

North Carolina

State OSHA Annual Report (SOAR)

Fiscal Year 2011



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Part I Strategic Management Plan Overview

Outcome Goals - On October 1, 2008, North Carolina began its third five year planning cycle as documented in the Strategic Management Plan. The five year plan includes two primary outcome goals.

- Reduce the rate of workplace fatalities by 5%
- Reduce the rate of workplace injuries and illnesses by 15%

Outcome Results

- The North Carolina occupational injury and illness case rate for total recordable cases was 3.6 in the baseline year of FY 2008 and 3.3 in FY 2010, the most recent statistical year available. This represents an 8% reduction.
- The North Carolina occupational injury and illness case rate for total recordable cases in construction was 3.7 in FY 2008 and 3.0 in FY 2010. This is a 19% reduction.
- The North Carolina occupational injury and illness rate for total recordable cases in manufacturing was 4.2 in FY 2008 and 3.7 in FY 2010 or a 12% reduction.
- The fatality rate has been lower than the baseline rate in two of the three years of the current five year cycle.

State Demographic Profile	Establishments	Employees
Total Private Industry	249,258	3,545,859
Total Public Sector	6,066	614,776

Areas of Emphasis – North Carolina’s strategy for reducing injuries, illnesses, and fatality rates is based on addressing specific areas that have an impact on the overall rates. The areas of emphasis in the current Strategic Management Plan include:

- Construction Industry
- Logging and Arboriculture
- Sawmills, Veneer, Manufactured Homes, and other Wood Products Manufacturing
- Long Term Care
- Exposures for Health Hazards
- Food Manufacturing

Strategic Activity to Support Outcome Goals

- Improve safety and health programs through compliance, consultative, and training intervention
- Expand safety and health recognition programs
- Develop partnerships and alliances in the areas of emphasis
- Implement Special Emphasis Programs (SEPs) for specific industries with intervention guidelines.

Goal Setting Process

- Evaluate injury, illness, and fatality data
- Secure input from stakeholders
- Establish five year outcome goals
- Select areas of emphasis and strategies to impact achievement of outcome goals
- Create a committee made up of division employees with a committee chair to manage the specific areas of emphasis in the Strategic Management Plan as described in Administrative Procedure Notice (APN) 19G
- Share progress in achieving goals with staff on a monthly basis
- Evaluate the process
- Alter strategies if necessary

Factors Affecting Achievement of Outcome Goals and Strategic Activity Goals

- Funding
- Resources, including trained division personnel that provide division intervention
- Fluctuation in work force of affected employers
- Strategies employed

Fatality Totals

	2008	2009	2010	2011	2012	2013	Reduction
Total	47	41	44	54			
Construction	17	11	18	17			
Manufacturing	4	13	6	5			
Public Sector	6	2	2	5			
Logging/Arbor	3	1	3	2			
Hispanic	11	9	7	15			
Overall Rate	.001330	.000837	.001238	.001302			

Injury and Illness Rates

	2008	2009	2010	2011	2012	2013
TRC (All)	3.6	3.4	3.3			
DART(All)	1.7	1.6	1.7			
Public Sector TRC	4.7	4.5	4.3			
Public Sector DART	2.2	2.1	1.9			

Intervention Statistics

	2009	2010	2011	2012	2013
Inspections	5,196	4,500	4,279		
Inspection Goals	4,950	4,467	4,457		
Consultation	1,186	1,213	1,268		
Consultation Goals	1,000	1,000	1,050		
Trained	13,173	11,578	10,766		
Training Goals	20,000	11,900	10,400		

Compliance Activity	2009	2010	2011	2012	2013
Serious Violations	5,239	4,761	4,732		
Willful Violations	1	23	10		
Average Serious Penalty	627	1,165	1,078		
Followups	47	110	153		

Part II Review of Specific Outcome Goals/Areas of Emphasis FY 2009-2013

1.1 Reduce Construction Industry Fatality Rate Statewide by 5% by the end of FY 2013

Great safety and health strides have been made in the construction industry but with 24 baseline fatalities and a rate of .01020, this industry is still a leader in workplace deaths and can have a significant impact on the state's overall outcome goal of reducing the rate of workplace fatalities.

