This report examines the extent to which young people work in California agriculture and describes work-related hazards and injuries among young agricultural workers. Data were gathered through a literature review; discussion groups with parents, community groups, and English-as-a-second-language students in the San Joaquin Valley; surveys of 295 high school students in 4 central California counties; and interviews with 23 farm employers. Findings indicate that current employment data do not accurately reflect the situation in many San Joaquin Valley communities. National studies of childhood agricultural injury and illness cannot be generalized to California because of unique aspects of the state's agricultural industry. Research is especially lacking on sexual harassment and other forms of workplace discrimination faced by young farmworkers. Agriculture is a major source of youth employment in California. Agriculture is also a dangerous occupation, with high rates of fatal and nonfatal injuries for all workers and young workers. Nevertheless, farm labor contractors often do not know or obey child labor regulations. Occupational risks and poor working conditions include working in the sun, exposure to pesticides, hazardous machinery, lack of clean bathrooms and drinking water, and transportation hazards. Participants were unanimous that agricultural health and safety should be part of the school curriculum. Recommendations are offered to employers, schools, parents, community organizations, researchers, and government agencies. Appendices include an outline of California child labor laws and a fact sheet for teen agricultural laborers in English and Spanish. (Contains 46 references.) (SV)
YOUNG AGRICULTURAL WORKERS IN CALIFORNIA

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November, 1997
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**Appendices:**

1. California Child Labor Laws
2. "Are You a Teen Working in Agriculture?" (Sample factsheet—English)
3. "¿Eres un joven que trabaja en el campo?" (Sample factsheet—Spanish)
The University of California's Department of Agriculture and Natural Resources (DANR) and The California Wellness Foundation recently provided funding to the Labor Occupational Health Program (LOHP) to examine job health and safety for young agricultural workers in California. The goals of the project were:

1. To gather information and write a comprehensive report describing work-related illness and injury among youth working in California agriculture.

2. To recommend educational, policy, and research interventions to improving the occupational health and safety of young agricultural workers.

3. To implement educational strategies targeting young farmworkers.

These goals were accomplished through a literature review, student surveys, community discussions, and employer interviews. The literature review and our field work raised a number of interesting issues. Some highlights include:

- Current employment data on youth in California agriculture do not accurately reflect the situation in many agricultural communities in the San Joaquin Valley.

- Most national studies of childhood agricultural injury and illness cannot be generalized to California because of unique aspects of the state’s agricultural industry.

- Research is especially lacking on sexual harassment and other forms of workplace discrimination faced by young farmworkers.

Our discussions with parents, community organizations, youth, and employers revealed that:

- Agriculture is a major source of youth employment in California. Harvesting and hoeing were mentioned as the most common tasks.

- Farm labor contractors often do not know child labor regulations and at times break the law to get the job done.

- Participants were unanimous that agricultural health and safety should be part of the school curriculum.
Most youth felt that working in the sun and being exposed to pesticides are the greatest occupational risks for farmworkers.

Several youth commented that young women in the fields encounter sexual harassment by foremen and/or employers.

Lack of clean bathrooms and of drinking water was repeatedly mentioned by youth.

None of the youth in our groups were involved in FFA or 4-H. They felt these were primarily for farmers’ children, not farmworkers’ children.

Employers hire raiteros (drivers) to transport their workers. They have difficulty complying with laws restricting young people’s work hours since there are no special trips made for the youth.

Based on our experience from this project, we realize that much work still needs to be done. In order to advance the health and safety of young agricultural workers, an active role needs to be taken by employers, schools, parents, community-based organizations, researchers, and government enforcement agencies.

Based on the study conducted by this project, we recommend several educational, policy, and research interventions. These include:

- Increase agricultural employers’ awareness of child labor laws and occupational health and safety issues facing young workers.

- Institutionalize bilingual health and safety training in school curricula.

- Provide health and safety programs in the community and at the worksite to reach out-of-school youth.

- Involve parents and community-based organizations in educational efforts.

- Expand the scope of research on childhood agricultural injury and illness to include hired young farmworkers as well as youth on family farms.

- Improve data collection and analysis by government agencies to inform educational and prevention efforts.
Prologue—One Teen’s Story

Teenage Irrigator’s Finger Mangled By Pipe

A fifteen-year-old irrigator was taking apart sprinkler lines in a garlic field with another worker. While his partner lifted one section of pipe, the teenager grabbed the next section at its mouth. But the two sections of pipe were stuck. The partner moved his section to break them free. The young irrigator’s hand got caught where the pipes joined. His fingers were cut and broken, and the tip of his little finger was almost completely cut off.

The farm did not have a procedure to care for injuries. The foreman told the teen’s father, who was also working there as an irrigator, to take him to a doctor.

The injured teenager was part-time, on his summer vacation from high school. He was on his first day of paid work as an irrigator. In the past, he had helped his father work as an irrigator, but had not received wages.

The teen had not received any training on how to handle and move irrigation pipes. He had never been told of the need to use personal protective equipment (such as leather gloves). His only experience with irrigation pipes came from helping his father.

— Nurses Using Rural Sentinel Events, Report #20 (NURSE 1992)
  California Department of Health Services
  Occupational Health Branch
SECTION ONE:
Introduction and Methodology

Highlights—Section 1

♦ Goals of the LOHP project were to:
  • Write a report on youth illness and injury in California agriculture
  • Recommend approaches to improving health and safety
  • Implement educational strategies targeting youth in agriculture.

♦ Methodology included:
  • Literature review
  • Community discussion groups
  • Student surveys
  • Employer interviews.

The Labor Occupational Health Program (LOHP) is the community outreach component of the Center for Occupational and Environmental Health at the School of Public Health, University of California at Berkeley. Since 1974, LOHP has provided health and safety training, information, and assistance to unions, workers, joint labor-management groups, community organizations, health professionals, and the general public.

LOHP has a long history of working with high school, vocational education, and apprenticeship programs that reach young people. Through these activities LOHP became increasingly aware of the need for a systematic approach to job health and safety training at the high school level. In 1994, LOHP produced a report for Cal/OSHA, *Young Workers at Risk: Health and Safety Education and the Schools*. Based upon the recommendations in the report, LOHP began a collaborative project with the Oakland (CA) Unified School District and all of its high schools. The project involves a multifaceted educational approach, both in
the schools and in the community, to involve teachers, students, parents, employers, and others in an effort to protect young people on the job. This work has been funded since 1995 by the National Institute for Occupational Safety and Health (NIOSH).

The University of California's Department of Agriculture and Natural Resources (DANR) and The California Wellness Foundation recently provided funding for LOHP to expand our work to include young agricultural workers. The new project, which began in early 1997, had three main goals:

1. To gather information and write a comprehensive report describing work-related illness and injury among youth working in California agriculture.

2. To recommend educational, policy, and research interventions to improving the occupational health and safety of young agricultural workers.

3. To implement educational strategies targeting young farmworkers.

This report summarizes the information LOHP collected and offers recommendations for promoting the health and safety of young agricultural workers. Our project methodology included the following elements:

- **Literature Review.** We reviewed research and statistics on childhood agricultural injury and illness, agricultural health and safety, and the agricultural labor force in California. We spoke with over 50 professionals in the fields of health and safety, education, and labor to guide us to the most accurate statistical data.

- **Community Discussion Groups.** Through five two-hour group discussions in Fresno, Mendocino, and Tulare Counties, we obtained input from parents whose teens work in agriculture, as well as representatives from community groups and government agencies that have contact with teen farmworkers. In addition, we held five short group discussions with English as a Second Language (ESL) students attending two high schools in the San Joaquin Valley agricultural communities of Firebaugh (Fresno County) and Arvin (Kern County). Participants addressed the extent to which youth work in agriculture in their communities, hazards found in farm labor, wage and hour issues, health and safety programs, and strategies for protecting young people on the job.
**Student Surveys.** During the spring, summer, and fall of 1997, survey forms were completed by 295 high school students (ages 14-18) in Fresno, Kern, Kings, and Tulare counties. 113 of these students were enrolled in California's Migrant Education Summer School Program. Another 164 were enrolled in ESL classes at two high schools. In addition, 18 students in one Vocational Agriculture Academy class were surveyed. The students were asked if they had worked in agriculture, and if so, the kinds of crops with which they had worked and specific tasks they performed.

