

STRATEGIC GOAL 3

QUALITY WORKPLACES

Foster Quality Workplaces that are Safe, Healthy, and Fair



The Department is committed to fostering workplaces that are safe, healthy, and fair. To meet this objective, the Department is dedicated to increasing the representation, advancement, and promotion of women, people of color, veterans, and people with disabilities in the workplace; providing access to quality child care for working families; and improving worker safety and health. As today's workplace is increasingly affected by global markets, DOL will also address core international labor standards and child labor issues.

MSHA mine inspector
measures methane gas levels.

Photo by: Michael Carpenter

**OUTCOME
GOAL 3.1 -
REDUCE
WORKPLACE
INJURIES,
ILLNESSES, AND
FATALITIES**



Photo by: Michael Carpenter

Overview

The Act that created the Department of Labor in 1913 established the improvement of working conditions as a primary legislative purpose. In that year, there were approximately 23,000 industrial deaths among a workforce of 38 million, equivalent to a rate of 61 deaths per 100,000 workers. By 2000, the workforce had grown to over 135 million, and occupational deaths had declined to 5,915 or fewer than five per 100,000 workers. In addition to fatal workplace injuries, an estimated 50,000 American workers die each year from illnesses caused by workplace exposures, and 6 million people suffer non-fatal workplace injuries. Injuries alone cost U. S. businesses over \$122 billion annually. Although the historical decline in occupational fatalities, injuries, and illnesses reflects progress made in identifying and correcting safety and health hazards, much remains to be done. The Occupational Safety and Health Administration (OSHA) and the Mine Safety and Health Administration (MSHA) are responsible for working with the States, employers, employees, and other stakeholders to ensure the safety and health of American workers.

Serving the Public

One of the most visible images after the catastrophic events of the terrorist attacks of September 11, 2001, was the extraordinary effort of search and rescue teams working in difficult and dangerous environments. The need to ensure the safety and health of these workers was paramount and, while at the same time coping with the destruction of its Manhattan Area Office at the World Trade Center, OSHA contributed directly to the rescue and recovery efforts. Nearly 180 staff members worked around the clock to provide safety and health assistance at the World Trade Center site. Since then, OSHA has shifted its effort to providing

guidance to help employers address new threats. For example, OSHA recently released an easy-to-understand Anthrax Matrix (<http://www.osha.gov/bioterrorism/anthrax/matrix/index.html>) that guides employers in assessing risk to their workers and determining an appropriate response.

Substantial progress has been made in ensuring a safe and healthy working environment in the mining industry. In FY 2001, the industry had the lowest number of fatalities ever recorded, an accomplishment partially attributable to efforts such as the adoption of an "accident prevention attitude" among MSHA inspectors and mine operators, development of mine profiles showing mine specific data and analysis on accident and injury trends, increased compliance assistance, and conducting more stakeholder and outreach meetings to involve the entire mining community in performance enhancement. MSHA has joined with the National Institute for Occupational Safety and Health to develop recommendations for manufacturers and users on the hazards associated with complex mining equipment and to develop personal wearable continuous dust monitors in coal mines.

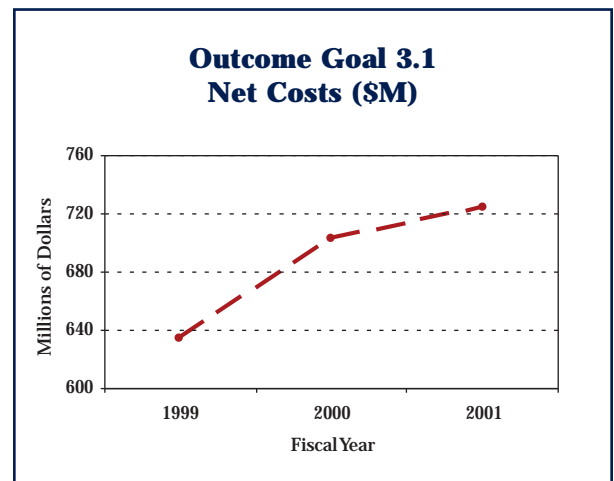
Program Costs

The FY 2001 program costs of \$724 million for Outcome Goal 3.1 support OSHA and MSHA occupational safety and health programs through compliance assistance and direct enforcement or through grants to State programs. Enhanced efforts of the Department included compliance assistance and enforcement initiatives to identify, target and strengthen focused programs on high hazard industries needing priority attention, such as the construction and metal and nonmetal mining industries.

DOL Challenges for the Future

The Department confronts a variety of challenges in its efforts to improve the safety and health of the nation's workplaces. The number of workers OSHA is responsible for protecting has expanded dramatically, nearly doubling between 1970, when OSHA was created, and 2000. Rapid technological advances and dynamic workplace environments have changed the nature of work, leading to new health and safety issues.

