

Outcome Goal 3.1 – Reduce Workplace Injuries, Illnesses, and Fatalities

The Department's two occupational safety and health agencies – the Occupational Safety and Health Administration (OSHA) and the Mine Safety and Health Administration (MSHA) – are doing more than ever to create opportunities for employers to work with them in partnerships and other cooperative relationships. In these innovative relationships, the Department is helping more workplaces become safer and more productive.

For example, OSHA's Strategic Partnership Program, OSHA and its partners agree to work cooperatively to address critical safety and health issues. This innovative approach is proving to be an effective tool for reducing fatalities, injuries, and illnesses in the workplace. Working together, OSHA, employers, and employees identify the most crucial safety and health problems to address and craft a Partnership agreement that may be national, regional or local in scope. Partners agree upon individual responsibilities, identify strategies, and establish goals and performance measures to verify results. Other interested parties, including unions, trade associations, local/state governments, OSHA's free on-site consultation projects, and insurance companies, are often brought into a Partnership to contribute expertise and resources. The Partnership program, like all of OSHA's cooperative programs, makes efficient use of taxpayer dollars by leveraging non-OSHA resources to accomplish tasks such as training employees, mentoring, creating compliance materials and developing site-appropriate safety and health management systems.

MSHA also has achieved success through developing strategic partnerships with unions, associations, and State governments. These partnerships foster the sharing of expertise and best practices between MSHA, States, safety professionals, and mine operators. In addition MSHA works cooperatively with the mining industry, labor, and the States to *encourage innovation*. For example, MSHA is working to prevent hearing loss by working collaboratively with the National Institute for Occupational Safety and Health and the Coal Noise Partnership. Together, they are developing noise control solutions for the coal mining industry's most pervasive noise problems and promoting the identification and investigation of promising noise control technologies. MSHA is also developing mechanisms and opportunities to promote innovations in noise control engineering and distributing outreach materials to transfer knowledge to mine operations experiencing noise compliance challenges.

The performance goals related to this outcome goal directly measure reductions in workplace injuries, illnesses and fatalities, across general industries and specifically within mining.

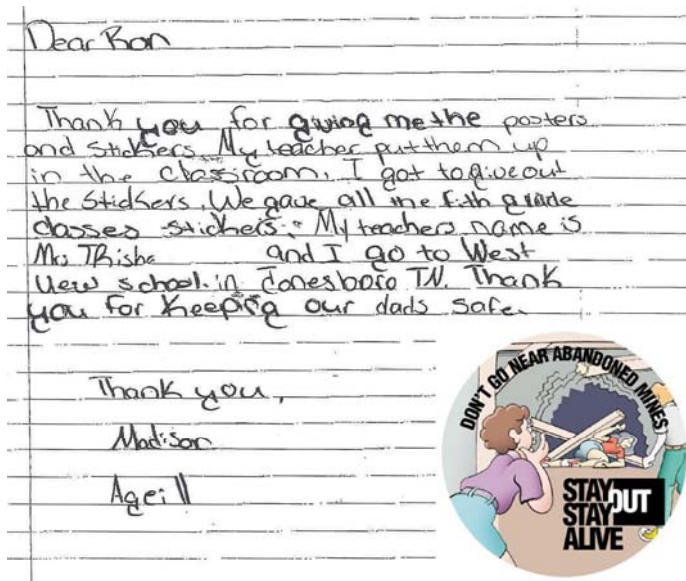
Goal (Agency) and Statement	Performance Summary	FY 2005 Costs (millions)
05-3.1A (OSHA/MSHA) Reduce work-related fatalities.	Goal not achieved. MSHA target reached and OSHA target not reached.	\$823 ²⁴
05-3.1B (OSHA/MSHA) Reduce work-related injuries and illnesses.	Goal not achieved. OSHA target reached and five MSHA targets not reached.	