**Employer Interviews.** We interviewed 23 San Joaquin Valley employers, the majority of whom were farm labor contractors. We specifically asked about their workers under the age of 18: the number they employ, the type of work the youth do, the employers' experiences and opinions as to why teens work, and their suggestions for protecting young people on the job.
SECTION TWO:
Agriculture in California and the Farm Labor Force

Highlights—Section 2

- California is the most productive agricultural state. Production surpasses second-ranked Texas by 60%.

- California’s agricultural success depends heavily on hired farm laborers. They perform an estimated 80% of the state’s agricultural work.

- California’s agricultural workforce tends to be Latino and poor.

Our research disclosed that California’s agricultural industry stands apart from that in other areas of the U.S. for two reasons. First, it is highly productive economically. Second, it relies on a hired workforce.

California is the most productive agricultural state in the country (Gabbard et al. 1993). Gross annual production is 60% higher than in Texas, which ranks second nationally. Forty percent of all vegetables grown in the United States come from California. In 1993, the value of California’s agricultural exports was nearly $5.6 billion (CA Dept. of Finance 1995).

California employs about 720,000 of the nation’s 2.5 million hired agricultural workers. California agriculture relies less on the traditional family farm than agriculture in other parts of the U.S. Only 40,215 of California’s 77,669 farms (52%) are operated by individuals who consider farming their principal occupation (Census of Agriculture 1994). A few large scale farms dominate California’s agricultural production. Just 3.4% of farms account for 60% of production (Villarejo 1990).

The state’s agricultural success depends heavily on hired farm laborers. For every one farmer in California, there are 18 hired agricultural workers. Hired laborers do an estimated 80% of California’s agricultural work (Villarejo and Runsten 1993). The majority of hired farm laborers (on U.S. farms with over ten workers) are employed in California and Florida. The
high-value, labor-intensive crops grown in these two states require this large agricultural workforce (Schenker 1996).

This critical workforce tends to be Latino and poor. Recent statistics show that 92% of California's crop workers were born outside the U.S., with the overwhelming majority from Mexico (Rosenberg et al. 1993). It has been estimated that at least half of the farmworkers in California live below the poverty level (Villarejo and Runsten 1993).
SECTION THREE:
Young Agricultural Workers

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<tr>
<td>♦ 1996 employment data show that 5% of U.S. working teens are employed in agriculture. Workers from 15-19 years old make up 14% of all hired farmworkers nationwide.</td>
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<td>♦ The 1990-91 National Agricultural Workers Survey (NAWS) estimates that 2% of hired crop workers in California are between 14 and 17. However, the latest NAWS report suggests that younger workers have recently become a larger share of the farm labor force.</td>
</tr>
<tr>
<td>♦ Underreporting may occur for numerous reasons and has been demonstrated by researchers.</td>
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<tr>
<td>♦ Despite official figures, community members and students in the San Joaquin Valley report that a significant proportion of adolescents in their communities do farm labor.</td>
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<tr>
<td>♦ About half of young farmworkers nationwide are white, but the majority in California are Latino.</td>
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<td>♦ Low-income adolescents are more likely to work in hazardous industries such as agriculture than teens from higher income households.</td>
</tr>
<tr>
<td>♦ About 47% of U.S. farmworkers under 17 live on their own, away from their parents. 80% of immigrant teen farmworkers live on their own.</td>
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Many Youth Work In Agriculture

According to official estimates, 132,000 young people (16 and 17 years old) were employed in agriculture in the U.S. in 1995 (BLS 1996a). According to 1992 employment data, 5% of U.S. working teens are employed in agriculture. (See Figure 1.)

According to the California Employment Development Department (EDD), youth working in California agriculture represent 4% of all working teens in the state. According to the U.S. Department of Labor’s National Agricultural Workers Survey (NAWS), young California agricultural workers represent only an estimated 2% of all hired agricultural workers in the state (Rosenberg et al. 1993). By these figures, about 14,000 of the estimated 720,000 California farmworkers are under 18. Though the NAWS statistics show that youth officially represent a very small percentage of all hired California farmworkers, this contradicts our experience. Our community discussion group participants and students we surveyed reported that a significant proportion of adolescents in their communities perform farm labor.

Limitations of Workforce Data

Researchers recognize that many data sources underreport youth labor force participation (U.S. GAO 1991). For agricultural workers under 18, this may occur for several reasons. It has been demonstrated that the 1990 U.S. Census of Population undercounts the hired farmworker population by about 60% (Gabbard et al. 1993). Accordingly, the Current Population Survey (CPS) may greatly underreport the number of farmworkers (including teens) because it is based on the Census.

Furthermore, a recent study conducted in the Fresno County town of Parlier suggests that migrant farmworkers, undocumented immigrants, the poor, and non-English speakers may be missed by the Census (Sherman et al. 1997). These groups are widely represented among California’s farmworker population. For example, only one out of ten California crop workers reports speaking English well, and over 40% report speaking no English (Rosenberg et al. 1993).

The Census of Agriculture (COA), one of the most comprehensive national sources of farm-related data, includes farmworkers but not those employed by farm labor contractors. This, too, may distort California figures substantially, since one-fourth of peak season workers in the state report being employed by a farm labor contractor (EDD 1990). The COA also does not capture employees of companies that provide agricultural services such as packing.
Where Do U.S. Teens Work?

Service 25%
- Recreation ................. 6%
- Education .................. 4%
- Health services .......... 3%
- Other services ............. 12%

Retail 54%
- Restaurants ............... 24%
- Grocery stores ............ 10%
- Department stores ....... 4%
- Other retail ............... 16%

Manufacturing 5%
- Agriculture ..............
- Construction ............ 3%
- Other ................... 8%

Our community discussion group participants, employers, and surveyed students all reported that California youth often work in fruit and vegetable sorting and packing.

Other factors also contribute to the limited and conflicting statistical information about young agricultural workers. For example, little employment data exists for children under 14. Data completeness and accuracy also vary for 14-16 year old workers. In sum, traditional employment data reflect inconsistent reporting on these age groups. Furthermore, young people may be paid in cash “under the table” and thus be part of the “underground economy.” Therefore, they may not appear in payroll records or in government statistics. Also, youth hired with false adult documentation would not appear in statistics as minors. Some children may work to contribute to a parent’s salary and therefore are not listed as official employees of the farm. This especially occurs in piece rate jobs. For all these reasons, it is clear that official employment figures represent only some of the youth actually employed in agriculture.

LOHP’s Survey

As mentioned in Section 1, LOHP surveyed 295 high school students. These included:

- 113 students ages 14-18 from eight classes in California’s Migrant Education Summer School Program in Fresno, King, Kern, and Tulare Counties. (For students to be eligible for this program, they or their families must have moved during the last 36 months to obtain temporary or seasonal employment in agriculture, dairy, fishing, or logging.)

- 164 students from five English as a Second Language (ESL) classes in the agricultural communities of Firebaugh, Arvin, and McFarland, CA.

- 18 students from one Vocational Agriculture Academy class at Firebaugh High School.

Of the 295 students surveyed, all but one was Latino. Many had worked in agriculture. (See Figure 2.)

- Of the 113 Migrant Education students, 65% reported performing farm work at some time. These students most frequently began working at the age of 13, picking grapes or tree fruit.
Based on a convenience sample of 295 high school students in the San Joaquin Valley of California, 1997.

Vocational Agriculture Academy Students: 11%
Migrant Education Students: 65%
English as a Second Language Students: 71%
Of the ESL students, 71% reported working in agriculture. Those who had worked as hired farm laborers most commonly reported harvesting and hoeing as their primary agricultural jobs. They frequently worked in grapes, tomatoes, and cotton. Most began working in farm labor between 14 and 15.

Of the 18 Vocational Agriculture Academy students, 11% had done farm labor.

We suspected that a large number of Migrant Education and ESL students in rural high schools might have experience working in agriculture, and our results confirmed this. Even though we had a small sample of Vocational Agriculture Academy students, we were surprised that so few had actually worked as farm laborers. Interestingly, the Vocational Agriculture Academy students had all received some basic farm health and safety information as part of their Academy curriculum or through their affiliation with Future Farmers of America (FFA) and 4-H, despite their limited employment in agriculture.

While this convenience sample (a sample not randomly selected) does not allow us to construct a complete count of youth working in agriculture in California, it does indicate that many Latino youth in agricultural communities of the San Joaquin Valley are indeed working as hired farm laborers. Our results suggest that official employment statistics, nationally and statewide, do not reflect the significance that agriculture has for working teens in these communities.