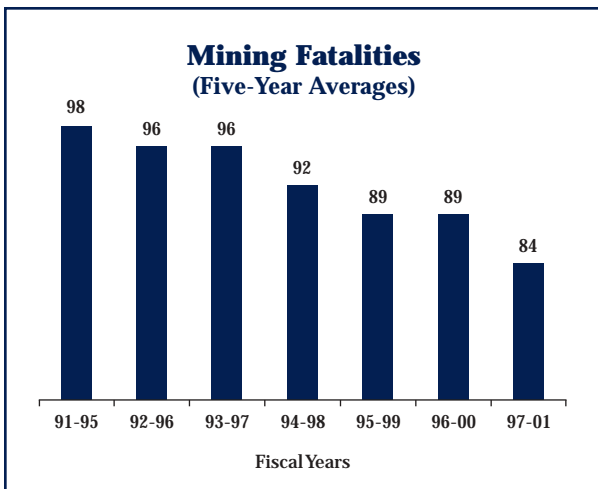
The Department of Labor is encouraged by the progress that employers and workers alike are making in reducing workplace injuries and illnesses. The Department seeks to meet the challenges of improving the safety, health, and productivity of America's workers, especially those engaged in hazardous occupations, by reducing injury and illness rates through increased compliance assistance, sensible enforcement, and setting performance goals to focus the Department's efforts.



REDUCE MINE FATALITIES AND INJURIES

Reduce the number of mine fatalities and non-fatal injury rate to below the average for the previous five years.

Results: This goal was exceeded. Fatalities and the non-fatal accident injury rates were well below the five-year average.



Program Description: The mission of the Mine Safety and Health Administration (MSHA) is to protect the safety and health of the Nation's miners. Through its safety and

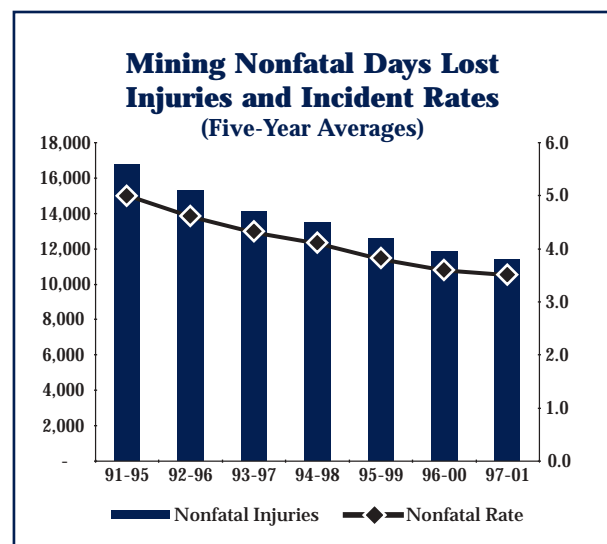
health enforcement and compliance efforts and in partnership with the American mining community, MSHA works to eliminate fatalities and reduce the frequency and severity of accidents in accordance with the Federal Mine Safety and Health Act of 1977.

reduction below the five-year annual average of 84 fatalities from FY 1997 – 2001. In the metal and nonmetal sector, fatalities declined to 30 in FY 2001, compared to 54 in FY 2000. As a result of a tragic coal mine explosion in September 2001 that claimed the lives of 13 workers, fatalities in this sector increased to 41 in FY 2001, compared to 34 in FY 2000.

Injuries: The Nonfatal-Days-Lost (NFDL) Injury Incidence Rate (injuries resulting in a lost work day or restricted activity per 200,000 workhours) of 3.30 is below the baseline rate of 3.65. Based on the five-year average, the number of nonfatal injuries and the nonfatal injury rate continued a downward trend for coal and metal and nonmetal mining, although the rate of decreasing injuries has slowed in the years following 1997 by comparison to the period from 1991 through 1997.

Accident and injury data are accurate and reliable. MSHA receives employment, injury and accident data from mine operators and has an audit program in place to ensure the reliability of the data.

Strategies: Through a more intensive use of its performance data, the Department is now developing targeted strategies to achieve a significant reduction of fatalities and nonfatal injuries. Mine profiles, showing mine-specific data and analysis, provide focus to enforcement activity and create an awareness of accident and injury trends in coal mines. During compliance assistance visits to metal and nonmetal mining operations in FY 2001, specialists emphasized the importance of training miners in avoiding the hazards responsible for the fatalities and serious injuries experienced by this



Analysis of Results:

Fatalities: The mining industry achieved the lowest number of fatalities (71) recorded in the industry's history in FY 2001, representing a significant

sector during the past several years. By expanding the successful strategies initiated in FY 2001 as well as training MSHA inspectors in a variety of new techniques and improving on-line services for stakeholders, the Department plans to reduce dramatically mining fatalities and injuries during the next four years.

Goal Assessment and Future Plans:

The Department is issuing a new strategic challenge to our employees and our stakeholders in the industry to cut mining-related fatalities and injury rates in half by FY 2004. As the first step, the new performance goals

starting in FY 2002 are to reduce the number of mine fatalities by 15 percent and the nonfatal injury incidence rate by 17 percent below the FY 2000 baseline numbers. These new targets will lead toward a planned 50 percent decrease over the next four years in mining fatalities and the rate of nonfatal injuries. ■

(Goal 3.1A — FY 2001 Annual Performance Plan)



MSHA acquired the ANDROS Wolverine Hazardous-Duty Robot System to aid in mine rescue and recovery efforts. It is capable of navigating through an underground mine via remote control for up to eight hours using an all-wheel drive or optional caterpillar tracks. Fiber optics carry data and video for one mile between the underground vehicle and an above-ground control station. The mobile robot is compact (28 inches by 40 inches by 58 inches), weighs 600 pounds, and is equipped with navigation and surveillance cameras, lighting and a manipulator arm. ANDROS uses these components to remove objects from its path, retrieve and carry objects, and perform many more tasks than could its human counterpart. The robot prototype was successfully tested at MSHA's experimental mine in Bruceton, Pa., and is being equipped to meet permissibility requirements for use in potentially explosive environments

Photo from: DOL/MSHA

REDUCE MINER OVER-EXPOSURE TO RESPIRABLE DUST

Reduce by 5% the percentage of coal dust and silica dust samples that are out of compliance for coal mines and metal and nonmetal high risk mining occupations,

respectively.