Results Summary

In FY 2005, for industry sectors covered by the Occupational Safety and Health Act, the three-year workplace fatality average rate rose slightly to 1.71 per 100,000 employees, missing the target rate of 1.52. Preliminary third quarter FY 2005 data indicate that the mine industry fatality incidence rate injuries also rose slightly – to .018 incidents per 200,000 work hours. This rate was lower, however, than the target of .0215. Occupational injury and illness rates fell again this year, to an estimated 1.5 days away from work per 100 workers against a target of 1.7. The preliminary FY 2005 data for the mining industry all-injury rate of 3.82 per 200,000, though a record and lower than in FY 2004, did not reach the FY 2005 target of 3.48. Coal mine health as measured by exposure of miners to coal dust reversed a positive three-year trend with a slight increase in non-compliant samples, missing the targeted reduction by 10.1 percent. MSHA did not meet its target to establish three additional mining safety and health indicators, which measure exposure to silica dust and noise. These baselines will be established using FY 2005 data and will be incorporated into the President's FY 2007 budget.

²⁴ As the same activities contribute to reductions in both injuries and fatalities, costs are not separable between the fatality reduction performance goal (3.1A) and the injury/illness reduction performance goal (3.1B).

Both agencies employ strategies that aim to reduce all injuries and illnesses, especially those that are life-threatening, and focus compliance assistance and enforcement efforts on the most hazardous industries and practices. OSHA credits its success in reducing injury and illness rates in part to its Voluntary Protection Programs – joint efforts of OSHA, employers and employees – and to Site-Specific Targeting, a key enforcement strategy that identifies individual employers with the highest injury and illness rates. MSHA has made significant contributions toward continued reduction of mine industry injuries and fatalities by implementing strategies that alter employer and worker behaviors to create safer, healthier work conditions.

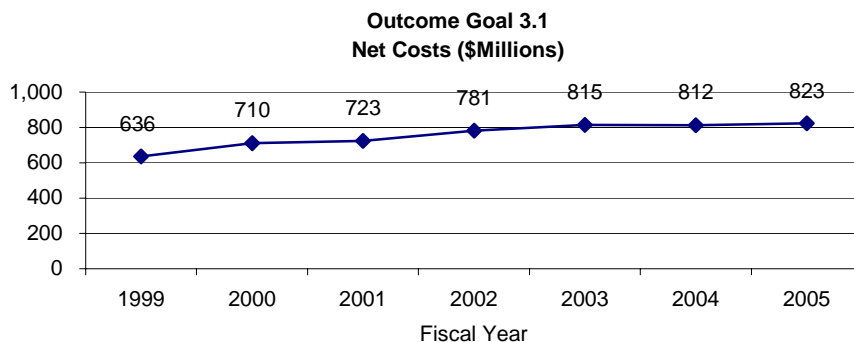


"Stay Out-Stay Alive" (SOSA) is a national public awareness campaign aimed at warning children and adults about the dangers of exploring and playing on active and abandoned mine sites. Every year, dozens of people are injured or killed in recreational accidents on mine property. MSHA launched SOSA in 1999 to educate the public about the existing hazards. MSHA's Mine Safety & Health Inspector, from Metal and Nonmetal's Southeastern District conducted a SOSA meeting at a Jonesboro, Tennessee elementary school in April 2005. The elementary school is located approximately eight miles from mining operations. MSHA handouts such as stickers, posters and other reading material were distributed to the approximately 150 students. Students were instructed not to play, swim, or ride four-wheelers on abandoned or active mine sites. Madison, an eleven-year-old fifth grade student sent a letter to the MSHA inspector, thanking him for keeping dads safe. Madison's father and grandfather are superintendents at two of the mines in Tennessee.

Photo credit: Donald Starr

Net Cost of Programs

FY 2005 program costs of \$823 million, which supported OSHA and MSHA programs to reduce worker fatalities, injuries, and illnesses, is 1.4 percent higher than FY 2004 costs of \$812 million. Cost containment efforts, including operating and administrative efficiencies, have kept safety and health compliance assistance and enforcement costs relatively flat for the last couple of years.



Future Challenges

OSHA and MSHA continue to face challenges in establishing performance measurement systems. This major management challenge is covered in the management discussion and analysis section of this report.

OSHA, in response to the Program Assessment Rating Tool review in FY 2002, continues to review its regulatory process in an attempt to make it as efficient as possible. Also, OSHA is exploring tools that will enable rapid response and more accurate targeting of investigation and enforcement activities.

For FY 2006, MSHA's initiatives, programs and strategies will continue to focus on prevention. The general challenge for mine safety is that coal production and perhaps mining of aggregates will continue to grow and lead to an increased number of inexperienced operators and miners who will need assistance understanding and learning how to mitigate safety and health risks.

