CONSTRUCTION SAFETY PRACTICES AND IMMIGRANT WORKERS: A PILOT STUDY

A Report for the Center to Protect Workers' Rights

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EXECUTIVE SUMMARY

This report is based on surveys conducted with fifty immigrant construction workers in South Florida in 2003. The survey elicited information on the training, personal protective safety practices, and employer safety policies and practices of these workers. It also collected demographic data and information on non-safety employer practices, such as workers compensation coverage, health care coverage, pension coverage, irregular payment practices (such as in cash or as a sham "independent contractor"), etc.

The purpose of the study is threefold:

(1) To document the safety conditions and experiences of these workers, as well as other conditions they face that may be related to their treatment in the safety area;

(2) To look for any significant relationships between their safety conditions (measured by degree of safety training, use of personal protective equipment, and employer safety policies and practices) and other factors that theory and previous evidence indicate are probably related (length of residence in the U.S., length of time working in the U.S. construction industry, unionized/non-unionized status, documented/undocumented status, and unskilled/skilled status); and

(3) To undertake a preliminary analysis of the results to see if any public policy measures may be promising ways to improve the safety conditions of these workers.

Although the sample size is small and is not a random sample, the pool of respondents does have considerable similarity in many respects to our best estimate of the local immigrant construction worker population. Haitians and union workers were intentionally over sampled so that there are enough of these categories of workers to make for meaningful comparisons. But in many other respects, local construction contractors and union officials and knowledgeable workers have indicated that this sample at least captures the characateristics of a good number of south Florida immigrant construction workers.

Key findings

1. These South Florida immigrant construction workers are primarily Hispanics; have multiple skills and are surprisingly well educated; earn relatively low pay; and are usually not U.S. citizens although a majority is legally documented.

- Respondents come from 12 countries, primarily from Mexico, Central America, South America, or Caribbean islands.
- Respondents average 40 years of age, ranging from 19 to 60.

- They have resided in the U.S. an average of 15 years, ranging from a few months to 35 years.
- They have worked in the U.S. construction industry an average of 7.5 years, ranging from days to 30 years.
- They have multiple construction skills, and usually have worked in more than one trade. In this sample, the most often cited trades were carpentry, drywall installation, general labor, painting, roofing, plastering, plumbing and pipefitting, and numerous others.
- They earn relatively low wages. Twelve percent earn less than $15,000 per year; 42% earn less than $20,000 per year. Fully 56% earn less than $25,000 per year.
- While 32% have not completed high school, 36% have gone to college and 20% have earned a college or graduate degree. Forty two percent have taken formal schooling after high school.
- Twenty two percent are U.S. citizens. An identical 22% are not legally documented, and thus are in the country illegally. The remaining 56% are documented but not U.S. citizens.

2. These workers labor under extremely unsafe conditions.

- Sixteen percent had experienced a severe injury during the last three years of work, causing loss of at least a day's work. (This statistic includes 15 respondents who had not even worked in the industry for the full three years, making it likely that it is an undercount of the actual percentage).
- Such a severe injury had occurred 13 times in that 3 year period, making for an annual incidence rate of 4.33 for this sample of 50, or 8.7 per 100. This is more than triple the U.S. annual incidence rate for such injuries, and also more than triple that of Florida construction workers. Even if compared with the worst Florida accident statistics for the most dangerous construction sectors, the 8.7 per 100 incidence rate is more than double.
- If all days of work lost annually due to injuries and work-related illnesses are spread across the entire sample, it amounts to 3.5 work days a year for each respondent due to a serous injury and an additional 2.5 work days a year due to a work-related illness.
- Forty percent of the respondents had witnessed a work site accident requiring hospitalization during the past year.
- Sixteen percent had witnessed an accident causing death during their working career in construction. (The average construction working life of these respondents was 7.5 years.)

3. Training of these workers concerning safety and health issues is incomplete, usually in English, and frequently non-existent if they do not belong to a union

- For most types of safety and health training (OSHA, Scaffold, CPR/First Aid, Asbestos, and Hazardous), 50% or less have received any training.

- The vast majority of training is done in English, and a majority of that majority was provided without translation. Despite this, most claimed to understand the training.
- Unions provide most of the training; those who are not union members get little training.

4. Most workers use various types of personal protective equipment most of the time, but employer safety policies and practices are less consistent

- Eighty percent or more of respondents consistently wear work boots and wear a hard hat on the job; 50% or more consistently wear protective eyewear and use cutting tool guards. However, only about a quarter consistently use hearing or respiratory protection.
- Half or less of employers hold weekly safety meetings, provide copies of their safety program, or provide access to chemical MSDS sheets. Almost a third do not provide a body harness for work more than 6 feet off the ground, and over 40% do not use ground fault electrical outlets. On other measures, such as provision of scaffold hand rails, employers do better.

5. A certain number of employers engage in questionable, illegal, or irregular practices that would make it harder for an injured worker to be taken care of in the event of a serious injury

- Fifty percent of the respondents either did not have workers compensation coverage or did not know if they did.
- Twenty six percent had been paid in cash, rather than by check with deductions.
- Nine percent had been asked to dishonestly sign an independent contractor ("1099") government form.

6. Union membership and documented legal status are the two factors most consistently associated with positive safety outcomes (measured by safety training, use of personal protective equipment, and safer employer policies and practices). Lengths of time in the country and longevity in the industry have little impact on safety outcomes.

- Union membership is positively statistically related to all five types of safety training covered in the survey, at an extremely high level of significance.
- Union membership is positively statistically related to use of four of the seven types of personal protective equipment covered in the survey.
- Union membership is positively statistically related to the use of a body harness for work six feet or more above ground and provision of handrails on scaffolds. The relationship with other employer policies and practices, while usually in the expected direction, is not statistically significant.

- Documented legal status is statistically related positively with two of the five types of safety training covered in the survey: OSHA 10-hr. training and scaffold safety training.
- Documented legal status is statistically related positively with use of three of the seven types of personal protective equipment covered in the survey.
- Documented legal status is statistically related positively with provision of a copy of the employer's safety program and provision of handrails on scaffolds. The relationship with other employer policies and practices, while usually in the expected direction, is not statistically significant.
- Semi-skilled or skilled construction workers are more likely to receive OSHA 10-hr. training and scaffold safety training than are the unskilled (general laborers). However skill has no statistically significant relationship with any other safety outcome.
- Length of residence in the United States has no statistically significant relationship with virtually any measurable safety outcome, contrary to the expectations of the researcher at the beginning of the research.
- Likewise, length of employment in the U.S. construction industry has no statistically significant relationship with virtually any measurable safety outcome, once again contrary to initial expectations.

7. Simple passage of time, either within the country or within the industry, does not appear to significantly improve the safety outcomes for immigrant workers. Therefore public policy to improve the safety conditions of these vulnerable workers would do well to encourage the factors most closely related to better safety outcomes: unionization and documented legal status.

INTRODUCTION

Immigrants comprise an increasingly larger percentage of the total construction labor force in the United States. A large percentage of these workers are Hispanic. While statistics are harder to come by for all immigrant construction laborers, we have a wealth of statistics on Hispanic construction workers. Seventy percent of the 1.4 million Hispanic construction workers in the U.S. in 2000 were born outside the United States, and fifty seven percent were not U.S. citizens (Construction Chart Book: section 16). Hispanics increased from six percent of all construction workers in 1980 to fifteen percent in 2000 (Construction Chart Book: Chart 16b).

Clearly, immigrants in general, and Hispanics in particular, will continue to play an ever-more important role in construction labor. Therefore, it is important to investigate the conditions these workers face, both because they are an important segment of the workforce in their own right and because their treatment is likely to have an ever-larger impact on the treatment of all construction workers.

This study explores the safety and health training and safety and health conditions of immigrant construction workers in south Florida. It has several purposes. First, it aims to provide a general picture of the safety and related conditions of these workers, to provide a preliminary picture of how they are being trained and treated in the area of safety and health. Second, it aims to compare the resulting picture with what we know about the conditions of construction workers in general. Third, it will look for any patterns or relationships between safety training/conditions and other statuses/conditions of these workers. Because of the small number of workers surveyed, and because a truly "random sample" is impossible with this population, results can be only suggestive, not definitive. But it should provide preliminary evidence on the safety and health conditions of these workers and what factors seem to be related to less safety training and less safe workplace practices. To the extent that correlations show likely causal relationships, it is hoped that preliminary evidence will point to possible areas to remediate any safety and health deficiencies discovered. It will also point the way to further research needed to establish more definitely the factors involved in safety and health outcomes for immigrant construction workers.

The following section of this report briefly examines some of the literature relevant to the present study. Following that, the methodology of the current study will be explained. Then a section will summarize the characteristics of those surveyed and examine questions concerning how representative the sample is of the overall immigrant construction worker population. The next section will display the results from the survey answers, with a minimum of analysis or interpretation. The following section will present a number of hypotheses about what are the likely factors influencing the different safety and health outcomes for different workers, followed by a testing for significant relationships that provide evidence for or against those hypotheses. Finally, a concluding section will summarize and discuss the results, as well as the need for further investigation on a number of questions.

LITERATURE ON THE TOPIC

No preliminary studies based on field research have been done directly on immigrant construction workers' safety conditions that the author was able to discover. There are some studies of the safety conditions and concerns of immigrant workers, or the safety records of Hispanic workers, or comparative studies of safety records for different ethnicities and races, and the like. These studies have some relevance to the present study, and will be cited here.

Some studies have done a comparative analysis of injuries or illnesses of Hispanics vs. other groupings, such as non-Hispanic whites and blacks. Robinson (1989) surveyed California data and discovered that for all workers (not specifically construction workers) Hispanic workers faced higher probabilities of exposure to occupational injuries and illnesses than did non-Hispanic whites. Utilizing emergency room records and looking at construction workers in the Washington D.C. area, Hunting, Nessel-Stephens, Sandford, Shesser, and Welch (1994) found that Laborers and Hispanic workers were overrepresented among severe cases of injury. Looking at New Jersey construction workers, Sorock, O'Hagan Smith, and Goldoft (1994) found that Hispanics had death rates over three times that of non-Hispanic whites. Anderson, Hunting, and Welch (2000) found that Hispanic construction workers were more likely to be employed in the less-skilled trades and had a higher proportion of serious injuries. They suggested that minority status is a predictor of trade and that trade is a predictor of injury risk. Welch, Hunting, and Nessel-Stephens (1999) found that Hispanic and older construction workers were more

likely to have continuing symptoms long after an injury. Dong and Platner (2004) utilized federal fatality data and concluded that Hispanics constituted less than 16% of the construction workforce in 2000, yet suffered 23.5% of fatal injuries. They found that from 1992 to 2000, for every age group, Hispanic construction workers consistently faced higher relative risks. All of these studies suggest that Hispanics in the construction industry are more likely to face injury and inadequate safety conditions.

Of course, not all Hispanic workers are immigrant workers. Some studies of immigrant workers have been done, although not all concern immigrants to the United States. Wu, Liou, Hsu, Chao, Liou, Ko, Yeh, and Chang (1997) found that immigrant workers in Taiwan faced no higher risk of occupational injury than native-born workers. However, female immigrant workers, particularly in the construction industry, did. Gannagé (1999) interviewed immigrant women workers in the Toronto sportswear industry and uncovered a number of concerns, as well as governmental efforts to address health and safety concerns. Perhaps closest to the aim of the present study, Pransky, Moshenberg, Benjamin, Portillo, Thackrey, and Hill-Fotouhi (2002) surveyed urban immigrant workers in an immigrant community in northern Virginia, and found that they face increased risk of occupational injuries, with adverse outcomes. Thirty two percent of these workers worked in construction, and of that group, thirteen percent had been injured in the past three years.

Studies have also been done of the health conditions of maquiladora workers on the U.S.-Mexico border, a population with may share some important characteristics with many recent immigrants to the U.S. Moure-Eraso, Wilcox, Punnett, MacDonald, and Levenstein (1997) found that maquiladora workers frequently face exposure to toxic chemicals and generally have inadequate health and safety training.

A small number of studies have been done on the impact of unionization on workers' safety. Taylor (1987) found that the degree of unionization in an industry (not only the construction industry) and its safety record was significantly positively correlated in some years but not in others. He explains these differences in terms of a number of intervening variables, including labor-management safety committees and safety consciousness of union members or management. He thus finds the relationship between unionization and safety to be complex. Dedobbeleer, Champagne, and German (1990) studied construction workers in the Baltimore

area and found that union membership is significantly positively correlated with high safety performance. However, controlling for age (age 26 or younger vs. ages 27 and up) made most of the relationships insignificant, since union workers tended to be older. However, there was an extremely high correlation between union membership and exposure to safety training. This correlation remained significant after all attempts to control for all other variables. They found that the differences in likelihood of being injured were in the expected direction (union worker injury rates were lower), but not significant.

METHODOLOGY OF THE CURRENT STUDY

Fifty immigrant construction workers in south Florida (Miami-Dade and Broward Counties) were surveyed using a 60 question survey instrument constructed by the author. The survey instrument asks questions concerning demographic data, safety training, workplace safety practices, employer safety policies and practices, other employer practices regarding wages, pensions, workers compensation, and respondent evaluations of their employers' attitudes toward safety. Workers were surveyed in Spanish, Haitian Creole, or English, depending on the language preference of the person being surveyed. Surveyors were native speakers of Spanish and Haitian Creole who were also completely proficient in the English language. The original English language version of the survey instrument was translated into the other two languages, and then re-translated back into English by different individuals, to ensure equivalence of survey instruments. (Copies of the survey instrument in all three languages are attached to this report as Appendix A, Appendix B, and Appendix C.)

Ten of the fifty surveys were reserved for speakers of Haitian Creole, because the author wanted to ensure more than one or two responses from this understudied and important sub-group. Haitians were therefore over-sampled relative to their share of the construction labor market, which is an estimated 5%, not the 20% of the surveyed sample. Likewise, union members were intentionally over-sampled in order to obtain large enough numbers of union members to be able to compare union and non-union members. Twenty one of those 50 surveyed (42%) were union members, compared to an overall union density rate in the area of approximately 5%.

Those being surveyed were contacted in a variety of ways. First, a number were found by simply walking onto a construction site and approaching workers, or by standing directly outside the gate at shift change time and talking to workers as they left the construction site. Second, some were contacted by referrals from friends of the surveyors who lived in heavily immigrant communities who personally knew construction workers. Third, some were located by contacting immigrant community organizations that were able to lead us to construction workers who were members or contacts. And finally, a number of the union members were contacted with help from a union (primarily the Carpenters union and secondarily the Ironworkers union). Perhaps because of their own ties with immigrant communities and community organizations, the three surveyors had little trouble locating immigrant construction workers.

Interviews were conducted off the construction site, frequently in the workers' homes. On average, they lasted 45 minutes to an hour. Respondents were given a small token of appreciation ($25) for their participation. All those surveyed signed informed consent statements according to the university protocol for research involving human subjects of the university employing the researcher. Those surveyed could refer the surveyor to additional immigrant construction workers for additional surveys, but such a "chain" was not allowed to go further than three persons. (This was to ensure a more representative sample, to avoid getting all surveyed workers from one particular country or one particular town or village in a country).

Once the data was gathered, it was put into an SPSS computer data file. All calculations were conducted with this SPSS file. Because the numbers frequently were quite small, the test of statistical significance used for cross tabulations was Fisher's Exact Test, not chi square.

CHARACTERISTICS OF THOSE STUDIED

Those surveyed were primarily from Mexico, Central America, South America, or Haiti. Table 1 shows the breakdown by country.

Table 1
Country of origin of immigrant construction workers surveyed

COUNTRY	NUMBER	PERCENT
Mexico	11	22%
Haiti	10	20%
Guatemala	7	14%
Colombia	5	10%
El Salvador	4	8%
Honduras	4	8%
Cuba	3	6%
Ecuador	2	4%
Argentina	1	2%
Costa Rica	1	2%
Dominican Republic	1	2%
Nicaragua	1	2%
TOTAL	50	100%

Forty nine of the fifty respondents were male, with the lone female being a 43 year old woman from Honduras. Respondents averaged 40 years of age, with a range between 19 years and 60 years old. Table 2 shows the spread of ages, in increments of ten.

Table 2
Age of immigrant construction workers surveyed

AGE	NUMBER	PERCENT
10-19	1 (19)	2%
20-29	7	14%
30-39	15	30%
40-49	18	36%
50-59	7	14%
60-69	2 (60, 62)	4%

On average, respondents had resided in the United States 15 years, with a range between 2 years and 35 years. Table 3 shows the spread, in increments of five years.

Table 3
Year of residence in the U.S. of those surveyed

YEARS	NUMBER	PERCENT
0-5	9	18%
6-10	9	18%
11-15	8	16%
16-20	9	18%
21-25	9	18%
26-30	4	8%
31-35	2	4%

They averaged 7.5 years working in U.S. construction, with a range from 1 to 30 years. Most are concentrated at the lower end of the spectrum. Table 4 shows the spread, in increments of three years.

Table 4
Years of U.S. construction work of those surveyed

YEARS	NUMBER	PERCENT
0-3	20	40%
4-6	5	10%
7-9	9	18%
10-12	5	10%
13-15	2	4%
16-18	3	6%
19-21	1	2%
22-24	2	4%
25-27	2	4%
28-30	1	2%

For the most part these were not extremely recent arrivals to the U.S., a fact probably due to the researcher's decision not to sample immigrant day laborers standing on street corners waiting for construction or other day labor. These were, instead, more established immigrants with more stable patterns of construction employment.

The primary trade of these workers was carpenter, followed by general laborer. Table 5 shows the results for all trades represented.

Table 5
Primary trade of immigrant construction workers surveyed

PRIMARY TRADE	NUMBER	PERCENT
Carpenter	18	36%
General laborer	11	22%
Drywall installer	7	14%
Painter	3	6%
Roofer	3	6%
Plasterer	3	6%
Electrician	1	2%
Ironworker	1	2%
Heavy equipment operator	1	2%
Welder	1	2%
Other	1	2%
TOTAL	50	100%

However, these workers had also worked in a wide variety of other trades in their (usually brief) tenure in construction work. One or more respondent had worked in fourteen other trades aside from the one they indicated as their primary trade. Table 6 shows the incidence of secondary trades, from most frequently cited to least.

Table 6
Secondary Trades of Respondents

SECONDARY TRADE	NUMBER OF TIMES MENTIONED
Painter	10
Drywall Hanger	10
Carpenter	9
Roofer	7
General Laborer	6
Bricklayer or Mason	5
Plumber or Pipefitter	4
Other (gutters, concrete prep. etc.)	4
Electrician	3
Insulator	3
Heavy Equipment Operator	2
Sheet Metal Worker	2
Air Conditioning Worker	2
Carpet Layer	1

Twenty one of the 50 respondents (42%) were union members. Of these twenty one, eighteen were members of the Carpenters union, two were members of the Ironworkers union,

and one belonged to an unspecified union that was not one of eighteen different construction trades unions they were asked to choose among. Average length of union membership was 4 ½ years, with a range from one month to 23 years. Most of these are at the low end of the spectrum, with fourteen having three or less years with the union. Table 7 shows the spread.

Table 7
Length of union membership for union member respondents

LENGTH OF UNION MEMBERSHIP	NUMBER	PERCENT*
Less than one year	5	24%
One year	2	10%
Two years	5	24%
Three years	2	10%
Four years	1	5%
Five years	1	5%
Eight to Ten years	1 (8)	5%
Ten to Twenty years	2 (12, 14)	10%
Twenty three years	1	5%
No answer	1	5%

*Percentages do not add up to 100% because of rounding.

Twenty one (42%) earned less than $20,000 per year, and over half earned less than $25,000 (this is personal income, not family income). Table 8 shows a breakdown:

Table 8
Personal Yearly Income of Respondent Immigrant Construction Workers

INCOME RANGE	NUMBER	PERCENT
Under $10,000	3	6%
$10,000 to $15,000	3	6%
$15,000 to $20,000	15	30%
$20,000 to $25,000	7	14%
$25,000 to $30,000	8	16%
$30,000 to $35,000	6	12%
$35,000 to $40,000	3	6%
$40,000 or more	3	6%
Wouldn't answer; or gave unusable information	2	4%
TOTAL	50	100%

While the respondents' family income was generally higher than personal income, nevertheless 76% of them had a family income below $30,000 per year, and 28% had a family income below $20,000 per year. Table 9 shows the family income spread.

Table 9
Family Yearly Income of Respondent Immigrant Construction Workers

INCOME RANGE	NUMBER	PERCENT
Under $20,000	14	28%
$20,000 to under $30,000	24	48%
$30,000 to under $45,000	9	18%
$45,000 to under $60,000	3	6%
$60,000 or more	0	0%

Sixteen (32%) had not completed high school or earned an equivalent diploma; yet the other end of the educational spectrum was also well represented. Eighteen (36%) had taken at least some college courses, and 10 (20%) had a college degree. Twenty one (42%) had some form of post-high school schooling. Table 10 shows the schooling attainments of the respondents.

Table 10
Schooling Attainment of Respondent Immigrant Construction Workers

DEGREE OF SCHOOLING	NUMBER	PERCENT
Less than High School	12	24%
Some High School (9^{th} – 12^{th} Grade)	4	8%
High School Degree	13	26%
Vocational or Technical School	3	6%
Some College (no degree)	8	16%
College or Graduate Degree	10	20%

Eleven (22%) were U.S. citizens; 39 (78%) were not. Of the 39 respondents who were not U.S. citizens, 28 had documents to legalize their status, while 11 did not. Therefore, thirty nine (78%) had either a documented or naturalized status, while 11 (22%) were undocumented. Table 11 shows the legal status of respondents.

Table 11
Legal Status of Respondent Immigrant Construction Workers

LEGAL STATUS	NUMBER	PERCENT
U.S. Citizen	11	22%
Not a Citizen; Documented	28	56%
Not a Citizen; Undocumented	11	22%

How representative is this sample of the overall population of immigrant construction workers in the area? The sample departs from our best estimate of the immigrant construction labor force in the area in several ways. First, Haitians were intentionally over-sampled, to obtain

enough Haitian responses to get any usable data on this important sub-group. Second, union members were intentionally over-sampled for the same reason.