Results: This goal was achieved. Samples of coal dust and silica dust not in compliance with the respirable dust standards were reduced below their targeted levels.

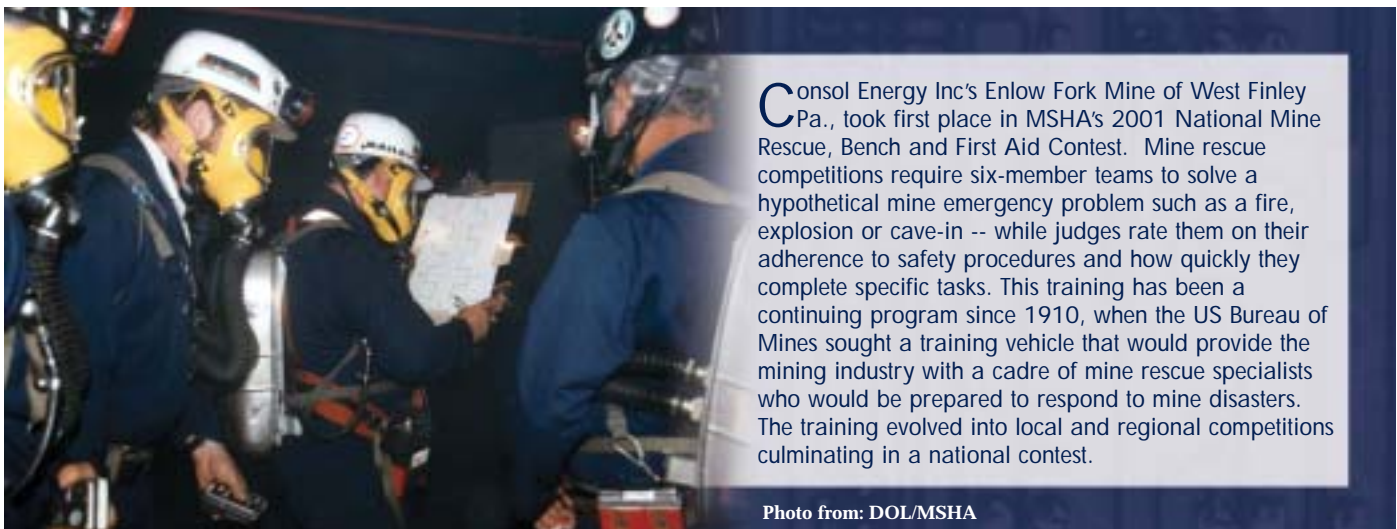
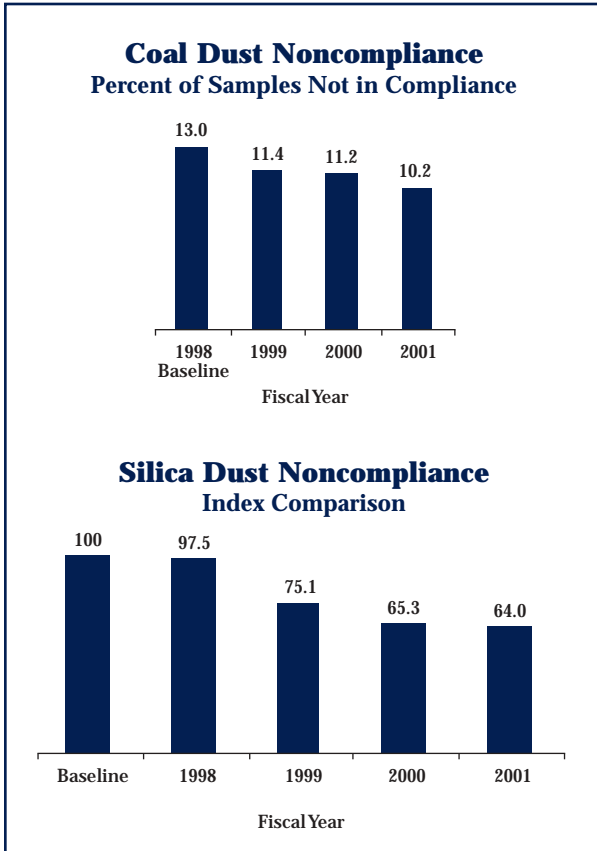
Program Description: The Department's Mine Safety and Health Administration (MSHA), through its safety and

health enforcement and compliance assistance efforts, and in partnership with the American mining community, works to minimize health hazards in accordance with the Federal Mine Safety and Health Act of 1977. Mine health resources and programs strive to ensure that the 360,000 men and women who work in over 14,000 American mines will not be at risk of illness while on the job.

Analysis of Results:

Coal Dust: In FY 2001, 539 out of 5,309 inspector samples, or 10.2 percent of samples taken, did not comply with the coal mine dust standard, representing a positive reduction below the target of 11.1 percent and below the FY 1998 baseline of 13 percent.

