

by Tanya Restrepo and Harry Shuford

## The Role of Traffic Accidents in Workers Compensation—An Update

Traffic accidents are a leading cause of high-severity workers compensation injuries. Moreover, they are pervasive; indeed, a study by NCCI published in December 2006 noted that even the clerical classification has surprisingly high exposure to traffic accidents.<sup>1</sup> Driver-related factors that are linked to traffic accidents include speeding, distraction, and impairment. There are differences between accidents for large trucks and for passenger vehicles, as well as impacts due to recessions. These factors are reflected in the data discussed below. In this update we extend our analysis to add several years of data, allowing us to observe the reduction in traffic-related injuries during recessions and, thus, to confirm the cyclical characteristics of traffic accidents during the Great Recession. Also new to this update is an analysis of traffic accidents as a source of claims with multiple claimants. Finally, the claim characteristics exhibits from the original study have been updated with more recent data.

Key findings include:

- The decline in frequency of motor vehicle fatalities and injuries overall and in the workplace observed in the 2006 study has continued. Moreover, the cyclical pattern mentioned in the earlier study was particularly pronounced in the recent Great Recession. That is, the rate of decline tends to increase during recessions, particularly for accidents involving large trucks.
- Risk varies by type of vehicle. While the frequency of truck fatalities is now very similar to the frequency of passenger vehicle fatalities, the frequency of nonfatal injuries is higher for passenger vehicles.
- In contrast to the previous study, which found that motor vehicle accidents comprised a growing share of nonfatal workplace injuries, this study shows that the share has fallen since 2006 as the number of traffic-related injuries fell more than nontraffic-related injuries during the recession.
- Motor vehicle accidents are more likely to result in multiple claims, and severity is higher for motor vehicle claims from multiple-claim events.
- Claim characteristics are consistent with findings from the previous study—motor vehicle accidents are more severe than the average workers compensation claim; they impact a diverse range of occupations other than just truckers; top diagnoses include neck injuries; duration is more than a third longer; subrogation is significant, with traffic accident claims comprising more than half of all claims with subrogation; and attorney involvement is greater.
- Distracted driving continues to be a leading cause of accidents and near accidents, and employers can play a big part in encouraging safe practices and procedures.

### Impact of Recessions on Motor Vehicle Fatalities and Injuries

Exhibit 1 shows the number of traffic crash fatalities and the number of vehicle miles traveled from 1966 through 2011 as reported by the National Highway Traffic Safety Administration. The data includes fatalities and miles traveled both on and off the job; the bars mark recessionary periods. The exposure for traffic accidents—the number of vehicle miles traveled—has more than tripled, from 926 billion to 3 trillion, increasing even during most recessions. However, during the most recent deep recession from December 2007 to June 2009, the number of vehicle miles traveled declined by 2.5%. The decline is a result of several factors, including fewer people driving to work due to higher unemployment; fewer truck shipments due to

<sup>1</sup> See “Traffic Accidents—A Growing Contributor to Workers Compensation Losses” on [ncci.com](http://ncci.com).

the decline in consumer spending;<sup>2</sup> and people changing their driving habits, such as carpooling<sup>3</sup> to work or opting for a “staycation”<sup>4</sup> due to higher gas prices. In contrast to miles traveled, the number of fatalities exhibited a much more cyclical pattern, having declined in six of the last seven recessions, with significant declines in four of those recessions.

Over the 45 years since 1966, the total number of traffic crash fatalities per year both on- and off-the-job has declined by over 18,500, or 37%, even though the number of miles driven has more than tripled. A recent article in *The New York Times* attributed the decline in fatalities to several factors, including advances in technology for safety features such as antilock brakes, air bags, and stability controls, as well as changes to regulations governing road behavior such as seat belt and drunken driving laws.<sup>5</sup>

