

# The Effect of Compliance Activities on Workers Compensation Claims Rates in Washington State

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**SHARP** | Safety & Health Assessment  
& Research for Prevention

Promoting Safer, Healthier Workplaces



**Washington State Department of Labor and Industries, USA**

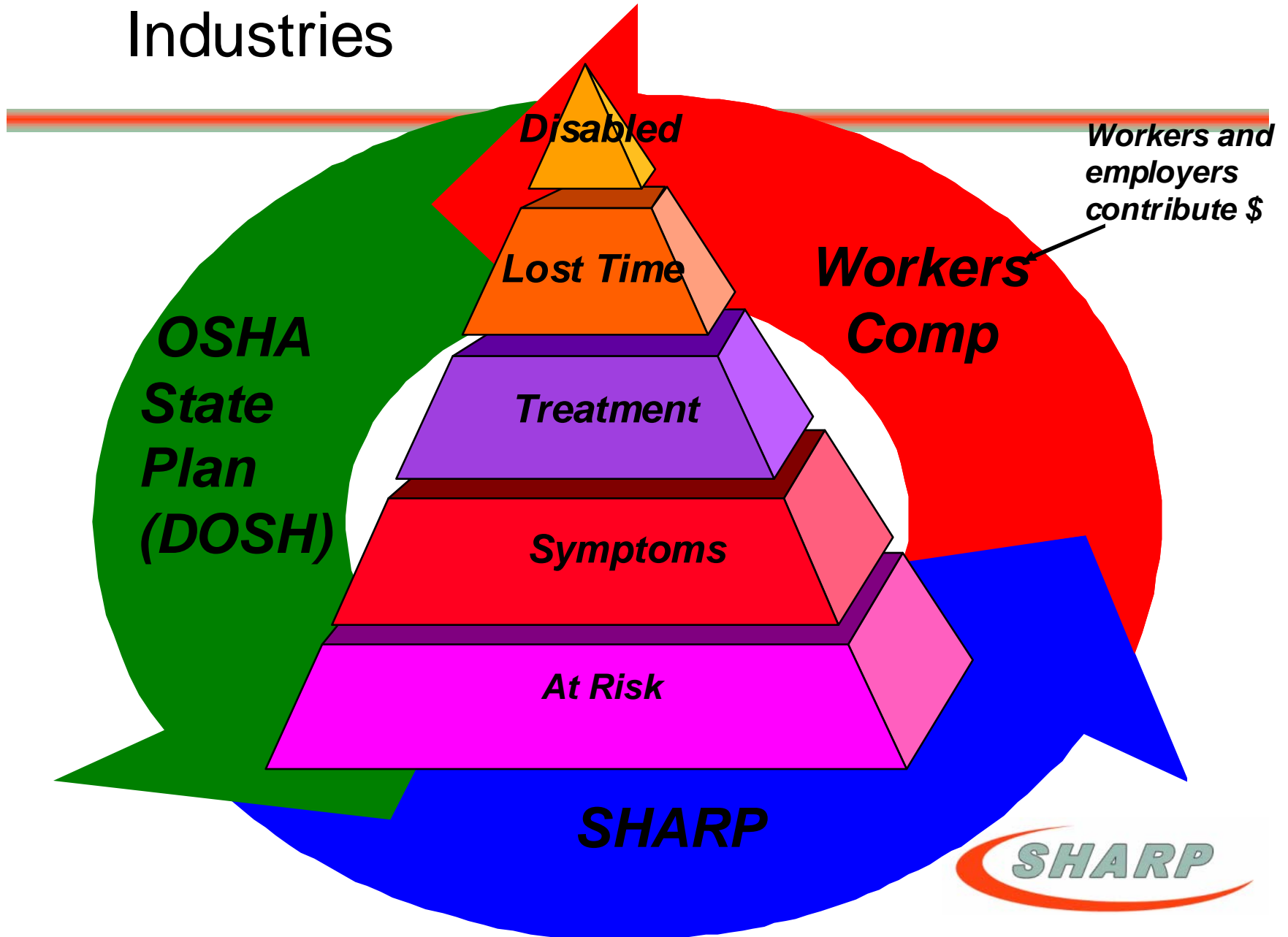
# ***Safety & Health Assessment and Research for Prevention (SHARP)***