Silica Dust: DOL inspectors collected 1,406 silica dust samples during FY 2001 and found that 133 did not comply with the standard. The resulting index of 64 percent significantly exceeds the targeted dust reduction index of 80 percent for FY 2001. The silica dust sampling results are a weighted comparison between the current year samples and a comparable set of



Consol Energy Inc's Enlow Fork Mine of West Finley Pa., took first place in MSHA's 2001 National Mine Rescue, Bench and First Aid Contest. Mine rescue competitions require six-member teams to solve a hypothetical mine emergency problem such as a fire, explosion or cave-in -- while judges rate them on their adherence to safety procedures and how quickly they complete specific tasks. This training has been a continuing program since 1910, when the US Bureau of Mines sought a training vehicle that would provide the mining industry with a cadre of mine rescue specialists who would be prepared to respond to mine disasters. The training evolved into local and regional competitions culminating in a national contest.

Photo from: DOL/MSHA

samples from the 1997 – 1998 sample population. A result of 100 percent means that current year samples have the same compliance-noncompliance ratio as a comparable set of baseline samples.

MSHA inspectors conduct dust sampling following well-established procedures. A quality control process and edit checks provide assurance that the performance data are accurate and reliable.

Strategies:

Coal Dust: As part of its ongoing strategy, the Department continued bi-monthly sampling at underground coal mines, focusing special attention during FY 2001 on the operators' plans for controlling dust.

Silica Dust: Increased awareness and a stronger emphasis on health contributed to improvements in silica dust compliance. The Department directed informational outreach programs towards

occupations with a high incidence of exposures to airborne contaminants and physical agents, such as dust, and worked with operators with high exposure problems.

Goal Assessment and Future Plans:

In the past, the Department achieved great success in accomplishing the goals to improve health conditions for the Nation's miners. However, the Department recognizes a need to expand and further challenge itself to improve health conditions, and has revised this goal for FY 2002 and future years to: 1) reduce the percentage of respirable dust samples in coal mines exceeding applicable standards by 5 percent per year for designated occupations; 2) reduce the percentage of silica samples in metal and nonmetal mines exceeding the applicable standards by 5 percent per year for high-risk occupations; and, 3) reduce the percentage of noise exposures above the citation level in all mines by 5 percent. ■

(Goal 3.1B — FY 2001 Annual Performance Plan)



Randy operates a large coal hauler. When driving, blind spots in his rear and side vision were a continuing concern. Unsure of what is behind his vehicle, Randy frequently was forced to leave the cab and check behind the vehicle before backing up. Randy is much happier now that his problem has been remedied by installing a video camera on his vehicle and a monitor in the cab. He now operates his truck with the added assurance of complete visibility on all sides of the vehicle. Since 1987, there have been 58 fatalities in the mining industry involving haulage trucks where restricted visibility was a contributing factor. By recommending/requiring that coal companies outfit their trucks with video cameras, MSHA has brought a 21st Century technology-based solution to an age-old safety problem

Photo by: DOL/MSHA

REDUCE WORKPLACE INJURIES AND ILLNESSES

Reduce three of the most significant types of workplace injuries and causes of illnesses by 11 percent [from baseline].

Results: This goal was not met. The average exposure severity at workplaces with silica interventions in FY 2001 was 1.2, an 87 percent reduction from the baseline. The

average lead exposure severity was 5.8, which was a 21 percent increase from the baseline. In CY 1997-99 (the most current data available), the average amputation rate was 1.17 per 10,000 workers, which represents a 19 percent reduction from the baseline. If current trends continue, the Department expects to meet the target for reducing amputations.

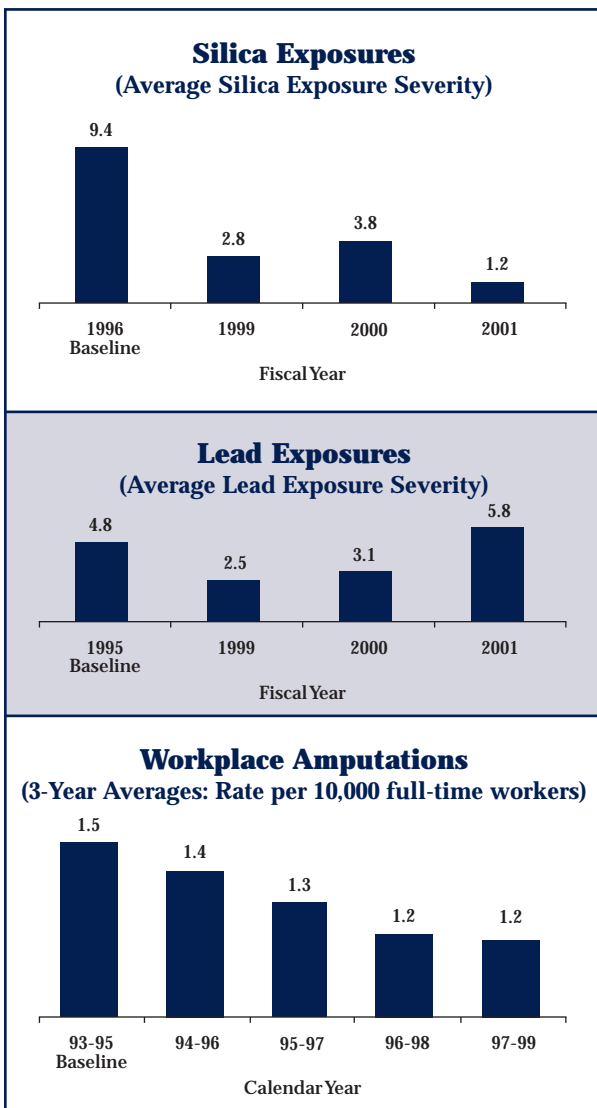
Program Description: The Department's Occupational Safety and

enforcement, compliance assistance, education, training, and voluntary programs and partnerships.