Our survey also made a first attempt to look at the specific tasks youth perform in agriculture and the major crops in which they work. These are two areas in which there is no existing data. Yet more comprehensive information of the type we collected could be valuable for effectively targeting agricultural injury prevention efforts.

Profile of Young Farmworkers in California

Although figures indicate that approximately one-half of young farmworkers nationwide are white, the demographics in California are different. While exact numbers are not available specifically for young farmworkers, we do know that 82% of all crop workers in California were born in Mexico (Rosenberg et al. 1993). Recent figures from the National Agricultural Workers Survey (NAWS) also indicate that Mexican-born workers between the ages of 14-17 most commonly worked in the West (28%), Southeast (21%), and Midwest (31%), while their white counterparts overwhelmingly worked in the Midwest and Great Plains (67%). (Mines et al. 1997).
For many farmworker families, work in agriculture appears to continue through the generations. According to the NAWS report, most young farmworkers said that their parents had either done farm work or came from a farm background. The U.S. General Accounting Office (GAO) reports that low-income adolescents are more likely to work in hazardous industries such as agriculture than teens from higher income households (U.S. GAO 1991). However, according to NAWS, a greater proportion of young Mexican farmworkers (50%) plan to continue doing agricultural work for more than five years, in contrast to only 25% of young white farmworkers.

NAWS also found that a striking 47% of U.S. farmworkers age 17 and younger live on their own, away from their parents. An even greater proportion (80%) of teen farmworkers born outside the U.S. live on their own (Mines et al. 1997). The needs of these isolated young workers without families nearby (many of whom may not regularly attend school) must be considered when planning comprehensive agricultural health and safety programs.
SECTION FOUR: Injury Rates and Types

Highlights—Section 4

♦ Agriculture has one of the highest occupational fatality rates in both the U.S. and California, second only to mining.

♦ Job injury statistics for youth in agriculture are inconsistent, and probably reflect substantial underreporting.

♦ Nationwide over 20% of job-related deaths among young people occur in agriculture.

♦ In California, agriculture accounts for nearly 5% of all reported job injuries and illnesses among young workers.

♦ Lacerations and contusions/abrasions are common occupational injuries among 14-17 year olds working in agriculture. Fractures and dislocations are higher in agriculture (14.4%) than in other industries (3.4%).

Injury Rates in Agriculture

Nationally, agriculture is one of the most dangerous industries. According to 1995 data, the occupational fatality rate in agriculture (24 per 100,000 workers) was six times greater than the average occupational fatality rate, making it the second most deadly industry in the U.S. It was surpassed only by mining/quarrying (National Safety Council 1996). (See Figure 3.)

During 1995, agriculture also exceeded the all-industry rate for nonfatal injuries, according to the U.S. Bureau of Labor Statistics (BLS). There were approximately 10 injuries per 100 full-time workers (BLS 1995). In 1993, nearly 52,000 injuries and illnesses (serious enough to require time off work) occurred in U.S. agricultural services and production (BLS 1996b).
Figure #3

Occupational Fatality Rates in the United States, 1995

Deaths per 100,000 workers

All Industries: 4
Agriculture: 24
Mining / Quarrying: 30
Construction: 16

California figures parallel the national data. According to the state's Division of Labor Statistics and Research (DLSR), agriculture had the second highest rate of occupational fatalities among all industries in 1993. It trailed only mining (DLSR 1995). (See Figure 4.) California's 1994 nonfatal injury and illness incidence rate for agriculture (9.6 per 100 full-time workers) exceeded the state's all-industry rate (8.6 per 100 full-time workers) (DLSR 1996).

Data for Young Agricultural Workers

While information on occupational injury and illness among young farmworkers is limited, studies have found that youth involved in agriculture face significant health and safety risks, and do experience farm-related injuries and illnesses. However, most studies of childhood agricultural injury and illness have focused mainly on Midwestern family farms and have not included other areas of the country such as California (Wilks 1993).

In an effort to develop comprehensive statistics on injury and illness among youth in agriculture, the National Committee for Childhood Agricultural Injury Prevention (NCCAIP) recently called for the establishment of a national database (NCCAIP 1996). Such a system would help fill the current gaps in information that force us to patch together any available data.

- **Fatalities.** Nationwide over 20% of job-related deaths among young workers occur in agriculture. (See Figure 5.) From 1992-95 young farmworkers had the highest number of occupational fatalities among youth (Derstine 1996). It has been estimated that about 100 children and adolescents die each year while working on U.S. farms and ranches (Rivara 1996).

- **Injuries and Illnesses.** Recent reports using data from the National Electronic Injury Surveillance System (NEISS) have found that 6.7% of all occupational injuries among U.S. adolescents occur in the agricultural industry (Layne et al. 1994). Nationally, 2,019 lost-time injuries among agricultural workers age 19 and younger were reported to the Bureau of Labor Statistics during 1994 (BLS 1994). This figure includes only those who lost at least one day of work, and whose employers reported the injury. Therefore, the actual number of occupational injuries among young farmworkers may be higher.

The Traumatic Injury Surveillance of Farmers (TISF) survey estimates that 12,873 lost-time injuries occurred among 10-19 year olds in agriculture during 1993 (NIOSH 1997a).
Figure #4

Occupational Fatality Rates in California, 1993

Figure #5

Job-Related Fatalities Among Young Workers

Agriculture, Forestry, and Fishing 22%
Retail 22%
Construction 14%
Other 19%
Services 13%
Manufacturing 10%

The Olmstead Agricultural Trauma Study (OATS), funded by the Centers for Disease Control and Prevention, estimates that 27,000 youth under age 20 are injured each year on U.S. farms and ranches (Gerberich et al. 1991). This study excludes youth who work but do not live on farms, so the actual number of injured youth may be much higher. In California during 1993, youth under 18 who worked in crops accounted for nearly 5% of the lost-time job injuries and illnesses among all young workers of that age (Castillo 1996).

Workers’ compensation data provide another avenue for understanding the extent of occupational injuries and illnesses among young farmworkers. Unfortunately, comprehensive California workers’ compensation data for this group is not easily accessible. However, a study analyzing workers’ compensation claims in the State of Washington found that 7% of claims filed by workers under 18 were in agriculture. Most notably, 36% of claims filed by those under 14, and 17% of claims by those 14 and 15, were in agriculture (Heyer et al. 1992).

The Washington analysis also found a higher frequency of severe or disabling injuries among youth working in agriculture than those in all other occupations. Among the youngest workers (under 14), agriculture accounted for 50% of severe injury claims and nearly 50% of disabling injury claims. For those 14 and 15, 39% of severe injury claims and 29% of disabling injury claims were in agriculture. Given the greater likelihood of underreporting in agriculture than in other industries, the researchers suggest that these findings may provide only a minimum estimate of actual injuries.

● **Types of Injury.** Data from the National Electronic Injury Surveillance System (NEISS) show that lacerations (36%) and contusions/abrasions (15%) were the most common occupational injuries among 14-17 year olds working in agriculture. Also, fractures and dislocations were higher in agriculture (14.4%) than in other industries (3.4%) (Layne et al. 1994).
SECTION FIVE:
Major Farm Hazards for Youth

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<td>♦ Vehicle accidents were the leading cause of job-related deaths for young U.S. farmworkers between 1992-1995.</td>
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<td>♦ Discussion group participants in the San Joaquin Valley felt that transportation is one of the greatest occupational hazards faced by young farmworkers. Transporting adults and children to work in the fields has special hazards.</td>
</tr>
<tr>
<td>♦ 20% of teen agricultural injuries seen in an emergency room resulted from the worker being caught in running machinery or equipment.</td>
</tr>
<tr>
<td>♦ Pesticides may pose a greater risk to children than adults.</td>
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<tr>
<td>♦ Lack of clean drinking water, handwashing facilities, and toilets is a major health and safety issue for farmworkers.</td>
</tr>
<tr>
<td>♦ Children are more vulnerable to the ill effects of heat than adults.</td>
</tr>
<tr>
<td>♦ Ergonomic injuries and sexual harassment among youth working in agriculture need further attention by both researchers and educators.</td>
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As with their adult counterparts, youth working in agriculture face safety threats from motorized vehicles, machinery, pesticides, poor field sanitation, long hours, strenuous labor, and heat.

- **Motorized Vehicles.** Operating a vehicle (or helping to operate a vehicle) was the leading cause of job-related deaths for young U.S. farmworkers between 1992-1995.
(Derstine 1996). According to 1992 and 1993 figures from the California Department of Industrial Relations, vehicle accidents were also the leading cause of work-related fatalities in California’s agricultural industry. They accounted for one-half of all occupational deaths (DLSR 1995).

