

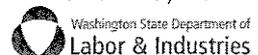
*Keep Washington Safe and Working*

**SUMMARY OF DOSH ACCOMPLISHMENTS**  
**State OSHA Annual Report**  
**Washington State**

Federal Fiscal Year 2010 Goals  
October 1, 2009 – September 31, 2010

FFY 2006 – 2010 Strategic Goals

Prepared by the Division of Occupational Safety and Health  
Department of Labor and Industries  
State of Washington  
March 15, 2011



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## Introduction

Washington State's industrial safety and health program is authorized by the Washington Industrial Safety and Health Act of 1973 (WISHA – Chapter 49.17 RCW) and administered by the Division of Occupational Safety and Health (DOSH) within the Department of Labor and Industries. The federal Occupational Safety and Health Administration (OSHA) monitors and partially funds WISHA, which must be at least as effective as federal OSHA.

Each year, an average of 80 Washington state workers die on-the-job and an estimated 13,000 people suffer on-the-job injuries. Many other fatal and non-fatal occupational illnesses go unreported. Our mission is to protect the safety and health of Washington's workers by ensuring that employers provide safe and healthful working conditions. Our strategic goals help us to accomplish our mission by focusing on prevention and protection.

In partnership with OSHA, our ultimate goal is for every worker to go home whole and healthy every day. While we have made progress in reducing injuries, illness and fatalities, our work is not done. Like trying to describe a world to our children where computers, DVDs, and CDs did not exist, not to mention texting, iPods, and 3D TVs, we will not be satisfied until it's extremely difficult to remember or imagine a time when each year, nearly one hundred workers per year in Washington lost their lives in the course of doing their job.

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## Summary of Results

This report summarizes DOSH's efforts and results of our annual performance and strategic goals during FFY 2010 (October 1, 2009 to September 30, 2010). It also describes our performance in achieving DOSH's five-year Strategic goals in the 2006 to 2010 Strategic Management Plan.

### FFY 2006-2010 Strategic Goals:

*Improve workplace safety and health for Washington workers by reducing hazards, exposures, injuries, illnesses and fatalities.*

*Promote values which foster workplace safety through education, consultation, and employer assistance.*

*Maximize DOSH's effectiveness and efficiency by strengthening our capabilities and infrastructure.*

During FFY 2010, DOSH reached a milestone of significance - all performance goals were met or exceeded. Highlights include:

- Maintaining hygiene and safety citation lapse times well below the current national average
- Conducting 9,896 inspections and consultations
- Fully implementing construction crane safety rules
- Ensuring that at least 95% of the time, Consultants and Inspectors verify correction of serious hazards within 14 days of abatement date.

In the past five years (2006-2010), DOSH has played a critical role in carrying out programs designed to save lives, prevent injuries and illnesses and protect the health of Washington's workers. We've realized significant results in preventing injuries, illness and fatalities and taken many steps to reach the *ultimate goal – every worker goes home whole and healthy every day.*

These programs include:

- Developing guidance and standards for occupational safety and health;
- Focusing inspections in hazardous places of employment and working with employers and employees;
- Offering consultation services to small businesses;
- Providing compliance assistance, outreach, education, and other cooperative programs for employers and employees; and
- Fostering relationships with other agencies and organizations, both private and public, in order to address critical safety and health issues.

# 2010 ANNUAL PERFORMANCE RESULTS

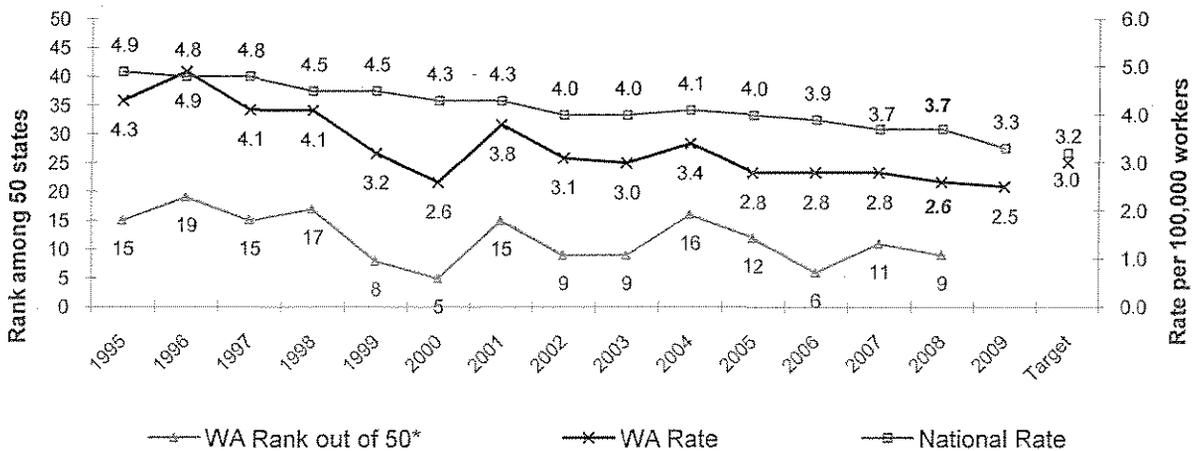
## Improving Workplace Safety & Health

<b>Goal 1-1</b>	Reduce deaths from work-related injuries in support of the 2010 goal of no more than 3.0 deaths per 100,000 full-time workers.
<b>Results: Goal met</b>	Washington deaths from work related injuries are 2.6 per 100,000 full-time workers.
<b>Comment</b>	Actual 2009 state data will be available late 2011. There is approximately an 18 month lag on workplace fatality rate data for states. The Federal Bureau of Labor Statistics (BLS) uses calculations of hours worked in each state to determine relative rates. The 2009 Washington rate is projected based on preliminary CFOI fatality data for 2009, and BLS Current Population Survey Employment (at work) data. See following page for additional data.
<b>Strategic Goal</b>	1: Improve workplace safety and health for Washington workers by reducing hazards, exposures, injuries, illnesses and fatalities.
<b>5 Yr Performance Goal</b>	1-A: By 2010, reduce deaths from work-related injuries to no more than 3.0 per 100,000 full-time workers.

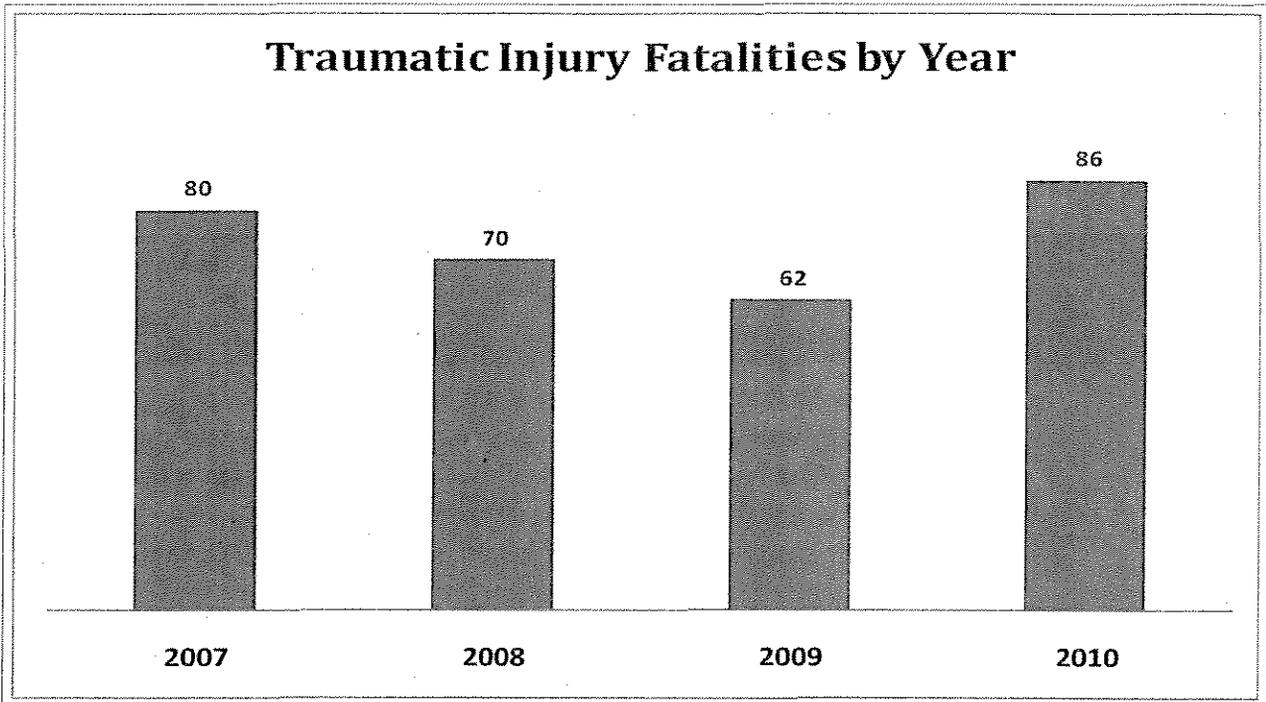
*Indicator: 2005-2009 average annual Washington State fatality rate.*

*Data Source: Census of Fatal Occupational Injuries (CFOI)*

### Washington Workplace Fatality Rate Compared to National Rate



Census of Fatal Occupational Injuries (CFOI), Bureau of Labor Statistics, U.S. Department of Labor; and Washington State Employment Security Report



Data from Washington's Fatality Assessment and Control Evaluation (FACE) system administered by L&I's Safety and Health Assessment and Research for Prevention (SHARP) program.

<b>Goal 1-2</b>	<b>Reduce workplace injuries and illnesses by at least 10% as measured by the average time loss claims rate for employers with WISHA enforcement or consultation visits.</b>
<b>Results:</b>	The results of the most recent SHARP study were not found to be statistically significant for either enforcement inspections or consultation visits. Please see page 16, 5-year Strategic Goal 1-B for analysis and more detailed information.
<b>Comment</b>	The Department's Safety and Health Assessment and Research for Prevention (SHARP) study analyzing the change between the baseline and workers' compensation compensable claims rate is used to measure the results for this goal.
<b>Strategic Goal</b>	1: Improve workplace safety and health for Washington workers by reducing hazards, exposures, injuries, illnesses, and fatalities.
<b>5 Yr Performance Goal</b>	1-B: By 2010, reduce deaths from work-related injuries to no more than 3.0 per 100,000 full-time workers.

**Indicator:** Percent change between baseline and performance period in workers' compensation compensable claims rates (includes kept-on-salary claims) for target group as compared with change for overall group.

