Estimation of Health Benefits From a Local Living Wage Ordinance

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Objectives. This study estimated the magnitude of health improvements resulting from a proposed living wage ordinance in San Francisco.

Methods. Published observational models of the relationship of income to health were applied to predict improvements in health outcomes associated with proposed wage increases in San Francisco.

Results. With adoption of a living wage of $11.00 per hour, we predict decreases in premature death from all causes for adults aged 24 to 44 years working full-time in families whose current annual income is $20 000 (for men, relative hazard [RH] = 0.94, 95% confidence interval [CI] = 0.92, 0.97; for women, RH = 0.96, 95% CI = 0.95, 0.98). Improvements in subjectively rated health and reductions in the number of days sick in bed, in limitations of work and activities of daily living, and in depressive symptoms were also predicted, as were increases in daily alcohol consumption. For the offspring of full-time workers currently earning $20 000, a living wage predicts an increase of 0.25 years (95% CI = 0.20, 0.30) of completed education, increased odds of completing high school (odds ratio = 1.34, 95% CI = 1.20, 1.49), and a reduced risk of early childbirth (RH = 0.78, 95% CI = 0.69, 0.86).

Conclusions. A living wage in San Francisco is associated with substantial health improvement. (*Am J Public Health.* 2001;91:1398–1402)

The inverse relationship between socioeconomic status (SES) and health, which has been extensively documented,[1–6] may be mediated by material, behavioral, psychosocial, or physiologic pathways.[2,7–9] Income is a widely used dimension of SES that at lower levels predicts poor health and premature death, whether measured at the individual or at the aggregate level.[10–13] Increasing the federal minimum wage is one means of limiting income poverty in the United States. Indeed, many municipalities in the United States have increased the minimum wage for certain sectors of the local labor force by establishing local "living wage" laws. In contrast to the national minimum wage, a living wage generates an income sufficient to meet subsistence needs such as food, shelter, clothing, transportation, and child care.[14,15]

San Francisco's legislative board recently considered adopting a living wage of $11 per hour for workers of the city's contractors and property leaseholders. We estimated the magnitude of the anticipated health improvement associated with this legislation.

METHODS

Data

In 1999, the city and county of San Francisco commissioned an economic analysis by San Francisco State University to examine the implications of a proposal to require that all workers of city contractors and property leaseholders receive a minimum hourly wage of $11.00. The analysis relied on 2 principal sources of information: (1) surveys mailed to city contractors and property leaseholders and (2) administrative data on contractor budgets provided by city departments.[16] The response rate to the 2 parts of the mailed survey was low (approximately 24% and 26%, respectively), and the administrative data from city departments was often of limited quality and completeness. The analysis assessed the number of part-time and full-time workers in designated wage ranges and their benefits and provided estimates of the aggregate income gains for these workers that the proposed minimum hourly wage of $11 would bring about. The average income benefit was calculated by dividing the aggregate gain by the number of affected workers separately for full-time and part-time workers in each of 4 sectors: city contractors, airport leaseholders, port leaseholders, and other leaseholders. Confidence intervals for the number of workers affected and the average wage gain were not provided.

Because the San Francisco State University analysis did not directly assess the social or economic characteristics of the affected workers, we used 3 years of Bureau of Labor Statistics data for the San Francisco Bay area (1997–1999 Annual March Current Population Survey) to characterize workers aged 18 to 64 years who earned $5.75 to $11 per hour and currently worked in occupational and industry categories likely to be affected by the city ordinance. We adjusted income data to current dollars by using the urban consumer price index. Estimated proportions were pooled across the 3 survey years, and standard errors were calculated by methods supplied by the Bureau of Labor Statistics.

Estimates were based on peer-reviewed published studies of income's effect on health. Health outcomes of interest were premature mortality, preventable hospitalizations, and emergency room visits. We identified relevant literature on health outcomes by using Melvyn Medline (available at: http://www.library.ucsf.edu/db/medline/medframe) and by searching for English language articles that matched the subject-heading search terms "income" and "United States" (and "mortality," "hospitalization," or "health status indicators") and that were published between 1990 and 1998. A priori, we developed the following 6 criteria for study inclusion: (1) subjects representative of the US general population; (2) income measured at the individual, family, or household level; (3) longitudinal design; (4) statistical adjustment for age and sex; (5) year of income ascertainment provided; and (6) income applied as a continuous variable. When several analytic models were used in a single study, we selected those models that assessed nonlinear effects of income and adjusted for other correlates of social position, such as education.

We identified 8 general-population studies of income's effects on all-cause mortality. All of these studies observed an inverse associa-

tion between income and premature mortality. Four of the prospective national studies categorized income.[17–20] Two analyses were cross-sectional,[21,22] and one used a ratio of income to the poverty level as the independent variable and limited the analyses to Whites and African Americans.[23] Only one study of income and mortality, a reanalysis of the Current Population Survey data, met all 6 of our criteria.[24] The investigators stratified the analysis by 3 age categories and by sex and additionally adjusted for age, household size, education, and marital status. The model that used a logarithmic transformation of income resulted in the best fit to the risk of mortality. One nationally representative study of income and hospital utilization was identified; however, income was assessed at the zip code level, and this predictor was not available in our analysis.

We identified 4 studies of the relationship between individual income and health status indicators in representative US populations.[13,25–27] All 4 studies were cross-sectional; however, one study, by Ettner,[27] used a 2-stage instrumental variable approach that allowed assessment of temporal relationships, so we included it in our analysis. The Ettner study assessed several health status indicators by using 3 data sets: the 1987 National Survey of Families and Households, the 1986–1987 panels of the Survey of Income and Program Participation, and the 1988 National Health Interview Survey. Outcomes were modeled as a function of log-transformed income, and the analyses were adjusted for sex, household size, marital status, race/ethnicity, age, education, and metropolitan area of residence. The analysis demonstrated a statistically significant exogenous relationship between income and 3 continuous health outcomes—the Center for Epidemiologic Studies scale of depressive symptoms, the number of days sick in bed in the past 4 months, and average daily alcohol consumption—as well as 3 discrete outcomes—self-rated health, work limitations, and limitations in activities of daily living.

We were also interested in the relationship between income and childhood development because of the importance of child development to lifelong social position and because of its potential intervening role in the relationship of income to health. We estimated the effect of increased wages on educational attainment and on early childbearing out of marriage by using an analysis from the Panel Study of Income Dynamics.[28] We selected this study because it illustrated the contribution of family income to childhood educational achievement and met all of our a priori inclusion criteria. For our analysis, we used the coefficients derived from models that used a log transformation of income and that adjusted for race/ethnicity, sex, number of siblings, family structure, and maternal age, schooling, and employment.

TABLE 1—Selected Characteristics of Workers: San Francisco Bay Region[a], California, 1997–1999

Characteristic	All Workers (n = 2667), % (90% CI)	Workers Targeted by Ordinance (n = 377), % (90% CI)
Female	43.3 (41.2, 45.3)	56.2 (50.8, 61.6)
Age, y		
18–23	8.3 (7.2, 9.4)	24.9 (20.2, 29.5)
24–44	58.0 (56.0, 60.0)	50.4 (44.9, 55.8)
45–64	33.7 (31.8, 35.6)	24.8 (20.1, 29.5)
Race/ethnicity		
White	74.7 (72.9, 76.4)	70.5 (65.5, 75.5)
Black	6.0 (5.1, 7.0)	5.9 (3.4, 8.4)
Asian/Pacific Islander	18.4 (16.8, 19.9)	23.0 (18.4, 27.6)
Native American	0.9 (0.6, 1.3)	0.6 (0, 1.3)
Marital status		
Married	56.7 (54.7, 58.7)	43.2 (37.8, 48.5)
Widowed, divorced, or separated	27.4 (25.8, 29.0)	9.9 (6.7, 13.1)
Unmarried	29.0 (27.2, 30.8)	46.9 (41.5, 52.3)
Family size		
1	26.5 (24.8, 28.3)	25.8 (21.1, 30.5)
2	23.9 (22.2, 25.6)	21.9 (17.4, 26.4)
3–4	38.0 (36.1, 40.0)	38.6 (33.4, 43.9)
>4	11.5 (10.3, 12.8)	13.6 (9.9, 17.3)
Any children <18 y	37.2 (35.2, 39.1)	28.2 (23.3, 33.1)
Any children <6 y	16.7 (15.2, 18.2)	12.7 (9.0, 16.3)
College graduate	41.8 (39.8, 43.7)	16.2 (12.3, 20.2)
Working full-time	86.3 (85.0, 87.7)	72.8 (68.0, 77.6)
Earning >50% of family income	60.4 (58.4, 62.3)	45.0 (39.6, 50.4)
Family annual income <$25 000	9.6 (8.4, 10.8)	32.1 (27.0, 37.1)

Note. CI = confidence interval.
[a]These estimates were derived from Bureau of Labor Statistics Annual March Current Population Survey data for the San Francisco Bay area (1997–1999). "Current workers" indicates currently employed workers aged 18 to 64 years who were working at least 26 weeks per year. "Workers targeted by ordinance" refers to the subset of current workers earning $5.75 to $11 per hour in occupational and industry categories who would probably be affected by adoption of a proposed living wage of $11 per hour for workers of the city's contractors and property leaseholders.

Analytic Approach

Effect measures and their standard errors were abstracted from the selected studies or were obtained from the study authors. The urban consumer price index was used to adjust the expected gain in income due to the proposed wage increase and the current income of earners to the year of income valuation reported in the studies. We estimated expected changes in health outcomes for full-time and part-time workers by applying the current estimated family income and the expected income gain to the study model. Given a specified annual income gain, this approach produced a value for each point on the current income distribution of the target

population of workers. Depending on the study outcome and model used, the benefit of the living wage was expressed as either a difference, a ratio, or a percentage change.

RESULTS

The San Francisco State University economic analysis estimated that 42 118 full-time and part-time earners working in 4 economic sectors would be affected by the proposed $11-per-hour living wage.[16] Estimated annual income gains varied by sector but averaged (in current dollars) $2668 for affected part-time workers and $4822 for full-time workers.

Table 1 describes selected characteristics of currently employed workers in the San Francisco Bay area aged 18 to 64 who worked at least 26 weeks a year as well as characteristics of those whose wages, industries, and occupations were most similar to those affected by the living wage. Of those affected by the living wage, 32.1% (90% confidence interval [CI]=27.0, 37.1) were members of families with annual incomes less than $25 000. Compared with all current workers, workers targeted by the ordinance were more likely to be female, young, less educated, unmarried, without children, and working part-time.

Wage gains predicted mortality risk reductions and improvements in health status for both men and women and for both part-time and full-time workers. The average magnitudes of these benefits for adult workers aged 24 to 44 with a current family income of $20 000 are presented in Table 2.

The estimated reduction in mortality risk (relative hazard) for a full-time worker decreases with increasing current income, from 0.93 (95% CI=0.90, 0.96) for men and 0.95 (95% CI=0.93, 0.97) for women with a family annual income of $15 000 to 0.98 (95% CI=0.977, 0.990) for men and 0.99 (95% CI=0.985, 0.994) for women with a family income of $75 000 (Figure 1).

The number of days sick in bed, depressive symptoms, the risks of limitations in work or activities of daily living, and being in the poorest subjective health would all be expected to be modestly reduced for full-time workers with current family incomes of $20 000; however, daily alcohol consumption would modestly increase (Table 2).

For the children of workers benefiting from a living wage, the chances of completing high school would increase (Figure 2), as would the number of years of completed education. For girls, the risk of childbirth outside of marriage would be expected to fall.

DISCUSSION

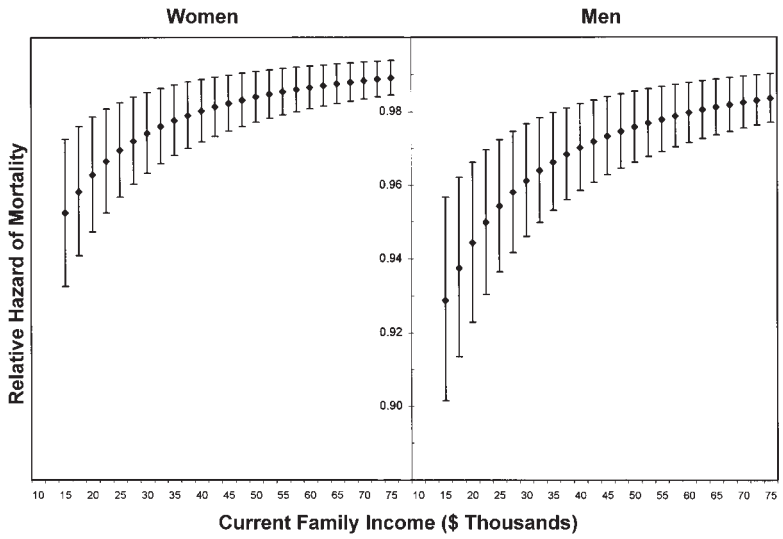
Estimating the magnitude of societal benefits resulting from a living wage is crucial because of the sizable costs of implementing this policy. Policymakers must be able to weigh the relative benefits and costs of a living wage compared with alternative means of achieving similar benefits.

Our analysis demonstrates that a modest gain in income resulting from a living wage would be associated with substantial health benefits. In addition, the educational attainment of workers' children would be improved and the risk of premarital childbirth among offspring would be lower with these modest income gains. Although our analysis predicted

TABLE 2—Estimated Health and Educational Effects on Workers and Their Children Resulting From Adoption of a Living Wage for Families With Incomes of $20 000: San Francisco Bay Region, California, 1997–1999

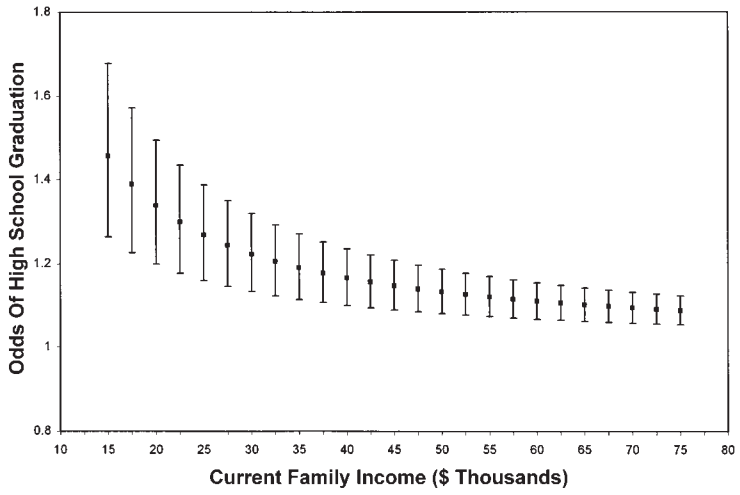
Study/Outcome	Model	Effect Measure	Estimate for Full-Time Workers (95% CI)	Estimate for Part-Time Workers (95% CI)
Backlund et al.[24]				
Mortality—male	Proportional hazards[a]	Hazard ratio	0.94 (0.92, 0.97)	0.97 (0.96, 0.98)
Mortality—female	Proportional hazards	Hazard ratio	0.96 (0.95, 0.98)	0.98 (0.97, 0.99)
Ettner[27]				
Health status	Ordered probit[b]	Relative risk	0.94 (0.93, 0.96)	0.97 (0.96, 0.98)
ADL limitations	Probit	Relative risk	0.96 (0.95, 0.98)	0.98 (0.97, 0.99)
Work limitations	Probit	Relative risk	0.94 (0.92, 0.96)	0.97 (0.95, 0.98)
CES–Depression scale	2-part[c]	Elasticity	–1.9%	–1.1%
No. of sick days	2-part	Elasticity	–5.8%	–3.2%
Alcohol consumption	2-part	Elasticity	+2.4%	+1.3%
Duncan et al.[28]				
Completed schooling	OLS regression	Years of schooling	0.25 (0.20, 0.30)	0.15 (0.12, 0.17)
Completed high school	Logistic regression	Odds ratio	1.34 (1.20, 1.49)	1.18 (1.11, 1.26)
Nonmarital childbirth	Proportional hazards	Hazard ratio	0.78 (0.69, 0.86)	0.86 (0.81, 0.92)

Note. CI = confidence interval; ADL = activities of daily living; CES = Center for Epidemiologic Studies; OLS = ordinary least squares.
[a]Effect measures for the 24- to 44-year age groups were used.
[b]The probit models required specifying the values of all the model covariates; the values given above were calculated for a married 30-year-old White female with 2 children living in a metropolitan area.
[c]The 2-part model used least squares regression on a log transformation of the dependent variable, with a conditional sample of subjects with positive values used for the outcome. The effect measure, elasticity, did not enable us to calculate confidence intervals.



Note. Bars represent 95% confidence intervals.

FIGURE 1—Estimated mortality risk reduction among full-time workers aged 24 to 44 years benefiting from the proposed San Francisco, Calif, living wage ordinance.



Note. Bars represent 95% confidence intervals.

FIGURE 2—Estimated change in the likelihood of high school graduation among children from birth to 15 years of age in families with full-time workers benefiting from the proposed San Francisco, Calif, living wage ordinance.

an increase in alcohol consumption, which may negatively affect health, the higher consumption of alcohol predicted by the applied study was attributed to a greater prevalence of drinking among wealthier persons.[27]

The major limitation of our analysis is the assumption of both a causal and a dynamic relationship between income and health. Since all available studies of the influence of income on health are observational, the apparent association could be due to confounding. Although all of the studies we applied adjusted for age, sex, race/ethnicity, education, and marital status, other unmeasured individual factors may explain the relationship between income and health. We were not able to account for neighborhood poverty, institutional racism, and inequalities in regional income distributions, which may also influence health outcomes independently of individual income.[8,11,29–33]

Reverse causality (i.e., poor health leads to poverty) is commonly raised as an alternative explanation of the association between SES and health. However, the evidence from prospective studies and the evidence for relationships between education and health and between spousal SES and health refute this hypothesis.[6] As childhood development is unlikely to influence parental income, reverse causality should not be an issue for these outcomes. Recent experience with welfare reform also provides compelling experimental evidence for the causal effect of income supplementation on childhood educational performance.[34]

Even if a causal relationship between income and health exists, we cannot be certain that an increase in income during adulthood will result in a prospective change in adult health. SES in childhood has been shown to predict health status in adult life, indicating that socioeconomic influences may be cumulative, have latent effects, or set an individual on a particular health trajectory.[9,35–38] However, longitudinal studies have demonstrated higher mortality rates among individuals in the middle income range whose incomes drop by more than 50%.[19] Also, significant effects of changes in family income on early childhood IQ and young adult achievement within families have been demonstrated.[28,39]

The application of observational studies in this policy analysis was constrained by the way the study data were reported and analyzed. While many of the reviewed mortality studies were prospective and statistically adjusted for potential confounders, few used continuous measures of income. For studies to be useful for estimating the health benefits accruing from modest income gains, researchers should retain income as a continuous measure and model nonlinear effects.

Our analysis was not intended to capture all of the possible economic effects, and their implications for health, of a living wage ordinance. Secondary economic benefits of a living wage would be "wage push" (resulting in

increasing wages for persons just above a living wage), "wage ripples" (increases in prevailing wages for persons doing similar work on noncity contracts), and local "multiplier" effects (due to the workforce spending additional income in the local economy). A potential negative effect of the living wage would be displacement of workers on city contracts due to competition from higher-paid or higher-skilled workers. Over the short term, the program would not be expected to result in displacement. However, even if displacements occurred, the ordinance would still increase the number of jobs in the community that paid a living wage.

Our study demonstrates that a more egalitarian distribution of income may have long-term positive effects on individual and community health. However, attempts to modify the distribution of wealth are likely to face significant social, scientific, and economic challenges.[7,40–43] ■

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Contributors

R. Bhatia designed the study, collected the data, and performed the analysis. Both authors wrote the manuscript.

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City and County of San Francisco
DEPARTMENT OF PUBLIC HEALTH

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OCCUPATIONAL & ENVIRONMENTAL HEALTH

Testimony to SF Board of Supervisors - Budget and Finance Committee
July 26, 2006

My name is Rajiv Bhatia. I am the Director of Environmental Health for the SF Department of Public Health. Thank you for giving the Department this opportunity to share what we know to be the important public health consequences of having paid sick days. I'm happy that you are taking these consequences into account as you determine how San Francisco can advance sick leave benefits for those that work here.

Intuitively, I think we all agree that having paid sick leave is good for our health. When workers with sick leave benefits are sick or even when they are managing a chronic illness, most will go and get the help they need or take the time off needed to recover. When children or parents are ill they can also take time off work to care for them.

Workers without of sick leave benefits don't have these options. They are more likely to come to work sick because they need the money or feel vulnerable in their jobs. They are less able to be able to take the time needed for sick children. Low-wage workers are the most vulnerable to having to make the unfortunate trade-offs between working sick and meeting family needs.

There are broader public health and societal consequences beyond these common sense consequences to individuals and families. If the sickness is due to an infectious disease, there is a real risk that a sick worker can infect other workers or the public. There are a number of communicable disease (i.e., transmissible person-to-person) conditions, such as Hepatitis A or influenza for which we worry about transmission at the workplace. Many of these diseases require reporting to the Department of Public Health, but for us to learn about these conditions, doctors, laboratories or other health care providers must report the condition.

If an individual who is infected with one of these conditions also works in what we call a "sensitive" occupation, such as child care provider or food handler, the Health Department may advise a work restriction in efforts to protect the health of co-workers, children, and customers. However, in reality, the success of these requirements depends on learning about the illness and acting in a timely way. An individual is typically the first person to recognize his or her

illness and the period of transmission often begins early in the course of an infectious disease. These facts mean that we really rely on workers and their employers to self-enforce requirements that protect the public from sick workers. In the absence of mandatory paid sick days benefit, it not realistic to expect that all workers take unpaid leaves absence from their job.

Whether or not workers have paid sick leave also impacts the economic costs of running our health care system. Many of the admissions to our hospitals are entirely preventable. We categorize these types of admissions as ambulatory care sensitive conditions (ACSCs) and they include asthma, hypertension, and diabetes. These are conditions where hospitalization is often avoidable with timely and effective outpatient and primary care, where, for example, a worker could go to their doctor or a clinic and treat a flare-up of an illness before it deteriorates so badly that they have to be admitted to a hospital. Many of those with chronic illnesses like asthma can avoid hospitalization entirely but this can require frequent outpatient visits to manage complex treatments.

Health care access requires not only facilities and a way of paying for services, but a variety of other factors. Transportation, time, and ability to leave work are probably three of the most important factors determining whether people will seek timely or regular care. We believe having paid sick days benefit would remove one of the most important barriers that these workers face in accessing health care.

The Department knows that residents in many neighborhoods of San Francisco experience high rates of hospitalizations due to ACS conditions. If we look at a map of almost any ACSC hospitalization in SF, we see the same pattern—a higher proportion of residents are hospitalized in areas with a larger proportion of low-income individuals. Many of these same low-income residents are employed through service sector positions and may be least likely to have paid sick days benefits. These are the same people who may be relying on City clinics and hospitals for their care.

To reiterate, the public health advantages of paid sick leave benefits to San Francisco include:

- Enabling workers to take the time off needed to manage or recover from an illness and care for ill family members.
- Protecting co-workers and the public from infectious disease.
- Reducing the social and economic costs of avoidable hospitalizations.

The Continuum of Enforcement Activities for Labor Laws and Potential Health Agency Roles

Spectrum of Enforcement	Typical Activities and Responsibilities of the Authorized Enforcement Agency	Allowed Health Dept Action	Examples of Supportive SFDPH Actions
Education on Legal Requirements	• Workers and Employer Training • Media campaign	Yes	• **Educate** workers on legal occupational safety protections and workers compensation rights • **Notify** restaurants of local labor laws
Technical Support and Consultation to Regulated Community	• Provide training, information, counseling, and tools to business to support compliance	Yes	• **Train employers** on Paid Sick Days requirement as part of required food safety training for restaurant managers • **Support employers** who are regulated businesses in understanding violation and meeting requirements
Routine Compliance Inspections	• Inspections conducted on a regular schedule to ensure that the regulated person/business is in compliance	No	• **Observe** (intentional or unintentional) for compliance with labor law violations during routine health inspections. • **Monitor and track** labor law compliance in permit records and databases • **Refer** observations of potential labor law violations to agency enforcing the labor laws as complaints
Complaint Inspections	• Inspections based on receiving a complaint from the public or another agency about noncompliance	No	• None currently identified
Notices of Violation	• Official notice to a regulated employer listing violations, a time line for correcting them, and a description of the consequences of not correcting the violations on time	No	• **Recommend** actions to regulated (permitted) businesses to get into compliance with local or state labor laws •
Citations to Administrative Hearings	• Violator has to appear at the enforcement agency to explain why the violations have not been corrected	No	• None currently identified
Fines and Penalties	• Enforceable order to make the regulated employer pay a fine or implement some form of retribution for failure to comply with the law.	No	• None currently identified
Operation Stopped	• Business is stopped temporarily until violations have been corrected • Permit to operate withdrawn	No	• Deny health permit until a business has shown of compliance with labor law
Civil Prosecution	• Legal action against the responsible party	No	• **Refer the case to the city Attorney** to evaluate the employer for unfair business practices
Criminal Prosecution	• The District Attorney (or Attorney General) takes charges the responsible party with criminal activity	No	• **Refer the case to the local district attorney**

Examples of Health Agency Actions Supportive of Enforcement:

1. Observe for compliance—Potential labor law violations observed during routine health inspections are noted.
   For example, as Health Inspectors are conducting routine inspections of auto-body painting shops, a Health Inspector may have observed that the employer has not posted a notice required by Cal-OSHA regarding employees access to medical records.

2. Monitor for compliance—Labor law requirements are included into routine health inspection checklists.
   For examples, Health Inspectors conducting routine inspections of restaurants are checking for 5 required labor law postings at each inspected restaurant. The presence or absence of the postings is noted on the inspection checklist.

3. Make referrals—Calls are made to agency enforcing the labor laws informing them that potential labor law violation.
   For example, after noticing that none of the employees have personal protective equipment at a pottery manufacturing plant, the inspector can call Cal-OSHA to report the observation.

4. Health permit dependent upon compliance— For those businesses requiring a health permit to operate, DPH can deny a business a health permit until the business has shown proof of compliance with labor laws, or DPH can require the permit holder to do certain parts of their business according to requirements in a labor law.
   For example, DPH can ask for proof and would not issue a health permit to operate a restaurant until the restaurant owner has shown proof that he has purchased workers compensation insurance. Businesses that need to have a S.F. CUPA registration cannot be registered until they have provided Materials Safety Data Sheets and training on hazardous materials management as required by Cal-OSHA regulations.

For more information, please contact:
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CHECK, PLEASE!

HEALTH AND WORKING CONDITIONS IN SAN FRANCISCO CHINATOWN RESTAURANTS

EMBARGOED UNTIL SEPTEMBER 17, 2010, 12:01AM

A REPORT BY CHINESE PROGRESSIVE ASSOCIATION

In partnership with the San Francisco Department of Public Health; University of California, San Francisco Medical School; University of California, Berkeley School of Public Health; and the University of California, Berkeley Labor Occupational Health Program, with writing support from the Data Center

CHECK, PLEASE!

This report is dedicated to all of our brothers and sisters who are struggling for survival and fighting for their rights.

With careful research and large amounts of data, this report seeks to tell the little-known real-life stories of low-wage workers and communities of color.

This is the grassroots level. These are the people that came to this foreign land to seek a life of hope. Armed with the will to persevere, they created wealth and laid the foundation for this city, but still live in the shadows of this society. They are continually exploited, often forgotten because they are immigrants or have difficulty with English, with their cries of frustration often falling on deaf ears, never getting media coverage. So as you finish your meal, please consider the people that made it all possible.

—The Workers Committee of the Chinese Progressive Association
Hu Li Nong, Gan Lin, Li Li Shuang, Rong Wen Lan, Michelle Xiong, Zhu Bing Shu

The Chinese Progressive Association (CPA) educates, organizes and empowers the low-income and working-class immigrant Chinese community in San Francisco. Our mission is to build collective power with other oppressed communities to demand better living and working conditions and justice for all people.

CPA's Worker Organizing Center builds a voice and power for Chinese immigrant workers through grassroots organizing, leadership development, advocacy, and alliance-building.

Our Worker Leadership Committee helped design this "research-for-action" project from start to finish and trained other restaurant workers to conduct survey interviews.

Since 2004, CPA has helped restaurant and food industry workers recover over $725,000 in unpaid wages and minimum wage violations, in collaboration with San Francisco's Office of Labor Standards Enforcement (OLSE). In that same time, OLSE has collected over $3.7 million in minimum wage violations for over 600 workers across the city. However, organizers and leaders at CPA felt that the systemic nature of low-road jobs had to be confronted on a greater scale, leading to this research project.

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TABLE OF CONTENTS

Tables and charts:

EXECUTIVE SUMMARY

San Francisco's Chinatown is a vibrant neighborhood and cultural center in one of the country's most affluent cities. Yet, within the walls of many Chinatown restaurants, immigrant workers struggle for survival by laboring in sweatshop conditions. This report, based on surveys of 433 restaurant workers interviewed by their peers and observational data on 106 restaurants, found a prevalence of low-road industry practices such as wage violations, lack of benefits, poor working conditions, and stressful and hazardous workplaces. These conditions leave workers insecure in their jobs and vulnerable to injury and illness, while negatively affecting consumers, businesses, and the community.

The problems in Chinatown reflect a national epidemic of wage theft and lowered labor standards. More and more employers are choosing the low road over the high road. These low-road practices may result in inexpensive meals for patrons, but workers, consumers, law-abiding employers and the public pay a high price. Low-road employers compromise the health of their customers when they violate health code and safety regulations to make an extra dollar. They undercut employers who are playing by the rules, depress the local wages and tax base, and force workers to rely on public services to meet their basic needs.[1] These national trends of wage theft, unlivable wages and poor working conditions are part a global "race to the bottom" to lower wages and working conditions in the pursuit of profits.

LOW ROAD PRACTICES WIDESPREAD IN CHINATOWN

The survey found that workers experience numerous labor violations and poor working conditions that are symptomatic of low-road practices.

- **Workers experience widespread wage theft, pay-related violations such as sub-minimum wages or lack of overtime pay.** In this study, wage theft in Chinatown restaurants was rampant and occurring at even higher rates than national trends: 1 in 2 workers report minimum wage violations. Other forms of wage theft cited include withheld, unpaid, or delayed payments, as well as employers taking a portion of workers' tips. **Minimum wage violations alone are costing Chinatown restaurant workers an estimated $8 million every year in lost wages.**[2]

- **Workers report long work days and weeks and lack of breaks.** Forty-two percent report working over 40 hours a week with half of those workers working 60 hours or more. Forty percent of workers do not get any rest or meal breaks at all. Thirty-seven percent shorten their breaks in order to complete their work.
- **Workers experience injuries, work in hazardous workplaces and do not receive training.** Almost half (48%) of the workers have been burned. Four out of ten have sustained cuts at work in the past year; 17 percent have slipped or fallen. Workers experience many occupational hazards such as intense heat, slippery floors, and missing safety protections— such as floor mats, proper knife storage for knives or complete first-aid kits. In addition, 64 percent of workers do not receive training to properly and safely do their jobs.
- **The workplace environment produces high levels of stress for workers.** Workers face constant time pressure, pressure to work extra hours, and demands to do tasks not in their job duties. Many (72%) report that their jobs had become more demanding over time with greater levels of responsibility. Many workers (42%) report being yelled at by their supervisors, co-workers or customers, reflecting a stressful and unsupportive work environment.
- **Workers do not have the necessary healthcare and time off to address their medical conditions and injuries.** Over half the workers surveyed (54%) are paying for their medical care out-of-pocket and only 3 percent of workers are provided healthcare by their employer. Although San Francisco has mandatory Paid Sick Leave, the survey found that 42 percent of workers have pay deducted if they take time off sick. In addition to lack of sick time, most workers (81%) do not receive paid vacation time.

POOR WORKING CONDITIONS IMPACT WORKERS, FAMILIES AND COMMUNITIES

Working conditions impact workers and their families, creating hardship, poor health and barriers to participating in the greater Chinatown community.

- **Workers' wages are low and inadequate to support their families.** With an average hourly wage of $8.17 and 13 percent of workers earning at or below $5 per hour, workers wages are inadequate to make a decent living in San Francisco. The survey found that 95 percent of workers do not earn a living wage and none of the workers earn what would be needed to support a family of four. The survey found that more than one in three workers report living often with their families, in single-room occupancy hotels (SROs) with an average of 80 square feet living space.
- **Workers' health severely affected by working conditions.** The health of Chinatown restaurant workers is considerably worse than that of the US population in general. Eighteen percent of all Chinatown restaurant workers report "fair or poor health" compared to almost ten percent of the general population and seven percent of the Asian population in the United States. Almost one-third (32%) describe their health as worse than the previous year.

