# Teens, Work, and Safety



# A Curriculum for High School Students

Labor Occupational Health Program Center for Occupational and Environmental Health University of California, Berkeley

# **ACKNOWLEDGMENTS**

This curriculum was developed by teachers in the Oakland Unified School District (Oakland, CA) and staff of the Labor Occupational Health Program (University of California, Berkeley, CA). Participants in the project included:

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# INTRODUCTION

This curriculum is the result of a cooperative effort between teachers in the Oakland Unified School District (Oakland, CA) and staff of the Labor Occupational Health Program (University of California, Berkeley, CA). It is designed to teach teens about workplace health and safety.

Students need basic health and safety awareness so they can protect themselves on the job—now, and later in their lives. Safety can literally be a matter of life and death.

The curriculum covers basic health and safety information that can be presented either in the high school academic curriculum or as part of a job training program. It is appropriate for a wide variety of academic and vocational courses.

# Why do high school students need to learn about workplace health and safety?

- Many teens have jobs. Surveys show that most teens hold at least one job by the time they leave high school. Teens typically work at a series of part-time, temporary, low-paying jobs with limited adult supervision. They often go to their jobs after putting in a full day at school.
- About 70 U.S. teens die from job injuries every year, and 64,000 more are seriously injured. The rate of teen work injuries is higher than the rate for adults, even though child labor laws prohibit teens from working in the most hazardous occupations.
- Teens are often inexperienced and unfamiliar with the work they are asked to do. Their most positive traits—energy, enthusiasm, a need for challenge and responsibility—can lead them to take on dangerous tasks. But sometimes they are neither prepared for these tasks nor capable of doing them safely. Teens may also be reluctant to ask questions or to make demands on their employers for better information or safer conditions.

Teens often know little about health and safety hazards or about the laws that protect them. Even their parents and teachers may have little information. Before they enter the workplace, teens are rarely told about hazards, protective measures, or their rights. Many employers don't provide adequate training, especially training appropriate for teens.

Employers, parents, teachers, and public health organizations such as the American Academy of Pediatrics, the American Public Health Association, and the National Institute for Occupational Safety and Health have all called for better education on workplace health and safety for teens. Students who have learned about workplace health and safety issues in the classroom are better able to avoid job injury.<sup>1</sup>

# Why teach health and safety in academic classes?

There is an increasing emphasis on tying students' academic learning to the skills and information they will actually need in the workplace. School districts throughout California are implementing "School-to-Career" programs that integrate work-based and school-based learning, based on the federal "School-to-Work" initiative. These programs are explicitly required to educate students about "all aspects of the industry," which includes job health and safety issues.

More importantly, education about real workplace issues is something that **all** students need— not just those in federally-funded vocational or school-to-work programs. Such education may help protect students from crippling injuries that can affect them for the rest of their lives, like losing a finger or suffering a permanent back injury. Most high school students will have worked on at least one job by the time they leave high school. Almost all of them will work once they leave school. All students need a basic introduction to workplace health and safety issues, and all students take academic classes.

# Who may want to use this curriculum?

This curriculum includes three subject-specific units designed to be incorporated into academic high school classes in English, Science,

<sup>&</sup>lt;sup>1</sup> Some of the material in this section was adapted from *Safe Work/Safe Workers: A guide for teaching high school students about occupational safety and health*, Massachusetts Department of Public Health (Occupational Health Surveillance Program) and Children's Safety Network (Education Development Center), 1997.

and U.S. Government. These units provide a way to present health and safety information while building academic skills appropriate to those particular subject areas. A three-hour general-purpose unit is also included. It can be incorporated into any subject area and taught by any teacher. This unit can either stand alone as an overview of workplace health and safety, or can serve as an introduction to the more comprehensive subject-specific units. The general-purpose unit can also be presented in vocational or job training programs.

Feel free to modify the here to meet your own needs. Activities in all the units can be used in, or adapted for, a variety of educational settings. Most activities are particularly appropriate for use in academic classes that are part of school-to-work programs, work experience programs, or other career-related programs.