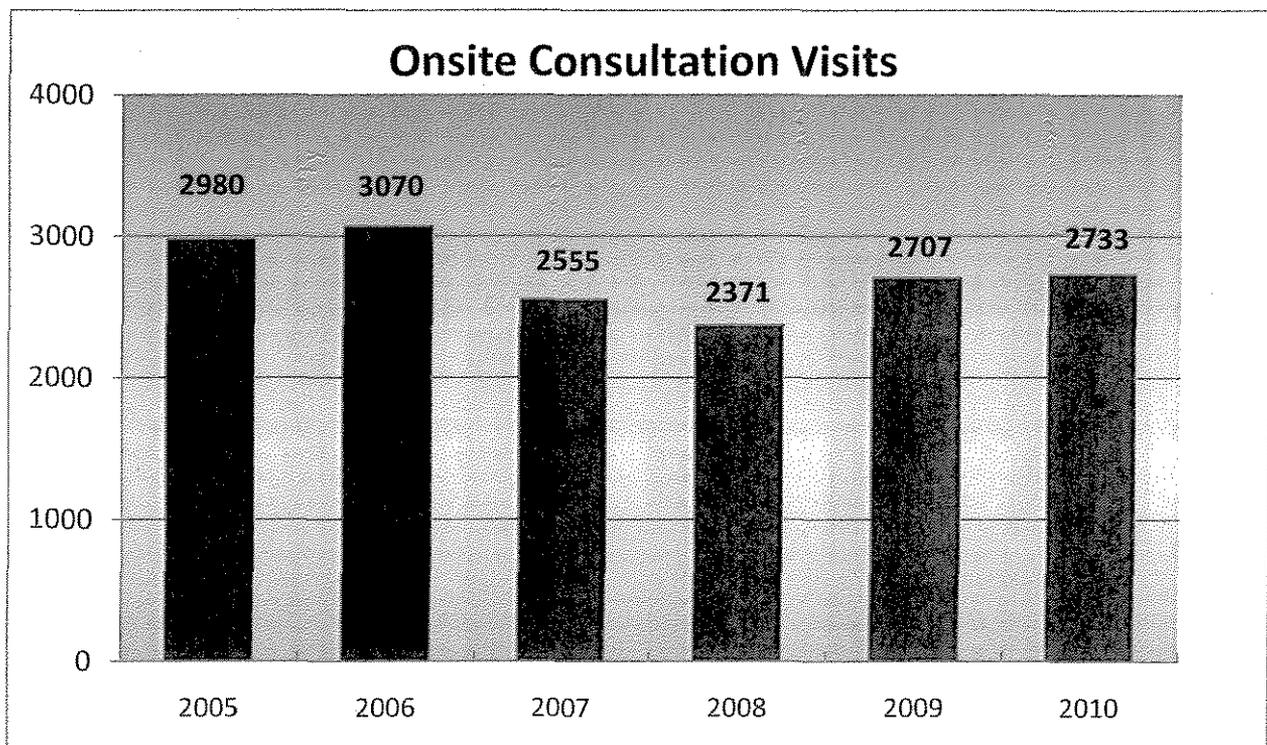
**Data Source:** SHARP report

<b>Goal 1-3</b>	<b>Conduct at least 2260 onsite consultations. To help ensure this goal is met, provide weekly tracking reports to consultation supervisors and managers.</b>									
<b>Results: Goal exceeded</b>	<b>Qtr 1</b>		<b>Qtr 2</b>		<b>Qtr 3</b>		<b>Qtr 4</b>		<b>YTD</b>	
	637	28.2%	732	32.4%	695	30.8%	669	29.6%	<b>2733</b>	<b>120.9%</b>
<b>Comment</b>	473 more consultations were conducted than projected for FFY 2010. The number of consultations conducted directly impacts our ability to reach our strategic goals and for the second year in a row, consultants surpassed visit goals.									
<b>Strategic Goal</b>	1: Improve workplace safety and health for Washington workers by reducing hazards, exposures, injuries, illnesses, and fatalities.									
<b>5 Yr Performance Goal</b>	1-B: By 2010, reduce the rate of workplace injuries and illnesses in Washington workplaces by 20%.									

*Indicator: Number of onsite consultation visits with a closing conference date in the current period.*

*Consultation activity reports prepared and distributed weekly.*

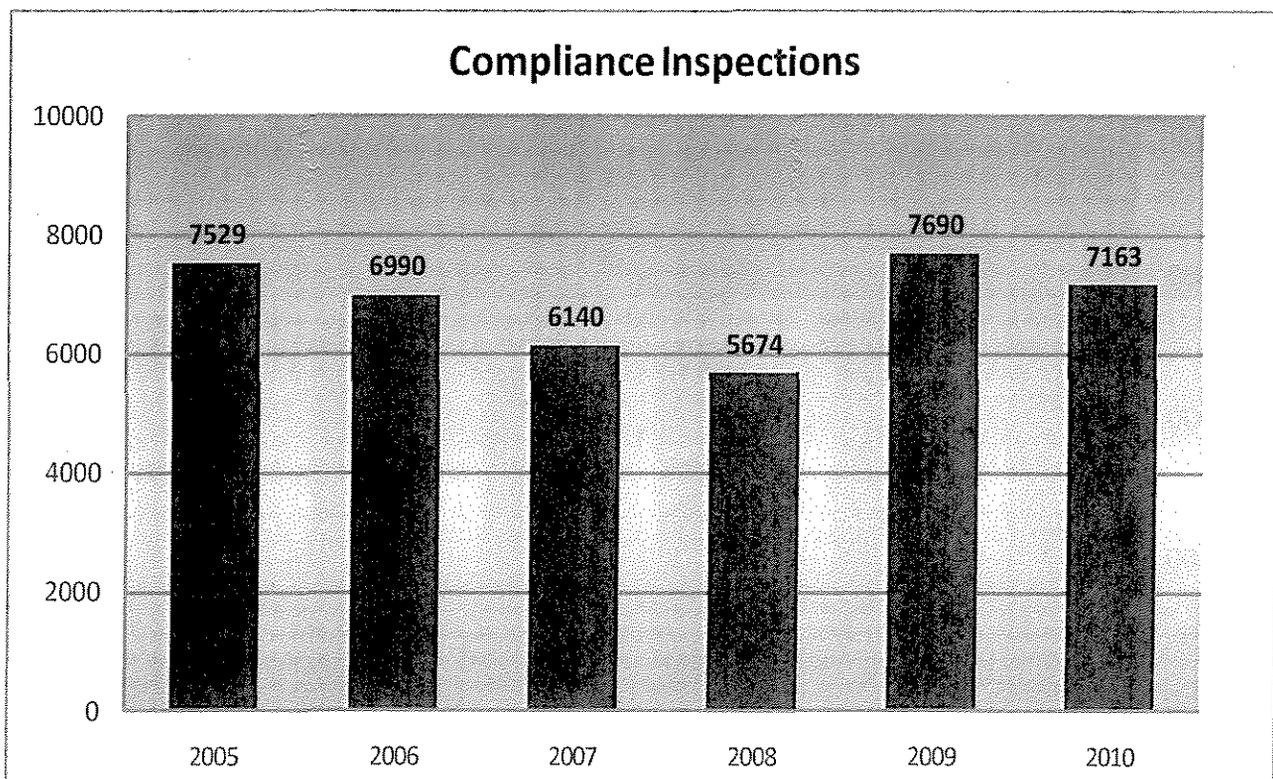
*Data Source: L&I Data Warehouse and WISHA Information Network (WIN)*



<b>Goal 1-4</b>	<b>Conduct at least 7000 compliance inspections. To help ensure this goal is met, provide weekly tracking reports to compliance supervisors and managers.</b>									
<b>Results: Goal exceeded</b>	<b>Qtr 1</b>		<b>Qtr 2</b>		<b>Qtr 3</b>		<b>Qtr 4</b>		<b>YTD</b>	
	1751	25%	1923	28%	1760	25%	1729	25%	<b>7163</b>	<b>102%</b>
<b>Comment</b>	The number of inspections conducted directly impacts our ability to reach our strategic and five-year performance goals. For the second year in a row, DOSH inspectors surpassed inspection goals.									
<b>Strategic Goal</b>	1: Improve workplace safety and health for Washington workers by reducing hazards, exposures, injuries, illnesses and fatalities.									
<b>5 Yr Performance Goal</b>	1-B: By 2010, reduce the rate of workplace injuries and illnesses in Washington workplaces by 20%.									

*Indicator: Number of compliance inspections with a closing conference date in the current period. Compliance activity reports prepared and distributed weekly.*

*Data Source: L&I Data Warehouse and WISHA Information Network (WIN)*



<b>Goal 1-5</b>	Implement construction crane safety rules effective January 1, 2010 and continue to work on updating the general crane safety rules.																																	
<b>Results: Goal met</b>	<table border="1"> <thead> <tr> <th colspan="4">Inspection data since 1/1/2010</th> <th colspan="2">General violations</th> <th colspan="2">Serious violations</th> <th colspan="3">Cranes taken out of service</th> </tr> <tr> <th>Employers inspected</th> <th>Employers unfamiliar</th> <th>Uncertified cranes</th> <th>Uncertified operators</th> <th>Uncertified cranes</th> <th>Uncertified operators</th> <th>Uncertified cranes</th> <th>Uncertified operators</th> <th>By L&amp;I red tag issued</th> <th>By employer</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>211</td> <td>27</td> <td>83</td> <td>57</td> <td>54</td> <td>37</td> <td>2</td> <td>4</td> <td>0</td> <td>20</td> <td>20</td> </tr> </tbody> </table>	Inspection data since 1/1/2010				General violations		Serious violations		Cranes taken out of service			Employers inspected	Employers unfamiliar	Uncertified cranes	Uncertified operators	Uncertified cranes	Uncertified operators	Uncertified cranes	Uncertified operators	By L&I red tag issued	By employer	Total	211	27	83	57	54	37	2	4	0	20	20
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211	27	83	57	54	37	2	4	0	20	20																								
<b>Comment</b>	<p>Phase 1 of the Crane certifier and operator certification rules became effective January 1, 2010. OSHA's crane rule was adopted in July, 2010.</p> <p>DOSH has continued with the second phase of the Construction Crane rulemaking, including power line safety, signaling, rigging, personal lifting, and other issues. A proposed rule will be published in mid 2011. Rulemaking will proceed in areas where the state is required to be at least as effective as OSHA but may be delayed in other areas to meet the requirements of the Governor's rule moratorium.</p>																																	
<b>Strategic Goal</b>	1: Improve workplace safety and health for Washington workers by reducing hazards, exposures, injuries, illnesses, and fatalities.																																	
<b>5 Yr Performance Goal</b>	1-C: Develop or continue at least two industry and hazard-based initiatives each year to provide additional attention to areas contributing to high fatality or high injury and illness rates, or emerging hazards.																																	

**Indicator:** Crane Safety compliance inspectors hired. General construction crane safety and rigging requirements drafted, public hearings held, and rules adopted. Crane safety computer tracking system including correspondence fully implemented.

**Data Source:** Compliance Program report; Standards and Technical Services Program report.

## Fostering Workplace Safety

<b>Goal 2-1</b>	Increase the number of safety outreach activities and materials in Spanish.									
<b>Results: Goal exceeded</b>	Qtr 1		Qtr 2		Qtr 3		Qtr 4		YTD	
	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010
	38	46	72	70	64	80	44	75	218	271
<b>Comment</b>	Vulnerable workers who understand and read only Spanish are exposed to serious workplace hazards and are injured at greater rates than non-Hispanic workers. DOSH's efforts in reaching these workers help create a level playing field by ensuring that language is not a barrier to workplace safety.									
<b>Strategic Goal</b>	2: Promote values which foster workplace safety through education, consultation, and employer assistance.									
<b>5 Yr Performance Goal</b>	2-A: Greatly expand safety and health assistance tools for employers as evidenced by a 50% increase in online or downloadable employer assistance tools.									