- **Low wages and long hours restrict workers' ability to spend time with their families, pursue training and education programs, and participate in the civic life of the community.** The survey found that over two-thirds (68%) of workers feel their current job situation is not secure. Workers also lacked time to study English or gain other job skills in order to find a better and more secure job. More than half (53%) do not participate in their child's school, over three-quarters (76%) of workers have never voted, and only 5 percent have ever attended a community meeting.

CREATING A PATH TO THE HIGH ROAD

Some Chinatown restaurant employers are seeking the high road by providing decent wages, increasing benefits, ensuring opportunities for job advancement and creating a healthy workplace. High-road employment practices benefit the community by raising standards for food, service and sanitation and improving Chinatown's image as a good place to visit and live. But when low-road employers dominate the industry and unfairly compete with responsible employers, they create disincentives for employers to comply with labor laws, let alone improve labor standards. Ultimately, the high road is the only road that can lead to a healthy Chinatown where workers have stable living wage jobs, local businesses compete fairly and grow, customer and public health are protected, and the community can thrive.

In response to these findings we make the following recommendations:

Convene community stakeholder roundtables on healthy jobs, healthy communities

Ending sweatshop conditions and changing the climate of low-road employment practices will take time, investments, creativity and serious commitment on the part of the city and community. Community dialogue is needed because developing solutions is the responsibility of the entire community — workers, employers, community, consumers, and the government.

Strengthen San Francisco government enforcement of labor and health and safety laws

Local government and agencies must enact stronger policies and enforcement systems and strengthen efforts to work with community organizations and advocates. To do this they can:

- Shift to a proactive "investigation-driven" enforcement strategy rather than relying on worker complaints to combat labor law violations.
- Partner and collaborate more closely with community-based organizations and advocates to monitor and target violators.
- Increase funding for enforcement agencies to hire more investigators and other staff and ensure adequate bilingual staffing.
- Strengthen penalties for violations and create new enforcement measures.
- Increase workers' voice and protect their right to take action by increasing education, streamlining the complaint process, and increasing protections from retaliation.
- Significantly strengthen and fund collections program for workers to obtain unpaid wages and penalties.

Significantly increase investments in healthy economic development and responsible employment practices in Chinatown

The City and other public agencies should invest significantly in diversified economic development in Chinatown with strong labor standards and programs to support and promote responsible employers. The City should:

- Invest in diversified economic development for Chinatown that builds from and protects community assets.
- Require that City funded economic development programs ensure living wages and strong labor standards.
- Invest in more small business stabilization and technical assistance programs to support employers to take the high road.
- Fund and support marketing programs to promote high road employers.

Address high rates of unemployment and employment needs of immigrant workers and other workers facing barriers to employment

High unemployment rates undermine the economic security of working families and their communities and increase the vulnerability of workers to exploitation by their employers. The city's economic development strategy should prioritize creating high road jobs and training programs that are accessible to immigrant and other workers with significant barriers to employment.

Create a new vision to the high road in San Francisco

In addition to increased enforcement and systems, we also recommend shifting towards a sustainable and community approach to business. To create a stronger community infrastructure to support workers and their families the City should:

- Create a Community Jobs program that addresses community needs around education, childcare, eldercare, transportation, healthy food, recreation, environmental justice, cultural programming and employment needs.
- Establish fair pricing and economic incentives for local consumption through promotion of living wage prices and a local Chinatown currency/bartering system to generate economic activity.
- Create Healthy and Green Food Community Kitchens by expanding existing community meals programs to provide affordable and healthy food to low-income seniors, families and youth while creating employment in Chinatown and neighboring communities.
- Develop and fund worker-owned cooperative businesses as a model that can generate employment with high labor standards, create access to business ownership, and build local community assets.
- Create protections for workers, including a "just cause termination" law requiring employers to provide reasonable justification to fire an employee.

Pass a Bill of Rights for all low-wage workers in San Francisco

The San Francisco Progressive Workers Alliance (SF PWA) was formed because the crisis facing Chinatown restaurant workers is shared by low-wage workers in San Francisco across industries, communities and languages. The Low-Wage Worker Bill of Rights lays out the PWA's platform and the key issues to be addressed through organizing, advocacy and legislative campaigns. It calls for the city of San Francisco to:

- Address the employment and training needs of those facing the greatest barriers to employment.
- Actively protect the city's workers and responsible employers from wage theft.
- Support and reward responsible businesses.
- Protect the social safety net for poor and marginalized communities.
- Ensure equal treatment for all workers.

We believe sweatshop conditions can end and new standards can be set for healthy jobs in Chinatown. Across Chinatown, San Francisco and the country, conversations are underway about a new, forward-thinking vision for healthy economic development. We invite all stakeholders to join us in developing our vision and strategy for healthy jobs and healthy community in Chinatown.

SECTION 1.

INTRODUCTION: THE HIGH ROAD TO HEALTHY JOBS

San Francisco's Chinatown is a vibrant neighborhood and cultural center in one of the country's most affluent cities. Tourists and locals are drawn to Chinatown's famous shopping and dining. However, within the walls of many Chinatown restaurants, immigrant workers struggle for survival by laboring in sweatshop conditions.

- A Feng, a 30-year old kitchen prep cook, is paid $6 an hour with no overtime pay and endures frequent insults from his boss. For eight months, he has been paid virtually nothing other than bounced checks, a few hundred dollars in cash, and verbal promises to pay "tomorrow."
- A Lei, a dim-sum seller, seriously injured her foot when heavy cans fell from a shelf. She asked to go to the doctor but her employer simply told her to ice it. The next day, she could not walk. Her employer still told her to come back to work.

Being a dog would be better than being a worker in the United States.

—a fifty-year old low-wage worker whose employer owes him thousands of dollars in unpaid wages

- Guan, a kitchen worker, works ten hours a day, six days a week to provide for her two children. She appreciates that her employer is fair and does not yell at her. However, after 10 years, she is still getting paid less than the minimum wage.

THE LOW ROAD AND THE HIGH ROAD

In the 21st Century, Chinatown restaurant workers are struggling for the enforcement of basic labor laws, rather than for higher standards that would allow them to have a decent standard

SAN FRANCISCO'S CHINATOWN AND THE CHINATOWN RESTAURANT INDUSTRY

San Francisco is a diverse city. One in four residents is Asian. Half of Chinatown's San Francisco's Asian population is of Chinese descent.[3] San Francisco's Chinatown is one of the oldest in North America and ranks as the third-most visited tourist destination in the City.[4] Chinatown is a cornerstone to San Francisco's local and tourist economy.

Chinatown continues to draw both Chinese immigrants—searching for jobs, housing access, Chinese groceries and goods—as well as tourists and locals coming to dine and shop. Three-quarters (74%) of Chinatown residents are immigrants and almost a third of residents are seniors.[5] The median household income of $21,800 is significantly lower than the San Francisco median household income of $64,700.[6] The unemployment rate for working-age adults is estimated to be well over 30%.[7]

The restaurant industry is the largest private-sector employer in the United States and has become a backbone of the service-based economy.[8] In San Francisco, the restaurant sector generates nearly one quarter of the city's total sales tax revenue. With the decline of the manufacturing industry in San Francisco, 32% of Chinese workers are now employed in the leisure and hospitality industry, more than in any other industry.[9]

There are over 100 restaurants in the approximately 0.13 square miles of Chinatown, employing an estimated 2,000 workers.[10] Restaurants serve a range of customers from local residents and low-income seniors to tourists, with an array of services ranging from single-family meals to large-scale events and banquets. The majority of restaurants are medium to large scale restaurants with 10–50 workers.

Most employers are Chinese immigrants, who lack training in business and marketing, and have limited to no access to capital. Retail sales in Chinatown have declined over the past 10 years with the rise of competing commercial centers in other "new Chinatowns" in San Francisco and the Bay Area.

PLAYING BY THE RULES

To responsibly operate a safe and healthy restaurant or other business in San Francisco, employers should comply with various federal, state and local laws, including paying minimum wage ($9.79/hr in San Francisco as of 1/1/10), paying overtime pay of 1.5 times regular pay rate for hours worked over 8 per day or 40 per week, providing rest and meal breaks, providing 1 hour of paid sick leave for every 30 hours worked, provide a safe working environment, and purchasing workers compensation (see www.cpasf.org for more detailed list of labor laws and health and safety laws).

of living and raise healthy families. While some Chinatown restaurant employers are responsible and play by the rules, this report finds that "low-road" employment practices are prevalent in Chinatown: **50% of Chinatown restaurant workers report earning less than minimum wage.**

Other common violations include lack of basic workplace protections such as overtime pay, breaks, safety protection, and workers' compensation. Many Chinatown restaurant workers are routinely cheated of wages and tips and experience abusive treatment at the workplace. Many are afraid to speak up for fear of losing their jobs.

This is the low road: violating basic workplace protections and cutting whatever corners possible in order to earn a profit. These low-road practices may result in inexpensive meals, but workers, customers, law-abiding employers and the public pay a high price. Low-road employers compromise the health of their customers when they violate health code and safety regulations to make an extra dollar. They undercut employers who are playing by the rules, depress the local wages and tax base, and force workers to rely on public services to meet their basic needs.

In contrast, some Chinatown restaurant employers are seeking the high road by providing decent wages, increasing benefits, ensuring opportunities for job advancement and creating a healthy workplace. High-road employment practices benefit the community by raising standards for food, service and sanitation and improving Chinatown's image as a good place to visit, live, and support. But when low-road employers dominate the industry and unfairly compete with responsible employers, they create disincentives for employers to comply with labor laws, let alone improve labor standards.

Across the country, more and more employers are choosing the low road over the high road. The problems in Chinatown reflect a national epidemic of wage theft and lowered labor standards. A recent study found that the practice of evading or breaking core labor protections has become normalized in most low-wage industries.[11] These national trends of wage theft, unlivable wages and poor working conditions are part a global "race to the bottom" to lower wages and working conditions in the pursuit of profits.

In Chinatown, the "race to the bottom" is compounded by inadequate enforcement of labor laws at the local, state and federal levels, as well as inadequate investment in Chinatown's economic development.

Labor law enforcement issues

- **Complaint-driven enforcement strategy:** Current enforcement strategy is complaint-driven, reacting to complaints filed by workers and relying on employers to be responsive to administrative proceedings.
- **Lack of resources:** Lack of sufficient funding for enforcement of labor and health protections at federal, state and local levels.
- **Backlog of cases:** Workers who file wage claims at the city or state level often wait months, even years, to get through the legal process.
- **Lack of an effective collections system:** Even when the state or city labor agency issue legal orders for employers to pay wages, workers are often not able to collect wages owed to them by evasive employers.
- **Inefficient administrative enforcement process:** With an unnecessarily complex hearing process, heavy caseload and only one Chinese-speaking bilingual investigator in San Francisco's Office of Labor and Standards Enforcement, some cases wait years before adjudication. (In one case, restaurant workers who were owed two months of unpaid wages waited two years for a hearing.)

Chinatown's economic climate

- **Declining economy and emergence of "New Chinatowns":** Retail sales have declined over the past ten years as many younger immigrant families have dispersed to other neighborhoods. Competing commercial centers have emerged in "New Chinatowns" around the city.
- **High commercial rent:** Employers face high commercial rents, short leases and aging infrastructure. Many employers cite high commercial rents as the greatest pressure they face to keep prices and costs down.
- **Businesses are "just getting by":** In a recent survey of Chinatown businesses, the majority said that their current business goal was "just to survive."[12] Chinatown's business environment relies heavily on the food industry (59% of retail sales), creating a highly competitive environment.
- **Narrow economic development strategy:** San Francisco's

economic development strategy prioritizes white-collar industries such as bio-tech and digital media, and focuses very little attention on the needs of small businesses, low-wage workers and limited-English speakers.[13]

LEADING THE WAY TO THE HIGH ROAD

Low-road practices have become so commonplace in Chinatown that many workers have accepted them as inevitable, saying "there is no minimum wage in Chinatown" and "that's just how Chinatown is," concluding that "there is no other way."

We believe there is another way. Chinese immigrants have a long history of resilience through hardship and of helping each other and their communities. High-road practices build on what is best about our communities and leave behind the low-road practices that undermine us. Local and federal governments are actively challenging the impact of low-road employment practices. San Francisco government officials and Chinatown leaders must join in these efforts and take action. Our success will require a concerted effort by all stakeholders—workers, employers, consumers, property owners, government agencies, community organizations, and community leaders. Together, we can build a path to the high road and create a healthy Chinatown community with healthy jobs.

I ran a restaurant in Chinatown for seven years paying workers good wages, maintaining high sanitation standards, and serving quality food. But it was hard to keep up the business, because expenses were high and there weren't enough customers coming to Chinatown, they are going to other places like the new Chinatowns. Some employers think by lowering prices they can increase their business. But I think employers should respect their employees labor and treat them well. If workers feel security in their job, they will do good work for you and they will stay with you. If we raise standards for food quality, worker treatment, and help bring more customers to Chinatown, it will help increase business to the community.

SECTION II.

ABOUT THE STUDY

The Chinese Progressive Association (CPA) in partnership with the San Francisco Department of Public Health (SFDPH), University of California, San Francisco Medical School, University of California, Berkeley School of Public Health and the Labor Occupational Health Program (LOHP) launched this study to document the work conditions of San Francisco Chinatown restaurant workers. The study utilized a community-based participatory research (CBPR) approach[14] with the extensive involvement of restaurant workers themselves. To date, few studies have been conducted on restaurant working conditions and none have focused on San Francisco's Chinatown.

Two primary methods were employed to collect information on the health and working conditions of Chinatown restaurant workers: a worker-administered community survey and a SFDPH-administered observational checklist. In addition, the survey focus groups and interviews were conducted with workers that generated the stories and quotes found in this report. Workers also assisted in analyzing the data and guiding the overall frame of the report. The final report was written by CPA staff with support from the DataCenter.

COMMUNITY SURVEY

Over the course of two years, approximately 30 current and former restaurant workers were deeply involved in the design, project oversight, and implementation of the community survey. These workers conducted surveys with a total of 433 restaurant workers during the summer of 2008. The survey included 103 questions on physical and mental health status, injuries, and illnesses, working conditions, and demographic characteristics. Survey participants were 18 years of age and older and were either currently employed or had been employed by Chinatown restaurants within the previous 24 months. Respondents were recruited through CPA member networks and other community organizations and are not necessarily representative of the entire Chinatown restaurant worker population (see Table 1 for complete demographics of those surveyed). Given the size of the community and vulnerability felt by workers, strict confidentiality was a key condition of the survey to gain the consent of workers to disclose information.

OBSERVATIONAL CHECKLIST

A 13-item observational checklist was used by collaborators from SFDPH to observe 106 of 108 Chinatown restaurants in the Spring and Summer of 2008. The development of the checklist built upon research conducted by previous CPA and LOHP interns and involved the input of workers and other project partners, as well as SFDPH food inspection staff. Checklist items focused on the number and gender of employees, presence of required labor law postings, occupational hazards, and safety measures and equipment.

REPORT OUTLINE

This report compiles the key findings from the survey and checklist. Under the Findings, Section A of the Findings presents the profile of workers. Section B presents the findings on wages and overtime pay and the impact on workers and their families. Section C focuses on workplace conditions including access to breaks, hours, experience with management, and health and safety issues. Section D assesses how the working conditions impact workers' health and lives. Part IV presents recommendations to improve the industry for workers, employers and the larger Chinatown community and Part V presents strategies to support all low-wage workers throughout San Francisco.

SECTION III.

FINDINGS

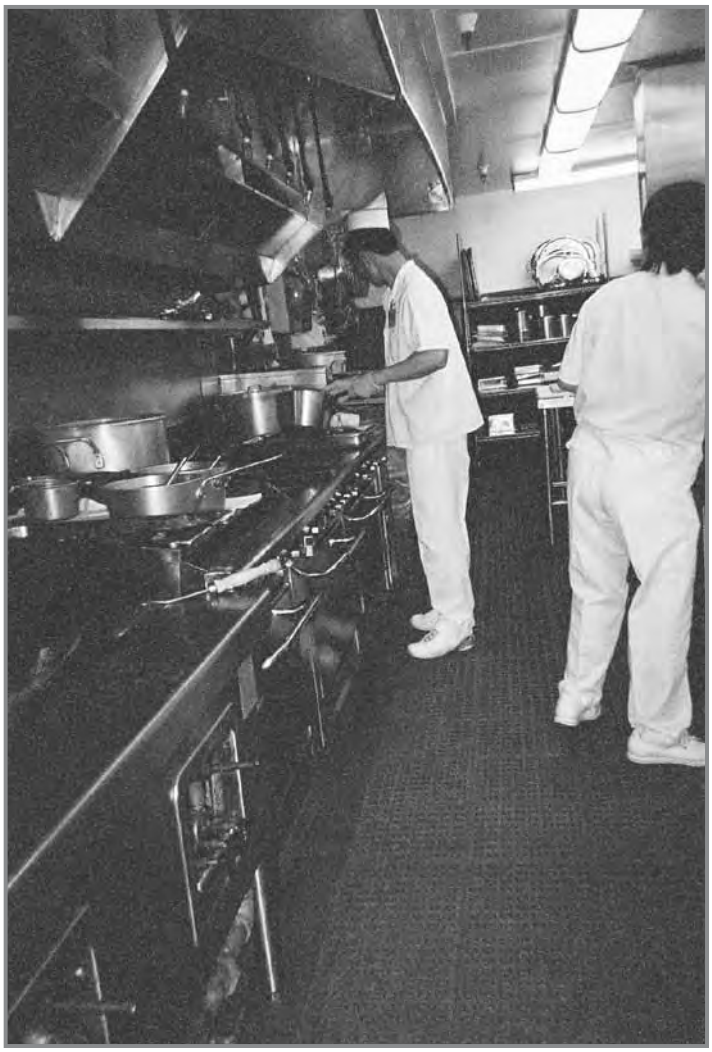
A. WHO ARE CHINATOWN RESTAURANT WORKERS?

The survey revealed that most Chinatown restaurant workers are relatively recent immigrants and middle-age wage-earners who are supporting families with children.[15] The majority of workers surveyed were women. Dim sum sellers, servers and kitchen workers are predominantly women, while men were concentrated in jobs such as cooks. Most workers have limited education background and English skills.[16] Nearly half (44%) are U.S. citizens.

When we came over, every Chinese person's thinking is for their children, their future . . . I was happy in China. I didn't want to come. But for my daughter, I gave it all up.

Before coming to America, you just couldn't believe when friends said that things weren't so good there. Only until you get here and experience things for yourself do you believe . . . life here is so hard.

Over 35% live in Single Room Occupancy hotels (SROs). The majority live in Chinatown and surrounding neighborhoods (70%), followed by 14% in the Southeast neighborhoods of San Francisco (see appendix Table 1).



B. WHAT ARE THE TYPICAL WAGES?

The most basic right of employment is fair compensation for one's labor. High-road employers not only pay the legally required minimum wage but offer higher wages that are considered a "living wage"- what it would take to cover living costs including shelter, food and other basic needs. But pay-related violations (such as not paying the minimum wage or overtime worked, withholding or delaying payments, taking illegal deductions or part of or all of the tips) are common in low-wage sectors and are a key component of low-road practices. The recent groundbreaking study, *Broken Laws, Unprotected Workers* found that in three major cities, 68% of all workers in low-wage industries had experienced at least one pay-related violation in the last pay period.[17] This is wage theft.

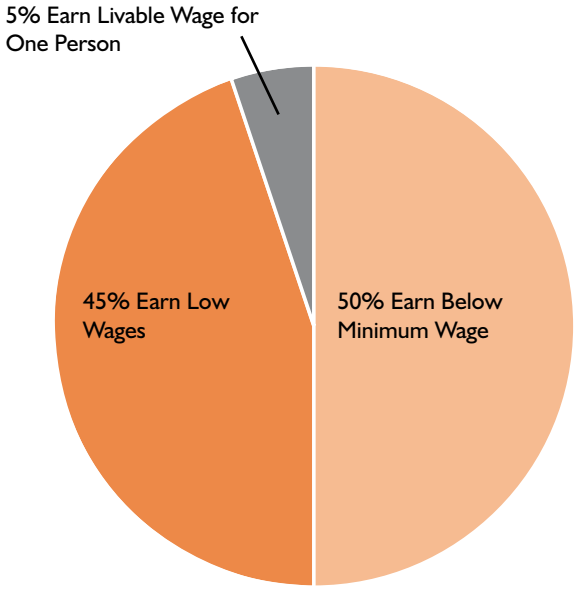
Our study found that wage theft in Chinatown restaurants was rampant and occurring at even higher rates than national trends: half of the workers reported experiencing minimum wage violations. Based on our survey data, **minimum wage violations alone are costing Chinatown restaurant workers an estimated $8 million every year in lost wages** not including losses to federal, state and local governments in unpaid taxes and to the local economy in decreased spending.

In addition to wage theft, almost all the workers surveyed were earning poverty wages and only five percent of workers earn a livable wage. Low wages pose significant hardship for workers and their families in meeting their living needs. In addition, wage theft and low wages hurt small businesses and the local economy by lowering local consumption and unfair competition. This takes resources away from the local community through loss of tax revenue and undermines overall community health and social stability.[18] Furthermore, with poverty-level wages and no benefits, workers often must turn to public assistance programs, leaving taxpayers to pick up the tab for low-road employers.[19]

Minimum Wage Violations Cost Workers Millions

This survey found a high occurrence of minimum wage violations: one half of respondents report not being paid the minimum wage. This is double the national average of minimum wage violation reported in the Broken Laws report. For kitchen workers and dishwashers, the violation rate was even higher with 70 percent of workers not earning the minimum wage. This means that the average Chinatown kitchen worker loses an average of $6,000 a year in minimum wage violations alone.

FIGURE B1. Chinatown Workers' Earnings



Widespread Wage Theft

As indicated in Figure B2, workers experience multiple forms of wage theft. Three-quarters of workers were not compensated for overtime when they worked additional hours. Workers also experience unpaid wages or delayed payments from their employer. In addition, some employers illegally withhold a workers' first and sometimes second paycheck. For almost one-third of the workers (31%), the money was never paid back. Workers explain that they continue to work without pay because they feel that if they leave, they will lose those unpaid wages completely. According to one worker, *"Employers usually promise they will pay them soon, and sometimes pay a small amount here and there to keep stringing workers along."*

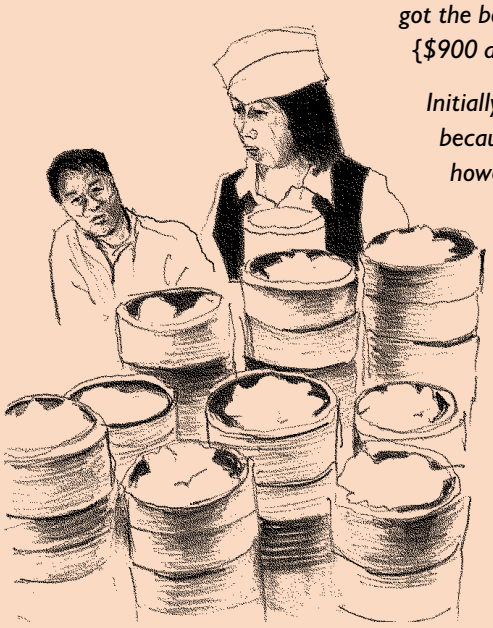
For wait staff, tips are an important part of their income. Yet nearly thirty percent of the respondents report that the "boss" receives a portion of the tips, which is illegal unless the boss provided service to a customer. Workers also shared stories of many other illegal tip policies, including deductions from credit card tips and taking a cut from banquet tips.

We don't even have minimum wage, maybe 4 dollars an hour. Think about it, $1200 for an entire month, working 10 hours a day, six days a week.

WORKER STORY

LI JUN IS A RECENT IMMIGRANT

who worked in a restaurant as a dim sum seller. She was paid $900 a month while working 7 to 8 hours a day, six days a week (averaging $5 per hour with no overtime). For 5 months, she was not paid at all.



I came to the U.S. one year ago for my daughter's future. She is 17 years old and it's hard for her to adjust. My husband works in construction and he has been unemployed for a long time. We live in a SRO room in Chinatown. It's about 12 by 12 square feet. Ten families share two toilets and one shower. There's no kitchen in my building, so I just cook in my room with an electric stove. Rent costs $470 a month.

I start work at 7 or 8 am and I get off at 3pm. I am off one day per week. When I get home I cook for my family. After dinner I attend my evening ESL class.

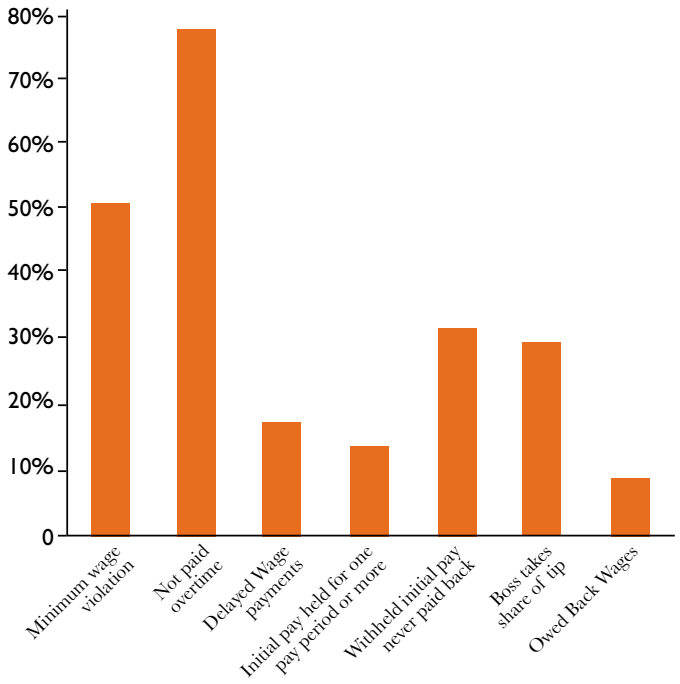
After not getting paid for months, my coworkers and I finally decided to stand up to the boss and fight for our pay. It was hard because I was still working there, but that is how we got the boss to pay us back the wages he owed us {$900 a month for five months}.

Initially, I didn't want to pursue back wages because I had compassion for my boss. He, however, did not have any compassion for me. When the dim sum didn't sell, the boss and his wife would yell at me. Once it got busy and the boss told me to bus tables, serve and take orders. But I was never trained to do that and didn't know how to do it. The boss yelled and cursed at me until I cried. For that whole busy day, all the boss gave us for credit card tips was $2.95. I could not take it anymore so I quit.

Now my husband and I are both out of work. I applied for unemployment insurance benefits, but I am not sure if I am eligible since my boss never paid taxes for me. I have been looking for a job for a month.

I want the government to enforce minimum wage laws. I want them to allow people like us to have just a little bigger space to live.

FIGURE B2. Wage Theft Experienced by Workers



Source: Chinatown Restaurant Worker Survey 2010

TABLE B1. Workers Wages and Income

Minimum Wage Violations Experienced by Job	
All Workers	50%
Kitchen Workers and Dishwashers	70%
Cooks	43%
Waiters, Dim Sum Sellers and Bus Persons	40%
Cashiers	34%
Other Restaurant Workers	45%

Average Hourly Wages and Monthly Income	
Hourly Wage	$8.17
Monthly Income	$1160
Household Monthly Income	$2219

Low Wages Inadequate to Support Families

Workers surveyed earn an average hourly wage of $8.17, which was below the San Francisco minimum wage at the time ($9.36.) 27% of workers earned at or below $6.25 per hour and 13% of workers earn at or below $5 per hour. These wages are inadequate to provide decent living in San Francisco. Based on living wage calculations, an individual needs to earn $12.50 an hour to support his or her basic living expenses in San Francisco.[20] Yet, 95% of workers surveyed did not earn a living wage and none of the workers earned what would be needed to support a family of four.[21]

These wages severely limit workers' options for supporting their families, including access to housing. Chinatown has the highest population density in San Francisco,[22] meaning that Chinatown restaurant workers work and live in crowded and stressful environments. One in three of the workers report living, often with their families, in single-room occupancy hotels (SROs). SROs are housing units designed for one resident and consist of a 70–100 square foot room with a shared kitchen, bathroom and shower facilities on the same floor. Workers who do not live in SROs often rent rooms or converted garages in houses where conditions are often crowded as well. Overcrowded housing has been shown to increase risk of fires, spread of infectious diseases, and incidence of mental health and child development problems.[23]

TABLE B2. Cost of Housing and Supporting Families

Type of Housing	
SRO	35%
Rental apartment or house	46%
Shared housing or basement	12%
Own home or condo	4%
Section 8 Housing	3%

Amount Paid in Rent	
Median Rent	$700

Workers Supporting Family Members	
Average Number of People in Household	4
Provide care for children, elderly or disabled person	74%
Support family members outside of their household	45%

C. WHAT ARE THE WORKING CONDITIONS?

High-road employers create safe and dignified working conditions that ensure the health of workers and consumers. In contrast, low-road practices create sweatshop conditions such as those reported in this survey: long hours, hazardous workplaces, lack of health and safety trainings, inadequate breaks, excessive job demands, and abusive and stressful workplaces. In national studies, similar conditions have been correlated with higher rates of health and safety violations, workplace injury, and high levels of stress and fatigue which impact consumer and public health.[24]

Unhealthy workplaces endanger public health, especially in restaurants, which account for more than half of all food-borne illness outbreaks in the United States.[25] Previous studies have demonstrated that employers who violate labor laws are also likely to cut corners on health and safety,[26] risking consumer health in addition to worker health. Though analysis has not yet been conducted to make those correlations, our research uncovered many incidents of labor violations as well as hazardous conditions in Chinatown restaurants. Furthermore, workplace injury and illness in the restaurant industry costs workers, the public and employers billions of dollars every year in lost wages, workers compensation and legal settlements.[27]

Workers Experience Overwork or Underemployment

Many workers report working long hours. 42% report working over 40 hours a week with half of those workers working 60 hours or more. One in four workers report working 10–12 hours a day. Longer work days were more prevalent among men and back-of-the-house positions like cooks and kitchen staff. One worker said, "Sometimes you work 10 straight hours with no break; you have to stand or walk until your legs are swollen."

At the other end of the spectrum, many workers experience underemployment, not finding enough work to meet their needs. **Almost half of workers surveyed report working less than 30 hours each week.** Many of these are women or front-of-the-house positions such as dim sum sellers. Since dim sum is served during breakfast and lunch times, these workers have only a small amount of work time for which they are paid. Even though they are employed, they do not receive full day shifts, leaving their income insufficient to support their families.

WORKER STORY

MR. LOW HAS WORKED full-time at a Chinese restaurant for 7 years as a kitchen helper. He is married and has two adult children. His wife is currently unemployed.

One Friday afternoon, I rushed into work from my morning ESL classes to prepare for a large banquet. The deep-fry oil needed to be changed and the kitchen helper was busy, so I decided to change the oil.

While moving the vat of hot oil, I slipped and spilled the oil on myself. The oil spilled all over my face, chest, both arms and right side of my body. I had second degree burns and had to get skin grafts on my arm. I stayed in the hospital for more than 2 weeks and could not go to work for over 11 weeks.

My manager said that it was not my job to change the oil and that the medical bills were my own responsibility.

Training? There is no such thing as training in Chinatown restaurants. You just get told to do your job and you learn on your own.

