NCCI Holdings, Inc.

NCCI RESEARCH BRIEF

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Workers Compensation Claim Frequency Continues Its Decline in 2008

Overview

The decline in claim frequency for workers compensation injuries continued in 2008, and economic factors suggest further reductions are likely in 2009.

Preliminary results indicate a decline of 4.0% for 2008. This is on the heels of a 2.6% drop in claim frequency in 2007 and it extends a trend that started in the 1990s. While the overall decline is widespread and good news for workers, employers and their insurers, high-cost Permanent Total claims have emerged recently as a noticeable exception to this decline.

NCCI's latest review of claim frequency[1] and severity shows that, while claim frequency is down, indemnity and medical severities continue to rise.

In the course of updating our annual study to reflect the latest frequency and severity results, a new analysis has been added to explore the recent increase in Permanent Total claims. This new analysis of claim frequency by employer size has also been added to this year's study.

Key Issues

A key issue facing employers and workers compensation insurers is whether the large declines in claim frequency that began in the 1990s are likely to continue. Virtually every major employment category examined has experienced a marked decline. The NCCI report, "An Analysis of Factors Affecting Changes in Manufacturing Incidence Rates" (available on **ncci.com**) examines factors underlying the long-term decline in frequency since the early 1990s.

Preliminary data for Accident Year 2008 reveals continued overall declines in claim frequency and overall increases in indemnity and medical severities. In order to examine these recent broad trends more closely, NCCI compared the latest available statistical plan data for states for which we provide ratemaking services to the same data from four years prior. Most analyses in this study compare policies that expired in 2007 to policies that expired in 2003.

Key Findings

Key findings of our analysis are:

- Over the last five years, there were significant declines in total lost-time claims frequency for all industries, geographic regions, and employer sizes
- The number and frequency of Permanent Total claims have increased significantly over the last four years, with all major causes of injury contributing to the rise
- The rise in Permanent Total claims appears to be driven primarily by workers age 50 or under
- While claim frequency generally decreases as risk size increases, single-state risks in some classes have higher claim frequency at the higher payroll sizes than at lower payroll sizes

[1] Generally, the term "frequency" is used in this report to mean the number of claims per $1 million of wage-adjusted payroll. An exception is Exhibit 1, where frequency means claims per 100,000 workers per year.

2008 Megatrends

As communicated at NCCI's ***2009 Annual Issues Symposium*** and as noted above, workers compensation claim frequency appears to have fallen again in 2008.

Exhibits 1–3 show analyses based on aggregate workers compensation data submitted by NCCI-affiliated carriers. The results for Accident Year 2008 are preliminary. Exhibit 1 includes the estimated decline of 4.0% in 2008, and it shows that claim frequency has fallen in all but 2 of the past 18 years.

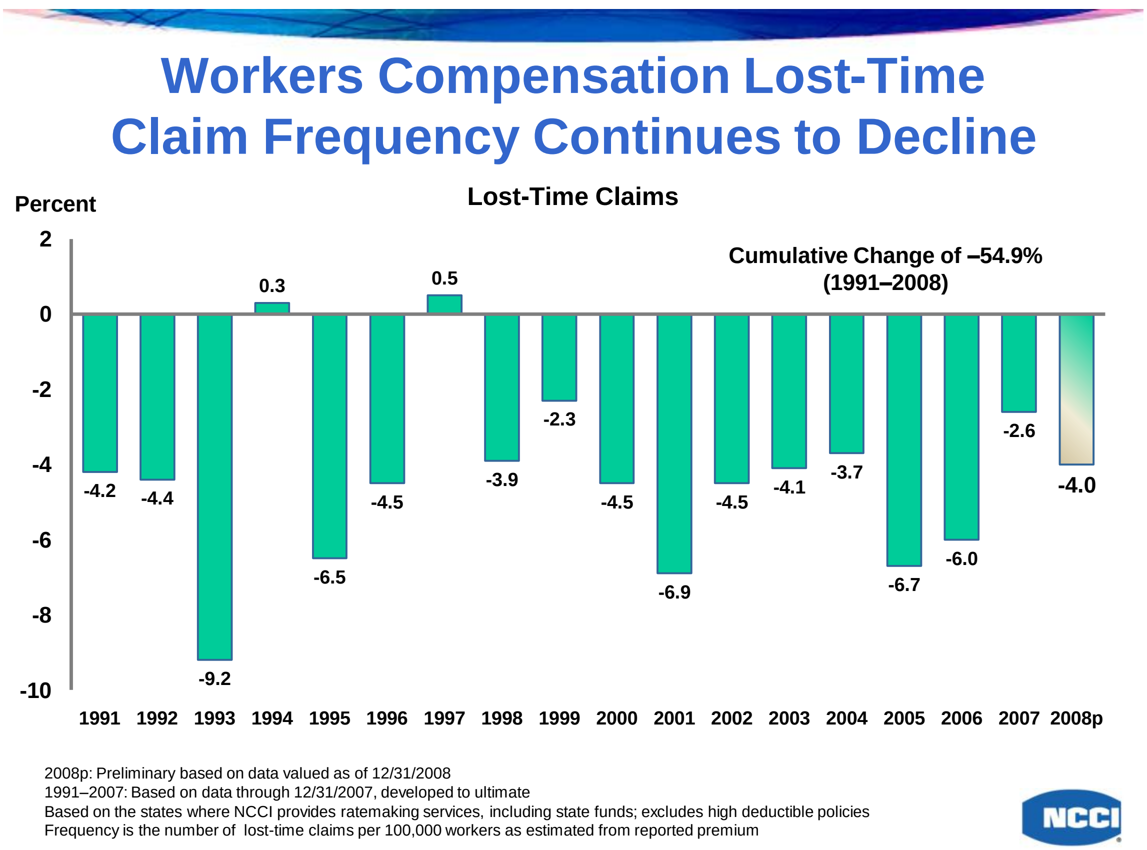


Exhibit 1. Lost-Time Claim Frequency Continues to Decline

Offsetting the drop in claim frequency is the increased cost of a claim. Exhibits 2 and 3 reveal the continued increase in the indemnity and medical costs of a claim, respectively. Annual increases in average indemnity costs per claim have tapered off significantly in the last seven years. While indemnity severity rose by an average 8.7% between 1996 and 2001, the average annual increase since then has been 3.6%. This includes an NCCI-estimated increase of 5.0% for 2008. In part, this easing in the growth of indemnity severity reflects the limited growth in wages during and following the recession of 2001.