*Indicator: Baseline identified. More Spanish language safety presentations conducted than baseline.*

*Data Source: Monthly report from Hispanic Outreach Coordinator and Form 66 database.*

<b>Goal 2-2</b>	Explore options for tracking longer-term outcomes of outreach activities.									
<b>Results:</b>	Goal dropped due to development of new strategies and DOSH business plan.									
<b>Comment</b>	Earlier this year, we reported having conversations with L&I's SHARP and RDS research programs on assessing outcomes of some of our services. Since then we developed new strategic, performance and business plans, and dropped this goal in order to focus our efforts and resources on higher priority areas. For instance, the DOSH 2011-2015 Strategic Management plan includes goals, strategies, and measures to evaluate effectiveness of collaborative Risk Management and Consultation efforts.									
<b>Strategic Goal</b>	2: Promote values which foster workplace safety through education, consultation, and employer assistance.									
<b>5 Yr Performance Goal</b>	2-B: Provide significant incentives and resources to foster workplace safety and health by developing and implementing a program to encourage and fund safety and health investment projects.									

## Providing Good Outcomes

<b>Goal 3-1</b>	<b>Ensure that at least 95% of the time, consultants verify the correction of serious hazards within 14 days of the abatement date.</b>									
<b>Results: Goal exceeded</b>	<b>Qtr 1</b>		<b>Qtr 2</b>		<b>Qtr 3</b>		<b>Qtr 4</b>		<b>YTD</b>	
	1457/1483	98.2%	1317/1331	98.9%	1704/1742	97.8%	1426/1448	98.5%	5904/5997	98.4%
<b>Comment</b>	Data is produced through the Data Warehouse, rather than the MARC report. This allows us to monitor performance on a more frequent basis, and accommodates the reduction in the measurement period from 30 days to 14 days.									
<b>Strategic Goal</b>	3: Maximize DOSH's effectiveness and efficiency by strengthening our capabilities and infrastructure.									
<b>5 Yr Performance Goal</b>	3-A: Assure timely response in critical program areas defined in annual performance plan targets, including issuing results of onsite interventions, assuring correction of hazards, and investigating complaints of workplace safety and health related discrimination.									

**Indicator:** At least 95% of serious hazards with abatement due during the period have abatement verified as completed.

**Data Source:** L&I Data Warehouse and WISHA Information Network (WIN).

### Getting Serious Hazards Corrected Faster

When DOSH assures the timely correction of serious hazards, Washington workers are exposed to significantly fewer hazards that can cause serious injuries, illnesses, or fatalities.

	<b>Consultation</b>	
	<b># Serious Hazards Abated</b>	<b>% Timely w/in 14 days</b>
<b>2010</b>	<b>5,904 of 5,997</b>	<b>98.4%</b>
<b>2009</b>	6,649 of 6,816	97.5%
<b>2008</b>	5,790 of 6,045	96%
<b>2007</b>	6,255 of 6,438	97.2%
<b>2006</b>	8,883 of 9,175	96.8%
<b>2005</b>	9,687 of 9,976	97.1%
<b>2004</b>	9,876 of 10,238	96.5%
<b>2003</b>	5,867 of 6,233	94.1%

<b>Goal 3-2</b>	Ensure that at least 95% of the time, inspectors verify the correction of serious violations within 14 days of the abatement date.									
<b>Results: Goal exceeded</b>	<b>Qtr 1</b>		<b>Qtr 2</b>		<b>Qtr 3</b>		<b>Qtr 4</b>		<b>YTD</b>	
	911/947	96.2%	832/856	97.2%	789/803	98.3%	912/931	98.1%	3444/3537	97.4%
<b>Comment</b>	Measure includes serious, willful, repeat and unclassified violations. Data is produced through the Data Warehouse instead of using the SAMM report. This allows us to monitor performance on a more frequent basis, and accommodates the reduction in the measurement period from 35 days to 14 days.									
<b>Strategic Goal</b>	3: Maximize DOSH's effectiveness and efficiency by strengthening our capabilities and infrastructure.									
<b>5 Yr Performance Goal</b>	3-A: Assure timely response in critical program areas defined in annual performance plan targets, including issuing results of onsite interventions, assuring correction of hazards, and investigating complaints of workplace safety and health related discrimination.									

**Indicator:** At least 95% of serious violations with abatement due during the period have abatement verified as completed.

**Data Source:** L&I Data Warehouse and WISHA Information Network (WIN).

### Getting Serious Violations Corrected Faster

When DOSH assures the timely correction of serious violations, Washington workers are exposed to significantly fewer hazards that can cause serious injuries, illnesses, or fatalities.

	<b>Compliance</b>	
	<b># Serious Hazards Abated</b>	<b>% Timely w/in 14 days</b>
<b>2010</b>	3,444/3,537	97.4%
<b>2009</b>	4,381/4,639	95%
<b>2008</b>	2,735 of 2,898	94.4%
<b>2007</b>	3,951 of 4,167	94.9%
<b>2006</b>	4,804 of 4,972	96.6%
<b>2005</b>	4,555 of 4,792	95.1%
<b>2004</b>	3,843 of 4,310	89.2%
<b>2003</b>	4,216 of 4,688	89.9%

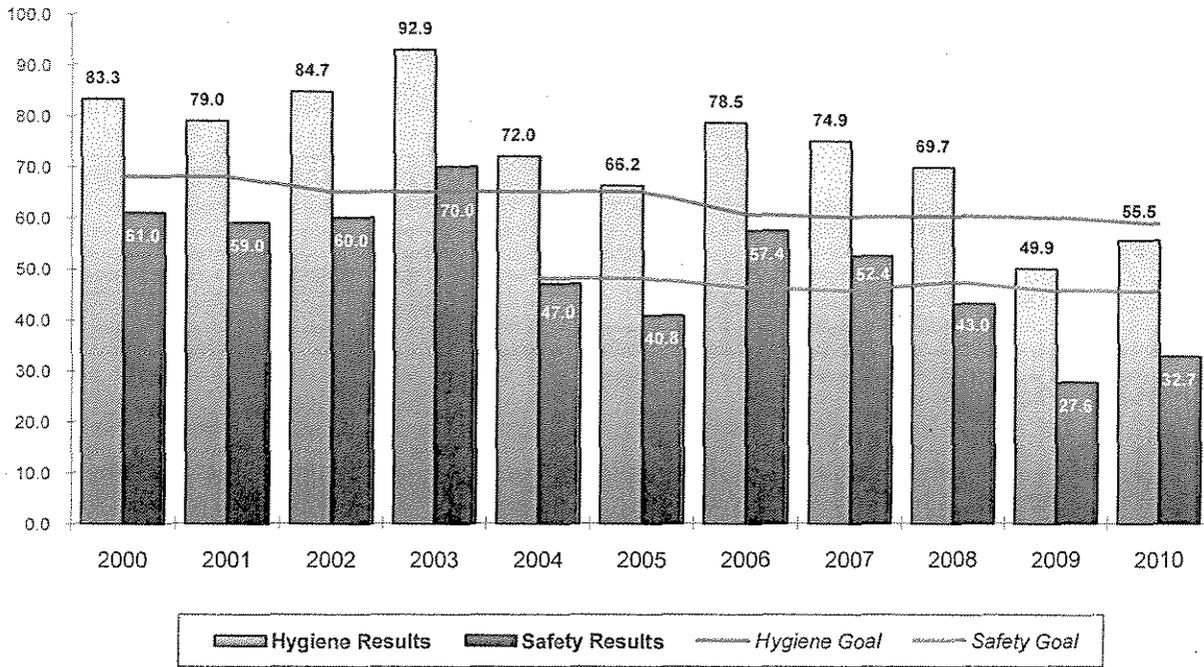
<b>Goal 3-3</b>	Maintain hygiene citation lapse time at or below the current national average of 58.7 calendar days (for citations with violations, from opening conference to issuance date).										
<b>Goal 3-4</b>	Maintain safety citation lapse time at or below the current national average of 45.5 calendar days (for citations with violations, from opening conference to issuance date).										
<b>3-3 Results: Goal exceeded</b>	<table border="1"> <thead> <tr> <th>Qtr 1</th> <th>Qtr 2</th> <th>Qtr 3</th> <th>Qtr 4</th> <th>YTD</th> </tr> </thead> <tbody> <tr> <td>54.3</td> <td>55.61</td> <td>56.58</td> <td>55.3</td> <td>55.5</td> </tr> </tbody> </table>	Qtr 1	Qtr 2	Qtr 3	Qtr 4	YTD	54.3	55.61	56.58	55.3	55.5
Qtr 1	Qtr 2	Qtr 3	Qtr 4	YTD							
54.3	55.61	56.58	55.3	55.5							
<b>3-4 Results: Goal exceeded</b>	<table border="1"> <thead> <tr> <th>Qtr 1</th> <th>Qtr 2</th> <th>Qtr 3</th> <th>Qtr 4</th> <th>YTD</th> </tr> </thead> <tbody> <tr> <td>31.51</td> <td>30.08</td> <td>34.06</td> <td>35.25</td> <td>32.7</td> </tr> </tbody> </table>	Qtr 1	Qtr 2	Qtr 3	Qtr 4	YTD	31.51	30.08	34.06	35.25	32.7
Qtr 1	Qtr 2	Qtr 3	Qtr 4	YTD							
31.51	30.08	34.06	35.25	32.7							
<b>Comment</b>	We continue to maintain our performance in keeping lapse times below the national average. For 2010, hygiene is 3.2 days and safety is 12.8 days below the national average. The data is produced through our Data Warehouse instead of using the SAMM report. This allows us to monitor performance on a more frequent basis, and helps ensure our measurement is comparable to the federal and state data used to determine the national average. See following page for charts.										
<b>Strategic Goal</b>	3: Maximize DOSH's effectiveness and efficiency by strengthening our capabilities and infrastructure.										
<b>5 Yr Performance Goal</b>	3-A: Assure timely response in critical program areas defined in annual performance plan targets, including issuing results of onsite interventions, assuring correction of hazards, and investigating complaints of workplace safety and health related discrimination.										

**Indicator:** Average number of days between opening conference date and citation issuance date for all hygiene/safety citations with violations issued during the period.

