

**TORP 33 Under Master Contract 200-
2000-08017**

**Task 4, Subtask 4: Summary
Report on Findings/Revisions
to Procedures from Pretests**

DRAFT

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1. Background and Introduction

1.1 Background

The estimated 1.5 million class 7 and class 8 truck drivers in the U.S. workforce face considerable health and safety risks on the job. Truck drivers suffer more occupational fatalities than do members of any other occupation, having an overall fatality rate that is more than 11 times that of the general worker population. Furthermore, they have the second highest number of non-fatal occupational injuries among all occupations, and have been shown to be at increased risk for a number of chronic diseases and health conditions.

Despite truck drivers' high rates of injury and illness, little research has been done directly in this mobile and difficult-to-reach population. In evaluating the potential health effects of the 2005 hours-of-service ruling, the Federal Motor Carrier Safety Administration (FMCSA) stated that due to a lack of evidence specific to trucking operations, information from other industries had to be adapted to a trucking environment. Other research needs cited by stakeholders include detailed data on the prevalence of selected health conditions and risk factors among truck drivers, and data on working conditions, injury causes and outcomes, and health behaviors. The FMCSA has indicated that data such as these will assist in future rulemaking as well as in development of non-regulatory approaches to health and safety promotion.

The overall objective of the Survey of Truck Driver Injury and Health is to develop and conduct a national survey that will contribute to the occupational safety and health surveillance needs of the heavy and tractor trailer truck driving workforce. There are three main outcome goals for this project:

- Identify the risk factors most strongly associated with poor health and safety outcomes with the truck driver population;
- Provide baseline data to assist the FMCSA and other stakeholders in evaluating the health effects of the hours-of-service rules, and inform policymaking related to driver health and fitness for duty, and
- Provide information to drivers, the trucking industry, and the transportation research community that will guide health and safety promotion, interventions, and future research direction.

1.2 Introduction

This report documents the findings from **Task 4: Pretest Strategies and Procedures**. The goal of Task 4 is to evaluate and finalize site coordination requirements, forms, and procedures. In this report we include a summary of the data gathered from the pretest visits and provide NIOSH with recommendations for finalizing the survey questionnaires, study forms, and procedures for the conduct of the main study. Chapter 2 provides a synopsis of Pretest 1. The primary focus of Pretest 1 was to examine the logistics of administering a survey at a truck stop. Chapter 3 details Pretest 2. The main focus of the second pretest visit was to evaluate the administration of the survey instruments. We conclude with the next steps and some general comments in Chapter 4.

2. Pretest 1

On April 9, 2009 Westat project staff conducted Pretest 1 at the Pilot and Travel Centers of America truck stops in Breezewood, Pennsylvania. The focus of this first pretest was to test and evaluate the approach to recruiting businesses; the manner in which truck drivers should be approached; the timing and protocol for obtaining complete interviews; and methods to gain consent and maximize participation in the study. This chapter includes our observations made when visiting the facilities, a summary of the manager responses and thoughts, and the responses of both drivers and other truck stop employees with whom we spoke.

2.1 General Observations

The following items are either general comments made by truck stop employees or patrons or general observations made by the Westat team while at the truck stop:

- There is some discrepancy as to what managers and drivers consider “long-haul” and “regional” when compared to our definition. Currently, we define “long-haul” as “spending one or more nights away from home per week.” Many of the drivers and managers informed us that “regional” drivers often spend anywhere from 2-3 nights away per week and drive up to 600 miles per day. Also, regional drivers tend to stay within a specific region or area. Whereas “long-haul” (as defined by drivers and managers) is someone who spends a week plus on the road (away from home). For example, someone who drives coast to coast would be considered a long-haul driver by their definition.
- There is no real uniformity among different truck stops; we will have to scope out the space before data collection begins at a site to determine the best place to recruit and the best place to administer the survey.

- We noticed FedEx and J.B. Hunt (companies that provide terminals) trucks that were stopped for refueling and to get food at the Pilot station in Breezewood, PA.
- The Travel Centers of America truck stop in Breezewood, PA, had a separate fuel building with a few small fast food restaurants (some drivers may use this and not stop in the main truck stop).
- The Travel Centers of America truck stop in Breezewood, PA, has a separate entrance to the restaurant/shower building for truck drivers. If this type of situation occurs or is typical at other facilities, then this may be an easy way to identify the truck driver from the general driver population.
- All of the drivers with whom we spoke said that they would participate for \$25 (time permitting).
- We had more individuals interested in speaking with us for a few minutes than the number of individuals who turned us down.
- Truck stop managers stressed the importance of getting corporate approval first before attempting to get permission to use a specific truck stop. Managers explained that it is in their protocol to deny permission without an email, phone call, or letter from corporate indicating that it is O.K. for the site to participate.

2.2 Conversation with Truck Stop Managers

While in Breezewood, PA we were able to speak with the truck stop managers at both the Pilot and Travel Centers of America facilities. Below is a summary of their responses to the guideline of logistical questions we developed. The guideline is included as Appendix A.

2.2.1 Conversation with John States, Manager of Pilot Truck Stop in Breezewood, PA

- Busiest time(s): 5AM-10AM (drivers eating breakfast then leaving) and 3PM-midnight (drivers stopping for mandatory rest period).
- Very few drivers who drive during the night and rest during the day stop at the Pilot Truck Stop in Breezwood, PA according to the manager.
- Majority of the “sit-down” traffic (the people who have time to participate) is during dinner hours, 4-8PM.
- The Pilot facility sees an average of 100-150 drivers per day.
- The proportion of truck stop patrons who are drivers varies with the seasons. In the winter (when tourist traffic is low), almost all of the patrons are truck drivers but during the summer (when tourist traffic is higher) there is a larger percentage of car drivers. Also during the middle of the week (Tuesday, Wednesday and Thursday) a larger percentage of patrons are truck drivers as compared with Saturdays and Sundays.
- John States felt as though a \$25 gift card to be used at the truck stop would be well-received by drivers and managers. He explained that in this economy managers would be happy to have a little extra business/income from the purchase of the gift card.
- John States said that the best approach for gaining individual truck stop cooperation for the study is to first approach the corporate office. He said managers at the truck stop may be skeptical to say yes (in fear of getting into trouble, he admitted that he was initially) and that an email or fax from corporate indicating their approval would be what individual sites needed to agree to participate.
- When asked about a fee for using the facility during the main study, John explained that at All-American Plazas (a Pilot-franchise) there is no fee. Again, he mentioned that it may help to spark managerial/corporate interest to know that the truck stop will be getting business back (via the gift cards) when agreeing to help.
- John felt that most truck stops would be willing to help hang up flyers, post ads and distribute study information AFTER

they were informed they have corporate approval to participate.

- John said that at his facility it would be okay to recruit participants as they come in and to hang up flyers and information promoting the study. He suggested that we just inform the manager ahead of time, make a reminder call and ask to speak with the manager the day of the survey to inform him/her that we have arrived and intend to set-up.
- John explained that most truck stops have a quiet place to interview. Some suggestions are: outside the trucker's lounge, down hallways that are not frequented, in the sit-down restaurant, in the back of a fast food restaurant or cafeteria, in the truck stop office areas, etc.
- John explained that a lot of truck stops have separate entrances for the truck driving population and for the general car drivers. Some are set up so that the fuel building for truck drivers is completely separate from the rest of the truck stop.
- John explained that the biggest truck stops are generally Travel Centers of America and Petro whereas Pilot and Loves tend to be the smaller company-owned truck stops.
- At the Pilot in Breezewood, PA John estimated that 60 percent of patrons "gas and go" and 40 percent come into the truck stop and stay. He also said that in areas that are closer to big cities, the truck stops tend to have a larger proportion of drivers that stop and stay (because they are waiting on loading/unloading times at a specific terminal or location in the city).
- John felt that the best time to approach drivers is after they come in (maybe not as they immediately walk in the door). He also suggested hanging flyers on the fuel island (gas pumps) to notify drivers that we are there and conducting a survey (and the potential to get the incentive).
- John suggested advertising on the radio such as XM/Sirius radio. He said there is a specific channel dedicated to truck drivers. John also mentioned that most truck stop companies publish their own magazines and that may be a good way to spread the word.

- When asked about the truck driver response to the \$25 gift card, John felt as though we will encounter certain people who will participate regardless of price and then others who may participate because of the cost of food/state of the economy.
- When asked if he thought sponsorship endorsement through OOIDA or the Teamsters may help, John explained that it might with some drivers. But on the flip side it may alienate or discourage others such as independent drivers or drivers who are not part of the Teamsters. These drivers often have a negative feeling towards the Teamsters because they do the same jobs as the Teamster drivers but often get paid less.
- John also said that with the current trend in truck driving of employing regional drivers rather than long-haul he often sees a lot of repeat drivers during the week or every other week. When asked to define “regional,” John said it was 1-3 nights away from home every week but driving a route that was within the driver’s region. For example a driver may pick up a load in PA, drive it to VA then spend the night while waiting for his unload time the following day, unload and then wait in VA for a new load, spend the night, get the new load and drive back to PA. When asked to define “long-haul” John said it was drivers that spend a week or more on the road without returning home and tend to drive a greater number of miles.
- John also suggested emphasizing or playing up the health benefits of the study. He felt as though this would be a great way to spark interest and get participants.

2.2.2 Conversation with Bob, Manager of Travel Centers of America Truck Stop in Breezewood PA

- Busiest Time(s): 3PM-midnight (drivers stopping for mandatory rest period).
- Bob felt as though not a lot of the drivers that stopped were “long-haul”... most of the drivers (in his opinion) in the industry are regional. Bob defined a “regional driver” as a driver who drives up to 600 miles per day and is away from home anywhere from 3-4 days.

- The TA facility sees an average of 300-400 drivers per day for fuel and at night he says that all 200 spaces for overnight trucks in the parking lot are generally full.
- The proportion of truck stop patrons who are drivers varies with the seasons. In the winter (when tourist traffic is low) almost all of the patrons are truck drivers but during the summer (when tourist traffic is higher) there is a larger percentage of car drivers. Also during the middle of the week (Tuesday, Wednesday and Thursday) a larger percentage of patrons are truck drivers when compared with Saturdays and Sundays.
- Bob felt as though a \$25 gift card to be used at the truck stop would be well-received by managers. He liked the idea of the “flow back” of the money.
- Bob felt that the best approach for gaining individual truck stop cooperation for the study is to first approach the corporate office.
- Bob mentioned that the demographics of drivers have changed a lot in the past 10+ years and that a lot of drivers do not fluently speak English. He felt that this may be a problem we encounter when administering the survey.
- When asked about a fee for using the facility during the main study, Bob said there is no fee. ** An email conversation with TA Corporate offices confirms Bob’s statement. **
- Bob said that he would be willing to help hang up flyers around the facility.
- Bob said that the TA truck stop in Breezewood has a separate entrance for truck drivers (he said this is sometimes the case at other truck stops) and this would be a good place to recruit. He also mentioned that at the fuel station (a separate building on the property) there is a mix of drivers who “gas and go” and those who get food and hang out by the picnic areas before resting at their trucks. He said that having someone recruit at both locations may be helpful. Bob said not to talk to drivers while they are eating as this may be their downtime.
- Bob explained that his truck stop has a lounge and a chapel in addition to the restaurant; all three might be good places to administer the survey.

- Bob informed us that most companies dictate where the driver stops to fuel.
- Bob explained that the biggest truck stops are generally Travel Centers of America and Petro whereas Pilot and Loves tend to be the smaller company-owned truck stops. He also said that larger truck stops are usually located near big cities or areas where there are a lot of distribution centers.
- Bob thought that some drivers would participate for \$25, especially if they had time to kill. He did not seem overly positive that the amount would be enough to spark their interest.
- Bob suggested advertising on the radio such as XM/Sirius radio. Bob, like John, also mentioned that most truck stop companies publish their own magazines and that may be a good way to spread the word. Bob suggested using NATSO to spread the word and promote the study.

2.3 Conversation with Truck Stop Patrons (Long-Haul Truck Drivers)

While at the Breezewood truck stop facilities we were able to speak with five drivers and two additional employees at the Pilot truck stop. In general, individuals seemed willing to talk to us for a few moments and share their thoughts about the study. Below is a summary of their responses to our questions. Examples of the questions we asked are included as Appendix B.

2.3.1 Driver 1: Spoke with at 10:50 AM

- His schedule changes and he does not always have his mandatory rest period at the same time.
- Due to the economy this driver said that he had a lot of time in-between loads when he is waiting at a truck stop.
- He said he would be willing to participate in the survey for a \$25 gift card but only if he had time. He said that time would

be our biggest obstacle since many drivers are pressed for time.

- He suggested the use of “Landline Magazine” as a place to advertise.
- He would participate without seeing any study background materials.
- He did not care if the survey was endorsed and also seemed indifferent on whether or not OOIDA or Teamster approval would encourage other drivers to participate. Of the two, he thought OOIDA may be more helpful because we could use the group’s assistance in promotion.
- This particular driver prefers to stop at Petro Truck Stops.
- He stays in his cab for the majority of the rest period but will come in to use the restaurant and shower facilities.
- This particular driver had never heard of NIOSH.
- This driver was very much against trucking regulations, the hours of service regulations, and fast food at truck stops.

2.3.2 Driver 2: Spoke with at 11:05 AM

- This driver’s schedule changes, but he prefers to drive during the day.
- When asked about his time between loads, he said that it varied anywhere from 20 minutes up to a day. He also said that almost everything is done electronically in his company. The company knows when he arrives, when the shipment is offloaded or loaded, when he departs and when he stops. The company schedules his deliveries/drives based upon this system.
- This driver said that he would participate in the survey for \$25 as long as it did not interfere with his hours of service.

- When asked when the best time to approach a driver to participate, he said not to bug someone while they are eating. He suggested that we “hang around” the TV lounges or showers and get people coming in or out of those locations.
- This driver suggested advertising in: “Road King,” at truck stops via flyers or the free magazines.
- He said that it would not be necessary for him to review any background information about the study before he would participate.
- He said that he would not be any more or any less likely to participate if OOIDA or the Teamsters had approved or endorsed the study.
- This driver prefers to use Travel Centers of America, Petro, or Flying J truck stops because they provide more services and tend to be cleaner.
- When he stops for the day he likes to walk around, shop, and get out of his truck.
- This driver was not familiar with NIOSH and what they do. He said a government survey did not make him skeptical, but it would cause a lot of other drivers to be so.
- This driver tends to rotate and use the same truck stops (if possible) during his haul.

2.3.3 Driver 3: Spoke with at 11:30 AM

- This driver has no standard schedule or stopping time, his schedule varies.
- He said that often he does not have much time in between loads.
- This driver did not seem impressed by the \$25 incentive and he said that, “no one will sit for 1hr and 15 minutes answering survey questions.”

- He said that the best place to recruit is probably by the entrance door.
- He suggested advertising on truck talk shows (on satellite radio).
- He said that he stops at whichever truck stop has the cheapest fuel.
- While stopped at the truck stop, this driver spends a majority of time in his truck but comes in occasionally to use the restrooms, shower, and restaurant.
- He said that he is concerned about health issues related to trucking. He informed us that he has had several strokes, a few heart attacks, and currently has diabetes and high blood pressure.
- This driver was an owner-operator.
- Driver seemed skeptical when informed that this was a government-sponsored survey.

