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Health Risks of American Long-Distance Truckers Results From a Multisite Assessment

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Health Risks of American Long Distance Truckers: Results from a Multi-Site Assessment

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***Journal of Occupational and Environmental Medicine*: Structured Abstract 135 words [Objective, Methods, Results, Conclusions]; text [no limit]; tables [no limit]. Include statement of clinical significance [50 words]. Impact Factor 1.861.**

Provisional Abstract [135 words]

Objective: To assess the general and sexual health of long-haul truck drivers in the United States.

Methods: Drivers were recruited from company sites and truck stops in North Carolina, Tennessee, and Mississippi. A sample of 266 drivers was assessed for life-style activities; body mass index and blood pressure were measured, and biologic samples were taken for cholesterol, diabetes, and STI/HIV testing.

Results: The drivers in this study had higher levels of cholesterol and higher rates of smoking, obesity, and diabetes than the U.S average. STI/HIV infection rates were lower than the U.S. average.

Conclusions: Long-haul truck driving is a stressful occupation with few opportunities for healthy living. Stress reduction, wellness programs, and better food and exercise options at truck stops should be adopted for the benefit of truckers and the safety of the driving public.

Background:

Trucking plays an essential role in the U.S. economy, moving over 70% of the freight across the country.[1] Long-haul trucking is often stressful and is not conducive to healthy living. Time off is often limited to truck stops which may not offer quiet, safe sleep environments, healthy dining options, or opportunities for physical and recreational activity.[2-5] The nature of the job requires truckers to stay awake for long periods of time and spend many hours or days away from home. With these working conditions, it is not surprising that truckers are at increased risk for stress-related illness[3, 6-7,] and that they develop obesity, hypertension, high cholesterol, and smoking-related mobidity.[8-9] About one-third of drivers also lack medical insurance or, even more commonly, access to a regular healthcare provider.[10] This study presents comprehensive results of research on truckers' physical and sexual health and differentiates between company and independent drivers who have different work conditions, access to health care, and distances to travel. These differences may be important to consider in health interventions for long-haul drivers.

Sexual health among long-haul truckers has been the focus of HIV-related research outside the United States with general agreement that occupational mobility has, in part, contributed to HIV transmission across Sub-Saharan Africa.[11-14-] However, little is known about truckers' sexual health as a specific area of study in the United States. A few papers have cited occupational stressors such as loneliness and a transient lifestyle as potential triggers for sexual risk-taking,[3,15]or reported inconsistent condom use, interactions with sex workers and truck chasers, and illicit drug use as

activities that may increase their sexually transmitted infection (STI)/HIV risk.[16-17] Sexual health items are included in our study for a more complete profile of truckers' health in the U.S. context.

Aims:

We hypothesized that occupational demands for on-time deliveries, irregular work schedules, and long distance travel would be stressful and thus unhealthy, act as a barrier to health care-seeking, and lead to greater sexual risk-taking in this highly mobile population. The study specifically sought to quantify the health risks of a convenience sample of long-haul U.S. truckers by: 1) Assessing the prevalence of diabetes, hypertension, obesity, hypercholesterolemia, syphilis, hepatitis C, hepatitis B, HIV, *N. gonorrhoeae*, and *C. trachomatis* through targeted health screenings conducted in trucking companies and in highway truck stops, and 2) assessing general and sexual health risk behaviors in an interviewer-administered survey.

Methods:

Participant Recruitment and Study Procedures:

All study procedures were reviewed and approved by ethics committees at the University of Alabama at Birmingham (Birmingham, AL) and Wake Forest University Health Sciences (Winston-Salem, NC). Six discrete "screening blitzes" were conducted between 2007 and 2010 at six sites (4 companies and 2 truck stops) in three southern states: North Carolina (NC), Tennessee (TN), and Mississippi (MS). A screening blitz involved visiting a site for several days per time for recruitment on a voluntary basis. Eligibility criteria were: long-haul truckers (defined as a driver, full or part-time, who drove a truck from one city to another city) who were

English speakers and aged 21 or greater. Eligible volunteers were consented at a private location, at which they had their blood pressure measured, were weighed and measured for Body Mass Index (BMI), submitted 30 cc of first void urine or a self-collected vaginal swab for testing for *N. gonorrhoeae* and *C. trachomatis* (GenProbe APTIMA COMBO 2® Assay; GenProbe Inc, San Diego, CA) and had blood collected to measure total cholesterol, high density lipoprotein (HDL), and low density lipoprotein (LDL) (CardioChek$_{TM}$ PA; PTS Diagnostics, Indianapolis, IN). Blood was also collected for hemoglobin A1C (HgbA1C) levels, as well as for syphilis (Rapid Plasma Reagin), hepatitis C antibody and hepatitis B surface antigen, and the samples were sent to a commercial laboratory for analysis. An oral swab was collected for rapid HIV antibody testing (OraQuick *ADVANCE*® Rapid HIV-1/2 Antibody Test; OraSure Technologies, Inc; Bethlehem, PA).