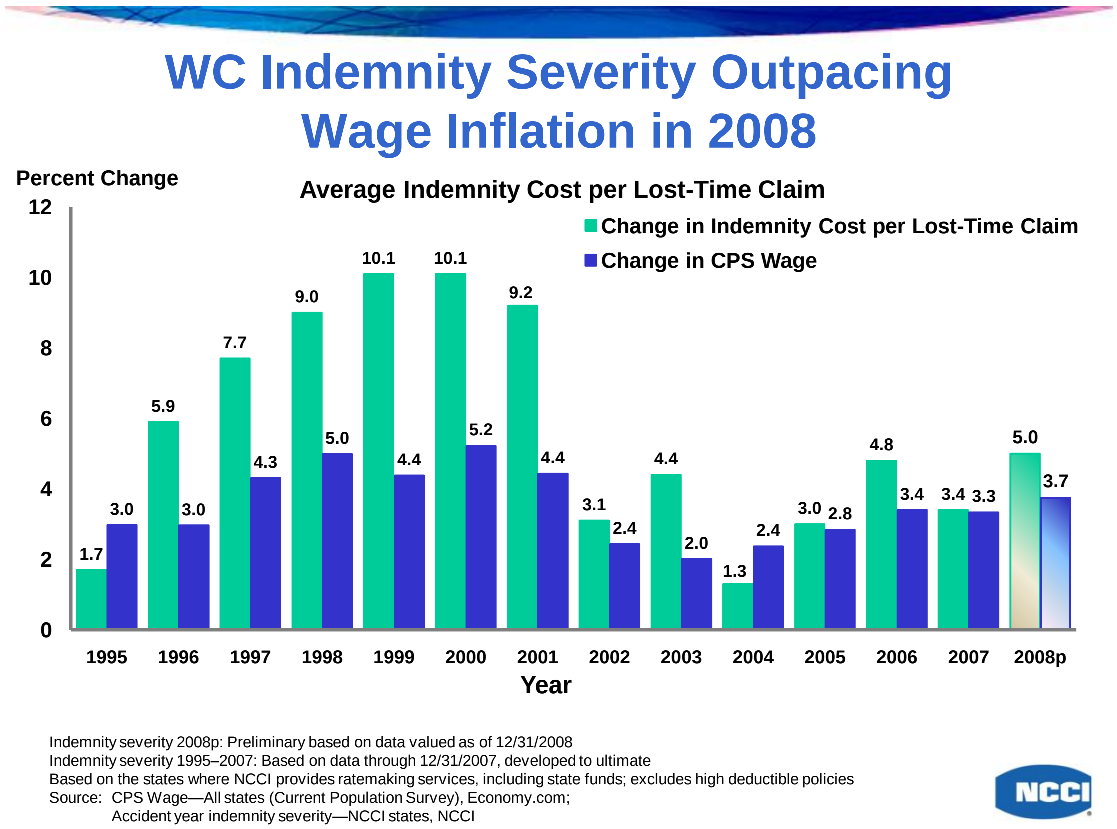
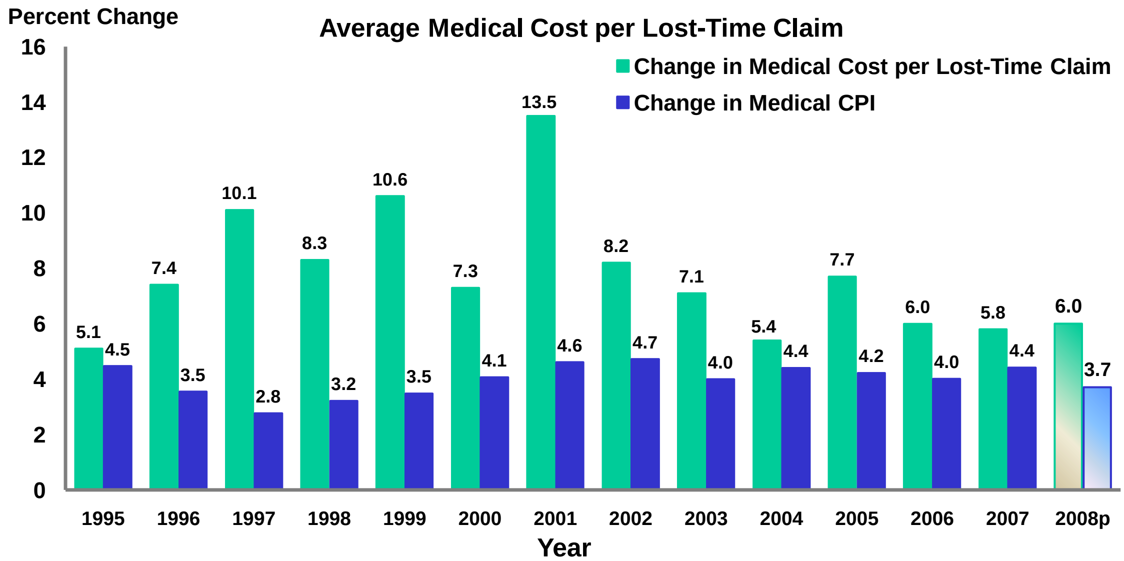


Exhibit 2. Changes in Average Indemnity Costs on Lost-Time Claims

WC Medical Severity Still Growing Faster Than the Medical CPI



Medical severity 2008p: Preliminary based on data valued as of 12/31/2008
Medical severity 1995–2007: Based on data through 12/31/2007, developed to ultimate
Based on the states where NCCI provides ratemaking services, including state funds; excludes high deductible policies
Source: Medical CPI—All states, Economy.com; Accident year medical severity—NCCI states, NCCI

Exhibit 3. Changes in Average Medical Costs on Lost-Time Claims

While the estimated 6.0% growth for 2008 in average medical costs per claim is substantial, the 18.9% cumulative increase since 2006 is less than in any other three-year period shown in Exhibit 3. In addition to medical price inflation, increases in the utilization of medical services are a significant driver of this growth.

Nonuniform changes in claim frequency by size of claim, discussed in prior studies, have also contributed to the severity increases for both indemnity and medical in past years. To some degree, nonuniform changes in claim frequency by size of claim might also be related to changes in utilization patterns. Our most recent studies have indicated that all claim sizes appear to be sharing equally in the claim frequency improvement over the last several years, with the exception of Permanent Total claims.

The reduction in claim frequency continues to be a major bright spot for workers compensation. Injury rates have dropped by approximately 55% since 1991—great news for workers, employers, and their insurers.

Claim Frequency by Industry

In order to further analyze the claim frequency results, NCCI used the ***Statistical Plan for Workers Compensation and Employers Liability Insurance*** data in states for which NCCI provides ratemaking services. For most analyses, policies expiring in 2003 were compared to policies expiring in 2007.

In Exhibit 4, we explore claim frequency by industry groupings. From this exhibit, it is evident that all major industry groups have shared in the claim frequency decline over the time period studied. The declines range from 16% to 27%.

What is also apparent is that industry groups experience significantly different levels of claim frequency when measured against payroll. The most notable example is Office and Clerical, where the number of claims per $1 million of wage-adjusted payroll is much lower than that in any of the other industries. It probably comes as no surprise that an office environment would generally experience fewer claims per payroll dollar, or per worker, than industries such as Contracting or Manufacturing. Our 2006 study showed that the difference between industries is substantially reduced when claim frequency is measured against premium, rather than payroll, since premium charges relative to payroll are generally lower in low-frequency industries.

