

**Differences in Working Conditions by Undocumented Status:
Evidence from the Day Labor Market**

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I. Introduction

In principle, the Fair Labor Standards Act (FLSA) and the OSHA work safety laws are applicable to all workers regardless of their legal immigration status. Yet, differences in mobility owing to the lack of proper immigration documentation may lead immigrant workers, particularly those who are undocumented, to accept worse working conditions for the same wage than legal immigrants and natives. Additionally, when it comes to safety working conditions, immigrants may have fewer incentives to invest in gaining work prevention skills specific to the destination country, especially if they perceive their stay to be temporary (Dustmann, 1999; Zimmermann, Bauer, Rotte and Million, 1999). Such a behavior on the part of immigrants may result in an overall less safe work environment than the one enjoyed by, say, natives or legal migrants planning on longer stays.

In this paper, we address these potential differences in workplace characteristics and specifically examine differences in working conditions according to workers' legal status. We examine whether this is the case for five different types of working conditions: (1) job safety training, (2) job safety equipment, (3) employer violence, (4) lack of payment, and (5) failure to provide food or water breaks. A series of limited dependent variable models that account for workers' personal and employment related characteristics are estimated with the purpose of identifying differences in working conditions by legal status and by type of employer, since an appropriate policy response would have to recognize the context in which fair labor standards may not be observed. Additionally, because corporations or even contractors are more likely to be the subject of inspections by government officials, we also examine the extent to which working conditions vary by type of employer.

The analysis relies on data from a unique dataset on day laborers, i.e. the National Day Labor Survey (NDLS). Workers standing on street corners, in front of businesses and gas stations constituted a widespread market of anywhere between 115,000 to 235,000 males nationwide in 2004-2005.² The day labor market provides us with an interesting case study of the impact that legal status may have on working conditions. Why? The day labor market is a fluid, “just-in-time” labor market characterized by its informal and unregulated nature.³ The informal nature of the day labor attracts undocumented workers more constrained in their job choices owing to their lack of proper work documentation. Indeed, over three-fourths of all day laborers are undocumented (Gonzalez and Valenzuela, 2007). Employers—aware of the situation as well as of the fact that this is a more informal, less-inspected job market—are more likely to also violate working standards in the FLSA and OSHA regulations. Yet, the informal nature in which workers are hired means that employers generally do not know for certainty the legal status of the workers they hire. Although the labor market may be marked by worse working conditions than the formal labor market, employers in this sector may have fewer incentives or ability to treat undocumented workers worse than documented workers. Any effect attributable to undocumented status is likely the result of workers sorting into jobs. As such this study provides a cleaner interpretation of the effect of undocumented status than previous studies that can only partially control for job characteristics that might be associated with employer discrimination.

Why should we care about working conditions? Because better working conditions add value to both businesses and to workers’ life quality. From an economic point of view, better working conditions can help businesses save money by reducing workers’ turnover rates, the

² Gonzalez and Valenzuela (2007) and authors’ calculations from the 2005 CPS Contingent Worker Survey.

³ Workers hired by temporary help agencies to perform day tasks for client companies also fall within the category of day laborers. However, our focus in this paper is on day laborers hired on a more informal, unregulated basis.

production of faulty products and, in the case of job safety standards, by lowering insurance costs and medical expenditures. In addition to this reduction in direct costs, jobs with better work conditions can also reduce businesses' indirect costs by raising workers' morale, leading to increased productivity, product quality, and improved labor/management relations and use of human resources. Our findings inform on the extent to which "at risk" workers' fair labor standards are violated, create public awareness and, most importantly, shed some light on the type of policy and implementation that would help to protect the rights of a rapidly growing migrant, both legal and undocumented, population best.

II. Conceptual Framework & Methods

Under the assumption of perfect information and free mobility, wages should reflect the non-pecuniary characteristics of the job or, as Adam Smith said, "[T]he agreeableness or disagreeableness of the employments themselves" (Smith 1976, Book I, Chapter X). Yet, the fundamental assumption of worker mobility is particularly strong among immigrants and, in particular, undocumented migrants (Kahn, 1987; Zimmermann, Bauer, Rotte and Million, 1999). Owing to differences in English speaking ability and in proper documentation, undocumented immigrants face greater job mobility constraints and, as such, may they be exposed to worse working conditions than their legal counterparts. Differences in working conditions may be particularly acute in the case of day laborers. The limited barriers to entry characterizing this type of employment make the day labor market particularly attractive to undocumented workers with limited employment options. Therefore, for any compensation package (i.e. wages and job amenities), undocumented workers are expected to negotiate poorer working conditions than their legal and more mobile counterparts.

Our purpose is to examine the role played by day laborers' legal status on their likelihood to enjoy certain job amenities. Therefore, we start assuming that all day laborers maximize utility. The utility function for worker i 's in job-type j in MSA c is a function of his individual human capital and personal characteristics (X_i), his legal status ($Undoc_i$), and a variety of job-related characteristics (A_j), including the average wage earned by other workers performing day labor in his area—a wage captured by the average worker-center wage in MSA c (W_c).⁴ That is:

$$U_{ijc}^* = U(X_i, Undoc_i, W_c, A_j). \quad (1)$$

Each day laborer will choose the job that provides the highest utility. Hence, worker i will choose job j over job k in MSA c if that job maximizes his utility, i.e., if $U_{ijc}^* > U_{ikc}^*$.