Beyond these over-samplings, interviews with local contractors and union leaders indicate that the mix of countries of origin is roughly representative of the local construction immigrant labor force (Gornewicz interview, Nagy interview, Garcia interview, Felton interview). Clearly, not all trades are represented, which would be next to impossible in a sample this small. And this is not to claim that the "mix" of trades in this sample is identical to the skill mix of the local immigrant construction labor force as a whole. Furthermore, there is probably an over-sampling of Guatemalans and under-sampling of Cubans. And one could probably name a variety of other ways in which a small sample like this will almost inevitably not represent the entire group of immigrant construction workers in the area. So, this clearly cannot be an entirely representative sample in all respects. Despite that fact, individuals in close contact with the local construction labor market have told the author that the surveyed group seems to share a number of important characteristics with the overall immigrant construction labor market.

In any case, the overall size of the sample is so small that caution must be exercised in generalizing from findings. Monetary restraints made a larger sample impossible. For all of the above reasons, the data from this study should be considered only preliminary indicators of south Florida immigrant construction worker conditions and patterns. Finally, the sample is not a random sample, which would be impossible to obtain given the population being surveyed. It is a sample of convenience, albeit one with a fair amount of diversity concerning core distinctions within the population. All quantitative results should be interpreted with appropriate caution; results are suggestive, not definitive.

EMPIRICAL RESULTS FROM SURVEY RESPONSES

The survey asks questions concerning six topic areas: (1) safety and health training received; (2) use of personal protective equipment on the job; (3) safety policies and practices of employers; (4) injuries and illnesses and related issues regarding workers compensation and disability; (5) other employer characteristics and practices which may be related to their safety practices; and

(6) respondents' evaluation of their employers' attitude toward safety. This section will report results in each of these areas sequentially.

SAFETY AND HEALTH TRAINING RECEIVED

OSHA 10 HOUR TRAINING.

Respondents were asked if they had received the "OSHA 10 hour training", a basic 10 hour class offered by the Occupational Safety and Health Administration (OSHA) on safety and health matters. Twenty seven (54%) had received this training; 23 (46%) had not. On average, training was provided approximately 39 months after beginning work in construction, with a range from "before I started working construction" to "20 years after I started working construction".

Of the 27 who had received OSHA training, six received it in their original language, while 21 received it in English. Fifteen of these 21 English language classes provided no translation, while six had a translator to aid comprehension. Twenty three of the 27 stated that they could understand the training well, while one stated he could not and three gave answers like "more or less", "English is not my language; I understand part of it", or "I would have understood better if it was offered in Haitian Creole". The 23 expressing no reservations about comprehension constitute 85% of those receiving training; the remaining 15% probably got a very limited benefit from the training.

Twenty one of the 27 who received OSHA training were asked to sign a statement that they had received the training. Eighteen had received their training from a union apprenticeship program or other union program; eight had received it from their employer; and one had received it from another source. Of the four either expressing reservations about their comprehension or claiming not to have understood their training, three had been trained by their employer, one by his union.

SCAFFOLD SAFETY TRAINING

Respondents were also asked if they had received scaffold safety training. Twenty six (52%) had; 23 (46%) had not, and one (2%) did not answer. Of the 26 receiving training, six received it in their original language, 20 in English. Six of the English trainings provided translation. Twenty four expressed no reservations about their degree of comprehension; two stated that they "more or less" understood. Eighteen were asked to sign a statement

acknowledging receiving the training, eight were not. Thirteen had received training from their union while 13 received it from the employer. Of the two expressing reservations about comprehension, one each had received their training from their union and their employer.

CPR/FIRST AID TRAINING IN THE PAST THREE YEARS

Respondents were asked if they had received any CPR or first aid training in the past three years. (A three year period was used because CPR certification expires after three years.) Fifteen (30%) had received this training in the past three years; 35 (70%) had not. One had received such training eight times; one five times; one four times; three two times, and nine had received it only once. Three of the respondents stated that the longest CPR training program they had received was 10 hours; five stated eight hours; two stated five hours; four stated four hours; and one stated one and one half hours.

Thirteen of the 15 received their CPR training in English; two in their original language. All 15 respondents expressed no reservations about their comprehension of the training. Thirteen had signed statements acknowledging receiving the training; two had not. Ten of the 15 received their training from their union; one from his employer, three from a government agency or the Red Cross, and one did not answer the question about source of training.

ASBESTOS AWARENESS TRAINING IN THE PAST THREE YEARS

Respondents were asked if they had received any asbestos awareness training in the past three years. (A three year period was used because asbestos awareness certification expires after three years.) Ten (20%) had received this training in the past three years; 40 (80%) had not. One had received such training six times; two had three times; one had two times; and six had received it only once. The length of the longest asbestos awareness training program was 40 hours for one of the respondents; sixteen hours for one, ten hours for one, eight hours for one, four hours for three, one and one half hours for one, and one hour for two respondents.

Seven of the 10 received their asbestos awareness training in English and three received it in their original language. One of the English trainings was accompanied by translation. Nine of the 10 indicated that they fully understood the training; one claimed not to understand. All 10 had signed statements acknowledging receiving the training. Five of the 10 received their training from their union; three from their employers, and two from another source. The person claiming not to understand the training had been trained by his employer.

HAZARDOUS MATERIALS/HAZARDOUS LOCATION TRAINING

Respondents were asked if they had received any hazardous materials/hazardous location training in the past three years. (A three year period was used because hazardous awareness training certification expires after three years.) Twenty five (50%) had received this training in the past three years; 25 (50%) had not. Two had received such training 10 and 12 times (definite "outliers"); three had three times; four had two times; and 13 had received it only once (three did not respond to the question). The length of the longest hazardous awareness training program was between 24 and 40 hours for three of the respondents; between 10 and 18 hours for six, between five and eight hours for six, between 2 and three hours for two, one hour for one, and less than one hour for five respondents.

Eighteen of the 25 received their haardous awareness training in English; five received it in their original language; and two did not respond to this question. Seven of the English trainings were accompanied by translation. Twenty two of the 25 indicated that they fully understood the training; one stated "more or less", and two did not answer this question. Sixteen had signed statements acknowledging receiving the training; seven did not, and two did not answer this question. Twelve of the 25 received their training from their union; nine from their employers, one from another source, and three did not answer this question. The person expressing reservations about how fully he comprehended the training had received the training from his employer.

OTHER .SAFETY AND HEALTH TRAINING

Respondents were asked if they had received any other safety and health training. Twenty three (46%) claimed to have received other training; 24 (48%) claimed none and three (6%) didn't answer this question. Asked to describe the type of training received, respondents displayed an enormous variation in what they considered "training". Four described weekly or monthly general safety meetings, not training sessions. Two stated that they learned on the job, "training" that was not formal training at all. Five mentioned just general safety training. Two mentioned training concerning the handling of chemicals, while two others mentioned handling of tools. Other topics mentioned once are: building collapse, AC course; electrical equipment, personal protective equipment, fall protection, confined spaces, and OSHA 500 train-the-trainer training.

SUMMARY DATA ON SAFETY AND HEALTH TRAINING

To aid comprehension, we can summarize some of the above data on safety and health training in a series of tables. Table 12 summarizes the numbers and percentages of respondents who have received various types of training.

Table 12
Numbers and Percentages of Respondents Receiving Various Types of Training

TYPE OF TRAINING	# YES	% YES	# NO	% NO
OSHA 10-hr. Training	27	**54%**	23	**46%**
Scaffold Training	26	**53%**	23	**47%**
CPR/First Aid Training (3 yr.)	15	**30%**	35	**70%**
Asbestos Training (3 yr.)	10	**20%**	40	**80%**
Hazardous Training (3 yr.)	25	**50%**	25	**50%**
Other Safety Training	23	**49%**	24	**51%**

Table 13 summarizes the language of the training received, and the level of understanding for each type of training.

Table 13
Language and Level of Understanding of Training Received, by Type of Training

TYPE OF TRAINING	IN ORIGINAL LANGUAGE (# AND %)	IN ENGLISH WITHOUT TRANSLATION (# AND %)	IN ENGLISH WITH TRANSLATION (# AND %)	FULLY UNDERSTOOD (# AND %)	NOT FULLY UNDERSTOOD (# AND %)
OSHA 10-hr. Training	6 (22%)	15 (56%)	6 (22%)	23 (85%)	4 (15%)
Scaffold Training	6 (23%)	14 (54%)	6 (23%)	24 (92%)	2 (8%)
CPR/First Aid Training (3 yr.)	2 (13%)	13 (87%)	0 (0%)	15 (100%)	0 (0%)
Asbestos Training (3 yr.)	3 (30%)	6 (60%)	1 (10%)	9 (90%)	1 (10%)
Hazardous Training (3 yr.)	5 (22%)	11 (48%)	7 (30%)	22 (96%)	1 (4%)

Table 14 summarizes the numbers and percentages of training provided by unions, employers and others.

Table 14
Number and Percentage of Training Provided by Unions, Employers, and Others

TYPE OF TRAINING	UNION PROVIDED (# AND %)	EMPLOYER PROVIDED (# AND %)	PROVIDED BY "OTHER" (# AND %)
OSHA 10-hr. Training	18 (67%)	8 (30%)	1 (4%)
Scaffold Training	13 (50%)	13 (50%)	0 (0%)
CPR/First Aid Training (3 yr.)	10 (71%)	1 (7%)	3 (21%)
Asbestos Training (3 yr.)	5 (50%)	3 (30%)	2 (20%)
Hazardous Training (3 yr.)	12 (55%)	9 (41%)	1 (5%)

USE OF PERSONAL PROTECTIVE EQUIPMENT

Respondents were asked to mark whether they "never", "sometimes", "regularly", or "always" used various types of personal protective equipment on the construction job site. Table 15 shows the number and percentages for each response for seven types of protective equipment.

Table 15
Number and Percentage of Respondents Using Various Types of Protective Equipment on the Job

TYPE OF PROTECTIVE EQUIPMENT	NEVER USE	SOMETIMES USE	REGULARLY USE	ALWAYS USE
Wear Work Boots	1 (2%)	6 (12%)	2 (4%)	41 (82%)
Wear a Hard Hat	4 (8%)	6 (12%)	6 (12%)	34 (68%)
Wear Work Gloves	9 (18%)	19 (39%)	5 (10%)	16 (33%)
Wear Protective Eyewear	5 (10%)	17 (34%)	5 (10%)	23 (46%)
Use Guards on Cutting Tools	8 (16%)	14 (28%)	6 (12%)	21 (42%)
Use Hearing Protection	21 (42%)	17 (34%)	3 (6%)	9 (18%)
Use Respiratory Protection	18 (36%)	20 (40%)	2 (4%)	10 (20%)

If we combine “regularly use” with “always use” to signify consistent use of these types of protective equipment, and combine “never use” and “sometimes use” to signify either no use or inconsistent use, we obtain the following results for each type of equipment:

- Wearing Work Boots: **86% consistently do; 14% do not**
- Wearing a Hard Hat: **80% consistently do; 20% do not**
- Wearing Work Gloves: **57% consistently do; 43% do not**
- Wearing Protective Eyewear: **56% consistently do; 44% do not**
- Using Cutting Tool Guards: **54% consistently do; 44% do not**
- Using Hearing Protection: **24% consistently do; 76% do not**
- Using Respiratory Protection: **24% consistently do; 76% do not**

SAFETY POLICIES AND PRACTICES OF EMPLOYERS

The survey also asked about a variety of employer safety policies and practices. Responses will be briefly summarized here.

WEEKLY SAFETY MEETINGS

Twenty five of the respondents (50%) indicated that their employer conducted weekly safety meetings, while 24 (48%) indicated that they either didn’t know or the employer did not. One (2%) stated “it depends.” Of the twenty five holding safety meetings, 20 were held in English, with seven of those twenty providing translation. Five were conducted in the respondent’s original language. Twenty one of the 25 indicated that they fully understood the content of those meetings; three indicated that they did not, and one did not respond to this question.

USE OF BODY HARNESS FOR WORK SIX OR MORE FEET ABOVE GROUND

Nine respondents indicated that they never worked at heights six feet or more above ground, leaving 41 who did. Of these 41, twenty seven (66%) indicated that they were provided a body harness; 13 (32%) were not; and one (2%) stated “it depends.”

PROVISION OF COPY OF SAFETY PROGRAM

Twenty (40%) of the respondents indicated that they were shown or provided a copy of the employer’s safety program; 30 (60%) stated that they were not or did not know.

ACCESS TO MATERIAL SAFETY DATA SHEETS (MSDS) FOR CHEMICALS

Ten of the respondents stated that they never worked with chemicals, making the question of access to MSDS sheets irrelevant to them. Of the remaining 40, nineteen (47.5%) were provided access while 21 (52.5%) either weren't or did not know.

USE OF "GROUND FAULT" ELECTRICAL OUTLETS ON THE JOB

One respondent indicated that he did not ever work with electricity, making the question irrelevant to him. Of the remaining 49, twenty eight (57%) indicated that ground fault electrical outlets were used; 20 (41%) that they were not of that they didn't know; and one ((2%) stated "it depends."

USE OF TAPED ELECTRICAL CORDS THAT HAVE PREVIOUSLY BEEN CUT

Three respondents indicated that the use of electrical cords was not applicable to their work situation, leaving 47 for whom the question was relevant. Of these 47, fifteen (32%) indicated that they did have to work with cut and taped up electrical extension cords, and 32 (68%) stated that they did not.

PROVISION OF HAND RAILS ON SCAFFOLDS

Fourteen respondents indicated that they never worked on scaffolds, making this issue irrelevant to them. Of the remaining 36, thirty one (86%) stated that scaffolds did have hand rails; 5 (14%) stated that they worked on scaffolds without protective hand rails.

PROVISION OF FIRST AID KITS

Thirty four respondents (68%) stated that their employers provided first aid kits on the job, and 14 (28%) stated either that they did not know or that the employer did not. Two (4%) did not answer this question.

PROVISION OF FRESH DRINKING WATER

Thirty two respondents (64%) indicated that their employers provided fresh drinking water on the job site; 18 (36%) indicated that they did not or gave an equivocal answer indicating no consistent provision of drinking water.

PROVISION OF PLACES TO GO TO THE BATHROOM

Forty one (82%) stated that their employers provided them with a place to go to the bathroom. (However, a rather large minority of these added comments to the effect that they

were frequently very dirty or not well maintained.) Nine (18%) indicated that their employers did not provide bathrooms.

SAFETY ON HIGH RISE BUILDINGS

Twenty four of the 50 respondents indicated that they had worked on a high rise building. Of these 24, twenty one indicated that they were provided safety rails or cables to avoid the possibility of simply walking off the edge. The other three indicated that they worked only inside, so this was not an issue.

SUMMARY DATA ON EMPLOYER SAFETY POLICIES AND PRACTICES

To aid comprehension, we can summarize some of the above data on employer safety and health policies and practices. Table 16 summarizes the numbers and percentages of respondents' exposure to different employer policies and practices.

Table 16
Number and Percentages of Respondents Exposed to Various Employer Safety Policies and Practices

EMPLOYER PRACTICE	YES	NO	NO ANSWER OR EQUIVOCAL ANSWER
Weekly Safety Meeting	25 (50%)	24 (48%)	1 (2%)
Use of Body Harness	27 (66%)	13 (32%)	1 (2%)
Provision of Safety Program	20 (40%)	30 (60%)	0 (0%)
Access to MSDS Sheets	19 (47.5%)	21 (52.5%)	0 (0%)
Use of Ground Fault Electrical Outlets	28 (57%)	20 (41%)	1 (2%)
Use of Cut and Taped Electrical Cords	15 (32%)	32 (68%)	0 (0%)
Provision of Scaffold Hand Rails	31 (86%)	5 (14%)	0 (0%)
Provision of First Aid Kits	34 (68%)	14 (28%)	2 (4%)
Provision of Fresh Drinking Water	32 (64%)	18 (36%)	0 (0%)
Provision of Bathrooms	41 (82%)	9 (18%)	0 (0%)

INJURIES, ILLNESSES, AND RELATED WORKERS COMPENSATION AND DISABILITY ISSUES

The survey also asked about injuries, work-related illnesses, workers compensation, and disability payments. Results will be briefly summarized here.

INJURY OR WORK-RELATED ILLNESS WITHIN THE PAST THREE YEARS

Twelve (24%) of the 50 respondents indicated that they had had either an injury or a work-related illness within the past three years; thirty eight (76%) had not. Nine of the 12 (18% of the overall sample) had a condition serious enough to merit medical attention. Nine (18%) had also missed work in the past three years due to a workplace accident or work-related illness. (Eight of the nine requiring medical attention overlapped with those missing work, but one each required medical attention without lost time or lost time without medical attention.)

Of the nine who had lost work time due to workplace injury/illness, eight (16% of the overall sample) had lost time due to an injury. Of these eight, three had experienced this only once, four had experienced this twice, and one had experienced it three times, for a total of 14 times. The total amount of time lost varied widely, from three days to 339 days. Two respondents lost three days work; one lost seven; one lost nine; one lost 31; one lost 40; one lost 90; and one lost 339. This amounts to a total of 522 days of lost work time over a three year period, an average of 10.44 lost work days per individual in the sample. This converts to an annual rate of approximately 3.5 lost work days due to injury per respondent.

Respondents who had been injured on the job at any time they had worked construction (not simply in the past three years) were asked if they had reported it. Sixteen of the 22 who had been injured (73%) stated that they had reported it; six (27%) had not. The six who had not were asked why they had not. One answered that it wasn't anything serious, and the other five did not answer. The sixteen who had reported it were asked what had happened after they reported it. Fifteen responded. The following listing of the surveyors' field notes on the fifteen responses attempts to list post-reporting treatment on a spectrum from most positive to most negative:

VERY POSITIVE TREATMENT:

Employer paid for medical treatment and employee received wages while injured.

They took him to the doctor; paid his lost wages

SOMEWHAT POSITIVE TREATMENT:

"My steward took me to the hospital."

They took him to the hospital (nearby). Chiropractor, 5 weeks and was better.

Was sent for medical attention. It was a minor injury.

"They sent me to the clinic for medical attention."

NEUTRAL TREATMENT:

Workers comp.

The employer checked his hand. There was no need to take him to the hospital.

Little cut; nothing major.

"The employer sent me to a chiropractor and I received treatment for my condition. However, I still feel the symptoms."

SOMEWHAT NEGATIVE TREATMENT:

Nothing happened. I went to the doctor on my own.

They said it wasn't necessary to go to the doctor. They just asked if he had had a tetanus shot.

They would discount for insurance, but no one really had it.

VERY NEGATIVE TREATMENT:

They took report but didn't act on it. He went back to them and eventually two weeks later he was sent to the doctor.

"They took me to the hospital but the case (law suit) is still pending."

He was laid off. He had to sue. He finally settled last year.

Five respondents (10% of the overall sample) had lost work time in the past three years due to a work-related illness (not injury). Of these five, three had experienced this once; one had experienced it three times, and one outlier had experienced it 10 times. The total amount of time lost again varied widely, from three days to 365 days. Two had lost three days work; one had lost four days work; one had lost seven days work; and one had lost 365 days work. This amounts to a total of 382 days of lost work time over a three year period, an average of 7.64 lost work days per individual in the sample. This converts to an annual rate of approximately 2.5 lost work days due to a work related illness per respondent.

WORKERS COMPENSATION ISSUES

Five of the 50 respondents (10%) indicated that they had filed for workers compensation coverage in the past three years. Four of the five had applied for payment of medical expenses; four had also applied for payment of lost wages. Two of the five had applied for permanent disability.

The forty five respondents who had not filed a workers compensation claim were asked if their employer paid into the workers compensation system. Only 29 answered the question; of these 29, twenty three did not know, four answered yes, and two answered no. Adding those who either don't know or don't receive coverage results in 25 of 29 respondents who probably do not receive workers compensation coverage.

Only one of the 50 respondents (2%) had ever been asked to sign a waiver of workers compensation coverage. That respondent indicated that the employer making the request employed less than 10 workers.

Two of the five who had filed a claim within the last three years had received workers compensation payments. Both received payment for medical expenses as well as lost time. Neither received permanent disability payments. Payments were for $68,000 and $29,000. None of the fifty respondents had received any type of non-workers compensation payment for injury or illness on the job.

SELF ASSESSMENT OF HEALTH

Eleven of the 50 respondents (22%) rated their own health as "excellent"; sixteen (32%) as "very good"; seventeen (34%) as "good"; five (10%) as "fair"; and one (2%) as "poor." The vast majority thought their health had not changed appreciably in the past year. Thirty eight (76%) compared their present health with that of one year ago as "about the same"; five (10%) stated "somewhat better"; three (6%) stated "somewhat worse"; two (4%) stated "much better"; and two (4%) stated "much worse."

SERIOUS INJURIES AND DEATHS AT WORK SITES

Respondents were asked if they had been working at a job site <u>in the last year</u> when a construction worker at the same site had to be taken to a hospital because of an injury. Twenty (40%) responded that they had; thirty (60%) had not. Nine had witnessed this only once; six had witnessed it twice; four had witnessed it three times, and one had witnessed it "a few times".

Respondents were also asked if they had worked since they started working construction on a site when a construction worker died in a work related accident. Eight (16%) responded that they had; forty two (84%) had not.

SUMMARY DATA ON INJURY, ILLNESS, WORKERS COMPENSATION AND DISABILITY ISSUES

To aid comprehension, we can summarize some of the above data on injury, illness, workers compensation, and disability issues. Table 17 summarizes the numbers and percentages of respondents' experiencing any workplace injury or work-related illness in the past three years, as well as those requiring medical attention or losing work days for the same conditions.