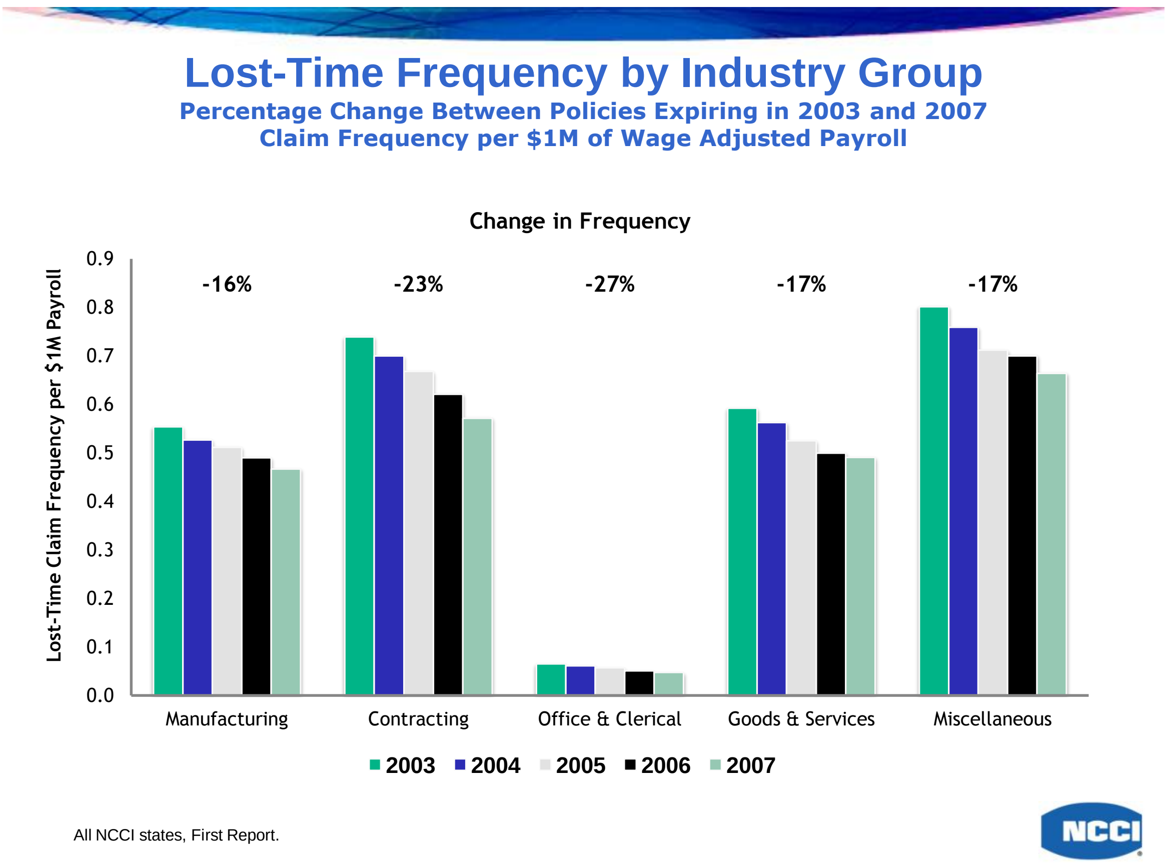


Exhibit 4. Lost-Time Claim Frequency by Industry Group

Claim Frequency by Geographic Region

While there are some differences by region, Exhibit 5 shows that all areas of the country have experienced substantial declines in lost-time claim frequency. While the West region is now showing the smallest decline during the latest five years, it had the largest decline in our 2005 study.

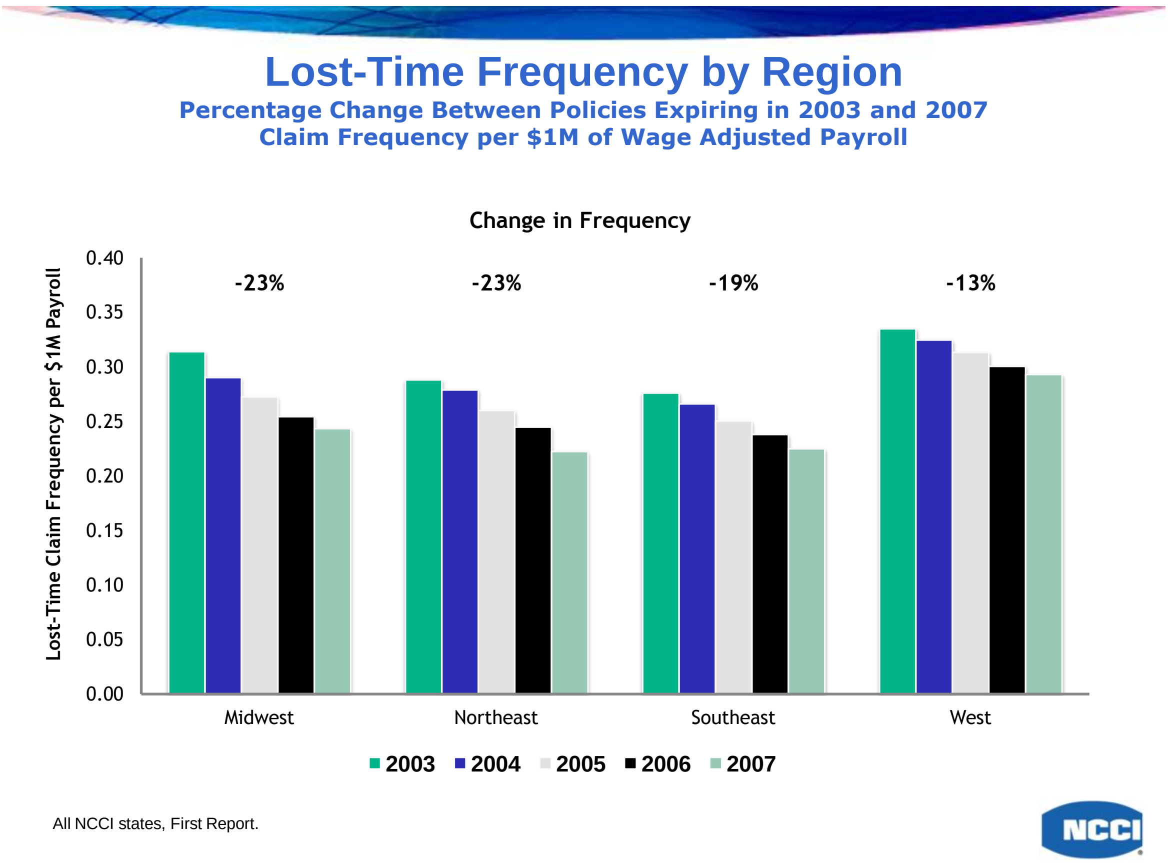


Exhibit 5. Lost-Time Frequency by Region

Claim Frequency by Injury Type

NCCI has also updated prior analyses that examined claim frequency by injury type. Exhibit 6 provides results over a 10-year period. While all injury types show a decline over the entire 10-year period, Permanent Total claims have experienced increased frequency over the past four years. Although Permanent Total claims generally make up less than 1% of lost-time claims, they are the most costly claims, accounting for approximately 10% of lost-time costs.

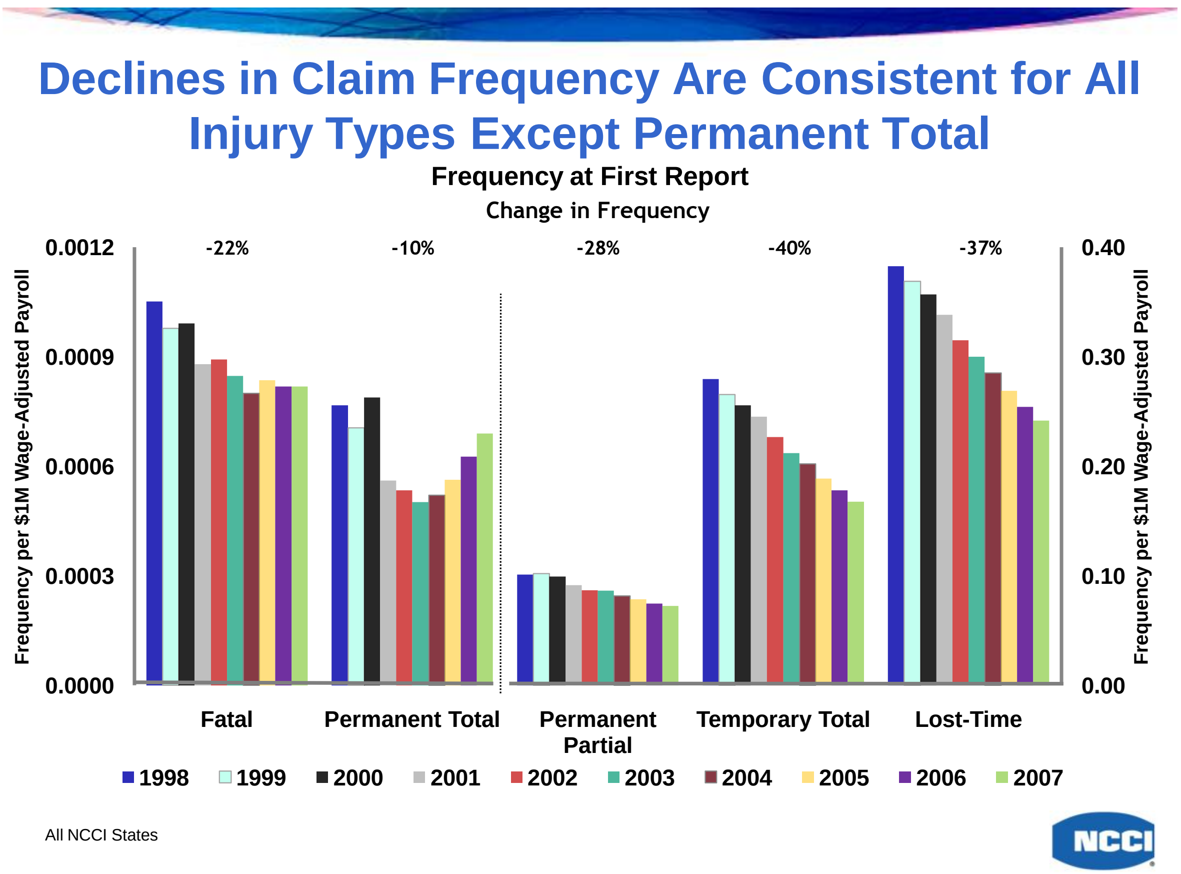


Exhibit 6. Claim Frequency by Injury Type

Drilling Down on Increases in Permanent Total Claims

The recent increase in Permanent Total claims was first reported last year. That study showed that the increase in Permanent Total claims was not being driven by any particular market segment. All major industries, geographic regions, and employer sizes have experienced an increase.