SHARP conducts research, monitoring and demonstration projects that promote healthy work environments and the prevention of workplace injuries and illnesses

- develop and analyze data for injury & illness prevention
- test hypotheses and develop methods for evaluating workplace exposure and health
- provide information and promote technology transfer
- serve as a scientific resource

*Economics, Epidemiology, Ergonomics, Health Education, Information systems, Industrial Hygiene, Occupational Medicine, Organizational Psychology, Safety Engineering, Toxicology*

# Washington State Department of Labor & Industries



# Background

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- US federal policy is shifting towards increased voluntary approaches rather than enforcement activities
- Previous studies on effectiveness
- Need for controlled worksite level studies of effectiveness



# Compliance effectiveness: What to measure?

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- Reduction in hazards
- Decreased absenteeism
- Decreased turnover
- Increased requests for consultations
- Employer survivability
- Decreased claims incidence rate



# Study Questions

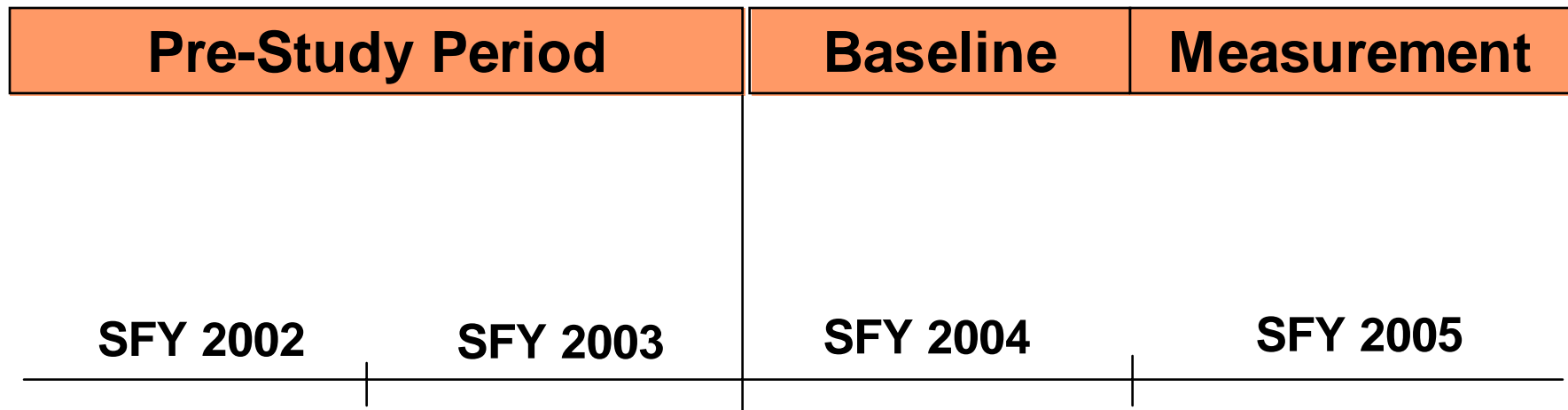
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- How much impact did enforcement inspections and consultation visits have on the compensable claims rates?
- Did the impact of compliance activity differ by size of the employers? By industry?
- Did inspections with citations have a greater impact?
- General deterrence & specific deterrence