Next, the participants completed a questionnaire on social demographics, driving category (independent/company), work-related characteristics, health history, and diet. Sexual history was assessed according to past and current activity and, for participants who currently engaged in risky behavior (as defined by multiple partners, unprotected oral, vaginal or anal sex), was followed by items about willingness to change according to the Transtheoretical Model of Change (TMC).[18] Gift cards were provided after the interview. Post-interview, participants received their blood pressure, BMI, cholesterol, and HIV test results. Counseling and referrals occurred in a follow-up interview for truckers with positive test results. All notifiable STI tests were reported to the health department of the participant's home state in compliance with public health law.

Statistical Analyses:

Summary statistics, including means, standard deviations, and medians for continuous measures and frequencies and proportions for categorical data, were calculated for the study. To assess relationships between driver type and categorical measures, Fisher's Exact Tests were used for analysis. Differences between subgroups in continuous data were assessed using independent t-tests. SAS (version 9.4, Cary, NC, USA) was used for all statistical analyses.

Results:

Study Population

A total of 65.5% of the drivers who were approached at the three sites agreed to participate in the study. The drivers were recruited from trucking companies (62.2%) or truck stops (37.8%) in the study areas. Refusals involved time constraints, lack of interest, and desire to avoid a blood draw. Of the 294 drivers who volunteered, 284 were men (96.6%) for a mean age of 45.4 years (range 21-74 years). The final sample size of 266 drivers excluded 10 women whose numbers were too low to yield valid conclusions and 18 men who were ineligible for the study. Most drivers in the final sample were white (70.7%) black (24.3%), and Hispanic (8.7%). The drivers lived in 28 different states, most commonly North Carolina (N=99; 37.2%), Tennessee (N=32; 12.0%), and Virginia (N=21; 7.9%). The majority (89.9%) lived in a house, apartment or condominium while only 3.4% lived in their truck.

The study included company and independent drivers. The two groups were similar in terms of age (45.7% versus 45.3%) and education (49.5% versus 52.1% had finished high school). They varied in terms of race (74.1% versus 55.3% White), married/committed relationship (70.5% versus 56.2%), and solo driver status (86.2% versus 91.7%), although these

differences were not statistically meaningful. Significant differences were observed for income and health insurance. Few company drivers earned more than $80,000 per year (4.2% versus 50%), although they did not have to pay for upkeep or insurance on their trucks. Company drivers were more likely to have health coverage (89.9% versus 58.3%), which also counted for cost savings.

The truckers had worked for a mean of 4.5 companies (1-38) during their careers, which, on average, spanned more than a decade (mean 15.4 +/- 11.4 years; range 0-50/years). They had been employed as a company or independent driver for an average of 5.6 years. Their average driving distance was 4,917 miles (median 5,000) over 2 weeks prior to the survey, and the mean time away from home was 16.5 nights in the previous 30 days. Independent drivers had driven more miles (4,897 vs. 5,006 miles in previous two weeks) and were away for longer periods than company drivers (15.7 vs. 20.5 nights; both $p<0.0003$ (data not shown)). Most drivers (80%) reported taking their breaks at a truck stop, with 10.8% breaking at a rest area, 2.1% at a highway on/off ramp, and 7.2% at a different location. Truckers relied on a variety of means of communication while driving, with the majority (98.1%) using cell phones, citizen band [CB] radio (89.1%), satellite radio (51.1%), and computers (27.4%) for communicating with dispatchers or other drivers.

Commented [J1]: I doubt that miles driven is significant.

