

Farm Labor Contractors and Occupational Safety in the Fields¹

Don Villarejo
California Institute for Rural Studies, Inc.
P.O.Box 2143, Davis, CA 95617

Abstract

Over the past fifteen years there has been a dramatic increase in the number of hired farm workers who are employed through labor market intermediaries, principally labor contractors. This increased reliance on contract labor is most pronounced in Sun Belt states, where hired labor is displacing farmer and directly hired labor, and where labor intensive crop production has greatly expanded in recent years.

Intervention strategies to promote agricultural health and safety have largely focussed on resident family farmers and often rely on existing organizations, such as the Cooperative Extension Service or family farm organizations, to assist in reaching on-farm decision makers. Only recently have intervention strategies been developed to take account of labor market intermediaries such as farm labor contractors.

Over 600 field enforcement citations issued during 1993 by the California State Labor Commissioner in the agricultural sector were analyzed in order to characterize high risk behavior patterns among labor contractors and farm operators. Each party cited was identified and their primary agricultural activity was determined. These were correlated with the character of the citation.

The results of this analysis shows that the largest share of safety-related violations were issued to foremen, supervisory employees of labor contractors, or to labor contractors directly. A smaller share of safety-related citations were issued to farm operators.

These results suggest that two principal types of intervention are needed. On the one hand, vigorous enforcement at the foremen level, combined with management education programs can be used to stimulate attention to high-risk behaviors among contractors and their foremen. Second, interventions among recent immigrants are needed to provide them with a basic understanding of employee rights and responsibilities.

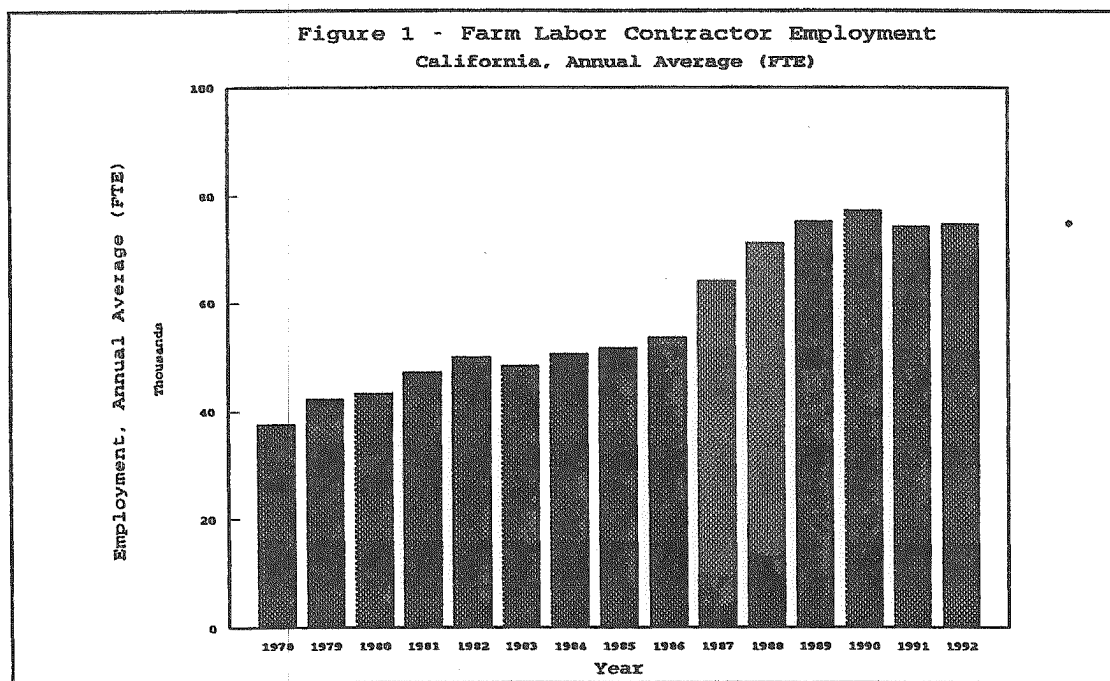
¹ Funding was provided by the Agricultural Health and Safety Center of the University of California under PHS Grant No. U07/CCU906162-02.

Background

Over the past fifteen years there has been a dramatic increase in the number of hired workers on farms who are employed through labor market intermediaries, principally labor contractors and custom harvest crews. Between 1974 and 1992, the amount of Contract Labor Production Expense (expressed in nominal dollars) on U.S. farms grew from \$511.6 million to \$2,323.9 million, an increase of 354.2%.¹ Even when corrected for inflation, on-farm Contract Labor expense increased by 60%.² In contrast, direct-hire Farm Labor Expense on U.S. farms, expressed in constant dollars, actually declined by 2% during the same period.³

This increased reliance on contract labor is most pronounced in Sun Belt states, where it is displacing both farmer and directly hired labor, and where labor intensive crop production has greatly expanded in recent years. For example, in California, the state whose farms report the largest Hired Labor and Contract Labor expenses, recent employment records indicate that one out of every three farm workers is employed by a labor contractor for at least part of each year.⁴ Reports of employment provided by employers show that Farm Labor Contractor Employment in the state doubled between 1978 and 1992 (see Figure 1).⁵