According to hedonic wage theory, the optimal job amenity level for worker i in a specific job, $j = J$, given wage W_c , is the inverse of the hedonic wage function (Rosen, 1986)

$$A_{ijc}^* = f'(W_c, Undoc_i, X_i \mid j = J). \quad (2)$$

Generalizing for j job-specific differences (Z_j) and assuming a linear functional form, we can express equation (2) as:

$$A_{ijc} = \alpha Undoc_i + X_i \beta + Z_j \chi + \delta W_c + \varepsilon_{ijc}, \quad (3)$$

where $A_{ijc} = 1$ if $U_{ijc}^* > U_{ikc}^*$, 0 otherwise. If we assume that $\varepsilon_{ij} \sim N(0,1)$, equation (3) can be estimated as a probit model:

$$\Pr(A_{ijc} = 1) = \Phi(\alpha Undoc_i + X_i \beta + Z_j \chi + \delta W_c) \quad (4)$$

We consider the following working conditions for A_{ijc} : the receipt of (1) job safety training, (2) job safety equipment (e.g. goggles, gloves, boots, or masks), or (3) violent treatment at work; as well as dummy variables indicating (4) employer violence, (5) not getting paid for a job

⁴ Worker centers set a price floor or minimum wage for day laborers. If there is no worker center in the worker's MSA, we use the average wage in the MSA.

performed, and (6) the lack of breaks for water and food. Because workers' undocumented status is likely to affect their job mobility and, as such, their ability to negotiate better working conditions for a given wage, our main interest rests on α and, in particular, on whether legal workers (natives and legal immigrants) endure better safety conditions at work than undocumented migrants.

III. Data and Some Descriptive Statistics

The National Day Labor Survey (NDLS) is a multi-stage, clustered survey of day laborers that took place from November 2003 through August 2004 (Valenzuela, Theodore, Melendez and Gonzalez, 2006). The NDLS data consist of 2,660 completed surveys in 36 MSAs. In order to give a higher probability of selection to cities with a large total population and a large Latino population, where day laborers are likely to concentrate, a disproportionate stratified sampling frame was implemented (see Data Appendix for a more detailed description of the survey implementation). In the NDLS, the probability of selection varied across sites within MSAs, and the probability of an MSA being included varied across five groups of MSAs. The weights used in this study are based on the entire set of sampled MSAs (random and non-random) and are representative at the national level. Given the survey design, we use weights to account for respondents having different probabilities of selection. As suggested by the error term, the estimates are clustered at the MSA.

All of the variables describing the working conditions pertain to the two months prior to the survey. Table A in the appendix provides the means, standard errors, and the number of observations available for each of our key variables. On average, 18 percent of the sample declares receiving safety training at their day labor job and 52 percent use safety equipment ranging from goggles to gloves, boots, and masks. Slightly less than half of workers report not

being paid (49 percent) or not receiving breaks while working (44 percent), and 18 percent report experiencing employer violence.

Of special interest to us is the fact that about 75 percent of the sample consists of undocumented migrants, eighteen percent are legal migrants, and 6 percent are U.S. natives. Given the predominance of undocumented workers, our primary focus relies on the role played by day laborers' legal status. A mere 25 percent of them gets by or speaks English well; therefore, controlling for English proficiency in the analysis is quite important. Furthermore, about 80 percent of the sample has less than a high school education, on average they are about 34 years old and 43 percent are married. Employment-wise, they earn approximately \$11/hr, very few have health insurance (only 8 percent of the sample), and about 17 percent have a regular job in addition to their day labor employment. The vast majority of day laborers work for either private individuals (50 percent of the sample) or contractors (44 percent of the sample), and over 80 percent of them have worked in construction, moving/hauling, landscaping or painting.

Are there statistically significant differences in working conditions among day laborers according to their legal status? Table 1 addresses this question at a mere descriptive level. Undocumented workers are significantly less likely than their legal counterparts to receive safety training (i.e. 14 percent versus 28 percent, respectively). Although not statistically significant, differences by legal status are also found with respect to the availability of safety equipment, with 53 percent of legal workers receiving safety equipment relative to 52 percent of their undocumented counterparts. Table 1 also displays the fraction of legal and undocumented workers declaring being the object of a variety of employer abuses, such as wage theft, lack of water or food breaks, and being the subject of violent treatment. Of the three abuses considered,

wage theft is the most common, followed by the lack of water and food breaks and violence. Yet, the largest and statistically significant difference in terms of working conditions is found between 51 percent of undocumented workers and 41 percent of legal workers declaring not being paid after completing their work.

Are these differences in work safety related to the type of employer day laborers work for? According to the figures in Table 2, safety training and equipment are more prominent in private firms, followed by contractors and private individuals. However, these differences are only statistically different from zero in the case of job safety training. In addition to work safety conditions, day laborers report that contractors are slightly more responsible for a variety of labor related abuses than individuals or companies. Specifically, contractors are more likely to not pay day laborers after completing their work than private individuals.

Overall, the figures in Table 1 and Table 2 reveal the existence of significant differences in the working conditions of day laborers according to their legal status as well as according to their employer. Yet, these differences could be driven by workers' characteristics, such as English proficiency, or by the type of work they perform. In what follows, we examine whether differences in working conditions among day laborers according to their legal status and the type of employer still persist after controlling for workers' personal and job related characteristics.

IV. Results

A) Who Receives Job Safety Training?

Table 3 displays the marginal effects and standard errors from a probit model of the likelihood of receiving job safety training estimated using various specifications. The first model specification only controls for workers' legal status and reveals a statistically significant and large impact of workers' undocumented status on the probability of having received job safety

training. Specifically, undocumented workers are 13 percentage points less likely than their legal counterparts to receive safety training. Controlling for the most frequent type of employer day laborers worked for in specification (2) slightly reduces the impact of workers' undocumented status on their likelihood of having received safety training. Additionally, it reveals that private companies are nearly 14 percentage points more likely to provide safety training than private homeowners and individuals. However, there are no significant differences in job safety training between day laborers more frequently hired by contractors than their counterparts more frequently hired by private individuals. As such, private companies may be more efficient at providing safety-training, put a larger emphasis on safety, or are more effectively regulated by state and federal agencies than contractors and private individuals.