Silica, lead, and amputations were chosen for special emphasis because they are three significant and particularly prevalent, chronic, or crippling types of workplace injuries and causes of illnesses. Overexposure to silica causes disabling, permanent, and sometimes fatal lung disease; overexposure to lead adversely affects kidney function and the reproductive, blood forming, and neurological systems; and an amputation is a devastating injury for any worker.

Analysis of Results:

Silica and Lead Exposures: Silica exposures measured during inspections in the past few years show a marked decline in average exposure severity from the baseline, while the results for lead are more mixed. DOL's current methodology does not measure the average exposure severity for these substances in all workplaces; it measures the average exposure severity in workplaces that OSHA inspects, which have been specially targeted as potentially hazardous sites. As a result, a few workplaces with high exposure can have a disproportionate effect on the performance measure. For example, five high-severity inspections (3 percent of this year's lead inspections) skewed the average exposure severity for lead in FY 2001. OSHA conducted these five inspections during bridge repair operations — where lead-based paint was either being removed or applied and high exposure levels are often found. Although the high average severity at these five worksites suggests that DOL reaches hazardous sites, DOL recognizes that the current data and process do not satisfactorily measure progress on this goal.



Health Administration (OSHA) addresses the significant dangers of silica, lead, and amputation hazards through a program mix of

Amputations: If current trends continue, DOL expects to exceed its FY 2001 goal of reducing the amputation rate by 11 percent from the CY 1993-1995 average level. The overall trend of amputations has been steadily declining. DOL recognizes that current data do not measure progress on this goal in a timely manner and is exploring options for alternative methods of obtaining this data.

Strategies:

DOL's traditional emphasis on enforcement, particularly specially targeted compliance inspections, has remained fairly consistent over the past few years. In addition, the Department continues to use compliance assistance, education, and outreach efforts to reach a broader range of worksites with information about these three hazards. Specific strategies include:

Silica: To help reduce exposures, the Department created a nationwide special emphasis program in 1996 that focuses inspections where silica exposure is likely to be highest. In addition, DOL has been developing innovative ways to use the Internet to provide training and information that assist employers and workers in identifying potential silica hazards in their workplaces and selecting control options. The Department will update the program during FY 2002 to focus on industries where overexposures have been found and provide compliance assistance and outreach as well as enforcement.

Lead: In FY 2001, DOL expanded its national emphasis program that targets lead in the construction industry to also address other sectors. The Department will continue its emphasis programs on lead, especially targeting inspections

HAZARDS	BASELINE	FY99	FY00	FY01	% CHANGE
Silica Exposures*	9.4 average silica exposure severity FY 1996**	2.8	3.8	1.2	-87%
Lead Exposures*	4.8 average lead exposure severity FY 1995**	2.5	3.1	5.8	+21%
Amputations***	1.45 per 10,000 CY 93-95	1.17 per CY 97-99	***	***	-19%***

* Source: OSHA Integrated Management Information System.
 ** Average exposure severity calculated by averaging the exposure severities measured for each inspection, then taking the average for all inspections (a severity of 1 means the exposure is at the Permissible Exposure Limit).
 *** CY 2000 BLS *Annual Survey of Occupational Injury and Illness* characteristic data for amputations will be available in April 2002.
 CY 2001 BLS *Annual Survey of Occupational Injury and Illness* characteristic data for amputations will be available in April 2003.

towards those industries and operations where high lead exposures are likely to be found (e.g., repair operations where lead based paint is either being removed or applied).

Amputations: Safety inspections targeted employers operating machines that cause the greatest number of amputations: power presses, shears, slitters, slicers, and saws. Outreach efforts continue to address amputations, including posting an interactive program on the Internet and awarding training grants to help prevent amputations.

Goal Assessment and Future Plans: Recognizing the need for accurate and timely information with which to make program decisions, the Department is reanalyzing these goals, performance measures, and targets and will consider alternative ways to calculate the outcome measures, particularly for silica and lead exposures. ■

(Goal 3.1C — FY 2001 Annual Performance Plan)

REDUCE INJURIES AND ILLNESSES IN HIGH-HAZARD WORKPLACES

Reduce injuries and illnesses by 7% [from baseline] in five industries characterized by high-hazard workplaces.

Results: The Department fully achieved its targets in all five high-hazard industries. Based on CY 2000 data (the latest information available from the Bureau of Labor Statistics), the lost workday rate per 100 full-time workers declined (from the CY 1993-1995 baseline) by 26 percent in shipyards; 18 percent in general food processing; 9 percent in nursing homes; 36 percent in logging; and 23 percent in the construction industry.

