

Teaching high school students about occupational safety and health

Summary of conference calls sponsored in March and May, 2006 by the Young Worker Safety Resource Center

In December 2005, the Young Worker Safety Resource Center convened representatives from 12 states to discuss how they are reaching youth with information on occupational safety and health. On their workshop evaluations, participants indicated that they wanted to have more in-depth discussion on two topics in particular. Therefore, the YWSRC facilitated follow-up conference calls to allow participants time to talk about the following questions:

- How can the OSHA 10-hour courses be enhanced for use with teens?
- What specific strategies have states used to institutionalize the use of occupational safety and health training in schools and community programs?

The following are notes from the calls.

Is the OSHA 10-Hour Course Appropriate for Young Workers?

Young Worker Safety Resource Center Conference Call—March 14, 2006

Participants: Jennifer Campbell, Center for School & Community Health Education, NJ; Tish Davis, MA Dept. of Public Health; Ann Freeman, NJ Dept. of Education; Tony Fuschillo, Federal OSHA, CT; Pat Griffin, Federal OSHA, MA; Don Guerra, OSHA Office of Training and Education, IL; Howard Garey, NJ Dept. of Education; Paul Kessler, OSHA Consultation Program, DE; Lou Lento, Federal OSHA, NJ; Leona May, Federal OSHA, CT; Dave McDonald, OSHA Compliance Assistance, KS; Susan McQuade, NYCOSH, NY; Maryann Medeiros, Federal OSHA, RI; Mary Miller, WA Dept. of Labor and Industries; Deborah Neff, DE Dept. of Labor; Bob Nester, Federal OSHA, WDC; Deborah Pease, CT Dept. of Public Health; Roanne Seeley, ME Dept. of Education; Beatriz Pazos Vautin, MA Dept. of Public Health

YWSRC Staff: Diane Bush, LOHP, CA; Robin Dewey, LOHP, CA; Chris Miara, EDC, MA

How the OSHA 10-hour program works

The OSHA 10-hour (both Construction and General Industry) can be taught by outreach trainers who have taken a trainer course (Course #500 or #501) from the OSHA Training Institute, or from one of the 19 OSHA Training Institute Education Centers (some of which represent consortia of 2-3 organizations.)

In 2005, 376,000 students completed the OSHA 10-hour and/or 30-hour (296,000 in Construction, 80,000 in General Industry) and received their cards. About 85% of these

were 10-hour cards. Trainers are trained at OTI and other training centers. OSHA's trainer database, which was the only database until the program decentralized in 2003, currently shows 609 possible educational based trainers. Some may have done training, others may not have. But the breakdown of the numbers may provide some insight into where outreach training is occurring, within educational organizations. As a note, consultants used as trainers would not show up in this mix. Of these 609 possible trainers, 22 (4%) were vocational schools, 36 (6%) were high schools, 125 (21%) were community colleges, 160 (26%) were other colleges, and 266 (44%) were universities.

OSHA 10-hour Program: General Industry

For the 10-hour General Industry, the following 4 topics/hours are mandatory:

- Introduction to OSHA (1-hour)
- Walking and Working Surfaces (1-hour)
- Exit Routes, Emergency Action Plans, Fire Prevention Plans, and Fire Protection (1-hour)
- Electrical (1-hour)

3 more hours must cover at least 3 of the following topics (.5-1 hour each)

- Flammable and Combustible Liquids
- Personal Protective Equipment
- Machine Guarding
- Hazard Communication
- Intro to Industrial Hygiene/Bloodborne Pathogens and/or Ergonomics
- Safety and Health Programs

Powerpoint presentations for all of these topics (including the required 4 topics) except for ergonomics can be found at

http://www.osha.gov/fso/ote/training/outreach/gi_outreach_tp.html

During the remaining 3 hours, the teacher "may teach any other general industry standards or policies and/or expand on the required topics."