Table 17
Number and Percentage of Respondents Experiencing a Workplace Injury/Illness in Past 3 Years; Those Requiring Medical Attention from Same; and Those Losing Work Because of Same

CONDITION	YES	NO
Had Workplace Injury or Work-Related Illness in Past 3 Years	12 (24%)	38 (76%)
Had Workplace Injury or Work-Related Illness in Past 3 Years that Required Medical Attention	9 (18%)	41 (82%)
Had Workplace Injury or Work-Related Illness in Past 3 Years that Caused Day or More of Lost Work Time	9 (18%)	41 (82%)

Table 18 presents the injury statistics of this sample population for the past three years.

Table 18
Three Year Injury Statistics for the Sample Population

CONDITION	SEVERE INJURY CAUSING LOSS OF WORK DAY	NUMBER OF TIMES INJURED CAUSING LOSS OF WORK DAY	NUMBER OF DAYS LOST DUE TO WORKSITE INJURY	LOST DAYS DIVIDED BY NUMBER OF RESPONDENTS IN SAMPLE	AVERAGE ANNUAL LOST DAYS PER RESPONDENT IN SAMPLE
NUMBER	8 (16%)	14	522	10.44	3.5

Table 19 presents the work related illness statistics of this sample population for the past three years.

Table 19
Three Year Work Related Illness Statistics for the Sample Population

CONDITION	SEVERE ILLNESS CAUSING LOSS OF WORK DAY	NUMBER OF TIMES ILLNESS CAUSES LOSS OF WORK DAY	NUMBER OF DAYS LOST DUE TO WORK RELATED ILLNESS	LOST DAYS DIVIDED BY NUMBER OF RESPONDENTS IN SAMPLE	AVERAGE ANNUAL LOST DAYS PER RESPONDENT IN SAMPLE
NUMBER	5 (10%)	16	382	7.64	2.5

Tables 20 and 21 relate the workers compensation experiences for those who had filed workers compensation claims in the past three years and those who had not.

Table 20
Workers Compensation Experiences of Those Who Filed in the Past Three Years

CONDITION	FILED A CLAIM	FILED FOR MEDICAL EXPENSES	FILED FOR LOST WAGES	FILED FOR PERMANENT DISABILITY	RECEIVED W.C. PAYMENT	AMOUNT OF PAYMENT
NUMBER	5 (10%)	4	4	2	2	$68,000; $29,000

Table 21
Workers Compensation Experiences of Those Who Did Not File in the Past Three Years

CONDITION	HAVE COVERAGE	DON'T HAVE COVERAGE, OR DON'T KNOW	DIDN'T RESPOND ABOUT COVERAGE	ASKED FOR WORKERS COMPENSATION WAIVER
NUMBER (%)	4 (8%)	25 (50%)	21 (42%)	1 (employer employs <10 employees)

Table 22 presents data on the respondents' self-assessment of their own health

Table 22
Respondents' Self-Assessment of their own Health.

HEALTH	EXCELLENT	VERY GOOD	GOOD	FAIR	POOR
NUMBER (%)	11 (22%)	16 (32%)	17 (34%)	5 (10%)	1 (2%)

Table 23 shows respondents' assessment of how their health had changed in the past year.

Table 23
Respondents' Assessment of Change in Their Own Health, Past Year

ASSESSMENT OF HEALTH CHANGE	MUCH BETTER	SOMEWHAT BETTER	ABOUT THE SAME	SOMEWHAT WORSE	MUCH WORSE
NUMBER	2	5	38	3	2
(%)	(4%)	(10%)	(76%)	(6%)	(4%)

Table 24 relates the number of respondents who had witnessed a work site accident taking a worker to the hospital within the past year, and the number witnessing a work site death in the entire time they had worked in construction.

Table 24
Number and Percentage of Respondents Witnessing Serious Accident Requiring Hospitalization in Past Year, and Witnessing Accidental Death at Work Site in All Time Working in Construction

ACCIDENT WITNESSED	ACCIDENT REQUIRING HOSPITALIZATION (PAST YEAR)	ACCIDENT CAUSING DEATH (ENTIRE TIME WORKING IN CONSTRUCTION)
NUMBER OF RESPONDENTS (%)	20 (40%)	8 (16%)
NUMBER OF TIMES	Approximately 35-40 (33 plus "a few times")	Not asked.

OTHER EMPLOYER CHARACTERISTICS AND PRACTICES THAT MAY BE RELATED TO THEIR SAFETY PRACTICES

The survey also asked a number of other questions concerning employers and the respondents' relationships with them. The information solicited was thought to be possibly related to employers' safety and health practices – for example, worse treatment in other respects may coincide with requiring employees to work in a less safe manner. Results will be briefly summarized here.

LENGTH OF TIME WITH CURRENT EMPLOYER

Respondents were asked how long they had been with their current employer. Three were not working at the time of the interview. Of the remaining 47, ten had been with their current employer a month or less. Twenty three had worked between a month and a year for

their current employer. Ten had stayed with their current employer between six and 10 years; one had for 14 years.

NUMBER OF EMPLOYERS IN THE PAST YEAR

On average, respondents had worked for two construction employers in the past 12 months. Twenty six had worked for only one; 11 had for two; five had for three, seven had for four, and one had for seven.

HOW CURRENT JOB WAS FOUND

Nineteen of the 50 respondents had found their current job through a friend or family member. Twelve had found it through a union. Eight had found it either by simply walking on a job site or calling a previous employer. Four had found it through "word of mouth". Three had been referred by a training program. Two had stayed with their current employer from a previous job. One had been referred to the current employer/job by a prior employer. And one had found the job through the want ads in the newspaper.

TYPE OF FIRM WORKED FOR

Respondents were asked if they worked for a construction firm, a temp help firm, or "other". One stated he was out of work; of the remaining 49, forty one worked for a construction firm. Three worked for a temp help firm. Of the remaining five, two worked for a particular property (building), one gave no explanation, one claimed to work for "a supervisor who takes them who charges $20 a week" (apparently some type of "straw boss" arrangement), and one stated he was doing "pirate" work – paid in cash.

Of the three working for a temp help firm, one had worked for this firm 3 months, one four months, and one six months. Two of them received their paycheck from the temp help firm; one received his from a construction firm. Two of the three would have preferred to get a paycheck from a construction firm; one preferred to stay with the temp help firm.

EMPLOYEES ON CURRENT JOB SITE

On average, respondents worked at a job site with 52 employees, but there were extreme variations from this average. Of the 49 currently working, twenty three worked at a site with less than 10 employees; eleven at a site with 10-24 employees; six at a site with 25 -99 employees; eight at a site with 100-499 employees; and one at a site with 500 or more employees.

TOTAL EMPLOYMENT OF CURRENT EMPLOYER

Thirteen respondents worked for a firm employing less than 10 people (this includes all employees, not simply physical laborers on the job site.) Seven worked for a firm with 10-24 employees; eleven for one with 25-99 employees; seven for one with 100-499 employees; and one for an employer with 500-999 employees. Two didn't know their current employer's total employment.

UNIONIZATION STATUS OF CURRENT EMPLOYER

Seven respondents indicated that all their employer's workers were unionized; nine stated "most"; eight stated "some", 24 stated "none"; two didn't know, and one didn't answer the question. Fourteen indicated that their employer dealt with just one union: the Carpenters Union. Eight didn't know the unions their employer dealt with; two stated only the Ironworkers Union, and one stated the Ironworkers and the Laborers Union. Two indicated their employers dealt with virtually the entire spectrum of construction unions: laborers, carpenters, ironworkers, air conditioning workers (UA), cement masons, plumbers and pipe fitters (UA), electrical workers, elevator constructors, plasterers, painters, bricklayers, etc. These last two were large unionized employers that employed between 100 and 1000 employees.

AVERAGE DAYS WORKED PER WEEK IN CONSTRUCTION IN PAST YEAR

On average, respondents averaged 5.28 days of construction work per week, while working in construction. Thirty two of the respondents worked an average of five days per week. Thirteen worked an average of six days per week. Two worked an average of either 6.5 or 7 days per week. One worked an average of three days per week, and one worked 3 days on average.

AVERAGE HOURS WORKED PER WEEK IN CONSTRUCTION IN PAST YEAR

On average respondents averaged 45.1 hours of construction work per week in the past year. The lowest average was 30 hours per week; the highest was 68 hours per week. Thirteen of the 49 who answered this question averaged over 48 hours of construction work per week, while working in construction.

TYPES OF PAYMENT AND RATES OF PAY

Thirteen respondents (26%) indicated that at some point (not necessarily current employer) they had been paid for construction work in cash; 37 (74%) had not. Of the thirteen

who had, five knew that the employer who had done this employed less than 10 employees, and five knew it to employ more than 10. Six indicated that the employer was non-union; none indicated that it was a unionized employer.

Four respondents had been asked to sign a "1099 form" declaring themselves independent contractors even though they were working by the hour. Forty two had not, and four did not answer the question. Of the four who had been asked, two stated that the employer employed less than 10 workers and was non-union; one didn't know either the size or union status of the employer, and one did not answer the question.

Forty four of the 50 respondents indicated that they were usually paid by the hour; two stated they were paid by the piece; two by the job and two did not answer the question. Those working by the hour averaged $13.41 per hour, from a low of $6.50/hour to a high of $24.50/hour. Eleven earned less than $10 per hour; nine earned $10 or more but less than $12 per hour; four earned $12 or more but less than $14 per hour; four earned $14 or more but less than $16 per hour; twelve earned more than $16 but less than $18 per hour; and one earned more than $20 per hour.

The two who were paid by the piece converted their average earnings into a $30/hour and $4/hour hourly rate. Those paid by the job converted their average earnings into a $30/hour and $10/hour hourly rate.

PROVISION OF A RETIREMENT OR SAVINGS PLAN

Thirteen of the 50 respondents indicated that their employer offered a retirement or savings plan; 36 indicated that their employer did not; and one did not respond to this question. Of the 13 with such a plan, eleven indicated that their employer contributed to it; two that it did not. Ten of the 13 plans were union plans; three were not.

PROVISION OF A HEALTH INSURANCE PLAN

Twenty one of the 50 respondents indicated that their employer provided a health insurance plan; 28 that their employer did not; and one did not respond to this question. Of the 21 with such a plan, seven indicated that the employer paid 100% of the insurance premium; one stated 75%; two stated 50%, one stated 0%, and ten did not know what percentage of the premium was paid by the employer.

SUMMARY DATA ON OTHER EMPLOYER CHRACTERISTICS AND PRACTICES THAT MAY BE RELATED TO THEIR SAFETY PRACTICES

To aid comprehension, we can summarize some of the above data on employer characteristics and practices that may be related to their safety practices. Table 25 summarizes the length of time respondents had worked for their current employers.

Table 25
Length of Time Respondents had worked for their Current Employer

ONE MONTH OR LESS	BETWEEN ONE MONTH AND ONE YEAR	TWO TO FIVE YEARS	SIX TO TEN YEARS	FOURTEEN YEARS	NOT CURRENTLY WORKING
10 (20%)	23 (46%)	10 (20%)	3 (6%)	1 (2%)	3 (6%)

Table 26 summarizes the number of respondents who had worked for varying numbers of employers in the past 12 months.

Table 26
Number of Construction Employers in the Past Twelve Months

ONE	TWO	THREE	FOUR	SEVEN
26 (52%)	11 (22%)	5 (10%)	7 (14%)	1 (2%)

Table 27 summarizes the numbers and percentages of respondents who found their job through various mechanisms.

Table 27
Numbers and Percentages of Respondents Who got their Job in Various Ways

Want ad in paper	1 (2%)
Word of mouth	4 (8%)
Friend or family member	19 (38%)
Union hiring hall	12 (24%)
Referred by prior employer	1 (2%)
Training program referred	3 (6%)
Moved with employer from previous job	2 (4%)
Other (walked on job site, or called)	8 (16%)

Table 28 summarizes the type of firm for whom respondents currently worked.

Table 28
Type of Firm Currently Working For

Construction firm	41 (82%)
Temp help firm	3 (6%) (two receive paychecks from temp help firm, one from construction firm)
Other	5 (10%) (two hired by a property, two in an illegal or "patron"- type arrangement, and one gave no explanation)
Currently out of work	1 (2%)

Table 29 summarizes the number of employees on the respondent's job site at the time of the survey and the size of the employer at that time.

Table 29
Number of Employees at Current Job Site, and Total Employment of Employer

RANGE	NUMBER OF EMPLOYEES AT CURRENT JOB SITE	TOTAL EMPLOYMENT OF EMPLOYER
Less than 10	23 (47%)	13 (27%)
10-14	11 (22%)	7 (14%)
25-99	6 (12%)	11 (22%)
100-499	8 (16%)	7 (14%)
500-999	1 (2%)	1 (2%)
Don't know	0 (0%)	11 (22%)

Table 30 summarizes the respondents' assessment of how unionized their current employers are.

Table 30
Assessments of How Unionized Employers Are

ALL EMPLOYEES UNION	MOST EMPLOYEES UNION	SOME EMPLOYEES UNION	NO EMPLOYEES UNION	DON'T KNOW
7 (14%)	9 (18%)	8 (16%)	24 (48%)	2 (4%)

Table 31 summarizes the average days per week and average hours per week worked by the respondents in the past year, when they were working in construction.

Table 31
Average Days Worked per Week and Average Hours Worked per Week in Past Year When Working in Construction

Average Days Worked per Week, While Working in Construction (Average for all 49 respondents who answered is 5.28 days)	3 4 5 6 6.5 or 7 Not applicable	1 (4%) 1 (2%) 32 (62%) 13 (26%) 2 (4%) 1 (2%)
Average Hours Worked per Week, While Working in Construction (Average for all 49 respondents who answered is 45.1 hours)	30 32 40 45 46 48 50 60 68 Not applicable	1 (2%) 1 (2%) 23 (46%) 2 (4%) 1 (2%) 8 (16%) 8 (16%) 4 (8%) 1 (2%) 1 (2%)

Table 32 summarizes the number of respondents who had been paid in cash or asked to dishonestly fill out an independent contractor ("1099") form, as well as the known characteristics of the firms doing this.

Table 32
Number of, and Characteristics of, Firms Paying Respondents in Cash or Requiring Dishonest Filling Out of Independent Contractor Form

EMPLOYER PRACTICE	YES	NO	KNOWN EMPLOYER CHARACTERISTICS FOR "YES" ANSWERS	
Paid in Cash?	13 (26%)	37 (74%)	Less than 10 Workers More than 10 Workers Non-Union	5 5 6
Asked to Dishonestly Sign an Independent Contractor Form?	4 (9%)	42 (91%)	Less than 10 Workers Non-Union	2 2

Table 33 summarizes the ways that respondents were paid by construction employers, and the pay levels according to type.

Table 33
Type of Pay and Levels of Pay for Respondents

	PAID BY THE HOUR	PAID BY THE PIECE	PAID BY THE JOB	NO ANSWER
Number	44 (88%)	2 (4%)	2 (4%)	2 (4%)
Hourly Earnings	Average $13.41 Low $6.50 High $24.50 Below $10 11 (25%) $10-$11.99 9 (20%) $12-$13.99 4 (9%) $14-$15.99 4 (9%) $16-$17.99 12 (27%) $18-$19.99 1 (2%) $20 up 2 (5%)	Average $17.00 Low $4.00 High $30.00 $4.00 1 (50%) $30.00 1 (50%)	Average $20.00 Low $10.00 High $30.00 $10.00 1 (50%) $30.00 1 (50%)	

Table 34 summarizes the number of retirement savings plans respondents receive, employer contributions or lack thereof, and union/non-union status of the plan.

Table 34
Retirement or Savings Plan Provision and Types

	YES	NO	NO ANSWER
Offered a Retirement or Savings Plan?	13 (26%)	36 (72%)	1 (2%)
For Yes Answers, Does the Employer Contribute?	11 (85%)	2 (15%)	0 (0%)
For Yes Answers, Is it a Union Plan?	10 (77%)	3 (23%)	0 (0%)

Table 35 summarizes the number of respondents offered health insurance, and the percentage of insurance premiums paid by the employer.

Table 35
Number of Respondents Offered Health Insurance Coverage, and Percentage of Insurance Premiums Paid by the Employer

	YES	NO	NO ANSWER
Offered Health Insurance Coverage?	21 (42%)	28 (56%)	1 (2%)
Percentage of Premium Paid by the Employer	100% 7 (33%) 75% 1 (5%) 50% 2 (10%) 0% 1 (5%) Don't know 10 (48%)		

EMPLOYER'S ATTITUDES AND CONSEQUENT PRACTICES CONCERNING SAFETY

Respondents were asked to state if they "strongly agree", "agree", "disagree", or "strongly disagree" with a series of statements that indicate their assessment of their employers' attitudes concerning safety and consequent practices. Table 36 shows the number and percentages of each response for nine statements of this nature.

Table 36
Number and Percentage of Responses Agreeing or Disagreeing with Evaluations of Employer Safety Attitudes and Practices

	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE	DON'T KNOW, NOT APPLICABLE, OR UNUSABLE ANSWER
My foreman is concerned about worker safety	10 (20%)	29 (58%)	4 (8%)	4 (8%)	3 (6%)
My contractor (employer) is concerned about worker safety	13 (26%)	26 (52%)	7 (14%)	1 (2%)	3 (6%)
Unions lead to safer jobs	16 (32%)	15 (30%)	2 (4%)	0 (0%)	17 (34%)
My work conditions are dangerous	6 (12%)	26 (52%)	15 (30%)	1 (2%)	2 (4%)
My work area is kept clean	9 (18%)	36 (72%)	5 (10%)	0 (0%)	0 (0%)
My work area is cluttered	0 (0%)	10 (20%)	34 (68%)	6 (12%)	0 (0%)
My job site has a good safety program	6 (12%)	30 (60%	9 (18%)	3 (6%)	2 (4%)
I have too much to do to be able to follow safe work practices	2 (4%)	13 (26%)	26 (52%)	8 (16%)	1 (2%)
Where I work, productivity is more important than worker safety	6 (12%)	18 (36%)	22 (44%)	3 (6%)	1 (2%)

If we combine "strongly agree" with "agree" to signify general agreement and "strongly disagree" with "disagree" to signify disagreement with these statements, we obtain the following results:

- Foremen is concerned about worker safety: **78% agree; 16% disagree**; 6 % uncertain or don't know

- Employer is concerned about worker safety: **78% agree; 16% disagree**; 6% uncertain or don't know
- Unions lead to safer jobs: **62% agree; 4% disagree; 34% uncertain or don't know**
- My work conditions are dangerous: **64% agree; 32% disagree**; 4% uncertain or don't know
- My work area is kept clean: **90% agree; 10% disagree**
- My work area is cluttered: **20% agree; 80% disagree**
- My job site has a good safety program: **72% agree; 24% disagree**; 4% uncertain or don't know
- I have too much to do to follow safe work practices: **30% agree; 68% disagree**; 2% uncertain or don't know
- Where I work, productivity is more important than worker safety: **48% agree; 50% disagree**; 2% uncertain or don't know.

As a further test of respondent's assessment of their employer's commitment to safe policies and practices, respondents were asked whether they would report a safety violation to their employers if they were aware of it. Thirty six said yes, 11 said no and three were unsure. Table 37 shows results.

Table 37
Willingness of Respondents to Report a Safety Violation

	YES	NO	UNSURE
Would You Report a Safety Violation?	36 (72%)	11 (22%)	3 (6%)

Those who answered no were asked why they would not. The surveyors' field notes on the answers are as follows:

- They don't listen, so why report it?
- A waste of time. No point reporting. They don't care about anything but production.
- Is just not him.
- Maintains the work are (sic) clean during the day.
- Has no reason to do so.
- Not to get into any problems.
- Afraid of consequences

- Generally or never I saw any problems. We used all the equipment he made us wear, the necessary equipment. If we didn't we wouldn't be able to work.
- Maybe he can fire me or report me to other contractors so I can't get hired. (This response was from a respondent who had answered, "Unsure".)
- I had a friend who was hurt; he got an attorney. The week after the attorney talked to the supervisor, we saw them at the gas station. They had followed us. They came over with a knife to scare my friend. We left. My friend went back to Mexico. He was afraid for his life. I don't want to have the same problem.
- Why should I jeopardize my job?
- I don't need to report a safety violation to my employer because I am the safety guy. I place barricades where there are holes to keep people from falling. I go from floor to floor looking for safety hazards.

With possibly three to five exceptions, the above responses indicate a belief that the employer would not listen, didn't care, or would take retaliatory measures. Of the seven who unambiguously expressed either fear or cynicism about their employers' attitudes, all but one either agreed or strongly agreed with the statements that the foreman and the employer were concerned about worker safety. This result – agreement or strong agreement that the foreman and the employer are concerned about safety and a cynicism or fear about employer reactions if a safety violation is reported – appear to be contradictory. Explaining the apparent cognitive dissonance is not easy. However, if "actions speak louder than words," greater credence should probably be given to the responses concerning willingness (or unwillingness) to report a violation. The general assessments of foreman and employer concern about worker safety may well be too generous, given the fear of, or cynicism about, results from reporting violations.

HYPOTHESIZED RELATIONSHIPS BETWEEN SAFETY AND HEALTH OUTCOMES AND OTHER VARIABLES, AND TESTS OF THOSE HYPOTHESES

Given the literature cited earlier in this report, one would expect that immigrant construction workers, and Hispanic workers in particular, have higher injury and illness rates than the entire population of construction workers. Therefore **Hypothesis #1** is: **Because of the immigrant**

status of the sampled population, the sample will have higher injury and illness rates than OSHA figures show to be true of the Florida construction worker population as a whole.

It is also expected that an immigrant worker's likelihood of receiving little or no safety training, working without much personal protective equipment, or working for an employer with less safe policies and practices will depend on the degree to which that immigrant is protected from unchecked employer power over them. A broad array of literatures and theories claim that very recent immigrants, those working in the industry for shorter periods of time, workers without the protection of a union contract, and those without documentation papers (i.e., in the country illegally) are likely to be less protected from employers taking advantage of them in a variety of ways. Operationalized in terms of data collected in this research, an immigrant construction worker therefore should be less vulnerable if he or she (1) has resided in the United States longer, (2) has worked in U.S. construction longer, (3) is a union member, and (4) is either documented or naturalized rather than undocumented. Therefore the second through the fifth hypotheses are as follows:

Hypothesis #2: The longer an immigrant construction worker has lived in the U.S., the more likely he or she will have received safety training, use protective safety equipment, and experience safer employer policies and practices.