### Traffic Crash Fatalities Tend to Fall During Recessions

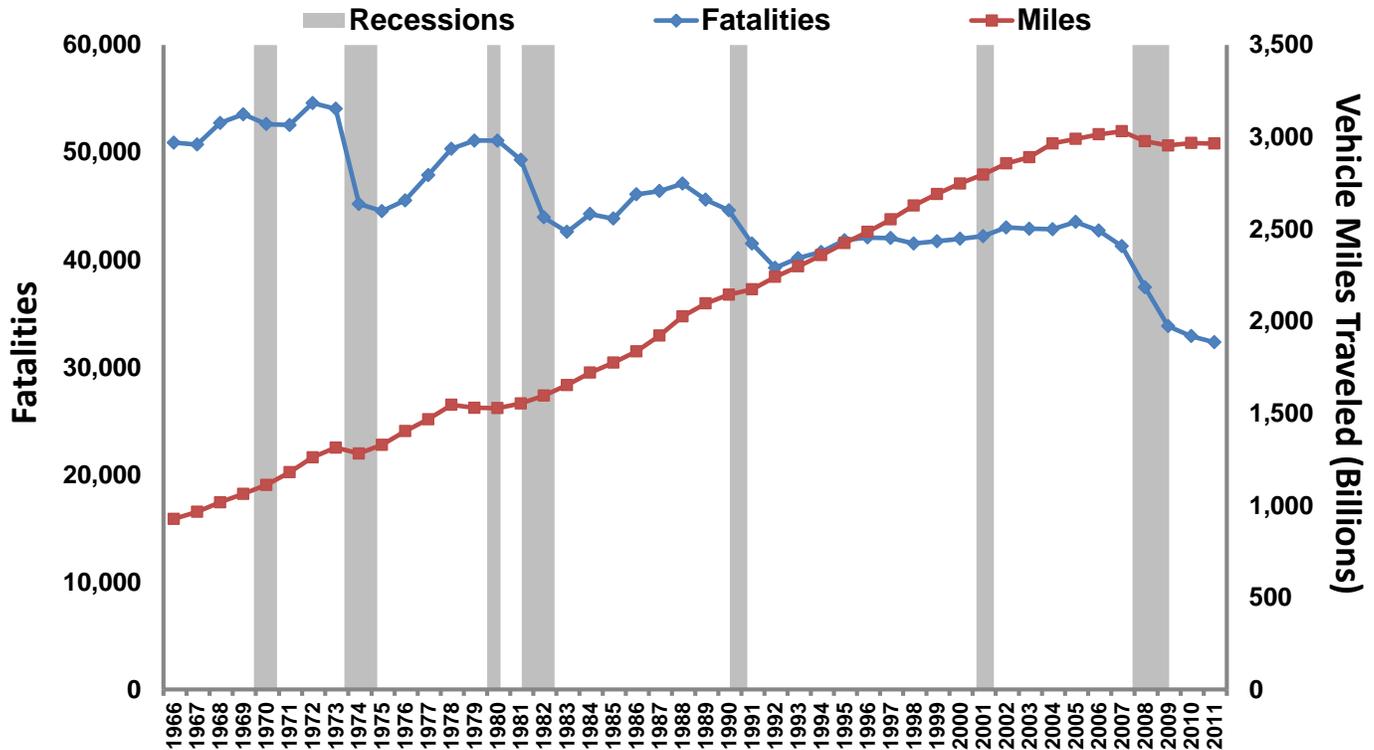


Exhibit 1. Traffic Crash Fatalities and Vehicle Miles Traveled, Calendar Years 1966–2011, National Highway Traffic Safety Administration

<sup>2</sup> Fairfield, Hannah, “Driving Shifts Into Reverse,” *The New York Times*, May 2, 2010, p. BU7. Available online at [www.nytimes.com/2010/05/02/business/02metrics.html?\\_r=0](http://www.nytimes.com/2010/05/02/business/02metrics.html?_r=0).

<sup>3</sup> El Nasser, Haya and Overberg, Paul, “Driving Habits Alter During Recession, Census Reports,” *USA Today*, September 22, 2009. Available online at [http://usatoday30.usatoday.com/news/nation/census/2009-09-22-censusinside\\_N.htm](http://usatoday30.usatoday.com/news/nation/census/2009-09-22-censusinside_N.htm).