Reduce Occupational Fatalities

Performance Goal 05-3.1A (OSHA/MSHA) – FY 2005

Reduce work-related fatalities

Indicators, Targets and Results	FY 2004 Result	FY 2005 Target	FY 2005 Result	Target Reached*
Rate of workplace fatalities (for sectors covered by the Occupational Safety and Health Act) ¹ (OSHA)	1.67	1.52	1.71**	N
Mine industry fatal injury incidence rate (MSHA)	.017	.0215	.018**	Y
FY 2005 Costs ²				\$823 Million

*Indicator target reached (Y), substantially reached (S) or not reached (N)

**Estimated

Goal Not Achieved

Program Perspective

The Department's mission to assure the safety and health of the Nation's workers and miners is carried out by OSHA and MSHA. OSHA and MSHA track fatality rates because the incidence of fatalities relative to the number of workers exposed is more meaningful than the numbers of fatalities alone. OSHA tracks the rate of fatalities per 100,000 workers. MSHA uses the fatal incidence rate (number of mining fatalities per 200,000 hours worked) to measure its impact on mine fatalities.

The nature of the work environment is continually changing as our nation's thriving economy creates demand for workers in new sectors of the economy. A booming construction sector and expanding use of cell phones and High Definition Television (HDTV) and wireless communications are trends that influence the potential for fatal workplace falls. With increased demand for coal and aggregates, new mines are being opened and existing ones expanded. Mines continue to be inherently hazardous workplaces. Unseen geologic instabilities, constantly changing terrain, and the prevalence of large and complex haulage and mining equipment are only a few of the factors that make maintaining mine safety challenging.

The oil and gas industry employs hundreds of thousands of people in the U.S. and is a vital component of the national and global economy. However, there were sixty nine fatalities and hundreds of injuries in the industry in 2004. Recognizing the potential for catastrophic accidents, OSHA has designated oil and gas field services as a target area of emphasis in its Strategic Plan. The Agency is working to provide employers and oil and gas workers with information and assistance in complying with OSHA and industry standards while staying as safe as possible. An OSHA eTool identifies common hazards and possible solutions in oil and gas field services, enabling employers and employees to reduce incidents that could lead to fatalities. Regions have initiated local emphasis programs for the industry, a two-pronged approach consisting of outreach and inspection. OSHA also has united in an Alliance with the American Petroleum Institute and the National Fire Protection Association to provide workers in the industry with training, knowledge and guidance.

OSHA's and MSHA's resource outlays correlate with their missions and they adjust strategies and emphases as the circumstances change. OSHA contributes to reducing on-the-job deaths by intervening at workplaces where it has evidence that fatalities are most likely to occur and by responding to reports of potentially life-threatening workplace hazards. MSHA's enabling legislation requires that the agency inspect underground mines four times per year and surface mines two times a year. Both OSHA and MSHA



¹ For this goal the baseline is the average fatality rate for July 1999 – June 2002 (July 1999-June 2000, July 2000-June 2001, and July 2001-June 2002, respectively) and the result is the average fatality rate for 2003-2005 (July 2002-June 2003, July 2003-June 2004, July 2004-June 2005, respectively).

² As the same activities contribute to reductions in both injuries and fatalities, costs are not separable between the fatality reduction performance goal (3.1A) and the injury/illness reduction performance goal (3.1B).

analyze fatalities to identify emerging fatality patterns and to determine where best to conduct interventions. Even though fatality rates have been declining over the long term, we must drive them even lower. OSHA's and MSHA's aggressive long-term targeted fatality rate reductions reflect their commitment to send workers and miners home healthy and safe every day.

Analysis and Future Plans

DOL did not meet its combined OSHA and MSHA fatality reduction goal, as the reduction in workplace fatalities rate target was not reached. While MSHA significantly exceeded its performance target, OSHA did not achieve its targeted rate of workplace fatality reduction. DOL uniformly maintains that even one workplace fatality is one too many. Even though fatal injury rates remain historically low, DOL is concerned that 2004 data show a small increase in workplace fatality rates. OSHA will continue to take every step necessary to ensure the safety of workers.

