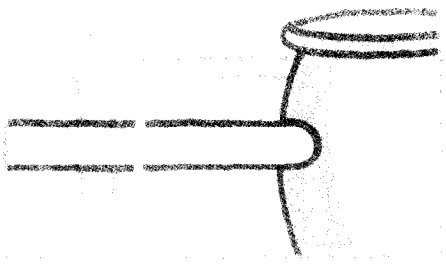


Organized Labor and Occupational Health

Smoke-Free Airlines and the Role of Organized Labor: A Case Study

Jocelyn Pan, ScD, MPH, Elizabeth M. Barbeau, ScD, MPH, Charles Levenstein, PhD, MSOH, and Edith D. Balbach, PhD

Labor unions play an important role in debates about smoke-free worksites. We investigated the role of flight attendants and their unions in creating smoke-free air travel.

We used case study methodology to search tobacco industry documents and labor union periodicals and to interview key informants (i.e., people identified as having first-hand information and experience in the campaign to make airlines smoke free). We then compared findings across these data sources.

Tobacco industry strategies against the establishment of smoke-free worksites failed in the case of airlines, largely because of the efforts of flight attendants and their unions. Other factors contributed to the failure but likely would have been insufficient to derail industry efforts without strong stands by the flight attendants. This case illustrates the potential for successful partnerships between unions and tobacco control policy advocates when developing smoke-free worksite policies. (*Am J Public Health.* 2005;95:398–404. doi:10.2105/AJPH.2004.040592)

IN 1989, THE US CONGRESS banned smoking on domestic flights of 6 hours or less. This ban followed a 1987 ban that made flights of 2 hours or less smoke-free. While airline cabins are public spaces, they are also workplaces, and the law represented the first—and so far only—federal legislation that regulates workplace smoking. In 1986, Congress rejected the Stevens Bill, which proposed that all federal workplaces be smoke-free; so why did it ban smoking on airliners?

The tobacco industry has understood the role that labor unions play in smoke-free worksites since early 1980, when it formed coalitions with sympathetic labor unions.[1] The Tobacco Institute (TI), which lobbies for US tobacco companies, and 5 unions that had contracts with the industry formed the Tobacco Institute Labor Management Committee (LMC) in 1984.[2] The Labor Management Committee's goal was to block smoke-free worksite legislation and increases in tobacco taxes.[3–5]

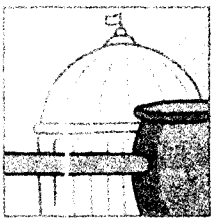
The TI had a 4-part strategy for contesting smoke-free policies, and its alliance with labor unions facilitated this strategy. In a 1987 speech about the TI's lobbying activities during the 1980s, Peter Sparber, vice president of TI, outlined its strategy:

- "Broaden the public issue to overall indoor air quality."
- "Challenge the scientific community to deal honestly with ETS [environmental tobacco smoke]."
- "Demonstrate the many unintended . . . negative . . . economic and social ramifications of smoking restrictions."
- "Rely on third parties to communicate our point of view."[6]

The tobacco industry's strategy for preventing smoke-free US airlines was not as successful as its strategy with other US worksites[7–10] and international airlines.[11] We examined why the industry's strategy failed in the case of smoke-free US airlines by focusing on the role that flight attendants and their unions played. By becoming advocates for smoke-free airlines, the flight attendants, tobacco control advocates, and political leaders successfully facilitated congressional action. This case parallels current debates about smoke-free restaurants and bars,[7] where the workplace intersects with public space and where unions make a difference.

METHODS

We used the University of California, San Francisco/Legacy Tobacco Documents Library—a database of documents from the major tobacco companies, the TI, and the Council for Tobacco Research—to search tobacco industry documents. We searched keywords, such as flight attendants, airlines, and smoking ban and the names of airline unions, such as the Association of Flight Attendants (AFA) and the Air Line Pilots Association (ALPA). As a result of our initial searches, we searched additional terms, such as cabin air quality, ventilation, and cabin air, and the names of key people. We found approximately 4500 relevant documents and tagged them as being major, minor, or trivial in relation the topic at hand.[12] We used 180 major and minor documents as our dataset and sorted them chronologically to establish a timeline of events.