Program Description: The Department's Occupational Safety and Health Administration (OSHA) addresses the significant workplace dangers found in high-hazard industries through a program mix of enforcement, compliance assistance, education, training, and voluntary programs and partnerships. One example of DOL's educational initiatives, the OSHA *e-Tools* web site,

<http://www.osha-slc.gov/dts/osta/oshasoft/osha-advisors.html>, provides software programs and compliance assistance tools that walk the user through challenging safety and health issues and common problems.

Analysis of Results:

Despite periodic fluctuations (this year, for instance, saw rate increases over last year in shipyards and nursing homes), the long-term trend is that the incidence rate of lost workday injuries and illnesses has been declining in all of the targeted industries. The greatest success has been realized in the logging industry, where the rate has declined by more than a third from the baseline. Achieving substantive results in nursing homes—where employees suffer roughly half of their injuries, and the majority of these being strains and sprains, when handling residents—remains a challenge.

In addition, although the food processing industry in general has shown significant improvement, injury and illness rates in the meat products sub-sector remain high even after this decline.

Strategies: These five industries were selected for particular focus based on their high incidence rates of injury and illness, their numbers of employees, and DOL's capability to make an impact. In addition to compliance assistance and other efforts aimed at these entire industries, OSHA targets the workplaces with the highest injury and illness rates for site-specific attention.

Shipyards: Last year, in addition to several local emphasis programs already in effect, DOL implemented a national emphasis program on

High Hazard Industry	Lost Workday Rate* per 100 full-time workers						
	CY 93-95 Baseline	CY 1996	CY 1997	CY 1998	CY 1999	CY 2000	Percent Change
Shipyards	13.4	11.6	9.7	10.2	9.1	9.9	-26%
Food Processing	8.9	8.0	8.0	7.5	7.3	7.3	-18%
Nursing Homes	8.7	8.3	8.8	8.1	7.6	7.9	-9%
Logging	7.2	4.6	5.5	5.5	5.0	4.6	-36%
Construction	5.2	4.4	4.4	4.0	4.1	4.0	-23%

* Source: BLS Annual Survey of Occupational Injuries and Illnesses and Census of Fatal Occupational Injuries (Logging). Lost workday rates are injury and illness combined for all industries except construction (injury only).
CY 2001 data will be available in December 2002.

shipbreaking operations, which calls for targeted comprehensive inspections of all known operations. DOL also released an array of new resources on ship repair and shipbreaking through the Internet.

Food Processing: DOL initiated local emphasis programs and partnerships for food processing around the nation covering diverse sectors, such as fisheries, meat and poultry products production, and meat packing. During FY 2001, the Department added new voluntary programs and made available on the DOL website a new *e-Tool* for poultry processing. (See the website above.) Given the trends in this industry, DOL is adjusting its efforts to focus on workplaces in the meat products industry.

Nursing Homes: Nursing homes account for nearly one-fourth of the establishments targeted for inspection during FY 2001. DOL is encouraging partnerships in the industry and increasing consultation, technical assistance, education, and outreach efforts aimed at safe patient handling practices. In addition, two *e-Tools* on the DOL website have been specifically designed for nursing homes. (See the website above.)

Logging: The Department continued a multi-pronged approach (training, partnership, compliance assistance, and enforcement) in this industry.

Construction: DOL continued to implement national partnerships with major construction contractors and added to its array of tools and resources available on the Internet. In addition to these efforts at the national level, during the past year all regional offices implemented local emphasis programs to target serious hazards in construction.

Goal Assessment and Future Plans: The Department's goal for FY 2002 will be to reduce injury and illness rates by 10 percent from CY 2001 rates in the targeted high-hazard industries (shipyards, meat products, nursing homes, and construction). In addition to heightened enforcement, an expansion of voluntary programs and partnerships, compliance assistance, education, and outreach efforts will be directed to these targeted industries.

Based on substantial reductions in injury and illness rates, DOL will not target the logging industry in FY 2002. In addition, the Department will be changing its emphasis on the general food processing industry to more narrowly focus on the most hazardous components of the food processing sector—the meat products industry. ■

(Goal 3.1D — FY 2000 Annual Performance Plan)

Following OSHA standards prevents tragedies every day. In Houston, on August 8, 2001, two window washers were suspended from the Baker Hughes building when their scaffold broke, leaving them dangling high above the ground. But they were hooked to the proper safety equipment and so they remained aloft until firefighters rescued them—a happy ending. Had they not followed OSHA's required safety procedures and tied off separately from the scaffold, they would likely have plunged to the earth with tragic results.

REDUCE INJURIES AND ILLNESSES IN WORKPLACES WHERE THE AGENCY INITIATES AN INTERVENTION

Reduce injuries and illnesses by 20% in at least 75,000 workplaces where an intervention is initiated.

Results: DOL fully achieved its goal. In the past 6 years, an estimated 88,850 workplaces have experienced at least a 20 percent reduction in injury and illness rates within 1 or 2 years following an intervention by the Department's Occupational Safety and Health Administration (OSHA).

Program Description: OSHA interventions include enforcement inspections, which occur after fatalities, serious injuries, and complaints or through systematic targeting of employers in high-hazard industries; high injury/illness notification letters, which put employers with the highest injury and illness rates on notice, encouraging them to take immediate action to improve workplace safety and health; and consultation visits, which are interventions requested by the employer from DOL-funded, State-run

Demolition requiring mechanical devices can be extremely dangerous to untrained workers. When equipment is used, workers are not permitted around clamming-type digging devices, demolition balls, areas where floors and walls might collapse, or where falling debris could cause injury.

consultation programs providing free and confidential assistance for improving occupational safety and health management systems.