**Data Source:** L&I Data Warehouse, WISHA Information Network (WIN). Measure includes citations with violations only.

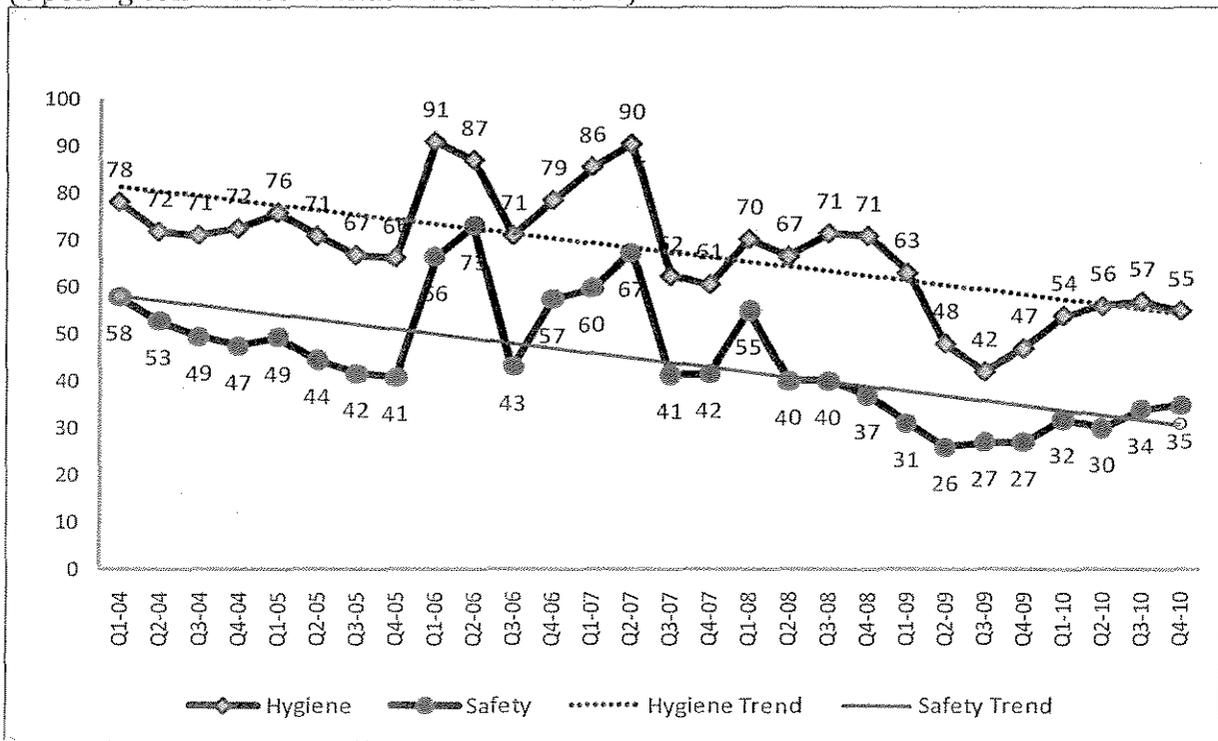
## History of Citation Lapse Time Goals - FFY 2000 - FFY 2010

(Hygiene goal adopted in 1999. Safety goal adopted in 2004.)



## Citation Lapse Time by Quarter FFY 2004 - FFY 2010

(Opening conference to citation issuance date)



<b>Goal 3-5</b>	Ensure that only work related fatality and catastrophe investigations are counted as Fatality/Catastrophe in OSHA and DOSH systems
<b>Results: Goal met</b>	Administrative controls are in place and WIN system changes are ready to implement.
<b>Comment</b>	Due to the need to remain flexible to accommodate OSHA's conversion to the new OSHA Information System (OIS), we cannot actually implement WIN changes until OSHA's update is complete. In the meantime, DOSH has put into place administrative controls to ensure accurate information is electronically shoveled to IMIS. We are also periodically monitoring the data to ensure accuracy.
<b>Strategic Goal</b>	3: Maximize DOSH's effectiveness and efficiency by strengthening our capabilities and infrastructure.
<b>5 Yr Performance Goal</b>	3-A: Assure timely response in critical program areas defined in annual performance plan targets, including issuing results of onsite interventions, assuring correction of hazards, and investigating complaints of workplace safety and health related discrimination.

*Indicator: Fatalities determined not to be work-related are not counted as Fat/Cats.*

*Data Source: Operations report.*

<b>Goal 3-6</b>	Develop a tracking database that will be used to target exclusions for VPP and START companies
<b>Results: Goal met</b>	The database is on track for implementation in 2011.
<b>Comment</b>	Tracking is currently done manually, but will be processed electronically following the implementation, which will take place during FFY 2011. Requirements documentation has been completed, and the database will be implemented once code is finalized.
<b>Strategic Goal</b>	3: Maximize DOSH's effectiveness and efficiency by strengthening our capabilities and infrastructure.
<b>5 Yr Performance Goal</b>	3-A: Assure timely response in critical program areas as defined in annual performance plan targets, including issuing results of onsite interventions, assuring correction of hazards, and investigating complaints of workplace safety and health related discrimination.

*Indicator: Database requirements are documented.*

*Data Source: Operations report.*

<b>Goal 3-7</b>	<b>Complete and return all ATS e-mail notices for federal standards and program changes by the specified due date.</b>				
<b>Results: Goal met</b>	<b>Description</b>	<b>Notice date</b>	<b>Notice of intent due date</b>	<b>Notification of intent sent</b>	<b>Outcome</b>
	Record Keeping NEP	2/19/10	5/16/10	4/22/10	Submitted Final SPC Packet to OSHA – mailed 8/4/10
	Hexavalent Chromium NEP	2/23/10	5/23/10	5/11/10	Submitted SPC packet on 8/23/10
	CPL-02(10-07) Revisions to NEP on Recordkeeping	9/28/10	12/19/10	10/27/10	DOSH notified OSHA that we will not adopt.  DOSH will continue using current procedures as indicated in DOSH Directive 2.66, revised date of August 30, 2010 (DOSH State Plan Change 10-14).
	CPL 02 (10-06) Site-Specific Targeting 2010	8/18/10	12/19/10	11/29/10	DOSH notified OSHA that we would not adopt.
	Severe Violator Enforcement Program (SVEP) OSHA CPL 02-00-149	6/18/10	8/28/10	7/1/10	DOSH is currently drafting an equivalent Program. Anticipated submission date is 12/18/10.
	Federal Standard Log 1926 Cranes and Derricks in Construction – Final rule	8/9/10	10/10/10	10/14/10	DOSH notified OSHA that we plan to adopt a crane rule, but not identical to OSHA's rule. DOSH is currently Stakeholding the draft rule and will notify OSHA soon of our planned adoption date.
<b>Comment</b>	See status column in table above.				
<b>Strategic Goal</b>	3: Maximize DOSH's effectiveness and efficiency by strengthening our capabilities and infrastructure.				
<b>5 Yr Performance Goal</b>	3-B: Continue to make WISHA rules, correspondence and other documents more accessible and understandable.				

*Indicator: Federal Automated Tracking System (ATS) responses returned timely.*

*Data Source: Standards & Technical Services Program report.*

<b>Goal 3-8</b>	<b>Complete first phase of automated performance management system by designing and implementing the highest priority reports.</b>
<b>Results: Goal met</b>	Reports were deployed for users on December 16, 2010, two weeks prior to project schedule.
<b>Comment</b>	These reports allow regional supervisors and managers to monitor the results of their staff's activities, including progress toward meeting goals established with OSHA.
<b>Strategic Goal</b>	3: Maximize DOSH's effectiveness and efficiency by strengthening our capabilities and infrastructure.
<b>5 Yr Performance Goal</b>	3-C: Improve DOSH's ability to analyze and measure delivery and outcome of services as evidenced by improved staff capabilities, data systems, and performance management reports.

*Indicator: Requirements for Phase 1 reports documented, report design approved, and implemented when feasible based on other pre-existing commitments.*

*Data Source: Operations Program report.*

## 2006 – 2010 Strategic Performance Results

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Following is a summary of DOSH's 5-year performance of DOSH for the 2006 -2010 Strategic Management Plan.

### Improving Workplace Safety & Health

<b>5 Yr Performance Goal 1-A</b>	By 2010, reduce deaths from work-related injuries to no more than 3.0 per 100,000 full-time workers.
<b>Results: Goal exceeded</b>	Washington deaths from work related injuries are 2.6 per 100,000 full-time workers.
<b>Comment</b>	FFY 2006 – 2010 Washington has maintained a fatality rate below the national average. See Goal 1-1, page 3 for additional details.

*Indicator: 2005-2009 average annual Washington State fatality rate.*

*Data Source: Census of Fatal Occupational Injuries (CFOI)*

<p><b>5 Yr Performance Goal 1-B</b></p>	<p>By 2010, reduce the rate of workplace injuries and illnesses in Washington workplaces by 20%.</p>																				
<p><b>Results: Goal met</b></p>	<p>For compensable claims rates, activity years 1999 – 2008:</p> <p>Over the 10 year period SHARP has been analyzing effectiveness of DOSH enforcement and consultation activity, aggregate data shows that in cases where DOSH conducted enforcement inspections, fixed industry employers' compensable claims rates decreased more than twice as much or 219% compared to employers DOSH did not inspect. Compensable claims rates for non-fixed industry employers inspected by DOSH decreased 170% more than employers DOSH did not inspect. Consultation data for non-fixed industry was found to be statistically significant and resulted in a nearly three times greater decrease or 293%, for employers who received a DOSH consultation visit compared to employers with no DOSH activity.</p> <table border="1" data-bbox="513 874 1466 1059"> <thead> <tr> <th rowspan="2">DOSH activity year vs. one-year after</th> <th colspan="3">Fixed-Site Industry</th> <th colspan="3">Non-Fixed Industry</th> </tr> <tr> <th>No DOSH</th> <th>Enf</th> <th>Cns</th> <th>No</th> <th>Enf</th> <th>Cns</th> </tr> </thead> <tbody> <tr> <td></td> <td>-3.6</td> <td>-7.9</td> <td>-6.4</td> <td>-4.4</td> <td>-7.5</td> <td>-12.9</td> </tr> </tbody> </table> <p>Note: Numbers in red are statistically significant at the p&lt;0.05 level.</p>	DOSH activity year vs. one-year after	Fixed-Site Industry			Non-Fixed Industry			No DOSH	Enf	Cns	No	Enf	Cns		-3.6	-7.9	-6.4	-4.4	-7.5	-12.9
DOSH activity year vs. one-year after	Fixed-Site Industry			Non-Fixed Industry																	
	No DOSH	Enf	Cns	No	Enf	Cns															
	-3.6	-7.9	-6.4	-4.4	-7.5	-12.9															
<p><b>Comment</b></p>	<p>The Department's Safety and Health Assessment and Research for Prevention (SHARP) study analyzing the change between the baseline and workers' compensation compensable claims rate and is used to measure the results for this goal.</p> <p>The inclusion criteria and dates for the most recent report were:</p> <ol style="list-style-type: none"> <li>1. Companies reporting hours each quarter during study period</li> <li>2. State Fund companies</li> <li>3. Companies with a single business location</li> <li>4. Companies with at least 10 FTEs per year during study period</li> <li>5. Companies with no DOSH activity during the two years prior to the year of the DOSH activity</li> </ol>																				

**Indicator:** Percent change between baseline and performance period in workers' compensation compensable claims rates (includes kept-on-salary claims) for target group as compared with change for overall group.  
**Data Source:** SHARP Program Report.