A cross-sectional survey of California farm labor contractors was reported in a



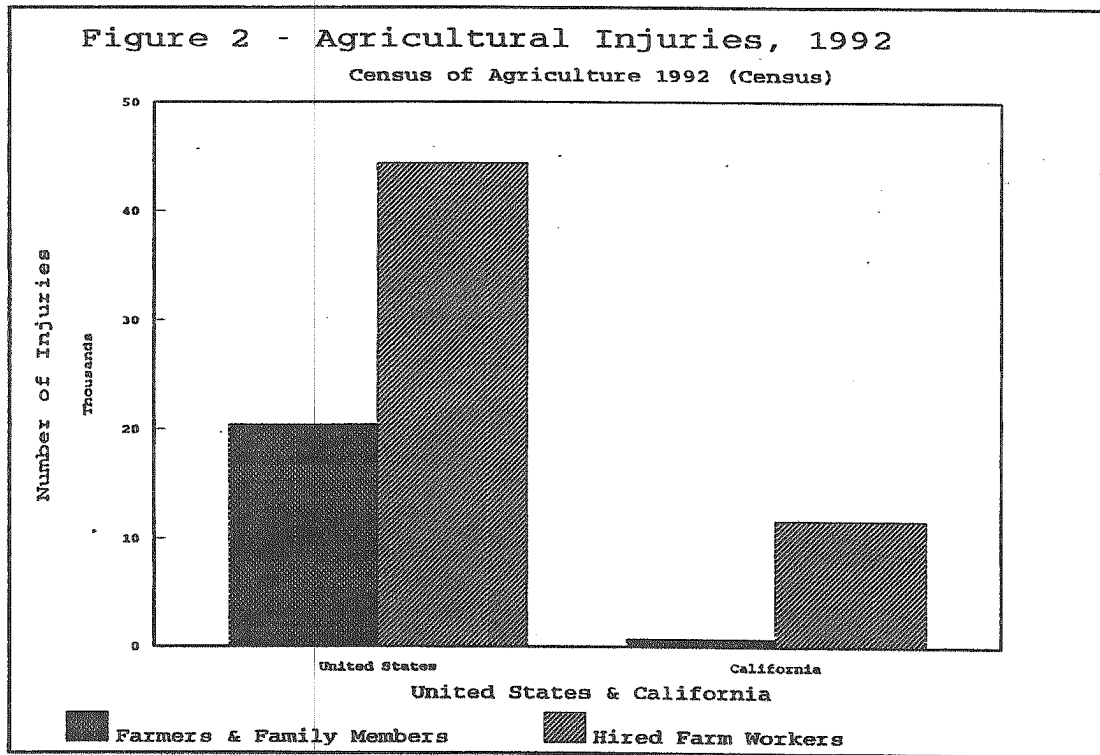
previous paper.⁶ Most labor contractors were found to operate very small businesses, but a clear majority of all employment in this industry is concentrated among the largest contractors (those with annual payrolls in excess of \$1 million). The "average" farm

labor contractor in California was found to be a medium-size business with several hundred employees, a half-dozen supervisory staff (foremen) and a modest office staff. It was also found that safety and labor law compliance efforts of regulatory agencies are quite uneven, concentrated among a few large contractors.⁷

Occupational Injuries: Farmers, Hired Workers, Contract Workers

Reports by farm operators of occupational injuries to themselves, their family members or their employees were included for the very first time in the 1992 U.S. agricultural census. The language of the question was limited to injuries or deaths among the farm operator and family members, or among directly hired workers. Respondents were specifically instructed not to report "...deaths or injuries to contract workers or customworkers."⁸

Figure 2 shows the number of these reported injuries on U.S. farms and on

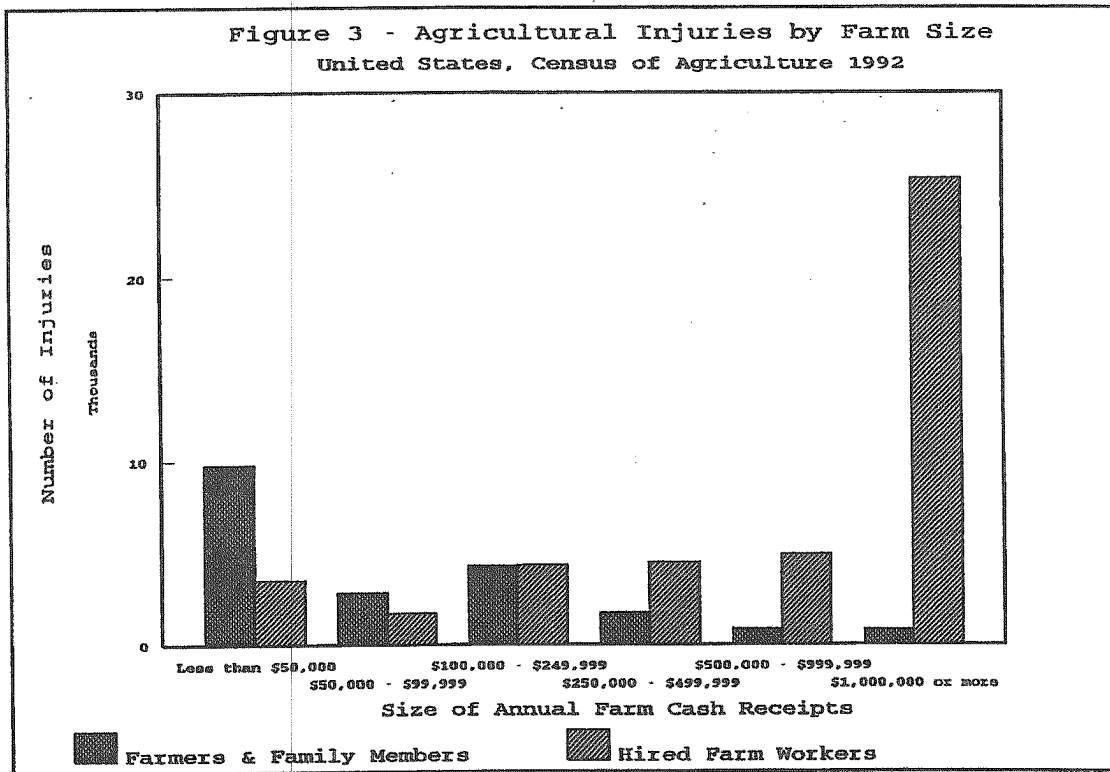


California farms in the two categories Farmers & Family Members and Hired Farm Workers.⁹ Clearly, reported injuries in 1992 to Hired Farm Workers greatly exceed those to Farmers & Family Members, by 2.17:1 on U.S. farms and by 16.41:1 on California farms. However, the specific exclusion by the census of reports of injuries experienced by contract workers who perform on-farm work presents a serious obstacle to the accurate assessment of the total number of injuries or to a determination of their

rate of occurrence. In view of the increased importance of such workers this factor may be quite significant.

Despite the limitation resulting from the exclusion of on-farm occupational injuries experienced by contract workers, the census data clearly show that the great majority of farm injuries are among hired workers. The census data also permit direct examination of the distribution of reported farm injuries by farm size.¹⁰ As shown in Figure 3, farms with annual farm cash receipts from the sale of agricultural commodities that amount to less than \$100,000 per year (small farms) report that most injuries occur to farmers. Among the medium size farms with farm cash receipts between \$100,000 and \$250,000, farmers and directly hired workers experience on-farm injuries in equal number. It is among the largest farms that on-farm injuries are overwhelmingly among hired farm workers. But this is not surprising since it is the largest farms that typically rely on hired workers for supplying most of the needed labor.

California farms are disproportionately large as compared with farms in most



other states. And they rely heavily on hired workers. At present, at least 80% of all work performed on California farms is supplied by hired workers.¹¹ As a consequence, insofar as agricultural injuries in California are concerned, it is mainly hired farm workers, not farmers, who experience these injuries. Overall, about one-

fourth of all U.S. on-farm occupational injuries among directly hired farm workers are reported to occur in California.