FIGURE C1. Hours worked per week

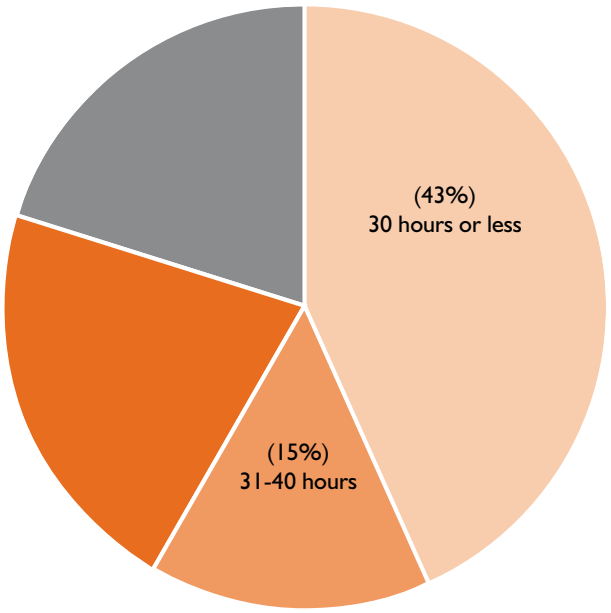
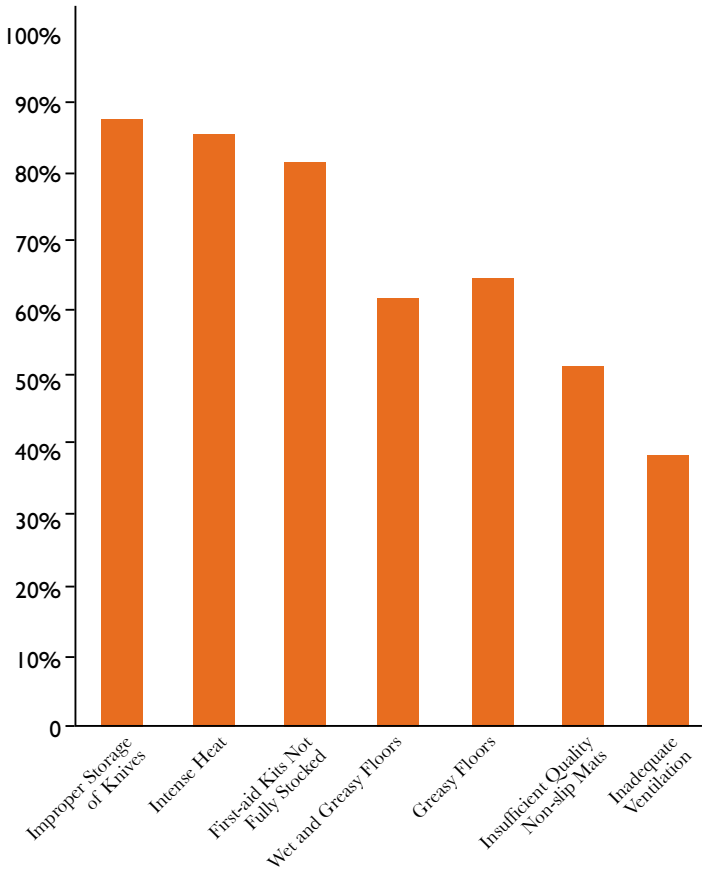


FIGURE C2. Occupational Hazards in Restaurants



Workers also report not receiving breaks to rest and recover. Even when they do receive breaks, they are often interrupted or instructed to return to work. The survey found that 40% of workers did not get any rest or meal breaks at all. 37% shortened their breaks in order to complete their work.[28]

Hazardous Workplace and Worker Injuries Commonplace

The majority of workplace injuries and illness are preventable. And yet, workers report frequent cuts, burns, slips and falls. Almost half (48%) of the workers have been burned while four out of ten have sustained cuts at work in the past year. 17% have slipped or fallen. Injuries are significantly higher for cooks. Eight in ten cooks have been burned and 68% have been cut. Over one-quarter of cooks have slipped or fallen.

Worksite observations documented many workplace hazards which could be controlled.[29] Intense heat and slippery floors were found in most restaurants. These hazards increased the vulnerability of workers to accidents and injuries. Missing safety protections —such as mats that could protect workers, proper storage for knives or complete first-aid kits -further jeopardized workers.

In addition, workers do not receive adequate health and safety training. 64% reported not being trained to properly and safely do their job, thus making them a potential hazard to themselves and others.[30]

Stress and Abusive Treatment at Work

The workplace environment produces high levels of stress for workers. Three-quarters of workers surveyed face constant time pressure. They also report that their jobs have become more demanding over time with greater levels of responsibility. More than half the workers report they are asked to complete tasks that are not a part of their job duties. Some workers feel pressured to work extra hours. In addition, experience multiple many workers (42%) report being yelled at by their supervisors, co-workers or customers.

My employer would yell at people for small things, or for no reason at all. He would frequently say things like, "You are all useless! Is everyone from mainland China so stupid?"

FIGURE C3. Pressures Experienced by Workers

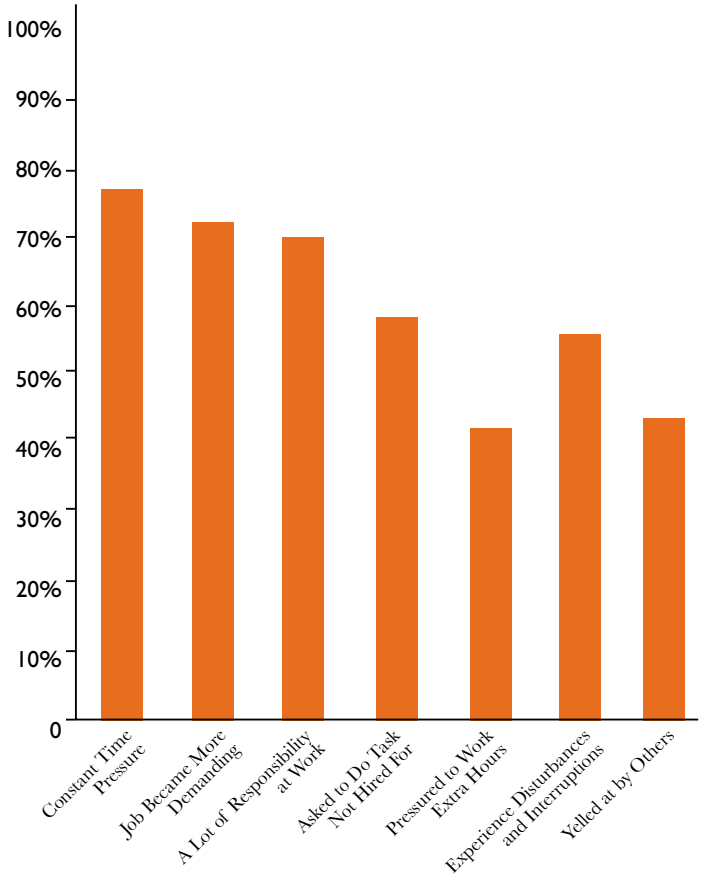


TABLE C1. Workplace Conditions

Workers Experience of Breaks	
Receive no work breaks	40%
Skip lunch or break or take shorter breaks	37%

All Workers Experience of Injuries	
Burned	48%
Cuts	40%
Fallen	17%

Cooks Only Experience of Injuries	
Burned	81%
Cuts	68%
Fallen	27%

Access to Trainings	
Did not receive any on-the-job training at all	64%

Source: Chinatown Restaurant Worker Survey 2010

D. WHAT ARE THE IMPACTS ON WORKER AND COMMUNITY HEALTH?

Low-road practices described in the previous sections have been shown to affect the physical, emotional, and mental health of workers. Studies have shown that such conditions increase risk of chronic illnesses (such as cardiovascular disease, diabetes, and depression), unhealthy coping behaviors (such as smoking or excessive alcohol consumption), and bodily wear and tear which may accelerate aging.[31] The health of Chinatown restaurant workers is considerably worse than that of the US population in general. 18% of all Chinatown restaurant workers report "fair or poor health" compared to almost 10% of the general population and 7% of the Asian population in the United States.[32]

These health issues are exacerbated by lack of adequate time off and health benefits, thus blocking their ability to get necessary medical attention. San Francisco leads the country in innovative efforts to make healthcare accessible to all San Francisco residents regardless of income. However our survey found that low-wage workers like Chinatown restaurant workers have yet to fully benefit from these policies.

In addition, San Francisco was the first city in the country to enact a paid sick leave policy, giving every worker access to one hour of paid sick leave per 30 hours worked. Research shows that employers can fulfill the policy with minimal effect on their businesses.[33] Nonetheless, this survey suggests that many businesses ignore the law. Lack of compliance with the paid sick leave law also endangers public health by increasing the spread of communicable diseases, transmission of food-borne disease in restaurant, and burden on the healthcare system[34].

Workers' Health Severely Affected by Working Conditions

Workers report various ailments. A majority of respondents (83%) report becoming tired after a short period of time and (84%) being physically exhausted at the end of the day. 20% report irregular bowel movements.[35] Almost one-third (32%) describe their health as worse than in the previous year.

WORKER STORY

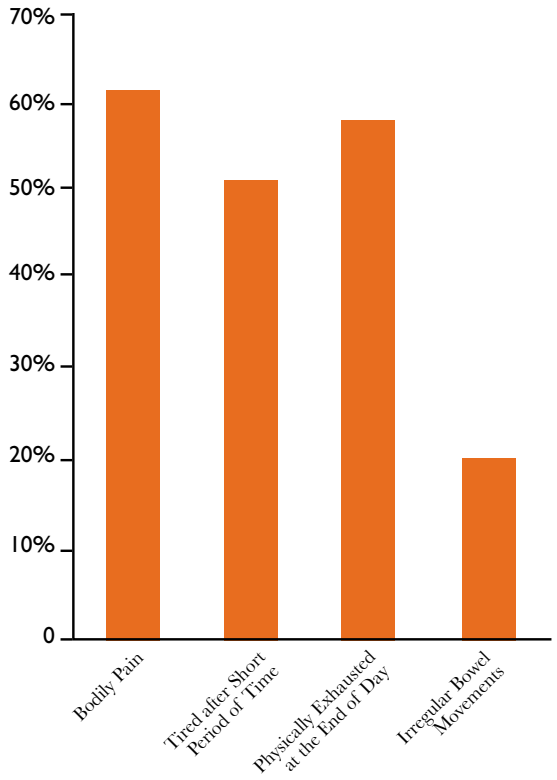
A LING IMMIGRATED to the United States from Guangzhou in China and is the mother of two US born children.

When I first arrived, my English was limited; I could only find work as a waitress in a Chinese restaurant. I often worked over 10 hours a day and sometimes even had to put in overtime.

In recent years, I began experiencing fatigue, an accelerated heartbeat and uncontrollable perspiration. I went to see a doctor and she told me that due to many years of standing for too long, not getting enough rest, and malnutrition, I had developed extensive muscle damage. Because my boss did not have healthcare coverage for his employees, I couldn't afford to get proper treatment, so I resorted to inexpensive temporary remedies that had very little effect. Despite my injuries, I had to endure the pain for fear of losing my job.

Finally one day, I really couldn't stand the pain any longer and I told my boss about it to see if he could help me. I never imagined he would respond so dismissively, saying "I can't help you, but if you can't go on, you can just quit." After hearing this, I couldn't help but cry. I experienced tremendous pain in order to help my boss become successful, and yet this is how he treats me. I hope that by working with CPA, I can contribute whatever I can to change this unjust society. This is my story.

FIGURE D1. Pain and Ailment Experienced by Workers



Source: Chinatown Restaurant Worker Survey 2010

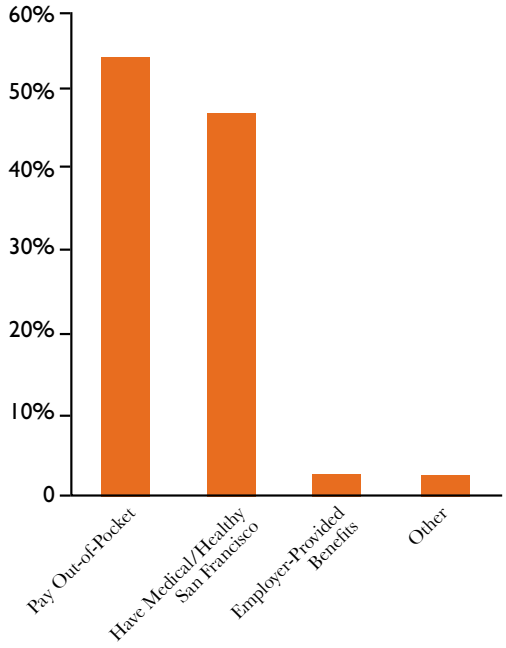
TABLE D1.

Pain and Distress Experienced by Restaurant Workers	
Have significant level of psychological distress	25%
Experienced some amount of bodily pain in the 4 weeks prior	61%
Bodily pain interfered with their work	66%
Pain in hands, wrists, fingers	68%
Pain in legs	64%
Pain in arms, elbows	64%

Workers Lack Healthcare

Workers do not have the necessary healthcare access to address their medical conditions. All residents are eligible for sliding-scale coverage under Healthy San Francisco, the city's healthcare system. However, over half of the workers surveyed (54%) are paying out-of-pocket for all their medical care since many cannot afford the cost of Healthy San Francisco. In San Francisco, all employers with 20 or more employees are required to spend a minimum amount on healthcare for their employees.[36] However, according to the survey, few employers (3%) provided healthcare for their employees. For many workers, healthcare is the most important household cost they face. Workers greatest concerns focus on health insurance for their children and catastrophic protection for themselves.

FIGURE D2. Healthcare Coverage of Workers



Source: Chinatown Restaurant Worker Survey 2010

Workers Lack Sick and Vacation Time

Workers are not receiving the necessary time off needed to rest and recover from their illnesses. Although San Francisco has mandatory Paid Sick Leave, the survey found that 42% of workers had pay deducted if they took time off sick. In follow-up interviews, workers explained that they usually do not take time off when sick, and in the rare event that they do, they are asked to make up the time on their regular day off.

In addition to lack of sick leave, most workers (81%) are not getting paid vacation time. Without a paid vacation benefit, workers do

not take the necessary time for rest and relaxation. This can add to overall feelings of fatigue and contribute to increased risk for workplace accidents and injury.

Workers do not report their work-related pain to their employer or file workers' compensation claims.
The survey documented over three-quarters of workers who do not report their injuries. Others do not know that they should report or could not afford to take time off. These workers go to work regardless of their pain or discomfort. In addition, only one respondent of 433 reported ever filing a workers' compensation claim. Chinatown survey findings correspond with state and national surveys showing most low-wage workers do not take advantage of the workers' compensation system.[37] One worker noted: "A lot of workers don't file for workers' compensation because they fear losing their jobs. Our education level and skills are limited, so we stick with our jobs regardless because it's all we have."

Workers Feel Trapped
The survey found that over two-thirds (68%) of workers do not feel secure in their current job situation. Workers spoke about how job insecurity and the precariousness of their positions keep them from complaining or asking for improvement. Workers also lack time to study English or gain other job skills in order to find a better and more secure job. 43% report they have never taken any English or vocational classes.[38]

TABLE D2. Injury Reporting, Time Off and Job Stability

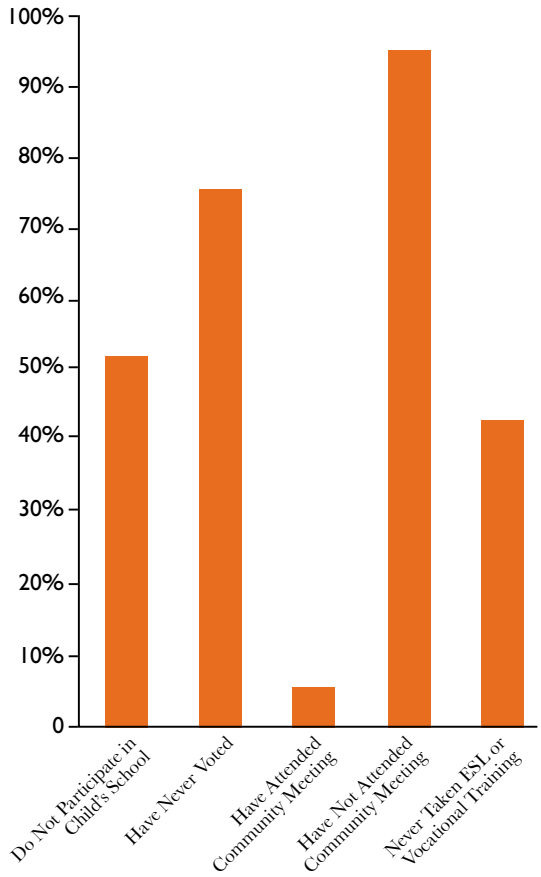
Health of Workers	
Do not report injuries on the job	76%
Did not know how to report work related injury to workers comp	57%

Access to Time Off	
No vacation time off	81%
Do not receive paid sick days	42%

Job Stability	
Feel job situation is not secure	68%

Workers Lack Time for Families and Civic Engagement
Low wages and long hours limit workers' ability to spend time with their families and participate in the civic life of the community. More than half (53%) do not participate in their child's school. Over three-quarters (76%) of workers have never voted even though almost half (44%) are US citizens. Only 5% have ever attended a community meeting. One worker leader reflected, "These problems [low wages and poor working conditions] aren't just happening to the Chinese community, it's the same with other minorities. People ask why minorities don't participate in [civic] society as much; they should look at how hard our jobs are to understand!"

FIGURE D3. Workers Role in the Community



Too many people are looking for a job, you don't want to risk getting fired because you know and the boss knows that there will be others to fill your position.

SECTION IV.

KEY RECOMMENDATIONS

The following summarizes the key recommendations which emerged from the experiences of Chinatown restaurant workers themselves, developed in consultation with community members, community leaders, other worker advocates and business leaders.

1. CONVENE COMMUNITY STAKEHOLDERS ROUNDTABLES ON HEALTHY JOBS, HEALTHY COMMUNITIES

In particular, community organizations including service organizations, grassroots advocacy groups and family associations; Chinatown business owners, property owners and business associations; and policymakers need to be at the table along with workers and community members. We call for these stakeholders to join in discussions where solutions can be identified and strategies developed.

2. STRENGTHEN GOVERNMENT ENFORCEMENT OF LABOR AND HEALTH AND SAFETY LAWS

Across the country, worker centers and advocacy organizations are reaching similar conclusions. To be effective, enforcement agencies must update their strategies for a changing economy where violations are rampant, fully fund investigation staffing, and better coordinate their work with each other and community organizations on the ground. We believe the first step is to focus on enforcement on the local level, but also seek improvements at the state and federal level.[39]

San Francisco's Office of Labor Standards Enforcement (OLSE), as well as California Division of Labor Standards Enforcement (DLSE), and the U.S. Department of Labor (DOL) should:

- **Shift to proactive "investigation-driven" enforcement strategy rather than relying on worker complaints to combat labor law violations.**
  An "investigation-driven" strategy identifies key industries, conducts industry sweeps and audits of target violators, and publicizes the successful resolution of violations and punishment of violators, particularly repeat offenders;[40] it is critical to addressing the epidemic of wage theft in restaurant industries and other low-wage sectors where violations are rampant. Interagency coordination and collaboration is also critical to target violators who are often violating a myriad of laws. San Francisco's OLSE should shift resources towards this strategy and restructure its work accordingly.

- **Partner and collaborate closely with community-based organizations and advocates to monitor and target violators.**
  In San Francisco, the OLSE's Workers Rights Collaborative should be expanded from its current outreach/education and counseling role, to have a strategic role in collaborating with the agency on developing strategy, identifying target industries and violators, and publicizing enforcement work.

- **Increase funding for enforcement agencies to increase number of investigators and other staff and ensure adequate bilingual staffing.**
  At the local, state and federal levels, staffing is inadequate for the enforcement of labor, health and safety laws, especially given the diverse nature of workforce, language needs and complex investigations. In San Francisco, more bilingual staff should be hired, particularly Cantonese-speaking bilingual staff, and a wage theft unit should be created in the City Attorney's office with specialized training and dedicated staff for labor law enforcement.

- **Strengthen penalties for violations and create new preventative measures.**
  In San Francisco current penalties should be enforced and stronger enforcement measures should be taken including: increasing penalties for repeat offenders, a wage-bond system to stop runaway employers, stronger citation powers, and mandatory labor law and health and safety education for employers. The state should create stronger enforcement mechanisms including systems to revoke or suspend business and liquor licenses of employers who violate labor laws.

- **Increase workers voice and protect their right to take action by increasing education, streamlining the complaint process, and protect workers from retaliation.**

San Francisco should increase funding to OLSE for community education and outreach, streamline the administrative enforcement process to eliminate unnecessary bureaucratic delays and employer evasion, and increase and enforce penalties on employers when they retaliate against workers who file complaints, speak up, or organize their co-workers around working conditions.

- **Significantly strengthen and fund collections program for workers to obtain unpaid wages and penalties.** Currently, workers who go through the DLSE or OLSE process may get an order to pay but without an effective enforced collections process, they are not able to collect those unpaid wages. In San Francisco a collections system should be established and staffed, partnering with other agencies such as the tax collectors to maximize oversight and relieve burden on investigators. More effective methods to collect fines and penalties from employers would also generate vital revenues. In California, the collections unit should be greatly expanded and linked to other permitting agencies.

3. SIGNIFICANTLY INCREASE INVESTMENTS IN HEALTHY ECONOMIC DEVELOPMENT AND RESPONSIBLE EMPLOYMENT PRACTICES IN CHINATOWN

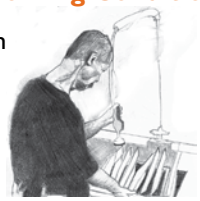
The city should invest significantly in diversified economic development in Chinatown with strong labor standards, and invest in programs to support and promote responsible employers. Furthermore, the city should address the unemployment crisis through workforce development and job creation programs to create access to jobs for immigrant workers.

The city should:

1. Invest in diversified economic development for Chinatown that builds from and protects community assets.

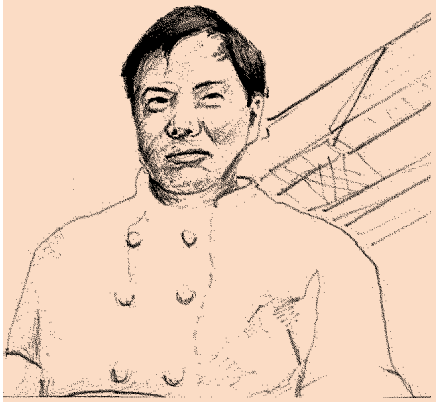
The city should invest more in a diversified economic development in Chinatown that can serve neighborhood needs while attracting new clientele, creating new healthy jobs for

LOW ROAD EMPLOYMENT PRACTICES	HIGH ROAD EMPLOYMENT PRACTICES
Working Conditions	
Pay workers low wages and regularly violate minimum wage, overtime, break period, and other labor laws; often violate other laws such as health and safety.	Set higher labor standards for healthy jobs by complying with and striving to go beyond legal requirements such as minimum wage, overtime, health care, etc.
Quality of Food, Service and Sanitation	
Set a low standard for food quality, service and sanitation by relying on low prices as primary marketing strategy.	Set high standards for food quality, service and sanitation as primary marketing strategy.
Impact on Chinatown Economy	
Hurt Chinatown's economy by depressing local wages, limiting local consumer base, not paying taxes owed, and overburdening the social services system.	Expand Chinatown's economy by contributing to local tax base, drawing in more visitors and increasing local consumption by paying good wages.
Impact on Chinatown's Reputation	
Tarnish Chinatown's reputation as a place to work, visit and live.	Promote reputation of Chinatown as a good place to work, live and visit; increase visibility of Chinatown businesses.



WORKER STORY

The High Road is Possible: Responsible Employers in Chinatown



JIMMY HAS WORKED for six years as a waiter at a large restaurant in Chinatown. He is married and has two children.

I only get 2-3 days of work but I do get paid the current minimum wage, plus tips. I'm not so satisfied with the wages [and would like more hours], but right now it's really hard to find another job. What I'm most happy about is getting healthcare; it's the Healthy San Francisco program and my boss pays for all of it. We get Paid Sick Leave too. My boss is better than others because he pays the minimum wage and follows the law.

current residents and raising labor standards for existing jobs. This must be achieved while protecting Chinatown's community and cultural heritage from gentrification and increased prices, rents, and displacement and include high labor standards as a baseline criteria. The city should fund comprehensive cultural preservation and community-based cultural programs that can build from community assets while drawing more visitors.

2. Require that city funded economic development programs ensure living wages and strong labor standards.

The Office of Economic and Workforce Development (OEWD) should work with the Office of Labor Standards Enforcement and community organizations to ensure that monitoring, enforcing and raising labor standards is integrated into any economic development strategy plan in San Francisco.

3. Invest in more small business stabilization and technical assistance programs to support employers to take the high road.

There is a lack of adequate training, representation and access to city services for Chinatown business owners, especially those who speak limited English. The city should increase efforts and work with local business owners to address needs for multilingual technical assistance including trainings on lease negotiations, labor laws, occupational health and safety, marketing support, and infrastructure improvements, etc, with compliance with labor standards a criteria for support. The city should work with business owners, landlords and family associations to address impact of commercial rent policies on Chinatown's small businesses (high rents and month-to-month leases), without passing increases to tenants.

4. Fund and support marketing programs to promote high-road employers.

The city should fund and support marketing programs and campaigns including a Chinatown guide, map, and website that can highlight high-road employers, and leverage access to the Tourism Board and publicity outlets. Community-based organizations and workers should be involved in identifying and monitoring businesses for compliance with a high-road standard. The city should fund a local restaurant guide for high-road employers such as Young Workers United's "Dining with Justice: A Guide to Guilt-Free Eating."[41]

4. ADDRESS HIGH RATES OF UNEMPLOYMENT AND EMPLOYMENT NEEDS OF IMMIGRANT WORKERS AND OTHER WORKERS FACING BARRIERS TO EMPLOYMENT

The high unemployment rate among immigrants and other workers with significant barriers to employment undermines the economic security of working families and their communities. It also fuels low-road practices by increasing the vulnerability of workers to exploitation by their employers. The city's economic development strategy should prioritize creating high-road jobs that are accessible to immigrant and other workers with significant barriers to employment.

The city should increase funding to community based workforce development programs that provide culturally appropriate vocational training to assist workers in moving into more stable jobs with benefits, such as union jobs in hotels, janitorial work, and childcare.[42] The city should develop a Community Jobs program to address community needs for education, childcare and other services while creating local employment opportunities. Finally, the city should support job development strategies that can address the needs of immigrant workers and other workers facing high rates of unemployment, including reviewing English testing requirements for entry-level city jobs (such as janitorial and food service positions) with community groups, and exploring policies such as local hiring mandates.

SAN FRANCISCO: CREATING A NEW VISION TO THE HIGH ROAD

As the first city in the nation to pass Paid Sick Leave and a universal healthcare program, San Francisco should continue to lead the way for working people. Many other steps could be taken to end sweatshop conditions and create healthy jobs and healthy communities, including shifting towards a sustainable and community approach to business and building a stronger community infrastructure to support workers and their families. In conclusion we share some of our visionary ideas that have potential to change conditions, and which deserve further conversation.

- **Community Jobs Program.** Create permanent city-sponsored subsidized Community Jobs program that address community needs around education, childcare, eldercare, transportation, healthy food, recreation, cultural programming, environmental justice and green equity and employment needs.
- **Re-Evaluation of Prices to Account for Living Wages.** If businesses adjusted their prices to include the actual cost of food, utilities, and other business expenses, then they could move towards sustaining their business and providing healthy jobs, instead of undercutting each other and themselves in price wars. For example, one study found that a 1% increase in the cost of a meal could cover the cost of a pay raise for workers.[43]
- **Chinatown Local Currency and Bartering System.** The city should consider establishing a local community system of exchanging services and goods through a central registry and established local currency/ barter system. Residents of Chinatown could get a "credit" that is "debited" from participants' account for valued service (ex. local restaurants and other businesses or independent labor). Residents could also use local currency (attached to their municipal ID) for discounted rates at local restaurants and other businesses. Dozens of cities have considered and implemented local currency systems to support community members and grow economic activity.
- **Healthy and Green Food Community Kitchens.** Expand existing food and meals programs administered by Self Help for the Elderly and other agencies to create community kitchens that will provide affordable and healthy food to low-income seniors, families and youth, while generating employment in Chinatown and neighboring communities. This project could be in conjunction with an urban garden project.
- **Development and Funding for Worker Cooperatives.** Worker-owned cooperatives are a unique business model that can generate employment with high labor standards, create access to business ownership, and build local community assets because both jobs and spending stay in the community. San Francisco should invest in the worker cooperative business model by offering procurement preferences, investing in local projects, and creating a Cooperative Business Incubator program which provides technical assistance, financing and promotion for worker cooperatives.
- **"Just Cause" Termination Law.** The city should also address how at-will employment is a key factor in workers feeling vulnerable and open to abuse, in addition to providing cover to employers who are in fact practicing retaliation. Just as a landlord must have justification to evict a tenant, employers would have to provide "just cause" or reasonable justification to fire an employee.

PROMISING STEPS TOWARDS THE HIGH ROAD

- The San Francisco Department of Public Health (DPH) has begun working with the city's labor agency to use the DPH hearing process to enforce the San Francisco minimum wage. With the threat of revoking a food permit, they compelled employers who had evaded the law or fought the city's legal proceedings, to negotiate settlement and pay workers back.
- New York state's Labor Department collected $28 million in wage violations in 2009 using an "investigation-driven" approach instead of a "complaint driven", collaborating with community groups to conduct sweeps of problem industries.
- The Restaurant Opportunity Center of New York convened the New York City Restaurant Industry Roundtable which has launched the "NYC Diner's Guide to High Road Restaurants" as well the "Exceptional Workplace Award" to honor restaurants with exemplary workplace practices.
- In Cleveland Ohio, an ambitious effort has been launched by the local universities, hospitals and the City of Cleveland to establish procurement agreements that could redirect the estimated $3 billion they spend on goods and services to developing worker cooperative businesses in Cleveland's urban communities with high unemployment rates.

SECTION V.

CONCLUSION: ANOTHER ROAD IS POSSIBLE

The findings in this report illustrate the prevalence of low-road industry practices in Chinatown's restaurants that are symptomatic of unregulated low-wage sectors across the country. Wage violations, overtime violations, lack of benefits, and hazardous workplaces leave workers feeling insecure about their jobs, vulnerable to injury and illness, and impact consumers, businesses, and the community.

Some say that Chinatown's low-road practices, sweatshop conditions and low pay cannot be changed, that "there is no other way." We believe that another way is not only possible but necessary for the future of Chinatown. There is no question that ending sweatshop conditions and changing the climate of low-road employment practices will take time, investments and serious commitment on the part of the city and community. Ultimately, the high road is the only road that can lead to a healthy Chinatown where workers have stable living wage jobs, local businesses compete fairly and grow, customer and public health are protected, and the community can thrive. Developing solutions is the responsibility of the entire community—workers, employers, community, consumers, and the government.

This research and work in the community indicate that the employment, wage theft and health concerns of Chinese immigrant low-wage workers continue to be serious and systemic problems, not only in San Francisco's Chinatown, but throughout the city, and in major cities throughout the country, including Los Angeles, Chicago and New York. These problems disproportionately impact immigrant communities and communities of color. As the economic recession persists, high unemployment rates, foreclosures and evictions, reductions in public services and increase in crime continue to ravage low-income communities.

In crisis there is opportunity. The national economic crisis has triggered long-overdue conversations about job creation and the working poor, opened up debates around the paradox of a job-less recovery, and energized growing grassroots movements across the country to challenge the epidemic of wage theft, create jobs such as the Green Jobs movement, end historic legal discrimination against domestic work and agricultural workers, and call for the improving of labor standards for all workers. Under the Obama administration and new Labor Secretary

NOT JUST IN CHINATOWN

Workers across industries and neighborhoods in San Francisco are facing record levels of wage theft, unemployment and mistreatment. A glance at recent news articles show examples that include:

- **Latina domestic workers** experience workplace abuse and are denied overtime pay due to exclusion from labor laws.
- **Latino day laborers** are cheated out of the wages they have earned and face police harassment.
- **Young restaurant workers** don't get overtime, paid sick leave or meal and rest breaks and face sexual harassment .
- **Filipino caregivers** are denied the 8-hour workday and expected to be on-call 24 hours a day.
- A high unemployment rate among **African-American workers** in the Bayview is also compounded by discrimination that makes it hard to find work.
- A **gay worker** who is organizing a union at his workplace is fired for "being too gay."

We need to educate workers and the community about our rights as workers, and organize to change these problems!

Hilda Solis, the Department of Labor is undergoing a significant and promising shift in policy to strengthen federal enforcement of labor laws and invite the engagement of workers, community organizations, and other government agencies.

We believe sweatshop conditions can end and new standards can be set for healthy jobs in Chinatown. Across Chinatown, San Francisco and the country, conversations are underway about a new, forward-thinking vision for healthy economic development. We invite all stakeholders to join us in developing our vision and strategy for healthy jobs and healthy community in Chinatown.