OSHA 10-hour Program: Construction

For the 10-hour Construction, the following 3 topics/hours are mandatory:

- Introduction to OSHA (General Duty Clause, General health and safety provisions, recordkeeping) (1 hour)
- Electrical, Subpart K (1 hour)
- Fall Protection, Subpart M (1 hour)

3 more hours must cover at least 3 of the following topics (.5-1 hour each)

- Personal Protective and Lifesaving Equipment, Subpart E
- Materials Handling, Storage, Use and Disposal, Subpart H
- Tools - Hand and Power, Subpart I
- Scaffolds, Subpart L
- Cranes, Derricks, Hoists, Elevators, and Conveyors, Subpart N
- Excavations, Subpart P
- Stairways and Ladders, Subpart X

Powerpoint presentations for all of these topics (including the required 4 topics) except for ergonomics can be found at

http://www.osha.gov/fso/ote/training/outreach/const_outreach_tp.html

During the remaining 3 hours, the teacher "may teach any other construction industry standards or policies and/or expand on the required topics."

Also: "The 10-hour classes are designed to be presented to workers, therefore they must emphasize hazard identification, avoidance, control and prevention, not OSHA standards."

Also, Outreach Training Tips (p. 4 of the OSHA Outreach Training Program Guidelines at <http://www.osha.gov/fso/ote/training/outreach/general.html>):

- worker emphasis
- site-specific
- use objectives (focused on skills they should have for each topic)
- presentation assortment (different trainers, computer presentations, videos, case studies, exercises, graphics) to make the course "interesting and enjoyable" "By doing this you'll be employing the three levels of training techniques-- presentation (presenting the material in a variety of ways), discussion (getting the students involved in the learning), and performance (students practice the material they learned.)"

How is the 10-hour currently being used with young workers?

- NJ: Ann Freeman reported that there is a major new initiative to require all teachers placing kids in jobs to teach the 10 hour general industry to those students, including students in vocational education, comprehensive high schools and special ed programs. Teachers themselves receive the OSHA 10-hour, plus 2 hours of training on NJ Dept. of Education safety and health codes and issues associated with placing students in workplaces. If teachers can't attend the 2 hour session; they can attend a *Youth@Work* TOT. They also have teachers attend a 6 hour training on wage and hour, and a 6 hour training on wage payment. If teachers understand the laws and regulations they'll be more likely to give info to kids. Teachers liked time spent on the OSHA website—especially the interactive pages, such as the virtual burger joint. Teachers felt like there isn't much in the 10 hour to address the kinds of jobs that kids usually get (i.e. retail, hotel/motel, restaurant.)
- NJ: Lou Lento (OSHA) reported that they teach the 10-hour construction program to youth. This year, they began to use volunteers from local unions, including health professionals. Union guys bring in equipment, youngsters can touch and try

it on. He also uses hazard mapping (from *Youth@Work*.) Makes everything more interesting. The OSHA powerpoints often show old machines.

- CT: Tony Fuschillo (OSHA) reported that they also teach the OSHA 10-hour construction program to youth. Modules from OTI are geared toward a more experienced workforce. He's modified electrical and construction to be more hands on and visual. He's given up on going into schools with the 10-hour. Administrators are inflexible on timing. Can't do modules in 45 minutes.
- CT: Leona May (OSHA) reported that she's starting the 10-hour construction program in a voc ed program later this month. They have 2 hour periods.
- ME: Roanne Seeley (Dept. of Ed) reported that the 10-hour is good for Tech Ed programs. At their Summer Institute, they present the *Starting Safely* curriculum first. Then, instructors do the construction or general industry 10-hour.
- DE: Paul Kessler (OSHA) reported that they teach the OSHA 10-hour construction to juniors and seniors in voc tech. It's boring. Needs more hands-on activities. We'd need a different program for work experience programs—banking, doctors offices, etc. 10 hour course doesn't address their concerns.
- NY: NYCOSH teaches the OSHA 10-hour program in Construction; tried to do General Industry, but seems like too much/not relevant to youth.
- ME: Teachers like the CareerSafe online program that's available. However, although it's based on OSHA-10 requirements and provides a CareerSafe certificate, it's not an OSHA card. Voc ed teachers like to have students use it or use it to review info for themselves.
- MA: Pat Griffin (OSHA) trains voc ed teachers, and bring in someone from wage and hour to instruct teachers as part of a 40-hour training.
- Federal OSHA: Bob Nestor and Dave McDonald reported that the OSHA-10 hour (construction) will be taught at the next Skills USA Conference; also working to include health and safety questions in Skills USA: Knowledge Bowl.