2.3.4 Driver 4: Spoke with at 11:45 AM

- On average, this driver spends 20 consecutive nights away from home.
- His schedule varies, but in general he is usually stopped for the day by 10PM, at the latest.
- This driver said that his time between loads varies, anywhere from a few hours to a day or so.
- The driver said that a \$25 gift card would be good; so long as the truck stop had a good restaurant or store at which it could be used.
- This driver seemed to think a good time and place to recruit would be at the entrance during the afternoon hours.
- He suggested “Overdrive Magazine” and Sirius radio as possible places to advertise. He said that we should definitely include the incentive in the ad.

- This driver tends to use Petro or Travel Centers of America because they have better food options. Sometimes when he stops later in the evening, he will try to go to a smaller independently owned truck stop because it is easier to find a parking space.
- When stopped, this driver spends most of the time in his truck, but comes into the truck stop for meals.
- This driver was not familiar with NIOSH.
- He thinks the main two concerns of the industry are: 1) drivers are always in a hurry and ruled by the clock; and 2) it is hard to get exercise.

2.3.5 Driver 5: Spoke with at 1:15 PM

- This driver's schedule changes, sometimes he drives at night and sometimes he drives during the day.
- This driver felt as though the \$25 incentive was OK. He suggested some other potential options (Subway, Restaurant Chains, and Merchandise).
- This driver suggested that we approach participants on their down time, after leaving restaurant, while waiting for the showers or when coming into the truck stop.
- He suggested advertising in trade magazines and XM radio (The Trucker Channel). When advertising he suggest that we play up the health aspect of the survey because this will catch drivers' attention.
- He thinks that an endorsement may help, in particular OOIDA.
- He said that we may also want to consider administering the survey at truck shows (Vegas, Dallas, etc).
- This particular driver likes to stop at Petro (he does not like Pilot and Flying J at all). He likes Petro best because they offer the best frequent fuel rewards. He explained that every time

he fills up with gas at a Petro he earns points which can be used for gas, merchandise, food, etc.

- When stopped, this driver usually spends most of the time in the truck. He uses the truck stop for the shower and restaurant.
- He was not familiar with NIOSH.

2.3.6 Truck Stop Employees (Laundry Center): Spoke with at 1:00PM

- Truck stop business picks up from noon- onward. 6:00 PM is the busiest.
- Tuesday, Wednesday, and Thursday are the heaviest truck driving days.
- Sundays can also be busy for the truck stops if the truck stop provides a chapel, because a lot of drivers will attend a service.
- Best time to approach drivers is when waiting for the shower or while waiting on laundry; this is a good down time.

3. Pretest 2

On September 21 and 22, 2009 Westat project staff conducted Pretest 2 at the Petro truck stop in New Paris, Ohio. The focus of this pretest was to test and evaluate the approach to administering the survey and survey instruments. This chapter includes observations made by Westat and NIOSH staff while visiting the facility, an analysis of the protocol, survey instruments (screeners, consent documents, questionnaire, and activity diary). It also includes Westat's general comments and recommendations.

3.1 Protocol

Below is a summary of the procedures used during the recruitment and survey administration stages of the pretest in New Paris, OH as well as the observations and recommendations made for protocol amendments as a result of the testing.

3.1.1 Recruitment

Recruitment took place in the lobby of the truck stop near the shower facilities and directly across from the doorway that truck drivers use to enter the truck stop. On Monday September 21st, recruitment began at 5:00 PM and continued until approximately 6:30 PM. During this time, we recruited six drivers. We actually had additional people interested in participating in the survey, but, because we wanted our pretest population to represent a variety of drivers, we stopped recruiting so that we would be able to speak with drivers on the following day¹. On Tuesday September 22nd, we began recruitment at 10:30 AM and had recruited the remainder of the allotted study participants by 11:00 AM. Drivers seemed interested in the survey and recruitment of enough eligible participants did not appear to be a problem. To inform drivers of the study, Westat posted 8 ½" by 11" signs on various

¹ Note that, due to OMB regulations, the instrument could only be administered to nine participants.

walls, windows, and doors throughout the truck stop. While we were not permitted to post signs on the fueling stations, we did post signs inside the mini-market where drivers pay for their fuel. The flyer notified potential participants that we were there conducting a study and that there was an incentive provided as a “thank you” for their participation. In addition to the posted signs, our recruiter approached potential participants as they entered the truck stop. Below are some of the comments and suggestions made about the recruitment process:

- For the main study study it will be important that interviewers arrive at the truck stop early to scope out the truck stop layout. It will be important to identify whether or not there is a separate entrance for truck drivers. If so, the group should set up their recruitment station by this entrance. Interviewers will be responsible for providing a description of the truck stop layout to Westat.
- For the main study study, study flyers should be printed on poster board size paper to attract the most participants possible. Also, the interviewing team will need to meet with truck stop managers to determine if there are any rules or regulations about where signs may be posted. **At the truck stop in New Paris, OH signs could not be posted on the doors. Also, if signs were posted on any windows, they had to be posted front to back, allowing people to read it from whatever direction they came from.**
- The recruiter should verify that the potential study participant will be at the truck stop for at least 2 hours, unless an interviewer is ready to take them right away. If there is a wait time, the participant should be provided with an approximate time to return to the recruitment table/area to begin the interview. The recruiter should maintain a log sheet to keep track of when the interviewers start so that he/she can estimate a schedule.
- When recruiting potential participants, the recruiter should approach individuals and ask, “Are you a truck driver?” rather than, “Are you a long-haul truck driver?” to avoid losing eligible participants due to confusion in terminology. Also, allowing the screener instrument to screen out ineligible

drivers will help us get a sense of the proportion of long-haul drivers at each truck stop.

- The recruiter should maintain a tally sheet of individuals who: refused without giving a reason; refused while giving a reason; are ineligible; and a rough estimate of those not approached. A “tally counter” could be use to count those the recruiter suspects are drivers as they enter the truck stop.
- The interviewing team will recruit participants from various times of day to get a representative sample of all drivers.
- At those truck stops that do not offer gift cards, we propose providing cash incentives equivalent to the gift card amount offered.

3.1.2 Interviewing

In all but one instance, the subjects were interviewed at tables in the truck stop restaurant. Within the restaurant, we selected a back corner because it was away from the general traffic and much quieter. Below are some of the comments and suggestions made about the survey administration process:

- We found that some questions routinely caused participants to provide a range for their answer response. We will instruct interviewers during training that they need to probe respondents for a specific answer if this situation comes up.
- Respondents should be interviewed alone, and not with their non-driving or driving partners. We make this recommendation because respondents may alter their intended response due to another person being present.
- The show cards for the scales did not present an issue during survey administration, however it may be helpful to have them all attached on a ring. This may also prevent lost cards.
- It seemed helpful to have the questionnaire, activity diary, and incentive all clipped together as a packet. For the main study, we propose having the recruiter assemble these packets and hand them to the interviewer when they are ready to start the next interview.

- One of the interviews was conducted in the TV lounge because a driver was already using that space to charge his phone. The TV was loud and, as a result, it was very difficult to maintain the driver's attention. For the main study, we will try to conduct all interviews in a location that is quiet and has minimal distractions.
- We found that upon completion of the activity diary, respondents did not seem to mind handing their diary back to us. In fact, many seemed perplexed as to why they needed to put their response in the lock box. Based upon these findings, we propose that a lock box is not necessary and may actually cause a false sense of concern with participants.

3.2 Survey Instruments

The following are the comments, suggestions, and observations made after pre-testing the survey instruments at the Petro Truck Stop in New Paris, OH.

3.2.1 Eligibility Screener/ Non-Response Questionnaire

When administering the screener (Appendix C), we noticed items that could be improved before being implemented in the main study. The following comments include both Westat and NIOSH suggestions for improvement:

- Relocate Question 8, "Are you currently on a 34-hour restart period" from the screener to the main questionnaire.
- Switch the order of Question 3 and Question 2 on the screener. Also, add Question 2 (why the driver does not wish to participate) to the non-response questionnaire, after NR5. Rearranging this order and adding the question in the non-response questionnaire will ensure that all drivers who were approached and declined to participate have been asked why they did so.
- After NR4, add a question stating, "If height and weight are not provided, please provide an estimate of weight using the

following categories” and then adjust the question to provide some weight ranges for interviewers to choose.

- For the non-response questionnaire, reorder the questions so that the smoking question is after NR1, since most of the other questions can be answered by observation if necessary.

3.2.2 Consent Handout and Script

When reading the consent script (see Appendix D), we found that the oral script is much too long. On average it took close to four minutes to administer. We recommend removing redundancies and rewording the script to make it more conversational.

3.2.3 Main Questionnaire

Below is a list of questions that appeared to present problems or elicited comments from either Westat or NIOSH during questionnaire administration. The questions are numbered as they appeared in the pretest 2 (07/22/09) version of the questionnaire (included in Appendix E), and are followed by a brief explanation of the problem or issue that arose during testing, as well as Westat’s recommendation for revising the question.

A10. On your current trip, when loading or unloading your cargo, do you use any of the following types of personal protective equipment?

	YES	NO	RF	DK
a. Face mask?.....	1	2	-7	-9
b. Respirator?.....	1	2	-7	-9
c. Hearing protectors?.....	1	2	-7	-9
d. Chemical barrier gloves?.....	1	2	-7	-9
e. Any other type of personal protective equipment?..... (SPECIFY)_____	1	2	-7	-8

Comment: Drivers that we spoke with also mentioned safety glasses, work gloves, work boots or steel toe boots, hard hats, and safety vests. NIOSH may want to consider adding these options.

A11. How many hours had you driven without stopping before arriving at this truck stop?

NUMBER OF HOURS.....|_|_|

RANGE: 1 – 11 HOURS

Comment: What about respondents who drove less than 1 hour? Westat recommends training the interviewers to round up to 1 hour if a participant provides an answer in minutes.

A13. Since last _____ [INTERVIEWER: INSERT THE DAY OF THE WEEK THAT WAS 7 DAYS AGO], how many total hours have you worked in your job as a truck driver? Do not include mandatory rest periods.

HOURS.....|_|_|_|

A14. Since last _____ [INTERVIEWER: INSERT THE DAY OF THE WEEK THAT WAS 7 DAYS AGO], how many total hours have you spent on each of the following tasks?

	TOTAL TIME SPENT (HOURS) IN LAST WEEK	RE	DK
a. Driving your truck?.....	_ _	-7	-8
b. Truck maintenance or repair?.....	_ _	-7	-8
c. Physical labor such as loading and unloading, staking, or tarping/securing loads?.....	_ _	-7	-8
d. Hostler or yard work?.....	_ _	-7	-8
e. Waiting for the dispatcher to call, waiting at the loading dock, or with the log book or other paper work?.....	_ _	-7	-8
f. Waiting for some other reason?.....	_ _	-7	-8
g. Some other major job duty?.....	_ _	-7	-8
(SPECIFY 1)_____	_ _		
(SPECIFY 2)_____	_ _		

Comment: Is the answer in A13 suppose to equal the total of A14? If so, this may serve as an excellent interviewer check for consistency. Also, drivers were uncertain what “hostler or yard work” meant. We recommend changing response option d to “other work at a terminal.”

B4. In your current job as a truck driver, do you receive any of the following benefits?

	YES	NO	RE	DK
a. Pension?.....	1	2	-7	-8
b. Health insurance?.....	1	2	-7	-8
c. Paid vacation?.....	1	2	-7	-8

Comment: NIOSH may want to consider rewording option B4a as “pension or any other retirement plan.”

B5. How many weeks per year do you work as a truck driver?

NUMBER OF WEEKS|_|_|

REFUSED..... -7

DON'T KNOW..... -8

Comment: Westat recommends adding a range of acceptable answers (i.e. 1-52) because we had some people provide a number over 52 weeks in a year. We also suggest revising the question to include direction on including paid vacation in their response.

B6. Do you currently have a second job?

YES..... 1

NO..... 2 □

REFUSED..... -7 □ GO TO B7

DON'T KNOW..... -8 □

Comment: Incorrect skip pattern, needs to say, “Go to Section C”

C5. Why didn't you get a flu shot? PROBE: Any other reason?

	YES	NO	RF	DK
TOO EXPENSIVE.....	1	2	-7	-8
INCONVENIENT.....	1	2	-7	-8
DON'T THINK I NEED IT.....	1	2	-7	-8
DON'T KNOW WHERE TO GET IT.....	1	2	-7	-8
DON'T HAVE TIME.....	1	2	-7	-8
OTHER.....	1	2	-7	-8

(SPECIFY) _____

Comment: Westat recommends adding the option, “Flu shot will give me the flu” as a reason for not getting a flu shot.

C8. Thinking back over the years you have smoked regularly, about how many cigarettes did you usually smoke each day? Recall that 1 pack equals 20 cigarettes.

CIGARETTES PER DAY.....|_|_|

REFUSED..... -7

DON'T KNOW..... -8

Comment: We had some respondents give their answers as a range. This is another situation where NIOSH needs to decide if we want to train interviewers to probe for a single number or if the interviewer can take the midpoint.

C15. During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, golf, gardening, walking for exercise, or calisthenics like sit-ups or push-ups?

YES..... 1

NO..... 2

REFUSED..... -7

DON'T KNOW..... -8

Comment: Some respondents laughed at these examples. NIOSH should consider replacing “golf” and “gardening” with more relevant examples such as weight lifting and hunting.

C25. When you are on a delivery run that takes more than one day, how many total hours of sleep do you usually get in a 24 hour period?

TOTAL NUMBER OF HOURS.....|_|_|

REFUSED..... -7

DON'T KNOW..... -8

C27. How many hours of sleep would you like to get during a 24 hour period?

HOURS.....|_|_|

REFUSED..... -7

DON'T KNOW..... -8

Comment: For C25 and C27 respondents gave their answers in ranges. This is another situation where we need to provide interviewer instructions on whether or not to probe respondents for a single number answer or to calculate the mid-point.

C30. The following questions refer to your behavior while sleeping or trying to sleep. On a scale from zero, meaning you never do this or have never been told you do this while sleeping or trying to sleep, to 5 meaning this happens 5 – 7 times or more per week while sleeping or trying to sleep, please tell me the one number that best describes how each statement applies to you in the past month.

	NEVER	RARELY, LESS THAN ONCE A WEEK	1-2 TIMES PER WEEK	3-4 TIMES PER WEEK	5-7 TIMES PER WEEK
a. Loud snoring?.....	1	2	3	4	5
b. Snorting or gasping?.....	1	2	3	4	5

- c. Your breathing stops or you struggle for breath?..... 1 2 3 4 5

Comment: The directions/question stem needs to be shortened for this question and it may be helpful/ more accurate to add “Don’t Know” as a response option.

C32. I’m going to read you a list of activities. Please rate the likelihood that you might doze off or fall asleep during each. Use a scale from 1 to 4, with 1 being “I would never doze or fall asleep,” 2 being “there would be a slight chance,” 3 being “there is a moderate chance,” and 4 being “that it would be highly likely that you would doze off or fall asleep.” Think about your usual way of life in recent times when answering.

	WOULD NEVER DOZE	SLIGHT CHANCE	MODERATE CHANCE	HIGH CHANCE	RE	DK
a. Sitting and reading?.....	1	2	3	4	-7	-8
b. Watching TV?.....	1	2	3	4	-7	-8
c. Sitting inactive in a public place such as a theatre or meeting?.....	1	2	3	4	-7	-8
d. As a passenger in a vehicle for an hour without a break?.....	1	2	3	4	-7	-8
e. Lying down in the afternoon when circumstances permit?.....	1	2	3	4	-7	-8
f. Sitting and talking to someone?.....	1	2	3	4	-7	-8
g. Sitting quiet after a lunch <u>without</u> alcohol?.....	1	2	3	4	-7	-8
h. In a vehicle, while stopped for a few minutes in traffic?.....	1	2	3	4	-7	-8

Comment: The directions/question stem needs to be shortened for this question and rather than asking the respondents to reflect back “on recent times,” NIOSH should provide a specific timeframe, for example, “in the past week.” Also, the interviewer instructions should remind interviewers to

repeat, “How likely is it that you would doze off or fall asleep when ___” for every few selections to remind the respondents of the question stem. In addition, since many drivers we spoke with were sensitive about the subject of alcohol, we recommend rephrasing option C32g to read, “Sitting quietly after lunch.”