THE HIGH ROAD FOR ALL WORKERS: San Francisco Low-Wage Worker Bill of Rights

The opportunities for reform exist at all levels. We believe the first step is to build a strong voice for a movement locally by creating model solutions in San Francisco. To this end, CPA helped form the San Francisco Progressive Workers Alliance (SF PWA) in 2010 to address the crises facing low-wage workers, particularly in communities of color. Recognizing that these problems emerge from an economic and political structure that systematically marginalize low-wage workers, nine grassroots organizations in San Francisco decided to come together and form a unified voice across race, language, neighborhood and industry.[44]

The Low-Wage Worker Bill of Rights lays out the platform for the alliance and the key issues to address through organizing , advocacy and legislative campaigns. It calls for the city of San Francisco to:

1. Address the employment and training needs of the long-term unemployed.
2. Actively protect the city's workers and responsible employers from wage theft.
3. Support and reward responsible businesses.
4. Protect the social safety net for poor and marginalized communities.
5. Ensure equal treatment for all workers.

Just as San Francisco has been a national trendsetter in environmental reforms such as municipal compost systems and bans on plastic bags, the Low-Wage Worker Bill of Rights can set a precedent for an inclusive economy and lead the nation in supporting healthy jobs for all.

When I first got involved in this survey project, I thought it was impossible to change anything in Chinatown. But now that we have done so much work in the community and helped other workers recover wages, I see that change is possible. We can improve things. We must!

—CPA Worker Committee leader

APPENDIX

Table 1. Characteristics of Chinatown Restaurant Workers Surveyed

Gender	
Male	31%
Female	69%

Age	
18-30	8%
30-39	20%
40-49	43%
50 and up	29%

Restaurant Position	
Kitchen Workers	31%
Cooks	18%
Dim Sum Sellers	22%
Waiters	19%
Cashier	7%
Bussers	1%
Driving/Delivery	1%
Leaflet Distribution	1%

Marital Status	
Married	86%
Single	14%

Country of Birth	
China	98%
Did not report	2%

Education	
Below High School	50%
High School Diploma	45%
College or Vocational Training	5%

English Ability	
Little or No English	79%
Basic	15%
Advanced or Fluent	6%

Citizenship	
US Citizen	44%
Not US Citizen	56%

Native Language	
Cantonese	52%
Mandarin	5%
Toishanese	42%
English or Other	1%

Years in the US	
0-5	45%
6-10	27%
10 or more	28%

Neighborhood Residence	
Percentage of restaurant workers living in Chinatown and surrounding neighborhoods	70%
Percentage of restaurant workers living in the Southeast neighborhoods	14%
Workers in other neighborhoods	16%

ENDNOTES

1 These trends are also seen in other low-wage industries. In fact, a recent study found that the practice of evading or breaking core labor protections has become normalized in most low-wage industries. Bernhardt, Milkman, et al. Broken Laws, Unprotected Workers: Violations of Employment and Labor Laws in America's Cities, Washington, DC: National Employment Law Project, September, 2009.

2 Calculated from Chinese Progressive Association 2007 worker survey findings.

3 U.S. Census Bureau, 2008 American Community Survey.

4 San Francisco Office of Economic and Workforce Development. "Chinatown Economic Action Plan." August 2008.

5 Chinatown Community Development Center. Chinatown Anchor Businesses Preliminary Report. June 2010.

6 San Francisco Office of Economic and Workforce Development. "Chinatown Economic Action Plan." August 2008.

7 A 2007 survey of Chinatown Single Resident Occupancy (SRO) tenants found that nearly one-third of all working-age adults (29.5%) were unemployed, even before Wall Street's "financial crisis" in 2008. Since then, overall unemployment rates have increased.

8 "National Restaurant Association 2006 Restaurant Industry Fact Sheet"; "National Restaurant Association Says 2006 Sales Will Exceed Half-Trillion Dollar Mark for Nation's Largest Private-Sector Employer." Both documents available at: National Restaurant Association (www.restaurant.org).

9 U.S. Census Bureau. (2000). Census 2000 Summary File 3—P49. Sex by Industry for the Employed Civilian Population over 16+ years. Universe: Total population.

10 Chinese Progressive Association. Research and Analysis of Chinatown's Restaurant Industry. August 2007.

11 Bernhardt, Milkman, et al. Broken Laws, Unprotected Workers: Violations of Employment and Labor Laws in America's Cities, Washington, DC: National Employment Law Project, September, 2009.

12 Chinatown Community Development Center. Chinatown Anchor Businesses Preliminary Report. June 2010

13 Marti, Fernando, Karl Bietel and Calvin Welch. "A new New Deal for San Francisco." San Francisco Bay Guardian, 6 July 2010.

14 For more information on the CBPR approach and principles for research, see Minkler, Meredith, & Nina Wallerstein. "Introduction to CBPR: New issues and emphases." In M. Minkler & N. Wallerstein (Eds.), Community-Based Participatory Research for Health (pp. 5–24). San Francisco: Jossey-Bass, 2008; and Israel, B. A., Schulz, A. J., Parker, E. A., & Becker, A. B. "Review of Community-Based Research: Assessing Partnership Approaches to Improve Public Health." Annual Review of Public Health, 19, 173–202. 1998.

15 While the vast majority of restaurant workers are Chinese immigrants, there are a growing number of Latino immigrant (Spanish-speaking) workers in Chinatown, primarily working in the back of the house or as delivery workers. This study did not include interviews with Latino workers due to the very limited numbers of such workers and the lack of capacity and existing relationships to engage Spanish-speaking workers in a long-term community-based participatory research project.

16 See Appendix A.

17 A. Bernhardt, et. al. Broken Laws

18 Fairris, D. et al. Examining the evidence: The impact of the Los Angeles living wage ordinance on workers businesses. (Los Angeles Alliance for a New Economy, 2005.)

19 Studies of the restaurant industry in cities like New York, Chicago, and New Orleans found that "low wages and lack of job security among restaurant workers lead to increased reliance on social assistance programs resulting in an indirect subsidy to employers engaging in low road practices and fewer such public resources available to all those in need."

Restaurant Opportunities Center United, Behind the Kitchen Door Executive Summary: A Summary of Restaurant Industry Studies in New York, Chicago, Metro Detroit, New Orleans, and Maine. February, 2010.

Researchers at the University of California, at Berkeley calculated that California taxpayers pay $10 billion annually in hidden costs associated with the poverty wages earned by 2 million families and that most public assistance went to families with full-time workers. The study concluded that raising wages for these workers would result in billions saved in public expenditures and help working families.

20 Glasmeier, Amy K. "Living Wage Calculator." http://www.livingwage.geog.psu.edu/places/0607567000. 2008

21 Workers had average household size of four, and almost three-quarters (74%) of the workers provide care at home for children, elderly or disabled persons. 45 percent were also supporting additional family members outside of their household. A family of four would need to earn $32.50 an hour to be able to sustain their household.

22 115 persons per acre compared to 25 persons per acre overall.

23 City and County of San Francisco Department of Public

Health Occupation and Environmental Health Section Program on Health, Equity and Sustainability, The Case for Housing Impacts Assessment: The Human Health and Social Impacts of Inadequate Housing and their Consider in CEQA Policy and Practice May, 2004 http://www.thehdmt.org/etc/004_HIAR-May2004.pdf

24 Restaurant Opportunities Center United, Behind the Kitchen Door Executive Summary: A Summary of Restaurant Industry Studies in New York, Chicago, Metro Detroit, New Orleans, and Maine. February, 2010.

25 Francisco Department of Public Health. A Health Impact Assessment of the California Healthy Families, Healthy Workplaces Act: Summary of Findings. July, 2008.

26 Bernhardt, Annette. Siobhán McGrath and James DeFilippis. Unregulated Work in the Global City: Employment and Labor Law Violations in New York City. Brennan Center for Justice, 2007.

27 Researchers have estimated that fatal and non-fatal occupational injuries and illnesses in eating and drinking establishments cost $3.2 billion nationally in workers' compensation, lost wages, and jury awards. In 2007, the estimated cost of disabling workplace injuries in the U.S. was $53 billion dollars. Liberty Mutual Research Institute for Safety, 2009.

28 Forty-six percent also reported that non-smokers were more likely to be called in early from breaks, a practice that has the effect of rewarding those who smoke.

29 San Francisco Department of Public Health. A Health Impact Assessment of the California Healthy Families, Healthy Workplaces Act: Summary of Findings. July, 2008.

30 Examples include what to do in case of workplace violence, how to safely lift heavy objects, what to do in case of emergency and how to report injuries and illnesses.

31 UCSF Center for Social Disparities in Health. Issue Brief 4: Work and Health. Robert Wood Johnson Foundation Commission to Build a Healthier America. . December, 2008.

32 Cultural perceptions of health vary. Focus groups and interviews revealed that for most Chinese immigrants, good health status is understood as the absence of serious illness such as cancer. "As long as you can work, you are healthy." Aches, pains, routine work-related burns and cuts are seen as normal and not viewed as unhealthy.

33 Boots, Shelley, Karin Martinson, and Anna Danziger. Employers' Perspectives on San Francisco's Paid Sick Leave Policy. The Urban Institute, Research of Record. March, 2009.

34 The provision of paid sick days to all workers could reduce the number of people impacted by pandemic influenza by 15%–34%; reduce transmission of food-borne and communicable diseases in restaurants; allow workers and their dependents easier access to preventive and early care, thus reducing unnecessary and expensive hospitalizations; and prevent hunger and homelessness among low-income workers with severe illnesses.

35 Chinese Progressive Association. Research and Analysis of Chinatown's Restaurant Industry. August 2007.

36 City and County of San Francisco Labor Standards Enforcement. "Health Security Ordinance." 9 January 2008. Accessed at: http://sfgsa.org/index.aspx?page=418

37 Lashuay Nanette, and Robert Harrison. Barriers to Occupational Health Services for Low-Wage Workers in California. San Francisco: Commission on Health and Safety and Workers' Compensation, California Department of Industrial Relations. April, 2006.

38 This correlates with results from CPA's 2007 SRO employment survey, where over 40% of the respondents worked in restaurants. Over 70% reported never having taken ESL and 89% had not taken job training.

39 The national Wage Theft Prevention Act (H.R. 3303) is an example of federal legislative initiative that would address staffing, increasing penalties for violations and retaliation.

40 More state and local governments are moving in this direction. New York state has been a leader in proactive approach to enforcement of labor laws, collecting $28.8 million in unpaid wages for close to 18,000 workers in 2009.

41 In 2009, Young Workers United created the first consumer guide to socially responsible restaurants in San Francisco, called «Dining with Justice: A Guide to Guilt-Free Eating!». Based on worker surveys and criteria for following labor laws and treating workers with dignity and respect, the guide highlights 10 restaurants and encourage consumers to patronize them.

42 Overall, San Francisco's economic development strategy prioritizes white-collar industries such as bio-tech and digital media, and focuses very little attention on the needs of limited English speakers, including Chinese immigrant workers (especially in proportion to the demographics of San Francisco.)

43 http://www.dollarsandsense.org/archives/2006/0506wicks-lim.html

44 SF PWA represents thousands of Asians, Latinos, Blacks, and whites who are restaurant workers, construction workers, caregivers, domestic workers, unemployed workers, and more. The member organizations are: The La Raza Centro Legal–Day Laborer Program and Women's Collective, the Chinese Progressive Association, Young Workers United, Filipino Community Center, SF Pride at Work (PAW), People Organized to Win Employment Rights (POWER), Mujeres Unidas y Activas (MUA), People Organized to Demand Environmental and Economic Rights (PODER), Coleman Advocates for Children and Youth, Jobs with Justice.

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PUBLIC HEALTH IMPACTS OF THE HEALTHY FAMILIES ACT

Testimony of

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Director, Occupational and Environmental Health
San Francisco Department of Public Health

Before the
U.S. House of Representative
Committee on Education and Labor

Hearing on HR 2460
"The Healthy Families Act"

June 11, 2009

I am Rajiv Bhatia, and I currently serve as the Director of Occupational and Environmental Health for the San Francisco Department of Public Health. I earned a Medical Doctorate from Stanford University and a Masters Degree in Public Health from the University of California at Berkeley, and I have practiced medicine and environmental health since 1992. I am an Assistant Clinical Professor of Medicine at the University of California at San Francisco, and I teach a graduate course in health impact assessment of public policy at the University of California at Berkeley. I also serve as the scientific director for the non-profit group Human Impact Partners.

I deeply appreciate the committee's interest in the public health impacts of the Health Families Act. I have been involved in conducting research on the health impacts of paid sick day policies since 2006 and have co-authored comprehensive health impact assessments of the paid sick day legislation currently being considered in the California legislature as well as the legislation currently being considered today by the House of Representative (Bhatia 2008; HIP 2009). In conducting research for these health impact assessments, I and others have critically reviewed available published health research literature on paid sick days, analyzed data from State and National health surveys, reviewed disease statistics for communicable diseases and food borne disease outbreaks, conducted focus groups and surveys with workers, and interviewed and surveyed public health officials responsible for communicable disease control. I have also been involved in the implementation of San Francisco's Paid Sick Days Law through outreach and training to San Francisco businesses. I have provided evidence and analysis on the health impacts of paid sick day legislation to stakeholder groups, and I have testified previously on paid sick day legislation both at local and state hearings and on a prior version of the bill in the US Senate.

Almost all available data and evidence I have reviewed is consistent with the premise that a requirement for paid sick days would protect the health of all Americans. The evidence provides substantial support for the following six conclusions:

- Workers that have greater need for sick leave, such as those with families, are less likely to have paid sick days.
- Workers with paid sick days are more likely to take time off work when they become ill.
- A substantial burden of food borne disease outbreaks are connected to food service workers working with a communicable illness despite laws that should exclude sick workers from work.

- Effective strategies for influenza prevention require compliance with recommendations that keep workers and students at home when sick; paid sick day legislation would enable compliance with these strategies.
- Workers with paid sick day are more likely to care for their sick children and ensure their regular contact with medical providers.
- Workers with paid sick days are more likely to access timely medical care.

Access to paid sick days in relation to need

Almost 60 million workers – 48% of the workforce – in the country currently do not have the ability to earn and use paid sick days when ill or when a family member needs care (Lovell 2006). Moreover, the availability of paid sick days varies among subpopulations with less availability of paid sick day benefits among those populations with a greater need for medical and dependent care.

Over 70% of workers in the highest income quartile receive paid sick days compared to about 20% of those in the lowest income quartile (Hartmann 2007). Disparities in access to paid sick days by income are important because lower income confers greater vulnerability to illness and disease, both through the experience of absolute and relative poverty and through exposure to adverse neighborhood and workplace conditions.

Disparities in access to paid sick days also correlate with disparities in access to health insurance. Based on data from the 2007 National Health Interview Survey (NHIS), those who had paid sick days were more likely to have health insurance coverage, compared to those without paid sick days (95.3% vs. 68.0%) (HIP 2009).

Furthermore, those who have access to paid sick day also have better health status. Analysis of 2007 NHIS data revealed that a higher proportion of working adults who rated their health as excellent, very good, or good had paid sick days compared to those who viewed their health as fair or poor (61.2% vs. 48.3%) (HIP 2009).

Mothers with children with relatively poor health are also less likely to have access to paid sick days. Heymann and others (1996) found that 40% of mothers whose children had asthma and 36% of mothers whose children had chronic conditions lacked sick leave during a five-year period. Similarly, Heymann and Earl (1999) found that mothers of children with chronic conditions are more likely to lack sick leave. Clemens–Cope (2007) found that, among children in low-income working families, 30% of children in fair/poor health lived in families that had access to paid sick leave for the entire year compared to 37% of children in good, very good or excellent health.

Sick Leave among workers with and without paid sick days

A number of studies have demonstrated that workers without paid sick days are less likely to take sick leave when ill. One recent survey of U.S. workers found that among employed adults aged 19-64, 42% without paid sick days did not miss work because of illness in contrast to 28% of workers with paid sick day benefits. The relationship was even stronger after adjusting for chronic health problems, disabilities, age and wages; employed adults without paid sick days were only half as likely to take time off for illness (Davis 2005).

In our analysis of the 2007 NHIS data, among workers who missed no more than nine work days due to sickness (i.e., those who did not have a prolonged illness), the average number of missed work days in the past 12 months was higher for workers with paid sick days than for those without (1.39 days per year vs. 0.92 days per year) (HIP 2009). Others have found a similar difference for California workers using data from the 2006 NHIS (1.8 days per year, versus 1.4 days per year) (Lovell 2008). These findings suggest that substantial numbers of ill workers without paid sick days are going to work when sick. In fact, in one survey on paid sick days, the majority (64%) of respondents reported having gone to work sick at least once because of a lack of sufficient paid sick days (Bhatia 2008).

Workers who take sick time off without the benefit of a paid sick leave policy may face real and perceived consequences of their choices, such as being reprimanded, the loss of wages, good shifts, or even a job. Surveys and focus groups with workers without paid sick days also have identified factors that may discourage workers from taking sick leave. For example, in one focus group, a participant described going to work with the flu and being feverish while at work (HIP 2009). While her employer recognized her illness, she was not instructed to go home. According to a recent poll (Smith 2008), one in six workers reported that they or a family member had been fired, suspended, punished, or threatened by an employer due to needing time off for illness. Collectively, these factors suggest that paid sick day policies could support a workplace culture that is more likely to accept and accommodate employee absence for illness.

Working when sick and the spread of communicable disease

Many common infectious diseases are transmitted in workplaces, schools, and other public institutions through simple casual contact. These diseases include influenza, food borne diseases such as salmonella and norvirus, and the common cold. For these common infections, keeping a

sick worker out of their workplace and sick children out of school will help stop infections from spreading.

Influenza Each year in the United States, 5% to 20% of the population gets the flu; more than 200,000 people are hospitalized from flu complications; and, about 36,000 people die from flu (CDC 2008). Transmission of influenza occurs through the generation of aerosol droplets by infectious individuals and through contact with infectious individuals. An estimated 30% of influenza transmission occurs in homes, 37% in schools and workplaces, and 33% in other community settings (Ferguson 2006).

Substantial attention and public health planning is focused on the prevention of worldwide pandemics due to a novel strain of influenza. Research has shown that the emergence of a highly infectious novel influenza strain as a pandemic could result in 68% of the population being affected and 34% suffering a clinical infection, potentially translating into 100 million sick individuals in the United States (Ferguson 2006). According to researchers who have studied prevention strategies to limit transmission of influenza, a combination of effective strategies including pharmacological strategies (e.g., vaccines, prophylaxis) and non-pharmacological strategies (e.g., quarantine, isolation, school closure) are necessary to effective control an influenza pandemic (Halloran 2008).

Strategies to minimize social contacts between people can be highly effective in controlling the spread of influenza but require people to take leave from work when they or their family members are potentially infectious (USDHHS 20007). Pandemic infectious disease modeling studies are consistent in predicting a reduction in the cumulative incidence of clinical infections with modest measures to reduce contacts among individuals, but estimates vary between models and scenarios (Halloran 2008). Glass (2006) estimated that from a moderately infectious pandemic strain requiring that all sick persons stay at home when symptomatic could result in a 22% reduction of the cumulative attack rate in a hypothetical U.S. small town. Ferguson (2006) estimated that 50% compliance with policy of household quarantine would result in a 15% reduction in the cumulative attack rate for infected individuals and household members with a somewhat more infectious strain of influenza in the United States.

The U.S. Centers for Disease Control and Prevention explicitly advises people with influenza: "*stay home from work and school when you are sick*" (CDC 2008). The modeling studies, combined with understanding that having paid sick days enables taking leave from work, provide a strong rationale for access to paid sick day as a strategy both for community prevention of seasonal

influenza and for the management of an influenza pandemic. Legislation requiring universal paid sick day policies would enable and increase compliance with both voluntary and mandatory social distancing strategies, including the home isolation of sick individuals and related household members and school closure

Foodborne Disease Outbreaks Some workplaces are priority sites for prevention of communicable disease transmission because workers have direct and regular contact with the public. Restaurants and other places where workers prepare food consumed by the public are particularly important because of their role in the transmission of food borne diseases.

Foodborne diseases cause approximately 76 million illnesses, 325,000 hospitalizations, and 5,000 deaths in the United States each year (Mead 1999). Outbreaks refer to two more cases of a food borne illness linked to a common food source. More than half of all U.S.-reported foodborne illness outbreaks are associated with restaurants (Jones 2006).

Food safety codes typically require the exclusion of a food service worker from a restaurant if the employee is diagnosed with an infectious agent, symptomatic, and still considered infectious. Public health officials rely on workers to recognize the illness and their employers to self-enforce requirements that protect the public. In reality, expecting voluntary compliance is not realistic. A worker may recognize a symptom but may not associate it with a food borne illness requiring work exclusion. Also, food worker may not want to take unpaid time to obtain a diagnosis or may defer care until the symptom worsens, potentially infecting co-workers and patrons in the meantime. Paid sick days along with clear workplace policies for their use could enable appropriate leave for food service workers; however, 85% of workers in the food service industry do not have access to paid sick days (Lovell 2008).

Unfortunately, in the current workplace environment, sick food service workers are commonly the source of restaurant food borne disease outbreaks. Guzewich and Ross (1999) reviewed published scientific literature for reports of food borne disease believed to have resulted from contamination of food by workers, finding 81 published outbreaks involving 14,712 infected persons. Eighty-nine percent (n=72) of the outbreaks occurred at food service establishments, such as restaurants, cafeterias and catered functions. Hepatitis A and Norwalk-like viruses accounted for 60% (n=49) of outbreaks. Ninety-three percent of these outbreaks involved food workers who were ill either prior to or at the time of the outbreak.

According to data from Centers for Disease Control's Electronic Foodborne Outbreak Disease Report System (eFORS), there were 5754 foodborne disease outbreaks between 2003 and 2007 nationally, with 121,948 related cases of illness (HIP 2009). The majority of these outbreaks (71%) and cases (61%) occurred in institutional and workplace settings including schools, day care settings, restaurants or delis, workplace cafeterias, grocery stores, hospitals, and jails. In these settings, workers with a communicable disease have a significant potential to contribute to a communicable disease outbreak if they work when ill. Of the 4,079 outbreaks occurring in the specific settings listed above, for 14% of outbreaks (n=586) and 24% of cases (n=18,030), food handling by an infected person or carrier of a pathogen was identified as a contributing cause.

A survey of local health officers in California that I conducted this year also provides similar findings on significance of ill food service workers as a cause of disease outbreaks. For example, in San Francisco and Los Angeles counties, about 11-12% of outbreaks involve an ill food service worker working.

The public health impact of a single disease outbreak with food borne disease can be significant. For example, in 2006, a restaurant-worker without paid sick day benefits infected over 350 customers (MMWR 2007) with norovirus at a restaurant in Lansing, Michigan. In 2007 in Santa Cruz, a dishwasher working at a hotel was implicated as the likely source of a norovirus outbreak affecting 134 people through a resort hotel.

Outbreaks in Health Care Facilities Nursing homes are another important setting for infectious disease outbreaks and outbreaks may be traced back to both residents and staff. For example, according to the CDC, 23% of all norovirus outbreaks occur in nursing homes (CDC 2006). In one year in California, nursing home outbreaks accounted for 6,500 patient illnesses, 120 hospitalizations, and 29 deaths (CDPH 2008). The vast majority of patients will recover from norovirus illness within a few days, but an estimated 10% experience more serious symptoms, including acute dehydration that ultimately requires hospitalization (Calderon-Margalit 2005).

Paid sick days may play an important role in nursing home-based disease outbreaks. About a quarter of nursing home workers nationally do not have paid sick day benefits. These workers may be more likely to come to work sick, thus putting patients and co-workers at risk of contracting illness. While this question has received only limited attention, one study of New York State nursing homes conducted in 1993 found that risk of respiratory and gastrointestinal infectious disease outbreaks was significantly less for nursing homes with paid sick leave policies (Li 1996).

Parental Care and Health Care in Dependents

Employed workers in households with children are among those with the greatest need for paid sick days due to responsibilities for the care of children. Furthermore, the American Academy of Pediatrics recommends excluding sick children from schools and childcare settings for a number of specific conditions and symptoms (Copeland 2006). In 2006, 70% of mothers with children under 18 were in the workforce (BLS 2006).

Unfortunately, care for sick children competes for the time and labor of parents and other caregivers. When a child is not well, parents might reasonably view staying home to care for a child as jeopardizing their ability to earn income to pay for essential health services, food, or housing.

For dependents, including children and elders, having access to an adult caregiver can be a matter of life and death. Children left home alone may be unable to see physicians for diagnoses, receive needed medications, or emergency help if their conditions worsen. The presence of parents has also been found to shorten children's hospital stays by 31% (Taylor and O'Connor 1989). Even when adults receive support from family members when sick, they recover faster and more fully from conditions such as heart attacks and strokes (Gorkin et al 1993; Tsouna-Hadjis et al 2000).

Clemens-Cope and others (2007) analyzed determinants of taking sick leave among the families of a sample of 10,790 children in low-income families using data from the Medical Expenditure Panel Survey. Only 36% of the children in working families had access to paid sick days for the entire year. Employees with paid sick days were much more likely to miss work to care for family members (44% vs. 26%).

Heymann and colleagues (1999b) analyzed data in the Baltimore Parenthood Study to assess what factors affected parents' decisions to care for sick children. The study found that parents who had either paid sick or vacation leave were 5.2 times as likely to care for their children when they were sick. In this study, half of the parents who cared for their own sick children reported that paid leave enabled them to miss work. Similarly, in recent study of Chicago and Los Angeles parents with children who have special care needs, Chung and colleagues (2007) found that parents with paid leave benefits had 2.8 times greater odds than other parents of taking time off work for their child.

In another study evaluating the relationship between maternal employment conditions and children's medical visits, Pimoff and Hamilton (1995) found that working mothers had fewer sick

child visits than non-working mothers. However, mothers who could use sick leave for doctor visits had 27% more sick-child visits than those without this benefit.

Our analysis of 2007 NHIS data also suggest that the lack of paid sick days may be a factor in delayed medical care for family members (HIP 2009). Based on NHIS, 17.2% of working adults were likely to have at least one family member whose medical care was delayed or who was not able to get needed medical care. A higher proportion of working adults who did not have paid sick days were likely to have family members who had delayed medical care or who had not received care they needed compared to those with paid sick days (23.7% vs. 12.9%). Notably, among those health insurance, those with paid sick days also experienced less delayed care (15.8% vs. 11.2%).

Timely health care in working adults

Timely primary care provides opportunities for disease prevention as well as early detection and management of health problems (IOM 1996). Timely primary care can potentially prevent the need for the unnecessary use of emergency rooms, hospitalization, complications, or more severe disease (AHQR 2004). For example, patients may be hospitalized or seek acute hospital care for avoidable reasons including misdiagnosis or a failure to detect the condition, inappropriate management including the lack of patient adherence to treatment recommendations, or failure by the patient to interpret symptoms as important (AHRQ 2004).

Timely ambulatory care is dependent on a number of factors including income and health insurance (Billings 1996; Newacheck 1998). Little research has explored the relationship between access to paid sick days specifically and primary care utilization. Based on 2007 NHIS data, we found that those with paid sick days were about 15% more likely to have a medical visit controlling for other potential predictors of medical visits (HIP 2009). The 2007 NHIS data also reveals that those who had paid sick days may be likely to visit an emergency room (ER) in the past year than those who did not have paid sick days (15.7% vs. 17.7%) particularly for those with health insurance.

San Francisco's experience with paid sick day legislation

In November 2006, San Francisco became the first city in the United States to require employers to provide paid sick days. Over 60% of voters in San Francisco supported this legislation. While formal studies of the laws implementation and impact are still underway, implementation to date has been largely unproblematic. One small survey found that "most employers were able to implement the paid sick leave ordinance with minimal to moderate effects on their overall business

and their bottom line" (Boots 2009). An analysis did not find evidence of loss of jobs in San Francisco in the year after the policy was implemented (Lovell & Miller 2008). Anecdotal assessments of the paid sick day law reported by several of the city business leaders also suggest there has been little to no impact on businesses.

Conclusions

A fundamental purpose of government is to ensure that day-to-day living and working conditions support health and welfare. Labor and occupational safety laws, including limits on child labor, the minimum wage, and work-time rules, were essential contributors to the dramatic gains in life expectancy in the 20th century. It is equally important today to think of labor policies as public health policies.

According to the Organization for Economic Cooperation and Development, the U.S. spends $6,102 per person on health care services—15% of our GDP and more than any other country the world (OECD 2006). Despite outspending our peers, life expectancy in the United States is a full year less than in Canada and England and three years less that Spain, Sweden, and Switzerland. One reason these other countries may be outperforming the US with respect to health is that they tend to pay more attention standards of healthy living and working conditions for all residents.

Overall, based on the research I and others have conducted, paid sick day legislation would be a practical and evidence-based public health policy to prevent communicable disease and to enable timely, preventative care for ourselves, our children and our elders. Guaranteeing the right to earn and use a minimum number of paid sick days may foster a workplace culture that is more conducive to appropriately taking time off when sick. Paid sick days would facilitate existing workplace policies designed to prevent food borne disease outbreaks. Adopting paid sick days would eliminate the perplexing contradiction between our strategies for containing new strains of influenza and labor laws. Finally, a paid sick day law has potential to reduce health disparities and control health care costs.

I thank you for your consideration of this testimony.

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Testimony on the Healthy Families, Healthy Workplaces Act

Assembly Bill 2716 (Ma)

California Assembly Labor Committee

April 9, 2008

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I want to thank the committee for providing this opportunity to consider AB 2716—a policy with great significance for public health. For the record, my name is Rajiv Bhatia. I received a Medical Doctorate from Stanford University and a Masters in Public Health from the University of California at Berkeley. I have practiced medicine since 1989. Since 1998, I have served as the Director of Occupational and Environmental Health for the City and County of San Francisco's Department of Public Health. I am an Assistant Clinical Professor of Medicine at the University of California at San Francisco and I teach a course in the Health Impact Assessment of Public Policy at UC Berkeley.

In November 2006, San Francisco became the first city in the United States to require employers to provide paid sick days. Understanding Paid Sick Days as both an essential labor right and a public health necessity, sixty one percent of the voters approved this initiative and the law took effect February 5, 2007. My testimony today will consider the impact of the proposed bill on five important public objectives. These include:

1. Avoiding transmission of infectious disease in communities
2. Preventing food borne illness
3. Reducing expensive hospital care.
4. Providing essential care for family members and dependents;
5. Addressing health disparities

Preventing Communicable Disease

It is both common sense and established science that going to work or school with an infectious disease can mean transmitting it to others. Many common infectious diseases are transmitted in workplaces, schools, and other public institutions through simple casual contact. These diseases include influenza or "the flu", viral gastroenteritis or the "stomach flu," viral meningitis, and the common cold. Collectively, the burden of these infectious illnesses are enormous.

- Each year in the United States, 5% to 20% of the population gets the flu; more than 200,000 people are hospitalized from flu complications; and, about 36,000 people die from flu (CDC 2008).
- Rotovirus, the most common cause of severe diarrhea among children, causes the hospitalization of approximately 55,000 U.S. children each year.
- There are between 25,000 and 50,000 hospitalizations due to viral meningitis each year.

For each of these common diseases—influenza, stomach flu, viral meningitis, or the common cold—ensuring a sick worker can stay out of their workplace and that sick children can stay home from school helps keep infections from spreading. In fact, this is exactly what doctors and public health agencies advise. The U.S. Centers for Disease Control website provides the very common sense recommendation to people with influenza: "*stay home from work and school when you are sick*" (CDC 2008). Sick children with contagious diseases are excluded from childcare because they contribute to the higher rate of observed infections in day care centers (Loda et al. 1972; Sullivan et al. 1984; Dahl et al 1991; Mottonen and Uhari 1992; Strangert 1976; Doyle 1976).

What is disturbing however is that, unlike all of our peer countries, labor laws do not guarantee U.S. workers leave when they or their family members are ill (Heymann et al. 2007). This inconsistency between public heath guidance and labor law creates a potent barrier for workers to follow common-sense advice from their doctors and public health agencies.

For the 42% of California workers without paid sick days—almost six **million workers—**a common illness in their household means having to make an extremely difficult choice. Should they take unpaid time off from work; or, should they go to work sick or send their children to school sick? For low income workers, not going to work for even a few days may mean not having enough money to pay the rent, keep their children in childcare, or buy groceries. Some workers may also be insecure in their jobs, not knowing whether an absence from work may translate into the loss of a job. We know from public

health research that the choice is difficult; parents without paid sick days are much less likely to care for their children when they were sick as those with these benefits. (Heymann 1999).