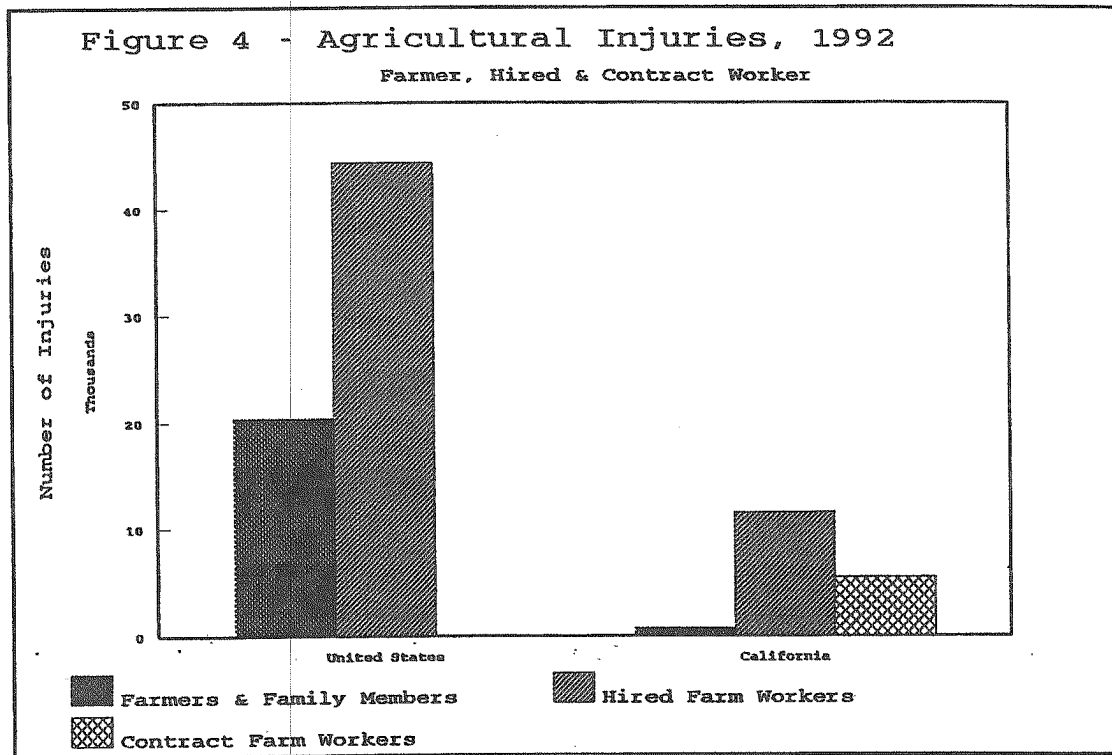
In order to determine the relative importance of occupational injuries experienced by contract farm workers, summary data compiled from workers' compensation claims filed by California agricultural workers was obtained and analyzed.¹² Under California law all employers, without exception, are required to provide workers compensation insurance for all employees. Most employers provide this insurance through a private insurance carrier. A few large employers self-insure their employees, subject to review and oversight by the California Department of Insurance. Under California law, employees who have been injured on the job may file a claim for workers compensation, a copy of which is forwarded to the Department of Industrial Relations (DIR) where the details of the incident are added to the claims records of the agency.

These occupational injury reports are classified by the Standard Industrial Classification Code (SIC Code) of the employer. Published reports of 1992 data from DIR provide sub-totals of all reported injuries at the two-digit SIC level, and by whether the injuries resulted in lost workdays or did not result in lost workdays. In 1992, there were 15,400 nonfatal occupational injuries and illnesses reported in the two SIC codes 01 and 02, crop and livestock farms, respectively.¹³ This is about one-third larger than the number reported in the census. There were also 19,400 such cases reported in the SIC codes 07, agricultural services.¹⁴

Contract farm workers comprise only a portion, albeit a large one, of the employees in the industry group with SIC codes 07, agricultural services. Crop and soil service employees, farm labor contractor employees and farm management company employees are all contract farm workers. On the other hand, pet veterinarian employees (SIC 0742) and lawn and garden workers (SIC 078x) are not. The two-digit SIC coded 1992 DIR data do not provide sufficient detail to segregate contract farm employment categories from those agricultural service employees who do not work on farms. It proved necessary to use 1991 data for which three-digit SIC coded data was available. In that year it was found that there were 2,720 disabling nonfatal occupational injuries and illnesses among soil and crop service employees and 2,784 such injuries among farm labor and management service employees.¹⁵ Altogether, there were 8,680 of these injuries reported in the SIC 07 categories, including both contract farm employees as well as persons who do not perform farm work.

Clearly, 1992 DIR data does not permit further analysis of the SIC 07 categories to separately analyze injuries among on-farm contract workers. But the 1991 data includes only disabling injuries (those resulting in lost workdays) and may not be strictly comparable to responses provided to the census question. Therefore, it was decided to compare the census data with the lower number (1991) of reported occupational injuries that is certain to refer to on-farm contract workers. At the same time it should be recognized that this figure likely understates the true number of injuries of all types that actually occurred in 1992.

The number of on-farm disabling occupational injuries and illnesses among



contract workers that occurred on California farms in 1991 is compared with the census data (1992) in Figure 4. The most significant observation is that, in California, the number of reported on-farm injuries among contract workers is at least 50% of the total reported among direct hire employees, and is nearly eight times larger than the total number of such injuries reported among farmers and family members. There is no comparable data set reporting injuries among contract farm workers in the U.S. as a whole.