C33. Keeping in mind that all of your responses are anonymous, have you ever nodded off or fallen asleep while driving your truck?

YES..... 1
NO..... 2 □
REFUSED..... -7 □ GO TO C35
DON'T KNOW..... -8 □

Comment: Change the incorrect skip pattern, so that every respondent gets asked C34.

C33a. How often do you estimate this has happened in the last 3 months?

Would you say...

Once per day,..... 1
Once per week,..... 2
Once per month, or..... 3
Only one or two times in the last three months?.. 4
REFUSED..... -7
DON'T KNOW..... -8

Comment: We had respondents say that they almost fell asleep at the wheel one time and that it scared them so badly that it has never happened again because they now pull off the road to rest when they get tired. One potential way to capture this response (that otherwise we would miss because it didn't happen within the last 3 months) would be to remove the time frame and capture the actual number provided.

C35. Now I'm going to read you some statements about how you may or may not feel during your work as a truck driver. On a scale from zero, meaning "not at all likely" to agree with the statement to 5 meaning "very likely" to agree with the statement, please tell me the number that best indicates how likely it would be for you to agree with each statement. Think about your work since last _____ [INTERVIEWER: INSERT THE DAY OF THE WEEK THAT WAS 7 AGO] when answering.

	NOT AT ALL LIKELY	1	2	3	4	5 VERY LIKELY	RE	DK
a. After several days with lots of loading and unloading I can't do my work so well because I am too tired.....0		1	2	3	4	5	-7	-8
b. After a long day at work I have enough energy to tackle anything.....0		1	2	3	4	5	-7	-8
c. During the working day I need extra breaks.....0		1	2	3	4	5	-7	-8
d. After doing a lot of loading and unloading for some days, I feel physically exhausted.....0		1	2	3	4	5	-7	-8
e. When I have driven all day, it's hard for me to unwind.....0		1	2	3	4	5	-7	-8
f. After work I relax easily.....0		1	2	3	4	5	-7	-8
g. I sleep well.....0		1	2	3	4	5	-7	-8
h. I usually fall asleep easily.....0		1	2	3	4	5	-7	-8
i. I sleep uneasily.....0		1	2	3	4	5	-7	-8
j. When I wake up in sleep, it's hard for me to fall asleep again.....0		1	2	3	4	5	-7	-8

Comment: Some of these questions do not apply to drivers that do not load/unload. One suggestion is that we can add a question directly before C35 that asks whether or not the driver loads/unloads the truck. Also, we may want to consider adding "Not Applicable" as an answer option for this question as well.

General Comment Regarding the Fatigue Questions:

It would be helpful if NIOSH included a definition for the word “fatigue” that the interviewer could read to the respondent. At times in the questionnaire, the term fatigue is used so that it appears interchangeable with “tiredness.” Is NIOSH using these terms interchangeably?

C36. I am going to read some statements about how fatigue or tiredness might affect you. On a scale from zero, which means “not at all fatigued,” to 10, which means “as fatigued as I could be,” please tell me the number that best indicates how the statement describes your level of fatigue since last _____ [INTERVIEWER: INSERT THE DAY OF THE WEEK THAT WAS 7 DAYS AGO]

	NOT AT ALL FATIGUED										AS FATIGUED AS I COULD BE		RE	DK
a. Your level of fatigue on the day you felt most fatigued.....	0	1	2	3	4	5	6	7	8	9	10	-7	-8	
b. Your level of fatigue on the day you felt least fatigued.....	0	1	2	3	4	5	6	7	8	9	10	-7	-8	
c. Your average level of fatigue.....	0	1	2	3	4	5	6	7	8	9	10	-7	-8	
d. Your level of fatigue right now	0	1	2	3	4	5	6	7	8	9	10	-7	-8	

Comment: Shorten the question stem /instructions.

C36a.

Continuing with statements about how fatigue or tiredness might affect you, please rate the following statements on a scale of zero, which means “no interference,” to 10, which means “extreme interference.” Again, base your answers on the time since last

_____ [INTERVIEWER: INSERT THE DAY OF THE WEEK THAT WAS 7 DAYS AGO]

	NO INTERFERENCE										EXTREME INTERFERENCE		RE	DK
a. How much fatigue interfered with your general level of activity	0	1	2	3	4	5	6	7	8	9	10	-7	-8	
b. How much fatigue interfered with your leisure activities	0	1	2	3	4	5	6	7	8	9	10	-7	-8	
c. How much fatigue interfered with your work	0	1	2	3	4	5	6	7	8	9	10	-7	-8	
d. How much fatigue interfered with your ability to concentrate	0	1	2	3	4	5	6	7	8	9	10	-7	-8	
e. How much fatigue interfered with your relations with other people	0	1	2	3	4	5	6	7	8	9	10	-7	-8	
f. How much fatigue interfered with your enjoyment of life	0	1	2	3	4	5	6	7	8	9	10	-7	-8	
g. How much fatigue interfered with your mood	0	1	2	3	4	5	6	7	8	9	10	-7	-8	

Comment: Shorten the question stem /instructions. Also, we recommend changing, “How much fatigue interfered with” to “How much did fatigue interfere with” because it is less awkward when an interviewer reads it aloud.

C37. Please Indicate **how many days**, in the period since last _____ [INTERVIEWER: INSERT THE DAY OF THE WEEK THAT WAS 7 DAYS AGO] you felt fatigued for any part of the day.

DAYS.....| |

RANGE 0-7

REFUSED..... -7

DON'T KNOW..... -8

Comment: Does this include the period right before bed? Is your definition of fatigue interchangeable with the word tired? If so, we should include a direction about whether or not to count the period right before bed.

C38. On a scale of 0 to 10 with 0 being “none of the day” and 10 being “the entire day” please rate how much of the day, on average, you felt fatigued since last _____.

Comment: This question seems identical to C36c. Your **average** level of fatigue.

D3. In what year was [this/your first] crash?

YEAR.....| | | |

REFUSED..... -7

DON'T KNOW..... -8

D3a. In what year was your most recent crash?

YEAR.....| | | |

REFUSED..... -7

DON'T KNOW..... -8

Comment: On D3 and D3a, one respondent gave answers as the number of years since the crashes occurred. We should include interviewer instructions

to convert the answer to a year but to note that they made a conversion so that it can be reviewed to verify that the calculation was done correctly.

D6a. How many work days did you miss [due to this injury]?

DAYS.....|_|_|_|

REFUSED..... -7

DON'T KNOW..... -8

Comment: NIOSH should consider rephrasing this question to, “How much time did you miss from work [due to injury]” because if the respondent missed more than a week they might give their answer in weeks or in months. If the question is rephrased, then we will format the response for the interviewer to fill in the appropriate number and time period (days, weeks, months, years).

D6c. Did you receive worker's compensation?

YES..... 1

NO..... 2

REFUSED..... -7

DON'T KNOW..... -8

Comment: Add “pending” as a response option.

D17a. How many work days did you miss [due to this injury]?

DAYS.....|_|_|_|

REFUSED..... -7

DON'T KNOW..... -8

Comment: We recommend that NIOSH consider rephrasing this question to, “How much time did you miss from work [due to injury]” because if the respondent missed more than a week they might give their answer in weeks or in months. If the question is rephrased, then we will format the response for the interviewer to fill in the appropriate number and time period (days, weeks, months, years).

D18a. Did you receive worker's compensation?

YES..... 1 □

NO..... 2 □ GO TO SECTION E

REFUSED..... -7 □

DON'T KNOW..... -8 □

Comment: Add “pending” as an answer option.

F1. Are you currently working within a company?

YES..... 1

NO..... 2 □

REFUSED..... -7 □ GO TO F6

DON'T KNOW..... -8 □

Comment: A few of the participants responded to this question by saying, "I am leased to a company." How do we want to treat these individuals with regard to this question?

F5. Now I'm going to read you a list of statements about worker safety. Please tell me whether you strongly disagree, disagree, agree, or strongly agree with each of these statements.

	STRONGLY DISAGREE		STRONGLY AGREE		RE	DK
a. The safety of workers is a high priority with management where I work.....	0	1	2	3	-7	-8
b. There are no significant compromises or shortcuts taken when worker safety is at stake....	0	1	2	3	-7	-8
c. Where I work, employees and management work together to ensure the safest possible working conditions.....	0	1	2	3	-7	-8

Comment: Westat recommends that we add a showcard for this question.

F6. What do you usually do when a dispatcher/shipper assigns an unrealistic delivery time? Do you usually...

- Refuse the load or renegotiate the time,..... 1
- Take the load,..... 2
- Do something else?..... 3
- (SPECIFY)_____
- DISPATCHER DOES NOT ASSIGN AN UNREALISTICALLY TIGHT DELIVERY TIME.... 4
- NO DISPATCHER..... 5
- REFUSED..... -7

DON'T KNOW..... -8

Comment: Interviewer should read the response option “Dispatcher doesn’t assign an unrealistically tight delivery time.”

G1. When you are on a trip, how many hours do you usually drive before stopping for gas, food, or for rest?

NUMBER OF HOURS.....|_|_|

REFUSED..... -7

DON'T KNOW..... -8

Comment: This was another question where respondents gave a range for answers and found it difficult to provide an exact number of hours.

G2. I'm going to read you a list of reasons why truck drivers **may** continue to drive despite fatigue, bad weather, or heavy traffic. Please tell me whether you often, sometimes, or never drive in hazardous situations due to each of the following reasons:

	OFTEN	SOME-TIMES	NEVER	RE	DK
a. You're on a tight schedule?.....	1	2	3	-7	-8
b. The 14-hour continuous shift?.....	1	2	3	-7	-8
c. You need to make more money?.....	1	2	3	-7	-8
d. Delays associated with dispatching?.....	1	2	3	-7	-8
e. Delays associated with loading/ unloading?.....	1	2	3	-7	-8
f. Some other reason?.....					
(SPECIFY)_____	1	2	3	-7	-8

Comment: The respondents still do not seem to understand this question. During the pretest and the cognitive interviews, we found it helpful to repeat before each selection, “How often do you drive in a potentially hazardous

situation because of ____". Westat suggests that we reword and shorten the question stem.

G3. How often do you do the following while driving a truck at work? Would you say often, sometimes, or never?

	OFTEN	SOME-TIMES	NEVER	RE	DK
a. Wear a seatbelt?.....	1	2	3	-7	-8
b. Load and unload your truck	1	2	3	-7	-8
c. Get frustrated by other drivers on the road?....	1	2	3	-7	-8
d. Get frustrated by operations at the loading dock?.....	1	2	3	-7	-8
e. Drive 10 miles or more faster than the speed limit.....	1	2	3	-7	-8

G5. In your driving experience over the past 12 months, how often do the following situations occur? Would you say often, sometimes, or never?

	OFTEN	SOME-TIMES	NEVER	RE	DK
a. You must deliver or pick up a load at a given time?.....	1	2	3	-7	-8
b. You receive an unrealistically tight delivery schedule?.....	1	2	3	-7	-8
c. The time you are allotted for loading and unloading is unrealistically tight?.....	1	2	3	-7	-8
d. Your delivery is later than scheduled?.....	1	2	3	-7	-8
e. Traffic congestion delays your deliveries significantly?.....	1	2	3	-7	-8

f. The Hours-of-Service rules are violated?.....	1	2	3	-7	-8
g. You arrive on time but are forced to wait to enter a dock?.....	1	2	3	-7	-8
h. The dispatcher works with you to get home as scheduled?.....	1	2	3	-7	-8

Comment: For G3 and G5, add “Not Applicable” as an answer option. Also, if the questionnaire is in CAPI format for the main study, a skip could be programmed so that those who indicated earlier in the questionnaire that they do not load or unload are not asked about those activities. NIOSH might consider reordering the questions within G3 so they follow a logical sequence, b, d, a, c, e. This would ask about loading, loading dock, seatbelt, then other drivers.

G6. I'm going to read you some activities that may or may not improve safety for truck drivers. Using a scale from 0, which means “not at all” to 5, which means “very much,” please rate how well each statement describes how you feel about whether or not the activity would improve safety.

	NOT AT ALL					VERY MUCH					RE	DK
a. Strictly enforce for carrier and driver hours-of-service (HOS) violations.....	0	1	2	3	4	5	-7	-8				
b. Strictly enforce for traffic violations in car and truck drivers.....	0	1	2	3	4	5	-7	-8				
c. Keep the current hours-of-service (HOS) regulations.....	0	1	2	3	4	5	-7	-8				
d. Increase the current speed limit by 10 miles.....	0	1	2	3	4	5	-7	-8				
e. Decrease the current speed limit 10 miles.....	0	1	2	3	4	5	-7	-8				
f. Require speed governors for all large trucks.....	0	1	2	3	4	5	-7	-8				
g. Build more roads.....	0	1	2	3	4	5	-7	-8				
h. Build more truck stops/parking area.....	0	1	2	3	4	5	-7	-8				
i. Pay drivers by the hour for driving time.....	0	1	2	3	4	5	-7	-8				
j. Require rest breaks.....	0	1	2	3	4	5	-7	-8				

Comment: For G6j, we recommend clarifying if NIOSH mean breaks in addition to the mandatory 10 hour rest period or if you are referring to the mandatory rest period.

H6. We think this survey will provide useful information about safety and health of truck drivers. I'm going to read you a list of some ways that the information we learn can be shared. Please tell me what you think are the top 3 ways to share what we learned with other drivers. Some ways are...

	YES	NO	RE	DK
AM/FM radio.....	1	2	-7	-8
Satellite radio.....	1	2	-7	-8
Television.....	1	2	-7	-8
Truck stops.....	1	2	-7	-8
Postings through your employer.....	1	2	-7	-8
Union postings.....	1	2	-7	-8
Internet website postings.....	1	2	-7	-8
Trucking magazines/publications.....	1	2	-7	-8
Something else?.....	1	2	-7	-8
(SPECIFY)_____				
OTHER.....	1	2	-7	-8
(SPECIFY1)_____				
OTHER.....	1	2	-7	-8
(SPECIFY2)_____				
OTHER.....	1	2	-7	-8
(SPECIFY3)_____				

Comment: We recommend that interviewers read all of the options and record responses for each, not limited to three. Rankings can be determined during data analysis based on frequency.

3.2.4 Activity Diary

Upon testing the activity diary (Appendix F), we found that, in general, survey participants did not seem to mind filling it out. In addition, many seemed content with handing the completed log back to the interviewer rather than putting it in the lock box. Below are some additional comments and recommendations regarding the management of the activity diary:

- Four out of nine people did not fill out the activity diary correctly. Westat recommends that for the main study, we have the interviewers walk the respondents through an example included with the instructions and then ask if the driver has any questions before proceeding.
- We had complaints that the instructions and numbers were difficult to read. Respondents suggested that the font size of the diary/instructions be larger.
- Westat recommends that we set the diary up as a booklet, with the left side of the inside page being an example and the right side being the page for the respondent to fill out. This way, when the respondent is finished he/she can close the book and hand it back to the interviewer, without the interviewer being able to see the respondent's diagram.

3.2.5 Supplemental Questions

After the respondents completed their activity diary, Westat asked them a few questions to help gauge their reaction to the survey. The questions are included as Appendix G. Below is a summary of participant responses:

- 1.** Was there anything in the questionnaire that you were uncomfortable answering or that was unclear?