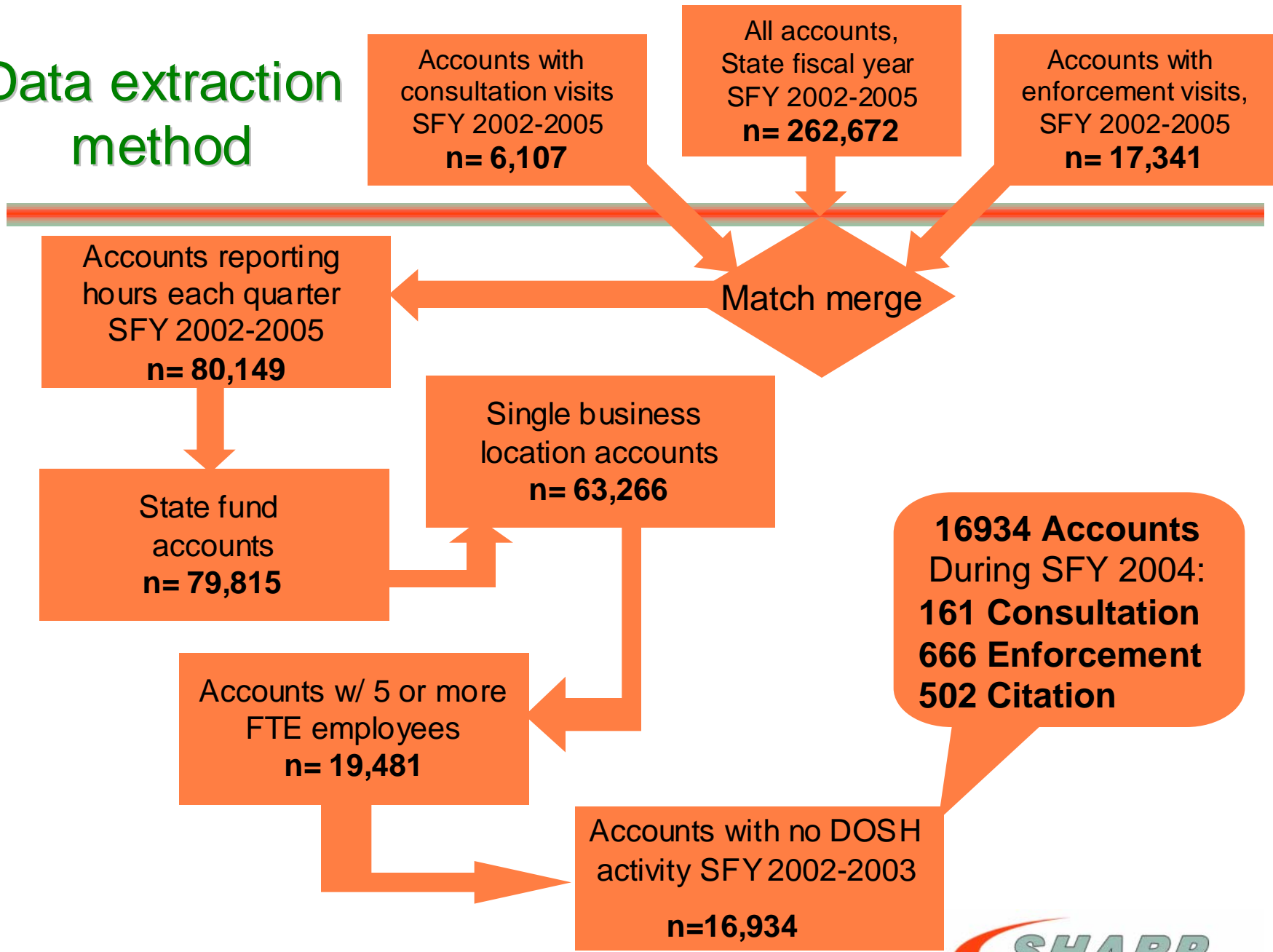


# Study Time Periods

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# Data extraction method



**16934 Accounts**  
During SFY 2004:  
**161 Consultation**  
**666 Enforcement**  
**502 Citation**





# Compensable Claim Rates by DOSH Activity for Fixed and Non-Fixed SIC

SIC Categories	DOSH Categories	N	Compensable Rates (mean)				Rate Difference SFY 2004-2005	
			SFY 2002	SFY 2003	SFY 2004	SFY 2005	Mean	%
All		16934	1.74	1.65	1.64	1.61	-0.02	-1.32
Fixed SIC		14128	1.37	1.27	1.30	1.28	-0.01	-1.03
Non-fixed SIC		2806	3.57	3.56	3.34	3.28	-0.06	-1.87
Fixed SIC	No DOSH	13592	1.32	1.20	1.23	1.24	0.01	0.77

SIC Categories	N	SFY 2004	SFY 2005	%
Fixed SIC	14,128	1.30	1.28	-1.03
Non-fixed SIC	2,806	3.34	3.28	-1.87
Excluded accounts	63,215	2.05	1.90	-7.27