Youth @ Work: what's different?

The YWSRC's curriculum, Youth @ Work, provides a basic introduction about why health and safety training is important. Youth learn basic skills, including identifying hazards on the job, and an intro to controlling hazards. The biggest difference in content is that participants learn about their rights, including both OSHA and child labor laws, and develop skills in problem solving and speaking up appropriately. Although there is some overlap in content with the OSHA 10-hour, the pedagogical approach is very different—games, role plays.

Why are people using the 10-hour program?

- Helps in getting jobs (especially construction)
- Liability issues for schools placing students

After the 10-hour training, you get an official OSHA card. Many construction jobs require the 10-hour card. This gives youth a competitive edge when applying for a job. It also prepares them for worksite hazards.

MA--OSHA began training voc ed teachers in 2001. The teachers came to them and asked for training. In MA, a state law will go into effect this summer (2006) requiring any employee on a public construction job to have an OSHA 10-hour card.

NJ- In the admin code, if a school places a youth in a school sponsored job, the school district and teacher are responsible for inspecting the worksite, and must ensure that the student is adequately trained in health and safety. They worked with a big insurance company, and asked what school districts can present to ensure adequate training. The only recognized training is the OSHA 10. It's an insurance and liability issue.

CT--Tony Fuschillo (OSHA) commented that voc ed teachers with industrial classrooms need more training than just the OSHA 10.

Concerns about using the OSHA 10-hour with youth

- Not interactive, concrete, hands-on
- Required topics don't address most common youth workplaces
- Too much information for most youth; shorter would be better
- Doesn't include critical info on child labor laws, rights, skill-building around speaking up, problem-solving

Tish Davis (MA Dept. of Health) commented that she sat through the 10-hour and couldn't absorb it all. Good information, but instructors need tools to do things more creatively.

Modules geared to more experienced workforce. Need to make it very real/concrete/hands-on for youth.

Seems like overkill for many youth. Lots of detailed training about the health and safety aspects of many jobs which youth are prohibited from doing until they're 18. (But Youth Build participants, for example, can start at age 16.)

OSHA 10-hour construction training meets real needs (this is the emphasis in MA, RI, and other states.) The general industry course, however, even when altered, doesn't really meet educational learning objectives for kids in various jobs.

Doesn't include info on child labor laws, which are critical to protecting young people.

Does emphasis on OSHA 10-hour and getting an official card remove some of the obligation of employer?

This is also an important opportunity to teach young people about their rights.

Evaluation of OSHA 10 hour?

Evaluation of the effectiveness of the OSHA 10-hour vs. other programs (Youth@Work) is needed!

No test is required to receive the 10-hour card -- it's just 10 hours of "seat time."

NJ: Teachers who go through the OSHA 10-hour in their program do a pre/post test. They are not voc ed teachers, so their reactions are probably not much different from what students' reactions might be. Ann Freeman will share results with YWSRC (350 teachers).

NY: NYCOSH also has participants take a test after each section.

An evaluation of the SmartMark program has been done. We should see if we can get the results.

What would help make a difference?

The OSHA 10-hour already has some flexibility in requirements (see above.) Don Guerra (OTI) suggested that we could propose a 10-hour course targeting youth and OTI could give feedback on whether it would be acceptable.