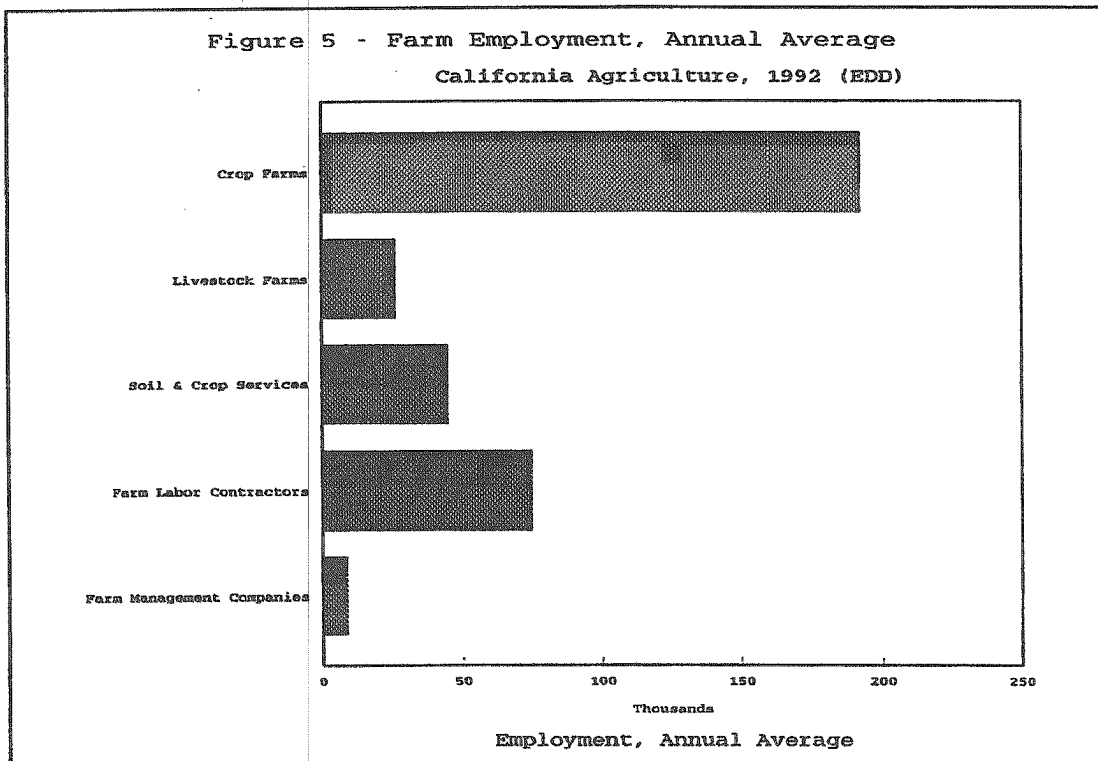
It is likely that strictly comparable same-year figures for disabling occupational injuries among contract farm workers in 1992 are larger than the 1991 reports that we have utilized in our comparison with 1992 census data. This is because the total number of disabling injuries in the SIC 07 codes reported in 1992 is 10,000, about 15% larger than the 8,680 reported in 1991.¹⁶ We have chosen not to extrapolate an estimate of the 1992 figure for contract farm workers, and instead rely on data for 1991 that refers exclusively and exactly to the population of interest, even though it is for the previous year.

Reported employment can be used to obtain nominal injury rates among California farmer and family members, directly hired farm workers and contract farm workers. The most reliable employment figures for hired workers are available from the California Department of Employment Development (EDD). These are obtained

from compilations of reports submitted by employers that are associated with payments of their quarterly taxes, notably the state's unemployment insurance tax. These reports are required to contain month-by-month counts of the number of persons who were on the payroll in the pay period that includes the twelfth day of the month. Thus, the quarterly tax report will include counts for all three months of the quarter. Each employer's report is classified by a single SIC code and statewide totals for agriculture are regularly published.¹⁷

Annual averages of the twelve monthly reports are easily calculated and can be analyzed at the four-digit SIC code level. For California, agricultural employment, determined in this way, is likely to be relatively accurate because, unlike most other states, unemployment insurance coverage is nearly universal, even for seasonal employees.

Figure 5 summarizes annual average farm employment on California farms among both directly hired farm workers and among the three major types of contract farm workers. Farm labor contractor employment is the most significant category of on-farm contract employment. Taken together annual average contract farm employment in the three categories shown amounts to roughly 50% of direct hire farm employment, a sizeable fraction.

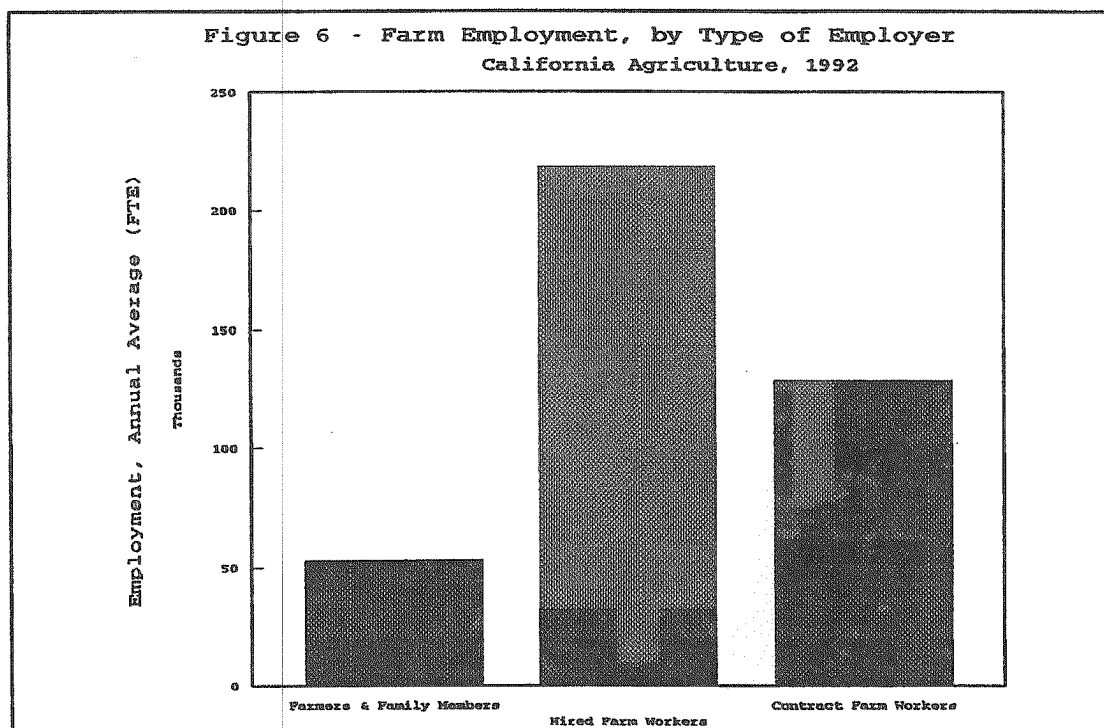


The actual number of different persons employed in the various categories of on-farm employment varies greatly in the course of a year. And monthly employment

totals in a specific category also vary by a large amount. In the case of labor contractors, the reported total reached 102,829 during August 1992, and was as low as 45,658 in February 1992, when most areas of the state have only limited agricultural activity. In contrast, dairy farm employment, the major category of livestock farm employment, varies only by a relatively small amount over the twelve months of the year. It reached a high of 13,357 in August 1992 and was at its low value of 12,457 in February 1992.