Because the tobacco industry documents were incomplete and primarily presented the industry's point of view, we verified our findings with other sources. This triangulation enhanced the validity of our findings.[13] First, we searched issues of *Flightlog*, a publication of the Association of Flight Attendants, and *The Air Line Pilot*, a publication of the ALPA, published between 1980 to 1990. We sorted the articles chronologically and compared them with findings from the tobacco industry documents. Second, we conducted telephone interviews with 3 key informants who advocated smoke-free airlines and asked them about their participation in the smoke-free airlines campaign. The interviews were tape recorded and then transcribed, and several members of the study team reviewed and interpreted the transcripts. Data from the tobacco industry database, periodicals, and interviews were compared, contrasted, and synthesized to develop a narrative of the case.

RESULTS

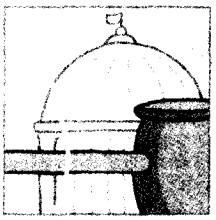
In 1983, the Civil Aeronautics Board proposed a smoking ban on flights of 1 or 2 hours duration, on aircraft with 30 or 60 seats, and on aircraft with inadequate ventilation systems. The final decision, effective in July 1984, banned cigars and pipes but rejected proposals to ban cigarettes on short flights or to require special provisions for passengers especially sensitive to smoke.[14,15] Also in 1984, federal legislation directed the US Department of Transportation (DOT) to review the literature on cabin air quality.[16] DOT contracted with the National Academy of Sciences (NAS) to conduct the review. In August 1986, NAS recommended banning smoking on all domestic commercial flights to eliminate potential fire hazards and to bring cabin air quality in line with standards for other enclosed environments.[17]

As shown in Table 1, the NAS study was crucial: the recommendations about flight attendant health engaged the AFA and the leadership of their umbrella organization, the American Federation of Labor–Congress of Industrial Organizations (AFL-CIO), who was already under pressure from union members.[18] As the largest union that represents

TABLE 1—The Struggle for Smoke-Free Passenger Airplanes: A Chronology

Year	Event
1970s	*First discussions by flight attendants about exposure to tobacco smoke on airplanes in the context of cabin air quality.*
	CAB hearings follow; review of rules that regulate smoking.
1975	FAA assumes jurisdiction over flight attendant health and safety from OSHA.
1983	Congressional investigation into cabin air quality and flight attendant concerns about fire safety and ventilation initiated by Senator Daniel K. Inouye
1984	CAB adopts final ruling to ban smoking on small aircraft and to ban cigar and pipe smoking on all flights. The CAB retains current rules that require fully functioning ventilation systems and that discourage airlines from seating nonsmokers between 2 smoking sections; CAB rejects proposals to ban smoking on short flights or to require special provisions for passengers especially sensitive to smoke.
	DOT contracts with NAS to conduct literature search about cabin air quality.
1985	The Civil Aeronautics Board Act of 1984 goes into effect, terminating the existence of the CAB and transferring the authority over smoking on commercial passenger aircraft to the Department of Transportation.
	NAS open hearings; AFA urges Congress to conduct longitudinal studies on flight attendants' health.
1986	NAS study released in August recommends a ban on smoking on all domestic commercial flights.
1987	February–DOT Secretary Elizabeth H. Dole rejects NAS recommendations for smoking ban on the grounds of deregulation and calls for more research on environmental tobacco smoke in aircraft cabins.
	April–ANR launches the Flight Attendants Project and kicks off National Campaign for Smokefree Skies.
	April–Congress passes a temporary ban on smoking on flights of 2 hours or less and which is to expire in April 1990.
1988	October–The Flight Attendants Conference meets in Chicago (organized by ANR and supported by NCI).
1989	January–101st Congress convenes; 4 smoke-free airlines bills are introduced in the House and 1 bill is issued in the Senate.
	April–Cabin Air Quality Lobby Day held by the AFA and Coalition on Smoking or Health.
	June–Participants in AFA's Joint Legislative/Safety Training lobbied on Capitol Hill for AFA's top legislative issues, including smoke-free airlines.
	June–AFA representatives testify before House subcommittee; flight attendants continue to write letters in support of smoke-free airlines.
	August–House approves permanent ban on flights of 2 hours or less as part of DOT Appropriations Bill.
	September–Senators debate a total domestic smoking ban; the Senate approves a total domestic smoking ban.
	October–House and Senate Conference Committee: permanent smoking ban on all domestic continental flights and flights of 6 hours or less to or from Alaska and Hawaii, which encompasses 99.9% of all domestic flights.
	November–President George H. W. Bush signs the smoke-free passenger airplane bill into law.
1990	February 25–Ban on smoking on all passenger airplanes takes effect.