Do differences in job safety training by workers' undocumented status persist when we account for their personal characteristics? The results from specification (3) reveal that undocumented workers continue to be up to 7 percentage points less likely than their legal counterparts to receive job safety training after accounting for their English speaking ability, marital status, fatherhood, or ethnicity. Not surprisingly, immigrants who speak English are 10 percentage points more likely to report receiving safety training. It is possible that if training is provided in English, day laborers unable to understand the instructions are not aware of having received any job safety training. Another possibility is that English-speaking employers may not provide such training to workers they cannot communicate with. Yet another interpretation of this finding is that since English ability is positively correlated with years in the U.S., this variables proxies for factors associated long-term residence that also affect the likelihood for such workers to receive safety training at one point (Chiswick and Miller, 2007; Dustmann, 1999; Gonzalez, 2000). For instance, this would be the case if English speakers are aware of

their right to receive safety training and ask for it. We also find that, contrary to the expectation that married men are more risk averse than single men (DeLeire and Levy, 2004; Garen, 1988; Leeth and Ruser, 2006), married men are 6 percentage points less likely to receive safety training than their single counterparts. One possibility is that married men have greater family responsibilities (i.e., in-laws or family in their country of origin) and, as such, are more pressed than their single counterparts to accept worse working conditions, despite being potentially more risk adverse.

Our fourth specification controls for job characteristics possibly linked to the likelihood of receiving job safety training. As in our third model specification, we continue to find that undocumented workers are 7 percentage points less likely than their legal counterparts to receive job safety training. Additionally, job safety training appears to be less likely in what may be considered riskier jobs, such as roofing; yet more likely among day laborers employed as landscapers or electricians.

Our fifth and sixth specifications add a series of state- and MSA-fixed effects, respectively. These fixed effects are intended to proxy for differences across state and MSAs with regards to enforcement of labor policies and local labor markets, respectively. The inclusion of these fixed-effects does not alter the 7 percentage point lower likelihood of being offered job safety training endured by undocumented workers. Yet, controlling for local labor market effects reveals some new factors shaping the likelihood of having a job that offers job safety training. For instance, workers with children in the U.S. appear less likely to have jobs offering job safety training. This could be due to greater family responsibilities pressing workers to accept worse working conditions. We also find evidence of a positive correlation between average hourly wages in the nearest worker center in the MSA and job safety. The direct link

apparently contradicts the trade-off between wages and safety predicted by hedonic wage theory and, instead, seems to signal the existence of segmented labor markets composed of “good” and “bad” jobs in which “good” jobs are likely to pay higher wages as well as to offer work safety training. Additionally, there seems to be a positive relationship between having another job and job safety, possibly signaling that workers with more job options face a greater opportunity cost of working in an unsafe environment. Finally, after controlling for state and MSA fixed effects, carpentry jobs seem more likely to offer safety training, whereas roofing jobs continue to be about 7 percentage points less likely to receive safety training.

B) Who Is More Likely to Receive Job Safety Equipment?

Table 4 shows the marginal effects and standard errors that result from estimating a probit model of the likelihood of having received job safety equipment. According to the estimates in Table 4, undocumented status is not associated with any difference in the receipt of safety equipment.

What are the robust findings across our various specifications? First, some personal characteristics of day laborers are significantly linked to the likelihood of receiving job safety equipment, such as their educational attainment, marital status, and fatherhood. Specifically, workers with at least a junior high degree are more likely to receive job safety equipment. However, English speaking ability, which played a role in the likelihood of receiving training, does not play a significant role in shaping the provision of job safety equipment. We also continue to find that married men with children work in more precarious conditions than their single counterparts without children. Additionally, the final results provide evidence of Mexican-born men being less likely to receive safety equipment than their non-Mexican counterparts.

Second, some job related characteristics appear to play a significant role in shaping day laborers' likelihood of receiving job safety equipment. For instance, the inclusion of MSA-fixed effects reveals a negative relationship between the receipt of safety equipment and the average MSA-wage consistent with the predictions of hedonic wage theory. Additionally, day laborers most frequently employed in construction or cleaning jobs are about 17 percentage points and about 7 percentage points more likely to receive job safety equipment, respectively. As these occupations involve the use of potentially hazardous materials (solvents) or tools (nail guns, for instance), it is not surprising to find that day laborers ever employed in such jobs enjoy a greater likelihood of receiving specific job safety equipment. In contrast, day laborers ever employed dishwashers indicate a significantly lower likelihood of receiving job safety equipment in specification (5).

In sum, while undocumented immigrants are less likely to receive job safety training than their legal counterparts, there are no statistically significant differences by legal status when it comes to the likelihood of receiving job safety equipment. These findings are robust to the inclusion of workers' personal characteristics, job attributes, and state and MSA fixed effects. The next sections consider other employer abuses at work indicating whether or not undocumented workers experience worse working conditions.

C) Enduring Employer Violence at Work

Table 5 displays the results from examining the determinants of day laborers' likelihood of suffering employer violence at work. The main finding from Table 5 is the fact that undocumented workers are about 4 to 5 percentage points more likely to experience violence at work than their legal counterparts. In addition, there are other factors that consistently affect the probability of experiencing employer violence. For instance, day laborers frequently hired by

private firms are about 12 to 13 percentage points more likely to report employer violence in the most complete specifications. We also find that English ability and years in the U.S. are positively related to a higher likelihood of employer violence –a non-intuitive finding as greater human capital owing to better language skills or cultural assimilation should allow workers to either seek help or find other employment opportunities. In this regard, we find that more educated individuals, as well as workers with children in the U.S., are less likely to experience violence. Lastly, day laborers who worked in moving and roofing are 6 to 7 percent more likely to report employer violence than those who never worked in such jobs.

D) Lack of Pay

Regardless of the specification being examined, the figures in Table 6 suggest that undocumented immigrants are anywhere between 10 and 15 percentage points more likely than their legal counterparts to report not being paid during the two months preceding the survey. In addition to workers' legal status, we find that the type of employer and the type of job also shape the likelihood of wage theft. Specifically, day laborers more frequently hired by contractors/sub-contractors are about 10 percentage points more likely than those hired by private individuals to report not being paid. Likewise, day laborers in moving and construction are 11 percentage points more likely to report wage theft than those who did not work in such jobs. Similarly, but to a lesser extent, day laborers who worked in roofing and carpentry are 6 to 8 percentage points more likely to not get paid. As 90 percent of day laborers work in construction, with contractors doing most of the hiring, the incidence of wage theft appears to be a particularly acute problem in day labor.