Refinements to fatality data collection methods are ongoing. DOL conducts quarterly reviews of performance against its strategic goals and remains committed to reducing fatalities through strong and fair enforcement, the provision of outreach, education and compliance assistance, and the promotion of cooperative programs.

The table below shows annual deaths, employment, and fatality rates for the construction industry and for all private industry covered by OSHA, and illustrate use of a three-year moving average of fatality rates to smooth year-to-year fluctuations.

Estimating Year (July-June)	Construction Fatalities	Construction Employment (thousands)	Construction Fatality Rates	Total Fatalities	Total Employment (thousands)	Total Fatality Rates
2000	736	6704	10.98	1729	109,989	1.57
2001	749	6823	10.98	1846	111,368	1.66
2002	744	6774	10.98	1773	109,524	1.62
2003	741	6692	11.07	1827	108,519	1.68
2004	784	6809	11.51	1849	108,786	1.70
2005	808	7100	11.38	1940	110,874	1.75
2000-2002 BASELINE	743	6767	10.98	1783	110,294	1.62
2002-2004 AVERAGE	756	6758	11.19	1816	108,943	1.67
2003-2005 AVERAGE	778	6867	11.32	1872	109,393	1.71

Data sources are the OSHA Integrated Management Information System (IMIS) for the number of fatalities and Bureau of Labor Statistics (BLS) Current Employment Statistics (CES) for the employment data.

DOL's efforts to reduce fatalities often directly correlate to its injury and illness reduction objectives. Decreasing exposures to occupational hazards through direct intervention, promoting a safety and health culture, and maximizing effectiveness and efficiency are all goals that guide OSHA's tactical plan. OSHA analyzes trend data to identify and target new areas of emphasis which increases the impact of its direct intervention activities. This approach led OSHA to target its resources strategically on five national emphasis programs and over 140 local emphasis programs that address the safety and health issues that present the greatest current threats to safety. Based on extensive analysis, OSHA has also selected seven priority industries for special focus, both in terms of enforcement and compliance assistance.

The U.S. workforce includes 19.9 million Hispanics and that number is growing. Workplace fatalities among Hispanics increased every year from 1995 to 2001. To address this trend, OSHA initiated its Hispanic Outreach effort in 2001. The initiative provides training and local outreach, disseminates Spanish-language publications and

electronic tools, and works through its cooperative programs to significantly expand outreach to Hispanic workers and businesses. Fatalities dropped each of the first three years of OSHA's Hispanic Outreach undertaking, but increased again in 2004. OSHA continues to pursue its outreach efforts and will identify new approaches for reducing deaths and injuries among Hispanic workers.

Preliminary data for the third quarter of FY 2005 indicates that MSHA exceeded its target for reducing the fatality injury incidence rate among miners. Accidents in the Nation's mines claimed the lives of 40 workers – 16 coal miners and 24 metal/nonmetal miners. For the fourth straight year, the United States mining industry set its best safety records for both fatal and non-fatal injury incidence since statistics were first compiled in 1910. This tremendous progress is a direct result of the diligence and commitment of miners, mine operators, and the employees of the Mine Safety and Health Administration, who together ensure that mines are increasingly safe places to work. While we are proud of the progress the industry has made, MSHA is constantly examining its strategies and looking at outcomes to determine how we can help the mining industry drive fatality, injury and illness rates down to zero.

For FY 2006, MSHA will continue to gear its initiatives, programs and strategies aimed specifically at fostering a culture of prevention, instilling safety as a core value, and making safety part of every task in the mining workplace. This includes strategies targeted at changing the behaviors and working conditions which contribute to injuries and fatalities. MSHA's highly effective blend of enforcement, compliance assistance, technical support, education and training constitute a balanced approach to mine safety and health.