Note. CAB=Civil Aeronautics Board; FAA = Federal Aviation Administration; OSHA = Occupational Safety and Health Administration; DOT = US Department of Transportation; NAS = National Academy of Sciences; ANR = Americans for Nonsmokers Rights; NCI = National Cancer Institute; AFA = Association of Flight Attendants.



flight attendants, the AFA eventually became a major player in the campaign for smoke-free airlines. As a result of pressure from health advocacy groups, flight attendants, and key politicians, Congress passed a temporary smoking ban on flights of 2 hours or less in 1987. Two years later, legislation to ban smoking on domestic flights of 6 hours or less—99% of flights within the continental United States—was passed.

Why did the TI fail in its effort to stop the ban from passing? An analysis of the TI's own 4-part strategy highlights the important role that the flight attendants and their unions played.

Broaden the Public Issue to Overall Indoor Air Quality

One of the tobacco industry's strategies for opposing indoor-smoking restrictions was to position itself as being involved in "seeking a solution" to the problem of poor indoor air quality.[1] This strategy was designed to shift attention from tobacco smoke to other pollutants and to facilitate alliances with both other industries and unions. The strategy with unions included a focus on indoor air quality that conformed to a long tradition of holding management responsible for cleaning workplace air.[19]

Because of its concerns about overall cabin air quality (not necessarily exposure to tobacco smoke specifically), the AFA was a potential ally for the tobacco industry. However, the AFA saw the smoking ban as a first step in bringing the Federal Aviation Administration's (FAA's) attention to the larger issue of occupational health standards for flight attendants.[20] The AFA was joined by the Joint Council of Flight Attendant Unions, a coalition of smaller flight attendants' unions, which also expressed concern about "ventilation systems in the cabin and the accumulation of pathogens in them."[21]

Thus, tobacco smoke was a major concern for many flight attendants. According to 1 flight attendant, as early as the late 1960s, some flight attendants complained to her they had "the lungs of a smoker," even though they did not smoke. She commented, "It's got to mean something. You can't have the lungs of a smoker when you've got the entire airplane smoking and not have it mean something" (P. Young, oral communication, October 2003). While the union was initially slow to take action, pressure from Young and others forced it to support their efforts to secure smoke-free conditions on passenger airplanes.

By focusing on tobacco smoke, the AFA and national antitobacco advocacy groups, such as the Coalition on Smoking or Health and Americans for Nonsmokers' Rights (ANR), became political allies. A senior associate of the coalition recalled that the flight attendants were "clearly the major force along with our health organizations . . . and I don't think we would have won without the flight attendants" (C. Douglas, oral communication, July 2003). The initiative of individual flight attendants led to the ANR's establishment of "The Flight Attendants Project" in 1987 (J. Carol, oral communication, June 2003). This project brought smoke-free air travel to the national spotlight and mobilized a grassroots effort among ANR members to support smoke-free passenger airplanes.

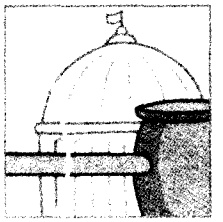
The tobacco industry's attempt to ally with airline management on the basis of the indoor air quality argument also backfired. While many industries supported a broad focus on indoor air quality rather than smoking bans, the airlines did not, because if the airlines had to address indoor air quality in general—rather than smoke alone—they would have had to undertake costly overhauls of airplane ventilation systems. Additionally, the tobacco industry supported enforcement of federal regulations that require the use of all air pacs (units that process outside air for cabin use) during flight to provide adequate ventilation.[22] Often airline management would save costs by only operating air pacs at a minimum level.

The tobacco industry also was expecting the airlines to oppose the smoking ban because of revenue loss from smokers who were frequent flyers. Smoke-free flights, however, allowed the airlines to use more seats, because the airlines did not need to estimate how many seats to allocate for smokers and nonsmokers—a requirement that left some seats empty if estimates were incorrect. Prohibiting smoking also would save on airplane cleaning and repair costs. After weighing the costs and benefits, airline management decided to stay silent on the issue by not testifying or otherwise indicating a position. Thus, attempts by the tobacco industry to contest smoke-free flights by broadening the issue into one of cabin air quality failed to win the much-needed alliance with flight attendants and airline management.