<p align="center"><b>5 Yr Performance Goal 1-C</b></p>	<p>Develop or continue at least two industry and hazard-based initiatives each year to provide additional attention to areas contributing to high fatality or high injury and illness rates, or emerging hazards.</p>
<p align="center"><b>Results: Goal exceeded</b></p>	<p>DOSH has provided additional attention to industries with high fatality, injury, and illness rates and emerging hazards. These emphasis areas include – warehousing, transportation, trucking, aging workforce, hospitalizations, burns, amputations, crane safety, heat related illness, fixed sites without inspections in the last five years, carbon monoxide and road construction.</p>
<p align="center"><b>Comment</b></p>	<p>While most of these initiatives resulted in identifying and ensuring that employers corrected workplace hazards, some produced information to help in honing our scheduled inspection process and providing consultation services. For example, from the warehouse and transportation initiatives, we learned there was a lower than average rate of serious violations cited since most reported injuries (or what precipitated the injuries) were ergonomic related issues, resulting primarily in citations for lack of an accident prevention program (APP). Additionally, it proved difficult to conduct inspections due the transient nature of the trucking industry. For both of these reasons, our focus in this industry shifted to consultation and outreach efforts.</p> <p>In FFY 2006 and 2007, DOSH adopted an emergency rule that required employers with outdoor jobsites to have a safety plan to protect workers from heat-related illness (HRI) during hot weather. Between June and September of 2006, DOSH inspectors and consultants documented 558 cases where employers addressed heat-stress issues. 215 HRI violations were cited during compliance inspections and 52 hazards were addressed in consultation visits. During June – October 2007, approximately 747 inspections were completed where HRI issues were addressed. HRI violations were cited in 82.7% of those inspections, resulting in 1,079 violations identified and penalties of \$10,970 assessed. Consultation conducted 298 visits emphasizing HRI, which resulted in 102 hazards being identified and addressed. On June 4, 2008, DOSH filed a permanent workplace rule to protect workers from outdoor heat exposure. The permanent rule took effect on July 5, 2008.</p> <p>On April 10, 2007, following a tragic crane-related accident in November 2006, the Washington State Legislature passed the most stringent crane safety bill in the nation, requiring L&amp;I to establish a crane safety program. Crane certifier and operator certification rules became effective January 1, 2010.</p>

## Fostering Workplace Safety

<b>5 Yr Performance Goal 2-A</b>	Greatly expand safety and health assistance tools for employers as evidenced by a 50% increase in online or downloadable employer assistance tools.
<b>Results: Goal Exceeded</b>	DOSH exceeded this goal during FFY 2006 and 2007. 336 safety and health assistance tools are available online, an increase of 95%.
<b>Comment</b>	<p>In 2007, the Department's Safety and Health Assessment and Research for Prevention (SHARP) program conducted a review and determined that seven most common work-related injuries accounted for approximately 90% of Washington's time-loss injury claims. DOSH's Education and Outreach Program developed prevention-based fact sheets for each injury type in each major industry group. Each one-page fact sheet covers a particular industry or construction trade, describes the injury and associated costs, the causes of the injury and ways to prevent the injuries from occurring.</p> <p>During FFY 2009 and 2010, DOSH focused on an increase of the number of safety presentations, outreach activities, and materials available in Spanish. See goal 2-1 on page 9 for more information.</p>

*Indicator: Tools are downloadable from website*

*Data Source: Education and Outreach program report.*

<b>5 Yr Performance Goal 2-B</b>	Provide significant incentives and resources to foster workplace safety and health by developing and implementing a program to encourage and fund safety and health investment projects.
<b>Results: Goal Met</b>	Since the program's inception, 97 applications have been received, with 41 grants approved and nearly \$5 million awarded.
<b>Comment</b>	This program implements a 2007 Washington State Legislature biennial budget proviso (\$8 million) requiring establishment by rule of a Safety and Health Investment Projects program under the statutory authority of Chapter 49.17 RCW. For additional information, see the appendix beginning on page 33 for a report on the SHIP program and grants awarded.

*Indicator: Written report produced of funded grants.*

*Data Source: SHIP Program report.*

<b>5 Yr Performance Goal 2-C</b>	Encourage voluntary efforts to improve occupational safety and health and expand worker protection systems by recognizing and encouraging positive models of successful employer programs, as evidenced by approval of at least ten additional VPP sites.
<b>Results: Goal Exceeded</b>	In reporting year FFY 2006, Washington approved nine VPP sites. In FFY 2007 and 2008, six were approved each year. FFY 2009, three were approved. In FFY 2010, four sites were approved for a total of 28 new sites since the goal was adopted.
<b>Comment</b>	<p>Additionally, during FFY 2009 and 2010, DOSH adopted a program at least as effective as the federal SHARP program (Safety and Health Achievement Recognition Program) as required by federal rule. DOSH addressed the federal mandate through adoption of the START program.</p> <p>In FFY 2010, DOSH approved the first START site for Cascades Sonoco.</p>

**Indicator:** Approval of employer's worksite for VPP recognition program.

**Data Source:** Voluntary Services Program report.

## Providing Good Outcomes

<p><b>5 Yr Performance Goal 3-A</b></p>	<p>Assure timely response in critical program areas defined in annual performance plan targets, including issuing results of onsite interventions, assuring correction of hazards, and investigating complaints of workplace safety and health related discrimination.</p>
<p><b>Results: Goal Exceeded</b></p>	<p>During the period covered by this strategic plan, DOSH achieved significant results in a number of areas. See details below.</p>
<p><b>Comment</b></p>	<p>Since FFY 1999, we have had a goal to significantly reduce hygiene citation lapse times. In FFY 2007, we implemented the final phase of WIN 2 system enhancements; this allowed us to issue citations directly from WIN (WISHA Information Network). In 2009, we not only met the lapse time goals for safety and hygiene but we reduced them to below the national average, and have maintained this level of production through FFY 2010.</p> <p>Consultants verified the correction of serious hazards within 14 days of abatement date for the previous 5 reporting years 97% of the time.</p> <p>Inspectors verified the correction of serious hazards within 14 days of the abatement date for the previous 5 reporting years 96% of the time.</p> <p>Washington's discrimination investigations are completed within the statutory 90 day period, 99% of the time.</p> <p>IN FFY 2010, all ATS e-mail notices for federal standards and program changes were completed and returned by the specified date.</p>

*Indicator: Response, abatement and case completion times are at or below target.*

*Data Source: L&I Data Warehouse and WISHA Information Network (WIN).*

<b>5 Yr Performance Goal 3-B</b>	Continue to make WISHA rules, correspondence, and other documents more accessible and understandable.
<b>Results: Goal Met</b>	The ability for all WIN users to review final citations electronically and print them directly from WIN was put into place in FFY 2008. FFY 2009 saw the implementation of the redesigned Citation and Notice package. DOSH has also integrated tools and methods to support safety and health information being more readily available and understandable.
<b>Comment</b>	DOSH has developed data on the usability of DOSH's workplace safety and health web pages and we are implementing changes to ensure visitors can find and understand the information they need in the time they are willing to spend to get it. <a href="http://www.lni.wa.gov/safety">http://www.lni.wa.gov/safety</a>

<b>5 Yr Performance Goal 3-C</b>	Improve DOSH's ability to analyze and measure delivery and outcome of services as evidenced by improved staff capabilities, data systems and performance management reports.
<b>Results: Goal Exceeded</b>	DOSH has developed, tested, and implemented automated quality assurance audit, performance monitoring and reporting tools. The reports were deployed for use in December 2010.  This goal also includes improvement of our inspection scheduling protocols. These changes were implemented in October 2010.
<b>Comment</b>	During the next year, we will assess effectiveness of the management reports, conduct user surveys, and identify any changes needed for further improvement.  We will also assess and complete a report on the effectiveness of inspection scheduling protocols by June 2012.

**Indicator:** Development of a written plan and proposed implementation schedule.

**Data Source:** Operations Program report

## **SPECIAL ACCOMPLISHMENTS**

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### **DOSH achieved all 2010 Performance Goals**

The Division of Occupational Safety and Health is very proud of a first time accomplishment – achieving or exceeding all annual performance goals.

As any other year, 2010 had challenges – the on-going state budget crisis, a devastating fatal explosion at an Anacortes refinery that killed 7 workers, 86 work-related traumatic fatalities. The year also included an organizational realignment, new staff, and sharpening of the agency's mission.

DOSH stayed focused on our primary purpose – ensuring workers go home at the end of the day safe and healthy. Through staff dedication and commitment, 9,896 inspections and consultations were conducted; construction crane safety rules were fully implemented; hygiene and safety lapse times have been maintained below the current national average; our first START company has been recognized; and most importantly, the Washington fatality rate remains well below the national average.

### **New Safety and health recognition program honors Lakewood business**

With fewer than 40 employees, Cascades Sonoco Inc. of Lakewood, Washington is a small business that is big on safety. Cascades Sonoco produces roll wrap for paper products. Its manufacturing processes include a die cutter and a slitting and rewinding machine.

Now, thanks to its culture of workplace safety, the company has become the first Washington state business to be recognized for safety and health under DOSH's new Safety through Achieving Recognition Together program, or START.

START is modeled on the federal Safety and Health Achievement Recognition Program (SHARP).

"The goal of this program is to showcase those businesses with excellent safety and health programs as a way of encouraging other companies to improve their safety efforts," said Lynda Stoneberg, DOSH's statewide consultation manager. "We hope that businesses who earn START certification will be willing to mentor companies struggling with their safety challenges."

"Over the past few years, we have put a lot of effort into our safety and health program," plant manager Thomas Parentaeu said. "It's really paid off. Our work culture is safety oriented and it has had a tremendous impact on employees."

## **DOSH completes inspections of state petroleum refineries and cites BP Cherry Point for 13 serious safety violations**

The Department of Labor and Industries, on May 5, 2010, cited the petroleum refinery BP Cherry Point for 13 serious safety violations discovered during an inspection that began in November 2009. The violations carry a combined penalty of \$69,200.

BP Cherry Point, near Blaine, Washington, is the largest petroleum refinery in Washington, producing 225,000 barrels of crude oil per day.

The inspection focused on the hydrocracker process unit, the refinery's largest process unit, which refines low-grade oil into gasoline. Twelve of the violations involve regulations governing the management of highly hazardous chemicals, which are part of the Process Safety Management Standard (PSM). One of the violations involves a failure to provide proper machine guarding.

The 12 PSM problems included failure to routinely inspect or maintain safety control devices, such as pressure safety valves; inaccurate or outdated instrument diagrams; and, failure to record whether identified safety hazards were corrected. One violation noted that there were 38 instances of safety recommendations for which there was no record they were ever implemented.

"The safety violations our inspectors uncovered at BP were problems similar to those we've uncovered in all of the refineries we have inspected in Washington," said Dr. Michael Silverstein, Assistant Director for L&I's Division of Occupational Safety and Health. "Petroleum refineries are inherently risky work environments, and following the safety regulations is the key to preventing explosions and other life-threatening events."

The inspection was part of the National Emphasis Program (NEP) begun in 2007 by the federal Occupational Safety and Health Administration to inspect the nation's petroleum refineries. The NEP followed several events in the refinery industry, including the 2005 explosion at a BP America refinery in Texas that killed 15 people and injured 170 others.