New to this year's study is a review of lost-time and Permanent Total claims by cause of injury. While all major causes of injury are experiencing declines in lost-time claims, they are also experiencing substantial increases in the number of Permanent Total claims.

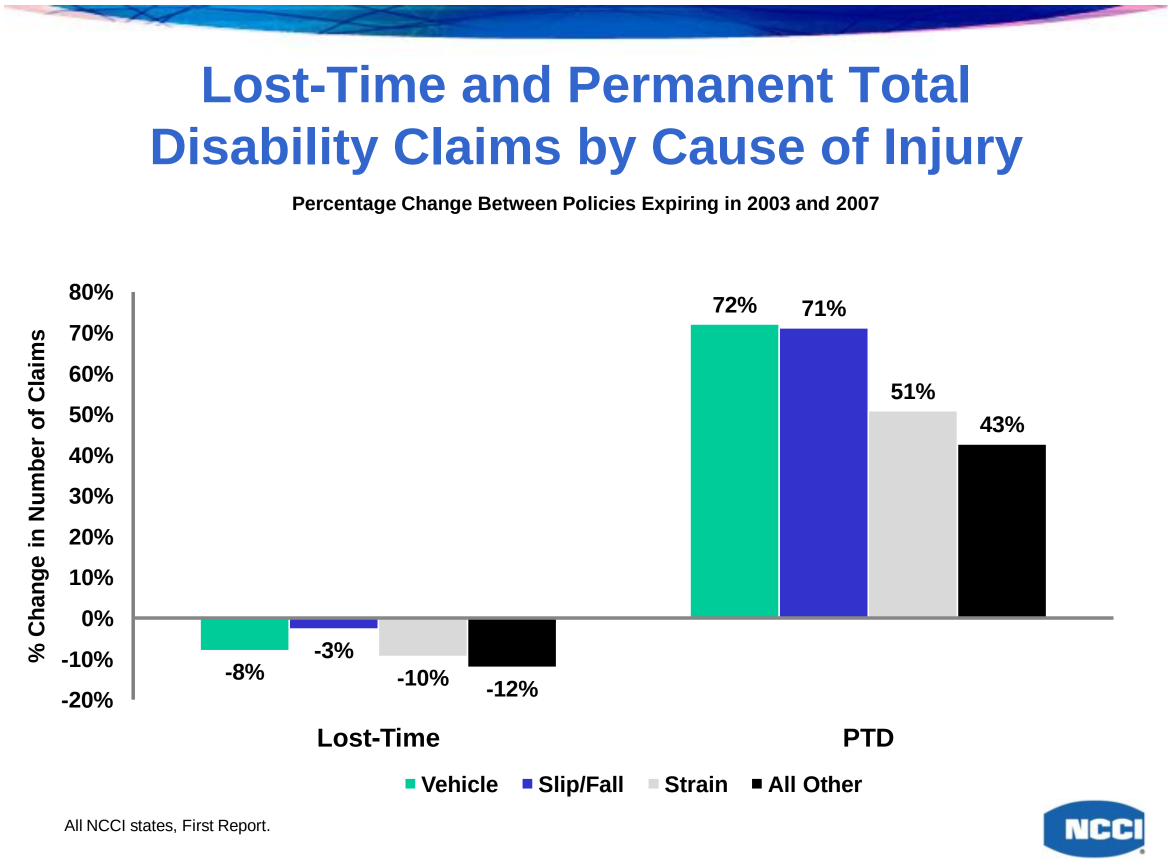


Exhibit 7. Change in Lost-Time and Permanent Total Claims by Cause of Injury

The lost-time percentages shown in Exhibit 7 are slightly lower than those shown in Exhibits 4 and 5 because Exhibit 7 uses number of claims, while Exhibits 4 and 5 use claim frequency—claims per $1 million in payroll.

Also new to this year’s study, we examined differences over time in Permanent Total claims by age of worker. One reason for this was that the average age of the workforce has been increasing, primarily due to aging baby boomers. Because older workers tend to have more Permanent Total claims, this was a potential explanation for the recent uptick in these types of claims. The data, though, tells a different story.

As shown in Exhibit 8, the increase in Permanent Total claims appears to be driven primarily by workers age 50 and under. Based on a sample of data, that age group experienced a much larger increase in Permanent Total claims between 2003 and 2006 than did older workers—those more than 50 years old.

NCCI is continuing its research into possible explanations for the rise in Permanent Total claim frequency.