For the most part, the participants thought that everything was clear and they were not uncomfortable answering the questions. A couple of participants mentioned that the script associated with the consent

process was too long. Another driver also mentioned that some of the questions, particularly those with scales, were too long. He said that by the time he heard the entire question he forgot what was being asked.

- 2.** I asked you for your height and weight. If an interviewer asked you to get on a scale, would you be willing to do so? Would you be willing to have your height measured? How about if an interviewer asked you what your waist size is? Would you be able to accurately answer that question? Would you be willing to let an interviewer measure your waist?

All participants said that they would be comfortable with having both their height and weight measured. In addition, all participants said that they could accurately report their waist size; however, one female participant said that she would not like to have her waist size measured. The other eight participants (all male) said they would be willing to have their waist measured.

- 3.** For participating in this study, you are being given a \$25 gift card for use at this truck stop. Do you think this is a good “thank you?”

For the most part, survey participants were happy with the \$25 gift card incentive. Some expressed that \$25 cash would be more of an incentive to participate.

- 4.** Is there anything about the way the study is being done, from approaching you as you entered the building, to going through the questionnaire, to filling out the activity diary that you don’t think worked well?

Participants did not have many comments with regard to the survey recruitment and administration process. One person suggested that we post larger signs (poster size) around the truck stop to catch the attention of more prospects. Another individual said that we should get the endorsement of the Teamsters, to help ease any doubts drivers may have about participating.

4. Next Steps

NIOSH will review this report to determine which recommendations they would like to include in the materials for the main study. Westat will incorporate those recommendations and provide NIOSH with the revised instruments for approval. Within one month Westat will deliver a revised protocol, incorporating our knowledge gained through these pretests.

Appendix A

Manager Discussion Topics

Items to Discuss with Managers During Pretest 1 and 2:

1. General flow of traffic at the truck stop/terminal.
 - During what hours is the facility the busiest? Are some days of the week busier than others?
 - Do you tend to see more than one busy time during the day (i.e. night drivers coming in during AM hours for rest and day drivers coming in during evening hours for rest)?
 - During what hours does the restaurant see the most “sit-down” traffic?
(Sit-down traffic would be more likely to have time to participate in our survey)

 - What times of day does the truck stop tend to see the most drivers stopping for their mandatory rest period?
 - On average, about how many drivers use your facility each day?
 - What proportion of your restaurant patrons are truck drivers?
 - What proportion of your patrons are long-haul truck drivers?

2. What is the best approach to gaining corporate approval to use truck stop/terminal facilities for the main study? (maybe also ask these questions on the corporate level)
 - Is the \$25 gift card to be used at the truck stop (income for the truck stop) an incentive to truck stop/terminal managers to gain their support for the survey? What would be some others?
 - What is the best way to approach corporate about the study? What is the best way to approach individual site managers about the study? Did you have any concerns when you were approached about your site participating in the pretest?
 - What type of information/ study background materials would you want to see and evaluate before agreeing to let us use your facility?
 - Is there a fee to use a truck stop / terminal for the main study? If so, what is the average cost?

3. Manager / Truck Stop Participation Levels
 - Would truck stop managers be willing to hang up flyers or distribute study information notifying drivers that we will be at your facility conducting the survey (i.e. post information a week before we begin interviewing at a site)?
 - Would we be able to hang up posters/flyers and distribute information about our study to potential participants as they walk in?
 - Would truck stop managers be able to guarantee us quiet space to conduct interviews? Do you think that we will be able to find quiet space at other truck stops?

4. Truck Stop Layout / Logistics of Using the Truck Stop To Conduct the Survey
(These questions may be better to ask at the corporate level)
 - Can you tell us a bit about the layout at most truck stops?

- In your opinion is there space to set up a table and conduct an interview away from the commotion at most facilities?
 - In your experience, is there an entrance used mostly by truck drivers rather than other travelers?
 - Are there size ranges that different truck stops are categorized as, if so, how are these determined (by number of parking spaces, showers, etc)?
 - Are there certain types of truck stops that only cater to filling-up and are not usually used for extended stopping purposes? If so, how are these facilities differentiated?
 - What proportion of drivers who stop at the facility use the restaurant or sleeping quarters? Do some just purchase gas and sleep in their trucks?
5. Best Way to Recruit/ Obtain Participants
- What is the best way to approach drivers/potential participants (i.e. recruit as they enter the facility, walk up to people while they are eating, etc)?
 - Do you know of any radio shows, publications (magazines, newspapers, newsletters), or websites that are popular among long-haul truck drivers that may be a good place to advertise/make people aware of our study?
 - Do you feel as though a \$25 gift card to be used at the respective truck stop or terminal will be a good incentive to encourage drivers to participate in a 1 hour and 15 minute survey?
 - Can you think of any problems we might experience in recruiting or interviewing drivers at truck stops?

Appendix B

Driver Discussion Topics

Items to Discuss with Drivers During Pretest 1 and 2:

(Not all questions will be asked of all people we encounter)

6. General Schedule.

- Are you a long-haul truck driver (read definition)?
- What is your driving schedule (Day Driver or Night Driver)? Does your schedule ever change, if so, how often?
- What time of the day do you generally stop for your mandatory rest period?
- How much time do you generally have between loads while waiting for another assignment?
- Do you ever drive short-haul or daily runs (where you return home each night)? How often do you drive for these types of assignments?

7. Best approach to recruiting participants.

- Is a \$25 gift card that can be used at the truck stop enough of an incentive for you to participate in a 1 hour and 15 minute survey? If yes, would you participate for less money? If not, what would be a reasonable amount or incentive?
- What is the best time to approach a driver such as yourself (i.e. recruit as they enter the facility, walk up to people while they are eating, etc)?
- Where are the best places to advertise the study (magazines, online websites, flyers posted truck stops, radio shows, etc)?
- What type of information/ study background materials would you want to see and evaluate before agreeing to participate in the study?
- Would you be more likely to participate if the study was approved/supported by groups such as Teamsters or OOIDA?
- Can you think of any problems we may encounter when trying to recruit participants at the truck stop?

8. Logistics of Using the Truck Stop To Conduct the Survey

- Is there a particular truck stop chain that you prefer to use when driving?
- How long do you tend to stay at these truck stops? When staying at the truck stop where do you spend a majority of the time (in cab of truck in the parking lot, in the restaurant, in the game or TV room, etc)?
- When you stop at a truck stop facility is it for use of the restaurant, sleeping quarters, gas, some of the above, all of the above or none of the above?
- Can you think of any problems that we may encounter when trying to administer the survey at a truck stop?

9. General Questions

- Are you familiar with the National Institute of Occupational Safety and Health?
If yes: In your opinion, what type of things do they do/are involved with in respect to the trucking industry?

- Do you have concerns about your health that are related to your job as a truck driver?
- Do you likely to participate in a survey conducted at a truck stop? If no: Why not?
- Any other comments you would like to share about the truck industry?

Appendix C

Screener and Non-Response

Eligibility Screener

INTRO. Westat, a research company, is interviewing truck drivers about their working conditions, injuries, and health. These discussions are anonymous. We will not ask for your name or any other identifiable information. We are offering all participating drivers a \$25 gift card for this truck stop at the end of their interview. The study is sponsored by the National Institute for Occupational Safety and Health.

1. In order to determine if you are eligible to participate, I will ask you some questions about you, your job and work experience. May I go ahead?

YES..... 1 → GO TO Q4
NO..... 2

INTERVIEWER NOTE: IF Q2 = 5 OR 6, USE STANDARD SURVEY TECHNIQUES FOR REFUSAL CONVERSION.

2. Would you please let me know why you don't wish to participate?

NOT A TRUCK DRIVER..... 1 → NOT ELIGIBLE, TERMINATE
NOT AT THE TRUCK STOP LONG ENOUGH..... 2
TOO TIRED..... 3
BUSY WITH SOMETHING ELSE..... 4
PRIVACY CONCERNS..... 5 → IF CONVERSION
SUCCESSFUL, GO TO Q4
SURVEY TOPIC DOESN'T INTEREST ME..... 6 → IF CONVERSION
SUCCESSFUL, GO TO Q4
OTHER..... 91
(SPECIFY) _____

3. I can offer you a coupon worth \$2 at this truck stop if you complete a quick, 2-minute interview. Would you be willing to do that?

YES..... 1 → GO TO Q4
NO..... 2 → TERMINATE. OBSERVE AND
RECORD GENDER,
APPROXIMATE AGE,
HEIGHT, WEIGHT, AND
CIGARETTE USE

4. Is driving a truck your main occupation?

YES..... 1
NO..... 2 □
REFUSED..... -7 □ NOT ELIGIBLE, TERMINATE
DON'T KNOW..... -8 □

5. Do you drive a tractor-trailer or any combination of vehicle units that weigh more than 26,000 lbs? Your job would require you to have a Class A or B license.

YES..... 1
NO..... 2 ☐
REFUSED..... -7 ☐ NOT ELIGIBLE, TERMINATE
DON'T KNOW..... -8 ☐

6. Have you driven such a vehicle for a total of 12 months more?

YES..... 1
NO..... 2 ☐
REFUSED..... -7 ☐ NOT ELIGIBLE, TERMINATE
DON'T KNOW..... -8 ☐

7. Do you usually take at least one mandatory 10-hour rest period **away from home** during **each** delivery run?

YES..... 1
NO..... 2 ☐
REFUSED..... -7 ☐ NOT ELIGIBLE, TERMINATE
DON'T KNOW..... -8 ☐

8. Are you currently on a 34-hour restart period?

YES..... 1
NO..... 2
REFUSED..... -7
DON'T KNOW..... -8

9. Do you plan to be at this stop for at least 2 more hours?

YES..... 1
NO..... 2 ☐ GO TO Q12
REFUSED..... -7 ☐ GO TO Q12
DON'T KNOW..... -8 ☐ GO TO Q12

INTERVIEWER NOTE:

IF Q3 = 1, SKIP TO NR1. OTHERWISE, INVITE TO PARTICIPATE.

ACCEPTED INTO INTERVIEW.

You are eligible to participate. The interview will last about 40 minutes and you will be given a \$25 gift card for this truck stop at the end of the interview.

These discussions are anonymous. We will not ask for your name or any other identifiable information.

10. Would you like to participate?

- YES..... 1 → GO TO MAIN QUESTIONNAIRE
- NO..... 2
- REFUSED..... -7
- DON'T KNOW..... -8

INTERVIEWER NOTE: IF Q11 = 1, 2 or 3 USE STANDARD SURVEY TECHNIQUES FOR REFUSAL CONVERSION. IF UNSUCCESSFUL, CONTINUE TO Q12.

11. May I ask why you don't want to participate?

- NOT AT THE TRUCK STOP LONG ENOUGH.... 1
- TOO TIRED..... 2
- BUSY WITH SOMETHING ELSE..... 3
- PRIVACY CONCERNS..... 4 → IF CONVERSION SUCCESSFUL, GO TO MAIN QUESTIONNAIRE
- SURVEY TOPIC DOESN'T INTEREST ME 5 → IF CONVERSION SUCCESSFUL, GO TO MAIN QUESTIONNAIRE
- OTHER..... 91
(SPECIFY) _____

12. I can offer you a coupon worth \$2 at this truck stop if you complete a quick, 1-minute interview. Would you be willing to do that?

- YES..... 1 → GO TO NR1
- NO..... 2 → TERMINATE. OBSERVE AND RECORD GENDER, APPROXIMATE AGE, HEIGHT, WEIGHT, AND CIGARETTE USE

NON-RESPONDENT QUESTIONNAIRE

NR1. Do you consider yourself a...

- Company employee who does not lease, own, or
make payments on your truck..... 1
- Owner-operator who leases, owns or makes
payments on your truck,..... 2
- REFUSED..... -7
- DON'T KNOW..... -8

NR2. ASK ONLY IF NECESSARY. OTHERWISE RECORD OBSERVATION.

Are you male or female?

- MALE..... 1
- FEMALE..... 2
- REFUSED..... -7
- DON'T KNOW..... -8

NR3. What year were you born?

19 |__|__|

- REFUSED.....-7→ GO TO NR3a
- DON'T KNOW.....-8→ GO TO NR3a

NR3a. Please tell me in which one of the following age categories you belong. Are you...

- 18 – 20,..... 1
- 21 – 30,..... 2
- 31 – 40,..... -3
- 41 – 50,..... 4
- 51 – 60,..... 5
- 61 – 70, or..... 6
- 71 or older?..... 7
- REFUSED..... -7
- DON'T KNOW..... -8

NR4. Please tell me your height and weight without shoes.

_____ FEET _____ INCHES

- REFUSED..... -7
- DON'T KNOW..... -8

_____ POUNDS

- REFUSED..... -7
- DON'T KNOW..... -8

NR5. Do you now smoke cigarettes every day, some days, or not at all?

- EVERY DAY..... 1
- SOME DAYS..... 2
- NOT AT ALL..... 3
- REFUSED..... -7
- DON'T KNOW..... -8

INTERVIEWER NOTE:

**RECORD GENDER, APPROXIMATE AGE, HEIGHT, WEIGHT, AND CIGARETTE USE IF
NONRESPONDENT DOES NOT ANSWER ANY OF NR1 – NR5.**

Appendix D

Handout and Script

Developing and Administering a Survey of Truck Driver Injury and Health Project #7389

NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH (NIOSH)
CENTERS FOR DISEASE CONTROL
U.S. PUBLIC HEALTH SERVICE
U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

AGREEMENT TO PARTICIPATE IN A RESEARCH STUDY

You have been asked to participate in a NIOSH research study. We explain here the nature of your participation, describe your rights, and specify how NIOSH will treat your records.

I. DESCRIPTION

1. **Title:**
Survey of Truck Driver Injury and Health: Pretest of the Questionnaire
2. **Sponsor and/or Project Director:**
The National Institute for Occupational Safety and Health (NIOSH), Karl Sieber (Project Officer)
3. **Purpose of Research:**
Surveys are used to collect facts. Westat, a survey research company, is working with NIOSH to conduct a survey that will describe health and safety issues of the long haul truck driving workforce.

Before we conduct surveys, we first test them with the help of people such as yourself. It is important that the questions make sense, are easy to answer, and that each driver understands the questions the same way. If you agree to take part in this test, we will ask you to answer the survey questions. Our purpose is not to collect information about you. Instead, we will test the questions to see how easy they are to answer and how long it takes to answer them.

The questions that we are working on today are about your work as a long-haul truck driver. We will ask you questions about your work, your health, and work injuries. Your participation will show us how to improve these questions and this survey process.

Benefits of Research:

No direct benefits will be received by your taking part in this study. Indirect benefits you receive may include increased knowledge of the health and wellness of truck drivers, and increased understanding of how working conditions may affect truck drivers' health and safety.

II. CONDITIONS OF THE STUDY

1. Procedures that we will use:

For most questions, an interviewer will read you each survey question that we are testing. Then, the interviewer will ask you to answer the question. For a few of the questions, you will read and answer the questions yourself.

The interview will last about 40 minutes and, when done, you will be reimbursed with a \$25 gift card for use at this truck stop.

You may find that some of the questions we are testing are personal or sensitive. You may choose not to answer any question, for any reason. If you do not want to answer a question, just say so, and the interviewer will move on to the next one. You may also stop the questions at any time.

2. Risks Associated with Participation:

We will ask you questions about your work as a truck driver, your health, and work-related injuries. Some questions may trouble you to think about or answer them, or embarrass you. If you do not want to answer a question, just say so, and the interviewer will move on to the next one. You may also stop the questions at any time.