It is also worth discussing the role played by other factors inversely associated to the likelihood of wage theft. The latter include education, which mitigates the incidence of wage

theft as evidenced by the fact that workers who have completed a junior high degree are about 6 percentage points less likely to report being a victim of wage theft than their less educated counterparts. Similarly, workers with a non-day labor job are 11 percentage points less likely to report being a victim of wage theft while working in day labor than workers solely employed in the day labor market. These findings are not surprising and, instead, underscore the importance of education and employment options in reducing workers' vulnerability to wage theft.

E) Lack of Food or Water Breaks

Table 7 displays the results from examining the likelihood of enduring the last of the working conditions we examine, i.e. the lack of food or water breaks at work. As with violence at work and wage theft, we once more find that undocumented workers are between 7 and 10 percentage points more likely than their legal counterparts to endure this type of abuse. Worth noticing is the fact that married or cohabitating workers are between 6 and 9 percentage points more likely than their single counterparts to lack food or water breaks. If the presence of a partner signals the existence of greater financial responsibilities, married and cohabitating individuals may endure worse working conditions before risking getting fired. As immigrants with longer U.S. stays, married and cohabitating day laborers, those with painting and roofing jobs are about 9 percentage points more likely to report not getting food or water breaks than day laborers who have never worked in such jobs. Finally, consistent with our earlier findings, day laborers with a non-day labor job are 9 to 11 percentage points less likely to report a lack of food and water breaks than their counterparts who only rely on day labor jobs.

V. Summary of Findings

The day labor market is ubiquitous in many urban centers throughout the U.S. and in other parts of the world. The National Day Labor Study (NDLS) is the first nationally

representative survey of this previously little-known population. The low barriers of entry into this market make it an attractive job option for less mobile workers facing greater employment difficulties, undocumented workers in particular. Although employers are not expected to differentiate workers according to their legal status when providing a safe and non-threatening work environment, undocumented immigrants may be more likely to encounter worse working conditions owing to their limited work options and job mobility.

In this paper, we examine the role played by workers' legal immigration status on their likelihood of receiving job safety training, safety equipment, and on what may be considered basic fair labor standards, such as being paid, having food and water breaks, and a non-hostile work environment. From our most complete model specifications, we find that, while undocumented workers do not seem significantly less likely than their legal counterparts to receive safety equipment, they are about 7 percentage points less likely to get safety training, five percentage points more likely to endure employer violence, thirteen percentage points more likely to not being paid, and 8 percentage points more likely to lack food or water breaks at work. Therefore, despite the non-distinction in the FLSA and OSHA regulations between legal and undocumented workers when it comes to fair working conditions, undocumented workers seem to be the subject of significant abuses at the workplace.

Do working conditions significantly vary according to the type of employer? In most instances, they do not. The exceptions are, however, worth noticing. In particular, day laborers employed by contractors are 7 percentage points more likely than their counterparts hired by homeowners and private individuals to be the victims of wage theft. Likewise, day laborers employed by private companies are 13 percentage points more likely than day laborers working

for individuals to report being subject to violent treatment at work. As such, more careful work site inspections could prove useful in reducing these types of abuses.

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Table 1: Work Safety Conditions by Nativity and Documentation Status

	Documented workers*	Undocumente d workers	P-value of diff. in means
Receive safety training	0.28 (0.04)	0.14 (0.02)	0.033
Receive safety equipment	0.53 (0.04)	0.52 (0.02)	0.881
Employer abuse - No pay, past 2 months	0.41 (0.02)	0.51 (0.02)	0.000
Employer abuse - No breaks, past 2 mont	0.39 (0.04)	0.45 (0.02)	0.121
Employer abuse - Violence, past 2 month	0.15 (0.03)	0.19 (0.02)	0.145

Source: National Day Labor Survey, 2004.

Notes: * Includes US born and legal immigrants. Standard errors in parentheses.

Table 2: Safety and Employer Abuse by Type of Employer

	Employer Type			P-value of Difference in		
	Private Individua	Contractor	Private Company	Ind. vs Contr.	Ind. vs Co.	Contr. vs. Co.
Safety training	0.15 (0.02)	0.19 (0.02)	0.29 (0.06)	0.101	0.009	0.076
Safety equipment	0.52 (0.02)	0.53 (0.02)	0.61 (0.07)	0.650	0.195	0.257
Abuse: No Pay	0.45 (0.02)	0.55 (0.02)	0.49 (0.06)	0.000	0.547	0.332
Abuse: No Breaks	0.43 (0.02)	0.45 (0.02)	0.43 (0.05)	0.243	0.981	0.635
Abuse: Violence	0.17 (0.02)	0.19 (0.03)	0.26 (0.05)	0.64	0.142	0.214