Analysis of Results: An annual study commissioned by DOL examines injury and illness data for workplaces having received an intervention between FY 1995 and the end of FY 2001. This year, for the first time, the methodology was adapted to include construction industry workplaces that had inspections or consultation visits in FY 2001. Since performance data are not routinely collected by DOL following interventions, the study estimates the number of workplaces experiencing successful reductions in injury and illness rates based on a retrospective analysis of available data. Because the study design did not separate out the effects of different interventions, nor include a control group, it does not provide an indication of the relative effectiveness of intervention types.

Strategies: In addition to completing all inspections required by law, each year DOL implements a site-specific targeting plan that surveys employers in high-hazard industries and targets



Workers on a deteriorating floor at a building undergoing demolition in Chicago in July appreciated OSHA's intervention. The workers were standing on deteriorating flooring, joists and support beams while demolishing the second level of the building. After being told by an OSHA inspector about the dangerous situation, the workers' employer moved his crew to the first level in another section of the building. It was fortunate he did because the next day the building collapsed-right where the workers had been.

Photo by: DOL/OSHA

An employee working in an unshored, unsloped, unsafe trench by the side of the road near El Paso, Texas avoided a serious, perhaps life-threatening injury by heeding the instructions of an OSHA Inspector. Earlier that day, an OSHA area manager had spotted the unsafe situation and sent two inspectors to investigate. The worker was warned to get out of the trench immediately. About 30 seconds after he did, the wall near where he had been standing collapsed.

Photo by: Michael Carpenter



for inspection approximately 4,000 workplaces with injury and illness rates substantially above the national average.

Each year, DOL also identifies about 14,000 employers with high rates of injuries and illnesses and sends each a letter urging them to take voluntary action to eliminate the hazards causing their high rates. Each letter includes a copy of the employer's injury and illness data, information on the most common occupational safety and health hazards in the industry, and suggestions for additional resources.

The consultation program provides assistance to small employers in high-hazard industries by evaluating their safety and health management systems. Employers commit to implementing, or improving, their safety and health programs and correcting in a timely manner any serious hazards identified.

Goal Assessment and Future Plans: The Department's goal for FY 2002 is to reduce injuries and illnesses by 20 percent in at least 100,000 workplaces in Federal OSHA jurisdictions following an intervention. This figure will include the estimated

88,850 workplaces in Federal OSHA jurisdictions where post-intervention injury and illness rates declined by 20 percent for the period between FY 1995 and FY 2001. Realizing the need for more comprehensive performance information, DOL is exploring options for gathering and analyzing data as a more systematic and coordinated part of OSHA interventions.

Program Evaluation: As part of its FY 2001 quality control efforts, OSHA completed an audit of the validity and reliability of workplace injury and illness data: *OSHA Data Initiative Collection Quality Control: Analysis of Audits on 1999 Employer Injury and Illness Recordkeeping*. Most employers are required to record injuries and illnesses, and these records are collected for a variety of program uses. The audit found that employers' reports of injuries and illnesses provide reasonable and accurate data, concluded that OSHA can use the information to meet its program data needs, and included several recommendations for further developing the audit program. ■

(Goal 3.1E — FY 2001 Annual Performance Plan)

A shield system is the best method to protect employees installing concrete pipe with an excavation greater than 5 feet.

DECREASE FATALITIES IN THE CONSTRUCTION INDUSTRY

Decrease fatalities in the construction industry by 7%, [from baseline] by focusing on the four leading causes of fatalities (falls, struck-by, crushed-by, and electrocutions and electrical injuries).

Construction Fatality Rate	
Baseline: CY 93-95	14.5 /100,000
CY 98	14.5 /100,000
CY 99	14.0 /100,000
CY 00	12.9 /100,000
Percent Change	-11 %
<i>CY 2001 data available 8/2002</i>	

Results: This goal was achieved. The CY 2000 fatality rate (the latest data available) declined 11 percent from the baseline.

Program Description: Six years ago, the Department established a new division of the Occupational Safety and Health Administration (OSHA) to focus specifically on safety and health challenges in the construction industry, effectively creating a "one-stop shop" for the industry. DOL's program to reduce fatalities in this area relies on a variety of approaches, including: compliance inspections, the creation of voluntary partnerships, the development of industry-specific standards and guidelines, compliance assistance, education and training, and outreach. In all of these efforts, DOL targets the worksites in the construction industry sectors where fatalities are most likely to occur, including those engaged in heavy construction, roofing, steel erection, and electrical work.

Analysis of Results: Fatality rates in the construction sector have been largely flat for most of the past decade, but in CY 2000, the most current data available, the rate dropped to 12.9 per 100,000 workers, an 8 percent decline from the previous year and an 11 percent decline from the baseline. DOL continues to analyze the effectiveness of its various efforts in this arena, and it is too early to speculate whether this recent downturn represents the beginning of a sustained trend.

Another recent finding is that deaths among Hispanic workers in CY 2000 grew faster than their participation in the industry. Demographics in the construction workforce are shifting, and Hispanic workers are increasingly moving into the types of construction jobs with higher fatality rates. Laborers, for example, consistently experience fatality rates more than twice the national average for private industry. In the past 4 years, the proportion of Hispanics in laborer jobs has increased by 43 percent. Language barriers may be a contributing factor and more analysis is needed.