MSHA's collaborative approach of building strategic alliances with trade associations, labor unions, professional societies and other like-minded organizations leverages the advantages of working together, rather than separately, to reach our common health and safety goals for the mining industry. These stakeholder groups have joined with MSHA in the agency's Strategic Alliance program to combine resources and experiences to achieve a safer and healthier mining industry. The National Stone, Sand and Gravel Association (NSSGA); the Industrial Minerals Association—North America (IMA-NA); the National Safety Council (NSC); the International Union of Operating Engineers (IUOE); the International Association of Bridge, Structural, Ornamental and Reinforcing Ironworkers (Ironworkers); the Bituminous Coal Operators Association (BCOA) and the National Mining Association (NMA) have all demonstrated their commitment to fostering worker health and safety in the mining industry by signing alliance agreements. MSHA will continue to work with State governments in partnerships such as the Substance Abuse Summit, in which the States of Kentucky, Virginia, and West Virginia held a free one-day substance abuse summit for individuals involved with coal mining operations and activities in the Southern Appalachian region. This kick-off meeting brought together a coalition of government, mining industry, labor, miners, and public health experts to share information, expertise and experiences in dealing with substance abuse in mines and the community.

One of the ways that MSHA works to prevent mining accidents is by providing information on "best practices" for mine safety. For example, pushing coal on a surge pile can be a dangerous job because of the potential for hidden voids to develop as coal is withdrawn from underneath the pile. Nineteen miners lost their lives in surge pile accidents between 1980 and 1999. Following a fatal accident in 1999, MSHA worked with the mining industry to develop a set of "best practices" to prevent this type of accident. Information packets were distributed to the industry with preventative engineering measures and training materials. Since this initiative, no fatal surge-pile accidents have occurred due to hidden voids and at least four miners have been rescued unharmed from potentially dangerous situations.

Photo credit: Pittsburgh Technical Support, MSHA



Management Issues

MSHA evaluated its efforts to deliver services and support to miners working for independent contractors. This evaluation was driven by MSHA's desire to improve the health and safety of independent contract mine workers who

represent an increasingly greater proportion of mining fatalities. This evaluation provided information regarding the feasibility, utility, and benefits of collecting more detailed information about independent contractors working on mine property.

OSHA has begun peer reviews for technical and scientific data used to support new significant regulatory development in response to the agency's FY 2002 review under the Program Assessment Rating Tool. OSHA, pursuant to Section 610 of the Regulatory Flexibility Act and Section 5 of Executive Order 12866, must conduct lookback studies on OSHA standards, taking into consideration public comments about rules, the continued need for them, their impacts, complexity, and whether there are redundant or conflicting regulations.

In FY 2005, a lookback review of the Ethylene Oxide standard was completed, with a determination that it should remain in effect with new guidance materials created (see Study 27 in Appendix 2). Another study completed in FY 2005, *Evaluation of OSHA's Voluntary Protection Programs* (Study 28 in Appendix 2), concluded that VPP sites may have a leveraging effect in their dissemination of safety and health information to other establishments in like industries both within their own corporations and outside.

Two evaluations, GAO's *Safety in the Meat and Poultry Industry, While Improving, Could Be Further Strengthened* (Study 25 in Appendix 2) and DOL OIG's *OSHA Correctly Denied ED&D's Incomplete NRTL Application* (Study 26 in Appendix 2) were completed in FY 2005. As a result of these studies, OSHA is examining expansion of criteria for site-specific targeting and improving its oversight and evaluation procedures for national testing laboratories.

The FY 2005 *Evaluation of the Mine Safety and Health Administration's Efforts to Deliver Services and Support to Miners Working for Independent Contractors* (Study 29 in Appendix 2) concluded that mine operator use of contractors to lower their costs and liability is increasing and that data on the contractor accidents and hours worked are under-reported.

OSHA estimates progress towards its fatality-reduction goal using Integrated Management Information System (IMIS) data from July of the previous fiscal year through June of the current fiscal year. The Agency relies on IMIS fatality data rather than Bureau of Labor Statistics (BLS) data because of a one-year lag in BLS Census of Fatal Occupational Injuries data availability and because IMIS data provide a better measure of workplace deaths under OSHA jurisdiction. OSHA continues to evaluate its programs and measurements in furtherance of meeting the fatality reduction goal and to pursue methods of collecting data more quickly.

