	0.91%	0.95%
Wholesale Trade <sup>42</sup>	0.97%	1.03%	1.01%

# Positivity Rates by Drug: Amphetamine

Urine Drug Tests - General U.S. Workforce

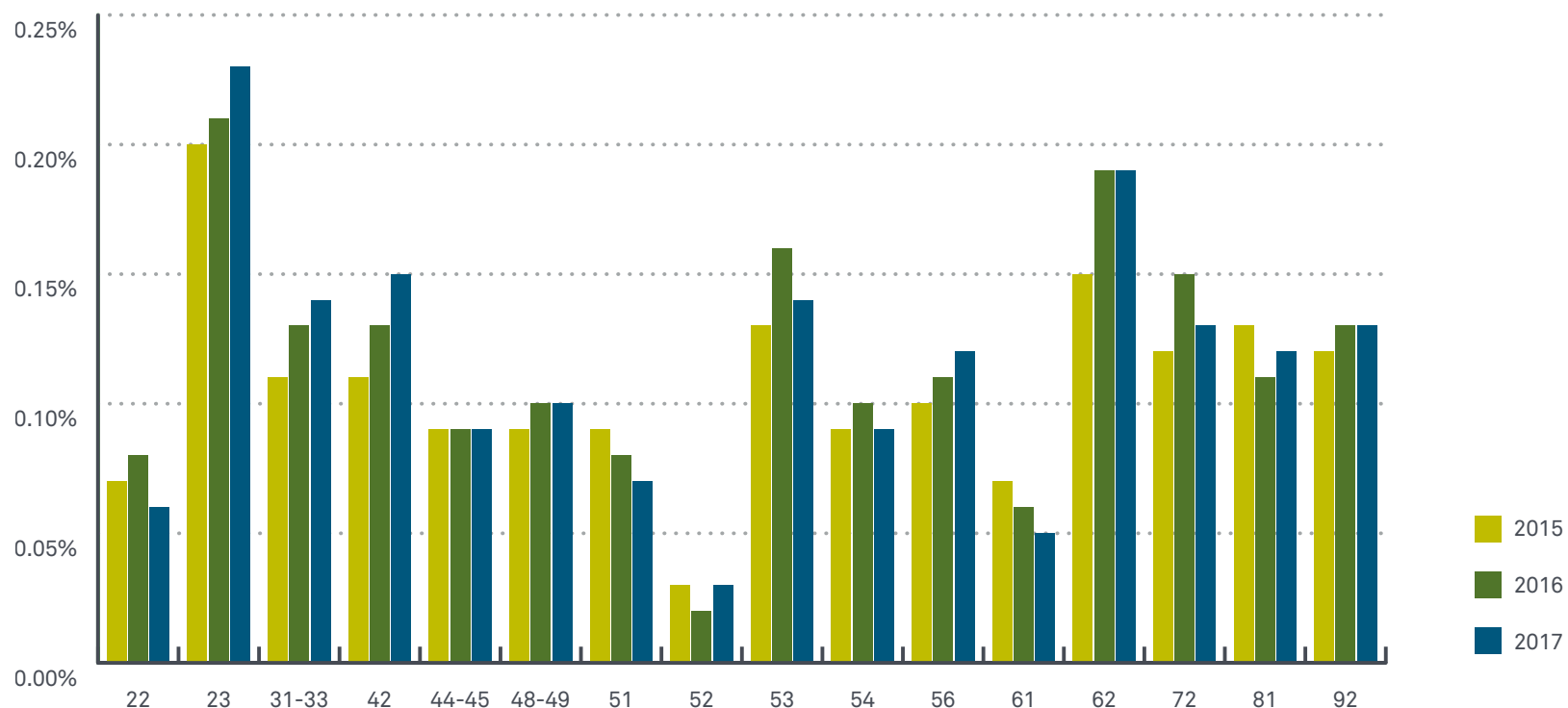


Industry	2015	2016	2017
Accommodation & Food Services <sup>72</sup>	0.68%	0.71%	0.72%
Admin Support, Waste & Remediation Services <sup>56</sup>	0.94%	0.99%	0.98%
Construction <sup>23</sup>	0.90%	0.99%	1.00%
Educational Services <sup>61</sup>	1.45%	1.60%	1.65%
Finance & Insurance <sup>52</sup>	0.92%	0.99%	1.03%
Health Care & Social Assistance <sup>62</sup>	1.20%	1.32%	1.39%
Information <sup>51</sup>	0.89%	0.91%	1.07%
Manufacturing <sup>31-33</sup>	0.93%	0.99%	1.00%

Industry	2015	2016	2017
Other Services (except Public Administration) <sup>81</sup>	0.83%	0.88%	0.88%
Professional, Scientific & Technical Services <sup>54</sup>	1.05%	1.08%	1.04%
Public Administration <sup>92</sup>	1.10%	1.38%	1.33%
Real Estate, Rental & Leasing <sup>53</sup>	0.87%	0.90%	0.91%
Retail Trade <sup>44-45</sup>	0.89%	0.93%	0.95%
Transportation & Warehousing <sup>48-49</sup>	0.65%	0.68%	0.67%
Utilities <sup>22</sup>	0.90%	0.97%	1.00%
Wholesale Trade <sup>42</sup>	0.96%	1.01%	0.98%

# Positivity Rates by Drug: Methamphetamine

Urine Drug Tests - General U.S. Workforce



Industry	2015	2016	2017
Accommodation & Food Services <sup>72</sup>	0.12%	0.15%	0.13%
Admin Support, Waste & Remediation Services <sup>56</sup>	0.10%	0.11%	0.12%
Construction <sup>23</sup>	0.20%	0.21%	0.23%
Educational Services <sup>61</sup>	0.07%	0.06%	0.05%
Finance & Insurance <sup>52</sup>	0.03%	0.02%	0.03%
Health Care & Social Assistance <sup>62</sup>	0.15%	0.19%	0.19%
Information <sup>51</sup>	0.09%	0.08%	0.07%
Manufacturing <sup>31-33</sup>	0.11%	0.13%	0.14%

Industry	2015	2016	2017
Other Services (except Public Administration) <sup>81</sup>	0.13%	0.11%	0.12%
Professional, Scientific & Technical Services <sup>54</sup>	0.09%	0.10%	0.09%
Public Administration <sup>92</sup>	0.12%	0.13%	0.13%
Real Estate, Rental & Leasing <sup>53</sup>	0.13%	0.16%	0.14%
Retail Trade <sup>44-45</sup>	0.09%	0.09%	0.09%
Transportation & Warehousing <sup>48-49</sup>	0.09%	0.10%	0.10%
Utilities <sup>22</sup>	0.07%	0.08%	0.06%
Wholesale Trade <sup>42</sup>	0.11%	0.13%	0.15%



## About Quest Diagnostics

Quest Diagnostics helps empower 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 healthcare management. Quest annually serves one in three adult Americans and half the physicians and hospitals in the United States, and our 45,000 employees understand that, in the right hands and with the right context, our diagnostic insights can inspire actions that transform lives. **QuestDiagnostics.com.**

Industry Insights: Quest Diagnostics Drug Testing Index™. Supplement. QuestDiagnostics.com/DTI. December 10,2018.

**QuestDiagnostics.com/DTI**