Would OSHA be willing to issue a certificate for a shorter, basic course targeting young workers? Don Guerra suggested this would be challenging, but you can always ask.

What's really needed is a joint 10-hour training offered by OSHA and Wage and Hour that includes info on child labor laws and has information related to the jobs commonly held by youth.

Ann Freeman (NJ Dept. of Ed) offered to recruit non voc ed teachers who would be interested in looking at the curriculum to see what is needed. This is a good group to give insight into the OSHA 10, separate from voc ed teachers.

Teachers need to know all of this. Employers assume that teachers know; teachers assume that employers know.

Possible Next Steps

- 1) Collect ideas and share strategies and resources trainers are already using to make the 10-hour more interactive and hands-on.
- 2) Develop an ideal OSHA 10-hour Youth outreach training program (General Industry) (using ideas from #1 and integrating *Youth@Work* activities) that's interactive and reflects more common youth workplaces. (Survey call participants re what they think should be in an "ideal" OSHA 10-hour.) Add a "+" section to cover child labor laws and speaking up. Consider the outreach requirements and youth training needs. Present this to Don Guerra at OTI; it may be able to be integrated into the General Industry outreach guidelines.
- 3) Encourage OSHA and DOL to offer a certificate for a 3-5 hour program that integrates child labor laws.
- 4) Recommend Youth@ Work curriculum as part of the unspecified 3-hours.
- 5) Share whatever is developed (materials or recommendations) with existing OTI outreach trainers, through Don Guerra at OTI.
- 6) Establish a core place (website) to share a well organized group of strategies, curriculum, photos, videos, tools, and segments for specific types of groups.

Suggested strategies for accomplishing these steps:

Ed Foulke has been confirmed as the new assistant secretary for OSHA. We should schedule a meeting to talk to him about this issue. Work through the Employment Standards Administration.

Use OSHA Alliances to get people together on these issues. Get specific groups (landscapers, restaurants) to form Alliances and develop appropriate activities for the OSHA 10 hour.

Collect existing evaluation info to help make the case for the need for a more youth-appropriate approach (e.g. NJ data).

Institutionalization of Young Worker Safety Training
Young Worker Safety Resource Center
May 1, 2006

Participants: Toni Adams, Alameda Co. Office of Education (CA); Jennifer Campbell, Center for School & Community Health Education, NJ; Carol Frischman, UCLA Labor Occupational Safety and Health Program; Tony Fuschillo, Federal OSHA, CT; Don Guerra, OSHA Office of Training and Education, IL; Howard Garey, NJ Dept. of Education; Elise Handleman, Federal OSHA; Kelly Howard, Cal/OSHA; Cassie Maloney, US Department of Labor; Leona May, Federal OSHA, CT; Lois McKenzie, Maryland OSHA; Bob Nester, Federal OSHA, WDC; Beatriz Pazos Vautin, MA Dept. of Public Health; Barry Schlagel, University of Medicine/Dentistry New Jersey, EOHSI; Marian Storch, CT Dept. of Labor, Judi Andrews, CT Dept. of Education

YWSRC Staff: Diane Bush, LOHP, CA; Robin Dewey, LOHP, CA; Chris Miara, EDC, MA

The purpose of this call was to discuss **ways to institutionalize use of existing health and safety curricula**, like Youth @ Work, using successes in NJ and CT as a jumping off point. Who were the players? What were the key selling points? What made these efforts successful? Our goal is to develop concrete tips we can all use in our efforts to institutionalize training in our own states.

New Jersey

Training for teachers involved in work-based learning.

Barry Schlegel and Howard Garey described New Jersey's regulation requiring teachers who supervise Structured Learning Experiences to receive training in student and workplace safety and health, Federal and state labor laws, and developing student-training plans. * This 48 hour training includes the OSHA 10 PLUS - the OSHA 10-Hour General Industry Program plus 2 hours of training on NJ Department of Education safety and health codes, accident reporting procedures, and issues associated with placing students in workplaces.