Commented [LHB2]: I think independents were only away a significantly greater number of nights compared to company drivers but the number of miles/2 weeks was not statistically different (see table in previous paper where p=0.73 for comparison of miles driven)

Self-Reported Health Status

Self-reported health was good, with 77.5% of drivers reporting good or excellent health. Only 15% reported that poor health had limited their daily activities. However, 64.5% of drivers also felt out of shape even though a similar proportion (60.5%) reported exercising for an average of 3.8 days a week over the past 30 days. Almost half (47.7%) reported a past diagnosis of

hypertension or pre-hypertension and, among those with a prior diagnosis, 62.1% were taking blood pressure medications. The majority of drivers (77.3%) reported having a cholesterol check in the past, and 45.8% of this group were aware that their cholesterol was high. Nineteen drivers (7%) reported coronary artery disease and 15 (5.6%) had experienced a myocardial infarction. Forty-six drivers (17.3%) had been diagnosed as pre-diabetic or diabetic. No statistical differences existed between types of drivers on these measures (all $p>.05$).

Access to Health Care

The two driver types reported different sources of health care. Better access to health coverage had enabled 75.2% of company drivers to receive healthcare from a personal provider compared to 54.2% of independent drivers. A total of 25% of independent drivers had received care from an acute care facility or emergency room compared to only 15% of company drivers ($p<0.05$). All drivers had DOT check-ups either annually (32%) or every two years (62.8%), although only 20.1% had additional checkups. Barriers to health care were reported in both groups, with 32% of drivers citing conflicts between work schedules and doctor's hours, and 19.6% citing financial problems.

Substance Use:

One third of the total sample (32.3%) smoked cigarettes on the job, although almost half of this group (48.8%) had tried to quit in the past year. Half of all drivers (50.8%) reported alcohol intake over the past 30 days, and only 2.6% of drivers reported any drug use in the last 3 months, with marijuana being the drug of choice. Independent drivers reported drug use more often than company drivers (6.4% versus 1.8%), although the difference was not statistically significant.

Sexual Health:

Most drivers (82%) had been sexually active over the past six months. Independent drivers spent longer periods of time away from home (p=.0003) and were more likely to report more than one sex partner over the past three months (16.2% versus 6.6%). Almost all drivers self-identified as heterosexual (98.1%), with only 2.6% reporting a history of same-sex contact. Many drivers did not feel at risk of STIs, as indicated by low rates of condom use (a mean of 1 condom for every 10 episodes of vaginal sex) and only half being tested for HIV (50.8%). Seventeen drivers reported having casual sex without condoms at least half the time, and 9.4% had exchanged sex for money or drugs in the past. Only one driver reported being diagnosed with an STI in the past year, although 17.3% reported a prior history of at least one STI, usually gonorrhea (63.6%).

Test Results:

The biomedical screenings and test results identified additional chronic health conditions in both groups. Most drivers (68.3%) were obese (mean BMI 32.8, range 19-55) and 20.5% (54/264) were diabetic defined as HgbA1C of 6.5 or higher (mean HgbA1C 6.1, range 4.4-9.7). The mean blood pressure was 135/86 (median 132/85, 98-190/58-120) and the mean total cholesterol was 169 (range 100-272). Almost half (47.8%) of the drivers were hypertensive or pre-hypertensive, and 62.1% of this group were given blood pressure medications. Independent drivers were more likely to have high blood pressure and high cholesterol than company drivers, although the differences were not statistically significant.

The STI test results revealed that 7 drivers (3.2%) had positive hepatitis C antibody and one had evidence of chronic active hepatitis B infection (0.5% positive for HbsAg). One driver

was diagnosed with genital chlamydial infection, and another had a positive RPR that failed to confirm with the treponemal assay and was therefore a false positive test. All tests for gonorrhea and HIV were negative. The drivers' STI morbidity was low and, in the case of hepatitis, was likely to reflect more remote exposure.

Discussion:

This study assessed the physical and sexual health of 266 long-haul truck drivers in three southern U.S. states. The results build on a small body of earlier research on long-haul U.S. truckers' health which found higher rates of smoking, hypertension, and elevated cholesterol;[6] as well as higher rates of obesity;[4,7] metabolic syndrome;[19] and ischemic heart disease than the general population and other U.S. employees.[20] With the exception of Valway et al.,[17] the small number of U.S. studies that specifically addressed STI/HIV risk in this population were qualitative only.[9,21] The current study may be the most comprehensive to date in matching biomarker and prevalence data with U.S. drivers' self-reports of health behavior and morbidity, as well as occupational factors such as DOT checkups and access to health care.