3. Injury or harm from this project is unlikely. But if it results, medical care is not provided, other than emergency treatment. If you are injured through negligence of a NIOSH employee you may be able to obtain compensation under Federal Law. If you want to file a claim against the Federal government your contact point is: Public Health Service Claims Office: (301) 443-1904. If you are injured or harmed through the negligence of a NIOSH contractor, your claim would be against the contractor, not the federal government. If an injury or harm should occur to you as the result of your participation, you also should contact: Karl Sieber, Project Officer, 513-841-4231 or Cheryl F. Estill, Chair NIOSH HSRB, 513-533-8591.
4. If you have questions about this research, contact Karl Sieber, 513- 841-4231. If you have questions about your rights as a member of this study, contact Cheryl F. Estill, Chair NIOSH Human Subjects Review Board, 513-533-8591
5. Your participation is voluntary and you may withdraw your consent and your participation in this study at any time without penalty or loss of benefits to which you are otherwise entitled.

Participants will receive a \$25 gift card for use at this truck stop as reimbursement for participation.

III. USE OF INFORMATION

This study is being done by The National Institute for Occupational Safety and Health (NIOSH). NIOSH is part of the Centers for Disease Control (CDC), a government agency in the Department of Health and Human Services. We collect this information in order to learn about various kinds of work hazards that may influence the health of the American worker.

NIOSH is allowed to collect and keep information about you, including your results from this study, because of three laws passed by Congress. These laws are:

1. The Public Health Service Act (42 U.S.C 241)
2. The Occupational Safety and Health Act (29 U.S.C. 669)

3. The Federal Mine Safety and Health Act of 1977 (30 U.S.C. 951)

You will decide whether you want to provide us with this information by being in this study. You are free to choose not to be in this study. It is up to you. You should know, however, that there are conditions under the Privacy Act when we could be authorized to release this information to outside sources. These conditions under which we might release this information are listed in Appendix A (the Privacy Act).

Appendix A

The Information you provide will become part of the CDC Privacy Act System, 09-20-0147, "Occupational Health Epidemiological Studies and EEOICPA Program Records" and may be disclosed to

- Appropriate state or local health departments to report communicable diseases;
- A State Cancer Registry to report cases of cancer where the state has a legal reporting program providing for confidentiality;
- Private contractors assisting NIOSH;
- Collaborating researchers under certain circumstances to conduct further investigations;
- One or more potential sources of vital statistics to make determinations of death, health status or to find last known address;
- The Department of Justice or the Department of Labor in the event of litigation;
- Congressional offices assisting an individual in locating his or her records;

You may request an accounting of the disclosures made by NIOSH.

Except for these and other permissible disclosures authorized by the Privacy Act, or in limited circumstances required by the Freedom of Information Act, no other disclosures may be made without your written consent.

**Developing and Administering a Survey of Truck Driver Injury and Health
Project #7389**

Script to be Used in Pretest 2 as Waiver of Documentation of Informed Consent

Thank you for agreeing to be in this research study. Let me begin by telling you a bit more about the survey and your role today.

Surveys are used to collect facts. Westat, a survey research company, is working with the National Institute for Occupational Safety and Health (NIOSH) (part of the Centers for Disease Control and Prevention CDC) to conduct a survey that will describe health and safety issues of the long haul truck driving workforce. NIOSH does research to prevent work-related injury and illness. It is NOT a regulatory agency. NIOSH does not pass laws and does not enforce regulations..

Before we conduct surveys, we first test them with the help of people such as yourself. It is important that the questions make sense, are easy to answer, and that each driver understands the questions the same way. Today we are helping NIOSH test and improve some questions that they want to include in the study. For the information we collect to be useful, it is important that we ask questions that are easy to understand, as well as apply to the trucking industry so that participants can provide useful answers rather than guesses. If you agree to take part in this test, we will ask you to answer the survey questions. Then, we will ask you about your reactions to the survey.

The questions that we are working on today are about your work as a long-haul truck driver. We will ask you questions about your work, your health, and work injuries. Some questions may trouble you to think about or answer them, or embarrass you. If you do not want to answer a question, just say so, and the interviewer will move on to the next one. You may also stop the interview at any time.

The interview will last about 40 minutes, and, upon completion, you will be reimbursed with a \$25 gift card for use at this truck stop. This is to help reimburse you for the time you spent answering the questions.

You will receive no direct benefits from taking part in this study. But helping us to test the survey questions may give you increased knowledge of the health and wellness of truck drivers, and increased understanding of how working conditions may affect truck drivers' health and safety.

Before we begin, I want to make you aware of a few things. First, I want to assure you that all information you share will be kept private to the extent allowed by law. Our purpose is not to collect information about you. Instead, we will test the questions to be used in a later survey. We are not collecting personal information

such as names or phone numbers. All records will be stored in a locked file, which only project staff may access.

Second, your being part of this test is voluntary and you may withdraw your consent and your participation in this study at any time without penalty or loss of benefits to which you are otherwise entitled. You will decide whether you want to provide us with this information by being in this study. You are free to choose not to be in this study. It is up to you. You should know, though, that there are conditions under the Privacy Act when we could be authorized to release this information to outside sources. These conditions under which we might release this information are listed in the handout to be given to you.

If you have questions about your rights as a member of this study, please contact Cheryl F. Estill, Chair NIOSH Human Subjects Review Board, 513-533-8591.

We have discussed this study and being part of it with you. All of this information is also included with this handout you may keep for your records. If you agree to be in this test of the survey questions, please say that to me as 'yes' or 'no'. If there is anything I said which is unclear to you, please ask questions about it. Please do not take part until you get solid answers to all of your questions. When you are ready to participate, please say that to me.

WHEN RESPONDENT HAS INDICATED HE/SHE IS WILLING TO PARTICIPATE, PROCEED WITH SURVEY QUESTIONS.

Appendix E

Questionnaire DRAFT

Before we begin, I'd like to collect some basic information.

PA1. What year were you born?

19 |__| |__| → GO TO PA3

REFUSED..... -7
DON'T KNOW..... -8

INTERVIEWER NOTE:

IF YEAR IS GIVEN IN PA1, SKIP TO PA3.

PA2. Please tell me in which one of the following age categories you belong. Are you...

18 – 20,..... 1
21 – 30,..... 2
31 – 40,..... 3
41 – 50,..... 4
51 – 60,..... 5
61 – 70, or..... 6
71 or older?..... 7
REFUSED..... -7
DON'T KNOW..... -8

PA3. ASK ONLY IF NECESSARY. OTHERWISE RECORD OBSERVATION.

Are you male or female?

MALE..... 1
FEMALE..... 2
REFUSED..... -7
DON'T KNOW..... -8

PA4. What county and state do you live in?

_____ COUNTY		_____ STATE	
REFUSED.....	-7	REFUSED.....	-7
DON'T KNOW.....	-8	DON'T KNOW.....	-8

PA5. We'd like to know how many miles you drove your truck in the last 12 months, excluding any miles driven by others. How many miles were you actually behind the wheel in the last 12 months?

MILES |__| |__| |__| |__| |__| |__| → GO TO A1
RANGE: 1,000 - 220,000

REFUSED..... -7
DON'T KNOW..... -8

PA5a. In the last 12 months, would you say you were behind the wheel of your truck...

1,000 – 20,000 miles,..... 1
21,000 – 50,000 miles,..... 2
51,000 – 100,000 miles,..... 3
101,000 – 150,000 miles, or..... 4
151,000 – 220,000 miles?..... 5
REFUSED..... -7
DON'T KNOW..... -8

A. CURRENT TRUCK DRIVING

Let's begin by talking about your current trip and job.

A1. Do you consider yourself a...

- Company employee who does not lease, own,
or make payments on your truck or an..... 1
- Owner-operator who leases, owns or makes
payments on your truck?..... 2
- REFUSED..... -7
- DON'T KNOW..... -8

A2. Which of the following best describes the type of company that you currently work for? Would you describe it as...

- For hire, meaning that your company's primary business is
providing trucks and drivers to transport goods for other
individuals or companies;..... 1
- A package delivery service such as UPS, FedEx, or the
U.S. Postal Service;..... 2
- Private carriage, meaning that your company owns trucks
to primarily haul its own merchandise;..... 3
- Independent, meaning that you don't work for a single
company; or..... 4
- Something else?..... 91
- (SPECIFY) _____
- REFUSED..... -7
- DON'T KNOW..... -8

A3. What type of truck are you driving today?

- STRAIGHT TRUCK (TRUCK THAT DOES
NOT PULL A TRAILER)..... 1
- TRACTOR WITHOUT TRAILER..... 2
- AUTO CARRIER..... 3
- DUMP..... 4
- FLATBED..... 5
- GARBAGE/REFUSE..... 6
- LIVESTOCK CARRIER..... 7
- LOW BOY..... 8
- POLE/LOGGING..... 9
- REFRIGERATED VAN ("REFER")..... 10
- TANKER..... 11
- VAN, ENCLOSED (BOX)..... 12
- VAN, OPEN TOP..... 13
- OTHER..... 91
- (SPECIFY) _____
- REFUSED..... -7
- DON'T KNOW..... -8

A4. What cargo are you carrying today?

LIVE ANIMALS/LIVESTOCK.....	1
FARM PRODUCE (OTHER THAN ANIMALS)....	2
AUTOMOBILES (INCLUDING PICKUP TRUCKS).....	3
GASOLINE.....	4
LOGS/TIMBER.....	5
MOBILE HOME.....	6
RADIOACTIVE WASTE.....	7
RUBBISH/TRASH/REFUSE/WASTE.....	8
USED HOUSEHOLD OR OFFICE GOODS/ MOVING VAN.....	9
NONE (EMPTY TRUCK/'DEADHEADING').....	10
OTHER.....	91
(SPECIFY)_____	
REFUSED.....	-7
DON'T KNOW.....	-8

A5. Does the truck you are driving have an APU generator for on-board air-conditioning, heating, and electric?

YES.....	1
NO.....	2
REFUSED.....	-7
DON'T KNOW.....	-8

The next few questions are about your current trip. If you are not carrying cargo or if you are waiting for another load, then your current trip is the trip just completed.

A6. On your current trip, are you ...

Carrying the load of more than one customer to deliver within a network of terminals, or.....	1
Carrying only the load of a single customer for delivery to its final destination. The load is not combined with shipment for other customers?.....	2
REFUSED.....	-7
DON'T KNOW.....	-8

A7. On your current trip, are you driving alone, with a non-driving passenger, as part of a driving team, as a trainer, or as a trainee with a senior driver?

DRIVING ALONE.....	1
WITH A NON-DRIVING PASSENGER.....	2
DRIVING AS PART OF A TEAM.....	3
TRAINER.....	4
TRAINEE.....	5
REFUSED.....	-7
DON'T KNOW.....	-8

A8. How are you being paid for your driving time on your current trip?

- BY THE MILE.....
- A PERCENTAGE OF REVENUES.....
- BY THE HOUR.....
- BY THE LOAD.....
- REFUSED..... -7
- DON'T KNOW..... -8

A9. On your current trip, does your company offer bonuses based on when you deliver your cargo?

- YES..... 1
- NO..... 2
- REFUSED..... -7
- DON'T KNOW..... -8

A9a. On your current trip, does your company give penalties based on when you deliver your cargo?

- YES..... 1
- NO..... 2
- REFUSED..... -7
- DON'T KNOW..... -8

A10. On your current trip, when loading or unloading your cargo, do you use any of the following types of personal protective equipment?

	YES	NO	RF	DK
f. Face mask?.....	1	2	-7	-9
g. Respirator?.....	1	2	-7	-9
h. Hearing protectors?.....	1	2	-7	-9
i. Chemical barrier gloves?.....	1	2	-7	-9
j. Any other type of personal protective equipment?.....	1	2	-7	-8
(SPECIFY)_____				

A11. How many hours had you driven without stopping before arriving at this truck stop?

NUMBER OF HOURS.....|_|_|
RANGE: 1 – 11 HOURS

A12. How long has it been since you had at least 24 hours off? This would be at least 24 hours when you knew you wouldn't be working, allowing you to plan other activities such as extra sleep, shopping, exercise, etc. It could have been either at home or away from home.

DAYS.....| |
 HOURS.....| |

REFUSED..... -7
 DON'T KNOW..... -8

A13. Since last _____ **[INTERVIEWER: INSERT THE DAY OF THE WEEK THAT WAS 7 DAYS AGO]**, how many total hours have you worked in your job as a truck driver? Do not include mandatory rest periods.

HOURS.....| | |

A14. Since last _____ **[INTERVIEWER: INSERT THE DAY OF THE WEEK THAT WAS 7 DAYS AGO]**, how many total hours have you spent on each of the following tasks?

	TOTAL TIME SPENT (HOURS) IN LAST WEEK	RE	DK
a. Driving your truck?.....		-7	-8
b. Truck maintenance or repair?.....		-7	-8
c. Physical labor such as loading and unloading, staking, or tarping/securing loads?.....		-7	-8
d. Hostler or yard work?.....		-7	-8
e. Waiting for the dispatcher to call, waiting at the loading dock, or with the log book or other paper work?.....		-7	-8
f. Waiting for some other reason?.....		-7	-8
g. Some other major job duty?.....		-7	-8
(SPECIFY 1) _____			
(SPECIFY 2) _____			

A15. What do you like most about your job as a truck driver?

INDEPENDENCE.....	1
TRAVELING TO DIFFERENT PLACES.....	2
BEING MY OWN BOSS.....	3
FLEXIBILITY.....	4
MAKE A GOOD LIVING.....	5
ONLY WORK I'VE EVER DONE.....	6
I'M A GOOD DRIVER.....	7
I LIKE DRIVING.....	8
I LIKE TRUCKS.....	9
I LIKE THE CULTURE.....	10
JOB SECURITY.....	11
FILLS THE TIME WHEN I'M NOT DOING MY OTHER JOB (E.G., FARMING).....	12
OTHER.....	91
(SPECIFY)_____	
REFUSED.....	-7
DON'T KNOW.....	-8

A16. What do you like least about your job as a truck driver?

RISK OF CRASH INJURY.....	1
RISK OF NON-CRASH INJURY.....	2
POOR MAINTENANCE OF OTHER TRUCKS ON THE ROAD.....	3
LONG WORK HOURS.....	4
IRREGULAR WORK HOURS.....	5
UNPREDICTABLE WORK HOURS.....	6
NIGHT SHIFT.....	7
DON'T SLEEP WELL/LACK OF SLEEP.....	8
FORCED TO SLEEP IN DAYTIME.....	9
LACK OF EXERCISE.....	10
LACK OF HEALTHY FOOD.....	11
LOW INCOME.....	12
ECONOMIC UNCERTAINTY.....	13
UNREALISTIC DELIVERY SCHEDULES.....	14
WORKPLACE VIOLENCE.....	15
OTHER.....	91
(SPECIFY)_____	
REFUSED.....	-7
DON'T KNOW.....	-8

B. WORK HISTORY

Now I would like you to think about how long you have worked in the trucking industry.

B1. You indicated earlier that your current job requires you to spend at least one 10-hour rest period away from home on each run. For how many years have you worked in this type of truck driving job?

NUMBER OF YEARS|_|_|

REFUSED..... -7
DON'T KNOW..... -8

B2. Have you ever worked as a driver in a truck job which did not require you to sleep away from home for at least one 10-hour rest period on each run?

YES..... 1
NO..... 2
REFUSED..... -7 GO TO B3
DON'T KNOW..... -8

B2a. For how many total years did you work in this type of truck driving job?

