



## Results from the 2013 Drug and Alcohol Testing Survey

### INTRODUCTION

This report summarizes the results of the 2013 Federal Motor Carrier Safety Administration (FMCSA) Drug and Alcohol Testing Survey. This annual survey measures the percentage of drivers with commercial driver's licenses (CDLs) that test positive for controlled substances (referred to as drugs in this report) and/or alcohol, as a result of random and non-random (pre-employment, post-crash, and reasonable suspicion/follow-up) testing.

### BACKGROUND

Motor carriers that employ CDL drivers are required to have drug and alcohol testing programs, pursuant to Part 382 of the Federal Motor Carrier Safety Regulations (FMCSRs). Currently, FMCSA requires these carriers to randomly test 10 percent of their CDL drivers for alcohol and 50 percent of their CDL drivers for drugs each year. In addition, FMCSA requires carriers to perform drug and alcohol testing (non-random) on CDL drivers whenever (1) 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); (2) 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); or (3) 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 his or her blood alcohol content (BAC) is equal to 0.02 grams per 210 liters of breath or higher. If the driver tests at a concentration of 0.04 or higher, he or she also must undergo referral, evaluation, and treatment, pursuant to Part 382, subpart F. 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 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 population of CDL drivers 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. Estimates from the 2013 survey are presented in Table 1 (drugs) and Table 2 (alcohol), which also include estimates from the 2011 and 2012 surveys. The term "positive usage rate" refers to use of any of the five drugs referenced in the previous section, and the overall positive rate also includes refusals to test, which are treated as positives.

### RANDOM TESTING

For the 2013 survey, survey forms were sent out to 3,251 randomly selected motor carriers. Of these forms, 2,236 were completed and returned to FMCSA, resulting in usable data from 1,654 carriers (comprising 497,270 CDL drivers) for random controlled substance testing, as well as usable data from 1,524 carriers (comprising 205,669 CDL drivers) for random alcohol testing. 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 2013.

For random testing conducted in 2013, the results are as follows:

- **Drugs:** The estimated positive usage rate for drugs in 2013 is 0.7 percent. The 95-percent confidence interval for this estimate ranges from 0.6–0.8 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 2011 and 2012, the estimated positive usage rate for drugs was estimated to be 0.9 percent and 0.6 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 2013 is 0.09 percent. The 95-percent confidence interval for this estimate ranges from 0.05–0.13 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 2011 and 2012, the alcohol usage violation rates were 0.1 percent and 0.03 percent, respectively (see Table 2).
- **Part 382 Compliance:** Based on the 2013 survey results, the estimated percentage of subject motor carriers with random controlled substance and alcohol testing programs in place is 61 percent, and the estimated percentage of all CDL drivers participating in such programs is 92 percent. The disparity between these two percentages stems from the fact that small carriers, which constitute a majority of companies in the national fleet, tend to be less compliant with Part 382. Large companies tend to be more compliant with Part 382, and they account for the majority of drivers (although they do not account for a majority of the carriers).

## NON-RANDOM TESTING

Estimates of drug positive 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, the sample sizes achieved in the survey for the various non-random testing categories are much lower than those achieved for random testing. As a result, the estimated precision levels for many of these estimates are low, and caution should be exercised when interpreting these estimates. Generally speaking, given the achieved levels of precision in the 2013 and 2012 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 particular 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, 2011–13.**

Category	2011 Est.	2011 S.E.	2012 Est.	2012 S.E.	2013 Est.	2013 S.E.
<b>Random Testing:</b>						
Any Drug	0.9%	0.1%	0.6%	0.1%	0.7%	0.1%
<b>Non-random Testing:</b>						
Pre-employment	1.2%	0.1%	1.3%	0.1%	1.8%	0.5%
Post-crash	1.8%	0.6%	1.3%	0.5%	2.8%	0.8%

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, 2011–13.**

Category	2011 Est.	2011 S.E.	2012 Est.	2012 S.E.	2013 Est.	2013 S.E.
<b>Random Testing:</b>						
(≥0.04 BAC)	0.1%	0.0%+	0.03%	0.0%+	0.1%	0.0%+
<b>Non-random Testing:</b>						
Pre-employment	0.0%+	0.0%+	0.0%	0.0%+	0.0%+	0.0%+
Post-crash	1.5%	1.1%	0.1%	0.0%+	0.1%	0.0%+

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.