<sup>4</sup> White, Randy, “Is the Staycation Trend a Real Phenomenon?” available online at [www.whitehutchinson.com/leisure/articles/Staycation.shtml](http://www.whitehutchinson.com/leisure/articles/Staycation.shtml).

<sup>5</sup> Fairfield, Hannah, “Driving Safety In Fits and Starts,” *The New York Times*, September 18, 2012, p. D3. Available online at [www.nytimes.com/interactive/2012/09/17/science/driving-safety-in-fits-and-starts.html](http://www.nytimes.com/interactive/2012/09/17/science/driving-safety-in-fits-and-starts.html).

In Exhibit 2, fatalities and miles driven are combined to show frequency of traffic crash fatalities per 100 million vehicle miles traveled. This has declined by 80%, from 5.5 in 1966 to 1.1 in 2011, or an average of 3.5% per year. Declines during recessions were often steeper than average.

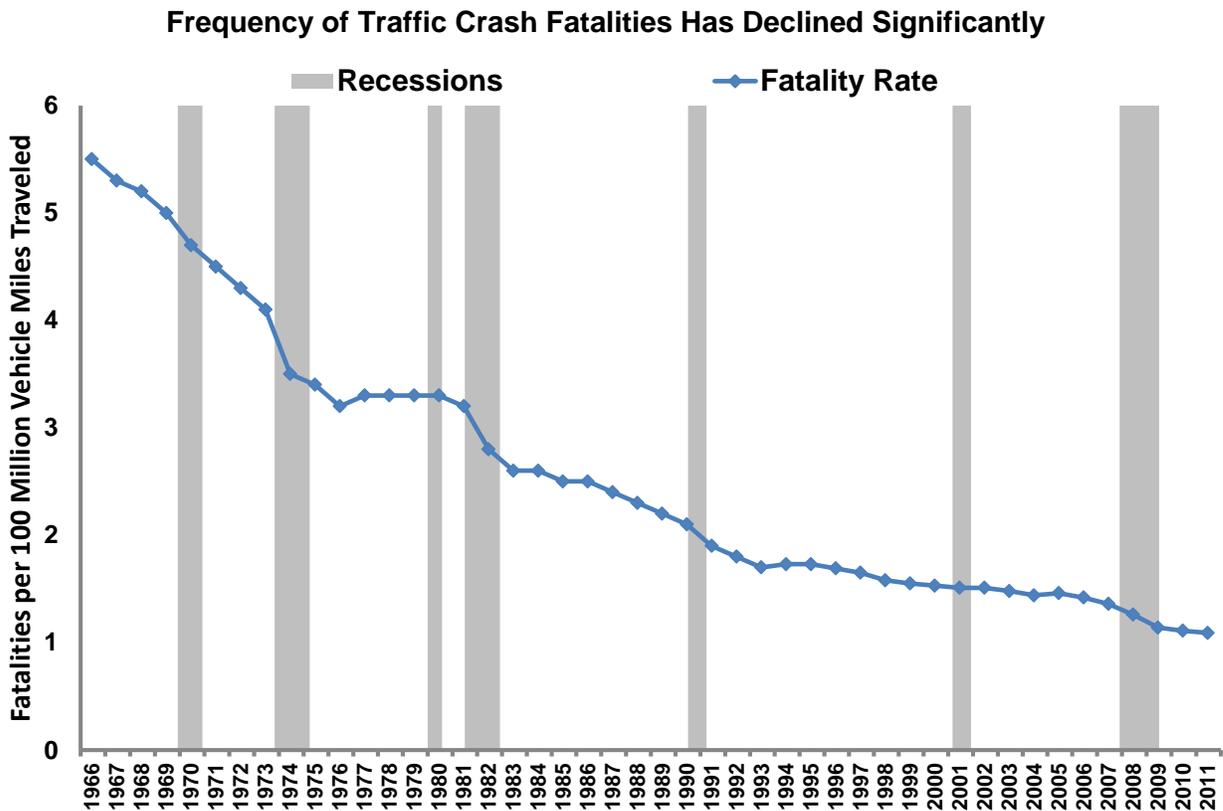


Exhibit 2. Traffic Crash Fatalities per 100 Million Vehicle Miles Traveled, Calendar Years 1966–2011, National Highway Traffic Safety Administration