NUMBER OF YEARS|_|_|

REFUSED..... -7
DON'T KNOW..... -8

B3. Have you ever worked in the trucking industry but not as a truck driver?

YES..... 1
NO..... 2
REFUSED..... -7 GO TO B4
DON'T KNOW..... -8

B3a. For how many years did you work in the trucking industry but not as a truck driver?

NUMBER OF YEARS|_|_|

REFUSED..... -7
DON'T KNOW..... -8

B3b. What job(s) did you have? Were you a...

JOB TITLE	YES	NO	RE	DK	B3c. How long did you do this job?		
					(YEARS)	RE	DK
a. Mechanic?.....	1	2	-7	-8	_ _	-7	-8
b. Dock Worker?.....	1	2	-7	-8	_ _	-7	-8
c. Dispatcher?.....	1	2	-7	-8	_ _	-7	-8
d. Supervisor/Management?.....	1	2	-7	-8	_ _	-7	-8
e. Anything else?.....	1	2	-7	-8	_ _	-7	-8

B4. In your current job as a truck driver, do you receive any of the following benefits?

	YES	NO	RE	DK
a. Pension?.....	1	2	-7	-8
b. Health insurance?.....	1	2	-7	-8
c. Paid vacation?.....	1	2	-7	-8

B5. How many weeks per year do you work as a truck driver?

NUMBER OF WEEKS|_|_|

REFUSED..... -7

DON'T KNOW..... -8

B6. Do you currently have a second job?

YES..... 1

NO..... 2 □

REFUSED..... -7 □ GO TO B7

DON'T KNOW..... -8 □

B6a. What is your second job?

Job Title _____

B6b. What type of business is this?

(Business)_____

B6c. Approximately how many hours per week do you work at your second job?

HOURS PER WEEK.....|_|_|_|

REFUSED..... -7

DON'T KNOW..... -8

B6d. For how long have you had a second job, including the current one?

NUMBERS OF YEARS.....| |

NUMBER OF MONTHS.....| |

REFUSED..... -7

DON'T KNOW..... -8

C. HEALTH

Now let's talk about your health and health care coverage.

C1. Are you currently covered by any kind of health insurance or some other kind of health plan? Include coverage provided by your spouse or partner's plan.

YES..... 1
 NO..... 2
 REFUSED..... -7
 DON'T KNOW..... -8

C2. In the past twelve months, were there times when you needed medical care but did not get it? Do not include dental care.

YES..... 1
 NO..... 2 □
 REFUSED..... -7 □ GO TO C4
 DON'T KNOW..... -8 □

C3. Why did you not get the needed medical care? Was it because...

	YES	NO	RE	DK
a. you couldn't afford it?.....	1	2	-7	-8
b. you were unable to go to a clinic because you were working?.....	1	2	-7	-8
d. of lack of health insurance?.....	1	2	-7	-8
e. of some other reason?.....	1	2	-7	-8
(SPECIFY) _____				

C4. During the past 12 months, did you get a flu shot? A flu shot is usually given in the fall and protects against influenza for the flu season.

YES..... 1 → GO TO C6
 NO..... 2
 REFUSED..... -7
 DON'T KNOW..... -8

C5. Why didn't you get a flu shot? PROBE: Any other reason?

	YES	NO	RF	DK
TOO EXPENSIVE.....	1	2	-7	-8
INCONVENIENT.....	1	2	-7	-8
DON'T THINK I NEED IT.....	1	2	-7	-8
DON'T KNOW WHERE TO GET IT.....	1	2	-7	-8
DON'T HAVE TIME.....	1	2	-7	-8
OTHER.....	1	2	-7	-8
(SPECIFY) _____				

Now let's talk about your cigarette smoking habits.

C6. Have you smoked at least 100 cigarettes, or 5 packs, in your entire life?

- YES..... 1
- NO..... 2 □
- REFUSED..... -7 □ GO TO C11
- DON'T KNOW..... -8 □

C7. How old were you when you first started to smoke fairly regularly?

- YEARS.....|_|_|
- NEVER SMOKED REGULARLY..... 1 → GO TO C9
- REFUSED..... -7
- DON'T KNOW..... -8

C8. Thinking back over the years you have smoked regularly, about how many cigarettes did you usually smoke each day? Recall that 1 pack equals 20 cigarettes.

- CIGARETTES PER DAY.....|_|_|
- REFUSED..... -7
- DON'T KNOW..... -8

C9. Do you now smoke cigarettes every day, some days, or not at all?

- EVERY DAY..... 1 → GO TO C11
- SOME DAYS..... 2 → GO TO C11
- NOT AT ALL..... 3
- REFUSED..... -7 → GO TO C11
- DON'T KNOW..... -8 → GO TO C11

C10. How long has it been since you quit smoking cigarettes?

- YEARS.....|_|_|
- MONTHS.....|_|_|
- REFUSED..... -7
- DON'T KNOW..... -8

These next few questions are about drinking alcoholic beverages. Included are liquor such as whiskey or gin, beer, wine, wine coolers, and any other type of alcoholic beverage.

C11. In the past 12 months, how often did you drink any type of alcoholic beverage?

- | | | |
|-------|--------------------------|---------------|
| _ _ _ | DAYS PER | |
| | WEEK..... | 1 |
| | MONTH..... | 2 |
| | YEAR..... | 3 |
| | DON'T DRINK ALCOHOL..... | 4 → GO TO C13 |
| | REFUSED..... | -7 |
| | DON'T KNOW..... | -8 |

C12. In the past 12 months, on those days that you drank alcoholic beverages, how many drinks did you usually have? Would you say...

- | | |
|------------------------|----|
| 1 or 2 drinks,..... | 1 |
| 3 or 4 drinks, or..... | 2 |
| 5 or more drinks?..... | 3 |
| REFUSED..... | -7 |
| DON'T KNOW..... | -8 |

Now I'd like to ask about your height, weight, and physical activity.

Please tell me your height and weight without shoes.

C13. _____ FEET _____ INCHES

- | | |
|-----------------|----|
| REFUSED..... | -7 |
| DON'T KNOW..... | -8 |

C14. _____ POUNDS

- | | |
|-----------------|----|
| REFUSED..... | -7 |
| DON'T KNOW..... | -8 |

C15. During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, golf, gardening, walking for exercise, or calisthenics like sit-ups or push-ups?

- | | |
|-----------------|----|
| YES..... | 1 |
| NO..... | 2 |
| REFUSED..... | -7 |
| DON'T KNOW..... | -8 |

The next few questions are about health conditions you might have.

C16. During the past three months, did you have low back pain that lasted a whole day or more? Do not report aches and pains that are fleeting or minor.

- YES..... 1
- NO..... 2
- REFUSED..... -7
- DON'T KNOW..... -8

C17. Has a doctor or other health professional told you on two or more different visits with you that you had hypertension, also called high blood pressure?

- YES..... 1
- NO..... 2 → GO TO C19
- REFUSED..... -7
- DON'T KNOW..... -8

C18. Are you currently taking medicine for your high blood pressure?

- YES..... 1
- NO..... 2
- REFUSED..... -7
- DON'T KNOW..... -8

C19. Have you ever been told by a doctor or other health professional that you had...

	YES	NO	RE	DK
a. coronary heart disease?.....	1	2	-7	-8
b. angina, also called angina pectoris?.....	1	2	-7	-8
d. any kind of heart condition or heart disease other than the ones already mentioned?..... (SPECIFY)_____	1	2	-7	-8
e. diabetes or sugar diabetes?..... [IF FEMALE, READ... <u>Don't include</u> diabetes only during pregnancy, otherwise known as gestational diabetes.]	1	2	-7	-8
f. emphysema?.....	1	2	-7	-8
g. obstructive lung disease or chronic lower respiratory disease?...	1	2	-7	-8

C20. Blood cholesterol is a fatty substance found in the blood. Have you ever had your blood cholesterol checked?

- YES..... 1
- NO..... 2 → GO TO C23
- REFUSED..... -7
- DON'T KNOW..... -8

C21. Have you ever been told by a doctor, nurse or other health professional that your blood cholesterol is high?

YES.....	1	
NO.....	2	→ GO TO C23
REFUSED.....	-7	
DON'T KNOW.....	-8	

C22. Are you currently taking medicine to lower your cholesterol?

YES.....	1	
NO.....	2	
REFUSED.....	-7	
DON'T KNOW.....	-8	

C23. Have you ever been told by a doctor or other health professional that you had cancer or a malignancy of any kind?

YES.....	1	
NO.....	2	□
REFUSED.....	-7	□ GO TO C25
DON'T KNOW.....	-8	□

C24. What kind of cancer was it? PROBE: Any other type?

		How old were you when you were diagnosed?
BLADDER.....	1	<input type="text"/> <input type="text"/>
BLOOD.....	2	<input type="text"/> <input type="text"/>
BONE.....	3	<input type="text"/> <input type="text"/>
BRAIN.....	4	<input type="text"/> <input type="text"/>
BREAST.....	5	<input type="text"/> <input type="text"/>
CERVIX.....	6	<input type="text"/> <input type="text"/>
COLON.....	7	<input type="text"/> <input type="text"/>
ESOPHAGUS.....	8	<input type="text"/> <input type="text"/>
GALLBLADDER.....	9	<input type="text"/> <input type="text"/>
KIDNEY.....	10	<input type="text"/> <input type="text"/>
LARYNX-WINDPIPE.....	11	<input type="text"/> <input type="text"/>
LEUKEMIA.....	12	<input type="text"/> <input type="text"/>
LIVER.....	13	<input type="text"/> <input type="text"/>
LUNG.....	14	<input type="text"/> <input type="text"/>
LYMPHOMA.....	15	<input type="text"/> <input type="text"/>
MELANOMA.....	16	<input type="text"/> <input type="text"/>
MOUTH/TONGUE/LIP.....	17	<input type="text"/> <input type="text"/>
OVARY.....	18	<input type="text"/> <input type="text"/>
PANCREAS.....	19	<input type="text"/> <input type="text"/>
PROSTATE.....	20	<input type="text"/> <input type="text"/>
RECTUM.....	21	<input type="text"/> <input type="text"/>
SKIN (NON-MELANOMA)	22	
SKIN (DON'T KNOW WHAT KIND).....	23	<input type="text"/> <input type="text"/>
SOFT TISSUE (MUSCLE OR FAT).....	24	<input type="text"/> <input type="text"/>
STOMACH.....	25	<input type="text"/> <input type="text"/>
TESTIS.....	26	<input type="text"/> <input type="text"/>
THROAT-PHARYNX.....	27	<input type="text"/> <input type="text"/>
THYROID.....	28	<input type="text"/> <input type="text"/>
UTERUS.....	29	<input type="text"/> <input type="text"/>
OTHER.....	91	<input type="text"/> <input type="text"/>
(SPECIFY) _____		
REFUSED.....	-97	
DON'T KNOW.....	-99	

The next few questions are about your sleep patterns.

C25. When you are on a delivery run that takes more than one day, how many total hours of sleep do you usually get in a 24 hour period?

TOTAL NUMBER OF HOURS.....||

REFUSED..... -7
 DON'T KNOW..... -8

C26. Is this sleep usually continuous or broken up? For example, if you had slept for 8 hours, was that 8 uninterrupted hours or was it broken into several rest periods?

- BROKEN UP..... 1
- CONTINUOUS..... 2
- REFUSED..... -7
- DON'T KNOW..... -8

C27. How many hours of sleep would you like to get during a 24 hour period?

- HOURS.....|_|_|
- REFUSED..... -7
- DON'T KNOW..... -8

C28. Considering your work schedule, how many days did you have the opportunity to sleep at home in the last 30 days?

- NUMBER OF DAYS.....|_|_|
- REFUSED..... -7
- DON'T KNOW..... -8

C29. Where do you usually take your longest sleep period on days that you drive your truck? Is it...

- In a motel,..... 1
- At home,..... 2
- In the truck, or..... 3
- Somewhere else?..... 4
- (SPECIFY) _____
- REFUSED..... -7
- DON'T KNOW..... -8

INTERVIEWER NOTE:

GIVE SHOW CARD TO RESPONDENT.

C30. The following questions refer to your behavior while sleeping or trying to sleep. On a scale from zero, meaning you never do this or have never been told you do this while sleeping or trying to sleep, to 5 meaning this happens 5 – 7 times or more per week while sleeping or trying to sleep, please tell me the one number that best describes how each statement applies to you in the past month.

	NEVER	RARELY, LESS THAN ONCE A WEEK	1-2 TIMES PER WEEK	3-4 TIMES PER WEEK	5-7 TIMES PER WEEK
a. Loud snoring?.....	1	2	3	4	5
b. Snorting or gasping?.....	1	2	3	4	5
c. Your breathing stops or you struggle for breath?.....	1	2	3	4	5

INTERVIEWER NOTE:

TAKE SHOW CARD FROM RESPONDENT.

C31. In the past month, have you used alcohol to help you fall asleep?

YES.....	1
NO.....	2
REFUSED.....	-7
DON'T KNOW.....	-8

INTERVIEWER NOTE:

GIVE SHOW CARD TO RESPONDENT.

C32. I'm going to read you a list of activities. Please rate the likelihood that you might doze off or fall asleep during each. Use a scale from 1 to 4, with 1 being "I would never doze or fall asleep," 2 being "there would be a slight chance," 3 being "there is a moderate chance," and 4 being "that it would be highly likely that you would doze off or fall asleep." Think about your usual way of life in recent times when answering.

	WOULD NEVER DOZE	SLIGHT CHANCE	MODERATE CHANCE	HIGH CHANCE	RE	DK
a. Sitting and reading?.....	1	2	3	4	-7	-8
b. Watching TV?.....	1	2	3	4	-7	-8
c. Sitting inactive in a public place such as a theatre or meeting?.....	1	2	3	4	-7	-8
d. As a passenger in a vehicle for an hour without a break?.....	1	2	3	4	-7	-8
e. Lying down in the afternoon when circumstances permit?.....	1	2	3	4	-7	-8
f. Sitting and talking to someone?.....	1	2	3	4	-7	-8
g. Sitting quiet after a lunch <u>without</u> alcohol?.....	1	2	3	4	-7	-8
h. In a vehicle, while stopped for a few minutes in traffic?.....	1	2	3	4	-7	-8

INTERVIEWER NOTE:

TAKE SHOW CARD FROM RESPONDENT.

C33. Keeping in mind that all of your responses are anonymous, have you ever nodded off or fallen asleep while driving your truck?

- YES..... 1
- NO..... 2 □
- REFUSED..... -7 □ GO TO C35
- DON'T KNOW..... -8 □

C33a. How often do you estimate this has happened in the last 3 months?

Would you say...

- Once per day,..... 1
- Once per week,..... 2
- Once per month, or..... 3
- Only one or two times in the last three months?.. 4
- REFUSED..... -7
- DON'T KNOW..... -8

C34. In the last 2 days, have you used medications or drugs to help you stay awake while driving? Some examples include Sudafed, Ritalin, methamphetamines (“meth”), or Provigil. Please exclude caffeine when answering.

- YES..... 1
- NO..... 2
- REFUSED..... -7
- DON'T KNOW..... -8

INTERVIEWER NOTE:
GIVE SHOW CARD TO RESPONDENT.

C35. Now I'm going to read you some statements about how you may or may not feel during your work as a truck driver. On a scale from zero, meaning “not at all likely” to agree with the statement to 5 meaning “very likely” to agree with the statement, please tell me the number that best indicates how likely it would be for you to agree with each statement. Think about your work since last _____ **[INTERVIEWER: INSERT THE DAY OF THE WEEK THAT WAS 7 AGO]** when answering.