Reduce Workplace Injuries and Illnesses

Performance Goal 05-3.1B (OSHA/MSHA) – FY 2005

Reduce work-related injuries and illnesses

Indicators, Targets and Results	FY 2004 Result	FY 2005 Target	FY 2005 Result	Target Reached*
Rate of workplace injuries and illness (OSHA)	1.6**	1.7	1.5**	Y
Mine industry all-injury incidence rate (MSHA)	4.07	3.48	3.82**	N
Percent of respirable coal mine dust samples exceeding the applicable standards for designated occupations (MSHA)	10.2	10.1	10.7	N
Percent of silica dust samples with a C/E ratio ¹ of at least 0.5 (MSHA)	N/A	Establish baseline	To be established	N
Percent of noise samples in metal and non-metal mines with a C/E ratio of at least 0.5 (MSHA)	N/A	Establish baseline	To be established	N
Percent of noise samples above the citation level in coal mines (MSHA)	N/A	Establish baseline	To be established	N
FY 2005 Costs ²				\$823 Million

*Indicator target reached (Y), substantially reached (S) or not reached (N)

**Estimated

Goal Not Achieved

Program Perspective

The Department's occupational safety and health agencies, OSHA and MSHA, are committed to working with employers to reduce injuries and illnesses. OSHA's strategies for reducing injuries and illnesses include the use of strong, fair and effective enforcement, outreach, education, compliance assistance, free and confidential consultation services, partnerships and cooperative programs. MSHA, through safety and health enforcement and compliance assistance, and in partnership with the mining community, works to reduce occupational injuries and illnesses and health hazards among our Nation's miners. MSHA's primary indicator for this goal is an all-injury incidence rate, which is a calculation of all mining injuries and fatalities, per 200,000 mining hours worked.

Both OSHA and MSHA are committed to expanding outreach, education and compliance assistance. OSHA uses its Web site for compliance assistance, and continually strives to make it more accessible – such as a recently added Spanish Compliance Assistance page. DOL estimates that 60 million web visitors used MSHA's Web site in FY 2005, representing a 10 percent increase over last year. OSHA also uses electronic resources for outreach and compliance assistance. There are now more than 57,000 subscribers to OSHA's bi-weekly electronic newsletter *QuickTakes*, and the agency projects that more than 335,000 will receive training in 2005 through OSHA-sponsored programs, including the Outreach Training Program, the OSHA Training Institute, the Education Centers and the training grants program.

Small mines have historically had acute safety challenges. To assist small mines in their safety efforts, MSHA created a Small Mines Office. The Small Mines Office helps smaller operations that might not otherwise have the resources to have a full-fledged safety program. Since its inception, the Small Mines Office has helped over 3800 mine operators develop written safety and health plans that are tailored to fit their mining operations. As a result, the small mine operators assisted by the Small Mines office have fatality rates of four times less than those not assisted by the program. MSHA, in cooperation with the National Mining Association, recognizes companies with outstanding safety performance every year with the Sentinels of Safety award program that is designed to help

¹ C=concentration result; E=enforceable level

² As the same activities contribute to reductions in both injuries and fatalities, costs are not separable between the fatality reduction performance goal (3.1A) and the injury/illness reduction performance goal (3.1B).

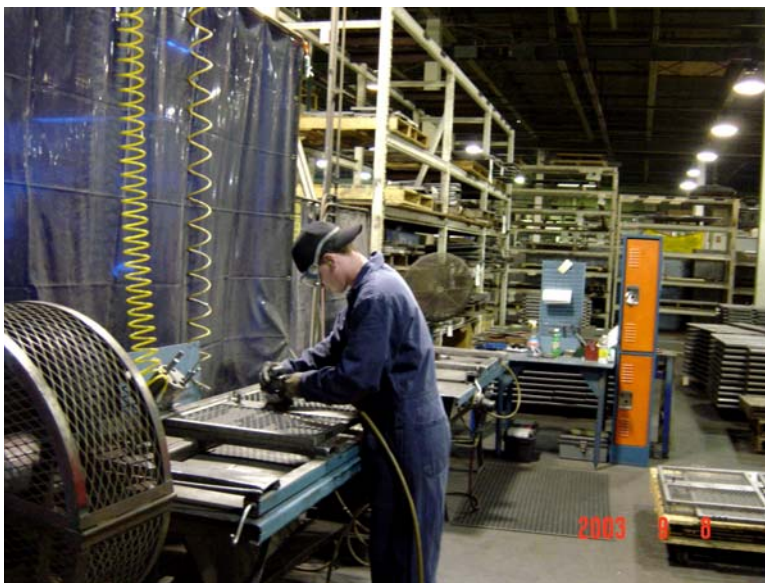
MSHA and the mine operators reach a shared vision of no lives lost and no injuries sustained. MSHA showcases Stakeholder Best Practices on its Web site. These best practices were assembled by teams of industry representatives who won a Sentinels of Safety award or were runners-up in their categories.