Job turnover is also high among seasonally employed farm workers. On average they are able to find about thirty-three weeks of work each year and typically work for several different employers. Thus, the annual average employment figures described above refer to Full-Time-Equivalent workers. It is believed that the actual number of persons performing hired farm work in California for at least part of the year is in the neighborhood of 700,000, roughly twice the annual average farm employment of approximately 350,000.

An aspect of these employment data that is of some concern is that the count of workers provided by employers is of Social Security numbers. Those who are knowledgeable about farm workers are aware that individual workers often "borrow" such a card from a friend or even from an employer's relative, especially if the worker is not authorized to work in the U.S. Thus, tracking individual employees using employment data is virtually impossible and effectively precludes any careful examination of employment patterns and associated occupational exposures.



By combining the various categories of contract workers and using an accurate measure of farmer and family member employment,¹⁸ on-farm employment, by category of worker - farm family, direct hire, contract hire - was determined for California in 1992.

The results are shown in Figure 6. Evidently, contract and direct hire farm employment totals approximately 350,000 while farmer and family member employment was about 50,000. By this measure, about 87.5% of all California farm work is performed by hired workers. Presumably, an equivalent proportion of all types of occupational risk exposure are also experienced by hired farm workers and farm family members. Of course, the types and relative seriousness of risks may vary greatly between categories of workers.

These employment data, together with the reported injury data, provide a basis for estimates of injury rates among these three different categories of California farm workers. This computation relies on the following data sources.

Number of Nonfatal Occupational Injuries and Illnesses

Farmer & Family	Census of Agriculture, 1992
Hired Farm Worker	Census of Agriculture, 1992
Contract Farm Worker	CA Department of Industrial Relations, 1991

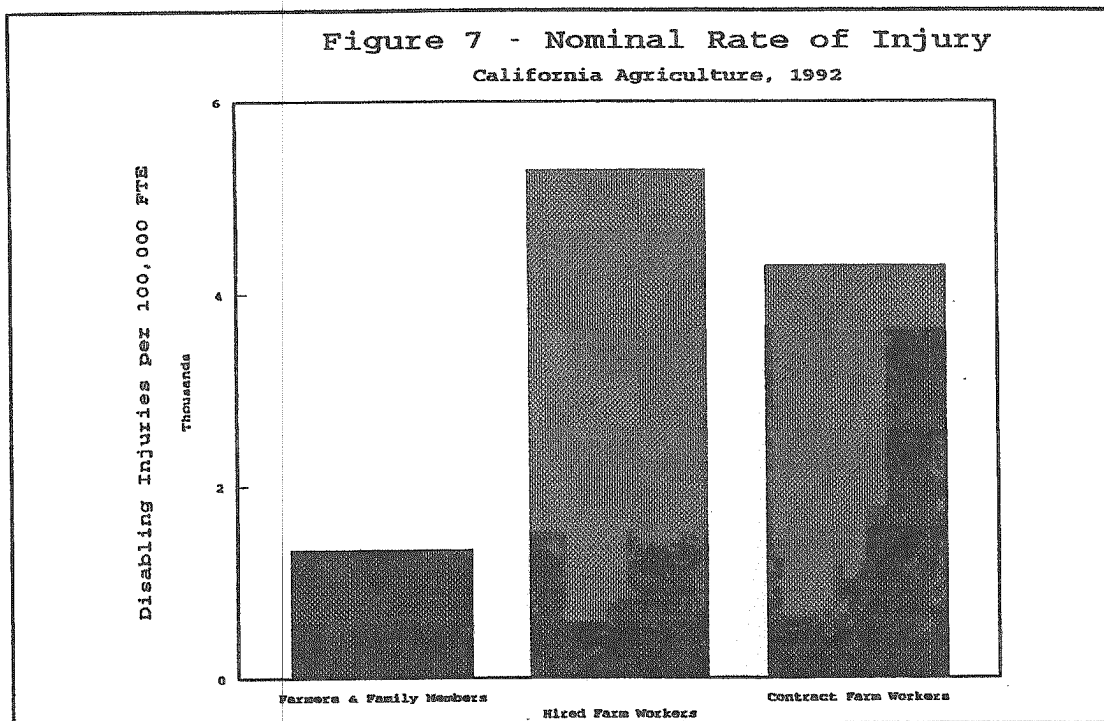
Farm Employment, Annual Average

Farmer & Family	U.S. Department of Agriculture, 1992
Hired Farm Worker	CA Department of Employment Development, 1992
Contract Farm Worker	CA Department of Employment Development, 1992

Figure 7 shows the results of this computation of nominal injury rates. Both the direct hired farm worker and contract farm worker injury rates are substantially greater than the nominal rate for farmers and family members in California. This is an unexpected result. Job tasks and associated risks would be expected to be rather similar among persons working on farms, whether hired or farm operator. These data indicate that the relative risk of occupational injuries or illnesses to a hired or contract worker is several times larger than for a farmer or family member.

It is instructive to recall that these data do not reflect an objective, direct measure of injuries. Rather, in the case of the census data, they reflect self-reported numbers of injuries experienced by the farm operator or directly hired workers. In the case of contract workers, they reflect reports of workers compensation insurance claims. Both self-reported data and compilations of workers compensation claims have important limitations and these must be considered when interpreting the nominal injury rate.

The employment data are likely to be relatively more accurate. This is because they