	NOT AT ALL LIKELY					VERY LIKELY	RE	DK
a. After several days with lots of loading and unloading I can't do my work so well because I am too tired.....0	1	2	3	4	5		-7	-8
b. After a long day at work I have enough energy to tackle anything.....0	1	2	3	4	5		-7	-8
c. During the working day I need extra breaks.....0	1	2	3	4	5		-7	-8
d. After doing a lot of loading and unloading for some days, I feel physically exhausted.....0	1	2	3	4	5		-7	-8
e. When I have driven all day, it's hard for me to unwind.....0	1	2	3	4	5		-7	-8
f. After work I relax easily.....0	1	2	3	4	5		-7	-8
g. I sleep well.....0	1	2	3	4	5		-7	-8
h. I usually fall asleep easily.....0	1	2	3	4	5		-7	-8
i. I sleep uneasily.....0	1	2	3	4	5		-7	-8
j. When I wake up in sleep, it's hard for me to fall asleep again.....0	1	2	3	4	5		-7	-8

INTERVIEWER NOTE:
TAKE SHOW CARD FROM RESPONDENT.

INTERVIEWER NOTE:

GIVE SHOW CARD TO RESPONDENT.

C36. I am going to read some statements about how fatigue or tiredness might affect you. On a scale from zero, which means “not at all fatigued,” to 10, which means “as fatigued as I could be,” please tell me the number that best indicates how the statement describes your level of fatigue since last _____ **[INTERVIEWER: INSERT THE DAY OF THE WEEK THAT WAS 7 DAYS AGO]**

	NOT AT ALL FATIGUED										AS FATIGUED AS I COULD BE										RE	DK		
a. Your level of fatigue on the day you felt most fatigued.....	0	1	2	3	4	5	6	7	8	9	10	0	1	2	3	4	5	6	7	8	9	10	-7	-8
b. Your level of fatigue on the day you felt least fatigued.....	0	1	2	3	4	5	6	7	8	9	10	0	1	2	3	4	5	6	7	8	9	10	-7	-8
c. Your average level of fatigue.....	0	1	2	3	4	5	6	7	8	9	10	0	1	2	3	4	5	6	7	8	9	10	-7	-8
d. Your level of fatigue right now	0	1	2	3	4	5	6	7	8	9	10	0	1	2	3	4	5	6	7	8	9	10	-7	-8

INTERVIEWER NOTE:

ASK RESPONDENT TO TURN OVER SHOW CARD.

C36a. Continuing with statements about how fatigue or tiredness might affect you, please rate the following statements on a scale of zero, which means “no interference,” to 10, which means “extreme interference.” Again, base your answers on the time since last _____ **[INTERVIEWER: INSERT THE DAY OF THE WEEK THAT WAS 7 DAYS AGO]**

	NO INTERFERENCE										EXTREME INTERFERENCE										RE	DK		
a. How much fatigue interfered with your general level of activity	0	1	2	3	4	5	6	7	8	9	10	0	1	2	3	4	5	6	7	8	9	10	-7	-8
b. How much fatigue interfered with your leisure activities	0	1	2	3	4	5	6	7	8	9	10	0	1	2	3	4	5	6	7	8	9	10	-7	-8
c. How much fatigue interfered with your work	0	1	2	3	4	5	6	7	8	9	10	0	1	2	3	4	5	6	7	8	9	10	-7	-8
d. How much fatigue interfered with your ability to concentrate	0	1	2	3	4	5	6	7	8	9	10	0	1	2	3	4	5	6	7	8	9	10	-7	-8
e. How much fatigue interfered with your relations with other people	0	1	2	3	4	5	6	7	8	9	10	0	1	2	3	4	5	6	7	8	9	10	-7	-8
f. How much fatigue interfered with your enjoyment of life	0	1	2	3	4	5	6	7	8	9	10	0	1	2	3	4	5	6	7	8	9	10	-7	-8
g. How much fatigue interfered with your mood	0	1	2	3	4	5	6	7	8	9	10	0	1	2	3	4	5	6	7	8	9	10	-7	-8

INTERVIEWER NOTE:

TAKE SHOW CARD FROM RESPONDENT.

C37. Please Indicate **how many days**, in the period since last _____ **[INTERVIEWER: INSERT THE DAY OF THE WEEK THAT WAS 7 DAYS AGO]** you felt fatigued for any part of the day.

DAYS.....|__|
RANGE 0-7

REFUSED..... -7
DON'T KNOW..... -8

C38. On a scale of 0 to 10 with 0 being “none of the day” and 10 being “the entire day,” please rate how much of the day, on average, you felt fatigued since last _____ **[INTERVIEWER: INSERT THE DAY OF THE WEEK THAT WAS 7 DAYS AGO]**

0	1	2	3	4	5	6	7	8	9	10
NONE OF THE DAY										THE ENTIRE DAY

D. TRUCK CRASHES AND WORK-RELATED INJURIES

The next set of questions is about work-related crashes and injuries.

D1. In your career as a truck driver, have you ever been in a truck crash, either as a driver or as a team member? Include only those crashes that occurred on the road and were attended by a police officer. Do not include crashes that occurred in a parking lot or terminal.

YES..... 1
NO..... 2 □
REFUSED..... -7 □ GO TO D7
DON'T KNOW..... -8 □

D2. How many of these crashes have you had?

NUMBER OF CRASHES.....|_|_|
REFUSED..... -7
DON'T KNOW..... -8

INTERVIEWER NOTE:

IF D2 = 1, READ “this” IN D3. OTHERWISE, READ “your first.”

D3. In what year was [this/your first] crash?

YEAR.....|_|_|_|_|
REFUSED..... -7
DON'T KNOW..... -8

INTERVIEWER NOTE:

IF D2 = 1, GO TO D3b.

D3a. In what year was your most recent crash?

YEAR.....|_|_|_|_|
REFUSED..... -7
DON'T KNOW..... -8

INTERVIEWER NOTE:

IF D2 = 1, READ “this” IN D3b. OTHERWISE, READ “your most recent.”

D3b. In [this/your most recent] crash, were you the driver or a team member?

DRIVER..... 1
 TEAM MEMBER..... 2
 OTHER..... 91
 (SPECIFY) _____
 REFUSED..... -7
 DON'T KNOW..... -8

D4. As a result of the crash, did you suffer any injuries that required immediate medical attention?

YES..... 1
 NO..... 2 □
 REFUSED..... -7 □ GO TO D7
 DON'T KNOW..... -8 □

D5. Where did you first receive medical attention for the injury?

ON-SITE MEDICAL TREATMENT..... 1
 EMERGENCY DEPARTMENT/HOSPITAL..... 2
 DOCTORS' OFFICE..... 3
 COMPANY CLINIC..... 4
 DID NOT RECEIVE MEDICAL ATTENTION..... 5 → GO TO D6
 OTHER..... 91
 SPECIFY _____
 REFUSED..... -7
 DON'T KNOW..... -8

D5a. How was the medical treatment paid? Was it by...

	YES	NO	RE	DK
a. Insurance?.....	1	2	-7	-8
b. Self – cash payment?.....	1	2	-7	-8
c. Not paid?.....	1	2	-7	-8
d. Some other way?.....	1	2	-7	-8
(SPECIFY) _____				

INTERVIEWER NOTE:

IF D5aa = 1, GO TO D5b. OTHERWISE, GO TO D6.

D5b. Whose insurance was it? Was it...

	YES	NO	RE	DK
a. Worker's compensation?.....	1	2	-7	-8
b. The insurance carried by your company?.....	1	2	-7	-8
c. The insurance carried by you, your spouse, or partner?.....	1	2	-7	-8
d. The insurance carried by the other party?.....	1	2	-7	-8
e. Other?.....	1	2	-7	-8
(SPECIFY) _____				

D6. Did you miss any work days due to this injury?

YES..... 1
 NO..... 2 □
 REFUSED..... -7 □ GO TO D7
 DON'T KNOW..... -8 □

D6a. How many work days did you miss [due to this injury]?

DAYS.....|_|_|
 REFUSED..... -7
 DON'T KNOW..... -8

D6b. Did you file a worker's compensation claim?

YES..... 1
 NO..... 2 □
 REFUSED..... -7 □ GO TO D7
 DON'T KNOW..... -8 □

D6c. Did you receive worker's compensation?

YES..... 1
 NO..... 2
 REFUSED..... -7
 DON'T KNOW..... -8

D7. Since last _____ **[INTERVIEWER: INSERT THE DAY OF THE WEEK THAT WAS 7 DAYS AGO]**, have you had "a near miss" that made you feel lucky not to have been in a crash?

YES..... 1
 NO..... 2 □
 REFUSED..... -7 □ GO TO D8
 DON'T KNOW..... -8 □

D7a. How many times since last _____ **[INTERVIEWER: INSERT THE DAY OF THE WEEK THAT WAS 7 DAYS AGO]** have you had "a near miss?"

NUMBER OF TIMES.....|_|_|
 REFUSED..... -7
 DON'T KNOW..... -8

The next set of questions is about any injuries you received on the job as a truck driver but were not a result of a truck crash. This could include injuries that you received while doing any part of your job as a truck driver—for example, loading or unloading.

D8. During the last three years, did you receive any injuries on your job for which you visited a doctor or other health professional?

- YES..... 1
- NO..... 2 □
- REFUSED..... -7 □ GO TO SECTION E
- DON'T KNOW..... -8 □

D9. How many of these on-the-job injuries did you have during the last three years?

- NUMBER OF INJURIES.....|_|_|
- REFUSED..... -7
- DON'T KNOW..... -8

The following questions are about the most recent injury you had. Please keep in mind that these injuries should not have been as a result of a truck crash.

D10. Which of the following best describe the type of injury or injuries you received. Was it a...

- | | YES | NO | RE | DK |
|---------------------------|-----|----|----|----|
| a. Sprain or strain?..... | 1 | 2 | -7 | -8 |
| b. Fracture?..... | 1 | 2 | -7 | -8 |
| c. Something else?..... | 1 | 2 | -7 | -8 |

(SPECIFY)_____

D11. Again, thinking about your most recent injury, what part or parts of your body were injured? Was it your...

- | | YES | NO | RE | DK |
|--------------------------------|-----|----|----|----|
| a. Back?..... | 1 | 2 | -7 | -8 |
| b. Neck?..... | 1 | 2 | -7 | -8 |
| c. Hands, wrist, or arms?..... | 1 | 2 | -7 | -8 |
| d. Legs?..... | 1 | 2 | -7 | -8 |
| e. Feet?..... | 1 | 2 | -7 | -8 |
| f. Something else?..... | 1 | 2 | -7 | -8 |

(SPECIFY)_____

D12. How did it occur? Was it...

- Contact with object or equipment,..... 1
- Fall on same level,..... 2
- Fall to lower level,..... 3
- Assault, or..... 4
- Something else?..... 5
- (SPECIFY) _____
- REFUSED..... -7
- DON'T KNOW..... -8

D13. What were you doing when the injury occurred? Were you...

- Getting in/getting out of truck,..... 1
- Loading/unloading,..... 2
- Spreading a tarp,..... 3
- Doing truck maintenance, or..... 4
- Doing something else?..... 5
- (SPECIFY) _____
- REFUSED..... -7
- DON'T KNOW..... -8

D14. Where did the injury occur? Was it...

- On the road,..... 1
- At a truck stop or rest area,..... 2
- At company headquarters,..... 3
- At a loading or unloading dock, or..... 4
- Somewhere else?..... 5
- (SPECIFY) _____
- REFUSED..... -7
- DON'T KNOW..... -8

D15. Where did you first receive medical attention for the injury?

- ON-SITE MEDICAL TREATMENT..... 1
- EMERGENCY DEPARTMENT..... 2
- DOCTOR'S OFFICE..... 3
- COMPANY CLINIC..... 4
- DIDN'T RECEIVE MEDICAL ATTENTION..... 5 → GO TO D17
- OTHER..... 91
- (SPECIFY) _____
- REFUSED..... -7
- DON'T KNOW..... -8

D16. Were you hospitalized due to this injury?

YES..... 1
NO..... 2
REFUSED..... -7
DON'T KNOW..... -8

D16a. How was the medical treatment paid? Was it by...

	YES	NO	RE	DK
a. Insurance?.....	1	2	-7	-8
b. Self – cash payment?.....	1	2	-7	-8
c. Not paid?.....	1	2	-7	-8
d. Some other way?..... (SPECIFY)_____	1	2	-7	-8

INTERVIEWER NOTE:

IF D16aa = 1, GO TO D16b. OTHERWISE, GO TO D17.

D16b. Whose insurance was it?

	YES	NO	RE	DK
a. Worker's compensation?.....	1	2	-7	-8
b. The insurance carried by your company?.....	1	2	-7	-8
c. The insurance carried by you, your spouse, or partner?.....	1	2	-7	-8
d. The insurance carried by the other party?.....	1	2	-7	-8
e. Other?..... (SPECIFY)_____	1	2	-7	-8

D17. Did you miss any work days due to this injury?

YES..... 1
NO..... 2 □
REFUSED..... -7 □ GO TO D18
DON'T KNOW..... -8 □

D17a. How many work days did you miss [due to this injury]?

DAYS.....|_|_|_|

REFUSED..... -7
DON'T KNOW..... -8

D18. Did you file worker's compensation claim?

YES..... 1
NO..... 2 → GO TO D18b
REFUSED..... -7 → GO TO D19
DON'T KNOW..... -8 → GO TO D19

D18a. Did you receive worker's compensation?

- YES..... 1 ☐
- NO..... 2 ☐ GO TO SECTION E
- REFUSED..... -7 ☐
- DON'T KNOW..... -8 ☐

D18b. Why didn't you file a worker's compensation claim?

D19. Did you report this injury to your employer?

- YES..... 1
- NO..... 2
- REFUSED..... -7
- DON'T KNOW..... -8

E. JOB-RELATED TRAINING

Now I have some questions about any job-related training you have received while employed as a truck driver.

E1. Do you think that you have received enough training to perform your job safely and competently?

YES.....	1
NO.....	2
REFUSED.....	-7
DON'T KNOW.....	-8

E2. I'm going to read you a list of health and safety topics. Have you received training in a classroom setting for each of these in the last 12 months?

	YES	NO	RE	DK
a. Federal regulations concerning trucking safety, such as the Hours of Service regulation?.....	1	2	-7	-8
b. Safe driving practices and/or defensive driving?.....	1	2	-7	-8
c. Proper lifting techniques?.....	1	2	-7	-8
d. Fall prevention?.....	1	2	-7	-8
e. Vehicle maintenance and safety checks?.....	1	2	-7	-8
f. Security procedures and awareness?.....	1	2	-7	-8
g. Assault prevention?.....	1	2	-7	-8

F. COMPANY SAFETY CLIMATE/CULTURE
--

The next set of questions is about the safety policies of the company for whom you currently work.

F1. Are you currently working within a company?

YES.....	1	
NO.....	2	□
REFUSED.....	-7	□ GO TO F6
DON'T KNOW.....	-8	□

F2. Does the company offer safety awards/incentives?

YES.....	1
NO.....	2
REFUSED.....	-7
DON'T KNOW.....	-8

F3. Does the company have safety programs, written policies, rules, or guidelines regarding workplace safety?

YES.....	1
NO.....	2
REFUSED.....	-7
DON'T KNOW.....	-8

F4. Does the company use a satellite-based system, such as Qual-com to communicate about the location of your truck?

YES.....	1	
NO.....	2	□
REFUSED.....	-7	□ GO TO F5
DON'T KNOW.....	-8	□

F4a. Do you like, dislike, or have no feeling about this technology?