MSHA is also tracking a goal to reduce the percent of respirable coal dust samples exceeding the applicable standards for designated occupations. This goal addresses reducing the incidence of black lung disease. See Management Issues for a discussion of the goals for which baselines were established in FY 2005.

Analysis and Future Plans

OSHA reached its injury and illness reduction target. OSHA continues its Site-Specific Targeting, a key enforcement strategy that identifies individual employers with the highest injury and illness rates. Targeted employers receive letters from OSHA informing them of their high rates. The letters are accompanied by suggested methods for reducing injuries and illnesses and an offer of free safety consultation services. Some sites receive inspections in conjunction with the letters. An evaluation of the Site-Specific Targeting initiative found that companies receiving only the letter, with no inspection, reduced injuries and illnesses by approximately 5 percent over the three years following receipt of the letter. Sites that were actually inspected in addition to the letter had injury and illness declines ranging from 12 to 13.8 percent over the three years following the inspection.

OSHA also continues to expand its cooperative programs. In the last two years, participation in the Voluntary Protection Programs (VPP) has increased by over 34 percent. To facilitate further growth in the program, OSHA launched OSHA Challenge and VPP Corporate in 2004 and plans to introduce VPP for Construction in 2006. The results VPP sites achieve are consistently impressive, including avoidance of over 8500 Total Recordable Cases in 2004. For example, Dow Company's VPP sites have a 33-percent lower injury and illness rate than their non-VPP sites and the United State Postal Service's VPP sites have a 21-percent lower rate than their non-VPP sites. The growth in all of OSHA's cooperative programs means more employers and employees are being reached. OSHA partnerships, joint efforts of OSHA, employers and employees, now cover over 4800 employers with over 566,000 employees and OSHA also has 69 national and 367 local Alliances.



OSHA's Consultation Program, celebrating 30 years of service in 2005, delivers free and confidential occupational safety and health analysis to small businesses that request their services. Consultants help employers identify and correct hazards and assist companies in developing and maintaining effective safety and health management systems. They also offer on-site and off-site training. More than 28,000 Consultation visits will be performed in 2005. Companies that participate in the Consultation Program and achieve a high degree of safety and health performance are eligible for SHARP, Consultation's Safety and Health Achievement Recognition Program. De Bourgh Manufacturing Company of La Junta, Colorado, a custom athletic, corridor, and industrial wardrobe locker manufacturer employing 110 workers, had been targeted for OSHA compliance inspections due to their high injury rates. De Bourgh had upwards of 30 recordable incidents in 1997. They began

participating in OSHA's Consultation Program in Colorado in 1999. The company first achieved SHARP in 2000 and has been re-certified each year since. To date, the company boasts a Total Recordable Case (TRC) Rate of less than 1.0 and a Days Away, Restricted, and/or Transfer (DART) Rate of 0.0. Also newsworthy, De Bourgh's insurance costs have dropped significantly and their already low Experience Modifier Rate (<1.00) is expected to drop even lower this year.

Photo credit: OSHA

DOL's all-injury incidence rate for the mining industry was reduced by 6 percent from the FY 2004 rate, according to preliminary FY 2005 third quarter data, although the target of 3.48 was not met. Through the third quarter of FY 2005, there were 3552 injuries in coal mines as compared to 3723 injuries through the third quarter of FY 2004. Injuries in metal/nonmetal mines were 4954 compared to 5000 in FY 2004.

MSHA's indicators for reducing respirable coal dust, silica dust, and noise exposures greatly exceeded MSHA's targets over the last two years for coal and silica dust, and over the last three years for noise. Subsequently, for FY 2005, MSHA established a more aggressive target for coal dust, and also established new baselines for silica dust and noise. The target was not reached for respirable coal mine dust exposures. Factors which most likely influenced this performance include competitive pressures to increase production while containing costs. This competitive dynamic leads to increased use of technically complex mining equipment; expanded mining operations leading many miners to work longer shifts and experience greater fatigue. Additionally, the high costs and limited supplies of oil and natural gas make coal mining more profitable. In turn, higher coal prices and increased profit margins push operators to open new mines, expand existing mines or resume mining operations at previously closed sites. Baselines for the three additional health indicators, which measure exposures to silica dust and noise in both metal and non-metal mines and coal mines, were not established in time for this report. They will be incorporated into the President's FY 2007 budget.