The drivers in this study met the U.S. average for cholesterol checks (77% versus 76%), and a diagnosis of pre-hypertension or hypertension (47% versus of 46%).[22] However, they exceeded the U.S. average for high cholesterol (46% versus 39%), diabetes (15% versus 10%), and cigarette smoking (32% versus 21%).[22] Overall, these results reflect national trends for obesity and related conditions, as well as occupational-specific factors such as being sedentary for extended periods of time and limited food options at truck-stop restaurants.[23] The high rate of cigarette smoking can be attributed, in part, to truckers' blue-collar culture and low educational

attainment (Jain et al., 2006).[24] The older age of the drivers compared to U.S employees as a whole (45 years versus 41 years) may also contribute to their higher morbidity.[25]

The drivers had similar education levels and social backgrounds. Research has tied social status to health outcomes, [27-28] which may contribute to non-statistical differences in health outcomes between company and independent drivers. The two groups also had similar work conditions, including mandatory annual or biennial DOT health screenings and, if diagnosed with serious conditions such as diabetes or heart disease, having to seek treatment in order to retain a commercial driver's license. Other factors include driving schedules that stop truckers from seeing a doctor during standard office hours, which means that both groups are driving when they feel ill. Many drivers self-treat by taking over-the-counter drugs,[26] wait until they return home to seek medical care, and keep making deliveries unless they become extremely ill.[17,26]

Nevertheless, the independent drivers had higher rates of hypertension and cholesterol than the company drivers who had higher rates of coverage and more opportunities for preventive care. It is worth noting that access to health coverage under the Affordable Care Act would be available to independent truckers if the study were conducted today. Driving schedules and other factors, such as social isolation, the pressure of meeting deadlines for delivery, and limited food options at truck-stop restaurants, have remained the same for both groups and call for better food options and more flexible access to health care near truck stops and other convenient locations.

The sexual health results counter popular myths about "highway cowboys" and the freewheeling style of U.S. long-haul truckers.[9] STI/HIV prevalence was low, and 92% of truckers reported having no sex or only one partner over the past three months. The independent

drivers had higher rates of casual sex, longer driving routes, and were less likely to be in committed relationships than the company drivers, but these factors did not result in higher rates of STI/HIV. Valway et al.'s[17] study of long-haul drivers in New Mexico also found low rates of STIs, which the authors attributed to low contact with sex workers and lower U.S. rates of STI/HIV compared to some other countries. Trucking industry changes involving GPS tracking and faster delivery times have contributed to more surveillance and less risk-taking among U.S. long-haul drivers in recent decades.[9] These multiplicative factors not only suggest that trucking is no longer the "Wild West" for sexual risk-taking, but that occupational stress and chronic health problems are the true frontier for interventions in order to protect truck drivers' health.

Strengths and Limitations:

This study used a multi-site convenience sample recruited from truck stops and trucking companies to capture the general and sexual health risks of long-haul truckers. This purposive method enabled data collection for numerous health conditions, while conducting a personal interview with 266 drivers in three Southern states. The authors worked with several company administrations to help recruit truckers for the research, a method that might have been biased in favor of company drivers, although the percentage of U.S. independent drivers is quite small.[29] The research also excluded non-English speakers and drivers who were unwilling to participate, as well as women whose numbers were too small for valid conclusions. The exclusions and the regional focus suggest that the results may not be representative of the 1.6 million long-haul truck drivers in the United States. A particular strength of the study is the mixed methodology that enhanced the validity of the results, offset problems with recall bias and socially desirable answers, and provided a comprehensive profile of tuckers' risk behavior and health outcomes.

The biological markers not only provided a check on the drivers' self-reports, but revealed under-reported chronic health conditions such as heart disease and diabetes.

Recommendations:

The U.S. trucking profession would benefit from interventions designed to improve their general health and create a healthier working environment. More truck stops and rest areas for truckers are needed across the country to improve access to health care. Healthier accessible dining options and access to gyms should be provided to encourage healthy eating and reduce the high obesity rate among truckers. Actions to change unhealthy behavior, such as smoking, are needed, as well as interventions to extend healthcare coverage to all employees in the trucking population. However, with the current emphasis on deregulation and political uncertainty over the fate of the Affordable Care Act, lifestyle interventions may become less available to truckers in the future. This change would most affect independent drivers who currently have access to nutrition counseling and preventative care for smoking, obesity, and diabetes under the Act. Such deregulatory pressures may also affect drug and alcohol testing, as well as the number of hours that truckers can drive safely. Notwithstanding these political trends, the need for stress reduction, wellness programs, and better food and exercise options at truck stops – all strongly supported by the trucking industry – lead us to recommend their adoption for the benefit of truckers and the safety of the driving public.