Strategies for Achieving Specific Outcome Goal

- Conduct OSH compliance, consultative, and training interventions
- Maintain strong working relationships with construction industry groups through partnerships, alliances and other outreach efforts
- Identify high fatality, high activity counties for special emphasis
- Provide Hispanic outreach personnel to conduct construction training in Spanish
- Establish partnership agreements at high visibility construction sites
- Develop Spanish language publications and training materials
- Promote recognition programs such as building/sub-contractor STAR and SHARP
- Conduct consultative blitzes in targeted counties
- Inspect all cranes operating on construction sites
- Utilize Labor One Training Unit for on-site training as requested
- Analyze statistical data to confirm viability of inspection targeting process

Outcome

	Baseline	2009	2010	2011	2012	2013
Fatalities	24	11	18	17		
Rate	.01020	.00400	.00720	.00850		
Hispanic	N/A	7	6	8		

Activity in Emphasis Counties

	2009	2010	2011	2012	2013	Total
Inspections	1,698	1,270	1,356			
Goals	1,440	1,320	1,310			
Consultation	229	186	152			
Goals	140	150	150			
Trained	2,703	2,394	1,565			
Goals	7,500	2,500	2,500			

1.2 Decrease Fatality Rate in Logging, and Arboriculture by 5% by the end of FY 2013

The State has had success in the past reducing the number of fatalities in logging and arboriculture. Experience has shown that a reduction in OSH activity can translate into an increase in the number of injuries and fatalities in this industry. The first state Special Emphasis Program for logging was initiated in FY 1994 in response to 13 logging fatalities in FY 1993. In FY 2011, the total number of fatalities and the fatality rate was below the baseline rate.

Strategy for Achieving Specific Outcome Goal

- Increase employer and employee awareness of regulatory requirements and safety and health work practices
- Change employer and employee behavior to improve job safety and health through education, consultation, and compliance interventions
- Establish and maintain strong working relationships with industries, associations, groups, and key individuals through alliances and other outreach efforts
- Encourage development of meaningful safety and health programs with site specific safety training
- Focus training events and outreach to specific problem areas such as tree felling

Outcome

	Baseline	2009	2010	2011	2012	2013
Fatalities	4	2	6	2		
Rate	.01688	.01640	.02754	.0078		

Activity in Logging and Arboriculture Industry

	2009	2010	2011	2012	2013	Total
Inspections	83	73	72			
Goals	75	75	75			
Consultation	16	15	16			
Goals	15	55	15			
Trained	0	50	138			
Goals	75	25	25			

2.1 Reduce the Injury and Illness Rate in Sawmills, Veneer, Manufactured Home, and Other Wood Products Manufacturing (NAICS 321) by 15% by the end of FY 2013

The baseline DART rate of 3.3 is higher than the industry average rate of 1.9. The DART rate has decreased during the first two years of the planning cycle.

Strategy for Achieving Specific Outcome Goal

- Provide OSH compliance, consultation and training interventions
- Develop and maintain alliances with industry trade groups

- Expand recognition programs such as Carolina STAR and SHARP programs in NAICS code 321
- Evaluate employer's safety and health program
- For sites with an effective safety and health program, conduct focused inspection of identified hazards in the industry including electrical, machine guarding, and use of hazardous materials

Outcome

	Baseline	2009	2010	2011	2012	2013
DART 321	3.3	2.5	2.6			

Activity Sawmills, Veneer, Manufactured Home, and other Wood Products Manufacturing

	2009	2010	2011	2012	2013
Inspections	164	73	82		
Goals	100	100	100		
Consultation	91	86	85		
Goals	30	50	70		
Trained	0	18	11		
Goals	20	20	20		

2.2 Reduce the Days Away, Restricted, or Transferred (DART) Rate in Long-Term Care (LTC) Facilities by 15% by the end of FY 2013

While progress has been made in this industry group during previous planning cycles, the baseline rate of 4.8 is still more than twice the overall DART rate. For this reason, this emphasis area has been carried over from the previous strategic plan.