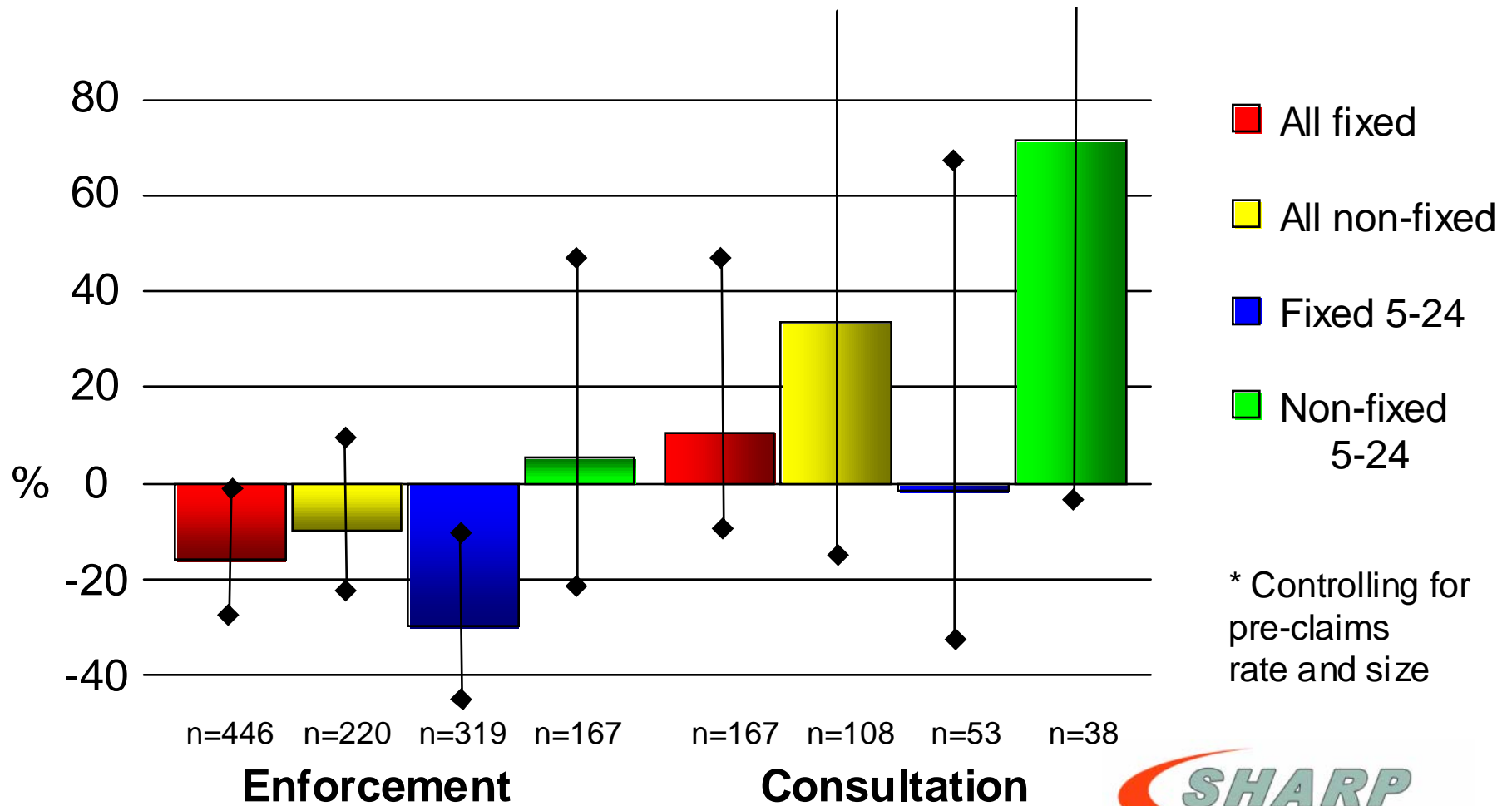
  

Consultation	38	3.86	3.66	4.00	5.43	1.42	35.56
Enforcement	205	5.12	5.20	4.28	4.11	-0.16	-3.83
Both	15	4.76	6.96	4.25	3.95	-0.30	-7.11
Excluded accounts <sup>1</sup>	63215	2.06	1.98	2.05	1.90	-0.15	-7.27

<sup>1</sup>Survived 16 quarters.