Source: National Day Labor Survey, 2004

Notes: Standard errors in parentheses. Abuses are for the past two months

Table 3: Marginal Effects from Safety Training Probit Regression

	(1)	(2)	(3)	(4)	(5)	(6)
Undocumented Immigrant	-0.134** (0.038)	-0.129** (0.037)	-0.072* (0.035)	-0.073* (0.032)	-0.070* (0.034)	-0.070+ (0.036)
Contractor/Sub-contractor		0.035 (0.024)	0.028 (0.022)	0.023 (0.020)	0.022 (0.020)	0.021 (0.020)
Private Company		0.136** (0.049)	0.096* (0.044)	0.102+ (0.057)	0.105+ (0.062)	0.095 (0.066)
In US 10+ years			-0.010 (0.028)	-0.010 (0.025)	0.002 (0.027)	0.004 (0.028)
Completed at least Jr. high			0.028 (0.027)	0.021 (0.027)	0.013 (0.026)	0.010 (0.027)
English ability: get by/well			0.104** (0.031)	0.084* (0.035)	0.084* (0.034)	0.083* (0.037)
Age			0.002 (0.001)	0.002 (0.001)	0.001 (0.001)	0.001 (0.001)
Married			-0.058* (0.026)	-0.056* (0.024)	-0.040+ (0.022)	-0.042+ (0.023)
Living with partner			-0.011 (0.039)	-0.015 (0.036)	0.012 (0.040)	0.010 (0.041)
Has Child in U.S.			-0.017 (0.014)	-0.023 (0.015)	-0.030+ (0.017)	-0.033+ (0.017)
Born in Mexico			-0.011 (0.029)	-0.012 (0.021)	-0.016 (0.023)	-0.021 (0.023)
Have place to go to for health advice or when sick?				0.030 (0.023)	0.014 (0.018)	0.010 (0.019)
Avg. Hourly Worker Center Wage in MSA ^a				0.008 (0.012)	0.012** (0.004)	0.027+ (0.017)
Job Other than Day Labor				0.037 (0.024)	0.044+ (0.023)	0.052* (0.026)
Moving				-0.028 (0.040)	-0.038 (0.040)	-0.034 (0.041)
Landscape				0.071+ (0.038)	0.055 (0.038)	0.057 (0.039)
Construction				-0.019 (0.040)	-0.018 (0.042)	-0.018 (0.043)
Drywall				0.026 (0.017)	0.025 (0.016)	0.026 (0.016)
Roofing				-0.075+ (0.040)	-0.066+ (0.040)	-0.068+ (0.041)
Carpentry				0.018 (0.015)	0.024+ (0.013)	0.028* (0.012)
Painting				-0.006 (0.027)	0.005 (0.026)	0.010 (0.027)
Plumbing				0.016 (0.023)	0.005 (0.022)	0.004 (0.023)
Cleaning				-0.003 (0.022)	0.002 (0.020)	0.005 (0.021)
Dishwash				0.010 (0.028)	0.012 (0.025)	0.014 (0.025)
Carwash				-0.005 (0.025)	-0.003 (0.024)	-0.004 (0.026)
Farming				-0.009 (0.015)	-0.001 (0.016)	-0.005 (0.016)
Cook				0.011 (0.024)	-0.002 (0.021)	-0.006 (0.022)
Electrician				0.060+ (0.034)	0.056 (0.035)	0.058 (0.037)
State Fixed Effects	N	N	N	N	Y	N
MSA Fixed Effects	N	N	N	N	N	Y
Observations	2564	2451	2394	2386	2367	2367
Mean Predicted Probability	0.17	0.18	0.18	0.17	0.17	0.17
Minimum Predicted Probability	0.12	0.04	0.02	0.00	0.01	0.01
Maximum Predicted Probability	0.41	0.54	0.61	0.83	0.85	0.85

Notes: ^a The mean wage in the MSA is used if there are no worker centers in the MSA. + significant at 10%; * significant at 5%; ** significant at 1%. Standard errors are clustered at the MSA. Robust standard errors in parentheses.

Table 4: Marginal Effects from Safety Equipment Probit Regression

	(1)	(2)	(3)	(4)	(5)	(6)
Undocumented Immigrant	-0.007 (0.043)	-0.010 (0.043)	0.040 (0.049)	0.024 (0.046)	0.017 (0.048)	0.034 (0.051)
Contractor/Sub-contractor		0.008 (0.019)	0.003 (0.020)	-0.004 (0.022)	0.004 (0.024)	-0.008 (0.028)
Private Company		0.086 (0.065)	0.065 (0.056)	0.072 (0.061)	0.072 (0.059)	0.059 (0.061)
In US 10+ years			-0.028 (0.029)	-0.039 (0.028)	-0.038 (0.030)	-0.037 (0.029)
Completed at least Jr. high			0.079+ (0.041)	0.076+ (0.039)	0.065+ (0.039)	0.057 (0.038)
English ability: get by/well			0.061 (0.037)	0.036 (0.037)	0.029 (0.034)	0.020 (0.035)
Age			0.001 (0.001)	0.001 (0.002)	0.000 (0.002)	0.000 (0.002)
Married			-0.074* (0.030)	-0.073* (0.030)	-0.063* (0.031)	-0.057+ (0.030)
Living with partner			-0.019 (0.055)	-0.017 (0.055)	-0.003 (0.057)	-0.017 (0.057)
Has Child in U.S.			-0.015 (0.015)	-0.019 (0.016)	-0.027+ (0.015)	-0.032* (0.016)
Born in Mexico			-0.018 (0.033)	-0.025 (0.031)	-0.080+ (0.041)	-0.087+ (0.046)
Have place to go to for health advice or when sick?				0.029 (0.024)	0.024 (0.021)	0.025 (0.022)
Avg. Hourly Worker Center Wage in MSA ^a				0.006 (0.014)	0.003 (0.010)	-0.036** (0.010)
Job Other than Day Labor				0.009 (0.067)	0.018 (0.063)	0.040 (0.056)
Moving				0.008 (0.047)	0.006 (0.043)	0.011 (0.045)
Landscape				0.062+ (0.037)	0.047 (0.038)	0.044 (0.038)
Construction				0.165** (0.042)	0.173** (0.043)	0.182** (0.045)
Drywall				0.010 (0.030)	0.010 (0.029)	0.006 (0.030)
Roofing				0.013 (0.037)	0.021 (0.039)	0.022 (0.040)
Carpentry				-0.049 (0.030)	-0.045 (0.031)	-0.041 (0.031)
Painting				0.019 (0.031)	0.019 (0.034)	0.029 (0.036)
Plumbing				0.016 (0.030)	0.014 (0.031)	0.014 (0.033)
Cleaning				0.069* (0.035)	0.073+ (0.039)	0.082* (0.038)
Dishwash				-0.049 (0.030)	-0.046+ (0.027)	-0.042 (0.026)
Carwash				0.023 (0.024)	0.026 (0.025)	0.020 (0.026)
Farming				-0.010 (0.028)	-0.014 (0.028)	-0.026 (0.030)
Cook				0.030 (0.040)	0.013 (0.038)	0.012 (0.039)
Electrician				0.042 (0.046)	0.036 (0.046)	0.030 (0.047)
State Fixed Effects	N	N	N	N	Y	N
MSA Fixed Effects	N	N	N	N	N	Y
Observations	2629	2562	2449	2393	2393	2367
Mean Predicted Probability	0.52	0.53	0.53	0.53	0.51	0.17
Minimum Predicted Probability	0.52	0.52	0.30	0.15	0.09	0.01
Maximum Predicted Probability	0.53	0.61	0.73	0.80	0.85	0.85

Notes: ^a The mean wage in the MSA is used if there are no worker centers in the MSA. + significant at 10%; * significant at 5%; ** significant at 1%. Standard errors are clustered at the MSA. Robust standard errors in parentheses.