Strategy for Achieving Specific Outcome Goal

- Conduct OSH compliance, consultation, and training interventions
- Develop and maintain alliances in the LTC sector
- Advance ergonomics guidelines during OSH interventions
- Address elements of long term care intervention contained in OPN 132C including bloodborne pathogens, tuberculosis, ergonomics, and slips, trips, and falls

Outcome	Baseline	2009	2010	2011	2012	2013
DART Rate	4.8	5.3	5.1			

Activity in Long-Term Care Facilities

	2009	2010	2011	2012	2013	Total
Inspections	132	118	127			
Goals	60	60	60			
Consultation	38	45	67			
Goals	20	20	25			
Trained	39	67	82			
Goals	75	75	75			

2.3 Conduct Emphasis Inspections, Training, and Consultation Activity in Establishments Where Employees Might be Exposed to Health Hazards Such as Lead, Silica, Asbestos, Hexavalent Chromium and Isocyanates

The State has established a special emphasis program to address health hazards in the work place. The current health hazards include lead, silica, asbestos, hexavalent chromium, and isocyanates. Tracking mechanisms have not been developed to allow for the establishment of specific outcome measures in this area of emphasis. The State will continue to monitor the progress of Federal OSHA in developing reliable outcome measures for health issues. A reduction in illnesses relating to the emphasis health hazards could influence the primary outcome goal of reducing the overall injury and illness rate by 15% during the five year cycle of the strategic plan.

Strategy for Affecting Overall Outcome Goals through Elimination of Health Hazards

- Conduct OSH compliance, consultation and training interventions
- Develop specific hazard alerts, training materials and industry guides for selected health hazards
- Provide consultative support on chemicals identified in health hazards SEPs
- Research and review site specific data sources that could be used to identify employers having or potentially having health hazard exposures
- During interventions and inspections, identify workplace activities where health hazards may be present

Activity for Selected Special Emphasis Health Hazards

	2009	2010	2011	2012	2013	Total
Inspections	210	203	252			
Goals	200	200	200			
Consultation	185	147	171			
Goals	50	75	100			
Trained	906	659	507			
Goals	500	700	700			

Activity for Specific Hazards

Hazard	Total Samples	Samples with overexposure	Total Inspections	Surveys
Silica	24	4	73	103
Lead	8	1	50	33
Asbestos	3	0	83	8
Cr(VI)	4	1	18	14
Isocyanates	8	2	28	13
Totals	56	8	252	171

2.4 Reduce the Injury and Illness Rate (DART) in Establishments in Food Manufacturing (NAICS 311) by 12% by the end of FY 2013

The strategic planning process is intended to allocate limited resources in those areas of emphasis with above average injury and illness rates in an attempt to impact the overall State injury and illness rate. The food manufacturing DART rate was 3.5 in FY 2007 which was more than the overall industry DART rate of 1.9. For this reason, food manufacturing was added to the current Strategic Management Plan that began on 10/1/2008. The baseline rate for this industry was 4.3 which represents the three year average DART rate for the period 2005-2007. The first year of the five year cycle for this SEP was a planning year. Intervention relating to the strategic plan began on 10/1/09. Operational Procedure Notice 140B establishes the special emphasis program (SEP) for food manufacturing facilities and specific inspection guidelines.

Intervention Strategy

- Special attention will be given to the OSHA recordkeeping process at each site visited.
- Facilities will be evaluated for accumulation of combustible dust.
- Confined spaces programs will be reviewed.
- Electrical issues will be addressed especially during wet processes.
- Ergonomics programs will be reviewed and processes evaluated.
- Chemical use will be evaluated in terms of compliance with hazard communication standard requirements.
- Machinery will be inspected to assure proper guarding is in place.
- Screening, for coverage under process safety management requirements, will be conducted.
- Potential exposure to hexavalent chromium, when welding on stainless steel and other activity, will be examined.

