Results from the 2019 Drug and Alcohol Testing Survey

INTRODUCTION

This report summarizes the results of the 2019 Federal Motor Carrier Safety Administration (FMCSA) Drug and Alcohol Testing Survey. This annual survey measures the percentage of commercial driver's license (CDL) drivers who test positive for controlled substances (herein referred to as drugs) and/or alcohol, as a result of random and non-random (i.e., pre-employment, post-crash, reasonable suspicion, and follow-up) testing.

BACKGROUND

Pursuant to Part 382 of the Federal Motor Carrier Safety Regulations (FMCSRs), motor carriers that employ CDL drivers are required to have drug and alcohol testing programs. In 2019, FMCSA required these carriers to randomly test 10 percent of their CDL drivers for alcohol and 25 percent of their CDL drivers for drugs. FMCSA also requires carriers to perform non-random drug and alcohol testing on CDL drivers whenever:

- The driver is being considered for employment (only for drugs and only when the driver has not recently been in a drug and alcohol testing program).
- The driver has been involved in a crash (only when the crash involves a fatality or when the driver receives a citation in a towaway or injury-related crash).
- The driver is suspected by a supervisor of using drugs or alcohol while at work.

In the case of alcohol, an on-duty CDL driver is in violation of the FMCSRs when the driver's blood alcohol content (BAC) is greater than or equal to 0.02 grams per 210 liters of breath. If the driver tests at a concentration of 0.04 or higher, pursuant to Part 382, subparts B, E and F, the driver also must undergo referral, evaluation, and treatment. The alcohol violation rate for the industry (determined annually by FMCSA and used to evaluate required motor carrier testing rates) is determined based on a 0.04 cutoff level. For drugs (marijuana, cocaine, opiates, amphetamines, and phencyclidine [PCP]), the cutoff levels for identifying use are based on guidelines set by the Department of Health and Human Services.

The positive usage rates presented herein represent weighted statistical estimates. These estimates are generalizable to the entire CDL driver population in the national fleet and have been derived by using standard statistical techniques applicable to stratified samples. It is important to keep in mind that the rates obtained from these procedures do not represent true values; rather, they are unbiased estimates of the true rates with associated sampling errors.

RESULTS

Estimates of positive usage rates from both random and non-random testing are discussed separately, below. Survey estimates from the 2019 survey are presented in Table 1 (drugs) and Table 2 (alcohol). Both tables also include estimates from the 2017 and 2018 surveys. The term "positive usage rate" refers to use of any of the five drugs referenced in the previous section. The overall positive rate also includes refusals to test, which are treated as positives.

RANDOM TESTING

For the 2019 survey, survey forms were sent to 9,515 randomly selected motor carriers. Of these forms, 4,022 were completed and returned to FMCSA, resulting in usable data from:

- 3,322 carriers (comprising 352,254 CDL drivers) for random controlled substance testing.
- 3,138 carriers (comprising 158,820 CDL drivers) for random alcohol testing.

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Respondents providing non-usable data represent entities that are out of business, exempt, have no testing program in place, or belong to consortia that did not test any drivers for the carrier during 2019. For random testing conducted in 2019, the results are as follows:

- **Drugs:** The estimated positive usage rate for drugs in 2019 is 1.6 percent. The 95-percent confidence interval for this estimate ranges from 1.4 to 1.8 percent. If the survey were to be replicated, it would be expected that the confidence interval derived from each replication would contain the true usage rate in 95 out of 100 surveys. For 2017 and 2018, the estimated positive usage rate for drugs was estimated to be 0.8 percent and 1.0 percent, respectively (see Table 1).
- **Alcohol:** The estimated violation rate for alcohol usage (the percentage of drivers with a BAC of 0.04 or higher) in 2019 is 0.3 percent. The 95-percent confidence interval for this estimate ranges from 0.2 to 0.4 percent. If the survey were to be replicated, it would be expected that the confidence interval derived from each replication would contain the true usage rate in 95 out of 100 surveys. For 2017 and 2018, the alcohol usage violation rates were 0.08 percent and 0.06 percent, respectively (see Table 2).
- **Part 382 Compliance:** Based on the 2019 survey results, the estimated percentage of subject motor carriers with random controlled substance and alcohol testing programs in place is 94 percent, and the estimated percentage of all CDL drivers participating in such programs is 100 percent.