**Where’s the Risk?—Frequency of Fatalities Is Now Similar for Trucks and Passenger Vehicles; Frequency of Nonfatal Injuries Is Higher for Passenger Vehicles**

The next two exhibits look at frequency separately for large trucks and for passenger vehicles using data from the Federal Motor Carrier Safety Administration.<sup>6</sup> Exhibit 3 shows fatalities, and Exhibit 4 shows nonfatal injuries. Again, these exhibits include both on- and off-the-job accidents. The frequency of both fatalities and nonfatal injuries has been declining for both large trucks and passenger vehicles. For most of the period from 1975 to 2010, fatalities per 100 million vehicle miles traveled were significantly higher for large trucks than for passenger vehicles. In 2007, the Federal Highway Administration implemented an enhanced methodology for estimating vehicle miles traveled by vehicle type, resulting in a shift downward in the frequency of fatalities for large trucks, which is more in line with the frequency of fatalities for passenger vehicles (see Exhibit 3). Because of this change in methodology, Exhibits 3 and 4 show a break in the lines between 2006 and 2007. From 1975 to 2006, the frequency of fatalities for large trucks declined by 59%, while the frequency for passenger vehicles declined by a very similar 58%. Each declined by 19% from 2007 to 2010.

<sup>6</sup> “Large Truck and Bus Crash Facts 2010,” Federal Motor Carrier Safety Administration, August 2012. Includes both on- and off-the-job accidents. A large truck is defined as a truck with a gross vehicle weight rating greater than 10,000 pounds. A passenger vehicle is defined as a car or light truck (including pickups, vans, and sports utility vehicles).

In contrast, the rate of nonfatal injuries is higher for passenger vehicles than large trucks and has remained so over the entire period from 1989 to 2010, the period for which data is available (see Exhibit 4). The frequency for large trucks declined more than for passenger vehicles (down 56% and 46%, respectively, from 1989 through 2006 and down 16% and 8%, respectively, from 2007 to 2010). Frequency of nonfatal injuries increased for both large trucks and passenger vehicles in 2010. The American Trucking Association for-hire truck tonnage index rose in 2010 after falling in 2009.<sup>7</sup> The increase in truck shipments may have contributed to the increase in the frequency of both fatal and nonfatal large truck injuries in 2010.

Frequency for both fatalities and nonfatal injuries for crashes involving both large trucks and passenger vehicles has tended to fall during recessions, but recessions have a more significant impact on the frequency of crashes involving large trucks. The most commonly coded driver-related factor for both large truck and passenger vehicle crashes was speeding. Driver distraction or inattention was the second most common factor for large truck crashes; while driver impairment due to drowsiness, alcohol, drugs, or illness was the second most common factor for passenger vehicle crashes.<sup>8</sup> The decline in frequency during the last recession may also be partly due to people driving more slowly due to high fuel prices. A *USA Today*/Gallup poll found that three-quarters of respondents were “getting tune ups, turning off the air-conditioning or driving slower to improve mileage.”<sup>9</sup> Those slower speeds may be contributing to increased safety, as was seen in the 1970s when traffic fatalities declined after the energy crisis led to the implementation of the 55 mph speed limit.<sup>10</sup>