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Table 1. Study Population Stratified by Driver Type*

Characteristic	Company Drivers N=218	Independent Drivers N=48	Total N=266	p-value
Age	45.7 (SD=10.8)	45.3 (SD=11.6)	45.6 (11.0)	0.82
Race				0.027
White	160 (74.1%)	26 (55.3)	186 (70.7)	
Black	46 (21.3)	18 (38.3)	64 (24.3)	
Other	10 (4.6)	3 (6.4)	13 (4.9)	
Ethnicity				0.24
Hispanic	15 (7.6)	6 (13.3)	21 (8.7)	
Non-Hispanic	182 (92.4)	39 (86.7)	221 (91.3)	
Marital Status				0.11
Married/committed	153 (70.5)	27 (56.2)	180 (67.9)	
Single	16 (7.4)	7 (14.6)	23 (8.7)	
Separated/divorced/widowed	48 (22.1)	14 (29.2)	62 (23.4)	
Education				0.55
<12years	39 (18.1)	7 (14.6)	46 (17.4)	

High School graduate/GED	107 (49.5)	25 (52.1)	132 (50.0)	
Some college	55 (25.5)	10 (20.8)	65 (24.6)	
Technical school	15 (6.9)	6 (12.5)	21 (8.0)	
Driver Class				0.063
Solo	188 (86.2)	44 (91.7)	232 (87.2)	
Team	24 (11.0)	1 (2.1)	25 (9.4)	
Both	6 (2.8)	3 (6.2)	9 (3.4)	
Income				<0.0001
<40,000/year	65 (30.1)	9 (18.8)	74 (28.0)	
40,000-80,000/year	142 (65.7)	15 (31.2)	157 (59.5)	
>80,000/year	9 (4.2)	24 (50.0)	33 (12.5)	
Pay Basis**				<0.0001
Per mile	195 (89.4)	24 (51.1)	219 (82.6)	
Hourly	2 (0.9)	0	2 (0.8)	
Per trip	8 (3.7)	13 (27.7)	21 (7.9)	
Salaried	2 (0.9)	0	2 (0.8)	
Other	11 (5.1)	10 (21.3)	21 (7.9)	
Health Insurance&				<0.0001
Private, company-based	178 (81.7)	12 (25.0)	190 (71.4)	
Private, not company-based (self-insured/spouse)	9 (4.1)	13 (27.1)	22 (8.3)	

Veteran's Administration	5 (2.3)	2 (4.2)	7 (2.6)	
Medicaid/Medicare	1 (0.5)	1 (2.1)	2 (0.8)	
Other	3 (1.4)	0	3 (1.1)	
None	22 (10.1)	20 (41.7)	42 (15.8)_	

*Totals may not equal 100% due to missing data

**some drivers reported more than one method of payment

& Some drivers reported more than one type of insurance coverage

Table 2. Health Status Stratified by Driver Type#

Characteristic	Company Drivers N=218	Independent Drivers N=48	Total N=266	p-value
General health perceived as…				0.82
Very good/Excellent	76 (35.0)	17 (37.8)	93 (35.5)	
Good	93 (42.9)	17 (37.8)	110 (42.0)	
Fair/Poor	48 (22.1)	11 (24.4)	59 (22.5)	
DOT check-up frequency				0.74
Every 2 years	135 (61.9)	32 (66.7)	167 (62.8)	
Annually	72 (33.0)	13 (27.1)	85 (31.9)	
Every 6 mo	7 (3.2)	2 (4.2)	9 (3.4)	
Other	4 (1.8)	1 (2.1)	5 (1.9)	
Months since last non-DOT check-up				0.72
0 – 12 mo	156 (73.6)	32 (69.6)	188 (72.9)	
>12mo	14 (6.6)	4 (8.7)	18 (7.0)	
>24mo	42 (19.8)	10 (21.7)	52 (20.1)	
Where receive healthcare				0.017
Personal provider	164 (75.2)	26 (54.2)	190 (71.4)	
Emergency room/acute care	33 (15.1)	12 (25.0)	45 (16.9)	