Challenge the Scientific Community on Environmental Tobacco Smoke

When the FAA first considered smoking restrictions on airplanes in 1970, very little scientific data were available that showed environmental tobacco smoke was hazardous.[23] Flight engineers at that time believed ventilation improvements would lessen the effects of smoke and the separation of smokers from nonsmokers would offer sufficient protection for the nonsmoker.[24]

In 1986, however, reports by the NAS and the US surgeon general about the dangers of environmental tobacco smoke[17,25] supported the flight attendants, who were (1) concerned that no one was worried about protecting their health in general and (2) already convinced that their daily experience of breathing smoke was hazardous to their health. The flight attendants increased pressure on the FAA, because they feared that "without the intervention of Congress, the National Academy of Sciences study [on cabin air quality] will end up on one of the burners that is so far back you cannot even tell if it is on."[26]



The TI, however, did not accept that a scientific case had been made against environmental tobacco smoke. In addition to funding cabin air quality studies of its own to discredit the health threats posed by environmental tobacco smoke,[26,27] the TI also hired a small ventilation firm, Air Conditioning and Ventilation Analysis, and its part owner, Gray Robertson, to support TI's position. Robertson conducted "media tours" to explain the need for clean indoor air rather than smoke-free air only.[28] While under contract to the TI, Robertson conducted air quality studies that showed tobacco smoke was a minor pollutant, if it was present at all. Through Robertson and other "scientific consultants," the TI was able to dispute the scientific basis for requiring smoke-free cabins.[29]

Robertson testified on behalf of the TI during 1989 congressional hearings about smoking on airplanes and tobacco smoke exposure.[30] He testified that nicotine was not the only pollutant that contributed to bad cabin air quality, and he said a smoking ban was unjustified because of scant scientific evidence that proved smoking was the cause of irritation and pollution. Instead, Robertson shifted the attention and blame onto the airlines by accusing them of saving on fuel costs by bypassing ventilation upgrades.

The flight attendants, however, presented their own testimony on the basis of personal experience. During 1986 congressional testimony, flight attendants expressed concern about chronic exposure to passenger smoking. Their list of symptoms ranged from headaches, burning eyes, and fatigue to nausea, faintness, lethargy, sinus pressures, and blocked ears.[21] Flight attendants' exposure to tobacco smoke while in flight was estimated to be the equivalent of living with a pack-a-day smoker.[17]

The NAS study recommended that smoking be banned, although it called for more research on the definitive effects of environmental tobacco smoke. As far as the flight attendants were concerned, the scientific evidence was "in." The flight attendants were concerned about the broader issue of cabin air quality, but they believed tobacco smoke was a major problem in and of itself.

Demonstrate the Negative Ramifications

Another tobacco industry strategy was to show the negative effects of smoke-free worksites: job loss and threats to employee privacy among unions,[31,32] and loss of revenue among smoke-free airlines when smoking passengers stopped flying. To convince the airlines that smoke-free cabins would alienate customers who smoked, the tobacco industry launched a campaign that included surveys of the flying public,[33] ticket agents, and smoker information centers and smokers' kits that encouraged passengers to complain.[34] The tobacco industry wanted to demonstrate to the airlines, Congress, and DOT that the public was satisfied with the separation of smokers and nonsmokers. These efforts fell flat, however. According to a 1989 nationwide survey of the flying public conducted by the American Association for Respiratory Care, passengers—both smoking and nonsmoking—preferred nonsmoking air travel.[35]

Rely on Third Parties to Communicate Point of View

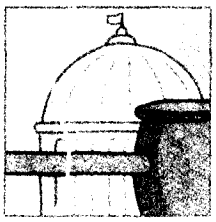
While the individual flight attendants' support for smoke-free airlines was an issue for the tobacco industry, the possibility of union support was a serious problem. Union support had the potential to neutralize the AFL–CIO and the other unions because of union solidarity. Airline management was staying out of the debate, and flight attendants supported smoke-free worksites; therefore, the TI sought the support of unions other than the flight attendants' unions.