### Frequency of Fatalities Is Higher for Large Trucks

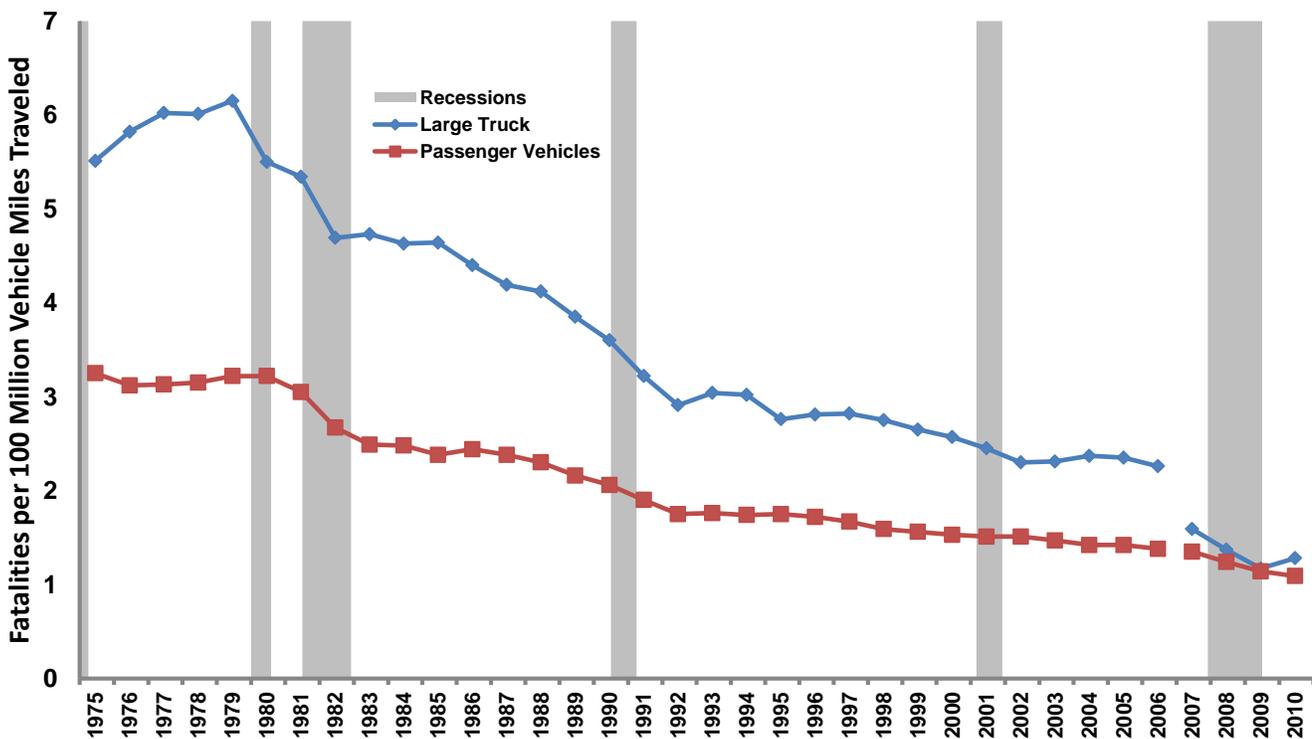


Exhibit 3. Fatalities in Crashes Involving Large Trucks and Passenger Vehicles per 100 Million Vehicle Miles Traveled, Calendar Years 1975–2010, Federal Motor Carrier Safety Administration.

<sup>7</sup> Craft, Ralph, “2010 Large Truck and Bus Crash Data: An Overview,” June 21, 2012 webinar.

<sup>8</sup> “Large Truck and Bus Crash Facts 2010,” Federal Motor Carrier Safety Administration, August 2012.

<sup>9</sup> Keen, Judy and Overberg, Paul, “Gas Prices Rattle Americans,” *USA Today*, May 9, 2008, available at [usatoday30.usatoday.com/money/industries/energy/2008-05-08-gasprices\\_N.htm](http://usatoday30.usatoday.com/money/industries/energy/2008-05-08-gasprices_N.htm).

<sup>10</sup> Fairfield, Hannah, “Driving Safety in Fits and Starts,” *The New York Times*, September 18, 2012, p. D3.