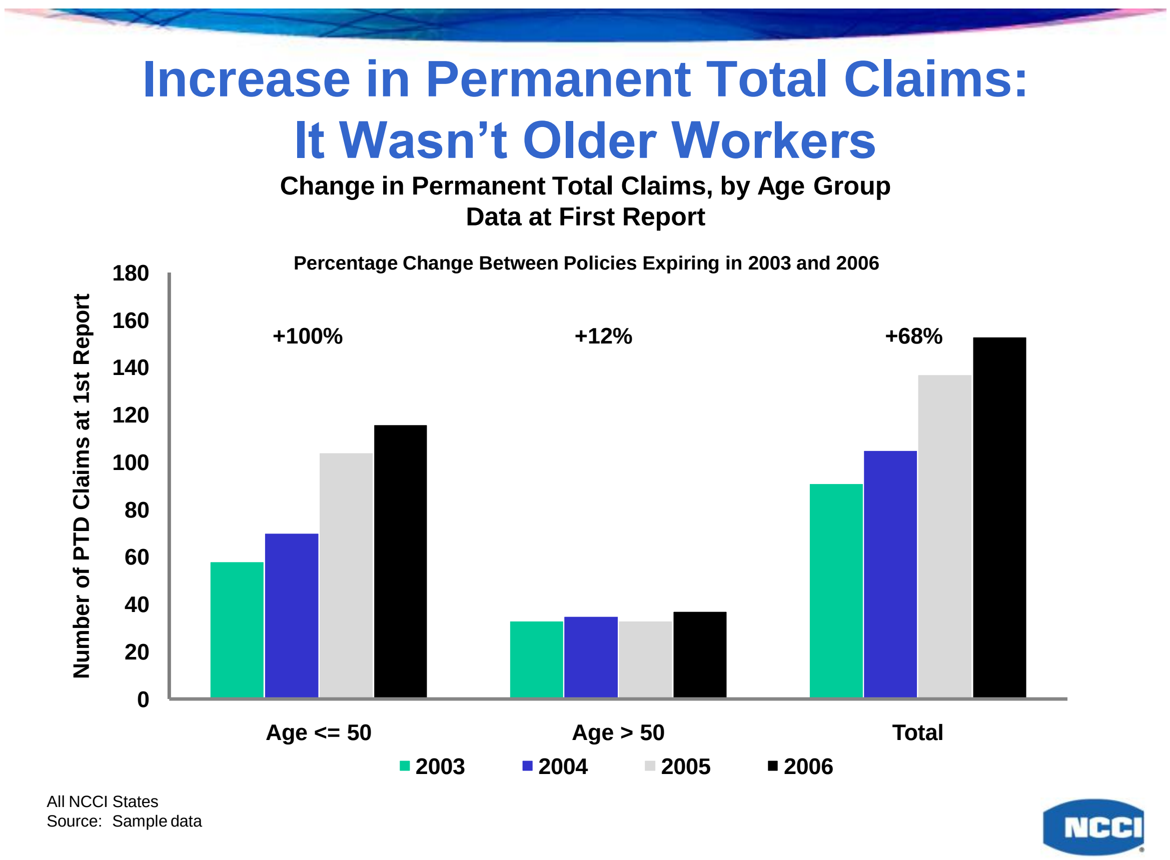


Exhibit 8. Permanent Total Claims by Age Group

Claim Frequency by Size of Employer

Lost-time claim frequency by employer payroll size is examined in Exhibit 9. There is a significant difference in average frequency by employer size, which is impacted by differences in occupational mix. However, all employer sizes experienced substantial improvements in workplace injuries over the time period studied. This is consistent with findings by the Bureau of Labor Statistics.

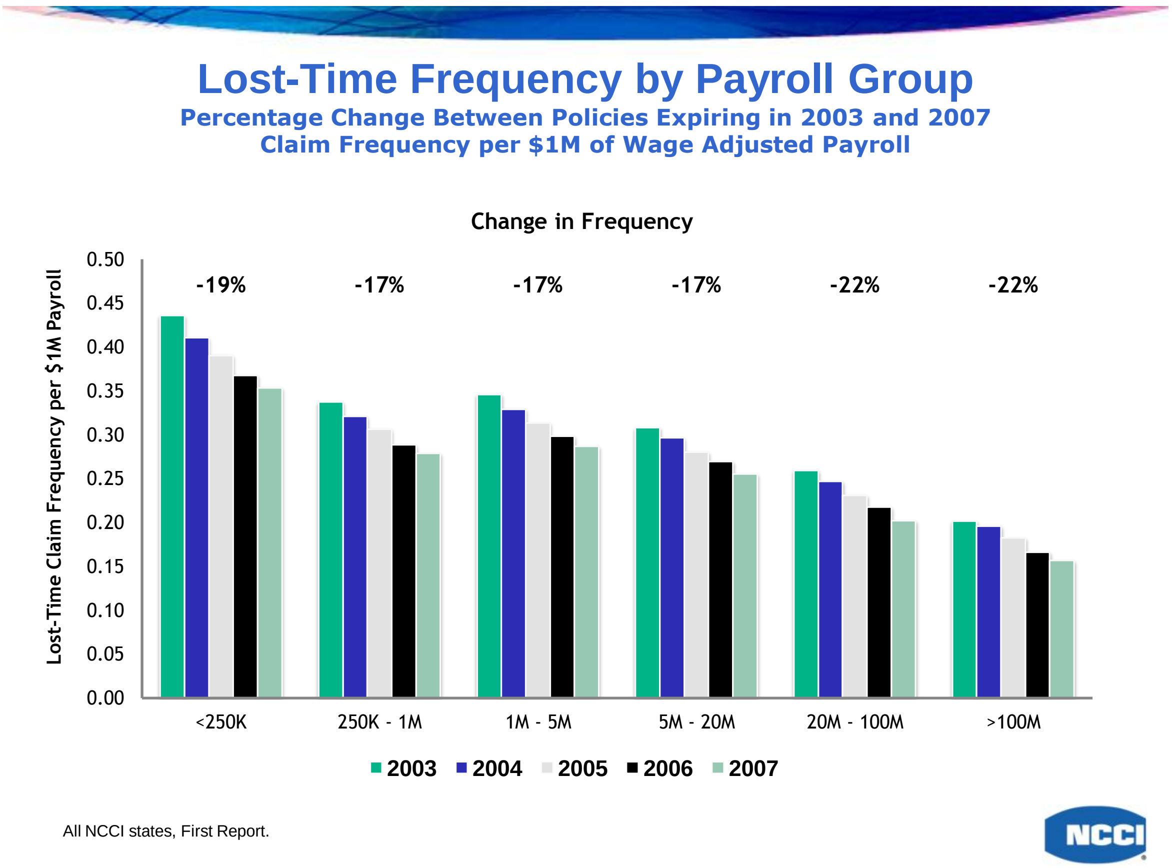


Exhibit 9. Lost-Time Claim Frequency by Payroll Group

Drilling Down on Size of Employer Differences

While Exhibit 9 shows that lost-time claim frequency generally decreases as employer size increases, there are notable exceptions. The next series of exhibits focuses on the latest available year rather than changes over time. Lost-time claim frequency and total claim frequency, which includes medical-only claims, are shown. The payroll groupings used are slightly different than those shown on Exhibit 9.

Exhibit 10 provides claim frequencies by size of employer for all policies, including multistate policies. Exhibit 11 limits the analysis to single-state policies. Both exhibits generally reveal slightly lower claim frequencies for the largest employers.

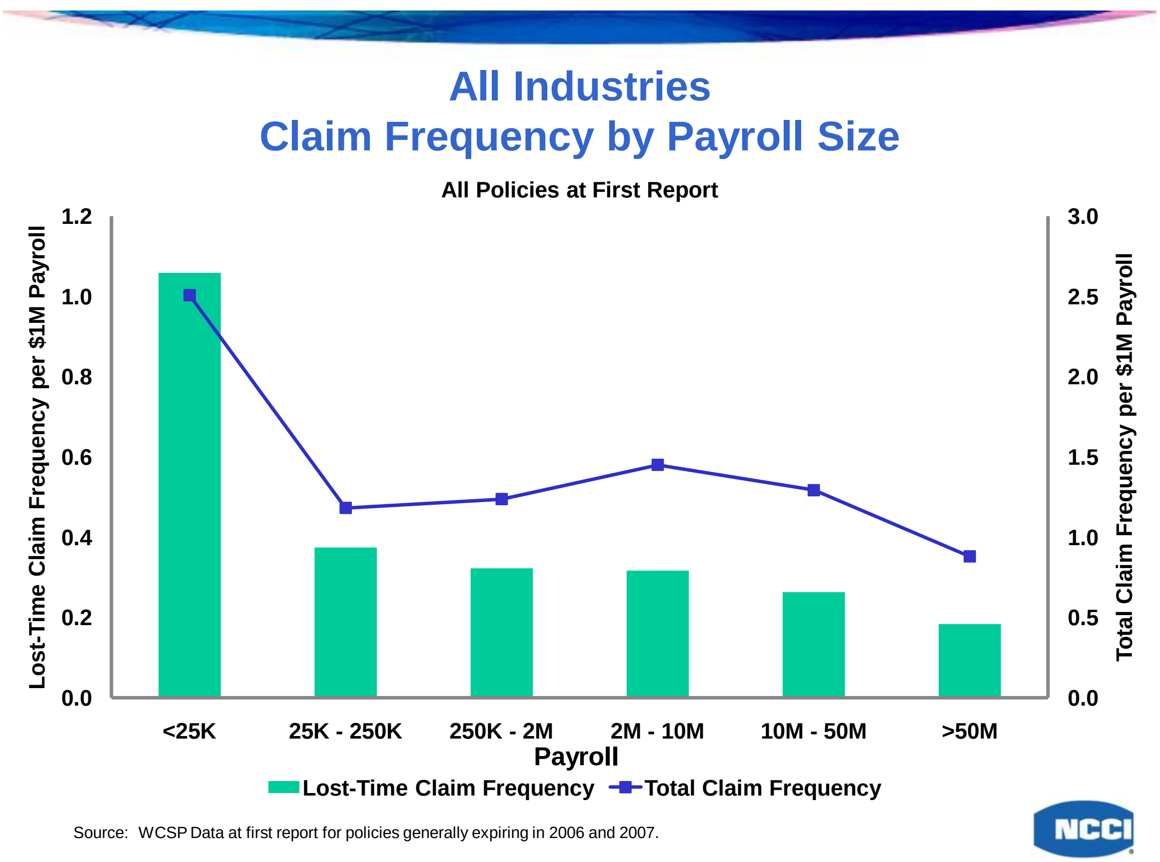


Exhibit 10. Claim Frequency by Payroll Size
(All Policies Including Multistate Policies)