## Overview of the Curriculum

Each academic unit was developed in partnership with teachers from the appropriate subject area, and is designed to be consistent with the *Curriculum Framework for California Public Schools* in that subject area. In all the units, emphasis is placed on interactive, "hands on" class activities rather than lecture or rote learning. Students "learn by doing."

The curriculum lends itself to a team teaching approach, where the same group of students learns about the issues from different perspectives in several subject areas.

If you are presenting one of the academic units, you may find that you prefer activities in other units for your particular class. Read through all the units, and find what fits.

Several of the units provide suggestions for optional activities, such as inviting guest speakers or showing videos related to health and safety. A list of appropriate videos appears in the **Resource Section** at the end of the entire curriculum. One video, *Your Work—Keepin' It Safe*, is included with the curriculum, and is used in all the units. (This 12-minute video was produced by UCLA's Labor Occupational Safety and Health Program for the California Commission on Health and Safety and Workers' Compensation.)

**Note on the video:** There are two scenes in this video that might merit additional discussion. In one scene, a young worker is seen using a circular saw. It is important to point out that workers under 18 are allowed to use power tools only if they are participating in an approved vocational or apprenticeship program. Second, back belts,

such as those shown in the video, have not been proven to prevent back injuries. It is important, whenever possible, to design a job so that workers don't have to rely on equipment like this.

Each curriculum unit contains objectives, a lesson plan, detailed teacher's instructions, overheads to show the class, and student handouts. Transparencies are provided of the overheads and masters are provided for the student handouts.

Following is a description of each unit.

- General Unit. The unit includes three lessons:
  - 1. Hazard Mapping
  - 2. Controlling Hazards
  - **3.** Teen Workers and the Law

In the first lesson, students draw maps showing health and safety hazards in a typical workplace, and suggest solutions. This hazard mapping activity can be adapted to focus on hazards of a specific industry or career area. The second and third lessons lead students through several activities that teach them how hazards can be controlled, and what legal rights they have on the job.

- English Unit. The unit includes six lessons:
  - **1.** Danger on the Job!
  - **2.** Attitudes and Their Consequences
  - **3.** Teen Workers' Rights
  - **4.** Taking Action
  - **5.** Preparing Oral Histories
  - **6.** Presenting Oral Histories

This unit teaches analysis of oral and written information, and preparation of reports. An oral history exercise focusing on job health and safety plays a key role in the unit. Students interview working adults. This helps develop skills in planning, interviewing, analysis, synthesis, and writing. Readings are also provided which encourage students to reflect on the world of work as expressed through different authors' voices and perspectives.

### • Science Unit. The unit includes five lessons:

- **1.** Danger on the Job!
- **2.** Introduction to Scientific Methodology
- **3.** Survey Assignment
- 4. Survey Analysis
- **5.** Presenting Your Results

This unit teaches scientific methodology, scientific data gathering skills, and specific health and safety information. In the principal activity of the unit, students conduct a survey of other teens, addressing both knowledge and opinions about workplace health and safety. Before conducting the survey, students work in groups to formulate hypotheses about the results. After completing the survey, the groups tabulate, analyze, and graph the data relevant to their hypotheses.

### • U.S. Government Unit. The unit includes five lessons:

- 1. There Ought To Be a Law!
- 2. Teen Workers' Rights
- **3.** Applying the Law
- **4.** Preparing To Debate
- **5.** The Debate

A major goal of this unit is to help teens develop the knowledge and skills they need to take action on issues in the workplace that affect them, in a way that is effective but also realistic. Students develop model laws to address working conditions and apply existing laws to "real life" scenarios. The centerpiece of the unit is a class debate. Students develop arguments on opposing sides of a social issue involving workplace health and safety, and then debate it in class.

# ■ Resource Section. This section has two appendices:

- **A.** Readings and Materials
- **B.** Resource Organizations

A variety of resources are listed in Appendix A—books, factsheets, and videos suitable for classroom use; curricula available from several sources; internet sites; and reference materials for the teacher on health, safety, child labor, and teaching techniques. Appendix B lists government and private organizations that may be helpful.