Frequency of Nonfatal Injuries Is Higher for Passenger Vehicles

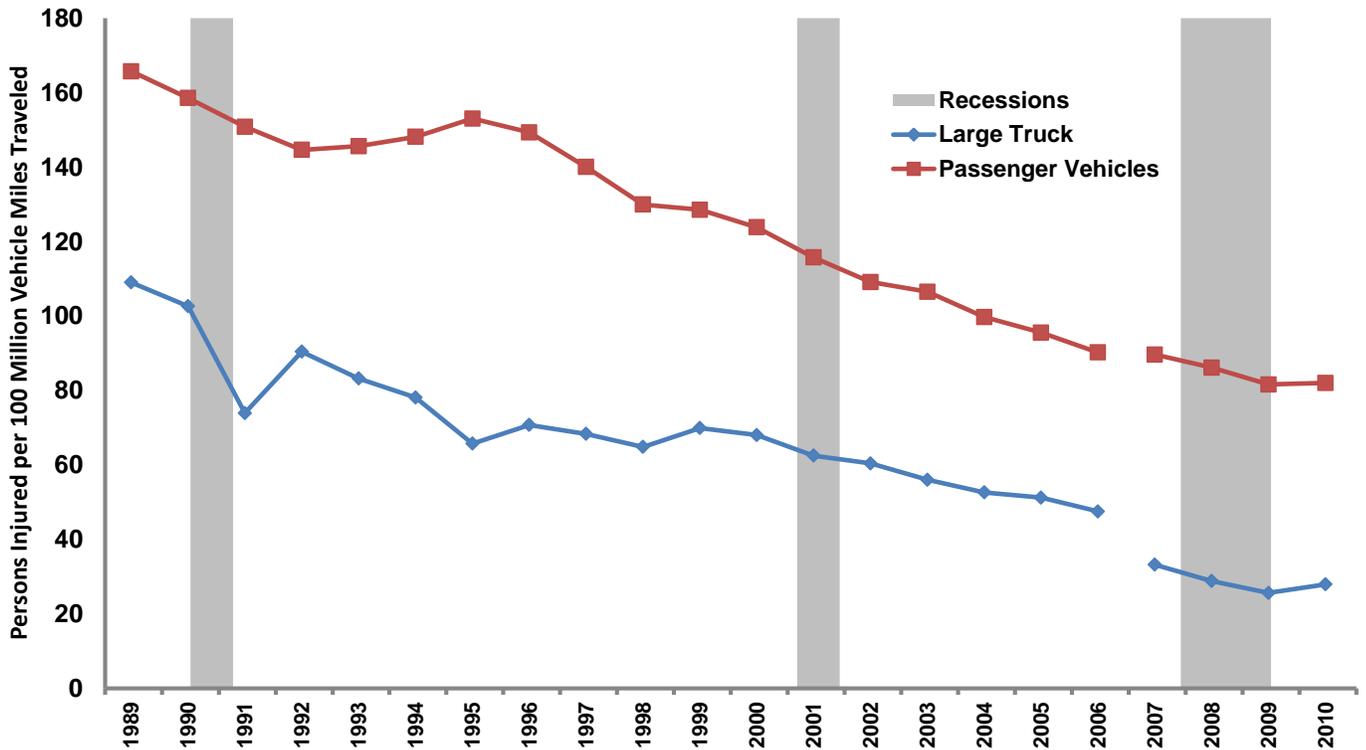


Exhibit 4. Persons Injured in Large Truck and Passenger Vehicle Crashes per 100 Million Vehicle Miles Traveled, Calendar Years 1989–2010, Federal Motor Carrier Safety Administration.

Impact of Recession on Workplace Motor Vehicle Fatalities and Injuries

This section utilizes information from the Bureau of Labor Statistics (BLS) on motor vehicle (MV) related accidents in the workplace. Exhibit 5 contains incidence rates (per 100,000 employees) of fatalities<sup>11</sup> in highway and in nonhighway MV accidents. Nonhighway accidents are those involving motor vehicles that occur entirely off the road, on industrial or commercial premises, on farms, or in parking lots. Incidence rates are higher for highway accidents and have declined for each since the data first became available in 1992.<sup>12</sup> The incidence rate for highway accident fatalities has declined 25% over the period while the incidence rate of nonhighway accidents has declined 46%. Most of the decline for highway accidents occurred during the most recent recession.