L&I has now inspected all five refineries in the state:

- U.S. Oil and Refinery in Tacoma – 20 violations cited and \$18,200 penalties assessed
- Shell Oil Equilon in Anacortes – 26 violations cited and \$109,600 penalties assessed
- Tesoro in Anacortes – 17 violations cited and \$85,700 penalties assessed
- Conoco Phillips in Ferndale, which volunteered for a consultation visit prior to the start of the National Emphasis Program – 29 serious hazards identified
- BP Cherry Point near Blaine – 13 violations cited and \$69,200 penalties assessed

Under the NEP, DOSH inspected Tesoro in 2009, citing the company for 17 serious PSM violations, with penalties totaling \$85,700. DOSH reached a settlement of that case with Tesoro in November 2009 that required them to: correct hazards identified in the DOSH inspection; hire a third-party consultant to do an independent process-safety audit; and, outline methods to correct safety issues identified by the audit. However, on April 2, 2010, an explosion that ultimately killed seven workers occurred at the Tesoro refinery.

## **Significant Inspections**

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### **L&I issues record fine in deadly Tesoro explosion**

In October 2010, DOSH announced it cited Tesoro for 39 willful violations and 5 serious violations of state workplace safety and health regulations, fining the company \$2.39 million. While no amount of money can reflect the value of a person's life, this is the largest fine in the agency's history. The citation and resulting penalty followed a six-month investigation, which concluded that the deadly explosion at the Tesoro petroleum refinery in Anacortes, Washington could have been prevented.

A heat exchanger at the refinery ruptured around 12:30 am, April 2, 2010, releasing hydrocarbon vapor, which almost immediately ignited. Seven workers, five men and two women died as a result. It was the worst industrial disaster in the 37 years since the Washington Industrial Safety and Health Act was passed in 1973.

"The loss of seven lives is a tragedy not just for their loved ones but for our entire state. What makes the loss of these lives all the more painful is that these deaths could have been prevented," Governor Chris Gregoire said. "I believe the action and the record fine DOSH has assessed against Tesoro sends a clear message that these tragedies are not acceptable."

L&I inspectors found that Tesoro disregarded a host of workplace safety regulations, continued to operate failing equipment for years, postponed maintenance, inadequately tested for potentially catastrophic damage and failed to adequately protect their workers from significant risk of injury and death.

"This explosion and the deaths of these men and women would never have occurred had Tesoro tested their equipment in a manner consistent with standard industry practices, their own policies, and state regulations," said L&I Director Judy Schurke.

L&I inspectors found the explosion occurred in the plant's naphtha hydrotreater unit, an area that includes two banks of heat exchangers. Naphtha is a flammable, oily substance produced as part of the refining process. The naphtha flows through the heat exchangers, cylinders

approximately 30 feet long, on its way for further processing. One of these heat exchangers split violently on April 2nd.

The blast came as workers were returning a bank of heat exchangers into service after it had been shut down for maintenance. As part of the investigation, the heat exchangers were sent to a laboratory in Ohio and dismantled for metallurgical testing. Tests revealed cracks had developed in many of the welds in the heat exchanger that exploded, and in at least one other similar heat exchanger. These heat exchangers were nearly 40 years old, and the cracks likely developed over the years. In addition, they were subjected to extreme heat and pressure, wide temperature and pressure swings, extensive chemical exposure and a near doubling of production over the years. These are all stresses that can damage this equipment, including causing cracking. Despite this, Tesoro failed to test the heat exchangers in a way that would have revealed such cracks.

“If Tesoro had tested their equipment appropriately and had followed their other safety requirements, we believe that they would have found the cracks that caused this explosion, and either by replacing the equipment or repairing it, prevented this from happening,” said Dr. Michael Silverstein, DOSH Assistant Director.

The equipment also leaked hot, volatile, and flammable vapor and liquid from flanges and other connections for years, especially when starting up following a shutdown. Tesoro’s repair efforts, including clamps, were ineffective and when they could not correct the problem, workers had to disperse the flammable vapors with long tubes called “steam lances” in an effort to prevent ignition. Employees did this work in hard hats, gloves, goggles and basic flame-resistant coveralls, which was inadequate protection for the hazards they faced.

Tesoro’s lengthy list of willful violations include failing to inspect equipment consistent with recognized engineering practices and industry standards; failing to test for cracks and other defects in equipment prone to damage from thermal fatigue, and chemical exposure; and, failing to implement its own corrosion awareness and management program.

Other willful violations were cited because Tesoro also failed to repair equipment, as with the leaks on the heat exchangers; did not have start-up procedures for the heat exchangers that clearly described the hazards workers would face; and, failed to ensure workers involved in starting up the heat exchangers were properly trained.

Among the serious violations, Tesoro was cited for failing to ensure fire brigade members were properly trained and failing to ensure a single incident commander coordinated emergency communications.

Tesoro filed an appeal of the citation and DOSH reassumed jurisdiction. Results of the appeal are pending at this time.

**REC Silicon in Moses Lake Cited for safety violations; penalties total \$57,000**

On March 30, 2010, DOSH issued a citation for 14 workplace safety violations carrying penalties totaling \$57,000 to REC Silicon in Moses Lake, which produces semiconductors and related devices.

DOSH industrial hygiene and safety inspectors spent 15 days at the Moses Lake site between September and November, 2009. The inspection included several on-site evaluations; interviews with managers, employees and technical workers; and a review of documents and records. Ultimately, the inspectors found 10 serious violations and 4 general violations at REC Silicon.

“REC Silicon had made meaningful progress over the past few years in improving safety at this site. However, important work remains to be done if employees are to be fully protected from significant hazards associated with the chemical process,” said Dr. Michael Silverstein, DOSH Assistant Director. “The company was very cooperative during our inspection and we expect that cooperation will continue.”

The inspection of REC Silicon was part of a national effort by federal and state safety and health agencies to inspect workplaces that have the potential to release highly hazardous chemicals. At the REC Silicon facility in Moses Lake, the chemicals in use include hydrogen, which is an explosive gas, and silane, which can ignite upon contact with air.

DOSH inspectors noted that the company has taken measures to mitigate the risks of working with these materials, including creating a process safety management team, but their efforts have not yet been enough to come into compliance with safety regulations.

Among the violations inspectors found were:

- Failure to inspect and test the mechanical integrity of valves and other critical instruments on production equipment in a manner consistent with good engineering practices or the manufacturer’s recommendations.
- A pressure-relief valve that did not vent to a safe location away from workers.
- Inadequately maintained respirators.
- A lack of documented follow-up on safety incidents or Management of Change procedures, which are written plans for handling modifications to machinery making up the production process.
- A lack of written protocols directing workers on how raise safety issues with managers.

## **Safe Workplace Initiatives**

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### **Construction Crane Safety**

L&I adopted new Construction Crane Rules with support of the crane and construction industries. Effective January 1, 2010, all cranes used in construction are required to be certified by an accredited third party crane certifier, and crane operators must be certified for the type of crane(s) they operate.

According to the National Commission for the Certification of Crane Operators, approximately 2,000 crane operators in Washington have successfully completed their certification. DOSH has certified about 50 third party crane certifiers across the state to inspect cranes. The crane inspection process can take a few hours or more than a week, depending on the complexity of the crane.

### **Safety and health calendar features real Washington workers, businesses**

The DOSH 2011 workplace calendar, "Keep Washington Safe and Working," features real workers in real jobs across Washington State, from tulip fields in Skagit Valley to a vineyard in Pasco.

"We want employers to see real-world examples of Washington businesses handling typical workplace hazards effectively and in a way that any company can replicate," said Bruce Zellar, Education and Outreach Services manager for DOSH.

Some safety and health issues addressed in the calendar include workplace violence, fall protection, flagging, blood borne pathogens, respirator use, and outdoor heat exposure. The 2011 calendar also offers suggested topics for the safety and health meetings that businesses are required to hold with employees.

Several businesses across the state assisted in making this year's calendar possible by allowing L&I to photograph workers on the job, including: Providence St. Peter Hospital, Gordon Brothers Family Vineyards, Tenaska Operations, Washington Bulb Farm, New Market Skills Center, Washington State Patrol Fire Protection Bureau, Absolute Solutions Roofing, Trident Seafoods, Pierce County Public Works, TMX Areospace, Village Market, and Nucor Steel. DOSH appreciates the willingness of these businesses to help promote workplace safety and health efforts.

### **DOSH recognizes two businesses for workplace safety**

Michael Silverstein, DOSH Assistant Director presented a VPP flag and certificate to Simmons Manufacturing Company – a mattress maker; and, Hampton Lumber – a mill consisting of a log yard, saw mill, kilns, a planer, shipping area and a co-generation plant. Both companies have been designated as STAR sites, signifying they have achieved the highest VPP level.

“At DOSH, we work hard to encourage businesses to improve workplace safety and health, and VPP is one way we do this,” Dr. Silverstein said. “The safety program at the Simmons plant demonstrates that when management and employees work together, they can develop an effective safety and health program that benefits everyone.” Dr. Silverstein acknowledged that “Lumber mills have many hazards, including heavy equipment and machinery, which makes it all the more impressive that the Hampton Lumber Mill was able to earn this safety award. The company has clearly demonstrated that injuries can be prevented if managers and employees work together and dedicate themselves to the mission of workplace safety.”

### **Teen-safety speakers: A powerful experience for high school students**

Statistics show that young workers are more likely to be injured on the job than adults are. Parents and young workers tend to assume that working is safe. Even jobs in restaurants and retail operations have potentially serious hazards, such as cuts, burns, and falls.

To raise awareness among teens that safety is never a given, DOSH, in collaboration with L&I's Public Affairs office, puts on a popular “Injured Young Workers Speakers Program.” The program brings speakers who were severely injured on the job as young workers to high schools around the state. A compelling video precedes each presentation to students, showing graphic reenactments of actual workplace accidents involving teens.

Since it began in June 2008, nearly 3,000 students in all parts of the state have heard the presentations and have a new appreciation for workplace safety. In 2008, presentations were made in five schools; in 2009, at 24 schools; in 2010, nearly 3,000 students at 35 venues statewide heard the presentation. The goal is to reach 50 schools in 2011.

Before-and-after questionnaires and evaluations completed by students and staff at each event showed a significant boost in work-hazard awareness after the presentations. Out of 1,100 completed questionnaires in 2009, 70% of the teens said their awareness of safety issues was raised “significantly” because of the presentation.

## **Hispanic Outreach**

Hispanic workers are injured and killed on the job at greater rates than non-Hispanic workers. In Washington State, Hispanic workers represent 9.8% of the population<sup>1</sup> but 11.8% of serious workplace injuries<sup>2</sup>, and 12.0% of fatalities<sup>3</sup>. Hispanic worker fatality rates are even more alarming in the high hazard industries of agriculture (34.4%), and construction (13.4%)<sup>4</sup>.

Many workers are afraid to ask for training or protective equipment, or report a hazard for fear they will lose their job. DOSH has placed additional emphasis on protecting Hispanic workers through four direct service programs so that language is not a barrier to workplace safety.

### Discrimination Investigation Program

Several years ago, DOSH hired its first bilingual WISHA discrimination investigator. Since that time and as a direct result of participating in ongoing public outreach to the Hispanic community, combined with the completion of several high profile investigations, the percentage of discrimination investigations requiring a Spanish-speaking investigator has more than doubled. These investigations routinely consist of multiple complainants, resulting in more complex and time-consuming investigations compared to other cases that nearly always have a single complainant. The bilingual investigator has increased the rate of merit findings for cases with Spanish speaking complainants from an average of 5% to approximately 49%.