Ensuring Food Safety

For occupations such as health care workers, child care providers, and food service workers, it is critical to keep sick workers out of the workplace. Foodborne diseases cause approximately 76 million illnesses, 325,000 hospitalizations, and 5,000 deaths in the United States each year (Mead) More than half of all U.S. reported food borne illness outbreaks occur in restaurants (Jones 2006).

A review of food borne disease outbreaks resulting from contamination of food by food workers, found that ninety-three percent of these outbreaks involved food workers who were ill either prior to or at the time of the outbreak (Guzewich 1999). In 2005, an ill worker without paid sick day benefits at a sandwich shop in Kent County, Michigan was responsible for the illness in over 100 customers (MMWR 2006). In 2006, a restaurant-worker without paid sick day benefits mediated outbreak of norovirus at Carrabba Restaurant Chain in Lansing, Michigan infected over 500 customers (MMWR 2007).

Contamination of food by an infected food worker is the most common mode of transmission of hepatitis A in food borne disease outbreaks (Guzewich 1999). A review of food-borne Hepatitis A outbreaks in the United States found that in many cases the infected food handler either did not seek medical care or delayed getting medical care (Fiore 2004).

Of course, food industry workers with infectious illnesses should not be going to work. The California Retail Food Code (2007) requires the local health officer to exclude a food service worker from a food facility if the employee is diagnosed with an infectious agent, symptomatic, and still considered infectious. In reality, we rely on workers to recognize the illness and their employers to self-enforce requirements that protect the public. Unfortunately, only 15% of workers in the food service industry have paid sick days—the lowest rate among major groups of industries meaning that many may delay or avoid seeking care for infectious diseases (Lovell 2006).

Preventing Costly Hospital Care

Getting timely primary and preventative care requires not only access to services and a way of paying for services, but also transportation, time, and the ability to leave work. Thus, paid sick days and access to heath care insurance are complimentary in helping to ensure access to early and preventative care, reducing the need for leave.

Because paid sick days remove a barrier to the utilization of primary and preventive care they can reduce the utilization of more expensive therapeutic and hospital care. The State of California considers many of the admissions to our hospitals for chronic diseases such as asthma, hypertension, and diabetes entirely preventable with timely and effective outpatient and primary care (Billings 1996). For example, early treatment of a flare-up of asthma in a doctor's office or clinic can prevent deterioration to the point where hospital care is required. Every year several hundred thousand preventable hospitalizations occur in California (OSHPD 2008). A single hospitalization for asthma costs over $13,000.

Caring for Children and Dependents

At the individual level, taking the necessary time to rest and recuperate when sick enables a faster recovery and prevents the progress serious illnesses. For dependents, including children and elders, having access to an adult caregiver can be a matter of life and death. Children left home alone may be unable to see physicians for diagnoses, needed medications, or emergency help if their conditions worsen.

Today, 70% of mothers with children under 18 are in the workforce (BLS 2006); 25% and 35% of working Americans are currently providing care for someone over 65 (Bond et al 2002); and 2 in every 7 families report having at least one member with disabilities (Wang 2005). However, 52% of employees do not receive paid sick day benefits. The disparities between low-wage and high wage workers are even more striking: 72% of high-wage (highest quartile) receives paid sick day benefits compared to 21% of low wage workers (lowest quartile) receive (Lovell 2006). More troubling is that mothers of children with chronic condition are more likely to lack sick leave and less likely to receive other paid leave or flexibility (Heymann 1999).

What this means for public health should be obvious and unacceptable. Studies of hospitalized children have shown that sick children have shorter recovery periods, better vital signs, and fewer symptoms when their parents share in their care (Palmer 1993). The presence of parents has also been found to shorten children's hospital stays by 31% (Taylor and O'Connor 1989). When adults receive support from family members when sick, they recover faster and more fully from conditions such as heart attacks and strokes (Bennet 1993; Gorkin et al 1993; Tsouna-Hadjis et al 2000).

Reducing Health Disparities

If we look at the patterns of disease within Cities, California and United States, we see the unacceptable reality of health being a product of race and class. People in the highest income group can

expect to live, on average, at least six and a half years longer than those in the lowest. Among neighborhoods stratified by income and wealth, we see life expectancy vary by a decade or more (BARHHI 2008). Benefits for paid sick days are strongly correlated with income, making them one of the many factors explaining our nation's growing health disparities. Providing paid sick days for all workers is a common-sense solution that addresses health disparities and reduces the strain on public safety net services.

Moving Towards a Common Sense and Fiscally Sound Health Policy

A fundamental purpose of government is to ensure that day-to-day living and working conditions support health and welfare. Labor and occupational safety laws, including limits on child labor, the minimum wage, and the work week, were essential contributors to the gains in life expectance in the 20th century. Today, it is equally important to think of labor policies as health policies.

According to the Organization for Economic Cooperation and Development, the U.S. spends $6102 per person on health care services—15% of our GDP and more than any other country the world (OECD 2006). Despite outspending our peers, life expectancy in the United States is a full year less than in Canada and England and three years less that Spain, Sweden, and Switzerland. One reason these other countries are outperforming us with respect to health is that they have paid attention to ensuring healthy living and working conditions for all residents.

Overall, I encourage you to view paid sick leave benefits as a practical and cost-effective public health policy to prevent disease, avoid unnecessary hospitalizations, care for our children and elders, reduce health disparities, and control health care costs. Furthermore, adopting paid sick days would eliminate the perplexing inconsistency between our public health and labor laws. I thank you for your consideration of this essential public health law.

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City and County of San Francisco
DEPARTMENT OF PUBLIC HEALTH

Gavin Newsom, *Mayor*
Mitchell H. Katz, M.D.,
Director of Health

OCCUPATIONAL & ENVIRONMENTAL HEALTH

Living Wages and Health

Testimony to the San Francisco Board of Supervisors Budget and Finance Committee

March 1, 2006

Income poverty is one of the strongest determinants of poor health and disease documented in the public health literature. Even in a wealthy society, such as the one in the United States, the poorest residents are more than twice as likely to die at any age as are the richest. Today I'd like to point out five important aspects of the relationship between income and health in support of the proposed amendments to the Minimum Compensation Ordinance.

First, even though low income jobs are more likely to lack health care benefits, it is not the difference in health care access alone that explains the size of the relationship between income and health. Studies have shown that even in economically developed countries with universal access to health services, at every level of income, those with lower income have poorer health.

Second, low income denies people access to adequate food, shelter, clothing and transport necessary for healthy lives. Over 31 million people in the US, including 12 million children, are unable to acquire adequate food to meet basic needs on a consistent basis. Local research documents those San Francisco residents in low-income neighborhoods pay as much as 64% more for food items in neighborhood corner stores. Lower cost housing is often of lower quality and may have mold, poor ventilation, cockroaches, rodents, asbestos or lead, all of which can have serious health effects, especially for children.

Third, above meeting basic needs, adequate income allows socializing and cultivating friends. People with enough money can go to the movie or out to eat, invite friends to their home for a meal, or call an out of town family member regularly. Friends can provide assistance in difficult financial circumstances or emotional support or advice in a stressful situation. Not being able to meet basic needs or to participate meaningfully in society may lead to feeling a lack of control over one's life, insecurity, anxiety, social isolation, bullying, or depression.

Fourth, low income neighborhoods typically have fewer sources of nutritious and affordable food, fewer options for safe and comfortable physical activity, and less access to public services. Lower income areas also may have less political clout to keep out polluting industries or to stop undesirable land uses. Lower income areas tend to have higher levels of crime. A reduced sense of personal security can lead to heightened fear and anxiety and inhibit health-promoting activities such as walking to school or on errands, jogging, meeting friends, or socializing.

Fifth, at home, parents who are stressed about finances, and perhaps working at multiple jobs with irregular hours, have less time to spend with their children. They may read less to them and literally speak to them less, which can influence the development of verbal skills. A synthesis of the evaluation of 11 large-scale welfare to work programs conducted in 2001 found that, "programs that included earnings supplements, all of which increased both parental employment and income, had positive effects on elementary-school-aged children. Specifically, these programs led to higher school achievement, a reduction in behavior problems, increased positive social behavior, and/or improved overall health".

Conclusion

Family poverty can be self-perpetuating. A child growing up in a poor family whose physical, cognitive or behavioral development is impaired may have lower educational attainment and, later in life, reduced adult income, limiting the life chances of his or her children.

The public health community has recognized the pathways between income and health and we therefore support the amendments to the Minimum Compensation Ordinance as they promote health and are in the broad social interest.

Estimated Health Effects Due To Average Living Wage Income Gains For Workers With A Current Family Income of $20,000.

Study/Outcome	Model	Effect Measure	Full-Time Workers Estimate (95%CI)	Part-Time Workers Estimate (95%CI)
Backlund, 1996				
Mortality-Male	Proportional Hazards	Hazard Ratio	0.94 (0.92-0.97)	0.97 (0.96-0.98)
Mortality-Female	Proportional Hazards	Hazard Ratio	0.96 (0.95-0.98)	0.98 (0.97-0.99)
Ettner, 1996				
Health Status	Ordered Probit	Relative Risk	0.94 (0.93-0.96)	0.97 (0.96-0.98)
ADL Limitations	Probit	Relative Risk	0.96 (0.95-0.98)	0.98 (0.97-0.99)
Work Limitations	Probit	Relative Risk	0.94 (0.92-0.96)	0.97 (0.95-0.98)
CES—Depression Scale	Two Part	Elasticity	-1.9%	-1.1%
Number of Sick Days	Two Part	Elasticity	-5.8%	-3.2%
Alcohol Consumption	Two Part	Elasticity	+2.4%	+1.3%
Duncan, 1998				
Completed Schooling	OLS Regression	Years of Schooling	+0.25 (0.20-0.30)	+0.15 (0.12-0.17)
H.S. Completion	Logistic Regression	Odds Ratio	1.34 (1.20-1.49)	1.18 (1.11-1.26)
Non-Marital Childbirth	Proportional Hazards	Hazard Ratio	0.78 (0.69-0.86)	0.86 (0.81-0.92)

From Bhatia R, Katz M. Estimation of health benefits from a local living wage ordinance. Am J Public Health. 2001 Sep;91(9):1398-402.

Understanding the occupational health concerns among Chinese restaurant workers in San Francisco

Summer 2006

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Chinese Progressive Association (CPA) 华人近步会
UC Berkeley Labor and Occupational Health Program (LOHP)
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Table of Contents

List of Tables

Acknowledgements

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Abstract

This summer OHIP internship was a partnership between the Chinese Progressive Association, UC Berkeley Labor and Occupational Health Program (LOHP), and CA Department of Health Services seeking to obtain more information about the worker health and safety of Chinese immigrant restaurant workers. A key goal of this project was to gain a better understanding of the perspectives that these workers have about their workplace health and safety, and to learn how to gather information from this particular population. Another important objective was to observe food safety and fire safety inspections, and to revise an existing LOHP checklist of workplace health and safety hazards in restaurants. To accomplish these goals, methods included worker interviews conducted in Cantonese (n=11), food and fire safety inspections (n=5), and key informant interviews (n=6). Key findings include: 1) Chinese immigrant knowledge of both Western and Eastern medicine and terminology, 2) contradiction and agreement between food and fire safety interests versus worker health and safety concerns, 3) new hazards such as mold, food borne, and infectious disease, and 4) importance of social networks in the Chinese immigrant community. Important results of this project include in-depth worker information, revised checklist of hazards, and a set of recommendations for work with this population.

Background

The restaurant industry is one of the largest service industries in San Francisco. Within the San Francisco Chinatown industry, the majority of restaurant workers are Chinese mono-lingual immigrants who have arrived in the United States at different time periods.

Target Population and Risk Factors
According to the research of the Chinese Progressive Association, many of these immigrants have experienced the inequalities that exist in the majority of the restaurants in which they work. For example, many of the employees are not paid the minimum wage, given work insurance or workers compensation nor have they received much training in occupational health and safety. Many of these workers have been and are exposed to occupational health and safety hazards in the workplace. Within the restaurant business, workers hold a variety of jobs, including positions as cooks, dim sum waitresses, kitchen assistants, waiters and dishwashers. Each job poses a set of hazards to the worker. When looking at worker health and safety, we must look at the health and safety hazards posed to each restaurant job position as well as the general restaurant population. For example, dermatitis is seen in dishwashers and musculoskeletal injuries are seen in waiters. These injuries and illnesses are only a few of the ones that are prevalent in this particular population of workers.

Current Approaches Used to Target Work Safety
Currently, Cal/OSHA (California Occupational Safety and Health Administration) conducts worker health and safety inspections but because their resources are limited, they rarely inspect restaurants. However, food and fire safety inspections are annually conducted in San Francisco's Chinatown. Food and fire safety inspections are conducted by the San Francisco County Health Department. Restaurants need to pass these inspections and be in compliance with food and fire safety regulations in order to receive their operating license. Though no research has been done on the correlation between food safety inspection score and worker safety in Chinatown restaurants, we suspect that the food safety inspection scores do reveal much about worker health and safety conditions. Inspections are rated from 0 to 100, with 100 being the best score possible. We learned from the inspectors that scores in Chinatown have ranged from 38 to 95.

Connection between food and fire safety, and worker health and safety
In the past, restaurants with a low food and safety or fire inspection score have also employed some very discontent workers who experienced many injuries and illnesses. For example, a restaurant which scored low because of slippery, dirty floors might also employ workers who are discontent with the physical work conditions. Although not all workers are experiencing daily health of safety problems in their workplace, the majority of restaurant workers have at some point experienced a work related illness, injury or problem.

Preliminary Research
Some research has been done regarding this target population. Last years OHIP interns, Alex Cooper and Henning Chu accomplished the following:

- Did preliminary research on the demographics of the Chinese restaurant worker population in Chinatown, San Francisco.

- Formed focus groups at the Chinese Progressive Association. During these focus groups, they attempted to understand the overall working conditions of these workers. Through these focus groups, they discovered that the workers are most concerned with a variety of work organizational issues including: wage, tension with co-workers, psychological and physical stress, poor working conditions and long hours.
- Upon discovering these conditions, Cooper and Chu visited restaurants in the Oakland Chinatown with Alameda City Health Department inspectors. They discovered three main worker hazards in these restaurants: 1) slips, trips and falls, 2) burn hazards, 3) ventilation and air quality hazards.
- Upon these findings, Cooper and Chu developed a comprehensive checklist based on the Labor of Occupational Health Program's training materials for restaurant workers.

In summary, last year's research has revealed to us the poor working conditions that the majority of Chinatown restaurant workers face. These findings have given us a broad understanding of the worker health and safety hazards in the population.

Objective and Purpose

Building upon last year's findings, we decided to do a more extensive research on worker health and safety in Chinatown restaurants in San Francisco and focus on the workers personal experiences in occupational health, illnesses and injuries.

Our broad, overall purpose is to improve the occupational health and safety standards in the Chinese restaurant community in San Francisco. In order to achieve this larger goal in the future, we have developed a few, specific objectives:

- Gain a deeper understanding of the health and safety hazards facing the current Chinese worker population.

- Revise the draft worker health inspection list.

- Learn how to effectively gather health and safety information from this target population.

Methods

I. Worker Interviews

a. Purpose. To gather a deeper understanding of the health and safety concerns as well as the holistic experience of Chinese restaurant workers in San Francisco Chinatown.

b. Interview style. We conducted one-on-one, in-person interviews in Cantonese. All workers felt most comfortable with answering questions in Cantonese, rather than English. The interview focused mainly on a set of questions on the workers' occupational health and injury history and current concerns. See Appendix 1 for the interview guide. These interviews were conducted in a conversational style in which we were open to discuss other topics that participants brought up. This style was chosen so that people would be willing to express concerns that they normally would not discuss in focus groups.

c. Recruitment. The interviewees were recruited in three ways:
    1) Former CPA ex-campaign workers
    2) Single Room Occupancy (SRO) tenants whom CPA's peer organizers knew through SRO visits
    3) SRO tenants who we found at random while doing method #2

d. Setting. From the week of 6/27/06 to 7/14/06, we conducted a series of interviews with 11 workers restaurant workers. Four of the interviews were conducted in the offices of Chinese Progressive Association. Seven workers were interviewed during single occupancy residence visits.

II. *Health and Safety Inspections and Training Sessions.*

a. Purpose. To understand other health and safety hazards that have not been brought up through the worker interviews, we shadowed food safety inspectors and educators, and a fire inspector. Shadowing these inspections allowed us to see the workplace conditions which the workers work in, identity observable and non observable health and safety hazards and also, see the reaction of employers and employees to health and safety intervention by these inspectors.

b. Food safety inspection on 07/05/06. This inspection was hosted by Jackie Greenwood, a senior food and safety inspector at the Department of Public Health in San Francisco. With her team of 5 other inspectors, Pamela Hollis, Calvin Tom, Mohanned, Eric, Imelda, we split up into two groups to go into two different Chinese restaurants in Chinatown. Greenwood and two other inspectors brought Margaret Lee and Pam Tau Lee to Restaurant A, a medium-sized restaurant. Inspector Pamela Hollis brought two other inspectors and Liz Hom to Restaurant B, a large-sized restaurant. After the physical inspections of the restaurant, the two

inspection groups met up to review the inspections and write up the individual restaurant reports. The visits and write up took about 3 hours.

c. Food safety education sessions on 07/19/06. We were hosted by Jackie Greenwood and Timothy Ng, senior health inspector and educator, to follow up on the inspections done on 7/05/06. The purpose of this inspection was to check where the hazards found in the last food safety inspection have been corrected and to educate all employees about food safety and handling.

d. Informal tour of Chinatown restaurants on 7/19/06. Ng also brought us to very informal visits to various restaurants that represent the worse in food health and safety and the best in Chinatown. Seeing one of the best restaurants was very inspiring.

e. Fire safety inspection on 07/24/06. San Francisco Fire Department senior fire inspector Kaan (Can) Chin hosted us on an inspection of Restaurant C, a large-sized restaurant. From this inspection, we were able to see the fire hazards that not only affect customers but workers health and safety on the job.

III. *Interview with Key Informants.*

a. Purpose. Talking to these key informants provided us with various points of view on the topics aspects of worker health and safety. Being familiar this information allows future researchers and community organizers to learn how to best talk to this population about occupational health and safety.

b. Interview style. We conducted one-on-one, phone interviews with key informants. Similar to the worker interviews, we utilized an interview guide, but also allowed informants to talk about other topics. See Appendix 2 for the questions.

c. Recruitment. Key informants were recruited via personal and professional contacts of CPA staff, DHS staff, and OHIP interns. They had a variety of different backgrounds including community organizers, worker center leaders, health care providers, Cal/OSHA inspectors and safety engineers, and occupational health professors.

IV. Reviewing the existing restaurant worker health and safety inspection list.

a. Purpose. Pam Tau Lee gave us a checklist designed by Cal/OSHA and LOHP that was designed to assist employers in training their workers about help and safety. There was also an emphasis for this checklist to assist with training young workers. The goal was to devise a more comprehensive worker health inspection list that may be used by a coalition of food safety, fire safety, and worker health/safety inspectors in the future.

b. Tools. We incorporated our findings from key informant interviews, as well as food and fire safety inspections to determine how to modify the checklist.

Findings

Worker interviews

I. Basic worker information.

Demographics. In summary, the job positions represented by interviewed workers include 4 part-time dim sum waitresses, 1 full time waiter, 2 kitchen helpers, 1 dim sum maker, 1 chef, and 2 dishwashers. Their years of experience ranged from ½ year (1 dishwasher) to 30 years (the waiter). See Table 1 for individual worker data. See Tables 2 and 3 for summaries of this information.

The majority, eight, of the interviewees were females. Amongst the female restaurant workers, 4 of them were part time dim sum workers. Generally, all dim sum workers were found to be female. The remaining females were dishwashers and kitchen helpers. None were cooks or dim sum makers. The males, with the exception of one waiter, worked in the kitchen preparing food.

Workload. The female dim sum workers work no more than 4 hours a day. The female kitchen helpers and dishwashers worked up to 8 hours a day. All the males we interviewed worked full time, with 8 hours or more regardless of their job position. Waiters worked about 8 hours a day. Chefs worked 8-10 hours a day. Their shifts were significantly longer in hours and their years of experience in the restaurant industry were more compared to the majority female counterparts. We found that in general, kitchen staff holds longer shifts than the wait staff. These relatively longer shifts may lead to greater risk for hazards.

Table 1: ***Individual worker data***

Gender	Job Position	Hours Worked/Day	Years Worked
Female	Dim Sum Waitress	4	Few
Female	Dim Sum Waitress	4	3
Female	Dim Sum Waitress	4	2
Female	Dim Sum Waitress	3 ½	4
Female	Dishwasher	Few	5
Female	Dishwasher	3½	4
Female	Kitchen Helper	8-10 (Varies)	3
Female	Kitchen Helper	9	Few
Male	Chef	10	10
Male	Chef	8	Few
Male	Waiter	8-10	30

Table 2: ***Time Spent in the Restaurant Industry***

Years worked
≤1 year (n=1)
1-5 years (n=5)
5-10 years (n=1)
10-30 years (n=2)
“A Few” (n=2)

Table 3: ***Workload***

Hours worked Per Day
≤ 4 hours (n=4)
4-8 hours (n=1)
8-10 hours (n=3)
10-12 hours (n=0)
Varies day to day (n=3)

II. *Hazards Observed By Workers.* In each interview, we asked the workers to describe the types of hazard that they or a co-worker with the same job position may face on the job. Table 4 describes the types of hazards observed:

Table 4: ***Types of Health and Safety Hazards Observed by Workers (By Job Position)***

Chef	• Lack of burn protection • Risk of cuts • Heat from steam and no ventilation • Handling raw food
Kitchen Assistant	• Same risks as chefs • More chances of falling and tripping from constantly moving around the entire kitchen and transporting stock/food/dishes • Dangers faced from multitasking • Being ordered around by chefs
Dishwasher	• Dermal exposure to harsh soap and hot water • Slippery floors due to wet and greasy floors and stairs • Constant repetitive motion and high speed of work increases risk of musculoskeletal injuries • Poor ventilation • Risk of cuts
Dim Sum Waitress	• Pressure to work at high speeds and slippery floors can cause falling/slipping • Lifting and carrying heavy trays of dim sum • Accidents caused by carrying overload of dishes or overcrowded aisles • Being yelled at by picky customers (stress) • Some of the waitresses note that cooks have even more hazards than the waitresses and that being a waitress is not as physically dangerous.
Dim Sum Maker	• Steam • Oil
Waiter	• Same as dim sum waitress. However, waiters have longer exposure to hazards because waiters typically work full time shifts, whereas dim sum waitresses work part time shifts. Thus, waiters have increased risk of musculoskeletal injuries or accidents.

To understand the occupational health history of the workers, we asked them what types of injuries and illnesses they experienced from their jobs. See Table 5 for details:

Table 5: ***Types of Occupational Injuries, Illnesses and Physical Problems Experienced by Workers***

Chef	• 1st and 2nd degree oil burns • Minor and deep cuts • Respiratory problems (difficulty breathing) • Eye problems (red, swollen, itchy, blurred vision)
Kitchen Assistant	• 1st and 2nd degree oil burns (especially fryer user) • Psychological stress from doing too many jobs at once
Dishwasher	• Dermatitis • Minor slips on the floor
Dim Sum Waitress	• Musculoskeletal pain in lower arms, lower leg and feet, • "Chou gun" (similar to muscle cramps in western medicine)
Dim Sum Maker	• Steam burns • Oil burns • Sharp cuts • Musculoskeletal pains in feet, arms and back • "Yeet hay" (similar to dehydration in western medicine)
Waiter	• Musculoskeletal pain in feet and shoulders • Tired wrist • Verbal customer abuse

III. Other Findings

In addition to health and safety, workers also discussed general health, safety, lifestyle and medical history.

Particular Hazards Associated with Specific Job Positions. We have found that the job position of the workers heavily influence the types of health and safety hazards they experience. Chefs are at higher risk for burns while performing their job. Meanwhile, dim sum waitresses are generally at a low risk for burns unless they make a mistake, such as spilling a bowl of soup. However, waitresses seem at particular risk for musculoskeletal problems from lifting and carrying. Through our interviews, we have also discovered that dishwashers experience dermatitis and cooks experience eye irritation. Dermatitis and eye irritation are new hazards that were not identified last year. Both of these illnesses were not seen in other jobs outside of dishwashers and cooks.

Connection between food safety and worker health safety.
We found that some restaurant workers often take short cuts in order to speed up production. These shortcuts pose a dangerous both to food safety and worker health safety. For example, one dim sum worker said,

> *"Some of our waiters run into the kitchen, quickly grab cooked spareribs with their bare hands, put them on a plate, then bring the plate outside and serve it to our customers. Our chefs also go outside to smoke then come back and start preparing food without washing their hands. I would never eat at my employer's restaurant!"*

She admits that taking these shortcuts are due to several factors: laziness of the workers, pressure to produce and serve food quickly, and most of all, lack in health and safety training. None of the workers have received official worker health and safety training. Many of the workers admit that they learn what and what not to do by watching other workers make mistakes on the job instead.

Frequency of Injury. All but two workers claimed that at some point, they have experienced either some serious illness or prolonged physical or stressful discomfort from the job at least once. We realized that it may be useful to find out when the injuries occurred, at night or day.

Though many workers do get injured on the job, we find that not all workers experience injuries or illnesses in their jobs. Furthermore, amongst these workers, a few of them are actually very happy with their jobs and their working conditions. However, workers who claim to work in dirty and crowded environments claim to be less happy and that they experience more risk for injury and illnesses. We find that food safety and labor violations often reveal worker health violations as well.

Injury and Illness Treatment Methods. Workers have various ways of dealing with their occupational injuries and illnesses. While some workers told us that they have private health insurance or worker insurance, the majority of workers self-treat their own injuries and illnesses without ever seeing a doctor due to the lack of private and workers heath insurance. Self-treatment was often done in response to muscle skeletal pains or injuries with the use of pain relief ointments, such as Tiger Balm or other Chinese ointments. In one case example, a dishwasher experienced a painful skin infection on both her hands from constant dishwashing and exposure to dishwashing chemicals (even when she wore gloves). She self treated herself with an anti-microbial solution purchased from Walgreens. After three bottles of the solution, the infection cleared up on its own, though leaving her fingernails slightly disfigured. In another case, a man who has been suffering vision blurriness and red eyes at work used eye drops bought from Walgreens. In addition, workers explained that usually the boss does not allow workers time off if workers have at fevers and headaches. Instead, workers often continue working even if they have a cold or a fever.

Cultural Differences in Health. During our interviews, several Chinese medical terminologies were used. We learned that in general, the target population is familiar with eastern medical terminology in addition to western medical terminology. The terminologies are not all understood by the other cultures' medical practice, though similarities do exist where a Chinese medical term may have a similar term in Western medicine. During our interviews, we hear two Eastern medicine conditions being mentioned:

1. "Chou Gun." Two workers expressed (a dim sum waitress and waiter) experiencing the concept, "chou gun" frequently. We learned that "chou gun" (literally meaning "twisting

muscles"), is an Eastern medicine concept that would be similar to "muscle spasms" in Western medicine.

2. "Yeet hay." One chef claimed to experience this frequently. In Chinese medicine, the concept yeet hay means ones body is too full of hot air. According to this belief, the body can become too hot from activities such as eating foods with very hot properties, being in the sun for too long, or not drinking enough water. The chef claimed that the smoke and oil caused this condition. We are still unsure as to what this eastern medicinal concept would translate to in western medicine.

Ultimately, understanding the cultural differences in medicine has allowed us to learn how workers understand the concept of health. We hope that these health concepts that workers are familiar can be integrated into future health and safety training sessions.

Defeated Attitude Towards Work. Many workers are aware of the occupational hazards in their jobs but reveal a defeated attitude. They often feel that there is nothing that can be done to change their situation. This quote describes this feeling:

> *"It is all part of the job, better than having no work."*

Living Conditions. In addition, we were informed that many of the restaurant workers live in single occupancy residences with large families and smaller apartments relative to the average family housing apartment size in San Francisco. During the visits to the SROs, we saw first hand the unhealthy conditions that many workers experience:

- 4-5 people share a small room for sleeping and studying
- They share a common bathroom and kitchen with other SRO residents.
- Buildings are not well maintained on the outside and inside:
    - Evidence of rats
    - Fumes and secondhand smoke
    - Improperly stored garbage

Understanding these conditions helped us identify the environmental health conditions that this population experience on a daily basis. In addition, we also realized that these conditions may influence workers' attitude towards safety and health conditions in the workplace. For example, a crowded, cluttered restaurant would not pose an obvious hazard to a workforce where the majority live in crowded and deteriorating housing.

Inspections

I. Rationale

Last year's summer interns also went on food safety and fire safety inspections to identify major health and safety hazards. However, most of their inspections were done in Alameda County. Through our visits this summer, we hoped to see whether or not these concerns were located in

San Francisco Chinatown restaurants as well. In addition, we went on food safety and fire safety inspections to find out what physical safety hazards workers face on a daily basis. Going on these inspections also helped us gain a working knowledge of the hazards so that we could mention them during worker interviews. We also hoped to compare our observations of conditions in restaurants with descriptions that workers gave during interviews.

II. Food safety inspection

There were a variety of specific concerns related to food safety that inspectors noticed at the two restaurants that we visited. See List 1 in "Detailed findings" for more information. From this inspection, we were not only able to see food and sanitation safety hazards but how many of these food and sanitation safety hazards can also be worker health and safety hazards. In addition, there were also concerns that affected worker health and safety. These concerns included:

- Slippery floors due to build up of grease and water. Water could have come from defrosting meat or washing vegetables. Grease comes from cooking and preparing food.
- Lack of burn protection when cooking. Some workers who were frying food on the wok or deep frying food wore short-sleeved shirts and did not have any gloves or other burn protection.
- Slippery stairs. No traction on the steps of the stairs could lead to workers falling down when carrying large items of food.
- Improper storage of ammonium carbonate, or "baker's ammonia." While a worker was observed lifting the ammonium carbonate, some of the ammonium carbonate was leaking out of the bag and coming out as dust in the air. The potential health hazards of ammonium carbonate include irritation to the respiratory tract when inhaled, irritation to the eyes, and skin irritations.

III. Follow-up food safety education sessions

Unfortunately, the food safety inspectors found that these particular restaurants had serious food safety violations. As a result, the food safety inspectors made return visits to both restaurants in order to conduct food safety educational sessions for each restaurant's employees. See List 2 and 3 in "Detailed findings" for topics covered by education sessions for kitchen staff and food handlers. Basic topics include safe food handling, rodent control, burn prevention, prevention of infectious, and prevention of food borne disease. Inspectors require that all employees that handle food at the restaurant attend the training. We realized that this food safety training may potentially be a good time to also talk to workers about health and safety issues in the future. See List 4 in "Detailed findings" for reasons why these trainings may be good opportunities to discuss worker health/safety.

Another advantage of attending the educational sessions was that we were able to observe effective styles of communication with workers. Ng, the food safety educator, had a dynamic, interactive style during his presentation with workers. See List 5 in "Detailed findings" for effective techniques that he used which should be incorporated into future worker health/safety presentations with this target population.

IV. Personal observations by inspectors

In addition, to accompanying inspectors on their visits to restaurants, we were also able to have informal conversations with them about their observations about the Chinese restaurant industry. These insights were very interesting because they reveal cultural insights on behavior of employers and employees in SF Chinatown restaurants. See List 6 in "Detailed findings" for more information on these insights.

V. Fire safety inspections

We accompanied SF Fire Department inspector Kaan Chin on a visit to the Restaurant C. In addition to the inspection, we also had a discussion with Chin about worker health hazards related to fires that are commonly found in Chinese restaurants that are. These include:

- Grease fires
- Compressed gas fires. Compressed gases are often used to heat movable dim sum carts. If not maintained properly and without worker awareness not to smoke around these carts, fires can result.
- Burn hazards
- Impact of cooking smoke on eye health of cooks

There is not a formal written checklist used by SF fire inspectors. However, based on our observations when accompanying Chin on his inspection, we put together this list of the different items that he checked included. See List 7 in "Detailed findings" for these items. Then See List 8 in "Detailed findings" for the violations found at Restaurant C.

Inspection hazard checklist

We revised the inspection hazard checklist so that inspectors may use on future worker health and safety inspections. Using observations from the food and safety inspections, we categorized the hazards identified by UC Berkeley's LOHP program into three categories: low, moderate, high risk. Based on our food safety inspection visit, we also recommend that more hazards such as worker risk of infectious diseases be added to the checklist.