Exhibit 6 is similar, but shows incidence rates for nonfatal cases involving days away from work for highway and for nonhighway MV accidents. The incidence rate for highway accident injuries declined by 48% while the rate for nonhighway injuries declined 63%.

<sup>11</sup> Incidence rates for motor vehicle workplace fatalities are estimated by NCCI by dividing fatalities by employment. Both fatality and employment data is from the BLS.

<sup>12</sup> Data for nonhighway accidents is included here because it is combined with highway accidents later in the report when we use NCCI data.

Frequency of Workplace Highway Fatalities Declined Significantly During the Most Recent Recession

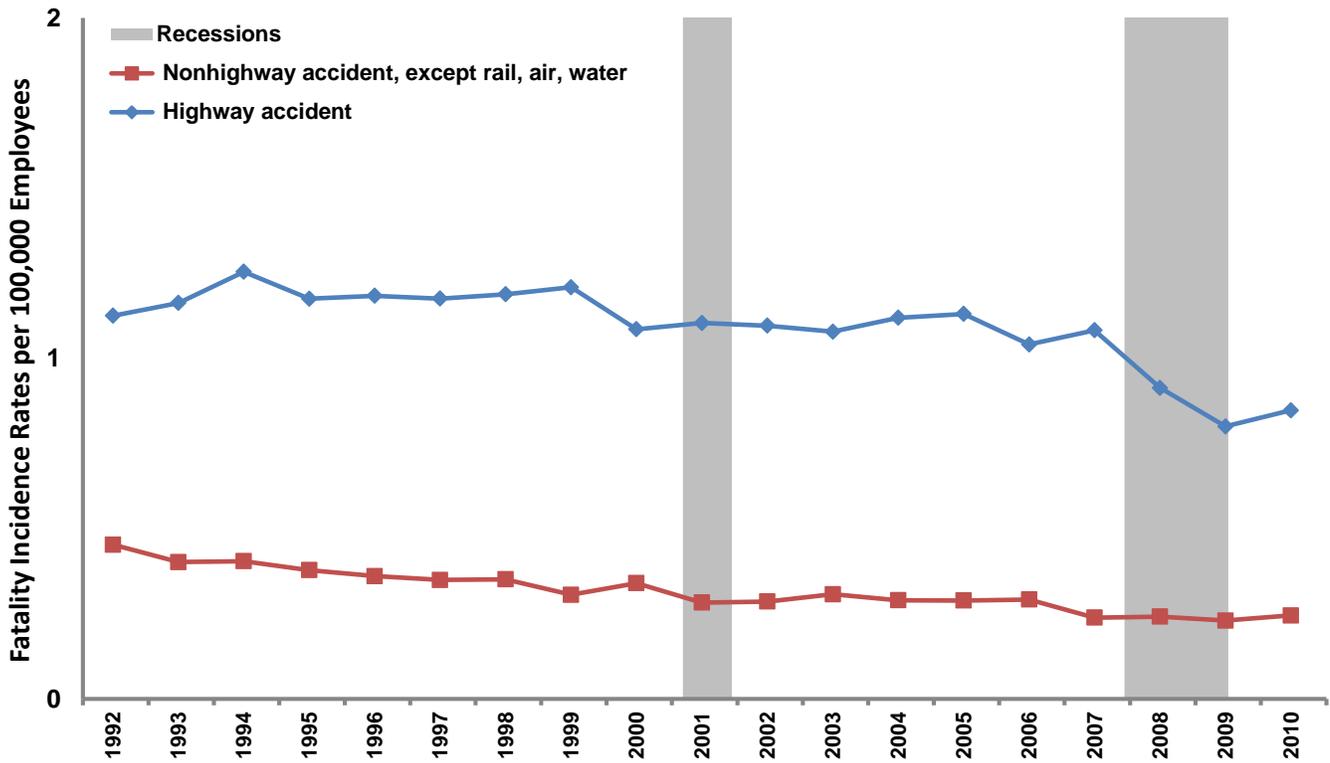


Exhibit 5. Fatality Incidence Rates per 100,000 Employees, Calendar Years 1992–2010, Estimated by NCCI Using Bureau of Labor Statistics Data.