### Compliance and Consultation Programs

DOSH inspectors and consultants play a key role in helping to keep Hispanic workers safe. They elicit the participation of Hispanic workers in finding serious hazards and ensuring they are fixed. Many DOSH inspectors have developed skills to interview and understand Hispanic workers during incident investigations and workplace inspections. Consultants are honing skills required to educate and train workers in hazard recognition and safety plan awareness. They are learning to define subtle nuances in word definitions between languages to effectively evaluate worker understanding and comprehension.

### Education and Outreach Program

DOSH outreach staff provide safety and health services specifically tailored to the Hispanic workforce and culture to help them become more knowledgeable about how to recognize and control occupational hazards. Outreach staff also work in collaboration with the Mexican Consulate, attend community events, and hold monthly safety and health broadcasts on Hispanic radio stations.

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<sup>1</sup> Source: 2008 U.S. Census Bureau, 2008 American Community Survey

<sup>2</sup> Bureau of Labor Statistics, U.S. Department of Labor

<sup>3</sup> Census of Fatal Occupational Injuries, 2004-2008 5 year average

<sup>4</sup> Washington FACE, incident dates 1998-2002

## WISHA Information Network (WIN) Updates

In March 2010, DOSH added a new 'Inspection Summary' document to WIN. The Inspection Summary streamlined the supervisor approval process and resulted in time and material savings. Inspectors no longer have to print a lengthy 'Case File Details' document, which averages seven to ten pages. Instead, they print the new Inspection Summary document, which averages only two pages. The reviewer knows at a glance what violations and total penalties are assessed without having to read non-critical information beforehand.

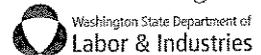
In December 2010, the first of the new WIN Statistical Reports went into production. These reports will allow regional supervisors and managers to monitor the results of their staff's activities, including progress toward meeting goals established with OSHA. The reports allow a variety of data selection, filter, and grouping choices, providing users with control over the data they wish to view.

Following the December 2010 release, the WIN system was frozen so all resources may be dedicated to developing, testing, and implementing a new direct data exchange with the OSHA Information System.

REPORT ON STATUS OF THE  
SAFETY AND HEALTH  
INVESTMENT PROJECTS  
(SHIP)

October 2010

Prepared by the Division of Occupational Safety and Health  
Department of Labor and Industries  
State of Washington



# Safety and Health Investment Projects (SHIP)

## Background and Startup

The Safety and Health Investment Projects (SHIP) program was authorized by the 2007 Legislature with a budget proviso for \$8 million "... provided that projects funded involve workplaces insured by the medical aid fund, and that priority is given to projects fostering accident prevention through cooperation between employers and employees or their representatives."

Following legislative authorization in 2007, L&I adopted rules (WAC 296-900-175) to govern operation of the program. An advisory committee whose members represent business, labor, and safety and health expertise was created to ensure that a balanced review of submitted grant proposals takes place. The SHIP Advisory Committee's (SAC) role is to evaluate grant proposals and make recommendations on funding priorities and projects that merit grant funding.

*"...provided that projects funded involve workplaces insured by the medical aid fund, and that priority is given to projects fostering accident prevention through cooperation between employers and employees or their representatives."*

SHIP grants are intended to reduce workplace injuries and illnesses by leveraging industry knowledge and experience to create products that can be used by employers and employees statewide. The first grant proposals were received in March 2008. Forty-one SHIP grants have been funded to date.

Twenty seven grants were approved and funded during the 2007-2009 biennium. Long-term impacts will not be available from these grants for several years; however, meaningful short-term successes have been recognized. **Attachment 1** to this report provides a summary of these grant projects and describes the products arising from them.

For the 2009-2011 biennium 14 additional grants were funded. Outcomes and products produced from these projects are not yet available. **Attachment 2** describes these current grants and the products and outcomes that are expected to result from them.

## Early Results and Successes

A grant to the **Washington Food Industry (WFI)** resulted in the development of a web-based safety training program for grocery stores and their employees. WFI reported that member businesses participating in the webinar training increased by 40% compared to other training programs they provided. They also reported that the businesses participating in this training incurred 14% fewer injuries following the training when compared to the same period for the previous year.

**TOC Management Services** used a SHIP grant to develop and deliver a safety leadership training program to 24 participating member companies. The training was delivered in three parts to supervisors, foremen, and mid-level managers. The grantee reported that they met their goal of a 10% reduction in workplace injuries for employers adopting the program.

*“... I appreciate this form of education for owners and employees. The “culture of safety” and this kind of presentation should be implemented more. Encouraging education is much more effective.”*  
*Participant from a SHIP-funded NICA grant workshop*

A grant to the **University of Washington** in collaboration with the **Governor’s Industrial Safety and Health Advisory Board** provided safety and health training materials for teens. The project resulted in the completion and implementation of the nationally accepted OSHA-11 training program. Young workers completing this training receive nationally recognized safety training certification from the federal Occupational Safety and Health Administration (OSHA).

Pro-Safety training materials created through a SHIP grant to the **Washington Restaurant Association Education Foundation** were integrated into an existing Pro-Start training program used in Washington high schools. Pro-Start is a training program that prepares young workers for restaurant jobs. Pro-Safety adds workplace safety training and educates young workers on the occupational safety and health hazards present in the restaurant industry. It includes instruction about hazards common to restaurant work and teaches young workers how to work safely. The Pro-Safety module was implemented successfully in participating Washington schools. It was also featured in a national publication; the training program was adopted by the State of Texas, and is now a pilot program of the National Restaurant Association.

Tractor accidents cause almost one-third of farm deaths.<sup>5</sup> A comprehensive farm tractor and power take off (PTO) safety training video was developed by **InstructoVision and the Governor's Industrial Safety and Health Advisory Board**, with help from the Washington State Farm Bureau and the John Deere tractor manufacturer. The video is available in both English and Spanish and teaches safe operation of farm tractors and PTO-powered equipment.

A grant to the **University of Washington** supported a partnership among higher education, business, and labor unions to produce a video, workbook, and poster to help employers and

*The first video on farm workers pesticide safety education produced in English, Spanish, and Mixteco was picked up by the EPA and will be distributed nationally. The same project has raised the awareness of pesticides and provided training to over 3000 local farm workers.*

workers reduce the hazards associated with welding on stainless steel – particularly the hazards associated with hexavalent chromium fumes. These grant-produced materials gained wide distribution and use in Washington. They are also used by OSHA at the federal level, and several requests for the products have come from outside Washington.

Protecting **vulnerable workers** was also a highlight of the first round of SHIP grants.

- 15% of these grants developed training materials for young people going to work for the first time, especially in construction trades or in restaurants. Teaching young workers how to work safely is an area of great need, according to studies by the University of Washington.<sup>6</sup>

Grantees initially report that more than 4,000 young people were trained on workplace safety, 49 teachers were trained as classroom safety instructors, and 30 restaurant supervisors were trained as workplace safety instructors for young workers.

- Another 15% of grant projects addressed specific needs of workers with limited or no proficiency with the English language. These grants developed training materials, videos, workbooks or other materials in Spanish, as well as English. One grant that focused on workplace safety and health for small residential contractors included Russian language materials along with the English and Spanish versions in their grant products. Industry focus of these grants providing multi-lingual products was construction and agriculture – both high hazard industries.

<sup>5</sup> Tractor-related fatalities accounted for 24 (31%) of farm fatalities in Washington from 1998-2008 ("Agriculture Fatalities in Washington State 1998-2008" Report: 47-18-2009, Washington State Fatality Assessment and Control Evaluation (FACE), June 29, 2009).

<sup>6</sup> According to the University of Washington Health and Safety Awareness for Working Teens website, between 2000 and 2006, 11,125 teens (11-17 years old) reported a workplace injury to L&I. Of those, 93 percent were 16 -17 years old (www.uwworksafes.com).

## Program Administration and Budget

Grant applications are screened for eligibility and completeness when received in the SHIP program. Applications deemed not to be eligible are rejected with a written explanation of the reasons for the rejection. Incomplete applications are returned with an explanation of what must be completed in order to be considered for full review.

Applications meeting the inclusion criteria are forwarded to the SHIP Advisory Committee for their review, evaluation, and funding recommendations. Committee members meet and discuss proposals using an application review checklist and uniform scoring process to evaluate the merits of grant proposals. The committee's recommendations and comments are

*SHIP funds enabled the most comprehensive safety program on Farm Tractors (DVD). The program has been picked up by every public school in Washington State with an Agriculture program. Manufacturing companies have seen that the program has been distributed to every state in the U.S.*

forwarded to the Assistant Director for the Division of Occupational Safety and Health, who makes the final funding decisions. All applicants are notified in writing of the decisions concerning their proposals.

In 2008 the new grant program requested an audit of its program operations by L&I internal auditors. They found that appropriate and adequate program controls and procedures were in place. In 2009 the grant program was audited by the State Auditor's Office (SAO). This audit resulted in no findings and SHIP received high praise for the controls that are in place. The SAO auditor made several recommendations that were adopted to further strengthen the program. An informal review of the

SHIP grant program by representatives from the Office of Financial Management resulted in them referring other agencies to the SHIP grant program as a model for operating similar sized grant activities.

The SHIP program was launched with an \$8 million budget proviso for the 2007 – 2009 biennium. By the end of the biennium \$3,934,531 had been spent to fund grants and support program start-up and administration. The remaining \$4,065,469 was provided to continue the program for the 2009 – 2011 biennium. For the current biennium \$1,658,567 has been awarded to 14 grantees. Administrative costs projected from program initiation through the current biennium (four years) are \$1,247,452. Approximately \$1,783,176 is projected to be unspent by the end of the biennium.

## Future Opportunities

The first two grant cycles were successful in producing a variety of useful products, programs, and training materials to help make Washington workplaces safer. While initial successes were meaningful, we believe there are opportunities to have an even greater impact on workplace safety and health. The SHIP Program asked its advisory committee to provide feedback about this early experience and how to build upon the early successes. Suggestions from the advisory committee along with feedback provided by grantees, and lessons learned by program staff have been used to develop plans for future funding initiatives and administrative improvements. These potential program enhancements include:

Capacity building grants: SHIP grants to date, even the most successful, concentrated on

*Mission: To fund and support the development of knowledge and tools to enhance the occupational safety and health of Washington workplaces and keep Washington workers safe and working.*

creating specific products such as videos or training materials. A few, however, have focused on leadership development or other means of building organizational capacity to find and fix workplace hazards on a continuing basis. A future initiative could build on these efforts to assist businesses, trade associations, and labor organizations in developing organizational strategies and resources that last beyond the grant period. In this way, the SHIP program grants can more effectively be investments in long-term workplace safety and health.

High hazard grants: High hazard grants would be a data driven initiative to solicit proposals focused on selected high priority safety and health hazards, such as practices that prevent trenching fatalities and injuries. L&I's Division of Occupational Safety and Health (DOSH) is currently working with the WISHA Advisory Committee to use workers compensation claims data to identify specific industries, occupations, and work processes that need priority attention. The SHIP program believes it can also direct investments to these areas.

Small business grants: We want to make grants more accessible to small business to address the specific safety and health challenges faced by these small businesses. Small businesses typically have limited resources to devote to developing workplace safety strategies. We would work with and through organizations that represent and support small business to reach this often-underserved group.