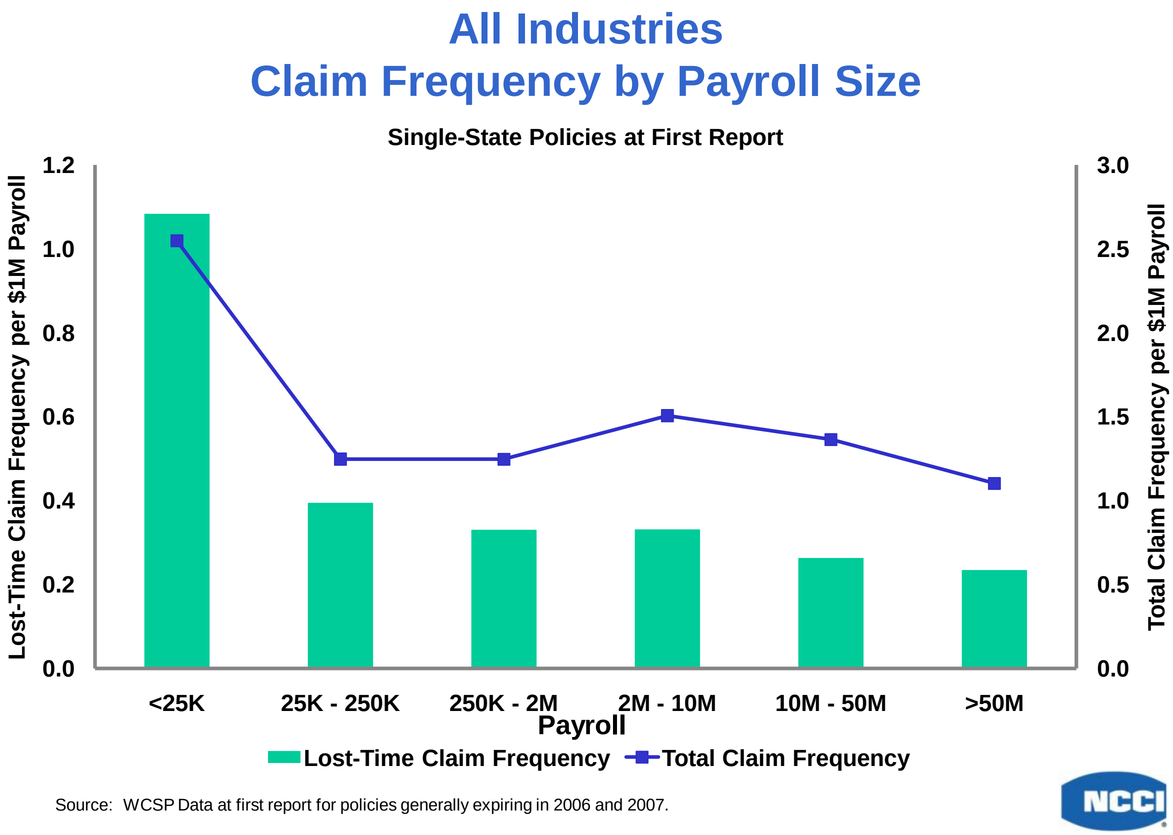


Exhibit 11. Claim Frequency by Payroll Size
(Single-State Policies Only)

Drilling down by industry group and focusing on single-state policies provides interesting results. Exhibit 12 reveals relatively high lost-time and total claim frequencies on single-state policies with payroll exceeding $10 million in the Office and Clerical industry group.

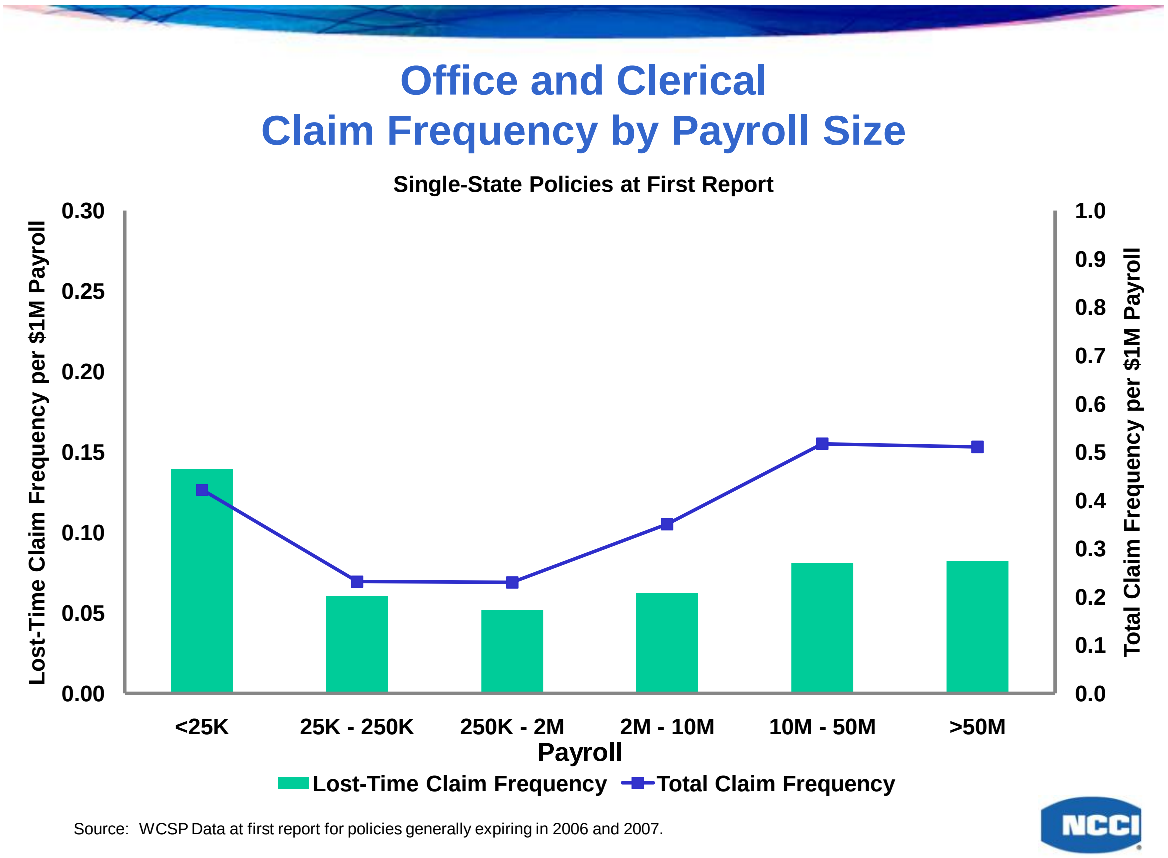


Exhibit 12. Claim Frequency by Payroll Size (Office and Clerical)

Single-state Contracting policies are the focus of Exhibit 13. An increase in both lost-time and total claim frequency is evident for payrolls exceeding $50 million.