Hypothesis #3: The longer an immigrant has worked in the U.S. construction industry, the more likely he or she will have received safety training, use protective safety equipment, and experience safer employer policies and practices.

Hypothesis #4: An immigrant construction worker who is a union member is more likely than a non-union counterpart to have received safety training, use protective safety equipment, and experience safer employer policies and practices.

Hypothesis #5: An immigrant construction worker who is either documented or naturalized is more likely than an undocumented counterpart to have received safety training, use protective safety equipment, and experience safer employer policies and practices.

Previous literature has also indicated that the unskilled, such as general laborers, generally face more dangerous conditions and are injured at a higher rate. Therefore it is hypothesized that the general laborers in this sample will face inferior safety conditions.

Hypothesis #6 is: **An immigrant construction worker who works as a general laborer is more likely than a skilled or semi-skilled counterpart to have received little or no safety training, use little or no personal protective equipment, or to work for an employer with less safe policies and practices.**

TESTS OF THE FIRST SIX HYPOTHESES

Test of Hypothesis #1: The first hypothesis is that injury rates for this population surpass those of the entire population of Florida construction workers. There are possible problems comparing recordable OSHA injury or illness rates with response rates to the survey used in this research. First, the reporting mechanism is not the same, and therefore survey respondents may either report injuries or illnesses that won't appear in OSHA data, or they may not report injuries and illnesses that do appear in OSHA data. Therefore, the numbers may be systematically either too high or too low. Second, the "mix" of occupations captured in the survey may depart substantially from the overall mix within the Florida construction workforce.

These problems can be overcome. "Filters" can screen out some of the potential sources of bias. First, illness data will not be compared, due to the subjective nature of a respondent's choice to call an illness "work related." Regarding injuries, one useful measure is to consider only injuries serious enough to cause loss of a day's work time. This should eliminate most of the "subjective" judgment about what actually constitutes an injury. Nine of the 50 respondents (18%) had experienced an injury on the job within the last three years so severe that it caused him/her to miss at least a day of work. This had happened thirteen times in that three year period, or an average of 4.33 times per year. This converts to an annual incidence rate of 8.7 per 100 workers. For the year 2002, the comparable figures for the nation as a whole and for Florida were 2.8 incidents per 100 workers, and 2.5 incidents per 100 workers. (OSHA data available at the web sites: http://www.bls.gov/iif/oshwc/osh/os/ostb1244.txt and http://www.bls.gov/iif/oshwc/osh/os/pr0206fl.pdf) Thus, these workers experienced injuries serious enough to lose a day's work at over three times the national or the state rate. Table 38 summarizes results.

Table 38
Yearly Incidence of Injury Serious Enough to Lose a Day's Work

GROUP OF CONSTRUCTION WORKERS	ANNUAL INJURY INCIDENCE RATE PER 100 WORKERS
All U.S. Construction Workers (2002)	2.8
Florida Construction Workers (2002)	2.5
Sample of Florida Immigrant Workers (2001-2003)	8.7

Sources: All U.S. Construction Workers data taken from the BLS website: http://www.bls.gov/iif/oshwc/osh/os/ostb1244.txt. Florida Construction Workers data taken from the BLS website: http://www.bls.gov/iif/oshwc/osh/os/pr0206fl.pdf. Sample of Florida Immigrant Workers data taken from survey done by the author.

To control for the "mix" of occupations as a source of possible bias, we can compare the serious injury incidence for our sample with the highest incidence rates for any type of construction worker in the national and state figures. For the state of Florida, the highest incidence rate in 2002 was for carpentry (not so incidentally, the largest craft within the sample): 4.2 injuries per 100 workers. In the national data, the highest incidence rate was for roofing and siding and sheet metal work: 4.0 injuries per 100 workers. The incidence rates for our sample are still more than double the national or state figures.

Thus, we conclude that these workers do have serious injury accidents well beyond that of the construction work force as a whole. Hypothesis #1 is confirmed.

Test of Hypothesis 2: Hypothesis #2 is that the longer an immigrant has lived in the U.S., the more likely it is that he or she will have received safety training, use protective safety equipment, and experience safer employer policies and practices. To test this hypothesis, the group was broken down into those residing in the U.S. for 3 or fewer years, 6 or fewer years, 9 or fewer years, and 12 or fewer years, who were then compared to those in the country longer. A cross tabulation of the resulting longer and shorter residence groups with six different types of training yields almost no significant results at the .05 level of significance.[1] (The only statistically significant result was that after 13 years residence in the U.S. respondents were significantly more likely to receive asbestos training than those residing in the country 12 years or less (p= .016). Regarding training, Hypothesis 2 is generally not supported.

[1] For reasons of space, tables will not be shown when all, or virtually all, relationships are insignificant. The entire SPSS file of the results is available from the author for those wishing to see these results.

A second test of this hypothesis concerns use of personal protective equipment. Regarding seven types of personal protective equipment no relationships even close to statistical significance can be found. Regarding this measure, Hypothesis 2 is once again not supported.

A third and final test of this hypothesis concerns employer safety policies and practices. Concerning eight different employer practices, a few significant results obtain. Sampled construction workers residing in the country for seven years or more are significantly more likely to work for an employer that conducts weekly safety meetings (p=.025), and this relationship becomes highly significant after 10 or more years or 13 or more years of U.S. residence (p=.001; p=.005). Those with ten or more years in the U.S. are significantly more likely to receive a copy of their employer's safety program (p=.020), a relationship that becomes highly significant after thirteen years residence (p=.005). Employers are significantly more likely to provide first aid kits to workers with thirteen or more years residence (p=.043).

The above results suggest that residence in the United States beyond a decade may lead immigrant construction workers to employers more likely to hold weekly safety meetings and more likely to provide copies of their safety program. However, length of U.S. residence does not appear to be significantly related to most other measures of training, use of protective equipment, or other employer safety policies or practices. Overall, there is little confirmation of Hypothesis 2, broadly stated. Only for a couple of employer policies and practices, and only after lengthy periods in the U.S., can any meaningful relationships be found.

Test of Hypothesis 3: Hypothesis 3 is identical to Hypothesis 2 but length of time working in the U.S. construction industry replaces length of time in the country. Here again, most of the results show no significant relationship between U.S. construction experience and provision of training. After 13 years in the industry, workers are significantly more likely to receive OSHA 10-hour training (p=.037), and significantly more likely to receive scaffold training (p=.037). But no other relationships are significant. The training results provide very little support for Hypothesis 3.

The second dependent variable to test Hypothesis 3 is use of protective safety equipment on the job. On this measure, virtually all relationships are insignificant. (Only one statistically significant relationship was found, and in the unexpected direction: those in the construction 3 or less years were significantly more likely to have used respiratory equipment [p=.027]. This is

probably a statistical fluke, because it holds for no other breakdown of the time intervals for having worked in construction.) For use of protective equipment, no support is provided for Hypothesis 3.

A final test of Hypothesis 3 is the impact that length of service in the industry has on the likelihood of working for an employer with safer workplace policies and practices. Regarding the holding of weekly safety meetings, the results are significant or nearly significant throughout different time periods that longer construction experience leads to employers holding such meetings,: 3 years or less vs. 4 and up (p=.010), 6years or less vs. 7 and up (p=.011), 9 years or less vs. 10 and up (p=.064), and 12 years or less vs. 13 and up (p=.085). But for all other employer policies/practices, the results are insignificant. Thus, the one consistent relationship between longevity in the U.S. construction industry for these immigrant construction workers is likelihood of working for an employer who conducts weekly safety meetings. But a significant relationship is not found with reception of training, use of protective safety equipment on the job, or other employer safety policies and practices. Overall, there is no significant support for Hypothesis 3 other than in the area of weekly employer safety meetings. Longevity in the industry does not appear to be associated with most measures of safety training or practice.

Test of Hypothesis 4: Hypothesis #4 postulates that an immigrant construction worker who is a union member is more likely than a non-union counterpart to have received safety training, use protective safety equipment, and experience safer employer policies and practices. This hypothesis is much more strongly supported by the evidence than were the previous two. Regarding training, union members are significantly more likely to receive virtually every form of training than are non-members. Table 39 gives the results.

Table 39
Relationship between Union Membership and Training

	UNION MEMBERS			NON-UNION WORKERS			
	# Yes	#No	% Yes	#Yes	# No	% Yes	Exact Sig.*
OSHA 10-hr. Training	18	3	**86%**	9	20	**31%**	**.000**
Scaffold Training	17	4	**91%**	10	19	**34%**	**.001**
CPR/First Aid Training	11	10	**52%**	4	25	**14%**	**.004**
Asbestos Training	8	13	**38%**	2	27	**7%**	**.009**
Hazardous Training	16	5	**76%**	9	20	**31%**	**.002**
Other Safety Training	10	11	**48%**	13	16	**45%**	.536

*Fisher's Exact Test (1-sided)

For all specifically named types of training, union members are much more likely to receive training than are non-members. And the relationship is highly significant. Regarding training, this is very strong support for Hypothesis 4.

Concerning use of protective safety equipment on the job, results again generally support the hypothesis, although not as strongly as for training. For the seven types of protective equipment, six of the seven variations are in the "right" direction according to the hypothesis, and four of those six are significant at the .05 significance level. Table 40 shows the results.

Table 40
Relationship between Union Membership and Use of Protective Safety Equipment

.	UNION MEMBERS			NON-UNION WORKERS			
	# Yes	#No	% Yes	#Yes	# No	% Yes	Exact Sig.*
Wear Work Boots	20	1	**95%**	23	6	**79%**	.115
Wear a Hard Hat	21	0	**100%**	19	10	**66%**	**.002**
Wear Work Gloves	7	14	**33%**	14	14	**50%**	.382 (wrong direction)
Wear Protective Eyewear	18	3	**86%**	10	19	**34%**	**.000**
Use Guards on Cutting Tools	15	6	**71%**	12	16	**43%**	**.044**
Use Hearing Protection	8	13	**38%**	4	25	**14%**	**.050**
Use Respiratory Protection	7	14	**33%**	6	23	**21%**	.247

*Fisher's Exact Test (1-sided; 2-sided for one in wrong direction)

Union members are significantly more like to utilize hard hats, use protective eyewear, use guards on cutting tools, and use hearing protection than are non-members. In general, this is additional evidence in support of Hypothesis 4.

The final test of Hypothesis 4 is whether union members work for employers with safer policies and practices. For the two policies and practices impacting likelihood of serious injury from a fall – use of a body harness at heights above 6 feet off the ground and use of handrails on scaffolds – union employers do have significantly safer practices. But this is not the case for other policies, such as holding weekly safety meeting, providing material safety data sheets (MSDS), using electrical ground faults, provision of first aid kits, or provision of bathrooms. Table 41 shows the results.

Table 41
Relationship between Union Membership and Employer Safety Policies/Practices

Policy/ Practice	UNION MEMBERS # Yes	#No	% Yes	NON-UNION WORKERS #Yes	# No	% Yes	Exact Sig.*
Weekly Safety Meetings	12	9	**57%**	13	16	**45%**	.284
Require Body Harness	15	1	**94%**	12	12	**50%**	**.004**
Provide Copy of Safety Program	11	10	**52%**	9	20	**31%**	.110
Provide MSDS Sheet for Chemicals	10	10	**50%**	9	14	**39%**	.342
Provide Electrical Ground Faults	12	7	**63%**	17	10	**59%**	.618
Provide Handrails on Scaffolds	18	0	**100%**	13	5	**72%**	**.023**
Provide First Aid Kit	14	7	**67%**	20	7	**74%**	.750 (wrong direction)
Provide Bathroom	17	4	**81%**	23	6	**79%**	.589

*Fisher's Exact Test (1-sided; 2-sided for one in wrong direction)

While all but one of the variations are in the expected direction, the only two union employer policies or practices that are significantly better than those of their non-union counterparts were provision of body harnesses and provision of handrail on scaffolds. Thus, the evidence supporting Hypothesis 4 is weaker concerning employer policies than it is for either training or use of personal protective equipment.

Overall, Hypothesis 4 is supported by the evidence. Regarding training, union members are much more likely to receive all five types of specified safety training. Regarding use of personal protective equipment, union members are significantly more likely to wear a hard hat, use protective eyewear, use guards on cutting tools, and utilize hearing protection. And concerning employer practices, union employers are significantly more likely to provide protection against falls through provision of body harnesses and scaffold hand rails. These two practices are particularly important because falls are a leading cause of death and serous injury for construction workers. On the whole, Hypothesis 4 is supported by the evidence.

Test of Hypothesis 5: Hypothesis #5 postulates that a documented or naturalized immigrant construction worker (referred to hereafter as "documented") is more likely than an undocumented counterpart to have received safety training, use protective safety equipment, and experience safer employer policies and practices. Regarding training, the hypothesis is

confirmed for OSHA 10-hour training and scaffold training at a .05 level of significance, but not for other types of training. Table 42 gives the results.

Table 42
Relationship between Documented/Undocumented Status and Training

	DOCUMENTED			UNDOCUMENTED			
	# Yes	#No	% Yes	#Yes	# No	% Yes	Exact Sig.*
OSHA 10-hr. Training	26	13	**67%**	1	10	**9%**	**.001**
Scaffold Training	25	14	**64%**	2	9	**18%**	**.009**
CPR/First Aid Training	13	26	**33%**	2	9	**18%**	.283
Asbestos Training	9	30	**23%**	1	10	**10%**	.289
Hazardous Training	20	19	**51%**	5	6	**45%**	.500
Other Safety Training	19	20	**49%**	4	7	**36%**	.353

*Fisher's Exact Test (1-sided)

This constitutes confirmation of Hypothesis 5, but only for two basic types of training, not for all types of safety training.

Regarding use of protective safety equipment on the job, the results show that documented workers are significantly more likely to wear a hard hat, to use protective eyewear, and to use guards on cutting tools. All of the other variations are in the "right" direction, but are not significant. Table 43 gives the results.

Table 43
Relationship between Documented/Undocumented Status and Use of Protective Safety Equipment on the Job

	DOCUMENTED			UNDOCUMENTED			
	# Yes	#No	% Yes	#Yes	# No	% Yes	Exact Sig.*
Wear Work Boots	34	5	**87%**	9	2	**82%**	.487
Wear a Hard Hat	35	4	**90%**	5	6	**45%**	**.004**
Wear Work Gloves	17	21	**45%**	4	7	**36%**	.445
Wear Protective Eyewear	25	14	**64%**	3	8	**27%**	**.034**
Use Guards on Cutting Tools	24	14	**63%**	3	8	**27%**	**.039**
Use Hearing Protection	11	28	**28%**	1	10	**9%**	.184
Use Respiratory Protection	11	28	**28%**	2	9	**18%**	.404

*Fisher's Exact Test (1-sided)

Again, this provides partial confirmation of Hypothesis 5, but only for the use of a hard hat, protective eyewear, and guards on cutting tools.

Regarding employer safety policies and practices, documented workers are significantly more likely to work for an employer that provides a copy of its safety program and provides handrails for scaffolds. Other relationships are usually in the right direction, but are not statistically significant. Table 44 provides results.

Table 44
Relationship between Documented/Undocumented Status and Employer Safety Policies and Practices

Policy/ Practice	DOCUMENTED # Yes	#No	% Yes	UNDOCUMENTED #Yes	# No	% Yes	Exact Sig.*
Weekly Safety Meetings	22	17	**56%**	3	8	**27%**	.085 (nearly significant)
Require Body Harness	24	9	**73%**	3	4	**43%**	.139
Provide Copy of Safety Program	19	20	**49%**	1	10	**9%**	**.018**
Provide MSDS Sheet for Chemicals	16	17	**47%**	3	7	**30%**	.254
Provide Electrical Ground Faults	21	16	**54%**	8	1	**89%**	.124 (wrong direction)
Provide Handrails on Scaffolds	28	2	**93%**	3	3	**50%**	**.024**
Provide First Aid Kit	27	11	**71%**	7	3	**70%**	.615
Provide Bathroom	32	7	**82%**	8	3	**73%**	.382

*Fisher's Exact Test (1-sided; 2-sided for one in wrong direction)

Thus, for only a small sub-set of employer policies and practices (provision of copy of safety program and provision of handrails on scaffolds) does documented status significantly improve safety for these immigrant workers.

Thus, while there is some evidence that documented (or naturalized) status is positively related to more training, more use of protective equipment, and safer employer policies and practices, this is only true for a limited sub-set of trainings and practices and policies: two out of

six types of training, three of seven types of protective equipment, and two of eight employer policies or practices.

Test of Hypothesis 6: Hypothesis #6 postulates that a general laborer is less likely than a skilled or semi-skilled counterpart to have received safety training, use protective safety equipment, and experience safer employer policies and practices. Regarding training, the hypothesis is confirmed for OSHA 10-hour training and scaffold training at a .05 level of significance, with near significance for asbestos and hazardous training, but not for other types of training. Table 45 gives the results.

Table 45
Relationship between Skill and Training

	UNSKILLED (GENERAL LABORER)			SKILLED OR SEMI-SKILLED (SOME CRAFT)			
	# Yes	#No	% Yes	#Yes	# No	% Yes	Exact Sig.*
OSHA 10-hr. Training	3	8	**27%**	24	15	**62%**	**.047**
Scaffold Training	3	8	**27%**	24	15	**62%**	**.047**
CPR/First Aid Training	2	9	**18%**	13	26	**33%**	.283
Asbestos Training	0	11	**0%**	10	29	**26%**	.062 (near significance)
Hazardous Training	3	8	**27%**	22	17	**56%**	.085 (near significance)
Other Safety Training	4	7	**36%**	19	20	**49%**	.353

*Fisher's Exact Test (1-sided)

The results show support for Hypothesis 6 regarding OSHSA 10-hr. training and scaffold training and weaker support for asbestos training and hazardous training. Results are mixed, but mildly supportive.

Regarding use of protective safety equipment on the job, the results show that unskilled general laborers display no significant differences from their more skilled counterparts. No differences were even close to statistical significance.

Regarding employer safety policies and practices, all differences are in the expected direction, but none are even near statistical significance apart from provision of a bathroom, which is significant (p=.030).

In general, Hypothesis 6 is not supported. Semi-skilled or skilled immigrant construction workers are significantly more likely to receive OSHA 10-hour training or scaffold training than are their unskilled general laborer counterparts, but no other form of training, use of protective equipment, or employer practice aside from provision of a bathroom is significantly different between the two groups.

Our results so far have shown that union status and secondarily documented status are the most likely factors related to superior health and safety outcomes for these immigrant construction workers. Length of residence in the United States and length of time in the construction industry appear to have little relationship to safety and health outcomes. Given these results, we should look for additional confirming or disconfirming evidence that the relationships found are causal ones, as assumed by the underlying theory leading to the hypotheses. Two obvious places to look are the actual illness or injury experiences of different groups and potential differences in willingness to report an unsafe condition. These two will be looked at now, in reverse order.

Union members are significantly more likely to report safety violations than were non-union members (p=.013); documented workers were also significantly more likely to do the same (p=.006). ("Unsure" responses were treated as a "no" response, meaning that the worker would probably not report a safety violation.) Ninety one percent of union members would report a safety violation, compared with 59% of non-union members. Eighty two percent of documented workers would report a safety violation, compared to 36% of the undocumented.

There were also some significant or near-significant results for length of residency in the United States. Those in the country four or more years were more likely to report a safety violation at an almost significant level of confidence (p=.074); those in the country seven or more were significantly more likely than those with a less lengthy residence (p=.022) as were those with 10 or more years compared to shorter term residents (p=.036). Those with thirteen or more years residence were almost significantly more likely than those with less years residence to report a violation (p=.069). Thus, for the four different categorizations of U.S. residence,

those in the country longer were always more likely to report a violation, twice significantly and twice almost significantly.

Years in the construction industry were never significantly related to this variable. The fear of retaliation for reporting safety violations is apparently lower for union, documented, and longer term resident workers.

Concerning accident and injury rates, comparisons between documented and undocumented workers are impossible, because the survey did not ask the respondents the date when they achieved documented or naturalized status, and thus it would be impossible to know their documented/undocumented status within the past three years (the period for which injury and illness data were collected). Similar problems plague a skilled/unskilled comparison, since many respondents have worked more than one craft (including mixing general labor with a more skilled craft), and the survey did not capture the dates when they were working in different capacities.

Comparisons between union and non-union respondents should be possible. But this can only be done for those who have worked in construction for three years or longer, because accident and injury questions asked about a three year working experience. Fifteen who had worked in construction for less than three years were eliminated from the sample for purposes of this computation. Second, we had to eliminate from the comparison those who had been in the union less than three years, since their inclusion would not have allowed us to distinguish their union from their non-union injury/illness experience. The resulting groups for the comparison comprised only eight union workers and 20 non-union workers. Within the union group, three of the eight (37.5%) had had an injury or work-related illness within the past three years. On the non-union side, only one of the 20 had (5%). This difference, in an unexpected direction, was almost significant (p=.058; two-tailed).

Looking at injuries serious enough to require medical attention, an identical three of the eight union workers had had such an injury in the past three years. And an identical three of the eight had lost a day's work due to work injury in the past three years. On the non-union side, none of the 20 had had an accident serious enough to require medical attention or to lose a day's work in that time period. For both the medical attention and lost work differences, the difference is statistically significant (p=.017; two-tailed).

It is difficult to explain the nearly significant and significant results in an unexpected direction. Several explanations are possible. First, it is possible that union construction labor is actually more dangerous than doing the same type of work non-union, despite the superior training, use of protective equipment, and employer safety policies and practices on the union side. This is not very likely, however.

Second, the results could simply be a function of the extremely small numbers involved in the sample comparisons. For example, had just one of the three union workers who reported an injury reported the opposite, the statistical significance would have disappeared. This is a quite plausible explanation.