One such union was the ALPA, the airline pilots' union. TI executive Susan Stuntz said, "The pilots had talked privately with the flight attendant unions, urging them, in the interest of political reality, to remain silent on the issue."[36] The ALPA was opposed to smoke-free airlines because surreptitious smoking in lavatories created a fire hazard and because the pilots believed they would have to enforce the new rules.[37,38]

At the Joint Council of Flight Attendant Unions meeting in 1987, the ALPA planned to "outline political, health and ventilation aspects of the issue as a first step effort to reverse the flight attendants' position."[39] The ALPA received financial support from the TI to disseminate a survey to registered voters, which found 87% of passengers agreed with the status quo of segregated seating.[36] Additionally, Stuntz noted Paul Halasay of the ALPA "did us another favor when he ordered pulled from the ALPA monthly . . . an article [that recommended a smoking ban on all commercial aircrafts] suggesting that smokers and ETS are causing vision, concentration and fatigue problems in pilots."[40] The pilots, however, were not willing to take a strong stand: "ALPA can be expected to maintain this position [opposition to smoking], albeit quietly. ALPA is not likely to testify against a ban, nor is it likely to make any public announcements."[38]

Likewise, the International Association of Machinists and Aerospace Workers, the union that represents airplane mechanics, did not take a public position on the issue. The union was quoted in 1 tobacco industry document as being "possibly" in support of the tobacco industry's aim to have the temporary smoking ban lifted after the legislated period of 2 years.[41] It may be that the ALPA and the International Association of Machinists and Aerospace Workers remained relatively quiet on the issue out of deference to the flight attendants, who were closest to the job hazard in question.

With a split in union positions on smoke-free airlines, the national organization of unions—the AFL–CIO—was essentially forced to *not* take a position and therefore *not* alienate its affiliate unions.



DISCUSSION

In the case of smoke-free airlines, the 4-part strategy of the TI was not successful. The tobacco industry made several critical miscalculations. First, its attempts to broaden the issue from smoking to indoor air quality failed because flight attendants and their unions were concerned about the health effects of smoking. Additionally, the single focus on smoking attracted the support of national tobacco control organizations, including Americans' for Nonsmokers Rights. Furthermore, the indoor air quality issue raised airline fears about the cost of indoor air quality regulations. Second, industry attempts to discredit the scientific evidence of the harmful health effects of environmental tobacco smoke were countered by the flight attendants' congressional testimony. Third, the tobacco industry did not present credible negative ramifications that would result from smoke-free airlines. Fourth, the tobacco industry was unable to garner the support of other major airline unions, including the pilots and the machinists. Because there was a split among its affiliated unions, the national AFL–CIO did not take a position on the smoke-free airline issue.

Our case study analyzed the failure of the tobacco industry's 4-part strategy for defeating smoke-free airline legislation. In contrast to a recently published paper on the campaign for smoke-free airlines,[15] we focused on the relationship among the AFA, the tobacco industry, and airline management, because these 3 groups had the most to gain or lose. However, it would be inaccurate to attribute the victory of the campaign solely to the actions of flight attendants and their unions, because smoke-free airlines also were pursued by health advocacy groups and key members of congress.[15] Studying both the dynamics of organized labor and the tobacco industry's history of aligning itself with labor's concerns offers another interpretation. The participation of the AFA shows that workplace tobacco policy is more readily enacted when the workers support it.

As Holm and Davis pointed out, a key to success was the inability of the tobacco industry to broaden the issue into one that was about cabin air quality and ventilation.[15] The health advocacy groups that campaigned for smoke-free airlines partnered with organized labor on a single-focus issue, which brought about the grassroots mobilization efforts and the passage of legislation that ended tobacco use on domestic aircraft. The success of this case stands in contrast to the 1985 campaign for legislation that would have made worksites in federal buildings smoke free.[42,43]

Our study adds to a growing body of literature on organized labor and tobacco. Others have reported on labor union positions on worksite smoking policies,[44–46] labor–management conflict over worksite smoking policies,[44,47] labor–management support for smoking cessation insurance benefits,[48] and roles for unions in tobacco control.[49–52] Our study is a unique contribution because it assesses the role of union members in the passage of the first—and only—federal smoke-free worksites initiative. The airplane cabin, however, is unlike most worksites, where smoking policy requires *workers* to control their behavior. With the airlines, it was the workers—the flight attendants—who sought control of the *public's* behavior to protect their own health and safety.