Efforts to improve safety and health for the nation's miners include not only mine inspections, but a variety of MSHA initiatives and programs. For example, during mine rescue or recovery operations, mine rescue teams are presented with many challenges that affect their ability to respond effectively without unnecessarily jeopardizing their own safety and health. Explosions, fires, flooding, and accumulations of methane and other toxic gas all present significant risk when exploring a mine. The lack of knowledge regarding the geological integrity and environmental conditions of the mine also hinder rescue and recovery efforts. The MSHA robot has already proved to be a valuable resource to aid rescue teams in search and rescue activities. It was deployed to Arlington, VA with the MSHA rescue teams following the terrorist strikes on 9-11. It was also used in the exploration of a gold mine, where hazardous conditions caused the death of two miners. The robot now has been equipped with gas measuring instrumentation for use in potentially explosive environments. The new version was used to explore a mine fire in which the mine was sealed for several weeks. The MSHA robot explored the mine slope entry and in the fire area providing valuable video information and gas readings before mine rescue teams were sent in to recover the mine; thus improving the overall safety of the recovery operation.



Management Issues

OSHA uses BLS data to estimate the results for this goal. BLS data used are the latest available, but nonetheless, are from 2003. In FY 2005 OSHA began a contracted project aimed at developing a framework for a predictive model to enhance its data capabilities. The predictive model would collect and use a variety of data sources to forecast illness and injury rates by industry sector so that OSHA can apply its resources in a timely manner to reduce illness and injury incidence. The anticipated outcome of this project is a management tool providing guidance to strategic planners for maximizing the results of Agency programs given varying levels of resources. OSHA plans to begin developing the model on a limited basis in FY 2006 and then to further expand its capabilities and scope in the out years. OSHA's intent is to enhance the effectiveness of its use of available data, with improved targeting serving as the most reasonable, cost-effective means of reducing injuries and illnesses.

To achieve the ambitious goal of reducing the days away from work case rate by 20 percent, OSHA targets resources toward areas where these injuries and illnesses are occurring at a high number and rate. The OSHA Data Initiative gathers and compiles occupational injury and illness information from establishments in high-hazard industries, providing OSHA the ability to identify workplaces with elevated rates. OSHA then uses this information to direct both outreach and enforcement resources to places where intervention activities can have the greatest impact on reducing injury and illness rates.

MSHA's revision of its silica dust measure for metal and non-metal mines in FY 2006 will be based on a newly established baseline in FY 2005. The new indicator will measure MSHA's progress in identifying and controlling excessive silica exposures that adversely affect miner health. As with MSHA's new silica performance measure, the new noise indicator will measure MSHA's effectiveness in identifying and controlling miners' overexposure to noise in coal and metal and non-metal mines.

MSHA safety and health compliance specialists conduct dust and noise samples following well established procedures. Quality control processes assure accuracy and reliability of performance data. Anticipated performance challenges on the horizon include dealing with ever-changing mining environments that are relying more and more on larger, more mechanized and technically advanced equipment. More important, however, is the expected, continued increase in coal production that will result in an increased number of smaller operators with less experience and generally less sophisticated safety and health programs than their larger industry counterparts. These new operators will likely employ many new and untrained miners who are vulnerable to safety and health risks, who often lack the necessary skills obtained from training and experience, and who may not speak English as their primary language. MSHA recognizes the need to use all the tools provided in the Mine Act – enforcement, education and training, and technical support, all of which include compliance assistance – to continue and expand current successes as well as achieve our goal of zero injuries, illnesses and fatalities in the mining industry of the 21st century. MSHA is undergoing a profound culture change – to a culture of prevention. The agency has strengthened compliance assistance and incorporated this concept in everything that MSHA does.

FY 2005 evaluations that pertain to this goal are discussed under Management Issues section in the fatality goal narrative (05-3.1A) and are listed in Appendix 2.