# % Change in Compensable Claims Rates by DOSH Activity 2004-2005\*

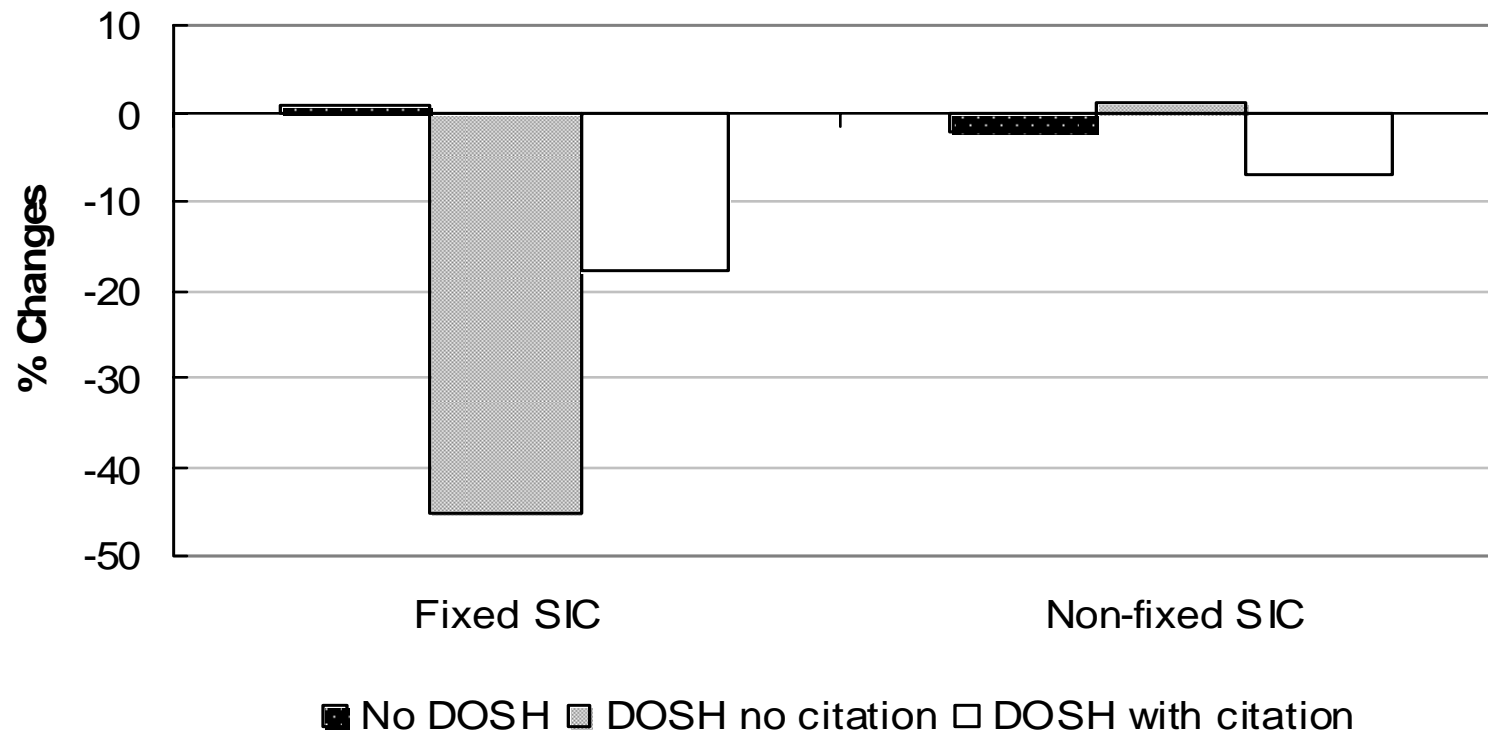


- All fixed
- All non-fixed
- Fixed 5-24
- Non-fixed 5-24

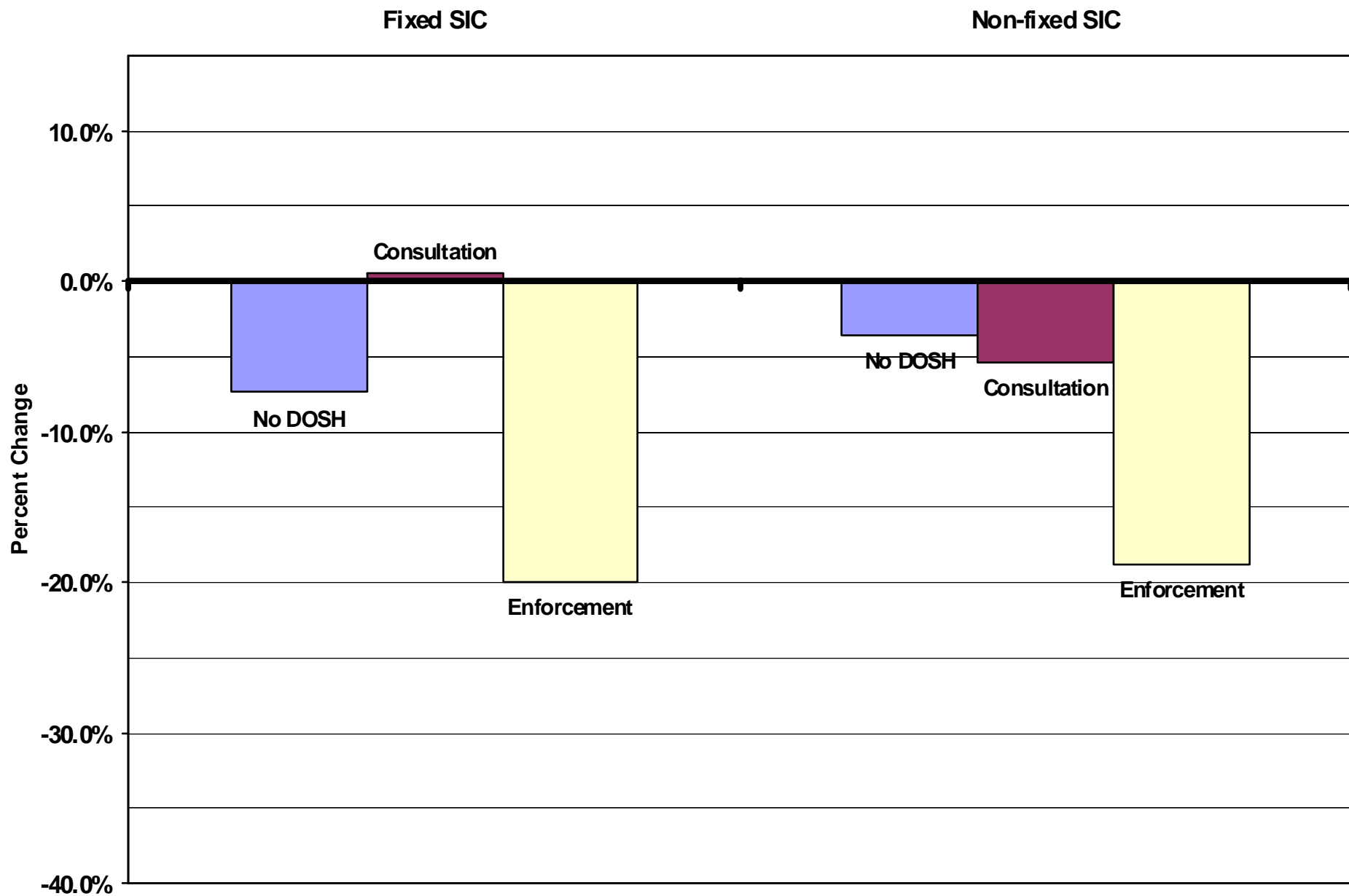
\* Controlling for pre-claims rate and size



# Percent change in compensable claims rate by citation status, 2004-2005.



Study Years: 2002-2003



# Main Results 1

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- Enforcement among fixed-site industries is associated with a greater decline in claims.
- Smaller businesses show a greater drop in claims after enforcement visit.
- Enforcement effect appears weaker among non-fixed site industries.



# Main Results 2

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- No conclusive evidence for consultation.
- Citations effect contrary to expectations.
- No decrease in business survival after enforcement visit.



# Study Limitations

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- Can only use businesses with single business location (only 4-6% of DOSH activities)
- Small numbers for consultation visits
- Non-fixed worksites underrepresented
- Able to look at single site effects but not general effect (across the industry)



# Study Strengths

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- Can identify specific effect of compliance activity on a concrete outcome measure while controlling for other predictors
- Shows effect among small employers
- Can look at effect on survival