NON-RANDOM TESTING

Estimates of positive drug usage rates for the pre-employment screening and post-crash, non-random testing categories are shown in Table 1. Estimated rates from non-random alcohol testing are shown in Table 2.

With the possible exception of pre-employment drug testing, and drug and alcohol post-crash testing, the sample sizes achieved in the survey for other non-random testing categories are much lower than those achieved for random testing. As a result, the estimated precision levels for other estimates are low, and these results are not included.

In accordance with the achieved levels of precision in the 2018 and 2019 estimates, year-to-year differences in non-random testing rates between these two years cannot be shown to be statistically significant

Where the estimated rate or standard error is recorded as 0.0 percent in the tables, negligible or no drug or alcohol use was recorded in the sample for that specific category. In such cases, the actual positive rate for the population is, in all likelihood, greater than zero, but the sample size was inadequate to produce a more precise estimate.

Table 1. Estimates of random and non-random drug usage rates among CDL drivers, 2017–19.

Category	2017	2017 S.E.	2018 Est.	2018 S.E.	2019 Est.	2019 S.E.
Random Testing: Any Drug	0.8%	0.3%	1.0%	0.1%	1.6%	0.2 %
Non-random Testing: Pre-employment	1.5%	0.0%	1.4%	0.2%	1.9%	0.4 %
Non-random Testing: Post-crash	3.4%	1.2%	1.4%	0.4%	5.8%	2.7%

Est. = Estimate; S.E. = Standard Error
Source: Analysis Division, FMCSA, U.S. Department of Transportation (USDOT).

Table 2. Estimates of random and non-random alcohol usage percentage rates among CDL drivers, 2016–18.

Category	2017 Est.	2017 S.E.	2018 Est.	2018 S.E.	2019 Est.	2019 S.E.
Random Testing: (≥0.04 BAC)	0.08%	0.03%+	0.06%	0.02%+	0.3%	0.1%
Non-random Testing: Post-crash	0.1%	0.0%	0.2%	0.1%	0.05%	0.01%

Est. = Estimate; S.E. = Standard Error
+ No or negligible usage among sample cases; standard error was too low or negligible.
Source: Analysis Division, FMCSA, USDOT.

FMCSA ACTIONS

Of note is the estimated positive usage rate for drugs in 2019 of 1.6 percent, and the 5.8 percent estimated drug usage of CDL drivers in 2019 post-crash testing. Both estimates are notably

higher than the previous year. FMCSA is coordinating with our State partners to raise awareness of safety issues related to driving and drug use, to conduct traffic enforcement aimed at identifying drug-impaired CMV drivers, and to take enforcement action against drivers and motor carriers with a pattern of drug-related violations. In addition, with the implementation of the Drug and Alcohol Clearinghouse in 2020, FMCSA has provided motor carriers with a tool for identifying drivers during the hiring process who have had positive drug tests and if the driver has completed the return to duty process. Also, in April of 2020, FMCSA published a notice of proposed rulemaking (NPRM) proposing to prohibit State Driver's Licensing Agencies from issuing, renewing, upgrading, or transferring a CDL, or commercial learner's permit, for individuals prohibited under current regulations from driving a commercial motor vehicle (CMV) due to controlled substance (drug) and alcohol program violations. The CMV driving ban is intended to keep these drivers from operating commercial vehicles until they comply with return-to-duty requirements. These proposed changes would improve highway safety by increasing compliance with existing drug and alcohol program requirements. FMCSA has reviewed the public comments to the NPRM and is preparing a final rule for publication.