We incorporated feedback from Cal/OSHA safety engineer, Ullerich, into our list. His suggestions include:

- The hazard, poor condition of electrical cords, should be moved from the moderate risk category to the high risk category.
- The list should include: "Is the fire emergency system (ie. sprinklers and alarms) in good, working condition?"
- The list should also include: "Is there an emergency eye wash system in the kitchen that is in good operating condition?" This eye wash system is a concern because caustic, dishwashing chemicals may get into the eyes of workers.

See Appendix 3 for revised inspection checklist. We hope that we can convince current food and fire safety inspectors to integrate these hazards into the already existing inspections. We also hope to emphasize that many worker health/safety concerns also may be food and fire safety concerns. The section of this report provides more details about these overlapping concerns.

Connecting food and fire safety inspections with worker health/safety

I. Areas of agreement between food safety, fire safety, and worker health and safety

Cleanliness of cooking facilities and kitchen is important. It affects food safety, fire safety, and worker health and safety. See Table 6 for examples.

Food borne and infectious diseases is an important concern affecting the health of both the general public and the workers. Food borne diseases include salmonella and hepatitis A. Infectious diseases include staph and septicemia experienced by workers that have cuts. See Table 7 for more details.

II. Contradictions between food safety, and worker health and safety

An important finding that resulted from talking with food inspectors was the discovery that there is conflict between food safety, and worker health and safety. Examples include utilizing dumbwaiters, dishwashing gloves, and holding dishes. See Table 8 for more details.

III. Intersection of food safety, fire safety, worker health and safety

It is important to recognize that restaurants with food and fire safety problems also often had problems with their worker health and safety. Thus, if one type of concern was present, it was often not hard to find evidence that this same restaurant had other types of concerns as well.

Here is a diagram that visually demonstrates this phenomenon:

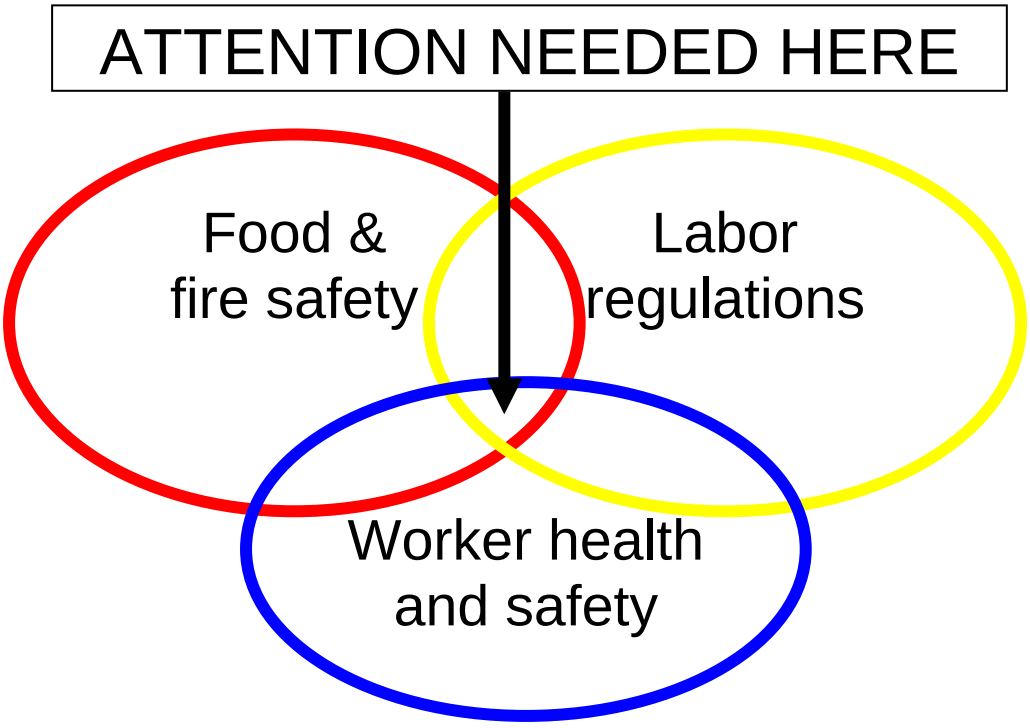

Table 6. ***Impact of cleanliness and equipment maintenance***

Issue	Food safety	Fire safety	Worker health and safety
Mold and water damage on the ceilings	• Water damage and mold may also lead to ongoing degradation of the ceiling. • Debris from the damaged ceiling may fall down into food	Mold disrupts the sprinkler system's temperature sensor	• Mold is an indoor air quality concern • May cause respiratory problems for exposed workers
Dust and dirt accumulation in ventilation systems for kitchen and dining area	Dust and dirt may fall into food that is being prepared on stoves and grills	Dust and dirt may inhibit functioning of the overhead ceiling sprinkler system	Hot temperature in kitchen can result in heat stress
Maintenance of grease collection system, ventilation system for stoves and grills, and stove cooling systems		Maintenance reduces the chance of grease fires and accumulation of grease vapors in the air that may result in fire	Maintenance protects workers from burns and from inhalation and exposure to smoke and grease laden vapors
Buckets of food left on the floor	Food may become contaminated by dirt or debris falling into the buckets		Buckets create a tripping hazard

Table 7: ***Impact of food borne illness and infectious disease***

Agent	Risk to public	Risk to worker	Prevention
Food borne illness including: • Salmonella • Hepatitis A	• Salmonella: Workers handle raw food and cooked food that is served to the public without washing hands. • Hepatitis A: Workers use restroom and handle food that is served to public without washing hands.	• Salmonella: Workers handle raw chicken and then consume their own food or beverage without washing hands. • Hepatitis A: Workers handle food contaminated with hepatitis A and then consume their own food or beverage without washing hands.	• Countertops should be cleaned with iodine and bleach. • Workers should wash their hands properly before touching food, after handling food or dirty dishes, and after eating or using the restroom. • Employers must allow workers sufficient break time to eat and use proper restroom hygiene.
Cuts or skin abrasions experienced by worker when chopping or cutting food	• If a worker does not properly clean and bandage wound, yet continues to work, then blood from the cut may contaminate food served to the customer. • A customer eating contaminated food may get sick	• A worker with a cut may be exposed to pathogens from the food or work environment. • Such infections may result in a staph infection. Or in a worst-case scenario, it may result in septicemia, a blood-borne illness.	• If a worker gets cut, he should wash out the cut immediately with water. • He should squeeze out the blood and bandage the cut. • He should also cover the cut hand with a glove if he is returning to work. .

Table 8. ***Contradictions between food safety and worker health/safety***

Issue	Food safety	Worker health and safety	Possible reconciliation
Dumbwaiters	• Dumbwaiters should not be used because they are often not clean. • There is the danger of dust and dirt debris from inside the dumbwaiter falling into plates the food transported in the dumbwaiter.	• Dumbwaiter use would prevent ergonomic injury among workers. • Workers use a mechanical device to transport food from one floor to another, instead of carrying heavy trays or plates with food manually.	• Have workers transport trays with dishes holding food. • Be sure that each tray is manageable and does not carry too much weight at one time. • Regularly clean dumbwaiters and cover food in dumbwaiters.
Dishwashing gloves	• Gloves should not be used because they lead to cross contamination. • Workers may be very likely to handle dirty dishes and clean ones with the same pair of gloves.	Gloves prevent workers from getting dermatitis due to frequent exposure to possibly harsh dishwashing detergent and hot water used to wash dishes.	• Have employees use disposable gloves when washing gloves. Change gloves when switching from dirty to clean dishes. • Use safer, less harsh alternative type of soap.
Holding dishes	• There is concern that holding dishes in neutral position will result in the worker placing their hand on the top of the plate where the food is located. • The preferred position is to hold the plate from the bottom and bending the wrist in an awkward, non-neutral position.	The optimum hand position for holding dishes would be to hold them with the hand in neutral position	

Key informant interviews

I. Purpose

Key informant interviews (n=6) were conducted with a variety of different individuals with expertise in various areas including: health care (1), academic research (1), government agencies (2), and community-based organizations (2). Each of these individuals provided important information about the health and safety of Chinese immigrant restaurant workers from a different perspective.

II. Health care

Dr. Stanley Lowe, OD, an optometrist practicing in Burlingame, CA, suspects a possible connection between exposure to cooking smoke and occupational cataracts. Dr. Lowe diagnosed several patients that were 40-50 years in age with cataracts. He found this observation unusual because most patients with cataracts are diagnosed when they are 60-70 years in age. When he asked patients with early onset of cataracts about their previous occupations, he noticed that many of these patients had previous employment as cooks. Furthermore, some of these cooks were employed at Chinese restaurants. Thus, Dr. Lowe suspects that there may be a connection between exposure to cooking smoke and development of cataracts among cooks. However, he cautioned that his observations constitute anecdotal evidence, and should not be interpreted as a proven scientific connection.

III. Academic research

We interviewed Dr. Jenny Hsin-Chun Tsai, an Associate Professor at the University of Washington School of Nursing, Department of Psychosocial and Community Health. Professor Tsai gave a detailed interview about her qualitative research with Chinese immigrant restaurant workers in the Seattle-King County area. The primary purpose of her research is to identify workplace hazards, injury, and illness experienced by Chinese restaurant workers. An important secondary aim is to understand worker knowledge about health and safety regulations, as well as to understand how they perceive hazards and risks. She conducted in-depth interviews and a follow-up focus group with 18 workers.

There were several findings in Seattle similar to our findings San Francisco:

- Workers are not conscious of environmental and occupational health. They often do not feel that their workplace is hazardous or dangerous. In addition, workers tend to be more aware of hazards they feel physically, such as heat.
- Economic change affects workers' health because an employer may decrease their staff and make scheduling changes that requires employees to work for longer hours. There is increased anxiety among employees about job security and their ability to get enough working hours to support themselves.
- Work organizational environment and management style are also other key influences on worker health and safety.
- There is very little or no training on job tasks or worker health and safety. All of these factors create an environment conducive to worker injury.

- An organizational hierarchy that operates within restaurants. This hierarchy can create tension among workers.

There were also some key differences between findings in Seattle and San Francisco:

- In the Seattle area, workers were concerned about physical violence from managers or other employees if they made a mistake. This created a great deal of stress among workers.
- In the Seattle area, workers also complained about age discrimination, and discussed how older workers had more difficulty in finding a job.
- In the Seattle area, there was significant competition for jobs in Chinese restaurants outside of Seattle Chinatown.

IV. Government agencies

We interviewed two safety engineers from California Occupational Safety and Health Administration (Cal/OSHA), Rick Ullerich and Aston Ling.

Prioritization and targeting

According to Ullerich, Cal/OSHA does not often specifically prioritize the restaurant industry for inspections because this industry is considered a low to moderate risk industry. Cal/OSHA does target specific businesses based on their worker health and safety record. In addition, about 2 years ago, Cal/OSHA placed a special emphasis on the health and safety of young workers employed in restaurants. Cal/OSHA realized that many restaurant employers assumed that young workers know what to do. Often employers do not realize that young workers need special training to prevent occupational injuries. In response, Cal/OSHA created specific training materials and lists of workplace hazards designed for employers with young workers.

Common restaurant worker health and safety hazards

Ullerich and Ling provided a list of health and safety hazards in restaurants that have been identified by Cal/OSHA in the past:

- Slipping and tripping hazards
- Electrical hazards
- Rotating machinery
- Poor ventilation over stoves
- Lack of fire protection plans
- Poor housekeeping and cluttering
- Possible falling objects due to insecure storage on shelves
- Lack of Injury and Illness Prevention Plan, which is a written safety plan

Challenges of immigrant workers

Ling noted specific challenges related to Cal/OSHA's interactions with immigrant workers include:

- They lack trust in Cal/OSHA because they are not familiar with this agency.
- They are often unaware their rights in the workplace.
- They are very motivated to work and do not want to jeopardize their job by speaking up about workplace safety hazards.

- Employers intimidate employees and provide incentives for employees to withhold information about worker health and safety from Cal/OSHA.
- Latino workers are often more likely than Chinese workers to share information with Cal/OSHA inspectors. He is not sure why this is the case, but believes that there may be cultural reasons for this.

V. Community-based organizations

Restaurant Opportunities Center of New York (ROC-NY)

Saru Jayaraman is the Executive Director of the Restaurant Opportunities Center of New York (ROC-NY). ROC-NY has done extensive community-based research with restaurant workers in New York City (NYC). The purpose of ROC-NY's research was multi-fold. ROC-NY wanted to understand working conditions and payment of wages from the worker perspective, establish ROC-NY as a credible expert on labor conditions in NYC restaurants, and hoped to use surveying as an outreach method to gain more members.

One of the challenges with surveying was achieving a sense of random sampling of restaurant workers. Jayaraman acknowledged that random sampling was not possible, but that it could be approached by doing street outreach.

An important result of ROC-NY's research is that they raised awareness in the NYC restaurant industry about worker health and safety. After the first study, the organization disseminated results to a diverse audience including restaurant owners, associations, lawyers, and workers through a restaurant industry summit.

ROC-NY is also involved in policy work. It is currently advocating a bill that would result in restaurant owners in NYC losing their city health license to operate if they get three or more labor law violations. This organization is pushing this legislation based on their study showing that workplace with many labor law violations also tend to have many food safety violations.

Koreatown Immigrant Workers Association (KIWA)

Tritia Park is a Community Organizer at Koreatown Immigrant Workers Association (KIWA). KIWA has a history of labor organizing with workers in Koreatown, which is located in Los Angeles, CA.

KIWA is currently conducting a survey with Korean and Latino restaurant workers employed by Koreatown restaurants that are Korean-owned and that serve Korean food. KIWA hopes to survey 200 workers total, including 50 Korean workers and 150 Latino workers. The purpose of this survey is to use results to design worker health and safety training involving the workers and managers. The plan is to design culturally appropriate health and safety trainings based on the content of the Cal/OSHA trainings.

KIWA faced several different challenges when surveying workers. First, organizers found it more difficult to survey workers that organizers do not know previously. In addition, the attempt to partner with restaurant owners at first did not work out very well

with some of the larger restaurants. Some owners viewed this survey as a threat to their business, and reacted with defensiveness. They felt the findings could result in pointing fingers and blame put on particular restaurants. However, KIWA was not collecting the names of any restaurants on the survey. Also the restaurant categories on the survey were sufficiently vague to prevent those reading the results from being able to link results to specific restaurants. Furthermore some workers did not feel comfortable giving open and honest information when the survey was conducted at the workplace.

The survey data collection and data analysis are presently not complete.

Recommendations from key informants

I. Dr. Lowe

Further scientific research should be conducted to explore this possible connection. He also recommended first looking at scientific studies exploring "glassblower's disease," which is occupational cataracts caused by exposure to light and heat emitting from flame used by glassblowers.

II. Professor Jenny Tsai

a. *Outreach:* She found it necessary to be extremely flexible with time and location of the meeting. To make workers feel comfortable, she also did not ask about workers' immigration status or for their Social Security numbers.
b. *Interview process:* Avoid using certain terminology such as "dangerous," "health," and "safety." She found that workers often did not immediately associate their jobs with these terms. When she posed open-ended questions with these terms, she received limited responses. Instead, she found that it was helpful to use examples related to areas that workers were interested in.

III. ROC-NY

a. To recruit restaurant workers, those administering the survey stood outside restaurants in busy commercial districts, and also followed workers on their subway rides home.
b. In order to conduct a study with academic and scientific rigor, from the beginning bring together a coalition of academics, policy makers, and workers to prepare for the study. Recruit PhD academics as primary advisors for the study to give report credibility in the scientific community.
c. Draw upon membership base to assist with surveying. ROC-NY only had 2 full-time staff members to coordinate the surveying. Therefore, the organization trained about 25 worker members to do surveying.

IV. KIWA

a. Successful strategies to contact workers include: 1) Talking to workers during their off time, either before or after work, at a location outside the

workplace, or 2) Asking current KIWA members to invite friends and co-workers who work in the restaurant industry to take the survey.

b. Train organizers to have a "rap" that they say when they talk to workers. During this rap, organizers explain to workers that they hope to use survey results to improve conditions in restaurants. Workers can benefit from hearing about services offered by the organizers' community organization.
c. Give each survey participant a small prize such as a mug or phone card as a token of appreciation for participating.
d. When trying to convince restaurant owners that health and safety training is good thing, emphasize how training will help reduce costs to restaurant owners because there will be decreased injuries, increased productivity, and fewer workers' compensation claims.

Detailed findings

Inspections

I. Food safety inspections

Background
The San Francisco (SF) Department of Public Health, Environmental Health Section, has the mandate to protect the health of the general public by enforcing food safety regulations. Each inspector has a different district to oversee. Each district has roughly 300-350 food service establishments. Therefore, an inspector is usually able to visit each food service establishment in his/her district once per year.

List 1. Food safety concerns at restaurants

- Cross contamination of different kinds of meats when defrosting
- Indoor mold growing on ceilings
- Water temperature of dishwashing system are not hot enough to disinfect dirty dishes
- Storage of raw and cooked foods in same space that can result in cross contamination
- Use of water used to hydrate noodles to wash hands
- Leaving food in containers on the floor
- Rodent droppings found throughout the restaurant
- Sinks used for washing vegetables were not clean
- Sinks used for employee hand washing not available for use or lacked soap
- Unapproved cutting board used
- Improper defrosting of seafood

List 2. Topics covered by the education sessions for kitchen staff

- How to keep knives clean and safe to use
- Proper concentration of bleach and water needed to disinfect dishtowels
- Proper method to clean wooden chopping block
- Proper usage of chopping boards
- Proper cleaning of cooking equipment and utensils
- Proper storage of cooked and raw food
- Proper habits around water in the workplace
- Proper concentration of chlorine for dishwashing machine
- How to prevent cross-contamination
- How to get rid of rodent pests and deal with rodent infestation
- No eating while working

List 3. Topics covered by the education sessions for food servers

- Handling of drinks and dishes: Important not to have fingers in the drink cup or on the serving plate.
- Proper hand washing

- Sneezing precautions to avoid food contamination
- Proper food storage
- Important health risk to food servers: communicable diseases

List 4. Advantages of utilizing this food safety training include worker health safety

- Follow-up education sessions on food safety are scheduled immediately if the inspector feels that it is necessary. In this case, education sessions occurred two weeks after the inspections
- All food handlers in the restaurant are required to attend. Thus, it is very likely that almost all employees in the restaurant that are at risk for occupational injury will attend the session.

List 5. Effective techniques that he used which should be incorporated into possible future worker health/safety presentations

- Usage of colorful props to show the different kitchen animal pests.
- Doing a walk-through of the kitchen. Asking employees about their current habits and to physically demonstrate their behavior around food safety at specific locations such as the chopping board, walk-in refrigerator, and hand washing sink.
- Emphasize the economic advantages of having a healthy, clean workplace and good food safety habits. Examples include: Workers want tips. In order to get tips, workers should practice good hygienic food handling. It prevents customers from being disgusted and made physically ill by poor food handling. Also, you want to take care of your own health to avoid getting sick and missing work. If you get sick, you don't get paid.
- Need for workers to be peer educators. Workers need to remind and teach each other about good food safety practices.

List 6. Cultural insights by food safety inspectors

- Cultural attitudes among Chinese immigrants include:
    - Profit and making money are the primary motivating factors for restaurant owners in Chinatown.
    - Restaurants owners, managers, and employees don't want to throw anything away because they don't want to waste any money.
    - People are accustomed to congestion, crowding, and marginal sanitation conditions.

- Work organizational concerns include:
    - Workers might not feel comfortable in speaking up about a dangerous situation or letting their employer know about an injury.
    - Cook has a great deal of control over the restaurant. If the cook decides not to cook or decides to quit and leave the restaurant, an owner can be in trouble.
    - There tends to be tension between the owner and the cook. Also, there can also be issues of sexist attitudes between male cooks and female owners. It can be difficult for a female owner to be respected.

- Specific aspects of Chinese cuisine include:
    - There are many different dishes that must be prepared for customers. There is more variety with Chinese restaurants than some other cuisines. This puts pressure on cooks and kitchen helpers because they must prepare things constantly in order to keep customers happy.
    - Also Chinese cuisine tends to use a lot of cottonseed cooking oil. This leads to serious grease build up on floors, countertops, and ovens.

- Some of the unique challenges to restaurant due to their location in Chinatown include:
    - Because many of the buildings are old, there are many holes or vulnerable parts of the wall that rodents can either crawl or chew through.
    - When handling garbage, there's a danger of silicosis from handling garbage cans covered with pigeon droppings.
    - High rent for some restaurant locations. Therefore some restaurants must be open for extended hours or seven days a week in order to make profit. This puts a lot of pressure and stress on workers and on owners.

II. Fire safety inspections

List 7. Fire safety checklist

- Last service date of fire extinguishers, fire hoses, sprinklers, and fire alarms
- Electrical outlets should not be open and exposed
- Clear, unobstructed exit doorways and hallways. Doors should also be are easy to open and should open in both directions.
- Expiration date for restaurant's licenses for public assembly and restaurant
- Structural integrity of the building
- Maintenance of ventilation and exhaust system. This system should be regularly steam cleaned and treated with grease remover. This is important to make sure that air moves effectively through the system and reduces fire risk.
- For buildings with occupancy load is for 50 people or greater, also check:
    - Exit signs should be clearly marked.
    - Occupancy sign showing how many people are allowed should be clearly posted.
    - Fire department needs to check exit doors annually so that restaurant can maintain license.

List 8. Fire hazards at Restaurant C

- Ceiling tiles were moldy and had visible water damage. Mold is undesirable because it can alter the flow of air. Thus, hot air may be able to escape through gaps in the ceiling during a fire. So instead of experiencing a rise in temperature, the ceiling stays cooler than it should. Even if there is a fire, automatic sprinklers may not be immediately triggered and the response may be delayed.
- Grease was building up on the filters on the top of cooking grills. The grease on the filters was visible.

- The restaurant failed to post the maximum occupancy load on every floor.
- Fire alarm panel was difficult to see because it blended into wall decorations
- Exit signs and emergency signs near elevators are not bilingual in both English and Chinese.
- Dirt and dust build up was found on ventilation system.
- Fire suppression system in one of the kitchens was out of service. There were fire extinguishers, but these are only temporary remedies.
- One set of cooking grills had a system pouring water down the walls at the back of the cooking grills. This mini-waterfall on the walls prevents the buildup of grease. However, unfortunately this system was not completely maintained and the water was not flowing at the system's full capacity.

Key informant interviews

I. Health care

Upon Dr. Lowe's recommendation, we conducted a literature review exploring the different risk factors for occupational cataracts. Most literature has to do with cataracts or other eye problems in professions such as welding and glassblowing. There is also some literature looking at the connection between exposure to cooking smoke from biomass stoves and the development of eye problems, especially among women in developing countries.

II. Academic research

Outreach

In order to recruit workers, Dr. Tsai utilized social connections of her study coordinator, who was a medical interpreter. A challenge in her research was contacting and scheduling workers for interviews.

Findings

Some of Dr. Tsai's findings from her study in Seattle are similar to our findings in San Francisco. Workers in both locations are not conscious of environmental and occupational health. They often do not feel that their workplace is hazardous or dangerous. In addition, workers tend to be more aware of hazards when they feel physically such as heat.

Work organizational environment and management style mentioned by participants include pace and demands of work. If the restaurant gets busy, employees are encouraged to work more quickly and faster. Also, workers in both locations mentioned that often there is very little or no training on job tasks or worker health and safety. All of these factors create an environment conducive to worker injury.

Participants described the hierarchy like this: Because cooks control the quality of the food, owners often are most dependent on their cooks. Thus some cooks use this control to treat other employees with verbal abuse. In addition, there can also be conflicts and rivalries among workers that come from different regions of China.

Dr. Tsai's specific findings to Seattle include: Immigrants with fewer social connections with established members of Chinatown tended to look outside of Chinatown to find a job. These immigrants found that employers outside of Chinatown often valued workers who spoke English in addition to Chinese.

III. Government agencies

Background

Ullerich is a safety engineer with the Cal/OSHA Consultation Service, which offers free, confidential advice to business owners and employers about how to improve their workplace health and safety.

Ling is a safety engineer with the Economic and Employment Enforcement Coalition (EEEC). Ling also speaks Chinese. The EEEC composes of Cal/OSHA, the Employment Development Department (EDD), and Division of Labor Standards and Enforcement (DLSE). Each month the EEEC conducts "sweeps," which are surprise inspections of a specific industry in a certain geographic location within California in 1 of 7 high-risk industries. During these sweeps, EEEC investigates employer tax compliance, workers compensation, wages, and breaks in addition to worker health and safety.

Prioritization and targeting

Cal/OSHA Consultation Service targets specific businesses based on their worker health and safety record. Ullerich explained that Cal/OSHA Consultation Service sends written letters to employers with large numbers of losses noted in workers compensation records. This letter invites employers to contact Cal/OSHA for a consultation on how to improve their worker health and safety. In addition, an employer can also contact Cal/OSHA Consultation Service directly for help.

Ling discussed how the EEEC seeks out workplaces that lack workers compensation, have wage violations, and have workers reporting complaints.

Common restaurant worker health and safety hazards

More details on electrical hazards include:

- Exposed electrical outlets, including missing cover plates on electrical outlets
- Electrical panels have missing covers
- Electrical wiring is done by an employee instead of a qualified electrician
- Electrical extension cords are run everywhere instead of building more hard wired electrical outlets

Challenges of immigrant workers

According to Ling, specific methods that employers use to intimidate employees include:

- Employers to intimidate employees include telling employees that Cal/OSHA inspectors are immigration authorities. This encourages employees not to talk to Cal/OSHA.
- Employers give Chinese employees cash payments to not talk to Cal/OSHA inspectors.

IV. Community-based organizations

Restaurant Opportunities Center of New York (ROC-NY)

Study designs
The first survey by ROC-NY focused on finding out about wages and working conditions in NYC restaurants from the workers' perspectives. About 530 workers participated in the first survey. The resulting report was called "Behind the Kitchen Door: Pervasive Inequality in New York City's Thriving Restaurant Industry" (January 2005). Their second study looked at the connection between labor law violations and food safety violations at restaurants. About 300 workers participated in the second survey. The report from this survey was called "Dining Out, Dining Healthy: the Link Between Public Health and Working Conditions in New York City's Restaurant Industry" (April 2006).

Outreach strategy
ROC-NY conducted extensive census research to determine the demographics of NYC restaurant workers. Workers were then sought out to fulfill the different proportions of demographic categories according to census group categories.

Best practices
From the beginning, ROC-NY was interested in conducting a study with academic and scientific rigor. Thus, ROC-NY brought together a coalition of academics, policy makers, and workers to prepare for the study. The organization also recruited 2 PhD academics as primary advisors for the study. These PhD advisors give the resulting report credibility in the scientific community.

In addition, ROC-NY also drew upon their diverse, extensive membership base to assist with surveying. ROC-NY only had 2 full-time staff members to coordinate the surveying. Therefore, the organization trained about 25 worker members to do surveying. Because ROC-NY's worker members speak a variety of different languages, workers were able to do outreach and surveying in their respective communities. Each worker member who conducted was given monetary compensation for their time spent surveying.

Challenges
Jayaraman acknowledged a difficulty in relying on worker members to do street outreach is that ROC-NY experienced an overrepresentation of Latino restaurant workers in the first survey because of the large number of Latino ROC-NY members who were doing surveying.

Findings and moving forward
In addition to their summit, ROC-NY also formed the Restaurant Roundtable, which comprises of ROC-NY and owners who are interested in treating workers well. The Restaurant Roundtable created a manual outlining the legal obligations of owners to workers, and distributed them to all restaurant owners in NYC.

Koreatown Immigrant Workers Association (KIWA)

Culturally appropriate worker health and safety training
KIWA pointed out that a weakness of the Cal/OSHA trainings is that they are fairly general and do not necessarily give specific examples that apply to Korean restaurants. For example, Korean tofu houses use stone pots that require special precautions to avoid burns.

Outreach strategy
Originally, KIWA aimed to partner with restaurant owners to do the survey. Consequently, KIWA talked to owners to gain permission to survey workers at workplace. However, KIWA also used different strategies including: 1) Talking to workers during their off time, either before or after work, at a location outside the workplace, or 2) Asking current KIWA members to invite friends and co-workers who work in the restaurant industry to take the survey.

Best practices
Some surveyed workers appreciated hearing about the different services that KIWA offers. KIWA also used surveying as an opportunity to educate workers through a variety of materials:

- Workers rights booklet that covers basic labor law, was created by KIWA
- Comic book that covers scenario in which Latino and Korean workers who work in Koreatown come to KIWA, was created by a UCLA student
- One page list of referrals for different services related to immigration, health care, tenant resources, workers compensation, tax preparation
- Invitation to workers who are interested in finding out more about worker rights or social services to come to KIWA

Limitations and challenges

I. Selection bias

One limitation of this study is selection bias. Selection bias occurred because we only interviewed workers that were associated with CPA. Some of the workers interviewed were involved in past CPA campaigns to receive back wages that were withheld from workers. Other workers became associated with CPA's efforts to organize tenants in SROs. In these organizing efforts, Peer Organizers (PO's) are hired to do home visits and organizing work among SRO residents.

II. Limited access to restaurants and workers

Another challenge of this study was that access to restaurants and workers was limited. We were not able to enter restaurants and look at the kitchen facilities without accompanying food safety or fire inspectors. Thus, we were not able to visit as many restaurants as we would have liked. In addition, we could not talk to all workers that we came into contact with. For example, when on inspections, it was usually not possible to talk to workers. During this time, most workers were actively working or under constant supervision by managers, so they did not feel comfortable talking about their health and safety concerns.

III. Lack of employer perspective

In addition, during this study, we did not interview restaurant employers or managers. Thus, we were not able to gather their perspectives on worker health and safety. In the future, it will be very important to consider their opinions when designing and implementing intervention.

IV. Many different factors at work

A key challenge with this population is realizing that there are many different factors that affect the health and safety of workers. It is important to recognize that housing conditions, wage conditions, and poverty affect worker health and safety. Furthermore, it also must be acknowledged that fire and food safety not only affect the general public, but also affect worker health. It is also essential to design solutions for worker health and safety that are compatible with food and fire safety concerns.

Strengths and successes

I. In-depth worker information

Last year's OHIP interns conducted focus groups with workers. The benefit of focus groups is that they are able to gather a large breadth of information. In contrast to last year, this year we were conducted 1-on-1, in-depth interviews. There was a range of responses from different participants, from being very interested in talking to us for long periods of time to more guarded and only willing to provide limited amounts of information. The advantage of these interviews was that we were able to ask detailed questions from workers who were willing to share. These conversations helped us get an extensive understanding into the experience of workers. Some of these interviews took place in people's homes. Consequently, we were also able to get a more complete view of the living conditions and lived experiences of different workers.

II. Bilingual inspectors and educators

This year we also had the opportunity to shadow food and fire safety inspectors, as well as educators that were bilingual. An advantage to this was that we were able to see these individuals speak directly with workers, managers, and owners. There was appreciation from the workers, managers, and owners towards the inspectors and educators that could speak Chinese. Many of these workers seemed very engaged and interested in receiving training from someone who could directly speak their language instead of going through a translator.

III. Partnership with Chinese Progressive Association (CPA) and UC Berkeley Labor and Occupational Health Program (LOHP)

An advantage of this project was the opportunity to work with CPA. CPA has a history of working closely with the Chinese immigrant worker community on past efforts such as back wage campaigns and the fight to raise the minimum wage in San Francisco. In addition, CPA employs Peer Organizers (PO's). PO's often have built rapport with workers through repeated visits and numerous conversations. Thus, when we accompanied PO's on their home visits to interview workers about their health and safety, often workers were willing to share information with us. In addition, PO's often introduced us to workers and provided extra explanations or prompting when workers had difficulty understanding or responding to our questions.

Our close relationship with CPA during this internship also allowed us to work at the CPA office located in Chinatown, rather than being based out of the DHS office at Richmond. Thus, we were able to witness and participate in other CPA activities such as language training sessions, political education workshops, and support another summer intern working on a political action targeting the Gap. Also, our location made it easier to meet with workers at the CPA office and to visit their homes for interviews.

Furthermore, we also greatly benefited from having Pam Tau Lee from LOHP as our academic mentor. She provided essential insight on how to link our activities with CPA, a community-based organization, to our goals and objectives as OHIP interns. She also

provided important personal contacts so that we were able to meet with SF food and fire safety inspectors.