Third, it could be that union construction work is different from non-union construction work in some manner that is relevant to safety. For example, no residential construction work in south Florida is done by union workers, and residential work is known to have a lower nonfatal injury rate than for other sectors having much larger projects.

Fourth, it could be a function of the craft of the workers involved. Six of the eight union workers in the comparison were carpenters (or carpenter union drywall hangers), an especially dangerous occupation in Florida. Carpentry and floor work resulted in 32% more OSHA cases with days away from work, job transfer, or restriction than was true for construction work in general in Florida during 2002 (see the OSHA web site at http://www.bls.gov/iif/oshwc/osh/os/pr0206fl.pdf for relevant figures). The other two union members were in the Ironworkers Union, another high risk population. While a good number of non-union workers were also in high risk occupations (carpenters – 6; general laborers -5; roofers -2), many were in occupations less prone to non-fatal accidents, such as plasterer (3), painter (2), electrician (1), or operator of smaller heavy equipment (1). None were ironworkers. If we compare union and non-union workers in the same occupation – carpenter or drywall hanger – the union workers again had more accidents than the non-union workers, but the numbers are so small that statistical significance is impossible to calculate. None of the six non-union carpenters or drywall hangers had had any type of injury, while two of the six union carpenters or drywall hangers had.

Finally, it is possible that some of the non-union workers were underreporting their injuries in a systematic way. This possibility arises from the responses showing that non-union

workers are significantly less likely to report a safety violation on the job, as reported earlier. Seven of the eleven respondents unwilling to report a safety violation were from the group of 20 non-union workers being considered here. Further evidence comes from the fact that six of these seven who would choose to not report a safety violation rated their employer positively regarding concern for safety. Typical reasons these same respondents gave for not reporting were that their supposedly safety-concerned employers (1) wouldn't listen; (2) would ignore the complaint; (3) might fire or blackball the worker; (4) might threaten and pull a knife, as had happened with a friend; etc. Since these respondents were apparently less than forthcoming in their evaluations of their employers' safety attitudes (rating them positively despite fear or cynicism about their reactions to complaints), it may well be that they are also less than forthcoming about whether or not they have had a work related injury in the past three years.

Whatever the reason or combination of reasons for the discrepancy between self-reported injury rates and all other measures of safety, we have only speculative explanations. To fully resolve the mystery, further research involving a much larger sample would be necessary. Perhaps the further research would have to obtain information not obtained through use of the survey used in this research. However, due to the small size of the numbers being compared regarding injury data, at the present it cannot be considered as more than a cautionary footnote to previous data showing union workers experience superior safety and health outcomes.

The survey asked for a great deal of information regarding employer treatment of workers in areas other than workplace safety and health practices. This was done because the investigator considered it likely that employers treating workers in an inferior manner regarding safety were also likely to be the same employers treating their workers in an inferior manner in other ways. Therefore, a loosely stated seventh hypothesis guiding this research was as follows: **Hypothesis #7: Respondents receiving less health and safety training, using less personal protective equipment, or experiencing less safe employer safety policies and practices will also disproportionately experience irregular and inferior employer treatment in other spheres, such as lack of workers' compensation coverage, payment in cash, lack of health care or retirement plans, extremely low pay, etc.**

Test of Hypothesis 7: This hypothesis was not stated very precisely at the beginning of the research because the investigator was uncertain about what links would be found. Largely,

the research would be exploratory, and would search for significant differences in non-safety outcomes for those experiencing "better" and "worse" safety and health outcomes. The following paragraphs will relate evidence found from a preliminary investigation.

For the most part, very little usable information was gathered that could test this hypothesis. Usually this was because the numbers of respondents experiencing an unusual or "inferior" employer practice or status was so small that no meaningful comparisons could be made. The solution would be further research with a much larger sample size. A few of the tests, and results, are presented below.

The relationship between working for a temp help firm and safety training and treatment outcomes was of interest. However, only three of the fifty respondents worked for a temp help firm. An inspection of the training of those three revealed nothing startling. On average, one of the three had received each type of training covered by the survey. Compared to the results for the entire sample as reported in Table 12 above, nothing unusual is apparent. The same is true for use of personal protective equipment: the three working for temp help firms did not depart drastically from the percentages reported for the overall sample in Table 15 above. And concerning employer safety policies and practices as reported in Table 16 above, the same holds true.

The number of respondents who had been paid in cash was thirteen. Hypothesis 7 would postulate that they would likely receive less safety training, use less protective equipment, and experience less safe employer policies and practices. Yet a cross tabulation on all of these measures revealed no relationships that were even close to significant. Hypothesis 7 is not supported concerning those paid in cash.

The number of respondents who had been asked to dishonestly sign an independent contractor form (1099) was only four. Not surprisingly for such a small number, cross tabulation of those asked to sign a 1099 form with any of the training, personal protective equipment use, or employer practices variables showed no significant results. Again, a much larger sample size would be needed to test for significant results.

The same holds true for those who were paid by the piece, or by the job, rather than on an hourly basis. Only two respondents generally were paid by the piece and only two were generally paid by the job. Such small numbers made meaningful comparisons impossible.

A significant relationship was found between having an employer-provided retirement/savings plan and having been trained. Those with a retirement plan were significantly more likely to have received three of the five named types of training, and a fourth type showed almost significant results. Results are shown in Table 46.

Table 46
Relationship between Having a Retirement/Savings Plan and Being Trained

	HAVE RETIREMENT PLAN			NO RETIREMENT PLAN			
	# Yes	#No	% Yes	#Yes	# No	% Yes	Exact Sig.*
OSHA 10-hr. Training	10	3	**77%**	16	20	**44%**	**.044**
Scaffold Training	9	4	**69%**	17	19	**47%**	.150
CPR/First Aid Training	7	6	**54%**	7	29	**19%**	**.025**
Asbestos Training	5	8	**38.5%**	4	32	**11%**	**.043**
Hazardous Training	9	4	**69%**	15	21	**42%**	.083 (near significant)
Other Safety Training	6	7	**46%**	16	20	**44%**	.584

*Fisher's Exact Test (1-sided)

However, there are no significant relationships between having a retirement plan and any measure of use of personal protective equipment or of employer safety policies and practices. And the statistically significant results we did find are almost certainly a by-product of union membership. Of the thirteen respondents with a retirement plan, 12 were union members. Since union members are much more likely to be trained, this explains the one significant result we could find here.

Unexpectedly, there was no similar relationship between having health care coverage and having been trained. All differences were far from significant. This is probably because the "union effect" is less pronounced concerning health care coverage. While union respondents are much more likely to have health insurance than are non-union respondents (60% vs. 32%; *p*=.052 1-sided), the union—non-union differences are not as extreme here as they are in the area of retirement plan coverage (Union: 60% vs. Non-union: 3%; p=.000 1-sided). Similarly, no significant relationships were found between having health care coverage and use of personal protective equipment. Regarding employer safety policies and practices, one significant and two nearly significant relationships were found. Employers providing health care coverage were significantly more likely than those not providing this coverage to give their employees a copy of their safety program (71% vs. 18.5%; *p*=.000 1-sided). They were also more likely to hold weekly safety meetings (67% vs. 41%; *p*=.067 1-sided). They were also more likely to provide a

body harness for work done six or more feet above the ground (82% vs. 54.5%; *p*=.067 1-sided). But nothing significant, or even close to significant was found concerning the relationship between health care coverage and use of ground fault outlets, providing scaffold hand rails, providing first aid kits, or providing bathrooms.

It was also thought that perhaps extremely low paid workers would receive less safety training, use personal protective equipment less, and experience less safe employer policies and practices. To test this, those making less than $15,000 a year (personal income) and those making less than $20,000 a year were compared with those making more on these dimensions. Virtually no significant results were found, for either comparison. Only one relationship reached significance: those earning $20,000 or more were significantly more likely to have received scaffold training (69% vs. 33%; *p*=.013, 1-sided). And one relationship was almost significant, but in the unexpected direction: those earning less than $15,000 were almost statistically significantly more likely to receive CPR/first aid training (67% vs. 25%; *p*=.058; 2-sided). Neither of these results proves anything important, however, and all other differences were very far from statistical significance.

In summary, few significant relationships were found between most areas of employer treatment of a non-safety nature and respondents' degree of training, use of personal protective equipment, or employer safety policies and practices. The only consistent relationships found appear to be largely due to the ability of unions to achieve a retirement plan for their members.

Of course, many relationships could not be tested due to small sample size. A real test would require further research with a much larger sample size. However, the few tests that were feasible supply little evidence in support of Hypothesis 7. There is no clear evidence from the results of this survey that "inferior" employer practices across the safety – non-safety spectrum "cluster" together, despite the researcher's initial belief that they would.

SUMMARY AND CALL FOR FURTHER RESEARCH

The fifty immigrant construction workers surveyed here share a number of significant characteristics with the South Florida immigrant construction workforce, with a few clear exceptions. Haitians and union members were intentionally over-sampled, and probably Guatemalans were over-sampled and Cubans under-sampled with no intent to do so. Other

deviations from an entirely representative sample can undoubtedly be found (especially in the "mix" of skills and trades represented). Nevertheless, the sample can still tell us a lot about immigrant construction workers in the area, which it mirrors in at least a number of important respects.

These respondents work long hours (averaging 45 hours per week) for low pay (median income is $20,000 - $25,000 per year). Forty two percent earn less than $20,000 per year. They face extremely unsafe working conditions. In an industry that is already known for being dangerous, they have a serious injury rate (involving at least a day's loss of work) that is more than three times the average for construction workers in the state. Even compared to the most dangerous sectors of construction work, they have a serious injury rate over twice as high.

Forty percent of the respondents had witnessed an accident in the past year at work serious enough to require hospitalization. Sixteen percent during their construction career have witnessed an accident at work causing death. (Average length of that career is 7.5 years).

Clearly, these workers work under unsafe conditions. Immigrants are now a majority of the construction labor force in south Florida and an ever-growing proportion of the construction labor force throughout the United States (currently between 15% and 20% and growing). Therefore their safety conditions and circumstances are of great importance for those concerned with the safety conditions of <u>all</u> construction workers in the country. In addition, of course, their safety conditions are important to research in any case. One important reason to investigate these issues is to determine if any possible public policy measures might improve their treatment.

The evidence from this survey indicates that unionized status is the factor most significantly related to more safety training, more use of personal protective equipment, and safer employer policies and practices. Documented legal status is also significantly related to these desirable outcomes, although less so than is unionized status. One possibility is that unionization, and documented legal status, <u>cause</u> the superior training and practices outcomes. This possibility coincides with broader evidence and theory that indicates that unionized workers and workers with legal protection have greater power to determine their working conditions, including safety conditions. They are less likely to be completely at the mercy of an employer facing pressures to sacrifice worker safety in the pursuit of production and profitability.

Correlation does not, of course, prove causality. It could be that some other factor is leading to both unionization and better safety training and safety practices. The same could be true for documented legal status and safety outcomes. It is hard to see what that the third independent factor could be, however. The mere passage of time, either within the country or within the industry, is not related significantly with improved safety outcomes. The intervention of unionization or documentation does coincide with a close positive relationship to better safety outcomes.

In any case, whether unionization or documented legal status cause improved safety outcomes or not (and the evidence is quite strong that they do), whatever leads to unionization and/or documented legal status should be encouraged by public policy, if that policy aims to improve the safety conditions of these immigrant construction workers. At least that is the conclusion to be drawn from this preliminary research.

The present research is far from definitive, however. The small size of the sample calls for caution in generalizing results. Further research should be conducted on a much larger sample size. Small modifications in the research instrument (survey) used here could also improve the usefulness of the data gathered. For example, the date at which a documented worker became documented should be gathered. Likewise sequencing with time lines of the different types of construction work done over the years, together with the dates of accident occurrence, would help enormously in sharpening analysis of the data. (This last suggestion may be too cumbersome, however – the survey already is quite long). In any case, a much larger research project aiming to confirm or disconfirm the evidence presented here, is greatly needed. Because of its size, such a larger research project would also be able to test for many things the current project was unable to do because of small sample size.

APPENDIX A – RESEARCH INSTRUMENT (SURVEY) IN ENGLISH

RESEARCH INSTRUMENT -- SURVEY

(Before beginning the survey, find out if the person you are talking to (a) is 18 years of age or older, (b) was born in a foreign country to parents who were not U.S. citizens, and (c) is working in the construction industry. If the answer to ALL THREE of (a), (b), and (c) is "yes", proceed. Otherwise, do not survey this person.)

Opening statement: This is a survey of about 50 adults 18 years of age or older who were not born in the United States and who work in the construction industry in this country. This survey is part of a research project being done by a professor at Florida International University. The questions will mostly be about your experiences working in the construction industry in this country, especially on issues of health and safety. A few questions will also be about background information. Replying to the survey should take about 45 minutes. As a participant in this survey you will assist other construction workers by providing information on current safety and health practices and training on construction work sites. This anonymous information will be shared with policy makers who will hopefully develop future policies that improve working conditions and training for all construction workers. There are no known risks to you from answering these questions beyond that which would be encountered in daily life. If you have any questions about this research, feel free to contact Dr. Bruce Nissen, at Florida International University, at 305-348-2616. You are free to not answer any question you do not wish to answer. You will be paid $25 for your participation if you complete the survey – or whatever percentage of $25 corresponds to the percentage of the survey you answer. The information gathered will be used only for research reports and scholarly articles. You will not be asked your name, and you will not be identified in any reports or other writings that come from this research. Do you give permission to be surveyed on this topic? (Obtain verbal consent)

Questions:

GENERAL DEMOGRAPHICS AND INFORMATION

(0) Record gender by observation _____male _____female (Ask if necessary)

(1) What is the country and town or village (or closest town or village) where you were born?

(2) What is your date of birth? Month_____ Day_____ Year_____

(3) What year did you come to live in the United States? _____

(4) How many years have you worked as a construction worker in the United States? _____years (If construction work has been interrupted by other types of work, have them add up the total number of years, not counting the periods when they were not in the construction industry. You can use fractions, such as 1 ½ years, 2 3/4 years, ½ year, etc.)

(5) What trade do you work most often? _____carpenter _____general laborer _____iron worker _____carpet layer _____drywall _____electrician _____heavy equipment operator _____insulation _____painter _____iron worker _____plumber or pipefitter _____sheet metal worker _____bricklayer or mason _____roofer _____heating, ventilation, or air conditioning installer ____glass worker or glazier _____other (specify)_____

(6) What other trades have you worked? _____carpenter _____general laborer _____carpet layer _____drywall _____electrician _____heavy equipment operator _____insulation _____painter _____iron worker _____plumber or pipefitter _____sheet metal worker _____bricklayer or mason _____roofer _____heating, ventilation, or air conditioning installer _____glass worker or glazier _____other (specify)_____

(6a) For each trade marked above, how long did you work in this trade?

Trade	Length of time worked in this trade
_____	_____
_____	_____
_____	_____
_____	_____

TRAINING

(7) Have you received any "OSHA 10 hour training"? ("OSHA" means "Occupational Safety and Health Act", a law concerning workplace safety) _____yes _____no _____don't know

If training received, **(7a)** how soon did you receive it after you began working in construction? _____ (circle which: days, months, years)

(7b) Was the training in English, or was it in your original language?
_____in English _____in original language

(7c) Could you understand the training well? _____yes _____no

(7d) Were you asked to sign a statement that you received this training?
_____yes _____no

(7e) Who provided the training? _____employer _____union apprenticeship program _____union but not through an apprenticeship program
____other (specify) _____

(8) Have you received any scaffold safety training? _____yes _____no
_____don't know

If yes, **(8a)** Was the training in English, or was it in your original language?
_____in English _____in original language

(8b) Could you understand the training well? _____yes _____no

(8c) Were you asked to sign a statement that you received this training?
_____yes _____no

(8d) Who provided the training? _____employer _____union apprenticeship program _____union but not through an apprenticeship program ____other (specify)_____

(9) In the past three years (or as long as you have worked in construction if less than three years), have you participated in any CPR or first aid training? ____yes ____no ____don't know

If yes, **(9a)** how many programs like this have you participated in? _____programs

(9b) How many hours did the longest of those programs last? _____hours

(9c) Was the training in English, or was it in your original language? _____in English _____in original language

(9d) Could you understand the training well? _____yes _____no

(9e) Were you asked to sign a statement that you received this training? _____yes _____no

(9f) Who provided the training? _____employer _____union apprenticeship program _____union but not through an apprenticeship program ____other (specify)_____

(10) In the past three years (or as long as you have worked in construction if that is less than three years), have you participated in any asbestos awareness training? _____yes _____no _____don't know

If yes, **(10a)** how many programs like this have you participated in? _____

(10b) How many hours did the longest of those programs last? _____hours

(10c) Was the training in English, or was it in your original language?
_____in English _____in original language

(10d) Could you understand the training well? _____yes _____no

(10e) Were you asked to sign a statement that you received this training?
_____yes _____no

(10f) Who provided the training? _____employer _____union apprenticeship program _____union but not through an apprenticeship program
____other (specify) _____

(11) In the past three years (or as long as you have worked in construction if that is less than three years), have you participated in any hazardous materials or hazardous location training?
_____yes _____no _____don't know

If yes, **(11a)** how many programs like this have you participated in? _____

(11b) How many hours did the longest of those programs last? _____hours

(11c) Was the training in English, or was it in your original language?
_____in English _____in original language

(11d) Could you understand the training well? _____yes _____no

(11e) Were you asked to sign a statement that you received this training?

_____yes _____no

(11f) Who provided the training? ____employer _____union apprenticeship program

_____union, but not through an apprenticeship program

_____other (specify)_____

(12) In the past three years (or as long as you have worked in construction if that is less than three years), have you participated in any other safety training program? _____yes _____no _____don't know

If yes, **(12a)** Would you describe what it was about, how long it lasted, and whether you found it useful in making your work safer? [open ended question]

If the person is an ironworker, **(12b)** Have you had any structural steel safety training (also known as "sub-part R" training)? _____yes _____no

PERSONAL PROTECTIVE EQUIPMENT

(13) We are interested in your use of various equipment and procedures in your work. Do you

NEVER	SOMETIMES	REGULARLY	ALWAYS	
				(a) wear work boots
				(b) wear a hard hat
				(c) wear work gloves
				(d) wear protective eyewear
				(e) use guards on cutting tools
				(f) use hearing protection
				(g) use respiratory protection

PRACTICES OF CONSTRUCTION EMPLOYERS

(14) In your experience, do the construction employers you work for have one meeting per week on safety issues? (These are sometimes also known as "tool box talks" or "tail gate safety meetings") _____generally yes _____generally no

If yes, **(14a)** Are these meetings in English, or in your original language?
_____in English _____in original language

(14b) Can you understand well what is being said at these meetings?
_____yes _____no

(15) For any work six or more feet above the ground, do your construction employers require you to use a body harness? _____generally yes _____generally no
_____not applicable

(16) Have your construction employers shown you or given you a copy of their safety programs?
_____generally yes _____generally no _____(if volunteered) don't know

(17) Have you been given access to Material Safety Data Sheets for any chemicals you work with?
_____generally yes _____generally no _____(if volunteered) don't know

(18) Have your construction employers used "ground fault" electrical outlets on your jobs, which turn off the electricity if there is a short?
_____generally yes _____generally no (if volunteered) _____don't know

(19) When doing construction work have you often been given electrical extension cords that are taped up because they have been cut?

_____yes _____no _____not applicable

(20) Would you report a safety violation to your employer if you were aware of it?

_____yes _____no ____(if volunteered) unsure

If no or unsure, **(20a)**: Why not? [open ended answer here]

If yes, **(20b)**: What usually happens (or would happen) when you do that? [open ended answer here]

(21) When you work on scaffolds, do the scaffolds have hand rails? _____generally yes _____generally no _____not applicable, because I never work on scaffolds

(21a) Are there usually other safety features, and if so, would you describe what they are?

(22) Does your employer allow you to keep the work site clean during the day while you're on the job, or do you have to wait until the end of the day to clean up? (open ended answer)

(23) Have your employers supplied first aid kits? _____generally yes _____generally no

(24) Have your employers supplied fresh drinking water on the job site?

_____generally yes _____generally no

(25) Have your employers supplied a number of places to go to the bathroom?

_____generally yes ____generally no

(26) Have you ever worked on a high rise building? _____yes _____no

If yes, **(26a)** Did your employer have safety rails or cables to prevent you from falling off, or was it possible to just walk off the edge?

_____had protection _____no protection

INJURIES

I am going to ask you some questions about injuries and work-related medical problems which may have affected your work in the last three years. If you have worked in construction for less than three years, please give answers only to the period during which you were working in construction.

(27) In the last three years, have you been injured or had a work-related medical condition which affected you at work while working as a construction worker?

_____yes _____no

(28) If you had an injury on the job, did you report it? _____yes _____no _____not applicable

If no, **(28a)**, why not? [open ended answer]

If yes, **(28b)** what happened when you did report it? [open ended answer)

(29) In the last three years, have you required medical attention from a nurse, paramedic, doctor or other medical worker because of an injury or work related medical condition which affected your work while working as a construction worker? _____yes _____no

(30) In the last three years, have you missed a day of work because of an injury or work related medical condition which affected your work while working as a construction worker?
_____yes _____no

(31) How many times have you been injured severely enough on the job to miss a day of work in the last three years? _____times

If the answer to (31) is more than zero, **(31a)** About how many days of work have you missed because of a construction injury in the last three years? _____ days

(31b) What was the longest period you were away from work because of a construction injury in the last three years? _____ (CIRCLE UNIT) 1. DAY(S) / 2. WEEK(S) / 3. MONTH(S) / 4. YEAR(S)

(31c) What type of work were you doing when that injury occurred?

(31d) Could you describe that injury?