Table 5: Marginal Effects from Violence Abuse Probit Regression

	(1)	(2)	(3)	(4)	(5)	(6)
Undocumented Immigrant	0.042 (0.026)	0.042 (0.027)	0.062** (0.019)	0.056** (0.020)	0.043* (0.018)	0.045* (0.020)
Contractor/Sub-contractor		0.016 (0.031)	0.014 (0.030)	0.012 (0.027)	0.007 (0.025)	0.005 (0.027)
Private Company		0.093 (0.058)	0.108 (0.066)	0.121+ (0.070)	0.131+ (0.069)	0.131+ (0.071)
In US 10+ years			0.075* (0.036)	0.066+ (0.037)	0.052 (0.037)	0.051 (0.040)
Completed at least Jr. high			-0.035+ (0.020)	-0.028 (0.017)	-0.024 (0.016)	-0.022 (0.016)
English ability: get by/well			0.066* (0.029)	0.052+ (0.027)	0.055* (0.025)	0.056* (0.026)
Age			-0.000 (0.001)	-0.001 (0.001)	0.000 (0.001)	0.000 (0.001)
Married			0.013 (0.021)	0.015 (0.020)	0.002 (0.019)	-0.002 (0.019)
Living with partner			0.055 (0.038)	0.041 (0.032)	0.022 (0.030)	0.024 (0.033)
Has Child in U.S.			-0.026* (0.012)	-0.029* (0.012)	-0.023* (0.011)	-0.024* (0.011)
Born in Mexico			-0.022 (0.025)	-0.024 (0.023)	-0.002 (0.024)	0.002 (0.025)
Have place to go to for health advice or when sick?				-0.031 (0.031)	-0.023 (0.027)	-0.022 (0.028)
Avg. Hourly Worker Center Wage in MSA ^a				-0.000 (0.009)	-0.005 (0.005)	0.003 (0.008)
Job Other than Day Labor				-0.010 (0.016)	-0.012 (0.015)	-0.013 (0.016)
Moving				0.071** (0.021)	0.070** (0.019)	0.073** (0.020)
Landscape				0.006 (0.041)	0.029 (0.033)	0.028 (0.034)
Construction				0.025 (0.024)	0.026 (0.023)	0.027 (0.024)
Drywall				0.000 (0.027)	-0.004 (0.026)	-0.004 (0.027)
Roofing				0.065** (0.018)	0.056** (0.016)	0.057** (0.016)
Carpentry				0.014 (0.025)	0.006 (0.024)	0.003 (0.025)
Painting				0.029 (0.024)	0.027 (0.018)	0.028 (0.019)
Plumbing				0.014 (0.019)	0.030 (0.019)	0.032+ (0.020)
Cleaning				0.035+ (0.019)	0.039* (0.018)	0.041* (0.020)
Dishwash				0.040 (0.027)	0.033 (0.023)	0.035 (0.023)
Carwash				-0.025 (0.027)	-0.021 (0.024)	-0.021 (0.024)
Farming				0.030 (0.025)	0.025 (0.024)	0.028 (0.026)
Cook				-0.015 (0.026)	-0.013 (0.024)	-0.010 (0.026)
Electrician				0.016 (0.020)	0.018 (0.020)	0.021 (0.021)
State Fixed Effects	N	N	N	N	Y	N
MSA Fixed Effects	N	N	N	N	N	Y
Observations	2611	2545	2433	2377	2377	2362
Mean Predicted Probability	0.18	0.18	0.18	0.18	0.20	0.20
Minimum Predicted Probability	0.15	0.14	0.02	0.00	0.00	0.00
Maximum Predicted Probability	0.19	0.27	0.44	0.57	0.66	0.66

Notes: ^a The mean wage in the MSA is used if there are no worker centers in the MSA. + significant at 10%; * significant at 5%; ** significant at 1%. Standard errors are clustered at the MSA. Robust standard errors in parentheses.