facility				
Non-acute care clinic	15 (6.9)	6 (12.5)	21 (7.9)	
Other	6 (2.8)	4 (8.3)	10 (3.8)	
Exercise/30d				0.10
Yes	137 (62.8)	24 (50.0)	161 (60.5)	
No	81 (37.2)	24 (50.0)	105 (39.5)	
Diagnosed with hypertension/borderline hypertension?				0.20
Yes	88 (40.4)	18 (37.5)	106 (39.8)	
Borderline	20 (9.2)	1 (2.1)	21 (7.9)	
No	110 (50.5)	29 (60.4)	139 (52.3)	
Cholesterol checked ever?				0.25
Yes	170 (78.7)	34 (70.8)	204 (77.3)	
No	46 (21.3)	14 (29.2)	60 (22.7)	
Informed cholesterol high?				0.54
Yes	75 (44.9)	17 (50.0)	92 (45.8)	
No	84 (50.3)	17 (50.0)	101 (50.2)	
Don't know	8 (4.8)	0	8 (4.0)	
History of myocardial infarction?				0.16

Yes	10 (4.6)	5 (10.4)	15 (5.6)	
No	208 (95.4)	43 (89.6)	251 (94.4)	
Diagnosed with diabetes?				0.76
Yes	32 (14.7)	7 (14.6)	39 (14.7)	
Borderline	5 (2.3)	2 (4.2)	7 (2.6)	
No	181 (83.0)	39 (81.3)	220 (82.7)	
Current cigarette smoking				0.61
Yes	69 (31.7)	17 (35.4)	86 (32.3)	
No	149 (68.3)	31 (64.6)	180 (67.7)	
Tried to quit at least 1 day in last 12 months				0.58
Yes	32 (47.1)	9 (56.3)	41 (48.8)	
No	36 (52.9)	7 (43.7)	43 (51.2)	
Drugs/3mo				0.11
Yes	4 (1.8)	3 (6.4)	7 (2.6)	
No	214 (98.2)	44 (93.6)	258 (97.4)	

#all numbers do not add up to 100% due to missing data and/or answer of "unsure/don't know"

Table 3. Sexual Behavior and STD History By Driver Type

Characteristic	Company Drivers N=218	Independent Drivers N=48	Total N=266	p-value

STD/12mo?				>0.99
Yes	1 (3.3)	0	1 (2)	
No	29 (96.7)	11 (100)	40 (98)	
Ever tested for HIV?				0.68
Yes	95 (43.6)	21 (43.8)	116 (43.6)	
No	112 (51.4)	23 (47.9)	135 (50.8)	
Not sure	11 (5.0)	4 (8.3)	15 (5.6)	
Sex partner gender				>0.99
Female	212 (97.3)	47 (97.9)	259 (97.4)	
Male	2 (0.9)	0	2 (0.7)	
Both	4 (1.8)	1 (2.1)	5 (1.9)	
Sexual identity				0.63
Heterosexual	214 (98.2)	47 (97.9)	261 (98.1)	
Homosexual	2 (0.9)	0	2 (0.8)	
Bisexual	2 (0.9)	1 (2.1)	3 (1.1)	
Sexually active/6mo				0.34
Yes	181 (83.0)	37 (77.1)	218 (81.9)	
No	37 (17.0)	11 (22.9)	48 (18.1)	
>1 partner/3mo	12/181 (6.6)	6/37 (16.2)	18/218 (8.3)	0.092
Ever exchange				0.79

sex for drugs/money				
Yes	20 (9.2)	5 (10.4)	25 (9.4)	
No	198 (90.8)	43 (89.6)	241 (90.6)	

Table 4. Biologic Outcomes

Test	Company Driver N=218	Independent Driver N=48	p-value
Systolic blood pressure **(mean, (std dev); median, range)**	134.3 (14.4); 132 (110, 190)	138.3 (18.0); 139 (98, 190)	0.16
Diastolic blood pressure **(mean, (std dev); median, range)**	85.8 (9.7); 86 (62, 120)	84.1 (12.7); 84 (58, 110)	0.40
BMI **(mean, (std dev); median, range)**	32.7 (5.9); 32 (19, 50)	33.0 (6.0); 33 (23, 55)	0.77
Total cholesterol **(mean, (std dev); median, range)**	167 (37); 161 (100, 272)	174.0 (38); 172 (100, 259)	0.25

HgbA1C **(mean, (std dev); median, range)**	6.1 (0.8); 6.0 (4.4, 9.3)	6.1 (1.1); 5.8 (5.0, 9.7)	0.91
			P-value
Hepatitis C Antibody	Number (%)	Number (%)	
Positive	7 (3.2)	0	0.36
Negative	211 (96.8)	48 (100)	
Hepatitis B surface antigen			
Positive	1 (0.5)	0	>0.99
Negative	217 (99.5)	48	