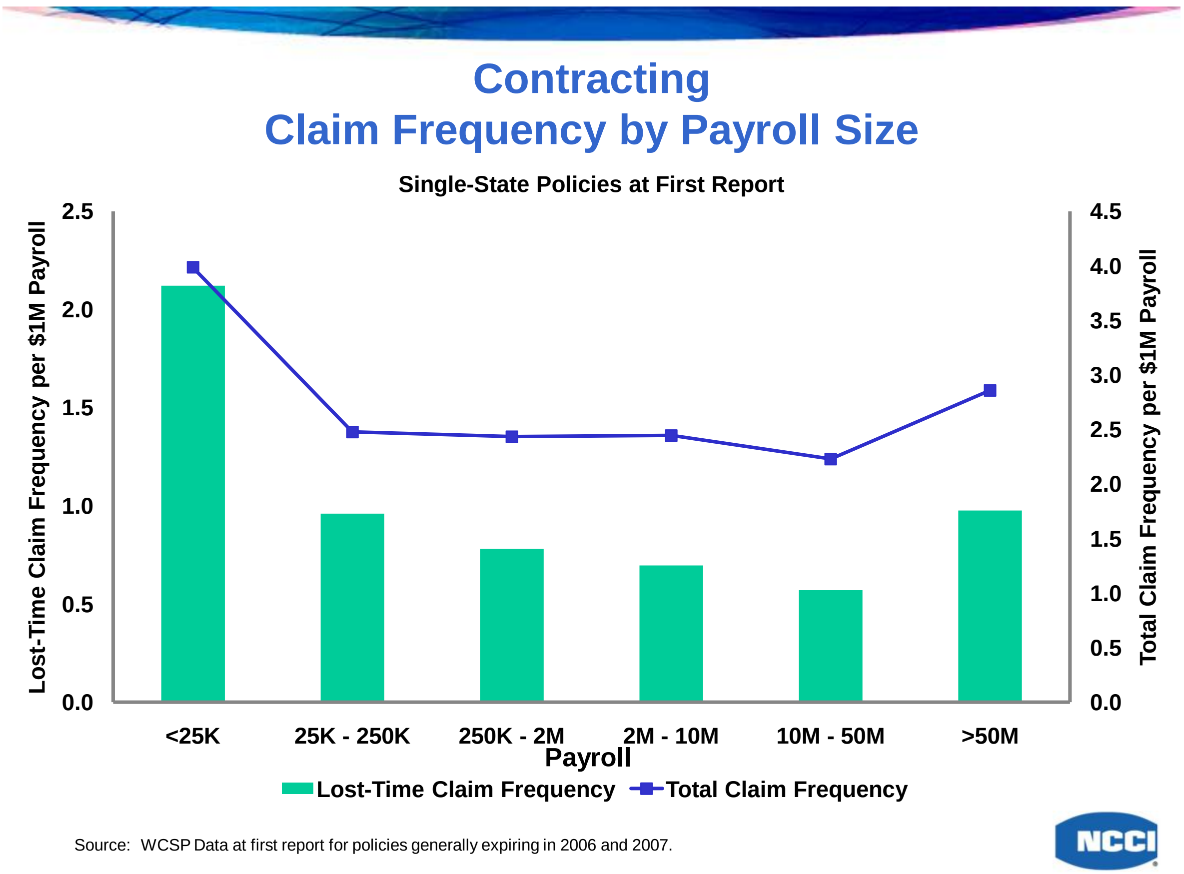


Exhibit 13. Claim Frequency by Payroll Size (Contracting)

Single-state policies in the Goods and Services sector are explored in Exhibit 14. For employer payroll sizes greater than $250,000, claim frequency increases as payroll size increases.

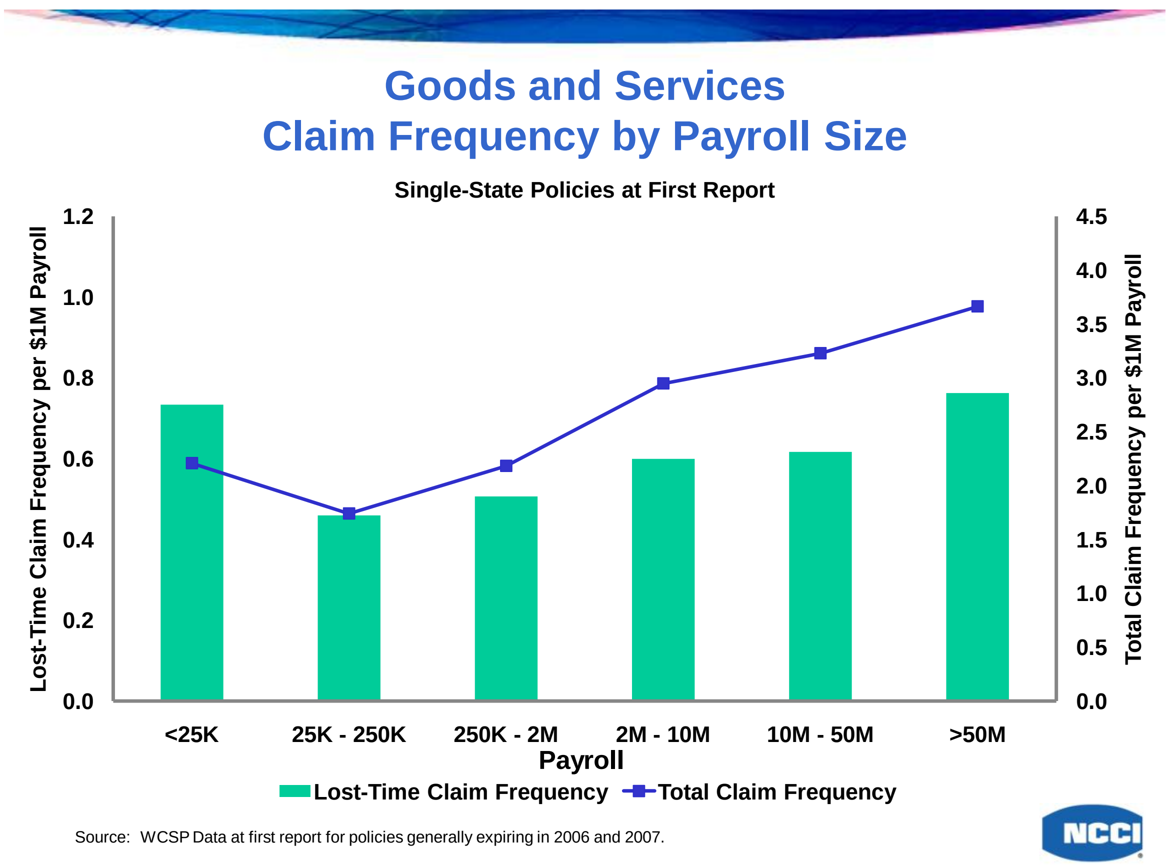


Exhibit 14. Claim Frequency by Payroll Size (Goods and Services)

The results by industry group shown in Exhibits 12-14 seem to contradict the all-industry results shown in Exhibit 11. The primary reason for this is that the industry mix underlying Exhibit 11 varies significantly from one payroll size group to the next. Office and Clerical makes up only 26% of the payroll volume in the smallest payroll size group but it represents over 76% of the payroll in the largest group. From Exhibit 4 we know that claim frequency is substantially lower in the Office and Clerical industry than in other industries. Thus, the greater proportion of Office and Clerical in the larger payroll size groups reduces their associated claim frequencies. This is reflected in the all-industry results shown in Exhibit 11.

The two industries not separately shown, Manufacturing and Miscellaneous, have claim frequency results by payroll size that are similar to the all-industry results.

In Exhibit 15, we review single-state policies for the largest payroll group for selected classifications. The lost-time claim frequency for single-state employers with payroll exceeding $50 million is compared to the lost-time claim frequency for single-state policies of all sizes in that classification. In six of the eight classifications shown, large single-state policies have lost-time claim frequencies that are higher than the classification average for single-state policies.