Overcrowded trucks and vans used to transport adults and children to the fields also pose a danger. Often these vehicles have no seats or seatbelts and may be operated by unlicensed, uninsured, and/or intoxicated drivers. (Wilks 1993). Accounts of raiteros (drivers who transport farmworkers) drinking and driving dangerous vehicles without insurance were frequently related by our discussion group participants in the San Joaquin Valley. Many felt that transportation is one of the greatest occupational hazards faced by young farmworkers. Recently, public education campaigns have been launched by the California Highway Patrol and the U.S. Department of Labor to combat this problem.

- **Machinery.** Machinery is the second highest cause of occupational fatalities among 16-17 year olds in all U.S. industries. Agricultural machinery is implicated in 68% of machine-related deaths among working teens nationwide. Tractors account for a substantial portion of these fatalities (Castillo et al. 1994). Other studies have also found machinery to be a leading source of childhood farm-related fatalities, with tractors a common cause (Rivara 1985; Cogbill et al. 1985). One study of teen occupational injuries, based on hospital emergency room data, found that 20% of these injuries occur when a young worker is caught in running machinery or equipment (Layne et al. 1994).

- **Pesticides.** Pesticides may pose a greater risk to young people than adults. Youth differ from adults in body mass, metabolic rate, and ability to process chemical compounds. The bodies and physiological systems of youth are still growing and developing (NIOSH 1997b). As a result, youth may be more vulnerable than adults to pesticide-induced illnesses. Unfortunately, the limited data detailing the extent of pesticide exposure and effects of pesticides on developing youth present barriers to making accurate risk assessments (National Research Council 1993).

Researchers have documented that youth in agriculture are frequently exposed to potentially toxic pesticides. For example, a study of Mexican-American migrant farmworker children in New York found that 48% reported working in fields that were still wet with pesticides, and that 365 had been sprayed directly or indirectly while working. Some of the youth interviewed had mixed and applied pesticides despite legal age restrictions (Pollack et al. 1990). (Scientific data are not entirely conclusive regarding
the greater risk of pesticide-induced illnesses to youth, but any pesticide exposure is
grounds for caution.)

- **Field Sanitation.** Lack of field sanitation (clean drinking water, handwashing facilities,
and toilets) presents another occupational hazard for young agricultural workers. For
example, lack of handwashing facilities presents a barrier to washing off chemicals, thus
potentially prolonging pesticide exposure. The lack of drinking water in the fields can put
young workers at risk of dehydration and other heat disorders. Lack of toilets not only
creates unsanitary conditions, but can be a source of discrimination and embarrassment,
particularly for female workers. Our discussion group participants reported that toilet
facilities were often so dirty that they were unusable. They also mentioned cases where
the raw sewage was dumped into the fields to avoid paying for its proper disposal.

A recent health survey conducted in the San Joaquin Valley town of Parlier found that
one-fourth of farmworkers reported no field sanitation facilities at their worksite, and 75%
brought their own drinking water to the field (Sherman et al. 1997). Since the Targeted
Industries Partnership Program (TIPP) stepped up enforcement in agriculture in 1993,
there has been a marked increase in field sanitation compliance. (See Section 6.)

- **Long Hours and Strenuous Labor.** Long hours and strenuous labor may also increase
the risk of job-related injury and poor school performance among young farmworkers.
Sleep researchers note that teenagers require about nine hours of sleep each night.
However, high school students with part-time jobs (in all industries) report an average of
only seven hours of sleep per night. Lack of sleep is a particular problem for those who
work over 20 hours each week (Carskadon 1990; Carskadon 1989). These data validate
teachers' accounts of tired students, especially in morning classes (NIOSH Child Labor
Work Group 1996). According to one U.S. Department of Agriculture report,
approximately 37% of hired farmworkers ages 15-19 work full-time (Runyan 1992).

- **Heat.** In summer months, temperatures in the San Joaquin Valley reach an average of
99°F. These high temperatures pose a real danger to farmworkers. When the body
overheats, workers get weaker, become tired sooner, and suffer impaired judgment. As a
result, workers are subject to serious heat-related illnesses and injuries (U.S. EPA 1993).
It is well documented that young children are more vulnerable to heat-related illness than
adults, but it less clear whether older youth are also at increased risk.
- **Other Hazards.** Certain occupational hazards faced by youth working in agriculture have not yet been addressed by research. Despite this lack of attention, our discussions with youth indicate that these issues deserve further exploration.

- **Ergonomic problems.** Only recently have researchers begun to describe musculoskeletal cumulative trauma disorders in agriculture, and apply ergonomic approaches to these problems (Meyers et al. 1995; Meyers et al. 1997). Risk factors such as gripping tools, bending at the waist, handling heavy loads, working in static positions, and constantly repeating such activities are common in agricultural work, including that done by young people.

- **Sexual harassment.** Unwanted sexual attention at work creates an intimidating and hostile workplace. Sexual harassment is legally considered a form of sex discrimination. Even if a young worker is not physically assaulted, the stress of repeated sexual harassment in the field can lead to other health problems.
## SECTION SIX:
### Protections for Young Agricultural Workers

<table>
<thead>
<tr>
<th>Highlights—Section 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>♦ Youth working in agriculture have less legal protection than youth in other industries, under both federal and California law.</td>
</tr>
<tr>
<td>♦ Children employed by their parents on a family farm are not protected by federal or California child labor regulations.</td>
</tr>
<tr>
<td>♦ The federal Fair Labor Standards Act sets 12 as the minimum age for farm work (as opposed to 14 for most other work). There may be exemptions for children as young as 10.</td>
</tr>
<tr>
<td>♦ In California, 16 year olds are allowed to perform hazardous agricultural tasks, such as operating a tractor, baler, or power tool. In other industries such work is prohibited for everyone under 18.</td>
</tr>
<tr>
<td>♦ The U.S. General Accounting Office reported that an overwhelming number of serious injuries among young workers result from hazardous jobs prohibited by child labor laws.</td>
</tr>
<tr>
<td>♦ In California, youth under 18 are required to have a work permit to do any paid work.</td>
</tr>
<tr>
<td>♦ Young workers in agriculture are covered by workers’ compensation if they receive a wage, whether cash or check, for their labor.</td>
</tr>
</tbody>
</table>
Agricultural Labor Laws Are Less Protective

Youth working in agriculture have less legal protection than youth in other industries. The federal Fair Labor Standards Act sets 12 as the minimum age for farm work (as opposed to 14 for most other work). Exemptions are available for children as young as 10. Federal law allows 16 year olds to work in agriculture during school hours, and permits those under 16 to work before or after classes on school days. Such work is not allowed at these ages in other occupations (U.S. DOL 1990).

California law offers more safeguards than the federal regulations. But even in California, young agricultural workers are less protected than their peers in other industries. For example, California youth may perform certain specific hazardous tasks at an earlier age in agriculture than in other industries. These tasks in agriculture include operating a tractor, hay baler, pea viner, power saw, and other machinery; working on a ladder or scaffold over twenty feet high; and driving an automobile with passengers. In California, 16 year olds are permitted to do these tasks in agriculture, whereas in other industries the state prohibits such work for everyone under 18. Children employed by their parents on a family farm may do these tasks at any age.

Unlike federal regulations, California law restricts children under 12 from working in or entering farm areas classified as “agricultural zones of danger.” These include the areas around moving equipment, unprotected chemicals, water hazards, and other dangerous conditions. Children working on their family’s farm are not covered by this restriction (DLSE 1995). For more detailed information see California Child Labor Laws (Appendix 1).

Enforcement

Although child labor laws have limitations, their enforcement is still a key step to protecting young workers. The U.S. General Accounting Office (GAO) reported that an overwhelming number of serious injuries among young workers result from hazardous jobs prohibited by child labor laws (U.S. GAO 1991). Unfortunately, statistics that might connect child labor violations and injuries among young agricultural workers are not readily available from enforcement agencies in California. In most agencies, information is collected but staffing constraints prevent data analysis and the publication of detailed reports. In some agencies, also, the data are very difficult to extract from current information management systems. We expect that systematic data will become more accessible as a result of the new Targeted Industries Partnership Program (see section below).
The following enforcement programs are relevant to youth in California agriculture:

- **Targeted Industries Partnership Program (TIPP).** This new joint enforcement and educational effort, targeting the agriculture and garment industries, is conducted by the California Division of Labor Standards Enforcement (DLSE), in conjunction with the U.S. Department of Labor (U.S. DOL), California Division of Occupational Safety and Health (Cal/OSHA), and California Employment Development Department (EDD). TIPP combines the resources of these agencies to carry out surprise inspections, commonly known as “sweeps.” These inspections cover wage and hour issues, occupational health and safety, housing conditions, child labor, employment tax, field sanitation, and workers’ compensation insurance requirements.