The Department recognizes the management challenges inherent in using out-of-date performance information and is exploring a variety of alternatives for improving its capacity for gathering and analyzing data. DOL is engaged in research projects to improve data quality and develop data initiatives that will better determine the risk factors associated with construction fatalities and improve the Department's ability to target enforcement efforts and increase the effectiveness of its program mix.

Strategies: As the construction industry suffers the most fatalities of any sector covered by the *Occupational Safety and Health Act*, the industry has traditionally been a focus of DOL's compliance inspections nationwide. For instance, during FY 2001 OSHA conducted about 56 percent of all its inspections in the construction industry. DOL continues to move towards focusing these inspections more directly on four leading causes of fatalities.

For the past few years, DOL has leveraged its safety and health presence in the construction industry through creating and building new voluntary partnerships. By identifying and encouraging employers with outstanding safety and health records, DOL spurs innovation in the industry and highlights best practices. In addition, these programs enlist participating employers in efforts to disperse their safety and health practices through their working relationships with other employers.

Several of these cooperative programs, including national agreements that serve as templates for local partnerships as well as programs driven at the local level, were strengthened this year. For example, DOL's training partnership with the United Brotherhood of Carpenters had trained 41,700 employees through FY 2001 to address fall hazards associated with scaffolding. These types of programs recognize excellence in safety and health; raise workplace safety awareness among subcontractors; and help reduce injuries, illnesses, and fatalities.

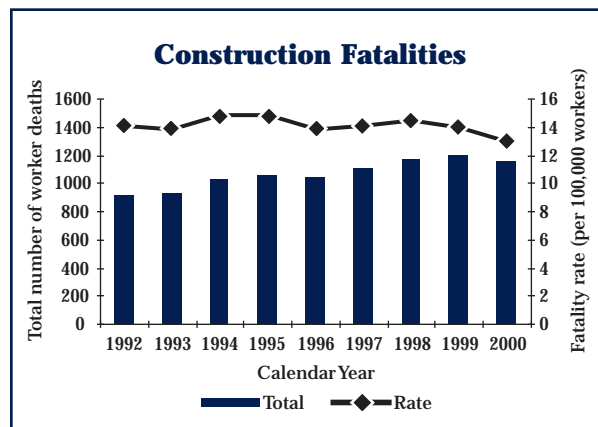
In addition, DOL pursues training and outreach strategies designed to

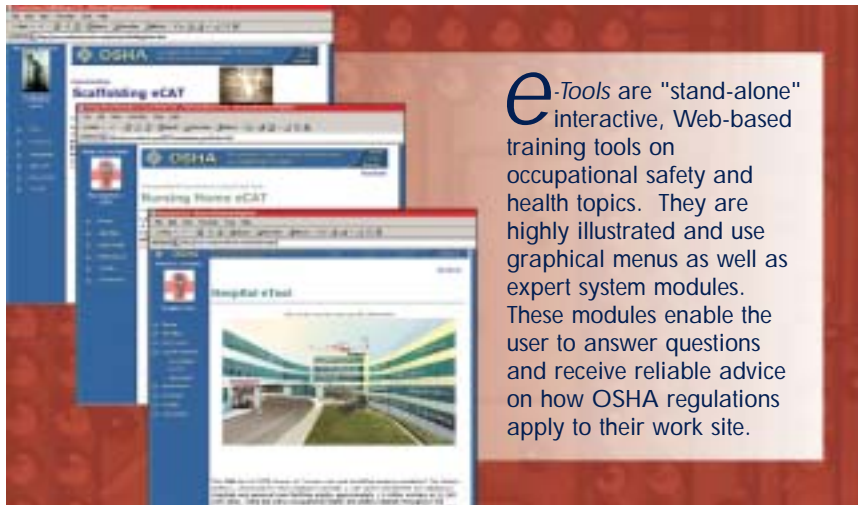
magnify our reach. The Department awards grants to organizations to develop and conduct safety and health training programs, including targeting safety and health hazards in construction. Additional grants assist nonprofit organizations in developing or expanding their safety and health capacity, with preference given to organizations that serve vulnerable workers, as well as traditionally underserved customers like small business employers and employees. The Department's outreach activities focus on trade associations for the specific segments of the construction industry with the highest fatality rates, such as roofing, electrical work, steel erection, and highway construction.

In FY 2002, DOL will increase the number of partnerships with employers and continue to work to make construction safety and health training more accessible.

The Department is developing new initiatives that focus on employers with the worst safety and health records—those who need the most assistance. DOL will also increase efforts to reduce construction fatalities among Hispanic workers by offering construction safety courses in Spanish and translating many OSHA documents.

Finally, DOL continues to develop several safety and health regulations related to facets of the construction industry, including confined spaces, fall protection, scaffolds, uniform traffic control devices, and silica.





Recognizing that steel erection is one of the most hazardous sectors of the construction industry in terms of fatality rates, DOL issued a revised regulation for the steel erection industry, effective in January 2002, that is expected to help prevent 30 deaths per year.

Goal Assessment and Future Plans: For FY 2001 and FY 2002, DOL has set targets of 11 percent and 15 percent reductions, respectively, from the current baseline. Many of the program initiatives in the construction industry began only recently, and their impact has not been fully determined. ■

(Goal 3.1F — FY 2000 Annual Performance Plan)