It took three years to adopt this NJ Department of Education administrative code, which included several modifications. The original adoption date was December 2002, with the most recent modification in March 2005. There was broad support. Key sponsors were staff in the child labor unit of the Department of Labor, school insurance carrier representatives, cooperative education coordinators, staff from NJ's Safe Schools Program, and staff from the NJ Department of Education's Office of Vocational-Technical, Career and Innovative Programs, the Office of Special Education, and the

* Anne Freeman, Education Program Development Specialist New Jersey Department of Education Office of Vocational-Technical, Career and Innovative Programs provided supplementary information after the call, which is included in this write up.

Office of Licensure and Credentials. Teachers and others school staff who place youth with special needs in worksites were also strong advocates. This latter groups have also made extensive use of the *Youth @ Work* curriculum, since they are looking for ways to prepare their students for the workplace.

In developing the administrative code, committees were convened to discuss the types of training needed, and many meetings were held with teachers, health and safety experts, school insurance carrier representatives, teacher licensure and credentialing staff, and others. The administrative code was adopted by the NJ State Board of Education after public hearings and comments. Because there was a broad group of people already on board, support was strong for the administrative code, although not without its detractors who were primarily school superintendents who did not want more mandated training for their staff. Teacher credentialing and tenure issues also had to be addressed as part of this code adoption process. One unexpected issue was the number of hours for the proposed training. The NJ Office of Legislative Services required that the Department of Education include the number of hours for each mandated course to be included in the legislation. Consequently, estimates were developed by the participating federal and state agencies for each course subject area: federal wage & hour, state wage and hour, wage payment and child labor; and designing and implementing student training plans. Those estimates were later revised.

The NJ Department of Education conducted a two-year pilot after the initial code adoption in December 2002 during which the mandatory courses were developed. The NJDOE worked closely with federal and state department of labor wage and hour specialists to develop a course outline and curriculum. The courses were based upon employer/worker training that these agencies already conducted. Similarly, the NJDOE worked with NJ regional OSHA staff to review and revise the OSHA 10 General Industry Certificate training to meet the needs of teachers. Barry Schlegel, the NJ Safe Schools Coordinator, developed the 2-hour portion of the OSHA 10 PLUS course based upon the Safe Schools courses already provided to Safe Schools officers. The NJDOE contracted with a work-based education specialist at Holy Family University in Newtown, PA, as well as work-based learning and academic specialists and within the NJDOE to develop the student training plan course.

500 teachers and 50% of New Jersey's high schools participated in one or more courses during the pilot program, which were free during the pilot period, with services donated by all involved.

Based upon the results of the pilot program, the administrative code was revised to eliminate the required number of hours for all courses other than the NJDOE courses, as the NJ State Board of Education determined to accept the results of the pilot program and to give the other agencies flexibility to revise their courses as needed. Finally, all the course hours may be counted towards the NJDOE's professional development hours required for teacher to maintain their certification.

Recommendations to other states

- Get active involvement of all parties--teachers who will be impacted, other relevant professionals, insurance companies--at the outset. Allow sufficient time for implementation.
- Find out what the state's Department of Education's teacher licensing and credentialing processes and procedures are to ensure that adequate time and resources are dedicated to adopting the new training requirements.
- Permit adequate time to pilot the training, work out the kinks, questions and other issues that might arise.
- Prepare guidebooks and other resources to assist educators and others with the process.
- Plan regular meetings and contact with the training partners to help them implement their courses. Teaching teachers who are supervising students is a completely different process and mindset than training employers and employees.
- Key to the development of a training that was acceptable to teachers: Held three pilot sessions with coop teachers. Brainstormed with them and modified course. For example, at first the developers thought they would do the OSHA 30 hour; changed to 10 hour.
- Survey the teachers during the pilot process and modify as you go, if appropriate.
- Include opportunity for teachers to visit a work site, interview an employer, and prepare a student training plan as part of their training.
- Offer courses year-round.
- Cover all types of structured learning experiences (work-based education) in the training to address the needs of diverse teachers.
- Assure teachers that they won't get into trouble if they ask questions about situations or past practices that may not have been in compliance with laws or regulations.
- Ask us! We would be happy to consider sharing the NJDOE administrative code and other materials with states interested in NJ's plan. Come visit us!