  TIPP may have a significant deterrent effect. Since the program began, TIPP has reported a decrease in child labor violations cited after agricultural inspections in California. From 1993 to 1996, child labor citations issued to agricultural employers dropped from 24% to 14% among those inspected (TIPP 1996).

- **California Division of Labor Standards Enforcement (DLSE).** DLSE, which coordinates the TIPP effort, is responsible for enforcing state child labor laws as well as other state labor laws. In addition, DLSE offers various services to workers, employers, and the public. For example, the California Labor Commissioner’s office in DLSE sends speakers to schools upon request to give presentations on child labor laws.

- **U.S. Department of Labor (U.S. DOL).** This agency enforces federal child labor requirements in agriculture under the Fair Labor Standards Act. As part of TIPP, DOL has made agricultural labor issues a high priority, and has allocated resources toward stronger enforcement. For example, all five of the DOL District Offices in California now have a farm labor specialist working solely on agricultural issues and complaints. DOL is also involved in educational campaigns to teach employers and workers about the Fair Labor Standards Act. As part of its educational activities, DOL operates a toll-free farmworker phone hotline where bilingual professionals answer questions, assist with complaints, and make referrals.

- **California Division of Occupational Safety and Health (Cal/OSHA).** Cal/OSHA enforces state health and safety requirements in agriculture, including the Field Sanitation standard. Other standards cover equipment safety, electrical safety, dust, noise, personal protective equipment, chemicals, proper labeling of hazardous materials, and many other issues. Cal/OSHA also enforces the state’s Injury and Illness Prevention Program (IIPP)
standard. One requirement of this standard is that employers give workers effective health and safety training. Cal/OSHA also inspects workplaces, including farms, for compliance, and accepts complaints from workers.

**Work Permits**

In California, youth under 18 are required to have a work permit to do any paid work. This includes youth working in agriculture, even during the summer months and other vacation periods. The only exceptions in agriculture apply to those youth who have already graduated from high school and those working for their parents on a family farm. Employers are responsible for ensuring that employees under 18 have a work permit.

Young people obtain work permits from their school, where they submit an application signed by a parent. At each school, one or more individuals are usually assigned to issue work permits. These may be teachers, counselors, secretaries, or others. These individuals are required to be familiar with the child labor laws. They are responsible for ensuring that the work is appropriate for the young person and does not interfere with his or her studies. But in reality, these individuals often have little or no training about child labor laws, workplace health and safety regulations, or other issues affecting youth in the workplace.

**Workers’ Compensation**

All California employers must provide workers’ compensation benefits. These include medical care if a worker is injured on the job. Some workers also receive payments for lost wages if injured. Many employers buy a workers’ compensation insurance policy. Some workers’ compensation carriers offer health and safety training to help prevent injuries and illnesses, and reduce risk.

Young workers in agriculture are covered by workers’ compensation if they receive a wage, whether cash or check, for their labor. If a young person is not paid directly but works to increase a parent’s production for a piece rate, the law is less clear. If the employer directed and controlled the young person’s work and benefited from the work, it is possible that the young person will be entitled to workers’ compensation benefits if injured. [Arriaga v. County of Alameda, 9 Cal, 4th 1055 (1995).]
SECTION SEVEN:
Key Findings from Parents, Community Organizations, Youth, and Employers

Highlights—Section 7

Our discussions with parents, community organizations, youth, and employers revealed that:

- Agriculture is a major source of youth employment in California. Harvesting and hoeing were mentioned as the most common tasks.

- Farm labor contractors often do not know child labor regulations and at times break the law to get the job done.

- Participants were unanimous that agricultural health and safety should be part of the school curriculum.

- Most youth felt that working in the sun and being exposed to pesticides are the greatest occupational risks for farmworkers.

- Several youth commented that young women in the fields encounter sexual harassment by foremen and/or employers.

- Lack of clean bathrooms and accessible drinking water was repeatedly mentioned by youth.

- None of the youth in our groups were involved in FFA or 4-H. They felt these were primarily for farmers’ children, not farmworkers’ children.

- Employers hire raietos (drivers) to transport their workers. They have difficulty complying with laws restricting young people’s work hours since there are no special trips made for the youth.
Through five two-hour group discussions in Fresno, Mendocino, and Tulare Counties, we obtained input from parents whose teens work in agriculture, as well as representatives from community-based organizations and government agencies that have contact with teen farmworkers. Among these groups and agencies were job training organizations, migrant health clinics, labor law enforcement agencies, employment agencies, local public health departments, county Agriculture Commissioners' offices, 4-H groups, the Farm Bureau, and youth centers. We also included some growers and farm labor contractors.

In addition, we held five short group discussions with English as a Second Language (ESL) students attending two high schools in the San Joaquin Valley agricultural communities of Firebaugh (Fresno County) and Arvin (Kern County).

Participants in these various discussions addressed the extent to which youth work in agriculture in their communities, hazards found in farm labor, wage and hour issues, health and safety programs, and strategies for protecting young people on the job.

We also conducted phone interviews with another 23 San Joaquin Valley employers, the majority of whom were farm labor contractors. These interviews focused on the type of work young farmworkers perform, and employers' opinions regarding health and safety on the job.

Major themes which emerged from these discussions and interviews included the following:

**Parents**

- Farmworker parents encourage their children to work in the fields for a variety of reasons: economic necessity; lack of child care; to acquire skills in preparation for future employment; and to learn that work is hard, thus motivating the youth to stay in school.

- Parents described situations where farm labor contractors did not know child labor regulations, and would break the law to get the job done. Parents suggested creating educational materials specifically for farm labor contractors.

- Parents felt it is important to teach young farmworkers about their rights on the job. They recommended educational programs both in the classroom and through radio and television.
Parent participants said it is important to educate other parents about teen health and safety issues. They suggested speakers at Migrant Education conferences and church groups.

Community Organizations

Participants generally agreed that most young workers in small San Joaquin Valley towns are employed in agriculture. They work primarily during the summer months, from June through August. (Participants from coastal Mendocino County, however, felt that very few youth work in agriculture there, except during the peak pear harvest season, which lasts about one month in late summer.)

Participants from all regions felt that youth working in agriculture face the same hazards as their adult counterparts, but are more vulnerable to health and safety risks due to their lack of work experience and level of maturity.

There was a general consensus that Latino youth (who make up the majority of young California agricultural workers) seldom participate in youth organizations such as Future Farmers of America (FFA) and 4-H. Representatives from 4-H and FFA recognized the need to reach out to Latino youth. They recommended creative recruitment efforts, possibly at soccer games and Catholic church functions.

Participants were unanimous that agricultural health and safety should be part of the school curriculum. Some suggested community youth centers as a vehicle for reaching youth who do not attend school.

Most participants believed that youth working in agriculture get the same health and safety training on the job as adults (if training is offered at all). Farm Bureau representatives, however, commented that their office was used for health and safety training sessions for migrant farmworkers, but these did not have a teen component. State 4-H said they had given health and safety training to youth participating in their programs, but these were not targeted toward youth working as hired farm laborers.
Youth

- Many young people commented that agriculture is the only kind of work they can find during the summer. Most of their friends who work also have agricultural jobs. Overall, young people enjoyed doing farm labor, but said it is hard work.

- Several participants knew of youth who had been injured on an agricultural job. Some participants had been injured themselves. Most of the incidents they mentioned involved tractors, although they also described accidents with conveyor belts, heavy machinery, lifting, and irrigation pipes.

- Most youth felt that working in the sun and being exposed to pesticides were the greatest occupational risks for farmworkers.

- Several participants commented that young women in the fields do encounter sexual harassment by foremen and/or employers.

- Young people also described cases where they were prohibited from taking bathroom breaks. Lack of clean bathrooms and accessible drinking water was repeatedly mentioned.

- None of the youth were involved in FFA or 4-H. While some had heard of these programs, they felt they were primarily for the farmers' children, not the farmworkers' children.