**Attachment 1**  
**SHIP Grants (2008-2009 grant cycle)**

<b>Grantee (\$3,414,757)</b>	<b>Grant Title</b>	<b>Purpose</b>	<b>Products</b>
City of Raymond (\$8,839)	Ergonomically Safe Workstations	Reduce/prevent symptoms of MSDs	Report Case study
Columbia Basin Health Assn (\$319,573)	Pesticide Safety Education Program For Seasonal Agricultural Field Workers	Prevent pesticide exposure to workers and their family members.	Report Training materials Video (English, Spanish, Mixteco)
Evergreen Safety Council/Northwest Laborers-Employers Training Trust (\$120,708)	Work Zone Flagger Safety Video	Training video using WA work zone safety rules	Report Video
Humanix Staffing (\$40,544)	Educating Manufacturing Companies On Safety Training Material And Communication Tools For Their Temporary Employees	Training for companies using temporary labor	Report "Best practices" guide
Inland Northwest Health Services (\$87,958)	Participatory Ergonomics To Prevent Musculoskeletal Disorders In The Grocery Industry	Design, test, and implement a participatory ergonomics process	Report Ergonomics process plan
Integrity Safety Services (\$80,371)	Stretch & Flex: A Multimedia Intervention To Reduce Work-Related Musculoskeletal Injuries In The Construction Industry	Provide the construction industry a tool to reduce MSDs and soft tissue injuries	Report Video Poster Card
Labor Neighbor Radio (\$359,172)	Conduct Year-Long Series Of Workplace Safety And Health Messages To Radio Audiences Across WA	Decrease the frequency of workplace accidents	Report Scripts and audio clips
Northwest Independent Contractors Assn (\$246,630)	Small Business Residential Construction Safety Seminars	Reduce workplace injuries for small contractors with fewer than nine employees	Report Training curriculum Power Point presentations
Painting and Decorating Contractors of America	Painters Safety Fair	Promote safety education	Report

<b>Grantee (\$3,414,757)</b>	<b>Grant Title</b>	<b>Purpose</b>	<b>Products</b>
(\$3,291)			
Pregis Corp (\$7,986)	Panel Production Line, Ergonomics Improvement	Apply engineering controls to specific materials handling process to reduce risks of MSDs	Report Case study
Roofing Contractors Association of Washington (\$70,500)	RCAW Roofing Safety Training And Technology Expo	Prevent workplace injuries and illnesses in the roofing industry	Report Model event guidelines
InstructoVision/GISHAB (\$54,164)	Reduce The Dangers By Educating The Agriculture Community On The Safe Operating Procedures Of Farm Tractors And PTO's	Reduce preventable accidents involving farm tractors and PTS's	Report Video (English and Spanish) Workbook, print materials
Sakuma Brothers Farms Inc (\$8,400)	Dealing With Sudden Cardiac Arrest In The Rural Workplace	Prepare for dealing with sudden cardiac arrest in rural workplaces	Report
Service Employees International Union 1199 NW (\$72,876)	Safe Patient Handling Best Practices Guidelines: Development And Dissemination	Identify, document, implement, and test evidence-based best practices in safe patient handling in WA hospitals, long-term care, and other health care facilities	Report Best practices guide Web-based clearinghouse
SMART Assn (\$143,641)	Personal Protective Equipment, It's Personal! Equipo de Proteccion Personal, Es Personal!	Train multi-lingual construction workers on the use, care and maintenance of their protective equipment	Report Training curriculum and materials (English and Spanish)
South Seattle CC/Washington Safety and Health Training Institute (\$140,658)	WASHTI – Improving Outreach And Safety & Health Training To Reduce Injuries And Fatalities And Loser Costs By Providing Data-Driven Training	Reduce injuries in masonry and ironworker trades	Report Training curriculum
Spokane Public Schools (\$349,690)	LeaderSHIP in Safety	Develop a culture of safety among secondary students who plan to enter the construction or manufacturing industries	Report Event planning guides "LeaderSHIP in Safety" tool kits
Tacoma-Pierce County Employment & Training	Youth Construction Incident Prevention	Prevent workplace injuries amongst young workers entering the	Report Training curriculum

<b>Grantee (\$3,414,757)</b>	<b>Grant Title</b>	<b>Purpose</b>	<b>Products</b>
Consortium/Pierce County Construction Partnership (\$74,933)		construction industry	
TOC Management Services (\$93,336)	Creating An Active Safety Leadership Environment (CASLE)	Prevent workplace injuries through stronger safety culture in the workplace	Report
U of W (\$226,080)	Designing The Age Friendly Workplace: A Train-The-Trainer Project	Prevent workplace injuries through creating age friendly workplaces	Report Training curriculum Workbooks and trainer guides Power Point presentations
U of W/Governor's Industrial Safety and Health Advisory Board (\$164,451)	Young Worker Safety And Health Curriculum Development And Dissemination	Provide OSH training materials for skill centers and other training venues	Report Training curriculum
U of W/ Camano Island Fire & Rescue, Snohomish Co Fire Dist. 7, Snohomish Co Fire Dist. 1, City of Yakima Fire Dept, Global Diving & Salvage Inc (\$118,482)	Best Practices In Production, Sampling, And Testing Of Breathing Air	Identify and publish best practices for production and sampling of breathing air	Report Best practices guide
U of W/Sheet Metal Associated Contractors of North America, Puget Sound Shipbuilders Assn, Local 66 of Sheet Metal Workers International Assn JATC, Local 104 of the International Brotherhood of Boilermakers, Iron Workers Local 86 (\$158,203)	Hexavalent Chromium Exposure Controls: Best Practices For Welders Video Training Package Development And Dissemination	Develop best practices training for welders on the use of local exhaust ventilation systems and other controls to reduce CrVI exposures.	Report Video Workbook Poster Information card

<b>Grantee (\$3,414,757)</b>	<b>Grant Title</b>	<b>Purpose</b>	<b>Products</b>
U of W/Snohomish Co Fire Dist. 1 Medic Unit (\$256,491)	MRSA And Fire Station Personnel	Develop and distribute best practices and training for fire station personnel to reduce exposures to MRSA arising from their work activities.	Report Best practices disinfection protocols Training curriculum Posters Web-based information
Washington Food Industry (\$10,225)	Grocery Industry Workplace Safety Webinar Series And Downloadable Web Library	Reduce injuries in the grocery industry through development and availability of on-demand, readily available training	Report Web-based training modules – viewable on-line or down loadable
Washington Restaurant Assn (\$141,947)	ProStart's ProSafety: A Curriculum For Improving The Safety Of Today's And Tomorrow's Restaurant Professionals	Reduce the frequency of occupational injuries incurred by young restaurant workers	Report ProSafety curriculum Instructor guides
WA Potato Commission (\$55,338)	Washington Potato Industry Worker Health & Safety Training	Reduce workplace injuries and illnesses through comprehensive worker health & safety training	Report Training materials Workbook (English and Spanish)

**Attachment 2**  
**SHIP Grants (2009-2010 grant cycle)**

<b>Grantee (\$1,705,426)</b>	<b>Grant Title</b>	<b>Purpose</b>	<b>Products (Proposed)*</b>
Build It Smart (87,241)	Broadening the Safety Alliance: Safety and Health Leadership Training for Midlevel Personnel in the construction Industry	Develop an evidence-based leadership training curriculum based on current best practices in the construction industry.	Training curriculum and related materials
Eastern Washington University (\$188,610)	Vertically Integrated Participatory Resources (VIPER) for Prevention of Musculoskeletal Disorders in Grocery Workers and Grocery Warehouse Employees	Extend participatory ergonomics approach vertically in the grocery supply chain to reduce musculoskeletal disorder exposures.	Training media and materials
Grace Community Church (\$17,855)	South King County Latino Family Health and Safety Fair	Develop and offer culturally and linguistically appropriate safety and health information through workshops aimed at workers and their families.	Workshops and related materials
InstructoVision (\$78,412)	Safe Practices During Logging Operations	Develop video training to address the three most dangerous parts of traditional logging operations – cutting, landing operations, and rigging.	DVD
Labor Neighbor Radio (\$250,000)	SHIP Radio Safety Campaign	Air hazard-specific announcements in strategic markets throughout Washington State.	Scripts and recorded radio spots
Roofing Contractors Association of Washington (\$70,500)	RCAW Roofing Safety and Technology Expo	Build workplace safety and health awareness through targeted safety and health workshops and related roofing technology seminars.	Model for other construction crafts to hold similar events
SMART Association (\$167,483)	“CHAPP” Construction Hispanic Action Protection Plan el CHAPP! A communication toolbox for contractors	Create a bi-lingual English/Spanish handbook of commonly used phrases used in construction safety and health	Handbook Classroom materials

<b>Grantee (\$1,705,426)</b>	<b>Grant Title</b>	<b>Purpose</b>	<b>Products (Proposed)*</b>
	of Spanish/English construction safety phrases related to on site hazards and related risks	to help communicate effectively between English and Spanish speakers.	
Tacoma Goodwill Industries (\$69,982)	Occupational Health and Safety Workplace Safety Training for Employees with Cognitive Impairments	Reduce risks to cognitively impaired workers through training modules customized to their learning capabilities.	Training modules for cognitively impaired workers
UFCW Local 21 (\$154,759) Industry Partners: PCC, Red Apple Markets, Town & Country Markets	Supermarket Deli Worker Safety Project (DWS)	<b>Phase I:</b> Identify the hazards, applicable codes and requirements, available training resources. <b>Phase II:</b> Produce training curriculum, video, train trainers and conduct training.	Training curriculum Video
University of Washington in collaboration with the Washington Wine Industry Foundation (\$113,109)	Development of a Health and Safety Manual for Washington Wineries	Develop a best practices health and safety manual for the Washington wine making industry to improve awareness of health and safety hazards in this industry and identify specific hazard control solutions targeted for this industry.	Health and safety manual
University of Washington in collaboration with Seattle Iron & Metals Corporation and Teamsters Local Union 117 (\$249,964)	Development of an effective labor/management health and safety committee in a dual-lingual, high hazard industry	Develop a model joint labor/management health and safety committee to address risks in a high hazard, dual-lingual (English/Spanish) work setting.	Model for dual-lingual committee
Washington Business Week (\$99,237)	CHRASH!! A Game That Heightens Awareness of Prevention & Risk in the Workplace	Provide education to teens and adults aimed at preventing workplace injuries and illnesses.	Learning tool Educational materials Resource website
Washington State Conference of Mason	New Employee Safety Orientation Interactive Training Series	Use an interactive safety orientation training series geared to workers new	Training materials in English and Spanish

<b>Grantee (\$1,705,426)</b>	<b>Grant Title</b>	<b>Purpose</b>	<b>Products (Proposed)*</b>
Contractors (\$37,854)		to the masonry construction industry to teach workers safe work habits.	
Washington State University (\$73,561)	Protecting Nurses as a Valuable Resource	Educate nurses and student nurses about common work-related hazards in order to reduce work-related injuries and illnesses.	On-line continuing education Palm card for reference Video Safe patient handling guidelines

\*These grant projects are still working, and products are not yet available.