Youth @ Work Curriculum

Teachers who place youth in the workplace are obligated to train students on health and safety. Some schools have chosen to use the OSHA 10hr to do this. Many students don't need that much. *Youth @ Work* has filled that void. It offers hands-on activities, alternative lessons. UMDNJ offers trainings, with support from the Department of Education.

Connecticut

Marian Storch and Judi Andrews described their initiatives, which institutionalize young worker safety training. Their successes have been due to the fact that they have a strong state level team, comprised of representatives from CT Department of Labor (Wage and Workplace Standards, WIA Administration, CT OSHA) Federal Department of Labor (OSHA, Wage and Hour) and the State Departments of Education, and Public Health . This has enabled team members to access various networks.

Workforce investment boards

Three of Connecticut's five regional WIBs incorporate requirements for workplace safety training into their grants to youth program operators, and note that *Work Safe!* will meet the requirement. (Each regional Youth Council develops its own RFP for youth employment services.)

The CT Department of Labor (DOL), which oversees the WIA youth program, especially youth councils, promotes health and safety. The State team member from the CT DOL, WIA Administration Unit shared and promoted the *Work Safe!* curriculum in meetings with each of the individual WIBs. They could see how the curriculum addressed the need for youth to learn workplace safety. These helped convince WIBs. Once one WIB mandated it, two others did also. WIBs had already adopted workplace safety as part of their philosophy. Deb Pease, a member of the State Team, completed an analysis of teen workers' comp injuries. This was presented to the state team and incorporated into a fact sheet. State team members have used this data in numerous presentations and meeting to help demonstrate the need for young worker safety training. In addition, the OSHA compliance assistance specialist has gone to the CT DOL One Stops and given safety talks to youth going to work.

School based programs

The Connecticut Department of Education (SDE) requires school districts with approved work-based learning programs to address the delivery of young worker safety training in their grant applications. This happened because WIB staff played a leadership role in rolling out School-to-Career programs in CT. Most of these programs are in career and technical education. SDE provides training on the *Works Safe!* curriculum for school staff placing students in the workplace through a professional development contract. The state team is now trying to connect with Guidance counselors. Work readiness is one of the things they have to cover; the team is trying to get them to include health and safety.

The Federal OSHA Compliance Assistance Specialists have been very involved in the state team and in schools. They give classroom presentations in schools utilizing components of *Work Safe!* including hazard mapping and the "Hazards we face" video, as well as teach the OSHA 10 hour classes in voc tech schools. The OSHA Compliance Assistance Specialists, Federal Wage & Hour and CT Wage & Workplace Standards serve as resources for Train the Trainer Workshops on the *Work Safe!* Curriculum. Professional development: The Capitol Region Education Council (CREC), which provides professional development for the Connecticut Department of Education, offers *Work Safe!* Train the Trainer workshops four times each year. The training is free for teachers, funded with professional development dollars under CT's Carl Perkins funding. Staff from the WIB's Youth Councils and others involved with youth in the workplace are also invited to the training. In addition, if a school pulls together 25 people, CREC will do a training for them.

California

Carol Frischman reported that UCLA's Labor Occupational Safety and Health Program has recently been successful in getting the LA Unified School District (with over 700,000 students) to include health and safety training in the "Life Skills" class that all 9th graders are required to take. They have been working on this for at least 4 years! Three units from LOSH's *Safe Jobs for Youth* curriculum are now included, starting Fall 2006. The key to success was building relationships with the key players.

LOSH has also tried to work with the teachers' college at UCLA to provide presentations to new teachers on the importance of teaching about work issues.