(31e) When you first returned to work after recovering from that injury, did you work in construction? _____yes _____no

(31f) How long did it take for you to return to working in construction?
_____ (CIRCLE UNIT) 1. DAYS / 2. WEEKS / 3. MONTHS / 4. YEARS

(32) How many times have you been absent from work because of a work related illness other than an injury which affected your work in the last three years? (An example might be getting sick due to exhaustion, too much heat, etc.) _____ times

(33) About how many days of work have you missed because of a work related illness other than an injury in the last three years? _____days

(34) Have you filed for, or has someone filed on your behalf, for workers compensation for an injury or work related medical condition which you sustained in the last three years?
_____yes _____no _____don't know

If yes in #34, **(34a)** Was this for medical expenses? _____yes _____no

(34b) Was this for lost work time? _____yes _____no

(34c) Was this for a permanent disability? _____yes _____no

If no in #34, **(34d)** Have your employers almost always paid into the workers compensation system so you can receive benefits if you are injured or made sick because of your job? _____yes ____no _____don't know

(35) Have you ever been asked to sign a waiver of workers compensation coverage? _____yes _____no

If yes, **(35a)** would you tell me if the employer asking you to do this: (check)

_____employed less than 10 workers _____employed more than 10 workers

_____was non-union _____was union

_____paid in cash _____paid by check

(36) Have you received a workers compensation payment or benefit for injuries or work related medical condition you suffered while working construction in the last three years? _____yes _____no

If yes, **(36a)** Was this for medical expenses? _____yes _____no

(36b) Was this for lost work time? _____yes _____no

(36c) Was this for a permanent disability? _____yes _____no

(36d) How much did you receive? _____dollars

(37) Have you received compensation from an employer, other than workers compensation, for injuries or work related medical condition you suffered while working construction in the last three years? _____yes _____no

If yes, **(37a)** Was this for medical expenses? _____yes _____no

(37b) Was this for lost work time? _____yes _____no

(37c) Was this for a permanent disability? _____yes _____no

(37d) Was this for anything else? _____yes (if yes, what for?

_____

_____

(38) In general would you say your health is excellent, very good, good, fair, poor?

_____excellent _____very good _____good _____fair _____poor

(39) Compared to one year ago, would you say your health is much better, somewhat better, about the same, somewhat worse, much worse? _____much better ____somewhat better ____about the same ____somewhat worse ____much worse

(40) In the last year, have you been working on a site when a construction worker had to be taken to a hospital because of an injury? _____yes _____no

If yes, **(40a)** How many times has this occurred in the last year? _____times

(41) Since you started working construction, have you worked on a site when a construction worker died in a work related accident? _____yes _____no

EMPLOYER AND JOB CHARACTERISTICS

Now I'm going to ask you some questions about the construction jobs you have had, and the employers you have worked for.

(42) How long have you been continuously employed by your current employer?

_____ (CIRCLE UNIT) 1. DAYS / 2. WEEKS / 3. MONTHS / 4. YEARS

(43) How many different employers have you worked for while working in construction in the last 12 months? _____employers

(44) How did you find your current job? DO NOT READ; CIRCLE ALL THAT APPLY.

want ad in paper……. 01

word of mouth……. 02

friend or family member recruited me……... 03

union hiring hall……. 04

referred by prior employer……. 05

training program directed me to this employer… 06

current employer (moved from other project)…. 07

other (specify)…… …….…. … 08

(45) Is your current employer a construction firm, a temporary help firm, or some other type of firm? _____construction _____temporary help firm _____other (please specify) _____

If temporary help firm, **(45a)** How long have you worked for this temporary help firm? _____ CIRCLE UNIT 1. DAYS / 2. WEEKS / 3. MONTHS / 4. YEARS

(45b) Does your paycheck come from the temporary help firm, or the construction firm? _____temporary help firm _____construction firm

(45c) Would you prefer to work directly for the construction firm that is currently employing you (rather than working for the temporary help firm)? _____yes

_____no (if volunteered)_____unsure, or don't know

(46) About how many people, including yourself, were on your job site today, or the last day you worked construction? _____ people

(46a) How many employees does your employer have at all locations -- please include all employees, not only construction workers but sales workers, secretaries, and other employees? Is it: _____less than 10 _____10 to 24 _____25 to 99

_____100 to 499 _____500 to 999 _____1000 or more?

(if volunteered)_____don't know

(47) How many of the construction employees of your current employer are represented by a union – would you say all, most, some, or none?

_____all _____most _____some _____none

(48) What union or unions represent the employees of your current employer?

(49) During the past year, <u>when you are working in construction</u>, how many days per week have you worked, on average?

____one ____two ____three ____four ____five ____six ____seven

(49a) On average, how many hours <u>per week</u> while working construction?

_____hours

(50) Have you ever been paid for construction work in cash, rather than by check?

_____yes _____no

If yes, **(50a)** would you tell me if the employer asking you to do this: (check all that apply)

_____employed less than 10 workers _____employed more than 10 workers

_____was non-union _____was union

_____required you to sign a waiver of worker's compensation coverage

_____required you to sign a "tax form" (also known as a "1099")

(51) Have you ever done construction work where you were paid by the hour and were asked to sign a “tax form” (also known as a “1099"), so that taxes would not be deducted from your paycheck? _____yes _____no

If yes, **(51a)** would you tell me if the employer asking you to do this: (check all that apply)

_____employed less than 10 workers _____employed more than 10 workers

_____was non-union _____was union

_____required you to sign a waiver of worker’s compensation coverage

_____paid you in cash, instead of by check

(52) When you did construction work during the past year, were you usually paid by the hour, by the piece, or by the job? _____by the hour _____by the piece _____by the job

If by the hour, **(52a)** On average, how much did you make per hour? $_____per hour

If by the piece, **(52b)** On average, at that piece rate, how much did you end up making in each hour you worked? $_____per hour

If by the job, **(52c)** On average, at that rate per job how much did you end up making in each hour your worked? $_____per hour

(53) At your present construction job, do you have any kind of retirement or savings plan?

_____yes _____no

If yes, **(53a)** does the employer contribute to it? _____yes _____no

(53b) Is this a union plan? _____yes _____no

(54) At your present construction job, does your employer offer any kind of health care coverage? _____yes _____no

If yes, **(54a)** what percentage of its cost does the employer pay, and what percentage of its cost do you have to pay? Employer percentage is _____%. My percentage is _____% (if volunteered) _____I don't know

(55) How much do you agree or disagree with each of the following statements. Please tell me whether you strongly agree, agree, disagree or strongly disagree.

	Strongly Agree	Agree	Disagree	Strongly Disagree
a. My foreman is concerned about worker safety				
b. My contractor (employer) is concerned about worker safety				
c. Unions lead to safer jobs				
d. My work conditions are dangerous				
e. My work area is kept clean				
f. My work area is cluttered				
g. My job site has a good safety program				
h. I have too much to do to be able to follow safe work practices				
i. Where I work, productivity is more important than worker safety				

FURTHER DEMOGRAPHICS AND BACKGROUND INFORMATION

(56) Do you currently belong to a union? _____yes _____no

If yes, (56a) which union do you belong to?

_____ ENTER CODE FROM LIST BELOW

1 Asbestos workers	11 Operating Engineers
2 Boiler Makers	12 Painters
3 Bricklayers	13 Plasterers
4 Carpenters	14 Plumbers and Pipefitters
5 Cement Masons	15 Roofers
6 Electrical Workers	16 Sheet Metal Workers
7 Elevator Constructors	17 Teamsters
8 Glaziers	18 Tile, Marble and Terrazo Helpers
9 Ironworkers	19 OTHER
10 Millwrights	

(56b) Have long have you belonged to the union? _____years (or _____months)

(57) About what was your total <u>family</u> income last year? $_____

PROBE IF NECESSARY: Was it less than $30,000? _____yes _____no

Was it more than $45,000? _____yes _____no

Was it more than $60,000? _____yes _____no

Was it less than $20,000? ____yes _____no

(58) About what was your total <u>personal</u> income last year? $_____

(59) What is the highest school grade you have completed? _____

(Try to get grade number, but if that does not work, prompt and ask if it was:

_____less than high school (8^{th} grade or less) _____some high school (9th-12th grade)

_____high school degree _____vocational or technical school

_____some college (no degree) _____college or graduate degree

(60) Are you a citizen of the United States? ____yes ____no ____doesn't want to answer

If no, **(60a)** is your legal status _____documented, or _____undocumented?

(_____doesn't want to answer)

That is all the questions that I have. Thank you for your time.

APPENDIX B – RESEARCH INSTRUMENT (SURVEY) IN SPANISH

INSTRUMENTO DE INVESTIGACION-ENCUESTA

(Antes de comenzar esta encuesta, averigüe si la persona con quien habla (a) ha cumplido ó es mayor de 18 años de edad, (b) nació en una nación extranjera de padres que no eran ciudadanos americanos, y (c) trabaja en la industria de la construcción. Proceda si la respuesta a TODAS LAS TRES preguntas (a), (b) y (c) es "sí", Si la respuesta es "no", no la entreviste).

Declaración de apertura: Esta es una encuesta de aproximadamente 50 adultos que han cumplido ó son mayores de 18 años que no nacieron en los Estados Unidos de Norteamérica, y trabajan en la industria de la construcción en este país. Esta encuesta es parte de un proyecto de investigación que está siendo hecho por un profesor de la Universidad Internacional de la Florida/Florida International University (FIU). Las preguntas le serán hechas en su mayoría sobre sus experiencias en su trabajo en la industria de la construcción en este país, especialmente sobre asuntos de salud y seguridad en el trabajo. También se le harán unas cuantas preguntas de información sobre su persona. Le llevará alrededor de 45 minutos el contestar esta encuesta. Al participar en ella, usted ayudará a otros trabajadores de la construcción en proveer información sobre las prácticas y entrenamiento de la salud y seguridad laboral actual que se efectúan en lugares donde hay obras de construcción. Esta información anónima será compartida con los que establecen las políticas en quienes confiamos puedan desarrollar normas futuras para mejorar las condiciones y entrenamientos laborales de todos los trabajadores de la construcción. No conocemos de riesgos que pueda usted correr al contestarnos estas preguntas más allá de los que podría encontrar en su vida diaria. Si usted tiene alguna pregunta sobre esta investigación, siéntase libre para comunicarse con el Dr. Bruce Nissen en la Universidad Internacional de la Florida (FIU), al teléfono (305) 348-2616. Usted está en libertad de no contestar cualesquiera de las preguntas si no desea hacerlo. Se le pagarán $ 25 por su participación si contesta la encuesta completa – o el por ciento de los $ 25 que corresponda al por ciento de la encuesta que usted conteste. La información recopilada será utilizada solamente para preparar reportes sobre la investigación y artículos académicos. No se le preguntará su nombre, y no será identificado en ninguno de los reportes o escritos que resulten de esta investigación. Nos da su autorización para hacerle esta encuesta sobre este tópico? (Obtenga consentimiento verbal).

Preguntas:

DEMOGRAFIA E INFORMACION GENERAL

(0) Anote el sexo por observación _____ masculino _____ femenino (Pregunte si es necesario)

(l) En qué país, pueblo o villa (o pueblo o villa más cercano) nació usted?

(2) Cuál es su fecha de nacimiento? Mes _____ Día _____ Año _____

(3) En qué año vino a vivir para Estados Unidos de Norteamérica? _____

(4) Cuántos años ha trabajado en la construcción en los Estados Unidos de Norteamérica?
_____ años
(Si su trabajo en la construcción quedó interrumpido por otros tipos de labor, sume el total del número de años sin contar los períodos en los que no estuvo trabajando en la industria de la construcción. Puede usar fracciones tales como 1 ½ años, 2 ¾ años, ½ año, etc.).

(5) En qué oficio trabajó usted más? _____ carpintero _____trabajador general
_____ herrero _____ ponedor de alfombras _____ paneles (drywall)
_____ electricista _____ operador de equipos pesados _____ aislamiento
_____ pintor _____ plomero o montador de tuberías
_____ chapistero _____ albañil/mamposterero _____ techador
_____ instalador de calefacción, ventilación o aire acondicionado
_____ vidriero _____ otro (especifique) _____

(6) En cuáles otros oficios ha trabajado?
_____ carpintero _____trabajador general
_____ herrero _____ ponedor de alfombras _____ paneles (drywall)
_____ electricista _____ operador de equipos pesados _____ aislamiento
_____ pintor _____ plomero o montador de tuberías
_____ chapistero _____ albañil/mamposterero _____ techador
_____ instalador de calefacción, ventilación o aire acondicionado
_____ vidriero _____ otro (especifique) _____

(6a) Cuánto tiempo trabajó en cada uno de los oficios arriba indicados?

Oficio	Tiempo trabajado en el oficio
_____	_____
_____	_____
_____	_____

ENTRENAMIENTO

(7) Ha recibido usted algun “entrenamiento de 10 horas OSHA”? (OSHA significa “Acta de Salud y Seguridad Ocupacional”, una ley relacionada con la seguridad en el trabajo) _____ sí
_____ no _____ no lo se

Si recibió entrenamiento, **(7a)** cuán pronto lo recibió después de haber comenzado a trabajar en la construcción? _____ (marque un círculo alrededor de cuál: días, meses, años)

(7b) Recibió el entrenamiento en inglés, o en su idioma nativo?
_____ en inglés _____ en el idioma nativo

(7c) Pudo entender bien el entrenamiento? _____ sí _____ no

(7d) Le pidieron firmar una declaración después que recibió el entrenamiento?
_____ sí _____ no

(7e) Quién le proveyó el entrenamiento? _____ empleador _____ programa de aprendizaje del sindicato _____ sindicato fuera de un programa de aprendizaje
_____ otro (agencia de gobierno) (especifique) _____

(8) Ha recibido alguna vez entrenamiento de seguridad en los andamios?
_____ sí _____ no _____ no se

Si sí, **(8a)** Recibió el entrenamiento en inglés, o en su idioma nativo?
_____ en inglés _____ en el idioma nativo

(8b) Pudo entender bien el entrenamiento? _____ sí _____ no

(8c) Le pidieron firmar una declaración después que recibió el entrenamiento?
_____ sí _____ no

(8d) Quién le proveyó el entrenamiento? _____ empleador _____ programa de aprendizaje del sindicato _____ sindicato fuera de un programa de aprendizaje
_____ otro (agencia de gobierno) (especifique) _____

(9) En los últimos tres años (o durante el tiempo que ha trabajado en la construcción si es menos de tres años), ha usted participado en algun entrenamiento de CPR o de primeros auxilios? _____ sí _____ no _____ no se

Si sí, **(9a)** en cuántos programas como éste ha participado? _____ programas

(9b) Cuántas horas duró el más largo de ellos? _____ horas

(9c) Recibió el entrenamiento en inglés, o en su idioma nativo?
_____ en inglés _____ en el idioma nativo

(9d) Pudo entender bien el entrenamiento? _____ sí _____ no

(9e) Le pidieron firmar una declaración después que recibió el entrenamiento?
_____ sí _____ no

(9f) Quién le proveyó el entrenamiento? _____ empleador _____ programa de aprendizaje del sindicato _____ sindicato fuera de un programa de aprendizaje ____otro (agencia de gobierno) (especifique) _____

(10) En los últimos tres años (o durante el tiempo que ha trabajado en la construcción si es menos de tres años) ha participado en algun entrenamiento para conocimiento sobre asbestos? _____ sí _____ no _____ no se

Si sí, **(10a)** en cuántos programas como éste ha participado? _____ programas

(10b) Cuántas horas duró el más largo de ellos? _____ horas

(10c) Recibió el entrenamiento en inglés, o en su idioma nativo?
_____ en inglés _____ en el idioma nativo

(10d) Pudo entender bien el entrenamiento? _____ sí _____ no

(10e) Le pidieron firmar una declaración después que recibió el entrenamiento?
_____ sí _____ no

(10f) Quién le proveyó el entrenamiento? _____ empleador _____ programa de aprendizaje del sindicato _____ sindicato fuera de un programa de aprendizaje **_____** otro (agencia de gobierno) (especifique) _____

(11) En los últimos tres años (o durante el tiempo que ha trabajado en la construcción si es menos de tres años) ha participado en un entrenamiento sobre materiales o lugares peligrosos? _____ sí _____ no _____ no se

Si sí, **(11a)** en cuántos programas como éste ha participado? _____ programas

(11b) Cuántas horas duró el más largo de ellos? _____ horas

(11c) Recibió el entrenamiento en inglés, o en su idioma nativo?
_____ en inglés _____ en el idioma nativo

(11d) Pudo entender bien el entrenamiento? _____ sí _____ no

(11e) Le pidieron firmar una declaración después que recibió el entrenamiento?
_____ sí _____ no

(11f) Quién le proveyó el entrenamiento? _____ empleador _____ programa de aprendizaje del sindicato _____ sindicato fuera de un programa de aprendizaje **_____** otro (agencia de gobierno) (especifique) _____

(12) En los últimos tres años (o durante el tiempo que ha trabajado en la construcción si es menos de tres años) ha participado en algun otro programa de entrenamiento sobre seguridad en el trabajo? _____ sí _____ no _____ no se

Si sí, **(12a)** Podría describirnos sobre qué trató, cuánto duró, y si usted lo encontró útil para crear un lugar de trabajo más seguro? (pregunta abierta a respuesta).

Si la persona es un herrero, **(12b)** Ha recibido usted algun entrenamiento de seguridad sobre acero estructural (también conocido como entrenamiento "sub-part R")? _____ sí _____ no

EQUIPO DE PROTECCION PERSONAL

(13) Estamos interesados en su uso de varios equipos y procedimientos en su trabajo. Usted

NUNCA	ALGUNAS VECES	REGULAR-MENTE	SIEMPRE	
				(a) usa botas de trabajo
				(b) usa casco protector
				(c) usa guantes de trabajo
				(d) usa protectores de ojos
				(e) usa cubiertas para herramientas de cortar
				(f) usa protección auditiva
				(g) usa protección respiratoria

PRACTICAS DE LOS EMPLEADORES EN LA CONSTRUCCION

(14) En su experiencia, tienen los empleadores de la construcción para los que usted trabaja reuniones semanales sobre seguridad industrial? (También a veces son conocidas como "charlas de caja de herramientas", o "reuniones de seguimiento")
_____ generalmente sí _____ generalmente no

Si sí, **(14a)** se celebran estas reuniones en inglés o en su idioma nativo?
_____ en inglés _____ en mi idioma nativo

(14b) Puede usted entender bien lo que se dice en estas reuniones? _____ sí _____ no

(15) Le requieren sus empleadores de la construcción que use arreos corporales para trabajos que se realicen a seis o más pies sobre el nivel del piso? _____ generalmente sí _____ generalmente no _____ no aplica

(16) Le han enseñado sus empleadores en la construcción una copia de sus programas de seguridad? _____ generalmente sí _____ generalmente no _____ no se (si responde voluntariamente)

(17) Se le ha dado acceso a las Hojas con Datos sobre Seguridad de Materiales sobre cualquiera de los químicos conque usted trabaja?
_____ generalmente sí _____ generalmente no _____ no se (si responde voluntariamente)

(18) Han usado los empleadores de la construcción conque usted trabaja tomacorrientes eléctricos con "tierra" en sus trabajos, que apagan la electricidad si hay un corto circuito? _____ generalmente sí _____ generalmente no _____ no se (si responde voluntariamente)

(19) Cuando usted realiza trabajo de construcción, le han ofrecido a menudo extensiones de cordones eléctricos que están parchadas con cinta adhesiva (tape) porque han sufrido cortaduras?
_____ sí _____ no _____ no aplica

(20) Reportaría usted una violación de seguridad en el trabajo a su empleador si se diera cuenta de ello? _____ sí _____ no _____ no estoy seguro (si responde voluntariamente)
Si no o no está seguro, **(20a):** Por qué no? (Pregunta abierta a respuesta)

Si sí, **(20b):** Qué usualmente ocurre (u ocurriría) si lo hace (o lo hiciera)? (pregunta abierta a respuesta)

(21) Cuando usted trabaja en los andamios, tiene pasamanos? _____ generalmente si _____ generalmente no _____ no aplica, porque nunca trabajo en andamios.

(21a) Hay usualmente otras medidas de seguridad? Y si las hay, descríbalas

(22) Le deja su empleador mantener el sitio de su trabajo limpio durante el día mientras que usted está trabajando, o tiene que esperar hasta el final del día para poder limpiar? (pregunta abierta a respuesta)

(23) Tiene su empleador suficientes botiquines de primeros auxilios? _____ generalmente sí _____ generalmente no

(24) Tiene su empleador suficiente agua fresca para beber en el lugar de trabajo? _____ generalmente si _____ generalmente no

(25) Tiene habilitados su empleador suficientes lugares para ir al baño?
_____ generalmente sí _____ generalmente no

(26) Ha trabajado alguna vez en un rascacielos? _____ sí _____ no
Si sí, **(26a)** Tenía su empleador railes o cables de seguridad para prevenir que usted se cayera o era posible dar un paso en falso? _____ tenía protección
_____ no había protección

LESIONES

Le voy a hacer algunas preguntas sobre heridas o problemas médicos relacionados con el trabajo que puedan haberle afectado su empleo en los últimos tres años. Si usted ha trabajado en la construcción por menos de tres años, por favor sólo conteste con respecto al período de tiempo durante el cual usted estuvo trabajando en la construcción.

(27) En los últimos tres años, ha resultado usted herido o ha tenido un padecimiento médico relacionado con su trabajo que le haya afectado en su labor mientras ha estado trabajando en la construcción? _____ sí _____ no

(28) Si usted se lesionó en el trabajo, lo reportó? _____ sí _____ no _____ no aplica
Si no, **(28a)** por qué no? (pregunta abierta a respuesta)

Si sí, **(28b)** qué pasó cuando lo reportó? (pregunta abierta a respuesta)

(29) En los últimos tres años, ha requerido usted atención médica de una enfermera, paramédico, doctor u otro trabajador médico a causa de una lesión o condición médica relacionada con el trabajo que ha afectado su trabajo mientras laboraba en la construcción? _____ sí _____ no

(30) En los últimos tres años, ha perdido un día de trabajo a causa de una lesión o condición médica relacionada con el trabajo que le ha afectado su empleo mientras trabajaba en la construcción? _____ sí _____ no

(31) Cuántas veces en los últimos tres años ha resultado herido con severidad lo suficiente como dejar de trabajar un día? _____ veces

Si la respuesta a (31) es más de cero, **(31a)** Cuántos días de trabajo en los últimos tres años ha perdido por una lesion en la construcción ? _____ días

(31b) Cuál fue el período más largo de tiempo en los últimos tres años que estuvo fuera de su trabajo a causa de una lesión en la construcción? _____ (PONGA UN CIRCULO ALREDEDOR DE LA UNIDAD). 1. DIA(S) / 2.SEMANA(S) / 3.MES(ES) / 4.AÑO(S)

(31c) Qué tipo de trabajo estaba haciendo cuando resultó lesionado?