- In general, participants felt that the best way to teach young people about agricultural health and safety would be to do special presentations in schools.

Employers

- Employers indicated that the most common task youth perform on farms is harvesting crops.

- Most employers felt that teens work in agriculture primarily to help meet family economic needs.

- According to employers, crew leaders and foremen are the main providers of worker health and safety training. However, workers' compensation insurance carriers (and to some extent community organizations) have also conducted training.
Most employers did not provide training specifically targeted to young workers. Some mentioned that they repeated safety messages more often to their young employees.

Opinions varied regarding child labor laws. Some employers expressed the opinion that the age of 12 is too young to work in the field, but may be a safer alternative to staying home alone if child care is not available. Other employers felt that children should be able to work if they want to, and that current child labor laws are overprotective. One employer said his farm had no difficulty with child labor laws because they didn’t follow them anyway.

Many employers hire *raiteros* (drivers) to transport their workers to and from the fields. They mentioned that it is difficult to comply with laws restricting young people’s work hours since there are no special trips made for the youth.

Employers recommended rural school districts as a place to implement agricultural health and safety training for youth.
SECTION EIGHT:
Conclusion and Recommendations

Highlights—Section 8

Based on the study conducted by this project, we recommend several educational, policy, and research interventions. These include:

- Increase agricultural employers' awareness of child labor laws and occupational health and safety issues facing young workers.
- Institutionalize bilingual health and safety training in school curricula.
- Provide health and safety programs in the community and at the worksite to reach out-of-school youth.
- Involve parents and community-based organizations in educational efforts.
- Expand the scope of research on childhood agricultural injury and illness to include hired young farmworkers as well as youth on family farms.
- Improve data collection and analysis by government agencies to inform educational and prevention efforts.

On a national level, a number of excellent recommendations for improving the health and safety of young farmworkers have been put forth by the National Committee for Childhood Agricultural Injury Prevention (NCCAIP 1996). They provide a strong framework for new educational, policy, and research initiatives. However, California agriculture is very different from that in most other agricultural states, as this report has demonstrated. California agriculture primarily depends on hired farmworkers, most of whom are employed by farm
labor contractors rather than growers. For this reason, our surveys, discussions, and interviews with those at the heart of the California experience—youth, educators, parents, and employers—offer a unique perspective.

Based on the available literature and the qualitative data gathered for this report, we identified several promising strategies for improving the health and safety of young agricultural workers in California. These educational, policy, and research interventions call upon employers, schools, parents, community-based organizations, researchers, and government enforcement agencies each to take an active role in ensuring that young people in agriculture have safe and healthy workplaces.

Following are our recommended interventions targeting each of the above groups.

**Employers**

- **Increase employers' awareness of occupational health and safety issues facing young agricultural workers.**

  Educational strategies could include preparing easy-to-read fact sheets for employers on health, safety, and child labor laws; working with groups such as the Farm Bureau and other grower organizations to develop educational programs for their members; and providing teen-targeted educational materials for employers to distribute. Outreach might include presentations at grower and labor contractor meetings, and articles in newsletters.

- **Help employers develop effective Injury and Illness Prevention Programs (IIPPs).**

  All employers, including those in agriculture, are already required to have such programs under California law. Strategies to improve them could include identifying positive models of training, hazard recognition, and other health and safety programs in agriculture, then developing a comprehensive model program. This should incorporate special youth-oriented components. It should be distributed and implemented broadly in agricultural workplaces.
Schools

- Increase teachers' and counselors' awareness of occupational health and safety issues facing young agricultural workers.

Strategies could include presentations in teacher training programs; in-service workshops sponsored by specific schools, school districts, or county education departments; summer workshops providing continuing education credits; and presentations at conferences of teachers’ organizations and unions.

- Develop bilingual school curricula on agricultural health and safety with the help of teachers in agricultural communities.

High school curricula on workplace health and safety have already been developed, but they target students who work in non-agricultural settings. These curricula should be adapted to include specific information for youth in agriculture. The adapted curricula should introduce students to workplace health and safety issues in agriculture, and help them develop “action” skills to protect themselves from hazards. Teachers who participate in the state’s Migrant Education Program or who teach English as a Second Language (ESL) classes should be recruited to help develop appropriate curricula, which should be bilingual (English and Spanish). These new materials should then be field tested in several rural schools throughout the state.

- Integrate agricultural health and safety topics into ESL and MEP classroom instruction.

Our research demonstrated that a significant percentage of youth in ESL classes in California rural high schools have done agricultural work. In addition, students in California’s Migrant Education Program either work, or have parents who work, in agriculture. These two groups of students should be targeted for special classroom instruction statewide.

- Encourage teachers and community organizations to design a media campaign targeting out-of-school youth.

Teachers and others (community organizations, etc.) could develop bilingual public service announcements for radio and television. These could potentially reach teens working in agriculture who are no longer in school. These announcements should explain agricultural safety issues relevant to young workers in an understandable and interesting way.
Encourage teachers and community organizations to develop educational materials for out-of-school youth.

Teachers and community organizations could also develop bilingual factsheets that describe health and safety issues facing youth in agriculture, targeting out-of-school youth. Materials should be easy to understand, attractive, and interesting. Young people themselves should be integrally involved in the development, production, and field-testing of such materials to maximize their effectiveness. There should be a comprehensive dissemination plan, drawing on multiple community outlets.

Parents

Educate parents about health and safety issues.

Parents have shown great interest in health and safety issues facing their young people who work in agriculture. Parent Teacher Associations (PTAs) might be one avenue for disseminating information—through workshops or simple written information. Some schools have a separate bilingual advisory committee for parents who do not speak English, and these groups might also be involved.

Develop educational materials targeting parents.

Materials should be easy to read, bilingual, and culturally appropriate. The most effective vehicles might be short factsheets that summarize what parents can do to help protect their working teens.

Community-Based Organizations

Increase awareness among community members and organizations of occupational health and safety issues facing young agricultural workers.

Strategies could include work with community groups concerned with the health and welfare of youth to present speakers and workshops, distribute literature, and design new educational programs. Groups could include youth service organizations, job training organizations, community clinics, and churches.
• Encourage farm youth programs to provide health and safety education.

These programs appear to focus on family farms. While these are less prevalent in California than in the Midwest, there is still a need for education and prevention among this population. Information on farm safety and injury prevention should be provided through farm youth programs such as 4-H and Future Farmers of America. Health and safety education could be part of these organizations’ broader youth leadership activities.

• Expand outreach efforts of farm youth programs.

Farm youth programs, such as 4-H and Future Farmers of America, should specifically target their educational and outreach efforts to include working youth on farms. This requires developing and/or distributing culturally and linguistically appropriate materials.

Researchers

• Encourage research on work-related injury and illness among young agricultural workers to help design prevention strategies.

Current knowledge is deficient regarding the occupational health and safety of young people who work in California agriculture. First, reliable and specific statistical information is needed on whether the types and rates of injuries among young agricultural workers differ from those of their adult counterparts. Second, research is needed to identify differences in injury patterns between family farm youth and hired farmworker youth in California. The establishment of a state database on childhood agricultural injury, paralleling the national recommendation of the National Committee for Childhood Agricultural Injury Prevention (NCCAIP), would be extremely useful (NCCAIP 1996).

Government Enforcement Agencies

• Continue targeted enforcement efforts in agriculture.

The Targeted Industries Prevention Program (TIPP), described in Section 6, appears to have been effective to date, and should be continued.
Compile and analyze injury and illness reports by age group and agricultural SIC codes.

The California Division of Labor Standards Enforcement and the U.S. Department of Labor should improve their documentation and reporting of the number and types of child labor law violations found in California agriculture, to make the information easily accessible.