LIKE.....	1
DISLIKE.....	2
NEITHER LIKE NOR DISLIKE.....	3
REFUSED.....	-7
DON'T KNOW.....	-8

F5. Now I'm going to read you a list of statements about worker safety. Please tell me whether you strongly disagree, disagree, agree, or strongly agree with each of these statements.

	STRONGLY DISAGREE		STRONGLY AGREE		RE	DK
a. The safety of workers is a high priority with management where I work.....	0	1	2	3	-7	-8
b. There are no significant compromises or shortcuts taken when worker safety is at stake....	0	1	2	3	-7	-8
c. Where I work, employees and management work together to ensure the safest possible working conditions.....	0	1	2	3	-7	-8

F6. What do you usually do when a dispatcher/shipper assigns an unrealistic delivery time? Do you usually...

Refuse the load or renegotiate the time,.....	1
Take the load,.....	2
Do something else?.....	3
(SPECIFY) _____	
DISPATCHER DOES NOT ASSIGN AN UNREALISTICALLY TIGHT DELIVERY TIME	4
NO DISPATCHER.....	5
REFUSED.....	-7
DON'T KNOW.....	-8

G. OTHER SAFETY RELATED QUESTIONS

G1. When you are on a trip, how many hours do you usually drive before stopping for gas, food, or for rest?

NUMBER OF HOURS.....|_|_|

REFUSED..... -7

DON'T KNOW..... -8

INTERVIEWER NOTE:

GIVE SHOW CARD TO RESPONDENT.

G2. I'm going to read you a list of reasons why truck drivers **may** continue to drive despite fatigue, bad weather, or heavy traffic. Please tell me whether you often, sometimes, or never drive in hazardous situations due to each of the following reasons:

	OFTEN	SOME-TIMES	NEVER	RE	DK
a. You're on a tight schedule?.....	1	2	3	-7	-8
b. The 14-hour continuous shift?.....	1	2	3	-7	-8
c. You need to make more money?.....	1	2	3	-7	-8
d. Delays associated with dispatching?.....	1	2	3	-7	-8
e. Delays associated with loading/ unloading?.....	1	2	3	-7	-8
f. Some other reason?..... (SPECIFY)_____	1	2	3	-7	-8

G3. How often do you do the following while driving a truck at work? Would you say often, sometimes, or never?

	OFTEN	SOME-TIMES	NEVER	RE	DK
a. Wear a seatbelt?.....	1	2	3	-7	-8
b. Load and unload your truck	1	2	3	-7	-8
c. Get frustrated by other drivers on the road?....	1	2	3	-7	-8
d. Get frustrated by operations at the loading dock?.....	1	2	3	-7	-8
e. Drive 10 miles or more faster than the speed limit.....	1	2	3	-7	-8

G4. Remembering that this survey is anonymous, how many moving violations have you received while on duty in the last 12 months?

NUMBER OF MOVING VIOLATIONS|_|_|_|

REFUSED..... -7

DON'T KNOW..... -8

G5. In your driving experience over the past 12 months, how often do the following situations occur? Would you say often, sometimes, or never?

	OFTEN	SOME-TIMES	NEVER	RE	DK
a. You must deliver or pick up a load at a given time?.....	1	2	3	-7	-8
b. You receive an unrealistically tight delivery schedule?.....	1	2	3	-7	-8
c. The time you are allotted for loading and unloading is unrealistically tight?.....	1	2	3	-7	-8
d. Your delivery is later than scheduled?.....	1	2	3	-7	-8
e. Traffic congestion delays your deliveries significantly?.....	1	2	3	-7	-8
f. The Hours-of-Service rules are violated?.....	1	2	3	-7	-8
g. You arrive on time but are forced to wait to enter a dock?.....	1	2	3	-7	-8
h. The dispatcher works with you to get home as scheduled?.....	1	2	3	-7	-8

INTERVIEWER NOTE:
TAKE SHOW CARD FROM RESPONDENT.

G6. I'm going to read you some activities that may or may not improve safety for truck drivers. Using a scale from 0, which means "not at all" to 5, which means "very much," please rate how well each statement describes how you feel about whether or not the activity would improve safety.

INTERVIEWER NOTE:
GIVE SHOW CARD TO RESPONDENT.

	NOT AT ALL					VERY MUCH					RE	DK		
a. Strictly enforce for carrier and driver hours-of-service (HOS) violations.....	0	1	2	3	4	5	0	1	2	3	4	5	-7	-8
b. Strictly enforce for traffic violations in car and truck drivers.....	0	1	2	3	4	5	0	1	2	3	4	5	-7	-8
c. Keep the current hours-of-service (HOS) regulations.....	0	1	2	3	4	5	0	1	2	3	4	5	-7	-8
d. Increase the current speed limit by 10 miles.....	0	1	2	3	4	5	0	1	2	3	4	5	-7	-8
e. Decrease the current speed limit 10 miles.....	0	1	2	3	4	5	0	1	2	3	4	5	-7	-8
f. Require speed governors for all large trucks.....	0	1	2	3	4	5	0	1	2	3	4	5	-7	-8
g. Build more roads.....	0	1	2	3	4	5	0	1	2	3	4	5	-7	-8
h. Build more truck stops/parking area.....	0	1	2	3	4	5	0	1	2	3	4	5	-7	-8
i. Pay drivers by the hour for driving time.....	0	1	2	3	4	5	0	1	2	3	4	5	-7	-8

j. Require rest breaks..... 0 1 2 3 4 5 | -7 -8

H. DEMOGRAPHICS

H1. Do you consider yourself to be Hispanic or Latino?

INTERVIEWER NOTE:

IF RESPONDENT IS UNSURE, READ THE FOLLOWING: "This would include Spanish, Mexican, Mexican-American, Chicano, Puerto Rican, Cuban, Dominican (Republic), Central or South American, Other Latin American or Other Hispanic/Latino."

YES.....	1
NO.....	2
REFUSED.....	-7
DON'T KNOW.....	-8

INTERVIEWER NOTE:

GIVE SHOW CARD TO RESPONDENT.

H2. What race or races do you consider yourself to be? Please select the ones which best describe you. PROBE: Anything else?

	YE	NO	RE	DK
	S			
WHITE.....	1	2	-7	-8
BLACK OR AFRICAN AMERICAN.....	1	2	-7	-8
ASIAN.....	1	2	-7	-8
AMERICAN INDIAN OR ALASKA NATIVE.....	1	2	-7	-8
NATIVE HAWAIIAN OR OTHER PACIFIC ISLANDER.....	1	2	-7	-8
SOME OTHER RACE.....	1	2	-7	-8
(SPECIFY) _____				

INTERVIEWER NOTE:

TAKE SHOW CARD FROM RESPONDENT.

H3. Are you now married, widowed, divorced, separated, or never been married?

NOW MARRIED.....	1
WIDOWED.....	2
DIVORCED.....	3
SEPARATED.....	4
NEVER MARRIED.....	5
REFUSED.....	-7
DON'T KNOW.....	-8

H4. What is the highest grade of school or college that you completed? Was it...

- LESS THAN HIGH SCHOOL (8th GRADE OR LESS)..... 1
- SOME HIGH SCHOOL (9th – 12th GRADE)..... 2
- HIGH SCHOOL DIPLOMA/GED..... 3
- VOCATIONAL/TECHNICAL SCHOOL..... 4
- SOME COLLEGE (NO DEGREE)..... 5
- ASSOCIATE DEGREE..... 6
- COLLEGE/GRADUATE DEGREE..... 7
- REFUSED..... -7
- DON'T KNOW..... -8

H5. What is your current personal annual income from the trucking industry?

ANNUAL INCOME.....|_|_|_|_|_|_|_| → GO TO H6

- REFUSED..... -7
- DON'T KNOW..... -8

H5a. Would you say it is...

- Under \$20,000,..... 1
- \$20,001 - \$30,000,..... 2
- \$30,001 - \$40,000,..... 3
- \$40,001 - \$50,000,..... 4
- \$50,001 - \$60,000,..... 5
- \$60,001 - \$70,000,..... 6
- \$70,001 - \$80,000,..... 7
- Over \$80,000?..... 8
- REFUSED..... -7
- DON'T KNOW..... -8

H6. We think this survey will provide useful information about safety and health of truck drivers. I'm going to read you a list of some ways that the information we learn can be shared. Please tell me what you think are the top 3 ways to share what we learned with other drivers. Some ways are...

INTERVIEWER NOTE:
READ ALL RESPONSE OPTIONS AND THEN LET RESPONDENT PICK 3.

	YES	NO	RE	DK
AM/FM radio.....	1	2	-7	-8
Satellite radio.....	1	2	-7	-8
Television.....	1	2	-7	-8
Truck stops.....	1	2	-7	-8
Postings through your employer.....	1	2	-7	-8
Union postings.....	1	2	-7	-8
Internet website postings.....	1	2	-7	-8
Trucking magazines/publications.....	1	2	-7	-8
Something else?.....	1	2	-7	-8
(SPECIFY)_____				
OTHER.....	1	2	-7	-8
(SPECIFY1)_____				
OTHER.....	1	2	-7	-8
(SPECIFY2)_____				
OTHER.....	1	2	-7	-8
(SPECIFY3)_____				

The remainder of this questionnaire is to be completed only by you. Remember that all of your responses are anonymous. We are interested in learning the amount of time you spent driving/on duty, off duty/not working, and sleeping for the past two days and today. A familiar format is used to make this task easy for you, however, we are **not** interested in your HOS-logged driving time; **only** your honest and best estimate for the hours you spent on these activities— For example, the number of hours you actually slept and not simply the hours you spent in the sleeper berth. When you are finished, please put your questionnaire in this locked box. No one will access this box until all of the questionnaires from this site are completed.

Thank you for participating in this survey.

INTERVIEWER NOTE:
HAND RESPONDENT THE PAPER WITH DRIVER SLEEP AND ACTIVITY DIARY TO ANSWER ON THEIR OWN.

Appendix F

Activity Diary

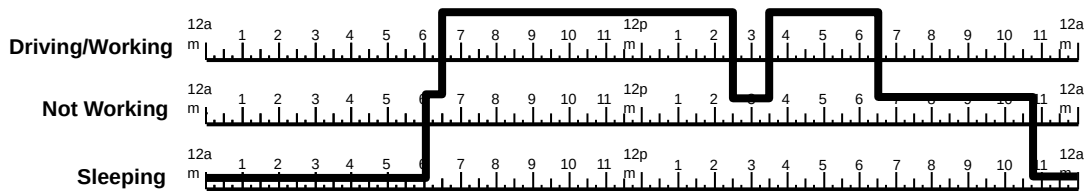
Driver Sleep and Activity Diary

Instructions: We are interested in learning the amount of time you spent driving/on duty, off duty/not working, and sleeping for the **PAST TWO DAYS AND TODAY**. A familiar format is used to make this task easy for you.

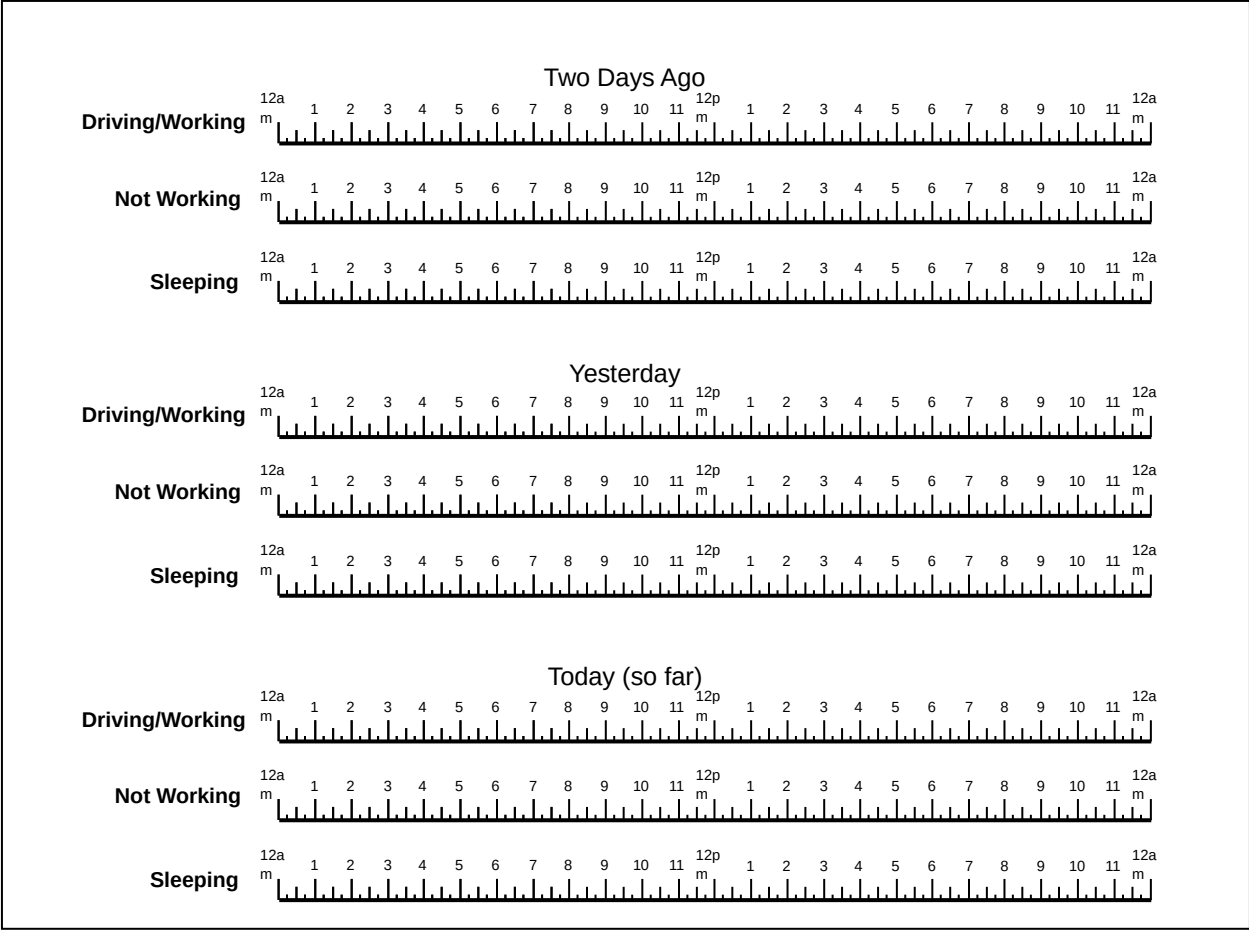
We are **NOT** interested in your Hours of Service (HOS)-logged driving time; only your honest and best estimate for the hours you spent on these activities— For example, the number of hours you actually slept and not simply the hours you spent in the sleeper berth.

Keep in mind that this survey is completely anonymous.

The example below shows how we would like you to indicate the hours you spent on these activities. Draw a continuous line to show the time spent on these activities.



Please indicate on the back of this page your driving, off-duty, and sleep activities for the previous two days, as well as so far today.



Appendix G

Supplemental Questions

1. Was there anything in the questionnaire that you were uncomfortable answering or that was unclear?
2. I asked you for your height and weight. If an interviewer asked you to get on a scale, would you be willing to do so? Would you be willing to have your height measured? How about if an interviewer asked you what your waist size is? Would you be able to accurately answer that question? Would you be willing to let an interviewer measure your waist?
3. For participating in this study, you are being given a \$25 gift card for use at this truck stop. Do you think that is a good "thank you?" [IF NOT - ASK WHAT THEY WOULD PREFER]
4. Is there anything about the way the study is being done, from approaching you as you entered the building, to going through the questionnaire, to filling out the activity diary that you don't think worked well?