Table 6. Marginal Effects from Wage Abuse Probit Regression

	(1)	(2)	(3)	(4)	(5)	(6)
Undocumented Immigrant	0.100** (0.024)	0.112** (0.025)	0.149** (0.032)	0.139** (0.029)	0.139** (0.034)	0.133** (0.036)
Contractor/Sub-contractor		0.109** (0.022)	0.105** (0.024)	0.098** (0.027)	0.083** (0.031)	0.074* (0.030)
Private Company		0.046 (0.056)	0.045 (0.056)	0.085 (0.062)	0.057 (0.059)	0.056 (0.058)
In US 10+ years			0.052 (0.038)	0.035 (0.038)	0.035 (0.038)	0.024 (0.037)
Completed at least Jr. high			-0.047 (0.029)	-0.056* (0.022)	-0.065** (0.024)	-0.071** (0.026)
English ability: get by/well			0.018 (0.038)	-0.005 (0.036)	0.018 (0.041)	0.017 (0.039)
Age			0.001 (0.002)	-0.000 (0.001)	0.000 (0.002)	0.000 (0.002)
Married			-0.020 (0.023)	-0.024 (0.023)	-0.036 (0.024)	-0.035 (0.025)
Living with partner			0.051 (0.049)	0.024 (0.041)	0.002 (0.042)	-0.010 (0.043)
Has Child in U.S.			0.022 (0.022)	0.014 (0.023)	0.018 (0.025)	0.019 (0.025)
Born in Mexico			-0.032 (0.037)	-0.045 (0.037)	-0.011 (0.033)	-0.011 (0.037)
Have place to go to for health advice or when sick?				-0.039 (0.031)	-0.036 (0.031)	-0.037 (0.033)
Avg. Hourly Worker Center Wage in MSA ^a				-0.017 (0.012)	-0.012 (0.010)	-0.019** (0.007)
Job Other than Day Labor				-0.113** (0.031)	-0.119** (0.034)	-0.105** (0.029)
Moving				0.096** (0.034)	0.112** (0.037)	0.113** (0.039)
Landscape				0.034 (0.046)	0.050 (0.041)	0.055 (0.042)
Construction				0.116** (0.043)	0.127** (0.045)	0.147** (0.045)
Drywall				0.033 (0.031)	0.035 (0.030)	0.042 (0.031)
Roofing				0.085** (0.028)	0.075** (0.028)	0.078** (0.027)
Carpentry				0.062* (0.026)	0.058* (0.025)	0.056* (0.027)
Painting				0.033 (0.030)	0.038 (0.030)	0.034 (0.029)
Plumbing				0.057 (0.039)	0.063 (0.039)	0.063 (0.039)
Cleaning				0.011 (0.020)	0.010 (0.018)	0.017 (0.019)
Dishwash				-0.013 (0.023)	-0.006 (0.025)	0.008 (0.027)
Carwash				0.059 (0.037)	0.053 (0.038)	0.045 (0.039)
Farming				0.006 (0.027)	0.006 (0.027)	-0.003 (0.027)
Cook				-0.035 (0.043)	-0.041 (0.043)	-0.046 (0.043)
Electrician				0.018 (0.036)	0.022 (0.036)	0.018 (0.036)
State Fixed Effects	N	N	N	N	Y	N
MSA Fixed Effects	N	N	N	N	N	Y
Observations	2629	2562	2449	2393	2393	2393
Mean Predicted Probability	0.49	0.50	0.50	0.50	0.52	0.53
Minimum Predicted Probability	0.41	0.36	0.26	0.04	0.04	0.03
Maximum Predicted Probability	0.51	0.58	0.75	0.82	0.86	0.90

Notes: ^a The mean wage in the MSA is used if there are no worker centers in the MSA. + significant at 10%; * significant at 5%; ** significant at 1%. Standard errors are clustered at the MSA. Robust standard errors in parentheses.

Table 7: Marginal Effects from Breaks Abuse Probit Regression

	(1)	(2)	(3)	(4)	(5)	(6)
Undocumented Immigrant	0.068+	0.074+	0.098*	0.084*	0.078+	0.084+
	(0.039)	(0.040)	(0.039)	(0.039)	(0.046)	(0.049)
Contractor/Sub-contractor		0.034	0.045+	0.036	0.035	0.012
		(0.023)	(0.024)	(0.025)	(0.026)	(0.027)
Private Company		0.008	0.018	0.034	0.067	0.045
		(0.062)	(0.074)	(0.068)	(0.060)	(0.056)
In US 10+ years			0.076*	0.062+	0.062	0.065+
			(0.031)	(0.034)	(0.038)	(0.038)
Completed at least Jr. high			-0.014	-0.010	-0.003	-0.017
			(0.036)	(0.034)	(0.030)	(0.034)
English ability: get by/well			0.068	0.043	0.036	0.038
			(0.043)	(0.047)	(0.042)	(0.044)
Age			0.000	-0.002	-0.001	-0.002
			(0.001)	(0.001)	(0.001)	(0.001)
Married			0.057	0.063+	0.062	0.068+
			(0.037)	(0.037)	(0.039)	(0.040)
Living with partner			0.105*	0.094+	0.087+	0.069
			(0.051)	(0.048)	(0.048)	(0.044)
Has Child in U.S.			-0.008	-0.013	-0.010	-0.016
			(0.013)	(0.015)	(0.017)	(0.018)
Born in Mexico			-0.000	-0.007	0.007	-0.005
			(0.030)	(0.037)	(0.040)	(0.037)
Have place to go to for health advice or when sick?				-0.006	0.005	0.001
				(0.030)	(0.031)	(0.031)
Avg. Hourly Worker Center Wage in MSA ^a				-0.006	-0.026+	0.156**
				(0.012)	(0.015)	(0.007)
Job Other than Day Labor				-0.108**	-0.113**	-0.085*
				(0.032)	(0.029)	(0.038)
Moving				0.058	0.035	0.029
				(0.058)	(0.057)	(0.059)
Landscape				0.040	0.050	0.058
				(0.056)	(0.052)	(0.051)
Construction				0.050	0.053	0.065
				(0.063)	(0.062)	(0.063)
Drywall				0.047	0.050	0.053
				(0.035)	(0.035)	(0.034)
Roofing				0.084*	0.086*	0.094**
				(0.035)	(0.034)	(0.034)
Carpentry				0.007	0.012	0.003
				(0.029)	(0.027)	(0.027)
Painting				0.084*	0.094*	0.105**
				(0.038)	(0.037)	(0.038)
Plumbing				0.026	0.037	0.033
				(0.025)	(0.022)	(0.024)
Cleaning				0.028	0.027	0.039
				(0.030)	(0.031)	(0.033)
Dishwash				0.048	0.041	0.048+
				(0.030)	(0.029)	(0.026)
Carwash				-0.038	-0.027	-0.030
				(0.033)	(0.031)	(0.033)
Farming				0.027	0.036	0.023
				(0.027)	(0.023)	(0.025)
Cook				-0.010	-0.012	-0.019
				(0.041)	(0.038)	(0.037)
Electrician				0.018	0.016	0.013
				(0.022)	(0.024)	(0.022)
State Fixed Effects	N	N	N	N	Y	N
MSA Fixed Effects	N	N	N	N	N	Y
Observations	2614	2547	2435	2379	2379	2379
Mean Predicted Probability	0.44	0.44	0.43	0.43	0.45	0.46
Minimum Predicted Probability	0.39	0.37	0.27	0.06	0.03	0.02
Maximum Predicted Probability	0.45	0.48	0.67	0.73	0.86	0.85

Notes: ^a The mean wage in the MSA is used if there are no worker centers in the MSA. + significant at 10%; * significant at 5%; ** significant at 1%. Standard errors are clustered at the MSA. Robust standard errors in parentheses.