(31d) Podría describir la lesión?

(31e) Trabajó en la construcción al regresar por primera vez después de recobrarse de la lesion? _____ sí _____ no

(31f) Cuánto le llevó poder regresar a su trabajo en la construcción?

_____ (PONGA UN CIRCULO ALREDEDOR DE LA UNIDAD)
1. DIA(S) / 2.SEMANA(S) / 3.MES(ES) / 4.AÑO(S)

(32) Cuántas veces en los últimos tres años ha estado ausente del empleo por una enfermedad (no lesión)causada por su trabajo que le ha afectado su empleo en los últimos tres años? (Un ejemplo podría ser enfermarse a causa de agotamiento, demasiado calor, etc.) _____ veces

(33) Cuántos días de trabajo ha perdido de su empleo en los últimos tres años por una enfermedad (no lesión) relacionada con su trabajo? _____ días

(34) Ha usted solicitado (o alguien lo ha representado) compensación por una lesion o condición médica relacionada con su trabajo sostenida durante los últimos tres años?
_____ sí _____ no _____ no se

Si sí en # 34, **(34a)** Fue por gastos médicos?_____ sí _____ no

(34b) Fue por tiempo perdido de trabajo? _____ sí _____ no

(34c) Fue por estar incapacitado permanentemente? _____ sí _____ no

Si no en #34, **(34d)** Han casi siempre sus empleadores contribuído al sistema de compensación laboral para que usted pueda recibir beneficios si resulta lesionado o se enferma a causa de su empleo? _____ sí _____ no _____ no se

(35) Se le ha pedido alguna vez que firme una renuncia a la cobertura de compensación laboral? _____ sí _____ no

Si sí, **(35a)** podría decir si su empleador que se lo pide: (marque cuál)
_____ emplea menos de 10 trabajadores _____ emplea más de 10 trabajadores
_____ no pertenece al sindicato _____ pertenece al sindicato
_____ le pagó en efectivo _____ le pagó con cheque

(36) Ha recibido pago o beneficio de compensación laboral por lesiones o condición médica relacionada con su empleo mientras trabajaba en la construcción en los últimos tres años? _____ sí _____ no

Si sí, **(36a)** Fue por gastos médicos? _____ sí _____ no

(36b) Fue por tiempo de trabajo perdido? _____ sí _____ no

(36c) Fue por incapacitación permanente? _____ sí _____ no

(36d) Cuánto recibió? _____ dólares

(37) Ha recibido una compensación de un empleador distinta de compensación laboral, por lesiones o condiciones médicas relacionadas con el trabajo que realizaba en la construcción en los últimos tres años? _____ sí _____ no

Si sí, **(37a)** Fue por gastos médicos? _____ sí _____ no

(37b) Fue por tiempo de trabajo perdido? _____ sí _____ no

(37c) Fue por incapacitación permanente? _____ sí _____ no

(37d) Fue por cualquier otra cosa? _____ sí (si sí, por qué?)

---

(38) Diría usted que en general su salud es excelente, muy buena, buena, regular, pobre?
_____ excelente _____ muy buena _____ buena _____ regular _____ pobre

39) Comparándola con hace un año, diría usted que su salud es mucho mejor, algo mejor, igual, algo peor, mucho peor?_____ mucho mejor _____ algo mejor
_____ igual _____ regular _____ algo peor _____mucho peor

(40) Ha estado trabajando en el último año en un lugar en donde un trabajador de la construcción ha tenido que ser llevado al hospital a causa de una lesión?____sí ____no

Si sí, **(40a)** Cuántas veces ha ocurrido esto en el último año? _____ veces

(41) Desde que trabaja en la construcción, ha trabajado en un lugar en donde un trabajador de la construcción murió en un accidente relacionado con el trabajo?
_____ sí _____ no

CARACTERISTICAS DEL EMPLEADOR Y DEL TRABAJO
Ahora le voy a hacer algunas preguntas sobre los trabajos en la construcción que usted ha tenido, y los empleadores para los que ha trabajado.

(42) Por cuánto tiempo ha estado seguidamente trabajando para su empleador actual? _____ (PONGA UN CIRCULO ALREDEDOR DE LA UNIDAD)
1. DIA(S) / 2.SEMANA(S) / 3.MES(ES) / 4.AÑO(S)

(43) Para cuántos empleadores diferentes ha trabajado usted mientras ha estado empleado en la construcción en los últimos 12 meses? _____ empleadores

(44) Cómo encontró su empleo actual? NO LEER; PONGA UN CIRCULO ALREDEDOR DE LO QUE APLIQUE.

Anuncio en el periódico	01
Por boca de otra persona	02
Un amigo o familiar me reclutó	03
Sala de contratación del sindicato	04
Referido por un empleador anterior	05
El programa de entrenamiento me refirió a este empleador	06
Del empleador actual (mudado de otro proyecto)	07
Otro (especifique)	08

(45) Es su empleador actual una firma constructora, una firma temporal de ayuda, o algun otro tipo? _____ construcción _____ firma de ayuda temporal _____ otra (favor de especificar)

Si es una firma de ayuda temporal, **(45a)** Por cuánto tiempo ha trabajado para esta firma? _____ PONGA UN CIRCULO ALREDEDOR DE LA UNIDAD. 1. DIA(S) / 2.SEMANA(S) / 3.MES(ES) / 4.AÑO(S)

(45b) Viene su cheque de nómina de la firma de ayuda temporal, o de la firma constructora? _____ firma de ayuda temporal _____ firma constructora

(45c) Preferiría usted trabajar directamente con la firma constructora que actualmente le emplea (mejor que la firma de ayuda temporal?) _____ sí _____ no
(si lo ofrece voluntariamente _____ no está seguro, o no sabe).

(46) Cuántas personas había incluyéndose usted en su lugar de trabajo hoy, o el último día que trabajó en la construcción? _____ personas

(46a) Cuántos empleados tiene su empleador en todos sus lugares de trabajo– por favor incluya todos los empleados, no sólo los trabajadores de la construcción sino también de ventas, secretarias y otros empleados? Es: _____ menos de 10 _____10 a 24 _____ 25 a 99 _____ 100 a 499 _____ 500 to 999 _____ 1000 ó más? (Si lo ofrece voluntariamente) _____ no se

(47) Cuántos trabajadores de la construcción de su empleador actual están representados por un sindicato – diría usted que todos, la mayoría, algunos o ninguno?
_____ todos _____la mayoría _____algunos _____ninguno

(48) Qué sindicato o sindicatos representan a los trabajadores de su empleador actual?

(49) Cuántos días por semana como promedio trabajó el pasado año <u>en la construcción?</u>
____uno ____dos ____tres ____cuatro ____cinco ____seis ____siete

(49a) Cuántas horas por semana como promedio durante esos días que trabajo en construccion? ____ horas

(50) Se le ha pagado alguna vez en efectivo, en lugar de con cheque?
_____ sí _____ no

Si sí, **(50a)** me podría decir si el empleador le pidió que hiciera esto (marque lo que aplique)
_____ empleó menos de 10 trabajadores _____ empleó más de 10 trabajadores

_____ no era del sindicato _____ era del sindicato

_____ le requirió que firmara una renuncia a la cobertura de compensación laboral por accidente del trabajo

_____ le requirió que firmara una “forma de impuestos” (también conocida como una “1099”)

(51) Ha hecho alguna vez trabajo de construcción en el que se le pagó <u>por hora</u> y se le pidió que firmara una “forma de impuesto” (también conocida como una “1099”), para que no se dedujeran impuestos de su cheque? _____sí _____ no

Si sí, **(51a)** podría decirme si el empleador que le pidió esto: (marque lo que aplique)
_____ empleó menos de 10 trabajadores _____ empleó más de 10 trabajadores

_____ no era del sindicato _____ era del sindicato

_____ le requirió que firmara una renuncia a la cobertura de compensación laboral por accidente del trabajo

_____ le pagó en efectivo en lugar de con cheque

(52) Cuando realizó trabajo para la construcción durante el año pasado, fue usualmente pagado por hora, por la pieza, o por el trabajo? _____ por hora _____ por pieza _____ por trabajo

Si por hora, **(52a)** De promedio, cuánto hizo por hora? $ _____ por hora

Si por pieza,**(52b)** De promedio, al costo por pieza, cuánto terminó haciendo en cada hora de trabajo? $ _____ por hora

Si por trabajo, **(52c)** De promedio, a ese valor por trabajo, cuánto terminó haciendo por cada hora que trabajó? $ _____ por hora

(53) En tu lugar de trabajo de la construcción actual, tienen algun tipo de plan de retiro o de ahorros? _____ sí _____ no

Si sí, **(53a)** contribuye el empleador a él? _____ sí _____ no

(53b) Es éste un plan del sindicato? _____ sí _____ no

(54) En su trabajo actual de la construcción, ofrece su empleador algun tipo de cobertura de cuidado de la salud? _____ sí _____ no

Si sí, **(54a)** qué por ciento de su costo paga el empleador, y cuál por ciento de su costo tiene que pagar usted? Porcentaje del empleador es_____%. Mi porciento es _____%(Si lo ofrece voluntariamente) _____ No lo se

(55) Cuánto está de acuerdo o desacuerdo con cada una de las siguientes declaraciones. Dígame si usted esta muy de acuerdo, de acuerdo, en desacuerdo o muy en desacuerdo.

	Muy de acuerdo	De acuerdo	En desacuerdo	Muy en desacuerdo
a.Mi capataz se preocupa por la seguridad en el trabajo.				
b. Mi contratista (empleador) se preocupa por la seguridad en el trabajo.				
c. Los sindicatos llevan hacia condiciones en el trabajo más seguras.				
d. Mis condiciones en el trabajo son peligrosas.				
e. Mi área de trabajo es mantenida limpia.				
f. Mi área de trabajo está en desorden.				
g. Mi lugar de trabajo tiene un buen programa de seguridad en el trabajo.				
h. Tengo demasiado quehacer para poder seguir prácticas de seguridad en el trabajo.				
i. En mi empleo, la productividad es más importante que la seguridad del trabajador.				

MAS DEMOGRAFIA Y DATOS SOBRE EL INFORMANTE

(56) Es usted miembro de un sindicato actualmente? _____ sí _____ no

Si sí, **(56a)** a cuál pertenece?
_____ ENTRE EL CODIGO DE LA LISTA QUE SIGUE

1 Trabajadores de asbestos	11 Ingenieros operadores
2 Caldereros	12 Pintores
3 Albañiles	13 Enmasilladores
4 Carpinteros	14 Plomeros, montadores de tuberías
5 Mampostereros	15 Techadores
6 Electricistas	16 Chapisteros
7 Constructores de elevadores	17 Camioneros
8 Vidrieros	18 Marmoleros/loseteros
9 Herreros	19 Otros
10 Mecánicos de molino	

(56b) Por cuánto tiempo ha pertenecido al sindicato? _____ años (o _____ meses)

(57) Cómo cuánto fue su entrada <u>familiar</u> el año pasado? $ _____

SONDEE SI ES NECESARIO: Menos de $ 30,000? _____ sí _____ no
Más de $ 45,000? _____ sí _____ no
Más de $ 60,000? _____ sí _____ no
Menos de $ 20,000? _____ sí _____ no

(58) Como cuánto fue su entrada <u>personal</u> el año pasado? $ _____

(59) Cuál fue el grado superior de secundaria que completó? _____

(Trate de obtener el grado, pero si no funciona, pregúntele si fue:
_____ menos de secundaria (8vo o menos) _____ alguna secundaria (9-12 grado)
_____ licenciatura o maestría
_____ diploma de secundaria _____ escuela técnica o vocacional
_____ alguna universidad (no se graduó).

(60) Es ciudadano de los Estados Unidos de Norteamérica? _____ sí _____ no

Si no, **(60a)** es su status legal _____ documentado _____ indocumentado?
(_____ no quiere contestar)

Estas son todas las preguntas que tenía. Muchas gracias por su tiempo.

APPENDIX C – RESEARCH INSTRUMENT (SURVEY) IN HAITIAN CREOLE

ENSTRIMAN RECHÈCH – ANKÈT

(Avan ou kòmanse ankèt la, chèche konnen si moun nan wap pale avèk li a (a) genyen 18 an oubyen plis, (b) te fèt nan yon peyi etranje avèk paran ki pat' sitwayen ameriken, epi (c) ap travay nan konstriksyon. Si repons pou TOU LE TWA (a), (b), ak (c) se "wi," kontinye. Otreman, pa egzamine moun sa a.)

Deklarasyon Ouvèti Ankèt La: Sa se yon ankèt pou anviwon 50 adilt ki gen 18 ane ou plis, ki pat fèt ozetazini, e ki travay nan endistri konstriksyon nan peyi sa a. Ankèt sa a fè pati yon pwojè rechèch ke yon pwofesè nan Inivèsite Entènasyonal Florid [FIU] ap fè. Pi fò nan kesyon yo konsène eksperyans ou fè nan travay konstriksyon nan peyi sa a, èspesyalman sa ki gen rapò avèk sante ak "safety." Gen kèk kesyon ki va sou enfòmasyon jeneral sou la vi ou. Sa ta dwe pran anviwon 45 minit pou reponn kesyon ankèt la. Kòm patisipan nan ankèt la, ou va ede lòt travayè kontriksyon pa mwayen enfòmasyon wap bay sou pratik sante avèk "safety" ansanm avèk fòmasyon nan chantye yo. Enfòmasyon sa a pap gen non moun la dan-l, epi nou èspere pataje-l avèk moun ki va devlope politik nan tan kap vini yo pou amelyore kondisyon travay avèk fòmasyon pou tout travayè konstriksyon. Pa genyen okenn risk ke nou konnen pou yon moun ki reponn kesyon sa yo ki ta va plis pase sa moun rankontre nan lavi chak jou. Si ou genyen nenpòt kesyon sou rechèch sa a, santi w lib pou rele Doktè Bruce Nissen, nan Inivèsite Entènasyonal Florid, nan 305-348-2616. Ou lib pou pa reponn nenpòt kesyon ou pa vle reponn. Nou va peye w $25 pou patisipasyon w si ou reponn tout kesyon ankèt la—oubyen kèlkeswa pousantaj $25 ki korèsponn avèk pousantaj kesyon ou reponn. Enfòmasyon ke nou kolekte an va sèvi pou rapò rechèch avèk atik jounal savan yo pibliye. Yo pap mande w non ou, epi yo pap idantifye w nan okenn rapò oubyen lòt bagay ekri ki va sòti nan rechèch sa a. Èske ou bay pèmisyon pou nou pose w kesyon sou sijè sa a? (Pran konsantman vèbal.)

Kesyon:

DEMOGRAFIK JENERAL AK ENFÒMASYON JENERAL

(0) Anrejistre seks dapre obsèvasyon _____gason _____fanm (Mande si nesesè)

(1) Nan ki peyi avèk ki vil oubyen vilaj (oubyen vil osinon vilaj ki pi pre) ou te fèt?

(2) Ki dat nesans ou? Mwa_____ Jou_____ Ane_____

(3) Ki ane ou te antre ozetazini? _____

(4) Sa fè konbyen ane wap travay kòm travayè konstriksyon ozetazini? _____ane (Si gen lòt kalite travay ki te entèwonp travay konstriksyon an, adisyone yo pou fè nonm total ane yo, san ou pa konte peryòd lè yo pat' nan endistri kontriksyon an. Ou kapab itilize fraksyon, tankou 1 ane ½ , 2 ane 3/4 , ½ ane, etc.)

(5) Ki metye ou travay ladan-l le pli souvan? _____chapantye _____travayè jeneral _____fewonye _____moun ki mete kapèt _____"drywall" _____elèktrisyen _____operatè ekipman lou _____izòlman _____pent _____fewonye _____plonbye oubyen moun ki ajiste tiyo _____travayè metal an tòl _____Moun ki poze brik oubyen mason _____moun ki fè twati _____chofaj, vantilasyon, oubyen moun ki enstale è kondisyone _____moun ki travay nan vit oubyen vitriye _____lòt bagay (èspesifye)_____

(6) Nan ki lòt metye ou (te) travay? _____chapantye _____travayè jeneral _____moun ki mete kapèt _____"drywall" _____elèktrisyen _____operatè ekipman lou _____izòlman _____pent _____fewonye _____plonbye oubyen moun ki ajiste tiyo _____travayè metal an tòl _____Moun ki poze brik oubyen mason _____moun ki fè twati _____chofaj, vantilasyon, oubyen moun ki enstale è kondisyone _____moun ki travay nan vit oubyen vitriye _____lòt bagay (èspesifye)_____

(6a) Pou chak metye ki make pi wo a, konbyen tan ou te travay nan metye sa a?

Metye	Konbyen tan ou travay nan metye sa a
_____	_____
_____	_____
_____	_____
_____	_____

FÒMASYON

(7) Èske ou te resevwa "fòmasyon 10 èdtan OSHA" a? ("OSHA" vle di "Occupational Safety and Health Act", yon lwa konsènan "safety" travayè kote moun travay) _____wi _____non _____pa konnen

Si ou te resevwa fòmasyon an, **(7a)** konbyen tan apre ou te kòmanse travay nan konstriksyon ou te resevwa li? **_____** (sèkle kiyès nan yo: jou, mwa, ane)

(7b) Èske fòmasyon an te fèt nan lang Angle, oubyen nan lang orijinal ou?
_____nan lang Angle _____nan lang orijinal

(7c) Èske ou te konprann fòmasyon an byen?
_____wi _____non

(7d) Èske yo te mande w pou siyen yon deklarasyon ki di ke ou te resevwa fòmasyon sa a? _____wi
_____non

(7e) Kiyès ki te bay fòmasyon an? _____konpayi ki anplwaye ou _____pwogram apranti sendika a fè _____sendika, men se pa nan yon pwogram apranti _____lòt bagay (ajans gouvènman) (èspesifye) _____

(8) Èske ou te resevwa fòmasyon pou "safety" nan echafo?
_____wi _____non _____pa konnen

Si wi, **(8a)** Èske fòmasyon an te fèt nan lang Angle, oubyen èske li te an lang orijinal ou?
_____nan lang Angle _____nan lang orijinal

(8b) Èske ou te konprann fòmasyon an byen? _____wi _____non

(8c) Èske yo te mande w pou siyen yon deklarasyon ki di ke ou te resevwa fòmasyon sa a? _____wi _____non

(8d) Kiyès ki te bay fòmasyon an? _____konpayi ki anplwaye ou _____pwogram apranti sendika a fè _____sendika, men se pa nan yon pwogram apranti ____lòt bagay (ajans gouvènman) (èspesifye) _____

(9) Nan twa ane pase yo (oubyen depi lè wap travay nan konstriksyon si-l pi piti pase twa zan), èske ou te patisipe nan yon fòmasyon CPR oubyen premye swen? _____wi _____non _____pa konnen

Si wi, **(9a)** Nan konbyen pwogram tankou sa a ou te patisipe? _____pwogram

(9b) Konbyen èdtan pwogram ki te pi long nan pwogram sa yo a te dire? _____èdtan

(9c) Èske fòmasyon an te fèt nan lang Angle, oubyen èske li te an lang orijinal ou?
_____nan lang Angle _____nan lang orijinal

(9d) Èske ou te konprann fòmasyon an byen? _____wi _____non

(9e) Èske yo te mande w pou siyen yon deklarasyon ki di ke ou te resevwa fòmasyon sa a? _____wi _____non

(9f) Kiyès ki te bay fòmasyon an? _____konpayi ki anplwaye ou _____pwogram apranti sendika a fè _____sendika, men se pa nan yon pwogram apranti ____lòt bagay (ajans gouvènman) (èspesifye) _____

(10) Nan twa ane pase yo (oubyen depi lè wap travay nan konstriksyon si-l pi piti pase twa zan), èske ou te patisipe nan yon fòmasyon pou fè moun veye kò yo avèk pwoblèm “asbestos” la? _____wi _____non _____pa konnen

Si wi, **(10a)** Nan konbyen pwogram tankou sila a ou te patisipe? _____

(10b) Konbyen èdtan pwogram ki te pi long nan pwogram sa yo a te dire? _____èdtan

(10c) Èske fòmasyon an te fèt nan lang Angle, oubyen èske li te an lang orijinal ou?
_____nan lang Angle _____nan lang orijinal

(10d) Èske ou te konprann fòmasyon an byen? _____wi _____non

(10e) Èske yo te mande w pou siyen yon deklarasyon ki di ke ou te resevwa fòmasyon sa a? _____wi _____non

(10f) Kiyès ki te bay fòmasyon an? _____konpayi ki anplwaye ou _____pwogram apranti sendika a fè _____sendika, men se pa nan yon pwogram apranti ____lòt bagay (ajans gouvènman) (èspesifye) _____

(11) Nan twa ane pase yo (oubyen depi lè wap travay nan konstriksyon si-l pi piti pase twa zan), èske ou te patisipe nan yon fòmasyon sou materyo danjere oubyen kote ki danjere? _____wi _____non _____pa konnen

Si wi, **(11a)** Nan konbyen pwogram tankou sila a ou te patisipe? _____

(11b) Konbyen èdtan pwogram ki te pi long nan pwogram sa yo a te dire? _____èdtan

(11c) Èske fòmasyon an te fèt nan lang Angle, oubyen èske li te an lang orijinal ou?
_____nan lang Angle _____nan lang orijinal

(11d) Èske ou te konprann fòmasyon an byen? _____wi _____non

(11e) Èske yo te mande w pou siyen yon deklarasyon ki di ke ou te resevwa fòmasyon sa a? _____wi _____non

(11f) Kiyès ki te bay fòmasyon an? _____konpayi ki anplwaye ou _____pwogram apranti sendika a fè _____sendika, men se pa nan yon pwogram apranti ____lòt bagay (ajans gouvènman) (èspesifye) _____

(12) Nan twa ane pase yo (oubyen depi lè wap travay nan konstriksyon si-l pi piti pase twa zan), èske ou te patisipe nan yon lòt pwogram fòmasyon sou “safety” travayè? _____wi _____non _____pa konnen

Si wi, **(12a)** Èske ou ta dekri ki sa li te ye, konbyen tan li te dire, epi èske ou te trouve li itil pou fè travay ou genyen plis “safety” pou travayè? [kesyon ouvè]

Si moun nan se yon moun ki travay nan fè, **(12b)** Èske ou te resevwa fòmasyon sou “safety” an pou asye èstriktirèl (ki rele ankò fòmasyon “sub-part R”)? _____wi _____non

EKIPMAN “SAFETY” PÈSONÈL

(13) Nou enterese konnen si ou itilize diferan ekipman ak pwosedi nan travay ou. Èske ou

PA JANM	PAFWA	REGILYÈMAN	TOUJOU	
				a) mete bòt travay
				(b) mete yon kas
				(c) mete gan travay
				(d) mete pwoteksyon pou zye
				(e) sèvi gad sou zouti pou koupe
				(f) sèvi pwoteksyon pou zòrèy
				(g) sèvi pwoteksyon pou rèspirasyon

PRATIK KONPAYI KONSTRIKSYON OU TRAVAY POU YO AN

(14) Nan eksperyans pa ou, èske konpayi konstriksyon ou travay pou yo a genyen yon reyinyon pa semen sou zafè “safety” travayè? (Kèk fwa, yo rele reyinyon sa yo “tool box talks” oubyen “tail gate safety meetings”) _____jeneralman wi _____jeneralman non

Si wi, **(14a)** Èske reyinyon sa yo fèt nan lang Angle, oubyen nan lang orijinal ou?
_____nan lang Angle _____nan lang orijinal

(14b) Èske ou konprann byen sa kap di nan reyinyon sa yo? _____wi _____non

(15) Pou nenpòt djòb 6 pye de otè oubyen plis, èske konpayi konstriksyon ou travay pou yo an mande ou pou sèvi yon senti (harness) pou kenbe kò ou? _____jeneralman wi _____jeneralman non _____pa aplikab

(16) Èske konpayi konstriksyon ou travay pou yo an te montre ou oubyen ba ou yon kopi pwogram “safety” yo genyen? _____jeneralman wi _____jeneralman non _____(si moun nan vle reponn konsa) pa konnen

(17) Èske yo janm ba ou aksè a “Material Safety Data Sheets” pou pwodi chimik ou travay avèk yo?