IV. Diverse, knowledgeable partners and key informants

One strength of this project was communication with a wide range of individuals. We were in contact with other community-based organizations, such as ROC-NY and KIWA, which also work with restaurant workers. Thus, we were able to draw upon the successful work of other organizations when designing and implementing our project. We were also working closely with individuals from many different areas of expertise, such as food and fire safety. The advantage of this was that we were able to get a more realistic picture of the complexity of the environment which affects workers health and safety.

Recommendations

Summary

Based on our research this past summer, we have several recommendations:

- More collaboration and communication between different enforcement agencies including Cal/OSHA, SF Department of Health (Environmental Health Section), and SF Fire Department
- Expand food safety educational sessions conducted by the SF Department of Health, Environmental Health Section to include information on worker health and safety
- Have inspectors from various different agencies mentioned above pilot test the revised, prioritized checklist in actual restaurants.
- Offer job training for current restaurant workers in other fields with better working conditions and wages
- Contact more medical staff and health educators that work with the Chinese immigrant population

Detailed recommendations

I. More collaboration and communication between different agencies

There are various agencies that visit Chinese restaurants for different purposes. Though they have different public health mandates in mind, many of their interests are overlapping. For example, cleanliness of kitchens and maintaining the structural integrity of the building is a concern for food safety, fire safety, and worker health and safety. Thus it seems appropriate for these different agencies to meet together and consider how they can work collaboratively. One possible model for collaboration is the EEEC. For EEEC, various California state agencies inspect workplaces to examine compliance with laws for wage payment, workers compensation, as well as worker health and safety. It may be helpful for local agencies to conduct inspections of workplaces together to look at these different aspects as well.

Cal/OSHA should cooperate with different agencies such as food and fire safety agencies because of their limited resources. Currently Cal/OSHA does not target the restaurant industry or small businesses as high priorities. However, local food and fire safety inspectors visit restaurants more frequently. For example, on average, each restaurant is inspected at least once a year by food safety inspectors. Therefore, it makes sense to utilize food and fire safety inspections and education sessions as opportunities to disseminate information on worker health and safety.

II. Expand food safety educational sessions

Our suggestion is that worker health and safety tips be incorporated into the existing food safety curriculum taught by SF health department food safety educators. This curriculum is required at restaurants with serious food safety violations. This curriculum is also part

of a food safety certification course that must be taken by at least one food handler at each retail food establishment according to California law. There are several reasons why food safety educational sessions should be considered as a method to educate workers about their health and safety:

- Research by ROC-NY suggests that restaurants with food safety violations often have labor regulation violations.
- Food safety educational sessions often occur in a short time period after the initial food safety inspection.
- Some topics covered by health educators already cover worker health and safety topics such as the reducing the risk of infectious disease for customers and workers by hand washing.
- Restaurants with serious food safety violations must require all its food handling employees attend food safety sessions in order to get into compliance. Thus, the participation rate of workers will be high.

III. Pilot revised checklist

Another important step is having inspectors from various different fields, including fire safety, food safety, and worker health and safety, pilot test the revised, prioritized checklist in actual restaurants. It is important to see how feasible it is for inspectors with busy schedules and limited time to use the checklist, especially if worker health and safety is not their primary concern. It will also be helpful to get the opinions of more Cal/OSHA inspectors on the way that we prioritized the different hazards. For this project, we were only able to gather a response from one Cal/OSHA Consultation Service safety engineer.

IV. Job training for current restaurant workers

In addition, many restaurant workers expressed interest in job training to gain the skills need to obtain jobs with fewer hazards and better wages. Thus, it is also important to consider that restaurant workers do not necessarily want to stay in their current jobs and would like to have the skills for more job mobility. It also may be possible to use job training as an opportunity to talk about health and safety concerns in their current jobs.

V. Contact more medical staff and health educators

We were interested in better understanding the perspectives of medical providers and health educators that serve the Chinese immigrant population. These individuals provide important information about the health concerns and cultural perspectives of this specific population. Unfortunately, we did not receive a reply from any of the health educators in community health clinics and public health departments that we contacted. However, we were able to contact one medical provider, an optometrist. In the future, more effort should be made to contact health educators.

References

Ammonium carbonate (http://www.jtbaker.com/msds/englishhtml/a5688.htm)

San Francisco Department of Health, Environmental Health Section, Food Safety Program
(http://www.dph.sf.ca.us/eh/FoodSafety.htm)

Appendices

Appendix 1: Key informant interview guide

1. **Introduction**
    a. Hi, my name is _____, and I am a summer intern with the Chinese Progressive Association (CPA). This summer I am working with CPA to better understand health and safety issues among Chinese immigrant restaurant workers.
    b. I am interested in conducting an interview with you to learn more about _____ (organizing, outreach, research, medical care) that you have done (or do) with (Chinese immigrant) restaurant workers.
    c. This interview should take about 20-30 minutes. Your input is needed to help us design a survey for workers and to develop an outreach strategy. Are you interested in participating?

2. **General questions for all participants**
    a. I am particularly interested in the attitudes and beliefs that low-income, Chinese immigrant restaurant workers have that are different from the general population and other immigrant populations. I would also like to learn about specific cultural attitudes and beliefs among these workers that may influence how they deal with workplace injury and illness.
    b. What do you think are the unique attitudes that this population has regarding general health and well-being? about general injury and illness?
    c. What do you think are the unique attitudes that this population has regarding workplace injury and illness?
    d. According to your observations, where does this population seek medical care for workplace injury and illnesses?
    e. What are some barriers that this population faces when seeking medical care?

3. **Specific questions for health educators**
    a. I am interested in learning about your experiences as a health care educator for the Chinese immigrant community.
    b. What types of general health issues do you educate your clients about?
    c. What kinds of health issues do your clients seem most concerned about?
    d. What kinds of occupational health issues do you discuss with your clients?
    e. When you discuss occupational health issues with your clients, what types of words or phrases do you use?

4. **Specific questions for health care providers**
    a. I am interested in learning about your experiences as a health care provider for the Chinese immigrant community. Depending on your training and practice as either a Western medical doctor or Eastern medical doctor, please answer the following questions.

b. What is your approach or philosophy to diagnosis and treatment of work-related, occupational injuries and illnesses?
c. What are the demographics of the population that you treat? (Race/ethnicity, gender, age)
d. What are the most common occupations of your patients?
e. Are there any patterns connecting certain occupations and worksites with a high number of injuries? For example, have you noticed that many of your patients work at particular restaurants?
f. What kinds of health complaints do your patients seem most concerned about and feel are most urgent?
g. When workers bring up occupational health complaints, how do they describe what's wrong with them? What types of words or phrases do they use?
h. How often do you receive work-related, occupational health complaints?
i. What is the degree of severity of these occupational health complaints? Please give an example of a minor health complaint and an example of a serious health complaint that you have seen.
j. Among this population, what are the most common methods of payment for medical care? For example, do patients tend to pay out of pocket or with health insurance?
k. Do your patients tend to use more than one system of health care? For example, if you are a Western medical doctor, do you know if your patients are also seeking additional care from Eastern medical doctors? If yes, do you know the particular Eastern medical doctors that they are visiting?

5. Specific questions for community-based organizations or academic researchers that have gathered information from the workers

a. What was your outreach strategy?
b. Who was your target population of workers?
c. What was the purpose and objective of your data collection?
d. What are best practices when it comes to surveying or talking to workers about their workplace safety and health issues?
e. What are the challenges and barriers to being able to contact workers?
f. What were the main topics that you surveyed workers about?
g. If you could conduct your research again, what information did you wish you had collected?

Appendix 2: Worker interview guide

Restaurant Worker Questionnaire (Updated July 14, 2006)
Participant: _____
Location of Interview:_____
Date:_____

General

1) Do you work in a restaurant? If no, do you have any friends or relatives that work in a restaurant?
   ? ?
   a)
2) When did you come to the United States?
   ?
   a)
3) Which part of China are you from?
   ?
   a)
4) Who are the members of your family and what do they do? If you have children, how old are they? If you have a spouse, what is their employment?
   ? ?
   a)
   b)
   c)
5) What is your job history? What other jobs have you had in the past?
   ? ?
   a)
   b)
   c)

Current Restaurant Job

6) How long have you worked at your current restaurant job? How long do you work per day?
   ? ?
   a)
   b)
7) How did you obtain your job?

   a)
   b)
8) What kind of tasks do you do at your job?
   ?

a)
b)

9) Which is your most strenuous task at your job?
?
a)
b)

10) Which part of your body do you think that you use the most at your job?
?
a)
b)

11) How many breaks do you take? How long? Are you provided water or a break room? Do you feel like you have sufficient breaks?
? ? ? ?
a)
b)
c)

Occupational Health and Illness History

12) Do you think that this job has impacted your health significantly?
?
a)
b)

13) Do you feel that your job is dangerous to your health mentally or physically?
?
a)
b)

14) What aspects of your job do you think affect your health?
?
a)
b)

15) What is the most common injury you experience on the job?
?
a)
b)

16) If you got injured on the job, how do you cope with this?
?
a)
b)

c)

17) If you are feeling physical pain or mental stress long term, how do you cope with this?

?

a)
b)
c)

18) Do you feel comfortable asking your employer for help or time off when you have a work-related health problem?

a)
b)

19) Has your employer ever discouraged you from getting medical help for work-related illnesses or injuries?

?

a)
b)

20) Have you talked to your co-workers about their health at work? How do you view your co-workers health?

? ?

a)
b)

21) Do you ever ask your co-workers for help if you need it?

?

a)
b)
c)

Workplace practices that endanger food safety and public health

22) Did you receive worker health and safety training?

?

a)
b)

23) Do you frequently feel pressure to cut corners in a way that could potentially harm the customer? (ie. Do you frequently feel that you must rush or do things unsafely to keep up the pace of the work environment?)

?

a)
b)

24) Do you frequently have to perform several jobs at once?
?

a)
b)

25) Is the restaurant you work at frequently understaffed?
?

a)
b)

26) Do employees at the restaurant you work at frequently handle food improperly?
?

a)
b)

27) Does the restaurant you work at frequently serve bad food to customers? Bad food includes food that is dirty, expired, spoiled, or leftover.
? ( )

a)
b)
c)

Reform

28) If you could change any physical part of this kitchen/work environment, which would it be? Why?
? ?

a)
b)
c)

Medical care

29) When you do see doctor for a work related health problem, is it usually eastern or western?
?

a)
b)

30) How did you find this doctor?

a)
b)

31) How do you or your family members have serious health problems? (ie. Diabetes, high blood pressure, cancer, asthma) If yes, how do you treat these problems?
?

a)
b)
c)

Job training

32) Are you interested in learning about new skills to help you find a new job or improving the conditions about your current job?

a)
Time available:
b)

Wages, Labor law compliance

33) Does your current employer pay you minimum wage? Minimum wage in San Francisco is currently $8.82.
?

a)
b)

34) Does your current employer pay overtime for work over 40 hours a week?
?

a)
b)

35) Has your current employer ever discriminated against you for any reason? (ie. on the basis of race, ethnicity, gender, age, sexual orientation, immigration status, language, religion, or politics)
?

( )

a)
b)
c)

Other

36) Other comments:

Appendix 3: Prioritized inspection checklist

DRAFT *Chinatown Restaurant Worker Safety Checklist*

Updated August 2, 2006

A) General Information

IA.	Inspection Date:	__ __/__ __/__ __ __ __ MO./DAY/ YEAR
IB.	Inspector Name(s):	
IC.	Restaurant Name:	
ID.	Inspection Start Time:	__ __:__ __ AM / PM
IE.	Number of Employees:	__ __ EMPLOYEES

B) Burn and Electrocution Hazards

High risk
Do workers have dry potholders, gloves, mitts, or rags to prevent burns?
Do workers stand at an appropriate distance from hot cooking oil and take caution not to lean over oil?
Are electrical cords and plugs in good condition?
Is the fire emergency system (ie. sprinklers and alarms) in good, working condition?
Moderate risk
Is there an emergency eye wash system in the kitchen?
Are there splash guards on fryers?
Low risk
Are range tops uncluttered and not overcrowded with cookware?
Is fryer oil covered when not in use?

B) Cut Hazards

High risk
Is there proper storage for knives (counter or wall racks or storage blocks)?
Do sliders, grinders or food processors have machine guards?
Are there risers if needed to make cutting area height appropriate for chopping?
Moderate risk
Do workers use cut-resistant gloves?
Are glasses, bottles, and dishware away from areas with a lot of traffic?
Are outcomes, housing, and blades in good condition?

C) Slip and Fall Hazards

High risk
Are there sufficient quality non-slip mats (raised with drainage holes) in good condition in areas that could get wet?
Are there non-slip surfaces on handrails and stairs?
Are floors dry and clean, instead of wet and greasy?
Are floors and steps in good condition?
Moderate risk
Are walkways free of clutter?
Is there good lighting in work areas?
Are there adequate floor drains?

D) Ergonomic Hazards

High risk
If necessary, are there footstools and ladders available?
Are there food storage areas that are easily accessible? (ie. Accessible by means besides a ladder)
Moderate risk
Are workers carrying pans or trays loaded with an appropriate amount of food and dishes?
Low risk
Is there a garbage chute?

D) Other Hazards

High risk
Is there adequate ventilation?
Do workers have adequate clothing and shoes to protect them?
Are Emergency Numbers posted?
Are there sufficient unblocked emergency exits?
Are there sufficient fire extinguishers?
Are there first aid kits accessible to workers?
Moderate risk
Is kitchen temperature at a comfortable temperature?
Low risk
Are there surveillance cameras or mirrors?

E) Inspector Comments

Did you observe or learn anything else about safety hazards at this restaurant that is not captured above?

IE.	Inspection End Time:	__ __:__ __ AM / PM

San Francisco Restaurant Health and Safety Checklist

Inspection date & time: __ __/ __ __/ 2008 __ __: __ __ AM/PM (circle one)
Month/ Day

Restaurant Name: _____

Inspector Name: _____

Number of Employees: Kitchen: M: ____ F: ___ Restaurant: M: ___ F: ____

1. Are the following posters visible where employees can read them?

a.	SF Minimum Wage Ordinance	❑ No ❑ Yes	In Chinese?	❑ No ❑ Yes
b.	SF Paid sick leave	❑ No ❑ Yes	In Chinese?	❑ No ❑ Yes
c.	Worker's Compensation information	❑ No ❑ Yes	In Chinese?	❑ No ❑ Yes

2. Do workers have dry potholders, gloves, mitts, or rags to prevent burns?
❑ No
❑ Yes

3. Are cooks wearing long sleeve shirts or cook jackets?
❑ No
❑ Yes

4. Are range tops overcrowded with cookware?
❑ No
❑ Yes

5. Are there non-slip mats?
❑ No
❑ Yes

6. Are floors dry, instead of wet and greasy?
❑ No
❑ Yes

7. Is there proper storage for knives (counter or wall racks)?
❑ No
❑ Yes

8. Are there footstools or ladders available to reach food in storage area?
❑ No
❑ Yes
❑ No needed

9. Are the restaurant's exits unblocked?
❑ Yes
❑ No

10. Is there adequate ventilation?
❑ No
❑ Yes

11. Is there adequate lighting?
❑ No
❑ Yes

12. Are there fully stocked first aid kits accessible to workers?

- ❑ No
- ❑ Yes

13. Do slicing machines, grinders or food processors have machine guards?

- ❑ No
- ❑ Yes

Notes

Health and Safety in San Francisco's Chinatown Restaurants

Findings from an Observational Survey

WORKING PAPER

San Francisco Department of Public Health

July 2009

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Introduction

Although restaurants are one of the largest and fastest growing industries in the United States, little research has been conducted on occupational safety of restaurant workers (1-5). Eating and drinking establishments employ 11.5 million individuals, or 8.5% of the nation' labor force,[1] and workers in this industry account for 6.4% of all reported injuries and illnesses nationwide.[2] In the San Francisco metropolitan region, eating and drinking establishments employ 9.2% of workers and represent the largest number and percentage of average annual job openings in the San Francisco-San Mateo-Redwood City area.[3] Workers in this industry have the lowest median hourly wage ($10.03/hr) which is less than half the average median hourly wage for all private industries in the metropolitan region ($22.20/hr). Nationally, 64% of workers in food preparation and serving-related industries make less than $9.50 per hour and 92.2% of all workers in this industry make less than $15.25 per hour.[4]

Known common physical hazards and injuries in eating and drinking establishments include sprains and strains from falls, slips, and lifting; cuts from knives and food processors; and burns (6) *(See Appendix 2)*. While not recorded by traditional occupational injury statistics, restaurant workers also report psychosocial stress and work for many is characterized by high demands and low levels of autonomy (7).

Immigrant workers often experience greater exposure to occupational injury and illness hazards because they commonly perform more dangerous and physically demanding tasks and have limited English and formal education (4, 8). Rates of injuries calculated by the Occupational Safety and Health Administration (OSHA) are believed to seriously underestimate the actual frequency of work-related injury and illness among immigrant workers because of language, awareness of rights, and other barriers to injury reporting (9, 10). Furthermore, recent studies of federal surveillance systems have suggested that the U.S. Bureau of Labor Statistics underestimates non-fatal occupational injuries by as much as 70% (11, 12).

If injured, many immigrant workers may face substantial barriers to filing workers compensation claims, such as: lack of knowledge or information about workers compensation and work related health issues; language barriers; complicated process for filing claims; fear of retaliation; and fear of deportation (13). At the same time, numerous employers lack awareness of their legal requirements to protect workers or disregard these requirements. In addition, state and local laws designed to protect and promote worker health and safety often go un-enforced by federal and state enforcement agencies that lack sufficient funding to do regular inspections. Recognizing that current national and state occupational injury surveillance systems significantly underestimate the number of work-related injuries and illnesses among immigrant workers, immigrant worker organizations in San Francisco, Los Angeles, New York, Oregon, North Carolina and other locations across the United States have begun conducting worker-designed and administered surveys, focus groups, and interviews to document violations of workers rights and workplace conditions (5).[6]

Ethnic Chinese constitute one of the largest and fastest growing immigrant populations in the U.S. and restaurants are one of the largest employers of immigrant Chinese workers (8, 14). Recognizing the hazards and barriers to labor rights faced by Chinese restaurant workers, the Chinese Progressive Association (CPA), the UC Berkeley School of Public Health and its Labor Occupational Health Program (LOHP), and the UCSF Division of Occupational and Environmental Medicine, along with the San Francisco Department of Public Health (SFDPH)'s Program on Health, Equity, and Sustainability, initiated a community-based participatory research project to identify and prevent workplace health and safety hazards in San Francisco's Chinatown Restaurants.[7] In addition to staff from each of the

organizational partners, research interns were hired through the Occupational Health Internship Program (OHIP) to support preliminary checklist research and a Restaurant Worker Leadership Group (RWLG) was formed to facilitate the active participation of workers in the research process. The RWLG are core members of CPA's Worker Organizing Center and as later described, provided valuable input throughout the study design and analysis. One component of the project aimed to document workplace hazards in restaurants via local environmental health inspectors as part of their routine semi-annual restaurant inspections.

This working paper reports on one outcome of the larger study: the development and use of an observational survey (hereafter known as "the checklist") of potentially hazardous conditions and statutory workplace labor law notifications in 106 restaurants in the Chinatown District of San Francisco *(See Appendix 1)*. After briefly describing the checklist development and implementation, the following pages describe preliminary findings and explore implications for monitoring and prevention activities for restaurant worker health and safety.

Methodology

Development of the Observational Checklist Instrument

The development of the checklist is described in detail in another publication (5). Briefly, the original checklist was developed by LOHP-supervised, OHIP interns for CPA[8], based on California's Division of Occupational Safety and Health Administration (Cal/OSHA) safety recommendations, a literature review, and interviews with restaurant workers. The purpose of the checklist was to collect data via direct observation on: (1) the number and gender of employees; (2) the placement of legally required notifications of labor laws; (3) the presence of common hazards; and (4) the presence of protective equipment to mitigate hazards and prevent injuries. With further input from SFDPH inspection staff, the project removed questions that could be considered time intensive, intrusive (such as requiring opening of cabinets), or interfering with employees' work.

The RWLG members also reviewed early versions of the checklist and suggested refinement of certain questions to improve their specificity, for example whether first aid kits were fully stocked (and not simply present) and whether posters were in Chinese as well as English (5). In February 2008, testing the checklist in ten restaurants identified the need to add observations regarding ventilation and covering of slicing machines.

The checklist contained 18 questions and space for date, time and name of restaurant, as well as the number of observed females and males in the kitchen and restaurant seating areas *(See Appendix 3).* San Francisco law requires all businesses to post information about local minimum wage and paid sick leave requirements, and California and federal law requires additional employee notifications (9).[10] Six questions pertained to the posting of these statutory employee notifications (local minimum wage, local paid sick days, and state workers compensation requirements) in English and Chinese. The majority of questions focused on the presence or absence of specific Cal/OSHA recommended, employer-provided items that would prevent occupational hazards such as potholders, non-slip mats, footstools/ladders, storage for knives, machine guards, and first aid kits. Other questions assessed the work environment, for example whether there were wet and greasy floors, blocked exits, adequate ventilation and lighting, or overcrowded range tops.[11] All questions were written with yes or no responses, with the exception of two questions which offered a "not applicable" and "band-aids only" option respectively for the footstool/ladder available and fully stocked first aid kit available questions.

Checklist Implementation

For efficiency and expediency, one SFDPH staff member with experience in both community-based participatory research and immigrant occupational health prevention pilot-tested and implemented the checklist. Throughout the project, this staff member was supported by Environmental Health Food Safety Inspectors to gain access to restaurants and understand needs for effective communication with restaurant staff and management. SFDPH student interns provided Cantonese/Mandarin interpretation and additional support.

SFDPH implemented the checklist in all food establishments in the Chinatown area[12] of San Francisco that had a kitchen and sold prepared, non-prepackaged food, whether or not seating space was available, thus including take-out restaurants *(See Appendix 1)*. From March 2008 through August 2008, SFDPH collected data at 106 restaurants including the 10 restaurants involved in the initial pilot evaluation.

At each visit, SFDPH would first request to speak to the manager or person in charge, explain the purpose of the observational checklist and the absence of regulatory consequence for findings. Second, SFDPH verified the location of labor laws postings. If there were no postings, a copy of the appropriate minimum wage, sick leave, and worker's compensation posters was provided to the person in charge. SFDPH then toured the restaurant either with or without the manager to collect observations on the remaining checklist items. Implementation of the checklist typically involved 10-15 minutes of time. The checklists were later entered into a database housed on the secure SFDPH server.

Analysis

We tabulated frequencies for responses to each of the variables in the checklist (23 items in total). We next explored the relationship between observed working conditions and other restaurant characteristics, such as the size (square footage) of the restaurant and the restaurant's food safety score, a score assigned by SFDPH, based on the violations observed during regular food safety inspections.[13] SFDPH stratified the data by restaurant safety score, the number of labor laws posted in each restaurant, the size of the restaurant, the number of employees, and the time of day visited to see if any trends emerged. To further evaluate the association between restaurant food safety scores and the number of labor laws posted, SFDPH stratified the restaurants observed into four categories based on the number (0, 1, 2, or 3) of the required labor law posters observed in any language (i.e. minimum wage, paid sick leave, or workers compensation) and calculated the mean and median food safety score by number of posters posted. *(See Appendix 5).*

Results

SFDPH observed working conditions in a total of 106 restaurants between March and August 2008, encountering few barriers to gaining access to restaurants and no barriers to collecting information once inside the restaurant.[14] Only two restaurants of all those approached refused to participate in the checklist pilot.

Workers and Worker Demographics

SFDPH counted a total of 813 restaurant workers or 7.7 workers per restaurant working at the time of the observations (the range was 0 workers (only owner) to 37 workers at the largest restaurant), including 370 females and 443 males.[15] Kitchen workers, who typically had no direct contact with customers included: cooks, dishwashers, bakers, and butchers working in the kitchen. Restaurant workers with contact with customers included: hostesses, busboys, cashiers, waitresses, counter persons at coffee shops, and butchers working at the counter at meat markets. SFDPH further found that females were more likely to be working in the restaurant/front area than in the kitchen (restaurant area 66% female vs. 34% male; kitchen areas 30% female vs. 70% male). As expected, there was a notable difference in the average number of workers working in smaller vs. larger establishments, with an average of 6 workers in restaurants that were less than 1,000 square feet and 10 workers in restaurants over 2,000 square feet in size.

Posting and Enforcement of Labor Laws

Of the 106 restaurants visited, 65% (n=69) did not have any of the three selected employee notifications posted in a visible location. Of the 37 restaurants that did have at least one labor law posted, ten (27%) had the poster in English only and fifteen (41%) had only one of the three posters posted. *(See Appendix 4)* In total, less than one-third of the 106 surveyed establishments (30%) posted the San Francisco minimum wage ordinance in Chinese, 23% posted the paid sick leave ordinance in Chinese, and 8% posted the workers' compensation information in Chinese.

Exposure and Protection from Hazards

Observed preventable occupational hazards were common in Chinatown restaurants. The majority of kitchens visited were small with overcrowded range tops (70%) and cooks working in overcrowded conditions that included range tops, kitchen appliances, pot racks, other staff, food storage, etc. Many employers also stored food supplies, cookware and empty boxes by the exits, occasionally blocking the establishment's emergency exits. The vast majority of cooks did not wear long-sleeve shirts (90%), which may mitigate or prevent burns, and 96% of the restaurant workers only used rags to hold hot items.

Sixty-two percent of establishments visited had wet and greasy floors, creating hazards for slips and falls while walking through the kitchen area.[16] Although the majority of establishments visited had some type of covering on the floor to address wet conditions, less than half of all establishments (48%) had mats specifically designed to prevent slips and falls. Some of the mats and pallets used for this purpose were in poor condition and slippery as a result of the accumulated grease and exposure to water.

Eighty-seven percent of restaurants surveyed lacked proper storage of knives on the counters or walls, 37% lacked adequate ventilation, and 28% lacked adequate lighting. Although 70% of restaurants had band-aids available, 82% of restaurants did not have fully stocked first aid kits. Finally, 18 of the 22 establishments (81%) that slice, grind or process food did not have any visible guards for their slicing, grinder and food processing machines.

Association between work environments and other restaurant characteristics

There did not appear to be any association between the number of labor notifications posted and the food safety score *[See Appendix 5]*. Results for other associations will be available in subsequent versions of the working paper.

Discussion

Although restaurants are a major employer of immigrant workers in the United States,[17] relatively little is known about worker health and safety conditions in these establishments. Recent efforts in several parts of the country to undertake worker-designed and administered surveys, focus groups, and interviews have helped document violations of workers rights and workplace conditions.[18] To date, however, no systematic means has existed for objectively monitoring occupational health and safety conditions in restaurants.

Development and piloting of the checklist served as an important first step in developing a process for systematic data collection and identifying additional subsequent steps necessary (i.e. refinement of the tool, feasibility assessment, increased resources, etc) for institutionalizing a tool within a local health department.

Overall, we observed numerous preventable occupational injury hazards and limited compliance with local and state requirements for notifying employees of their labor rights in San Francisco's Chinatown restaurants. We also observed that required labor notices were rarely posted in the native language of the employees. As discussed below, both workers and inspectors noted that occupational exposures vary by location within the restaurant (i.e. cooks' exposures differ from waitresses). We observed gender differences in worker locations within the restaurant, with females representing 66% of restaurant staff, but only 30% of kitchen staff, suggesting that there may be gender differences in exposure to occupational hazards as well.

After collecting and analyzing the data, we shared the findings with the Restaurant Worker Leadership Group and SFDPH Environmental Health Inspectors to gather impressions of the relevance and consistency of the findings to their experiences, and ideas and opportunities for prevention. As discussed below, their collective responses and questions improved SFDPH's development and interpretation of observational checklist results. Their commentary provided additional insight into other steps and modifications needed if the tool were utilized in an ongoing manner.

Perspectives of employees and employers

As discussed above and consistent with a CBPR approach, the participatory development of the checklist contributed to the research in several ways. Affiliated workers, in particular, provided valuable insights for data collection and understanding of the implications of the findings. For example, as noted earlier, worker suggestions to ensure that labor laws were posted in Chinese and that first aid kits should contain more than band-aids strengthened SFDPH's specificity of data collection. Workers also helped identify new establishments that had closed or changed names. During the application of the checklist, both employers and employees volunteered diverse explanations for the lack of hazard prevention. For example, some restaurants' cooks stated the kitchen was too hot to wear long sleeved shirts and noted that even those wearing long sleeves would end up rolling up their sleeves after a few hours of working in the kitchen. Members of the RWLG noted that for male cooks, burns and cuts were often considered "badges of honor" and therefore constituted another incentive for abandoning long sleeves (5).

Following data collection and analysis, SFDPH solicited reactions from members of the Restaurant Worker Leadership Group to corroborate findings against their experiences in restaurants. In general, the members of the RWLG stated that the checklist findings reflected their experiences as workers; however, these workers also offered several caveats:

- *Physical presence does not ensure usage.* Physical presence of items such as first aid kits, machine guards, and employee hand washing stations in restaurants does not guarantee that workers are able to access and utilize when needed or that it is being used in the way it was intended.[19]
- *Posting Does Not Equal Compliance* Posting of labor laws in a visible location does not ensure that employers comply with the minimum wage, paid sick leave, workers' compensation and other requirements, nor that employees are aware of their rights or able to demand their rights from their employers. Postings should not serve as a proxy for compliance with wage and labor laws.[20]
- *Workers experience different occupational exposures within restaurants.* RWLG members helped draw attention to the differential exposures to occupational hazards at the same restaurant. For example, dishwashers are regularly exposed to hot steam and poor ventilation whereas waitresses and hosts in the seating area tend to have better ventilation and air with good smelling fragrance. As noted elsewhere (5), RWLG members also reported that workers who stand outside restaurants distributing leaflets and soliciting customers experience greater exposure to weather conditions and the public than those inside the restaurant.[21]
- *Employee-owned knives and knife storage.* RLWG members noted that sometimes cooks will bring their own knives to and from work to use in the kitchen. It is noted that employee-owned knives would likely not have or use an employer-purchased/owned proper knife storage location. To carry the knives to and from work, the cooks may wrap the knives in towels and carry them in their pockets, which the RWLG member noted was not safe. They noted that the provision of employee lockers in restaurants could alleviate the need to carry the knives or other personal belongings on themselves.
- *Big cans used as footstools.* RWLG members also noted that they use big cans to reach food rather than footstools or ladders. If not thoroughly washed before opening and using, the big cans could serve as a vector for bacteria, dirt and other materials on the floor to get into the food supply. These comments prompted further discussion about whether differences in height between workers and SFDPH staff might impact perceived need for a footstool or ladder.
- *Use and availability of machine guards vary.* Discussion by members of the RWLG revealed varying perspectives on machine guards, a lack of clarity about what specific part of the machinery was being discussed and when it was used, and concerns both about machine safety and sanitation. One member observed that there were machine guards in the Western restaurants but not in the Chinese ones. These may be points for further exploration and clarification for future checklist applications.

Finally, as noted by the project evaluator, although the checklist findings did not identify blocked fire exits and the absence of footstools or ladders for reaching food in storage as widespread concerns, "*early conversations with worker partners have suggested that these conditions may still be more widespread than is apparent or may be very problematic where they do exist."* Such reactions and insights into the checklist findings were very helpful in identifying limitations, caveats and a broader understanding of barriers to implementation of prevention strategies.

Perspectives of Environmental Health Inspectors

SFDPH also shared the checklist findings with supervising environmental health inspectors. Their comments and responses identified additional caveats and issues for consideration if the checklist were to be revised and re-applied or applied in other San Francisco neighborhoods, such as:

- *Non-slip mats vary by restaurant type* – Some non-slip mats that help prevent slips in certain restaurants may not be as effective in other restaurants, for example restaurants making roasted duck. Also, some cooks prefer wooden pallets because it provides better cushioning then rubber mats while standing up all day.
- *Long Sleeves* – Inspectors noted that although the observation of whether workers were wearing long sleeves was included with the intention of preventing burns, wearing of long sleeves can actually put workers at risk for unintentional burns or cuts if the sleeves are caught in the flame of a stove, in an oven, a slicer, etc.
- *Lighting requirements* – There are existing code requirements for the minimum amount of lighting needed in restaurants and this could be used as a threshold with a light meter in the future, rather than qualitative observations.
- *Implications of Checklist Findings* – Inspectors noted that when asking a question about a condition (i.e. checking off whether something is present or adequate), there is an unstated assumption that those conditions could be mitigated or improved if needed. For example, asking whether a restaurant has adequate ventilation suggests that if the answer is no, then owners could – or should - fix the ventilation system to improve air quality for workers and customers. Inspectors noted that installing better ventilation systems could potentially be prohibitively expensive for some restaurant owners, thus SFDPH should be aware of the possible implications of different mitigation recommendations, the feasibility for making change, and the implications if the change is not made.
- *Different workers experience different exposures* – The inspectors noted that workers' perspectives on what is needed to prevent hazards may vary considerably by where in the restaurant they work. For example, cooks would likely have a very different perspective on what are their occupational risks and how could those be prevented in a way that is conducive to efficient working than dishwashers or waitresses.