Educational and research initiatives depend on accurate statistics to target their efforts. The California Department of Industrial Relations should compile injury and illness data in such a way that educators and researchers might know specifically which job hazards are most serious for youth in agriculture.
REFERENCES CITED


APPENDICES

1. California Child Labor Laws

2. “Are You a Teen Working in Agriculture?” (Sample factsheet—English)

3. “¿Eres un joven que trabaja en el campo?” (Sample factsheet—Spanish)
# California Child Labor Laws

## A Comparison of Protections for Youth Working in Agricultural and Non-Agricultural Settings

<table>
<thead>
<tr>
<th></th>
<th>Youth Working on Family Farms</th>
<th>Youth Employed in Agriculture (non-family)</th>
<th>Youth Employed in Non-Agricultural Sectors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Work Permits</strong></td>
<td>Permits not required.</td>
<td>Same as non-agricultural sectors.</td>
<td>All minors under 18 employed in California must have a permit to work unless a high school graduate or equivalent.</td>
</tr>
<tr>
<td><strong>Minimum Age</strong></td>
<td>No minimum age requirement.</td>
<td>12 is the minimum age for employment in agriculture.</td>
<td>14 is the minimum age for employment in most jobs.</td>
</tr>
<tr>
<td><strong>Hazardous Occupations</strong></td>
<td>Parents who employ their children are exempt from many of the age requirements. There is no minimum age for working in an “agricultural zone of danger.”</td>
<td>16 is the minimum age for working in a hazardous agricultural occupation. 12 is the minimum age for working in or entering an “agricultural zone of danger.”</td>
<td>18 is the minimum age for working in a hazardous occupation.</td>
</tr>
</tbody>
</table>
| **Hours**              | No work hour limitations except young people may not work during school hours. | Same as non-agricultural sectors. **Except:**  
- **12 & 13 year olds**  
  Same as 14 & 15 year olds in non-agricultural occupations.  
- **16 & 17 year olds**  
  When employed in agricultural packing plants during the peak harvest season, may work up to 10 hours on any day that school is not in session. The packing plant must obtain a special permit from the Labor Commissioner to do this. Permits will only be granted if they will prevent undue hardship on the employer and not affect the safety and welfare of the minor. | Work Hours  
**Ages 16 & 17:** Not before 5am or after 10pm on school nights. Not before 5am or after 12:30am when there is no school the next day.  
**Ages 14 & 15:** Not before 7am or after 7pm during the school year. Not during school hours. 7am - 9pm during the summer.  
**When School Is In Session**  
**Ages 16 & 17:** 48 hours a week but not over 4 hours a day Mon.-Thurs. and not over 8 hours a day Fri.-Sun. and holidays.  
**Ages 14 & 15:** 18 hours a week but not over 3 hours a day on school days and not over 8 hours a day on weekends and holidays.  
**When School Is Not In Session:**  
**Ages 16 & 17:** 48 hours a week. 8 hours a day maximum. |
| **Wages**              | Parents employing their children are exempt from minimum age requirements. | Same as non-agricultural sectors. | Minors must be paid at least minimum wage. In some cases, employers can pay less than minimum wage during the first three months. Call 1-888-275-9243 for more information. |

Whenver federal standards overlap or appear to conflict, the more protective standard always applies.
Are You a Teen Working in Agriculture?

Protect Your Health
Know Your Rights

Labor Occupational Health Program
University of California, Berkeley

1998
Could I Get Hurt or Sick on the Job?

Every year over 100 teens die from agricultural work injuries in the United States. Another 2,000 get hurt badly enough that they stay home from work.

Here are the stories of three teens:

- 17-year-old Gloria was picking oranges when she began to complain of nausea, dizziness, blurred vision and stomach cramps. The orchard had been sprayed with pesticides the day before. No warning signs had been posted.

- 15-year-old Luis caught his hand between two sections of irrigation pipe. His little finger was almost completely cut off. His other fingers were cut and broken.

- 17-year-old Martin died after harvesting melons in the hot sun for 4 hours. He was taken by ambulance to a hospital after complaining of a headache, nausea and difficulty breathing. He died because his body overheated.

Why do injuries like these occur? Teens are often injured on the job due to unsafe work conditions. Also, they may not receive adequate safety training and supervision.

What Are My Rights on the Job?

All farm workers have legal rights regardless of their immigration status.

Under California law, your employer must provide:

- Training about health and safety, including information on pesticides and other chemicals that could be harmful to your health.
- Toilets, hand washing facilities, and drinking water whenever there are 5 or more workers.
- Payment for emergency care and transportation if you get hurt or sick because of your job. You may also be entitled to lost wages.
- At least the minimum wage, $5.75/hour as of March, 1998. In some cases, employers can pay less than minimum wage during your first three months, if you are under 18. Call toll-free 1-888-275-9243 for more information.

You also have a right to:

- Report health and safety problems.
- Work without racial or sexual harassment.
- Refuse to work if the job is immediately dangerous to your life or health.
- Join or organize a union.

What Hazards Should I Watch Out For?

<table>
<thead>
<tr>
<th>Type of Work</th>
<th>Examples of Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hoeing</td>
<td>• Heat stress</td>
</tr>
<tr>
<td></td>
<td>• Bending (can hurt back)</td>
</tr>
<tr>
<td>Hand Harvesting</td>
<td>• Pesticides</td>
</tr>
<tr>
<td></td>
<td>• Ladders</td>
</tr>
<tr>
<td>Using Machines</td>
<td>• Tractors</td>
</tr>
<tr>
<td></td>
<td>• Sharp blades and conveyer belts</td>
</tr>
<tr>
<td>Packing Plant</td>
<td>• Slippery floors</td>
</tr>
<tr>
<td></td>
<td>• Heavy lifting</td>
</tr>
<tr>
<td></td>
<td>• Repeated movements</td>
</tr>
</tbody>
</table>

Labor Occupational Health Program, UC Berkeley, 1998
How Old Do I Have To Be To Work?

In California, you must be at least 12 years old to be hired as a farm worker.

NOTE: Youth of any age may work at any time in any job on a farm owned or operated by their parents.

Is It OK To Do Any Kind of Farm Work?

NO! There are laws that protect teens under the age of 16 from working in certain jobs that have been identified as a hazardous occupations or agricultural zones of danger.

In California no worker under 16 may:

☐ Handle or apply pesticides

☐ Drive, ride, or assist in operating a tractor or forklift

☐ Drive any vehicle for transporting passengers

☐ Use powered equipment such as a chain saw, hay mower, hay baler, or cotton picker

☐ Work on a ladder over 20 feet

☐ Work inside a silo

Also, no one under 12 may:

☐ Work near moving farm equipment

☐ Work near pesticides or other chemicals

☐ Work near any water hazards such as an irrigation canal

Are There Other Things I Can’t Do?

YES! There are many other restrictions regarding the type of work you can and cannot do. Check with the Farm Worker Hotline to make sure the job you are doing is allowed.

Do I Need a Work Permit?

YES! Under California law, if you are under 18 and plan to work, you must get a work permit from your school (unless you have graduated).

What Are My Safety Responsibilities on the Job?

To work safely you should:

☐ Follow all safety rules and instructions

☐ Use safety equipment and protective clothing when needed

☐ Wear clean clothing daily

☐ Never eat or drink in the fields

☐ Never drink irrigation water

☐ Know what to do in case of an emergency

☐ Report any health and safety hazard to your supervisor

Labor Occupational Health Program, UC Berkeley, 1998
Should I Be Working This Late or This Long?

Child labor laws protect teens under the age of 18 from working too long, too late, or too early. This table shows the hours teens may work in agriculture. (There are exceptions for students enrolled in an approved vocational training or apprenticeship program.)

<table>
<thead>
<tr>
<th>Work Hours for Teens</th>
<th>Ages 12–15</th>
<th>Ages 16–17</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Work Hours</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not before 7 am or after 7 pm during the school year</td>
<td>Not before 5 am or after 10 pm on school nights</td>
<td></td>
</tr>
<tr>
<td>Not during school hours</td>
<td>Not before 5 am or after 12:30 am when there is no school the next day</td>
<td></td>
</tr>
<tr>
<td>7 am–9 pm during the summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Maximum Hours When School Is in Session</strong></td>
<td>18 hours a week, but not over:</td>
<td>48 hours a week, but not over:</td>
</tr>
<tr>
<td>3 hours a day on school days</td>
<td>4 hours a day Monday–Thursday</td>
<td></td>
</tr>
<tr>
<td>8 hours a day Saturday–Sunday and holidays</td>
<td>8 hours a day Friday–Sunday and holidays</td>
<td></td>
</tr>
<tr>
<td>10 hours a day in agricultural packing plants during peak harvest season Saturday–Sunday and holidays</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| **Maximum Hours When School Is not in Session** | 40 hours a week | 48 hours a week |
| 8 hours a day | 8 hours a day |
| 10 hours a day in agricultural packing plants during peak harvest season |

What If I Need Help?