Outcome

	Baseline	2009	2010	2011	2012	2013
DART Rate	4.3	2.9	3.0			

Activity in Food Manufacturing

	2009*	2010	2011	2012	2013	Total
Inspections		77	61			
Goals		60	60			
Consultation		25	13			
Goals		10	10			
Trained		9	76			
Goals		25	25			

*planning year with no intervention specifically related to the strategic plan

2.5 Develop/Sustain Partnerships and Alliances Supporting OSHNC Mission

Developing and sustaining partnerships and alliances are a viable strategy for supporting the outcome goals associated with specific areas of emphasis described in the Strategic Management Plan. Partnerships and alliances with companies and associations allow the department to leverage resources and to promote employee safety and health. This includes partnerships at high profile construction sites. Partnerships are performance based and have been terminated in the past when partnership participants did not adhere to requirements of the partnership.

New partnerships were initiated with Archer Western-Granite for the Western Wake Toll Road Project in Raleigh and Flatiron Construction Corp. and Lane Construction Company on the Yadkin River Bridge improvement project near Salisbury.

Four alliances were renewed including the North Carolina Forestry Association, North Carolina Utility Contractors Association, Forestry Mutual insurance Company, and Lamar Advertising Company. All of the alliances focus on internal training except for the Lamar alliance which is designed to spread the safety and health message through the use of billboards.

Strategy for Affecting Outcome Goals through Partnerships and Alliances

- Pursue partnerships and alliances in areas of emphasis or other areas that advance achievement of established goals and objectives
- Establish construction partnerships at high visibility sites
- Formalize partnership agreements with specific outcome measures
- Conduct OSH verification inspections quarterly at partnership sites
- Prepare partnership evaluations yearly and when project is completed
- Establish specific training and education goals and safety and health promotion goals for each alliance

Activity for Partnerships and Alliances

	2009	2010	2011	2012	2013
Partnerships	4	4	5		
Alliances	12	12	9		
Total	16	16	14		

Part III Special Accomplishments

- The State's total recordable case rate was the lowest in program history at 3.1 for FY 2010, which is the most current year available.
- The NCDOL library received 2447 information requests and made 3,635 audio visuals loans including 433 in Spanish.
- Hazard alerts on scissor lifts, heat stress and working in hot conditions, marina safety, forklifts and other material handling equipment and excavations & trenches were created and posted to the website and/or mailed to the appropriate NAICS employer.
- A hazard alert on carbon monoxide was revised and posted to the website.
- New industry guides were developed, published and posted online for hexavalent chromium and isocyanates.
- Four brochures and one quick card for women in construction were revised.
- General Industry safety briefings and logging safety supplemental booklets were created, published, and posted online.
- Twelve industry guides were revised.
- Sixty three safety and health PowerPoint presentations are available online and updated routinely.
- SEP procedural documents were all reviewed in 2011.
- Twelve chapter revisions to the state's Field Operations Manual were submitted as state plan changes. They were mostly related to compliance programming and conducting inspections.
- Thirty six OSH personnel attained the Manager of Environmental Safety and Health (MESH), Construction MESH, and/or Public Sector MESH status as a result of receiving 100 hours of safety and health training. NCDOL is a co-sponsor of the MESH certificate program that has a total of 7,429 graduates to date.
- Workshops for SEPs Food Manufacturing and Wood Products were introduced.
- 5.5 CEU credits were received for the LTC workshops from the NC Long Term Care Association.
- New course catalogs for internal and external training were developed and are available online for public and internal personnel.
- An automated registration program for public courses was established.
- The number of webinars was increased by over 300 %.
- ETТА web pages were redesigned and the state specific federal OSHA website was updated.
- An OSH Resource CD for public distribution was designed and developed. It is also available online and routinely updated.
- Work continued on the design, development and implementation of the One Stop Shop.
- ETТА offered 218 hours of continuing education to internal personnel to include courses in Digger Derricks, Flammable & Combustibles, Rough Terrain Vehicles, Cranes, Excavation and Trenching, Toxicology, Welding, Ergonomics and CPR/First Aid.
- The Division provided outreach activity in response to the Hurricane Irene recovery efforts.
- A total of 644 registered for the 2011 Annual Carolina Star Safety Conference.