Data Appendix

The NDLS sample was executed in four stages. In the first stage of the sample design, 50 cities were randomly selected. Because Los Angeles and New York City were sampled twice, the sample consisted of 48 unique MSAs. Selection of these MSAs was based on: (1) belonging to one of four strata defined by the overall Latino population, and (2) each MSA's total population relative to the smallest metropolitan area in the strata. Of the 48 randomly selected MSAs, 13 did not have a day labor population; hence, were not surveyed in the NDLS. This left 35 MSAs with a confirmed day labor population.

In the second step, in order to collect data on a representative number of worker centers, another 11 MSAs with worker centers that had not been selected as part of the random sample were added, bringing the total to 46 MSAs. Thus, these 11 MSAs define an additional stratum to the four strata above. Step 3 in the sample design included identifying all day labor worker sites within the 46 MSAs, whereas step 4 consisted in randomly selecting workers for the survey. Although all identified day labor sites were subsequently visited, no day laborers were found in 10 MSAs on the day of the survey. This brought the total number of surveyed MSAs to 36.

Several procedures were used to identify day labor hiring sites (from November 2003 to March 2004). First, local groups, such as community-based organizations, advocacy groups, churches, home improvement stores, police departments, city planning departments, and merchants, were contacted. Additionally, they carried out internet searches (i.e., looked at newspapers, websites, articles) to identify sites within each MSA. More than half of the hiring sites were identified using this method. Further sites were identified using a "referral" system that in many ways resembles snowball sampling. Day laborers were approached at different sites and asked where else they go in search of work, and workers at those new sites were asked the

same question. This method led to the identification of the remainder of the sites. All known sites were visited, except for those in Los Angeles, New York, and Orange County due to budget restrictions. This aspect of the sample design is also incorporated into the survey weights.

Utilizing information (i.e., field notes, counts of day laborers) from the site identification research and the scouting exercise in May 2004, “selection” counts for each site were established. Selection counts were based on the size (total number of day laborers) of the hiring site prior to the survey conducted in July and August of 2004. Upon arrival at a given site, a total count of all workers was taken at 6:30 in the morning. The count was repeated every hour until 10:30 a.m. and included day laborers who arrived after the initial count had been made. Included in the count was a general description of each worker (usually based on physical features and/or clothing attire). After all the workers had been counted, a simple random sampling procedure was administered whereby potential participants were identified. Each worker who fell within the selection count (a random number) was approached and asked to participate in the survey. Workers were randomly selected at 264 hiring sites in 139 municipalities in 20 states and the District of Columbia.

A total of 2,660 surveys were completed. The majority of the interviews were administered in Spanish and all were conducted face to face. The survey was undertaken during a continuous seven-week period (the last week of June to mid-August 2004). Each interview included more than 100 questions. The survey took approximately 35 minutes to complete, and each participant received \$10 and a certificate of participation. The refusal rate (21 percent) was considerably low particularly in light of what most survey experts regard as a difficult population to approach and convince to participate in a research study (U.S. General Accounting Office, 2002).

Table A: Summary Statistics of Selected Variables

	Mean	(Std. Error)	N
Work Safety Variables			
Safety Training	0.18	(0.02)	2641
Safety Equipment	0.52	(0.02)	2639
Employer abuse - No pay	0.49	(0.02)	2638
Employer abuse - No breaks	0.44	(0.02)	2623
Employer abuse - Violence	0.18	(0.02)	2620
Work injury requiring medical attention	0.19	(0.02)	2635
Number of work injuries	0.92	(0.06)	553
Missed work due to injury	0.67	(0.03)	547
Number of day missed due to injury	25.32	(3.36)	362
Individual Characteristics			
Nativity/Citizenship			
US Born	0.06	(0.02)	2659
Foreign Born - Documented	0.18	(0.02)	2649
Foreign Born - Unocumented	0.75	(0.03)	2649
English Proficiency			
Speaks Well/Gets By	0.25	(0.02)	2643
Length of time in US			
10 years or more	0.28	(0.03)	2659
Educational Attainment			
No Schooling	0.20	(0.02)	2611
Elementary/JR High	0.61	(0.02)	2611
High School Diploma/GED	0.14	(0.01)	2611
Some College	0.05	(0.00)	2611
Age	34.32	(0.51)	2653
Married	0.43	(0.02)	2659
Job Characteristics			
Average hourly wage	11.05	(0.30)	1914
Employer Type			
Private Individual	0.50	(0.03)	2579
Contractor	0.44	(0.03)	2579
Private Company	0.06	(0.01)	2579
Health Insurance	0.08	(0.01)	2633
Job other than day labor	0.17	(0.02)	2641
Occupation			
Moving/Hauling	0.83	(0.01)	2653
Landscaping	0.83	(0.02)	2652
Construction	0.90	(0.01)	2653
Drywall	0.58	(0.02)	2651
Roofing	0.66	(0.02)	2650
Carpentry	0.56	(0.02)	2652
Painting	0.80	(0.02)	2649
Plumbing	0.39	(0.02)	2650
House Cleaning	0.64	(0.02)	2648
Dishwashing	0.39	(0.02)	2652
Car Wash	0.35	(0.01)	2646
Farming	0.51	(0.02)	2650
Cook	0.17	(0.01)	2653
Electrician	0.21	(0.01)	2649

Source: National Day Labor Survey, 2004

Notes: Estimates are weighted and clustered at the MSA.