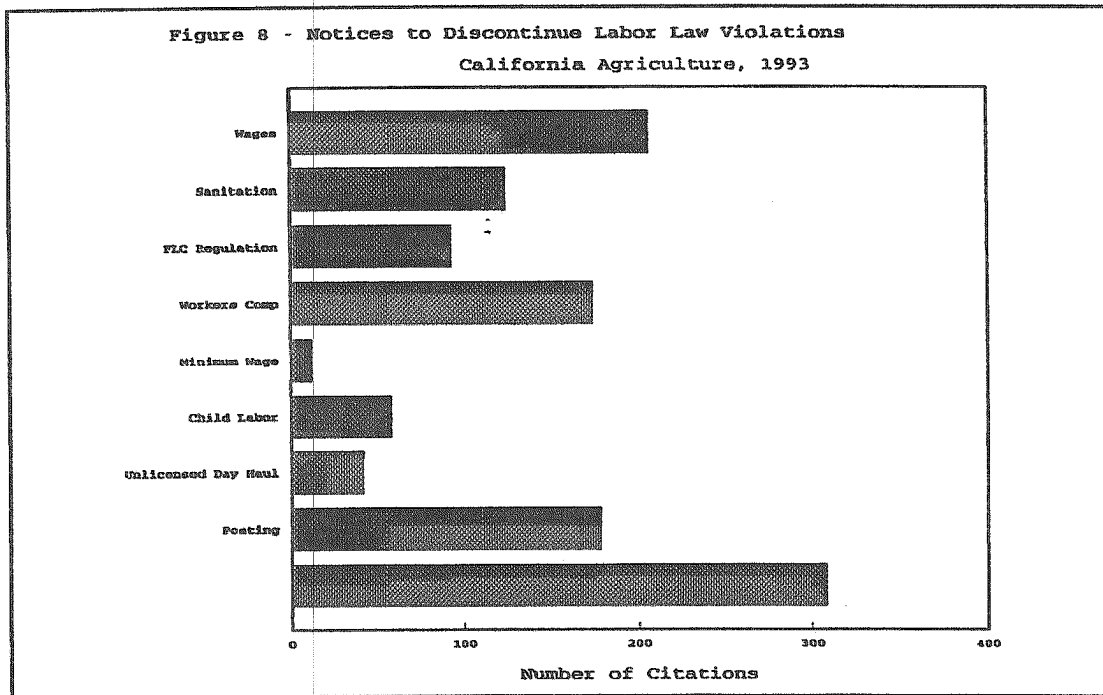


are based on employment records which are subject to periodic audit by government agencies, including tax authorities. While there are undoubtedly instances of under-reporting of employment, such instances are more likely to occur among small employers, those who account for a very small share of total employment. Thus, the total employment figure is likely to be affected by only a small amount.

Reducing Risk Through Strengthened Safety Enforcement

Safety enforcement efforts in California agriculture are largely handled by two agencies: Cal-OSHA and the Labor Commissioner. Under the Targeted Industry Partnership Program (TIPP), both agencies cooperate with the U.S. Department of Labor and with other state agencies who have an interest in labor law and health and safety code compliance. Under California law the Labor Commissioner has the authority to conduct inspections at the work site as well as issue citations or levy fines. These enforcement tools provide enforcement and compliance staff with the ability to materially affect the work place, and especially safety concerns. Until recently, the efforts of these agencies in the agricultural sector have been largely complaint-driven. However, beginning in 1993, surprise sweeps were conducted in several major agricultural areas of the state. The largest such effort was mounted in Fresno County, the nation's leader in agricultural production.

Figure 8 shows the number of citations issued to agricultural employers by the California Labor Commissioner during 1993, the first year of TIPP, by type of violation



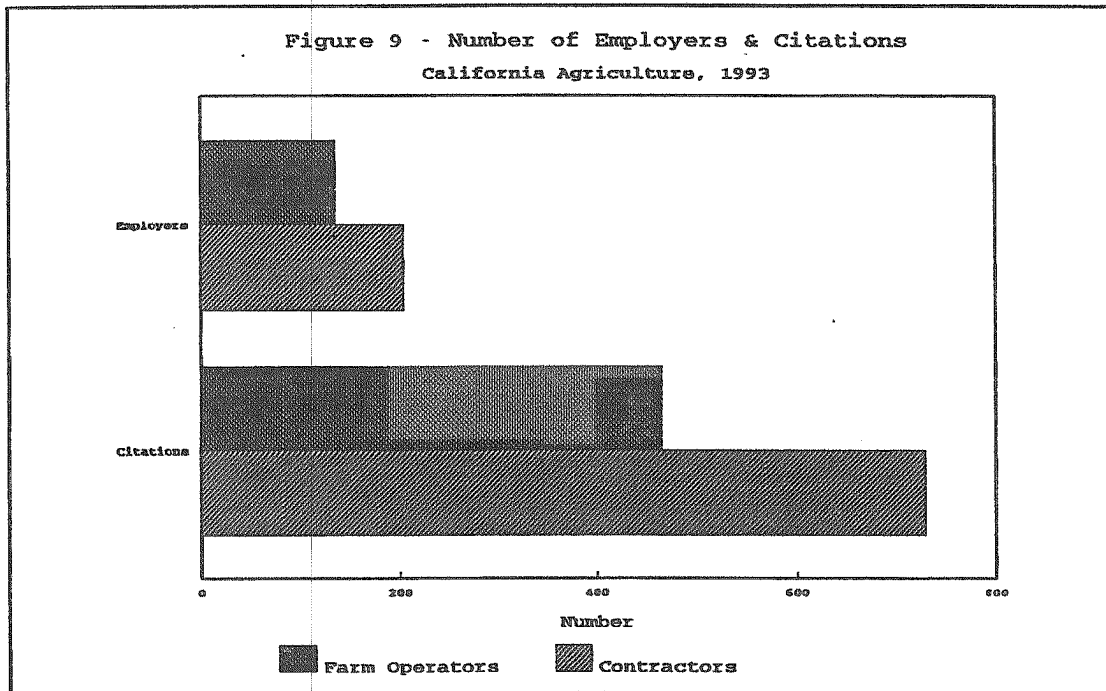
found at the work site.

Approximately 1,100 citations were classified according to type of violation. Those directly related to farm safety and occupational health concerns are field sanitation, workers compensation insurance, child labor, unlicensed day haul and, possibly, posting. Thus, at least half of the citations are those which directly relate to occupational safety and health concerns.