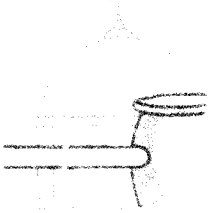
Document analysis research has limitations. Because of the large number of documents available, our search on the topic—although extensive—may not have found all relevant documents. We made every effort to make our search exhaustive, and we corroborated data from the documents by consulting union publications and newspaper articles and by interviewing key informants about smoke-free airplanes. Our study was limited to industry action in attempting to derail smoke-free airline legislation in the United States. Neilsen and Glantz wrote an excellent article about how the issue played out differently in Europe.[53] A cross-case comparison in the future is warranted.

Laws that require smoke-free restaurants and bars are gaining momentum across the United States. In the early 1990s, tobacco industry consultants recommended the industry develop "hospitality industry-related third-party allies" to combat such legislation. A TI memo described the Hotel Employees and Restaurant Employees International Union (HERE) as the largest labor organization of restaurant workers and concluded, "Thus an anti-smoking position developed by HERE, similar to that adopted by the AFA, could present a major setback. However, HERE, as an ally in this effort, would be a very powerful voice."[53] The industry was cautioned to learn from its experience with the flight attendants and court HERE as an ally

CONCLUSION

Our case study shows that the issue of tobacco policy in the workplace is an area where organized labor can work in partnership with tobacco control advocates. In fact, during recent policy debates about smoke-free worksites in Massachusetts, both HERE[54] and the Massachusetts AFL–CIO strongly supported smoke-free worksites as a way of protecting the health and safety of hotel and restaurant workers (R. Haynes, written communication, November 2003).

The flight attendants and their unions played a critical role in drawing public and political attention to the issue of smoking on airlines by framing the issue around worker health and safety. In order to form lasting partnerships with organized labor, tobacco control advocates must know when to focus on environmental tobacco smoke alone if it is a worker issue, and they must know how to work within the broader context of improving overall air quality when smoke is just 1 of several carcinogens in the air. ■



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Contributors

J. Pan collected and analyzed the data and led the writing of the article. E.M. Barbeau helped originate the study and participated in the data analysis and writing the article. C. Levenstein contributed his organized labor expertise and guided writing the article. E.D. Balbach originated the study design and oversaw the collection of data and writing the article.

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Human Participant Protection

This study was approved by the institutional review board of Tufts University.

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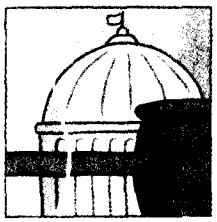

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Integrating Occupational Safety and Health Information Into Vocational and Technical Education and Other Workforce Preparation Programs

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The high rates of injury among young workers are a pressing public health issue, especially given the demand of the job market for new workers. Young and new workers experience the highest rates of occupational injuries of any age group.

Incorporating occupational safety and health (OSH) information into the more than 20 000 vocational and other workforce preparation programs in the United States might provide a mechanism for reducing work-related injuries and illnesses among young and new workers. We assessed the status of including OSH information or training in workforce preparation programs and found there is an inconsistent emphasis on OSH information. (*Am J Public Health.* 2005;95:404–411. doi:10.2105/AJPH.2004.047241)

IN THE UNITED STATES, A variety of programs exist to prepare young people for work and careers. These include schools and programs dedicated to career and technical education, commonly known as vocational education. Other training approaches include school-to-work programs and apprenticeships, career academies, career cluster initiatives, and various other federally and privately supported programs that deliver skills training (Figure 1, Table 1). The practice of incorporating occupational safety and health (OSH) information and training (about hazards and risks of work) into vocational and other training programs has not been widely recommended, and the extent to which this occurs has not been assessed.[1–4] We review what is known about the status of incorporating OSH into vocational, career, and other technical training. The benefits are believed to include increased job/career knowledge, safer work behaviors, increased competence when dealing with high risk occupational situations, and reduced incidence of occupational injuries and illnesses.

Safety and health conditions for vocational students during their training and in their subsequent careers overlap with the larger issues of safety and health risks for young workers. Work is a common part of the lives of many adolescents. It has been estimated that between 70% and 80% of teenagers work for pay at some time during their high