- Talk to your boss to resolve the issue.
- Talk to your parents or teachers.
- Call the Farm Worker Hotline (staffed by the U.S. Department of Labor) to make a complaint about wages, hours, health or safety, sexual harassment, or discrimination. (800) 733-3899
- Call the Linea Campesina for referrals on employment, housing, health care, education, and emergency food. (800) 789-9993
- Call U.C. Berkeley's Labor Occupational Health Program (LOHP) for health and safety information and advice. (510) 642-5507

You have a right to speak up!

It is illegal for your employer to fire or punish you for reporting a workplace problem.
¿Eres un joven que trabaja en el campo?

Protege tu salud
Conoce tus derechos

Programa de salud laboral
Universidad de California en Berkeley

1998
¿Podría lesionarme o enfermarme en el trabajo?

En los Estados Unidos cado año más de 100 jóvenes muyen debido a lesiones de trabajo de campo. Otros 2,000 se lastiman tan severamente que no pueden ir al trabajo.

Aquí hay las historias de tres jóvenes:

➤ Gloria, de 17 años, pizcaba (cosechaba) naranjas cuando empezó a sufrir de náuseas, mareos, vista nublada y calambres del estómago. El huerto había sido rociado de pesticidas el día anterior. No se habían puesto letreros de peligro.

➤ Luis, de 15 años, enganchó la mano entre dos secciones de tubería de riego. Se cortó casi completamente un dedo. Se había cortado y quebrado los otros dedos.

➤ Martín, de 17 años, murió después de pizar melones bajo el sol caliente por cuatro horas. Le llevaron al hospital en la ambulancia después de sufrir de dolor de cabeza, náuseas y dificultad al respirar. Murió porque su cuerpo se sobrecalentó.

¿Por qué ocurren estos tipos de lesiones? Con frecuencia los jóvenes se lastiman en el trabajo debido a condiciones de trabajo peligrosas. También, puede ser que no reciban suficiente entrenamiento ni supervisión.

¿Cuáles son mis derechos en el trabajo?

Todos los trabajadores de campo tienen derechos legales, sin tener en cuenta su estado legal (de inmigración).

La ley de California requiere que su patrón provea:

☐ Entrenamiento sobre la salud y seguridad, incluyendo información sobre los pesticidas y otras substancias químicas que pueden ser peligrosas para tu salud.

☐ Excusados, facilidades para lavarse las manos, y agua limpia para tomar cuando hay cinco o más trabajadores en el campo.

☐ Pago por cuidado médico y transporte de emergencia si te lastimas o te enfermas debido a tu trabajo. También se puede recibir pago por salario perdido.

☐ Por lo menos el salario mínimo, $5.75 a partir de marzo de 1998. En algunos casos los patrones pueden pagar menos del salario mínimo durante los primeros 3 meses si tienes menos de 18 años. Llama gratis al 1-888-275-9243 para más información.

También tienes el derecho de:

☐ Presentar una queja de problemas de salud y seguridad.

☐ Trabajar sin discriminación racial o sexual.

☐ Rechazar un trabajo si te puede causar daño inmediato.

☐ Organizar o unirte a una unión.

¿De cuáles peligros debo de tener cuidado?

<table>
<thead>
<tr>
<th>Tipo de trabajo</th>
<th>Ejemplos de peligros</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trabajar con azadón</td>
<td>• agotamiento por calor</td>
</tr>
<tr>
<td></td>
<td>• torcedura de la espalda</td>
</tr>
<tr>
<td>Pizar a mano</td>
<td>• pesticidas</td>
</tr>
<tr>
<td></td>
<td>• escaleras</td>
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<tr>
<td>Trabaja con máquinas</td>
<td>• tractores</td>
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<tr>
<td></td>
<td>• hojas afiladas y cintas transportadoras</td>
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<tr>
<td>Sortear o empacar</td>
<td>• pisos resbalosos</td>
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<td></td>
<td>• levantar cosas pesadas</td>
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<td></td>
<td>• movimientos repetitivos</td>
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</table>

Labor Occupational Health Program, UC Berkeley, 1998
¿Cuántos años debo tener para poder trabajar?

En California, debes tener por lo menos 12 años para ser contratado como trabajador de campo.

¡OJO! Los jóvenes de cualquier edad pueden trabajar en cualquier momento haciendo cualquier trabajo en un rancho dirigido por o propiedad de sus padres.

¿Estás bien hacer cualquier tipo de trabajo?

¡NO! Hay leyes que protegen a los trabajadores jóvenes que tienen menos de 16 años de hacer ciertos trabajos identificados como trabajos peligrosos o zonas de peligro en la agricultura.

En California, ningún trabajador de campo que tiene menos de 16 años puede:

- Manejar o aplicar pesticidas
- Manejar, transportarse, o ayudar a operar un tractor o montacargas (forklift)
- Manejar cualquier vehículo usado para el transporte de pasajeros
- Usar equipo motorizado como sierra de motor, cortadora o empaquadora de heno o cosechadora de algodón
- Trabajar en una escalera de más de 20 pies
- Trabajar dentro de un granero (silo)

También, ningún trabajador que tiene menos de 12 años puede:

- Trabajar cerca de maquinaria de campo cuando está en movimiento
- Trabajar cerca de pesticidas u otras sustancias químicas
- Trabajar cerca de cualquier peligro de agua tal como un canal de riego

¿Hay otras cosas que no puedo hacer?

¡Sí! Hay muchas otras restricciones sobre el tipo de trabajo que puedes o no puedes hacer. Consulta con Farm Worker Hotline para asegurarte que se permite hacer el trabajo que estás haciendo.

¿Necesito un permiso de trabajo?

¡Sí! De acuerdo con la ley de California, si tienes menos de 18 años y quieres trabajar, tienes que obtener un permiso de trabajo de tu escuela (si todavía no te has graduado).

¿Cuáles son mis responsabilidades de seguridad en el trabajo?

Para trabajar con seguridad debes:

- Seguir todas las reglas e instrucciones de seguridad
- Usar equipo de seguridad y ropa protectora cuando sea necesario
- Llevar ropa limpia todos los días
- Nunca comer ni tomar en el campo
- Nunca tomar agua utilizada para irrigación
- Saber lo que hay que hacer en caso de emergencia
- Avisar al supervisor sobre cualquier peligro de salud y seguridad
¿Debo trabajar tan tarde o por tantas horas?

Las leyes sobre trabajo de menores protegen a los jóvenes que tienen menos de 18 años. Ellos no pueden trabajar horas excesivas, ni demasiado tarde o temprano en el día. Este cuadro muestra las horas que los jóvenes pueden trabajar en el campo. (Hay excepciones para estudiantes en programas aprobados de enseñanza profesional o de aprendizaje.)

<table>
<thead>
<tr>
<th>Horas de trabajo para jóvenes</th>
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<tr>
<td>12-15 años</td>
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<td>Horas de trabajo</td>
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<tr>
<td>• Ni antes de las 7 am</td>
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<tr>
<td>ni después de las 7 pm</td>
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<td>durante el año escolar</td>
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<tr>
<td>• No durante las horas de</td>
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<td>escuela</td>
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<tr>
<td>• 7 am a 9 pm durante el</td>
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<td>verano</td>
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<tr>
<td>Horas máximas cuando hay</td>
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<tr>
<td>escuela</td>
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<tr>
<td>18 horas por semana, pero</td>
</tr>
<tr>
<td>no más de:</td>
</tr>
<tr>
<td>• 3 horas por día en días</td>
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<tr>
<td>de escuela</td>
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<tr>
<td>• 8 horas por día sábado a</td>
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<td>domingo y feriados</td>
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¿Qué debo hacer si necesito ayuda?

- Habla con tu patrón para resolver el problema.
- Habla con tus padres o maestros.
- Llama a Farm Worker Hotline (con personal del Departamento Laboral de los Estados Unidos) para presentar una queja de salario, horas de trabajo, salud, seguridad, acoso sexual o de discriminación.
  (800) 733-3899
- Llama a la Linea Campesina para información sobre empleo, vivienda, cuidado médico, educación y alimentos en caso de emergencia.
  (800) 789-9993
- Para pedir información o consejo sobre salud y seguridad, llama al Programa de salud laboral de la Universidad de California en Berkeley (LOHP)
  (510) 642-5507

¡Tienes el derecho de hablar!

Según la ley, tu patrón no puede despedirte o castigarte por presentar una queja de un problema en el trabajo.
I. DOCUMENT IDENTIFICATION:

Title: Young Agricultural Workers in California

Author(s): Michele González Arroyo, MPH and Laura Kurre

Corporate Source: University of California, Berkeley Labor Occupational Health Program

Publication Date: November, 1997

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