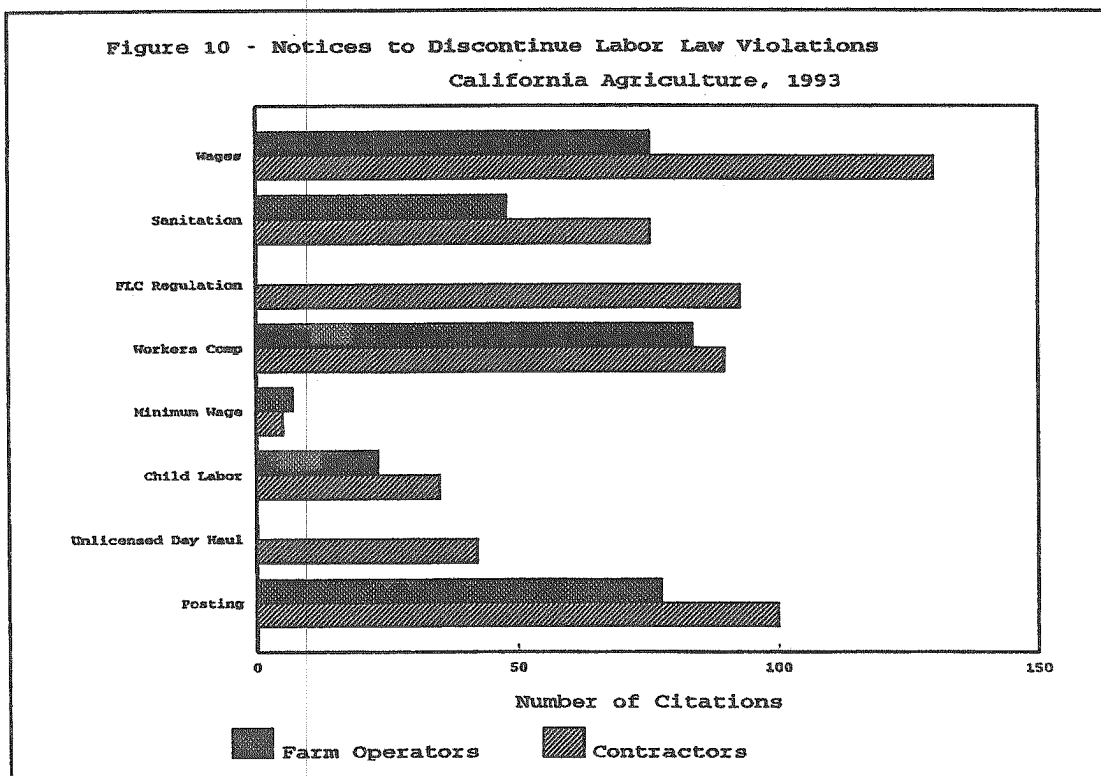
The raw data furnished by the Labor Commissioner included the name of the employer, whether business or individual.¹⁹ These names were matched against the electronic file of 55,000 farm operators and of more than 1,000 farm labor contractors maintained by the California Institute for Rural Studies. This matching process permitted the classification of employers into two major categories: farm operator and contractor.

The results of this analysis is shown in Figure 9. The majority of employers who received citations, and of citations as well, were found to be issued to labor contractors. The total number of employers cited was about 360 so that the average number of different citations per employer was roughly three.

By classifying the employers in this way it was possible to analyze the type of violation by employer category. This is shown in Figure 10. Contractors are found to be the principal category of employer cited for all types of violations although, surprisingly, for both child labor and workers compensation insurance violations, farm operators were cited nearly as frequently as contractors. In the two categories "FLC Regulations (Farm Labor Contractor Regulations)" and "Unlicensed Day Haul" only contractors were cited, which is to be expected since these are regulations that only



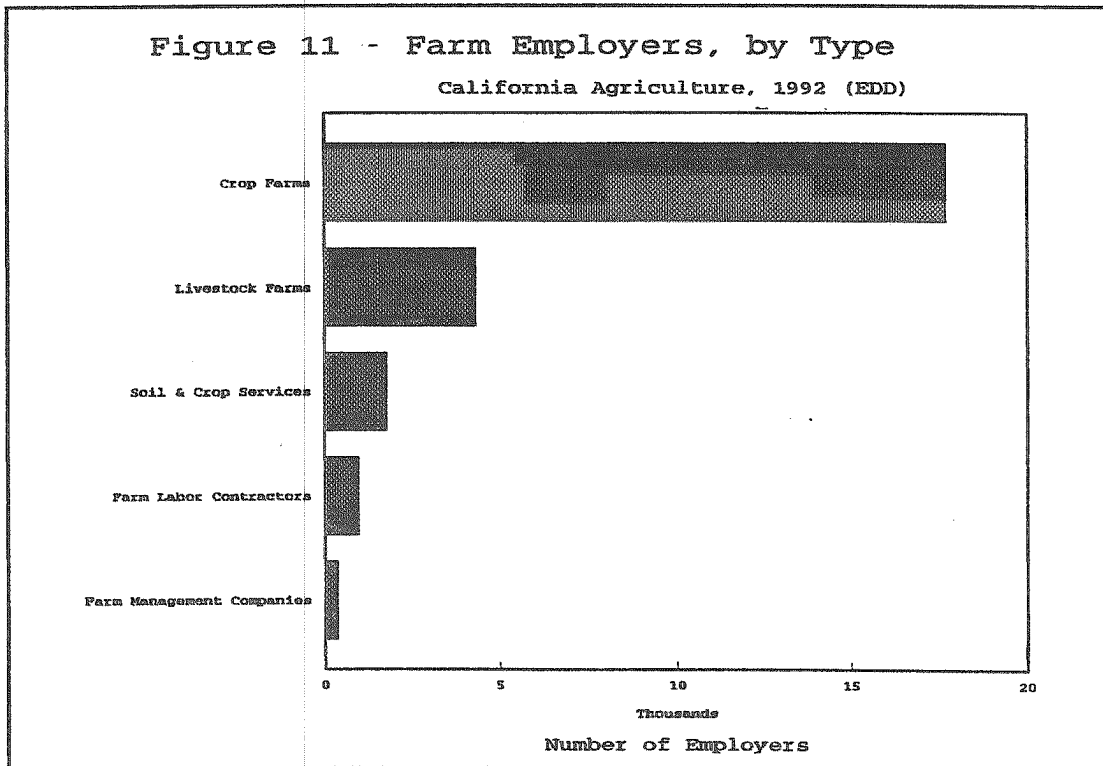
apply to them.



According to the California Labor Commissioner, the unlicensed day haul operators are frequently found to lack both a drivers license as well as liability insurance.²⁰ This is especially significant since 50% of farm worker occupational mortalities are the result of vehicle accidents. As many as one farm worker in three does not own a car, which makes going to remote locations to perform farm work problematic. Day haul drivers, called "reiteros," and car pools fill the transportation gap. Therefore, enforcement of minimal standards among the hundreds of drivers who bring farm workers to their jobs can have a major impact on farm worker occupational mortality. In some instances, particularly among larger employers, buses operated by the employer provide the needed ride to work.