_____jeneralman wi _____jeneralman non _____(si moun nan vle reponn konsa) pa konnen

(18) Èske konpayi konstriksyon ou travay pou yo an itilize tiyo elèktrik “ground fault” nan djòb ou yo, ki fèmen elèktrisite a si gen yon kou sikwi? _____jeneralman wi _____jeneralman non _____(si moun nan vle reponn konsa) pa konnen

(19) Lè wap fè travay konstriksyon, èske yo ba ou souvan kòd ekstansyon elèktrik ki tepe paske yo te koupe?

_____wi _____non _____pa aplikap

(20) Èske ou konn rapòte yon violasyon “safety” a anplwayè ou si ou te konsyan de sa?

_____wi _____non ____(si moun nan vle reponn konsa) pa si de sa

Si non oubyen pa si de sa, **(20a)**: Pouki non? [repons ouvè isi]

Si wi, **(20b)**: Ki sa ki pase abityèlman (oubyen ta va pase) lè ou fè sa? [repons ouvè isi]

(21) Lè ou travay sou echafo, èske echafo yo genyen ray a men [hand rails]?

_____jeneralman wi _____jeneralman non _____pa aplikab, paske mwen pa janm travay sou echafo

(21a) Èske genyen abityèlman lòt aspè nan zafè “safety,” e si wi, èske ou ta dekri sa yo ye?

(22) Èske konpayi ou travay pou li an pèmèt ou kenbe chantye travay la pwòp <u>la jounen</u> pandan ou nan travay la, oubyen èske ou oblije tann jis jounen an fini pou netwaye? (repons ouvè)

(23) Èske konpayi ou travay pou yo an bay ekipman premye swen? _____jeneralman wi _____jeneralman non

(24) Èske konpayi ou travay pou yo an bay dlo fre pou bwè nan travay la?
_____jeneralman wi _____jeneralman non

(25) Èske konpayi ou travay pou yo an bay yon kantite kote pou ale nan twalèt?
_____jeneralman wi _____jeneralman non

(26) Èske ou janm travay sou yon "building" ki wo anpil anpil? _____wi _____non

Si wi, **(26a)** Èske konpayi ou te travay pou li an te genyen ray oubyen kab "safety" pou anpeche ou tonbe anba, oubyen èske li te posib pou ou te jis pèdi pye nan bò an?
_____te genyen pwoteksyon _____pat genyen pwoteksyon

LÈ MOUN PRAN CHÒK

Mwen pral poze w kèk kesyon konsènan lè moun pran chòk ak lòt pwoblèm medikal ki gen rapò avèk travay ki te kapab petèt afèkte travay ou nan twa dènye ane yo ki fenk pase an. Si ou te travay nan konstriksyon pou pi piti pase twa zan, silvouplè bay repons sèlman pou peryòd ke w tap travay nan konstriksyon an.

(27) Nan twa dènye ane yo, èske ou te pran chòk oubyen èske ou te genyen yon kondisyon medikal ki gen rapò avèk travay epi ki te afekte ou nan travay pandan ou tap travay kòm travayè konstriksyon? _____wi _____non

(28) Si ou te <u>pran chòk nan travay la</u>, èske ou te rapòte sa? _____wi _____non _____pa aplikab

Si non, **(28a)**, poukisa se non? [repons ouvè]

Si wi, **(28b)** ki sa ki te pase lè ou te rapòte sa? [repons ouvè]

(29) Nan twa dènye ane yo, èske ou te ekzije atansyon medikal yon enfimyè, paramedik, doktè osinon lòt travayè medikal paske ou te pwan yon chòk oubyen akoz de yon kondisyon medikal ki gen rapò avèk travay e ki te afekte travay ou pandan ou tap travay kòm travayè konstriksyon?
_____wi _____non

(30) Nan twa dènye ane yo, èske ou te manke yon jou travay paske ou te pran chòk oubyen akoz de yon kondisyon medikal ki gen rapò avèk travay e ki te afekte travay ou pandan ou tap travay kòm travayè konstriksyon? _____wi _____non

(31) Konbyen fwa ou te pwan chòk ki te tèlman grav nan travay la ke ou te manke yon jou travay nan twa dènye ane yo? _____fwa

Si repons pou (31) se plis ke zewo, **(31a)** Konbyen jou travay anviwon ou te manke akoz yon chòk ou te pran nan konstriksyon nan twa dènye ane yo? _____ jou

(31b) Ki peryòd ki te pi long lè ou pat al' travay akoz de chòk ou te pran nan konstriksyon nan twa dènye ane yo? _____ (SÈKLE YON INITE) 1. YON JOU (PLIZYÈ JOU) / 2. YON SEMÈN (PLIZYÈ SEMÈN) / 3. YON MWA (PLIZYÈ MWA) / 4. YON ANE (PLIZYÈ ANE)

(31c) Ki jan de travay ou tap fè le ou te pran chòk sa a?

(31d) Èske ou ta kapab dekri chòk sa a?

(31e) Lè ou te premye retounen travay apre ou te fin' reprann ou de chòk ou te resevwa an, èske ou te travay nan konstriksyon? _____wi _____non

(31f) Konbyen tan li te pran pou ou te retounen travay nan konstriksyon? _____ (SÈKLE YON INITE) 1. PLIZYÈ JOU / 2. PLIZYÈ SEMÈN / 3. PLIZYÈ MWA / 4. PLIZYÈ ANE

(32) Konbyen fwa ou te absan nan travay akoz de yon maladi ki pat yon chòk ou te pran men ki gen rapò avek travay e ki te afekte travay ou nan twa dènye ane yo? (Yon egzanp ta kapab: Lè ou malad akoz de twòp fatig, twòp chalè, etc.) _____ fwa

(33) Konbyen jou travay anviwon ou te manke akoz de yon maladi ki gen rapò avèk travay men ki pa yon chòk ou te pran nan twa dènye ane yo? _____jou

(34) Èske ou te aplike, osinon yon moun te aplike pou ou, pou konpansasyon travayè akoz de yon chòk ou te pran oubyen yon kondisyon medikal ki gen rapò avèk travay ki te rive ou nan twa dènye ane yo?

_____wi _____non _____pa konnen

Si wi nan #34, **(34a)** Èske se te pou depans medikal? _____wi _____non

(34b) Èske se te pou tan travay ou te pèdi? _____wi _____non

(34c) Èske se te pou enfimite pèmanan? _____wi _____non

Si non nan #34, **(34d)** Èske konpayi ou travay pou yo an te prèske toujou peye lajan nan sistèm konpansasyon travayè a dekwa pou ou kapab resevwa benefis si ou pwan chòk oubyen si ou vin malad akoz de travay ou? _____wi ____non _____pa konnen

(35) Èske yo te janm mande ou siyen pou renonse a dwa ou pou konpansasyon travayè kouvri ou? _____wi _____non

Si wi, **(35a)** èske ou ta di mwen si konpayi an ki te mande ou pou fè sa a: (tcheke kiyès)

_____te anplwaye pi piti ke 10 travayè _____te anplwaye plis ke 10 travayè

_____pat' nan sendika _____te nan sendika

_____te peye lajan kach _____te peye ak chèk

(36) Èske ou te resevwa benefis oubyen peman konpansasyon travayè pou chòk ou te pran oubyen pou kondisyon medikal ki gen rapò avèk travay ke ou te soufri pandan ou t'ap travay nan komstriksyon nan twa dènye ane yo? _____wi _____non

Si wi, **(36a)** Èske se te pou depans medikal? _____wi _____non

(36b) Èske se te pou tan travay ou te pèdi? _____wi _____non

(36c) Èske se te pou enfimite pèmanan? _____wi _____non

(36d) Konbyen lajan ou te resevwa? _____dola

(37) Èske ou te resevwa konpansasyon de yon konpayi ou tap travay pou li, men ki pa konpansasyon travayè, pou chòk ou te pran oubyen kondisyon medikal ki gen rapò avèk travay ke ou te soufri pandan ou t'ap travay nan konstriksyon nan twa dènye ane yo?
_____wi _____non

Si wi, **(37a)** Èske se te pou depans medikal? _____wi _____non

(37b) Èske se te pou tan travay ou te pèdi? _____wi _____non

(37c) Èske se te pou enfimite pèmanan? _____wi _____non

(37d) Èske se te pou nenpòt lòt bagay? _____wi (si wi, pou ki bagay?)

_____

_____

(38) Anjeneral, èske ou ta di ke sante ou ekselan, trè bon, bon, pasab, pòv?

_____ekselan _____trè bon _____bon _____pasab _____pòv

(39) Konpare ak yon ane pase, èske ou ta di ke sante ou pi bon anpil, lejèman pi byen, pwèske menm jan, lejèman pi mal, pi mal anpil? _____pi bon anpil _____lejèman pi byen _____prèske menm jan _____lejèman pi mal _____pi mal anpil

(40) Ane pase a, èske ou te travay nan yon chantye kote yo te oblije mennen yon travayè konstriksyon nan lopital paske li te pran yon chòk? _____wi _____non

Si wi, **(40a)** Konbyen fwa sa te rive nan ane pase a? _____fwa

(41) Depi ou te kòmanse travay nan konstriksyon, èske ou te travay nan yon chantye kote yon travayè konstriksyon te mouri nan yon aksidan ki gen rapò avèk travay? _____wi _____non

KARAKTERISTIK KONPAYI KI BAY TRAVAY YO AK DJÒB

Koulye-a mwen pral poze ou kèk kesyon konsènan djòb konstriksyon ou te genyen, ak konpayi ou te travay pou yo an.

(42) Depi konbyen tan wap travay pou konpayi ke wap travay avèk li koulye an?

_____ (SÈKLE YON INITE) 1. PLIZYÈ JOU / 2. PLIZYÈ SEMÈN / 3. PLIZYÈ MWA / 4. PLIZYÈ ANE

(43) Pou konbyen konpayi diferan ou travay pandan ou t'ap travay nan konstriksyon nan 12 dènye mwa yo? _____anplwayè

(44) Kòman ou te fè pou jwenn djòb ou genyen koulye-a? PA LI; SÈKLE TOUT SA KI APLIKAB.

anons djòb nan jounal ……..…….....….	01
pawòl bouch an bouch…….....…….	02
zanmi oubyen manm fanmi te rekrite mwen….....	03
sal kote sendika ap pran moun pou travay....…….	04
yon ansyen anplwayè te refere mwen……	05
pwogram fòmasyon te voye-m bò konpayi sa a....	06
konpayi mwen travay pou li koulye-a (te sòti nan yon lòt pwojè)…….	07
lòt bagay (di ki sa l' ye)…….....…… ...	08

(45) Èske konpayi ou travay li koulye-a se yon konpayi konstriksyon, oubyen yon konpayi èd tanporè, oubyen yon lòt jan de konpayi? _____konstriksyon _____konpayi èd tanporè _____yon lòt bagay (silvouplè di ki sa l' ye)

Si se konpayi èd tanporè, **(45a)** Depi konbyen tan wap travay pou konpayi èd tanporè sa a? _____ (SÈKLE YON INITE) 1. PLIZYÈ JOU / 2. PLIZYÈ SEMÈN / 3. PLIZYÈ MWA / 4. PLIZYÈ ANE

(45b) Èske chèk travay ou sòti nan konpayi èd tanporè a oubyen nan konpayi konstriksyon an? _____konpayi èd tanporè _____konpayi konstriksyon

(45c) Èske ou ta prefere travay dirèkteman pou konpayi konstriksyon an ke wap travay pou li koulye-a (olye ke ou travay pou konpayi èd tanporè a)? _____wi _____non (si moun nan vle reponn konsa) _____pa si de sa, oubyen pa konnen

(46) Konbyen moun anviwon, lè ou konte tèt ou ladan-l, ki te sou chantye travay ou jodi-a, oubyen dènye jou ou te trvay nan konstriksyon? _____ moun

(46a) Konbyen anplwaye konpayi ou travay pou li koulye a genyen nan tout chantye yo—silvouplè konte tout anplwaye, pa sèlman travayè konstriksyon men travayè kap vann, sekretè, ak lòt anplwaye? Èske se: _____pi piti ke 10 _____10 a 24 _____25 a 99 _____100 a 499 _____500 a 999 _____1000 ou plis? (si moun nan vle reponn konsa)_____pa konnen

(47) Konbyen nan anplwaye konstriksyon k'ap travay avèk konpayi wap travay pou li koulye-a ki nan sendika ["union"] – èske ou ta di tout, pi fò, kèk, oubyen pa gen ditou?

_____tout _____pi fò _____kèk _____pa gen ditou

(48) Ki sendika ki reprezante anplwaye k'ap travay avèk konpayi ke wap travay pou li koulye-a?

(49) Pandan ane pase a, <u>lè wap travay nan konstriksyon</u>, konbyen jou pa semèn ou te travay, anmwayèn?

_____youn _____de _____twa _____kat _____senk _____sis _____sèt

(49a) Anmwayèn, konbyen èdtan pa semèn ou te travay pandan jou sa yo? _____èdtan

(50) Èske yo janm peye ou lajan kach pou travay konstriksyon, olye ke yo peye ou ak chèk?
_____wi _____non

Si wi, **(50a)** èske ou ta di mwen si anplwayè a ki te mande ou pou fè sa a: (tcheke tout sa ki aplikab)

_____te anplwaye pi piti ke 10 travayè _____te anplwaye plis ke 10 travayè

_____pat' nan sendika _____te nan sendika

_____te egzije ou siyen papye pou ou pa reklame dwa ou genyen pou konpansasyon travayè kouvri ou

_____te egzije ou siyen yon "fòm pou taks" (ki rele ankò yon "1099")

(51) Èske ou janm fè travay konstriksyon kote yo peye ou pa è epi yo te mande ou siyen yon "fòm pou taks" (ke yo rele ankò yon "1099"), dekwa pou yo pa dedwi taks nan chèk travay ou? _____wi _____non

Si wi, **(51a)** èska ou ta di mwen si anplwayè a ki te mande ou pou fè sa a: (tcheke tout sa ki aplikab)

_____te anplwaye pi piti ke 10 travayè _____te anplwaye plis ke 10 travayè

_____pat' nan sendika _____te nan sendika

_____te egzije ou siyen papye pou ou pa reklame dwa ou genyen pou konpansasyon travayè kouvri ou

_____te peye ou ak lajan kach, olye de chèk

(52) Lè ou te fè travay konstriksyon pandan ane pase a, èske abityèlman yo te peye ou pa è, pa chak moso travay ou te fini, oubyen pa djòb? _____pa è _____pa chak moso travay ki fini _____pa djòb

Si se pa è, **(52a)** anmwayèn, konbyen kòb ou te fè pa è? $_____pa è

Si se pa moso travay ki fini, **(52b)** Anmwayèn, nan pri pa moso travay sa a, konbyen lajan ou te rive fè nan chak èdtan ou te travay? $_____pa è

Si se pa djòb, **(52c)** Anmwayèn, nan pri pa djòb sa a, konbyen kòb ou te rive fè nan chak èdtan ou te travay? $_____pa è

(53) Nan djòb konstriksyon ou genyen koulye-a, èske ou genyen yon plan epay oubyen retrèt? _____wi _____non

Si wi, **(53a)** èske konpayi ou travay pou li an kontribye ladan-l? _____wi _____non

(53b) Èske se yon plan sendika? _____wi _____non

(54) Nan djòb konstriksyon ou genyen koulye-a, èske konpayi ou trvay pou li a ofri ou yon asirans sante?

_____wi _____non

Si wi, **(54a)** ki pousantaj nan sa li koute a ke konpayi an peye, e ki pousantaj nan sa li koute a ke ou dwe peye? Pousantaj konpayi an peye se _____% Pousantaj pa mwen se ____% (Si moun nan vle reponn konsa) _____Mwen pa konnen

(55) Nan ki degre ou dakò oubyen ou pa dakò avèk chak nan deklarasyon ki pwal fèt la yo. Silvouplè di mwen si ou dakò anpil, dakò, pa dakò oubyen pa dakò ditou.

	Dakò Anpil	Dakò	Pa Dakò	Pa Dakò Ditou
a. Fòmann mwen konsène de zafè "safety" travayè				
b. Kontraktè mwen (konpayi mwen travay pou li an) konsène de zafè "safety" travayè				
c. Sendika fè djòb yo genyen plis "safety" ladan yo				
d. Kondisyon travay Owen danjere				
e. Pati kote mwen travay la rete pwòp				
f. Pati kote mwen travay la ankonbre				
g. Chantye kote mwen travay la genyen yon bon pwogram "safety"				
h. Mwen gen twòp bagay pou mwen fè pou mwen kapab rive swiv pratik "safety" nan travay				
i. Kote mwen travay, sa ou pwodi pi enpòtan pase "safety" travayè				

PLIS DEMOGRAFIK AK ENFÒMASYON JENERAL SOU LA VI OU

(56) Èske ou fè pati yon sendika koulye-a? _____wi _____non

Si wi, (**56a**) nan ki sendika ou ye?

_____ ANTRE KOD APATI DE LIS KI ANBA LA A

1 Asbestos workers	11 Operating Engineers
2 Boiler Makers	12 Painters
3 Bricklayers	13 Plasterers
4 Carpenters	14 Plumbers and Pipefitters
5 Cement Masons	15 Roofers
6 Electrical Workers	16 Sheet Metal Workers
7 Elevator Constructors	17 Teamsters
8 Glaziers	18 Tile, Marble and Terrazo Helpers
9 Ironworkers	19 LÒT
10 Millwrights	

(56b) Depi konbyen tan ou fè pati de sendika an? _____ane (oubyen _____mwa)

(57) Anviwon konbyen revni total <u>fanmi</u> ou te ye ane pase? $_____

FOUYE PLIS SI NESESÈ: Èske li te pi piti ke $30,000? _____wi _____non

Èske li te plis ke $45,000? _____wi _____non

Èske li te plis ke $60,000? _____wi _____non

Èske li te pi piti ke $20,000? ____wi _____non

(58) Anviwon konbyen revni total <u>pèsonèl</u> ou te ye ane pase? $_____

(59) Nan ki klas ou te rive nan lekòl? _____

(Eseye trouve nimewo klas la, men si sa pa mache, sigjere epi mande si li te: _____pi piti ke “high school” (8è “grade” oubyen pi piti) _____yon pati nan “high school” (9èm-12èm “grade”)

_____fini “high school” _____lekòl pwofesyonèl oubyen teknik _____yon pati nan kolèj (pa gen diplòm)

_____kolèj oubyen lòt degre apre lisans [“bachelor’s degree”]

(60) Èske ou se yon sitwayen ameriken? ____wi ____non ____pa vle reponn

Si non, **(60a)** èske èstati legal ou _____dokimante, oubyen _____pa dokimante?
(_____pa vle reponn)

Sa se tout kesyon yo mwen genyen. Mèsi pou tan ou.

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Personal interviews conducted with the following individuals: Chris Felton of Coastal Staffing, a construction referral service to contractors; George Garcia of the Carpenters Union, Dave Gornewicz of the Ironworkers Union, and Al Nagy of the Carpenters Union.