As reflected by the comments of both the inspectors and the RWLG regarding the use of long sleeves to prevent burns, sometimes recommendations or mitigations may have other unintended implications that may further protect or endanger workers. Both the RWLG and inspectors' responses reaffirm the great value of having multi-stakeholder engagement in checklist development and analysis, as well as having pilot applications of a checklist in multiple areas (i.e. to identify different types of mats needed).

Identifying Opportunities for Prevention

Prevention of occupational injuries and illnesses occurs through modification of the work environment to eliminate or reduce hazards, administrative controls on work practices, or the use of personal protective equipment by employees. All of these strategies require complementary worker training and education. Many of the restaurants surveyed lacked readily available environmental controls or personal protective equipment. For example, employers could purchase knife blocs or wall racks for proper storage of knives, quality non-slip floor mats, footstools or ladders, first aid kits, and/or machine guards for slicing machines, grinders and food processors. While SFDPH acknowledges that physical presence of these engineering controls does not ensure proper usage, the use of these relatively low cost interventions could immediately help reduce unintentional cuts, stabs, falls or slips.

We found that more than one-third of restaurants surveyed in the checklist application lacked adequate ventilation and more than one-quarter of restaurants lacked adequate lighting. Exposure to particulate matter and other air pollutants from cooking may result in respiratory problems (15-17) and heart disease (18). Restaurants may be a particularly important source of particulate matter exposure in urban environments (19). Both air quality and lighting may also contribute to worker performance, with well-ventilated and well-lit rooms resulting in higher worker productivity, attentiveness, and job satisfaction (20). Ventilation for dishwasher ventilation is also important given the potential exposure to hot steam, bad odor and poor air quality.[22]

Both ventilation and lighting can be improved through feasible physical modification of the work environment, including operable windows, better lighting, fans, or heating, ventilation and air conditioning (HVAC) systems. However, the mixed-use nature of buildings in Chinatown, with restaurants located at the first floor of multi-story buildings, the often crowded spaces, and the lack of ownership by restaurant owners who rent their commercial space, create barriers to changing the size of the kitchen or making significant physical modifications of the building structure.[23]

Use of the Checklist to Monitor Working Conditions by Food Safety Inspectors

One of the secondary interests of the project partners in developing and testing this checklist was to evaluate the feasibility of using an observational checklist instrument or a similar survey as a monitoring tool used by restaurant safety officials. Even though worker safety and food safety are currently the responsibility of separate agencies at different jurisdictional levels, restaurant inspectors, who routinely inspect all restaurants in most jurisdictions, are well placed to observe safety hazards, refer potential violations to responsible regulatory agencies, and educate restaurant employers on both labor law requirements and hazard reduction practices. While this limited application of the checklist provided valuable input on checklist content and conditions in one neighborhood, the application did not assess feasibility of using the instrument in routine regulatory activities or of the feasibility of improving conditions (i.e. how this would impact inspectors' time; what kind of increased financial support, training and educational materials are needed; the role of EHS vs. CalOSHA inspectors, policy changes needed, funding etc). The research also did not assess whether particular conditions were associated with priority and frequent adverse health outcomes. A feasibility assessment for a checklist would need to explore organizational commitment requirements, resources to support significant additional inspector training and time, responsive target agencies for referral, and clear advice for action in response to observed deficiencies.

Our experience suggests that while checklist implementation was not time-consuming itself, the high prevalence of deficiencies suggest that the time needs for interpretation and communication about results with restaurant owners or managers would be high. SFDPH restaurant inspectors also note that investment of time and intentional relationship building with employers, owners, and workers are key components of preventing and addressing food safety violations.

Effectiveness of a local monitoring system would also depend on communication to and action by other agencies. Under the local health code, SFDPH cannot take regulatory action to compel compliance with local and state worker health and safety laws, as this responsibility is the exclusive domain of other local and state authorities (i.e. Cal-OSHA, DLSE).[24] However, restaurant inspectors can legally inspect any restaurant conditions related to food safety or the proper operation of restaurants, which includes conditions related to worker health and safety. Some labor standards enforcement agencies do appear willing to take action on non-compliant employers. As the state level labor standards enforcement agency, the California Division of Labor Standards Enforcement (DLSE) has taken several recent high

profile actions against employers without workers compensation insurance.[25] In San Francisco, the city agency charged with enforcement of the City's labor laws, the Office of Labor Standards Enforcement (OLSE), has expressed interest in acting on referrals from restaurant inspectors. Restaurant inspectors making referrals to labor standard code enforcement agencies could also be a practical strategy, since inspectors already routinely make referrals to other agencies, such as the fire department when they observe potential violations of fire code. SFDPH inspectors are currently exploring the value of monitoring by confirming labor law postings during inspections in other districts and making referrals to regulatory agencies.

Limitations

Our application of a new observational checklist offered a relatively objective perspective unbiased by employer or worker impressions; still, this observational approach has several acknowledged limitations including the subjective nature of particular observations, variation in time of visit, diversity of type of business, and limited generalizability.

Several questions relied upon the inspector's subjective opinion (e.g. overcrowded, sufficient lighting). Because one staff person conducted all 106 inspections, there is likely higher internal consistency across restaurants observed. However, external reliability and generalizability would benefit from standardized definitions of "adequacy" of lighting and ventilation, "overcrowdedness" of oven ranges, "sufficient quality" of non-slip mats, etc. Potentially, measurement tools such as light meters and particulate air pollutant monitors could support objectivity.

The variation in time of observations relative to cycles of business operation may have affected results. We observed that restaurant kitchens pre-meal or post-meal times can be much calmer, cleaner, and less crowded than during the peak meal times and may impact which hazards are observed. For example, floors may be dry before 11am and after 3pm but not during the lunch time rush. Knives may be properly stored after their final use, but kept out during meal preparation. Small storage closets may be open during meal preparation but hidden from sight at other times. Subsequent applications could conduct checklist observations at similar times of day or analyze associations among hazards and the time of the day.

Our sample included diverse establishment types, including some meat markets, bakeries, cafes and other eating establishments whose conditions may vary significantly from restaurants and from each other. For example, it was observed that meat markets are extremely wet and greasy and have open ovens, where one can easily slip into the flames. Broader application of this checklist may want to disaggregate analysis by business type.

Although San Francisco's Chinatown may be demographically and economically similar to Chinatowns in other cities, the neighborhood is fairly unique compared to most other San Francisco neighborhoods. For example, Chinatown has the highest proportion of households in overcrowded living conditions (more than three times the city average), the lowest weighted median household income (one-quarter of the city average), and the highest proportion of non-English speakers (four times more than the city average) of all San Francisco neighborhoods.[26] The lack of data collected in multiple neighborhoods precludes generalization of our findings.

Further Opportunities for Collective Action

One of the goals of the Worker Health and Safety in Chinatown Restaurants Project/Study is *"to disseminate and begin translating study findings into action to promote the occupational health of Chinatown restaurant workers."* Lessons learned from this research aim to inform next steps of policy development and actions taken by project partners, local elected officials, policymakers, and responsible regulatory agencies. In addition to exploration of restaurant inspector monitoring, our checklist suggests value in the following strategies:

Educating and Working with Employers
Given that employers, managers, and restaurant owners have the most direct control over workers' conditions in the workplace and have the ability to implement or block interventions that improve workers' health, it is critical that they are engaged in policy development and educational outreach. Recognizing the importance of employer and manager engagement, the Chinatown Restaurant Worker Health and Safety Project will hold focus groups on restaurant worker health and safety in Fall 2009 or Spring 2010, at least one of which will be specifically targeted towards employers and managers.

Resources and Technical Assistance for Hazard Reduction
The provision of technical assistance to make small scale improvements to the work environment – i.e. where to find quality non-slip mats, how to stock first aid kits, how to improve ventilation - may be an important need for restaurant owners, especially small restaurant owners.[27] Even for many well-meaning small business owners, the lack of knowledge, time, and financial resources limit their ability to prevent injuries and illnesses. Partners working to improve workers' health and safety could advocate for restaurant associations and Cal-OSHA to strengthen its consultation services to business owners. The provision of technical assistance and education to small business owners' to improve workers' health and safety could similarly result in improved business practices for some employers, which could result in information sharing with other employers and rising of work standards generally.

Educating Workers About Rights and Injury Prevention
Although more systematic enforcement of workplace laws and workers' rights could help increase employer compliance with labor laws, additional activities are also needed to ensure that workers know their rights and have the ability to demand their rights without risk of losing their jobs and livelihood. Over the past several years, community based advocacy organizations in San Francisco including the Chinese Progressive Association (CPA), La Raza Centro Legal (LRCL), Pride At Work, the Filipino Community Center, and Young Workers United have been educating low wage and immigrant workers about their rights and helping workers file claims with the Office of Labor Standards Enforcement to recover unpaid wages.[28] SFDPH has worked with LRCL to identify ways to incorporate injury prevention and occupational safety and health information into day laborer and domestic worker trainings.[29]

In addition to exploration of restaurant inspector monitoring, the following strategies might be worth additional research:

- *Incentive and Recognition Programs for Restaurants:* An incentives type approach could award restaurants who maintain high standards for worker health and safety recognition for their practices and could complement other enforcement strategies. San Francisco currently awards restaurants recognition for both green business practices and for consistently high standards in food safety.[30]

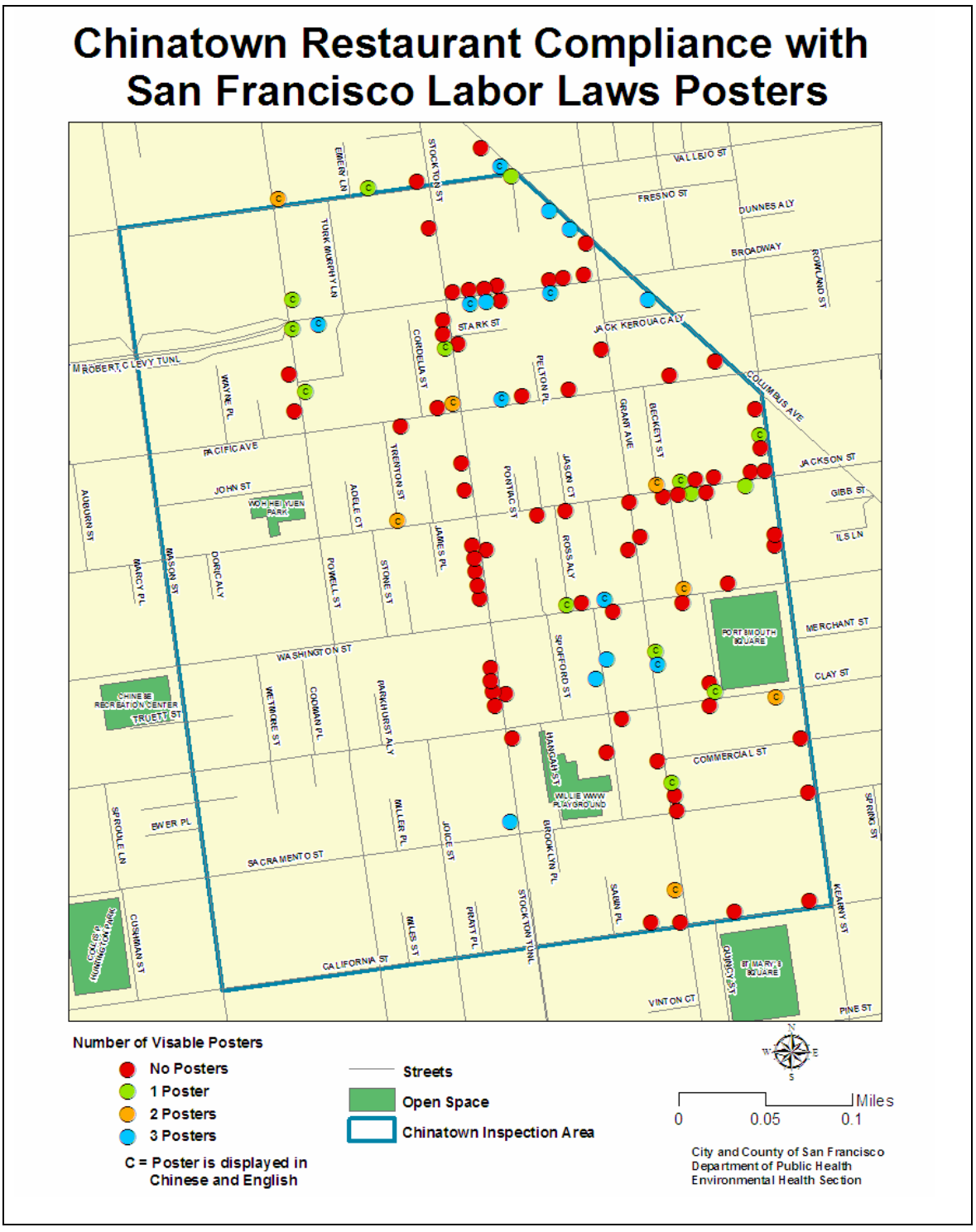
- *Engagement with State Labor and Occupational Health Regulators:* Given their regulatory mandates, efforts to improve accountability to health and safety standards in the restaurant industry could benefit from partnerships with DSLE and Cal-OSHA. Innovative interdisciplinary collaborations, such as the Watsonville Community Connections and Workers' Compensation Enforcement Collaborative, between state and local enforcement agencies, service providers, university partners and advocacy organizations can serve as models/lessons for engagement.[31]

Conclusion

In conclusion, we found the restaurant health and safety observational checklist instrument to be a useful tool for identification of potentially modifiable and preventable workplace hazards. The collaborating organizations aim to explore these issues and their solutions through additional participatory research with the restaurant workers with the ultimate goal of proposing and achieving policy changes that better protect workers' health and rights. Lessons learned from this experience will inform project partners about the feasibility, potential challenges and potential barriers to its use in San Francisco and other counties.

APPENDICES

APPENDIX 1:: *MAP ILLUSTRATING BOUNDARIES OF SURVEY AREA AND RESTAURANT COMPLIANCE WITH LABOR LAW POSTING REQUIREMENTS*



APPENDIX 2: *TABLE OF COMMON RESTAURANT WORKER INJURIES AND PHYSICAL HAZARDS*

Injury	*Physical Hazard*	*Parts of the Body Commonly Impacted*
Sprains and strains	o Falls to floors, walkways, & other surfaces; o Overexertion in lifting; o Slips, trips and loss of balance without fall; o Bending, climbing, crawling, reaching and twisting	o Back o Ankles o Knees
Cuts, lacerations and punctures	o Knives and other non-powered cutting hand tools o Specialized food and beverage processing machinery (i.e. food slicers, meat grinders, mixers, blenders, & whippers) o Broken dishes, cups, glasses	o Fingers o Fingernails o Hands
Heat burns and scalds	o Contact with hot objects and substances including fats, oils and other food products o Contact with heating and cooking machinery such as stove tops, ovens and grills o Contact with hot pots, pans and trays o Contact with steam	o Hands o Fingers o Arms

APPENDIX 3: *SAN FRANCISCO RESTAURANT HEALTH AND SAFETY CHECKLIST*

Inspection date & time: __ __/ __ __/ 2008 __ __: __ __ AM/PM (circle one)
Month/ Day

Restaurant Name: _____

Inspector Name: _____

Number of Employees: Kitchen: M:____ F:___ Restaurant: M:___ F:____

1. Are the following posters visible where employees can read them?

a.	SF Minimum Wage Ordinance	❑ No ❑ Yes	In Chinese?	❑ No ❑ Yes
b.	SF Paid sick leave	❑ No ❑ Yes	In Chinese?	❑ No ❑ Yes
c.	Worker's Compensation information	❑ No ❑ Yes	In Chinese?	❑ No ❑ Yes

2. Do workers have dry potholders, gloves, mitts, or rags to prevent burns?
❑ No
❑ Yes

3. Are cooks wearing long sleeve shirts or cook jackets?
❑ No
❑ Yes

4. Are range tops overcrowded with cookware?
❑ No
❑ Yes

5. Are there non-slip mats?
❑ No
❑ Yes

6. Are floors dry, instead of wet and greasy?
❑ No
❑ Yes

7. Is there proper storage for knives (counter or wall racks)?
❑ No
❑ Yes

8. Are there footstools or ladders available to reach food in storage area?
❑ No
❑ Yes
❑ Not needed

9. Are the restaurant's exits unblocked?
❑ Yes
❑ No

10. Is there adequate ventilation?

❑ No
❑ Yes

11. Is there adequate lighting?

❑ No
❑ Yes

12. Are there fully stocked first aid kits accessible to workers?

❑ No
❑ Yes

13. Do slicing machines, grinders or food processors have machine guards?

❑ No
❑ Yes

Notes

_____

_____

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APPENDIX 4: *FINDINGS FROM THE OBSERVATIONAL HEALTH AND SAFETY CHECKLIST*

Labor Laws Posters display	YES Number (%)	NO Number (%)	Not Applicable
SF Minimum Wage ordinance[1]	32 (30%)	74 (70%)	
SF Minimum Wage ordinance in Chinese	32 (30%)	74 (70%)	
Worker's Compensation Information[1]	17 (15%)	89 (85%)	
Worker's Compensation Information in Chinese	8 (8%)	98 (92%)	
SF Paid Sick Leave[1]	25 (24%)	81 (76%)	
SF Paid Sick Leave in Chinese	24 (23%)	82 (77%)	
Hazard Observations	**YES Number (%)**	**NO Number (%)**	**Not Applicable**
Potholders, gloves, mitts, or rags to prevent burns[2]	102 (96%)	4 (4%)	
Cooks wearing long-sleeved shirts or cook jackets	11 (10%)	95 (90%)	
Range tops overcrowded with cookware	74 (70%)	32 (30%)	
Sufficient quality non-slip mats	51 (48%)	55 (52%)	
Floors are dry, not wet and greasy	40 (38%)	66 (62%)	
Proper storage of knives	14 (13%)	92 (87%)	
Footstools or ladders to reach food in storage area	5 (5%)	8 (7%)	92 (88%)
Restaurant's exits unblocked	99 (93%)	7 (7%)	
Adequate ventilation	67 (63%)	39 (37%)	
Adequate lighting	76 (72%)	30 (28%)	
Fully stocked first aid kits	19 (18%)	13 (12%)	
Slicing, grinders and food processors guards	4 (4%)	18 (17%)	84 (79%)

These findings reflect observations of 106 restaurants in San Francisco's Chinatown District between February and August 2008. At time of visit, 813 employees were observed, of whom 54% were male and 46% were female.

[1] Posters visible where employees can read them

[2] All restaurant visited only use rags to prevent burns

[3] The remaining 70% (frequency=74) of Restaurants have bands aids **ONLY**

APPENDIX 5: ***COMPARISON OF LABOR LAWS POSTERS DISPLAY AND FOOD SAFETY SCORES IN SAN FRANCISCO'S CHINATOWN RESTAURANTS – 2008***

Categories	Total Restaurants	Establishment's Average Food Safety Score	Establishment's Median Food Safety Score
No posters Displayed	69 (65%)	83	86
Display one poster	15 (14%)[1]	87	88
Display two posters	7 (7%)	77	78
Display three posters	15 (14%)[2]	78	86

[1] Three of the posters posted were not in Chinese
[2] Seven of the posters posted were not in Chinese

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[1] According to the Bureau of Labor Statistics in May 2008, 8.5% of the nation's 135,185,230 workers, 8.4% of California's 15,212,610 workers, and 9.2% of the San Francisco-San Mateo-Redwood City Metropolitan Area's 1,016,500 workers were employed in Food Preparation and Serving Related Occupations. At the federal, state, and regional level, food preparation and serving related occupations are the third largest industry (following

Office/Administrative Support and Sales/Related Occupations). Data from Bureau of Labor Statistics. May 2008 National and State Occupational Employment and Wage Estimates. http://www.bls.gov/oes/home.htm

[2] Although the incidence rate (4.0 cases per 100 full time workers) for food services and drinking places is the same as the private industry average, the food services and drinking places industry is one of the nation's largest employers. This translates into the second largest number of nonfatal occupational injury cases (245,000 cases) by industry, after hospitals (which employs half as many individuals but with an incidence rate of 7.1 cases per 100 full time workers, results in 248,000 cases per year). Data from Bureau of Labor Statistics. TABLE 5. Incidence rate(1) and number of nonfatal occupational injuries by selected industries, 2007. http://www.bls.gov/news.release/osh.t05.htm

[3] According to the California Employment Development Department's 2006-2016 Industry Employment Projections, the San Francisco-San Mateo-Redwood City Metropolitan Division (which includes Marin, San Francisco, and San Mateo Counties) is anticipated to create 1,269 new jobs and 3,442 net replacement jobs between 2006 and 2016, accounting for 14.4% of the region's 32,563 average annual job openings. http://www.labormarketinfo.edd.ca.gov/?pageid=94

[4] US Bureau of Labor Statistics. Occupational Employment Statistics. Distribution of workers in each major occupational group by wage range, May 2008. http://www.bls.gov/oes/current/distribution_table.htm

[5] For example, see Environmental Justice and CBPR projects funded by the National Institute of Environmental Health Sciences (http://www.niehs.nih.gov/research/supported/programs/justice/grantees/index.cfm) and DataCenter's list of collaborative publications (http://www.datacenter.org/reports/reports.htm)

[6] For example, see Environmental Justice and CBPR projects funded by the National Institute of Environmental Health Sciences (http://www.niehs.nih.gov/research/supported/programs/justice/grantees/index.cfm) and DataCenter's list of collaborative publications (http://www.datacenter.org/reports/reports.htm)

[7] The overarching orientation of this study is CBPR, which is defined as "systematic investigation with the collaboration of those affected by the issue being studied, for the purpose of education and taking action or effecting social change." [Green, 1995] CBPR is a collaborative approach that equitably involves community members, organizational representatives, and researchers in all aspects of the research process, and balances research and action [Israel, 1998]. A community-driven approach to research that begins with study questions that matter to the community, CBPR can increase the quality of data collection, build community capacity and project sustainability, and foster culturally appropriate research and intervention strategies [O'Fallon, 2002; Minkler, 2005]. It further can improve dissemination efforts, help in the translation of the research into policy and practice, and "foster the emergence of new research questions" [O'Fallon, 2002; Minkler, 2005; Israel, 2005]. The focus of CBPR is on oppressed groups. CBPR involves a commitment to co-learning and a valuing of lay knowledge [Hagey, 1997].

[8] In 2006 and 2007, the Occupational Health Intern Project, a project funded by the California State Health Department and local foundations, sponsored four interns to work with CPA to conduct initial economic and occupational health and safety research of the restaurants in San Francisco's Chinatown. Under the supervision of LOHP, they explored the feasibility of integrating occupational health and safety hazard identification with routine inspections conducted by City agencies responsible for public safety in restaurants. The interns researched and compiled restaurant occupational hazard checklists and accompanied a San Francisco fire inspector on a routine visit. He received permission from restaurant managers to allow the interns to observe him conduct the walk around inspection and the closing meeting with the employer. Following a series of debriefing sessions between the interns, the fire inspector, LOHP and CPA concluded that integrating occupational health and safety hazards with routine inspections by agencies such as the SF Fire Department and or the SFDPH food safety program could provide important data toward the protection of worker health and safety. Drawing on the findings from the OHIP projects, CPA and the UC SPH approached the SFDPH to collaborate on this study.

[9] See Office of Labor Standards Enforcement website for specific details on San Francisco Minimum Wage, Paid Sick Leave and Health Care Security Ordinance posting requirements. Accessed on April 21, 2009: http://www.sfgov.org/site/olse_index.asp?id=81787 For workers' compensation posting requirements, see California Code of Regulations, Title 8, Section 9881, Posting Notice Requirements. Accessed on April 21, 2009: http://www.dir.ca.gov/t8/9881.html

[10] See Office of Labor Standards Enforcement website for specific details on San Francisco Minimum Wage, Paid Sick Leave and Health Care Security Ordinance posting requirements. Accessed on April 21, 2009: http://www.sfgov.org/site/olse_index.asp?id=81787 For workers' compensation posting requirements, see California

Code of Regulations, Title 8, Section 9881, Posting Notice Requirements. Accessed on April 21, 2009: http://www.dir.ca.gov/t8/9881.html

[11] As later noted, the conditions of the work environment may vary by time of day/busyness of the kitchen as well as the space/size of the restaurant and the employer provision of materials such as non-slip mats that prevent contact with wet and greasy floors.

[12] Chinatown's boundaries were defined by census tracts, used by SFDPH to conduct their inspections. Census tracts included: 107, 113, 114 and 118 which covered Vallejo, Columbus, Kearny, California, and Mason streets.

[13] For more information about the SFDPH Restaurant Food Safety Program, please visit: http://www.sfdph.org/dph/EH/Food/Inspections.asp

[14] As noted by the project evaluator, "Access to the restaurants during the pilot was good overall. When accompanying the food safety inspectors, access was not an issue, but took somewhat more explanation when the DPH partner conducted observations independently. DPH identification provided the necessary entrée in most cases, and workers, managers, and owners were put more at ease when reassured that no tickets would be issued based on the pilot checklist."

[15] SFDPH's observed ratio of females to males in Chinatown restaurants (370:443, or 5 female workers for every 6 males) was considerably higher than the gender ratio reported by the U.S. Census in 2000 (243:527, or 5 female workers for every 11 males) for all food preparation and serving related occupations in the same geographic area. (Census 2000 SF 3, Table P50 "Sex by Occupation for the Employed Civilian Population 16 Years and Over")

[16] As noted by one of the environmental health inspectors, restaurant inspectors have also noted and experienced the greasy floors, with several inspectors having fallen while conducting routine inspections and one inspector having to obtain workers' compensation to recover from the floor related fall.

[17] See Bureau of Labor Statistics. Table 4. Employed foreign-born and native-born persons 16 years and over by occupation and sex, 2008 annual averages. http://www.bls.gov/news.release/forbrn.t04.htm. See also ROC-NY 2009 "The Great Service Divide: Occupational Segregation and Inequality in the NYC Restaurant Industry" (http://www.reuters.com/article/domesticNews/idUSTRE52U6UT20090331) and the National Restaurant Association press release stating that "the restaurant industry is the nation's largest employer of immigrants." http://www.restaurant.org/pressroom/pressrelease.cfm?ID=1088

[18] For example, see Environmental Justice and CBPR projects funded by the National Institute of Environmental Health Sciences (http://www.niehs.nih.gov/research/supported/programs/justice/grantees/index.cfm) and DataCenter's list of collaborative publications (http://www.datacenter.org/reports/reports.htm)

[19] For example, one worker affiliated with the project described how the employer did not allow his employees to use the soap or paper towels in the kitchen area sink designated for employee hand washing because he would get fined by the environmental health inspectors if they found that there were no paper towels at the time of inspection. Instead, workers had to leave the kitchen area and go to the bathroom to obtain paper towels. Similarly, several members noted that workers may not know the location or how to utilize a first aid kit.

[20] During pilot survey, one worker remarked that the majority of the workers don't even have time to be read the posters, and even if they did, they were not going to ask their employers to get paid the minimum wage, since they can lose their jobs, jobs that they depend on to support their families. This sentiment – that low wage workers face many obstacles to demanding employer compliance with minimum wage laws and other legally required worker protections – has been well documented in recent research conducted by various governmental, membership and advocacy organizations. See Lashuay N, Harrison R. April 2006, Barriers to Occupational Health Services for Low-Wage Workers in California. San Francisco: CHSWC, CA Department of Industrial Relations; MUA, LRCL, and DataCenter. March 2007, Behind Closed Doors: Working Conditions of California Household Workers; Valenzuela, A.N. TheodoreE. Melendez and A. L. Gonzalez (2006). On the Corner: Day Labor in the United States. Los Angeles, UCLA Center for the Study of Urban Poverty; Restaurant Opportunities Center of New York. 2005. Behind the Kitchen Door: Pervasive Inequality in New York City's Thriving Restaurant Industry. New York.

[21] Some RWLG members noted that waiters, waitresses and outside staff got more time to eat, whereas kitchen/inside staff never had any time. However, another member noted that inside staff got to eat all the time. Either way, both perspectives raise that there may be differential working conditions for staff working in the restaurant/public areas compared to staff working in the kitchen/inside areas. RWLG members noted in worker survey development that leafletters (individuals who stand outside restaurants to distribute leaflets and solicit visitors) have much greater

exposure to outdoor weather conditions than those inside. Since "leafletter" is not a job category on OSHA and other occupation listings for restaurant workers, this observation was particularly salient.

[22] The RWLG members noted that dishwashers are exposed to this poor air quality, which is different from those who work in the seating area which has a good smelling fragrance.

[23] SFDPH environmental health inspectors working in Chinatown have noted that Chinatown is one of the harder places to do restaurant inspections because with small restaurants and space, there is no other option that to be creative about where placing and storing items and how people use the work environment. The inspectors noted that Chinatown restaurants often have a lot of violations for food handling, which may be due to the space limitations, cultural or linguistic barriers, or a variety of other factors.

[24] Currently, there is a local agency (the San Francisco Office of Labor Standards Enforcement) responsible for enforcement of wage and hour laws, but there is no local agency (for example, a San Francisco Division of Occupational Safety and Health or SF OSHA) responsible for enforcement of workplace safety and health laws.

[25] See 12/23/08 LA Business Journal "State Regulators Crack Down on Employers" by Howard Fine. Accessed on 5/10/09: http://www.labusinessjournal.com/article.asp?aID=67152259.1309146.1724346.4699692.8819438.796&aID2=132633; 11/20/08 Bakersfield Now "Investigation Follow Up: Former Galloway employee awarded back pay" by Gloria Bratton. Accessed on 5/10/09: http://www.bakersfieldnow.com/news/19618144.html; 12/20/07 San Diego Union-Tribune, "State sues 2 janitorial companies over wages" by David Washburn. Accessed on 5/10/09: http://www.signonsandiego.com/news/business/20071220-9999-1b20labor.html

[26] Data from the Healthy Development Measurement Tool (www.thehdmt.org), gathered from the 2000 U.S. Census.

[27] As noted by the SFDPH staff person, some employers do not have bad intentions, they just don't know what to do to change their practices or where to get some of the supplies. For example, one supervisor at a meat market expressed interest in making the floors less greasy but did not know how. SFDPH also discovered that there was some confusion over how to obtain the posters, with some having received them via mail and others having purchased the posters through a third party. Of the restaurants with visible posters, 3% had purchased a laminated collage of posters at prices ranging form $54 to $112. All purchased posters (believed to come from Office Max) were in English and contained outdated minimum wage information. This prompted SFDPH to bring OLSE posters to the site visits, hand out if needed and explain where and why the poster needed to be posted.

[28] For example, the Chinese Progressive Association, which is one of the community partners in the Worker Health and Safety in Chinatown Restaurants Study, coordinates the Worker Organizing Center. Through education and mobilization of low wage workers, CPA is striving to empower Chinese restaurant workers to speak out against abusive employers. Recent campaign activities have resulted in recovering of over $700,000 in back wages owed to employees. Ongoing worker education and campaign mobilization have supported ongoing worker education, empowerment and shaming of abusive employers.

[29] For more information about this collaboration, called *Jornaleros Unidos con el Pueblo* (or Day Laborers United with the Community), please visit: http://www.sfphes.org/work_unidos.htm

[30] Currently SFDPH has two incentive/recognition type programs for restaurants to acknowledge high standards for food safety and green business practices. The Symbol of Excellence is issued only to establishments that receive three successive scores of ninety (90) percent or higher during routine food inspections with no major violations as set forth in the food inspection report. The Clean and Green Award is provided to businesses that apply best management practices and pollution prevention guidelines to help keep San Francisco "clean and green." Although these programs promote and reward positive behavior and could help inform consumer choices about where to go, it is noted that the green businesses award has had limited success with restaurants compared to other businesses and that the worst offenders of workers' rights and safety might be unlikely to be motivated by incentives.

[31] For more information about the Watsonville Collaborative, visit: http://www.watsonvillelawcenter.org/