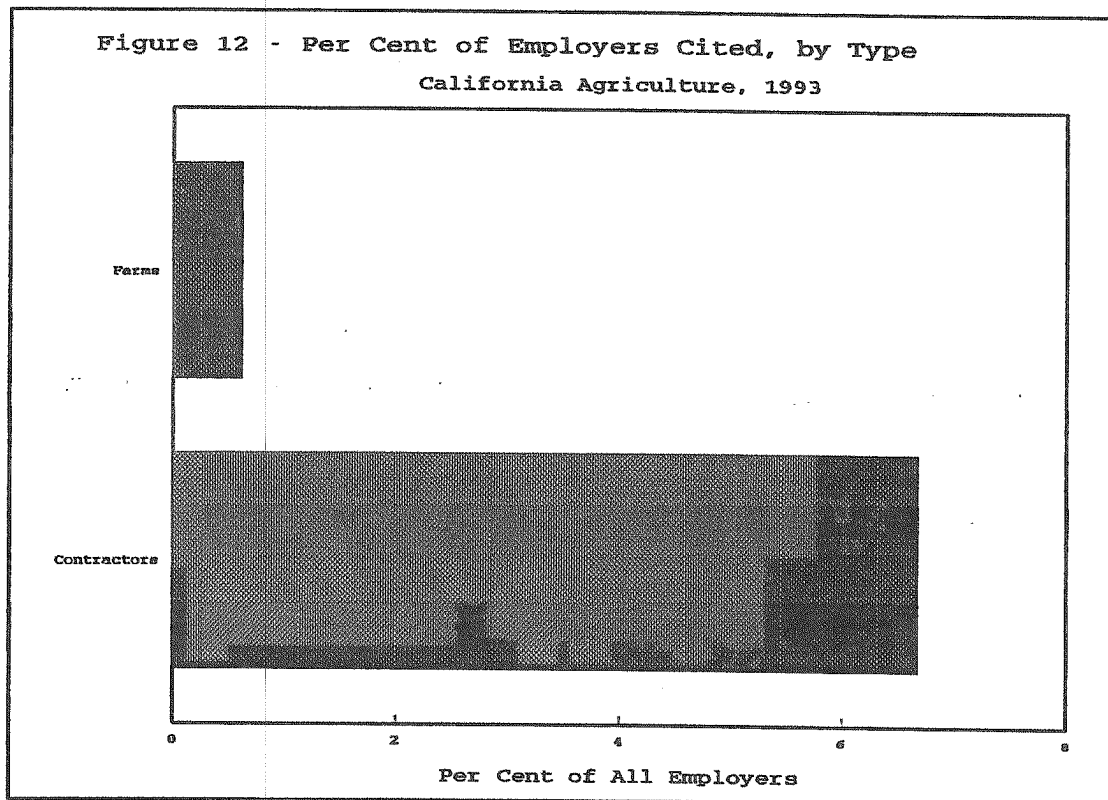
Farm employment records provided by EDD also yield counts of the number of employers by category (SIC code). For California agriculture in 1992, their numbers, by major category, are shown in Figure 11. Crop farm operators were, by far, the largest number among farm employers. Livestock farm operators ranked next, and the combined total of all contract farm employers was actually less than the number of livestock farm employers.

These data are sufficient to allow a direct computation of the frequency of citation of employers, by type of employer. This is presented in Figure 12 where the per cent of all employers who were cited, by type of employer, is shown. Contractor employers were about ten times more likely to be cited for safety and health, or labor law, violations in



1992 than were farm operators. Roughly one in sixteen contractor employers were found to be cited for violations of labor law, as compared to just one in two hundred farm operator employers. This finding alone suggest that a more intensive enforcement effort among contractors is needed as compared with farm operators.

Another unambiguous finding is the significant number of citations issued to day haul drivers. Most often these are drivers who charge a flat cash payment for each day's ride to the job. In some instances, obtaining the job is contingent on agreeing to pay the "reitero" for the ride to the job.



Conclusions

The major findings reported in this paper are several. First, contract farm workers are a major factor in California agriculture, and their presence is reflected in the large number of disabling occupational injuries and illnesses which they experience.

Second, the nominal rate of disabling occupational injury among farm workers, both direct hire and contract hire, is significantly larger than the corresponding rate among farmers and unpaid family members. This unexpected finding suggests that there may be unidentified risk factors that place hired workers at greater risk.

Third, California contractor employers are ten times more likely to be found in

violation of labor laws, whether health and safety, or other types of labor laws than are farm operators. This findings suggests that enforcement efforts targeting labor contractors are warranted.

Finally, day haul drivers require special attention since they are placing their riders at risk to the leading cause of farm worker occupational mortality.

REFERENCES

1. Census of Agriculture. Volume 1. Part 51. United States, 1974 & 1992, Bureau of the Census, U.S. Department of Commerce, Washington, DC, Table 3. Farm Production Expenses.
2. The Bureau of Labor Statistics reports that the U.S. Consumer Price Index (CPI) was 49.3 in 1974 and 140.3 in 1992. Some might argue that the Gross Domestic Product deflator might be a better indicator of wholesale prices. We have chosen to use the CPI in the present case.
3. In 1974 the Hired Labor Production Expense was \$4,652.1 million while in 1992 the comparable figure was \$12,961.6. See Census of Agriculture, op. cit.
4. Agricultural Employment Pattern Study: 1989, California Agricultural Studies, Report No. 92-1, Employment Development Department, State of California, CA, February 1992, Table 1, P. 42.
5. Agricultural Employment, Report 882-A, 1987-1992, Labor Market Information Division, Employment Development Department (EDD), State of California, Sacramento, CA. Data for the years 1978-1986 was obtained directly by the California Institute for Rural Studies from unpublished reports prepared by EDD upon special request. We are grateful to the staff of EDD for their cooperation in making this unpublished data available.
6. Farm Labor Contractors in California, California Agricultural Studies, Report No. 92-2, Labor Market Information Division, Employment Development Department, State of California, Sacramento, CA. The Principal Authors of this report were Howard Rosenberg, Suzanne Vaupel and Don Villarejo.
7. Ibid, pp. 75-77.

8. Census of Agriculture, op. cit., Appendix D, p. D-12.
9. Census of Agriculture, op. cit., Table 46. Summary by Tenure of Operator: 1992.
10. Census of Agriculture, op. cit. See Table 52.
11. D. Villarejo and D. Runsten, California's Agricultural Dilemma, California Institute for Rural Studies, Davis, CA, December 1993.
12. California Work Injuries and Illnesses 1992, Division of Labor Statistics and Research, Department of Industrial Relations, State of California, San Francisco, CA. Table 2. Number of Nonfatal Occupational Injuries and Illnesses, by Industry, 1992.
13. California Work Injuries and Illnesses. 1992, Division of Labor Statistics and Research, Department of Industrial Relations, State of California, San Francisco, CA. Table 2. Number of nonfatal occupational injuries and illnesses, by industry, 1992.
14. Ibid.
15. Ibid. 1991 report. See Table 3.
16. Ibid.
17. Agricultural Employment, Report 882-A, Labor Market Information Division, Employment Development Department, State of California, Sacramento, CA.
18. Farm Labor, Economic Research Service, U.S. Department of Agriculture, Washington, DC.
19. The author is grateful to Victoria Bradshaw, Labor Commissioner, State of California, for kindly furnishing the full set of data pertaining to 1993 citations issued to agricultural employers in California.
20. Victoria Bradshaw, California Labor Commissioner, private communication.