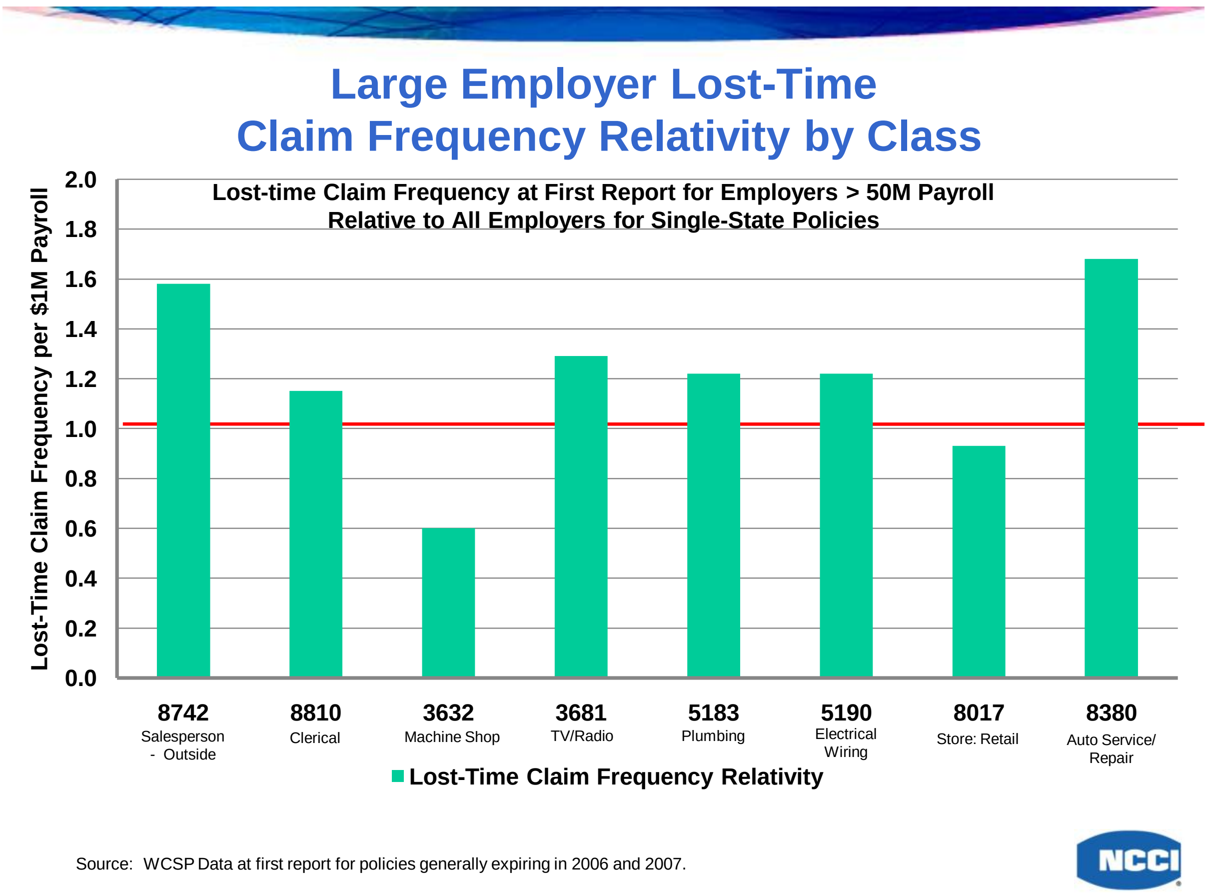


Exhibit 15. Single-State Large Employer Lost-Time Claim Frequency by Class

When a similar analysis is performed but not restricted to single-state policies, the results are considerably different. Exhibit 16 provides claim frequencies for the largest payroll group for all policies, including multistate policies. In all but one classification, the large policies have lost-time claim frequencies that are lower than the classification average for all policies.

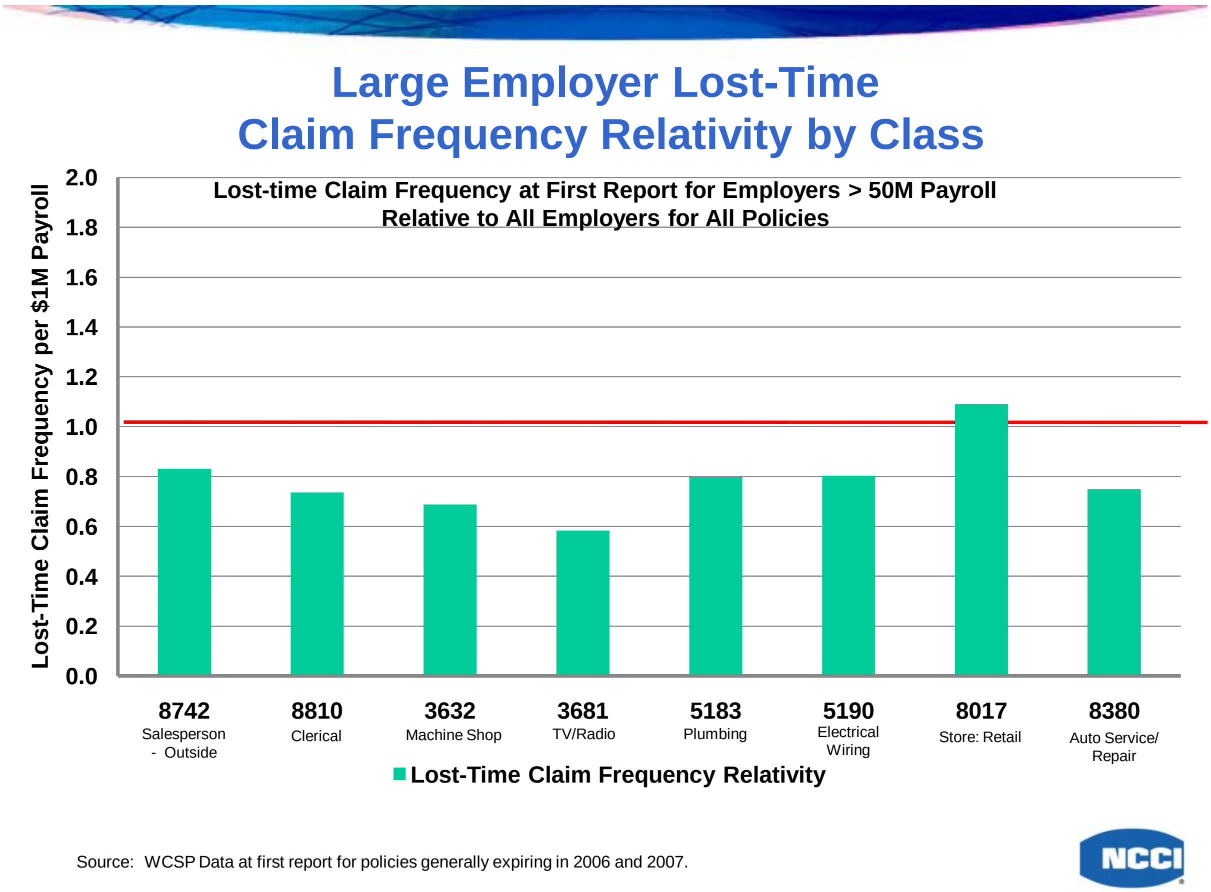


Exhibit 16. Large Employer Lost-Time Claim Frequency by Class

What's Driving the Claim Frequency Trend?

As previously reported, NCCI believes that key drivers of claim frequency include:

- Global competition and advances in automation, technology, and production, such as the following:
  - Increased use of robotics
  - Increased use of modular design and construction techniques
  - Increased use of power-assisted processes
  - Advances in ergonomic design
  - Proliferation of cordless tools
- The business cycle (e.g., economic expansions can result in hiring less-experienced workers)
- Demographics (older workers tend to have fewer workplace injuries)
- More and better job training
- Continued emphasis on workplace safety
- Improved fraud deterrents

Looking Forward

NCCI research indicates that recessions typically place additional downward pressure on workers compensation claim frequency. This suggests that a continued decline in claim frequency in 2009 is likely. Details on this and other research can be found at **ncci.com**.