- Sixteen safety and health professionals participated in Special STAR Team Member Program training including nine in the Raleigh Class and seven in the Winston-Salem Class.
- Eight (new) Star sites were recognized during FY 2011, bringing the total number of Star Sites to 137. This includes 89 Carolina Star, 22 Building Star, 18 Public Sector Star and eight Rising Star.
- 2,722 workplaces (Gold & Silver) were recognized at 32 events by the Safety Awards Program. This included 98 Million Hour Safety Awards.
- Partnerships were initiated on a roadway construction project in Raleigh and a bridge construction project near Salisbury
- A total of 201 growers received Gold Star Grower designation
- Consultative Services Bureau Chief John Bogner received the William J. Higgins Award from the U.S. Department of Labor.
- Assistant Director Kevin Beauregard appeared before Congress to discuss the state plan monitoring process.
- A five year statistical analysis completed by Planning, Statistics, and Information (PSIM) and ending in FY 2010 documented a 44.57% DART rate reduction for employers participating in the Site Specific Targeting Program reflecting 834 establishments.
- PSIM completed the Public Sector Survey (collection of calendar year 2010 injury and illness data) of 3,157 employers with a 99.8% response rate and a 100% clean rate. A total of seven non-responders were referred to the Compliance Bureau. As of the end of FY 2011, all but these seven surveys have been collected.
- PSIM completed an analysis of data collected from the 2007, 2008, and 2009 Public Sector Surveys, resulting in updated, established target rates for employer specific categories.
- PSIM revised the lead, asbestos, and isocyanates/health hazards targeting schedules.
- PSIM redesigned the General Industry Health Hazards Targeting Schedules in order to increase the number of Health Hazard SEP inspections.
- Collection of ODI data for calendar year 2010 officially concluded in October 2011 with a 100% response rate and a 100% clean rate. Three survey mailings and over 900 phone calls were made to 3,117 survey participants resulting in only 12 non-responders, which were referred to the Compliance Bureau.
- PSIM organized, coordinated, and managed a contract with an outside vendor to convert all OSH inspection files from 1973 through 1996 currently stored on microfiche and microfilm and closed inspection files through FY 2007 to imaged documents and to upload those files into the current document management system.
- A total of 641 disclosure requests were received and 587 processed (458 from FY 2011 and 129 from the previous year) resulting in a 94% response rate.
- A Compliance led committee refined the penalty collection process and implemented procedures to reduce the total amount of outstanding penalties.

Part IV Summary

North Carolina has developed a Strategic Management Plan with outcome goals that are consistent with federal OSHA activity. As well as specific outcome measures, the plan includes activity goals for each major component of the state program. The plan's areas of emphasis are managed by a specific committee. Strategies can be altered and activities increased or decreased to enhance program performance. Any changes to the Plan are documented annually, and submitted to federal OSHA as part of the 23(g) grant application process.

A review of statistical and program information indicates that after three years of the five year Strategic Management Plan, the State is making adequate progress in meeting the five year goals contained in the plan. Fatality rates have decreased in two areas of emphasis, construction and logging/arboriculture. The total recordable case rate for all industries including government is 3.4 and 3.1 in the private industry only. This is a reduction from the baseline numbers of 3.6 and 3.8. The most recent DART rate was 1.6 which is reduction from the base line rate of 1.7.

Overall program activity is also impressive including 4,279 inspections and 1,268 consultative interventions in FY 2011. This compares favorably to activity conducted in the four federal OSHA jurisdiction states in Region IV. Cutbacks in personnel and vacant positions required because of budget cuts have had an impact on training activity, as well as inspection totals in comparisons to other years. A fully staffed Consultative Services Bureau did meet their activity goals for the year.