**Frequency of Nonfatal Workplace Injuries Declined For Both Highway and Nonhighway Accidents**

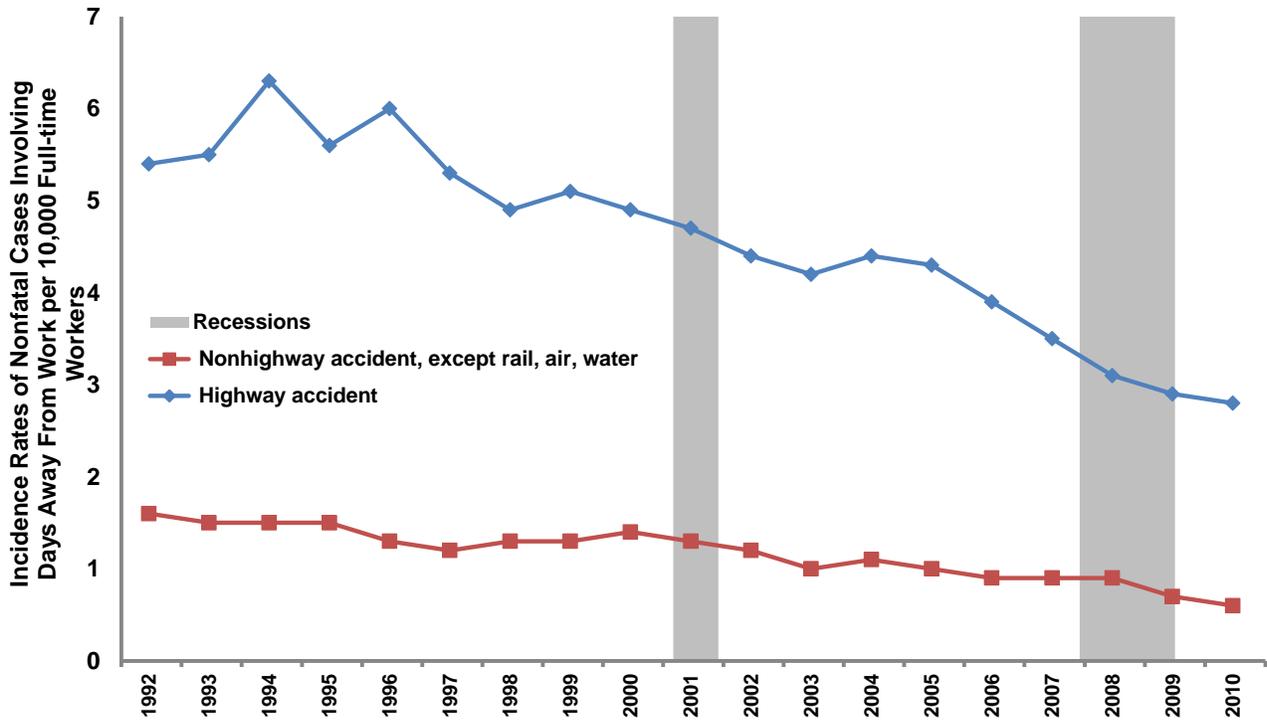


Exhibit 6. Incidence Rates of Nonfatal Cases Involving Days Away From Work per 10,000 Full-time Workers, Calendar Years 1992–2010, Bureau of Labor Statistics.

**The Share of Traffic Accidents Has Declined in Recent Years**

The previous NCCI study found that traffic accidents represented a growing share of workplace injuries using BLS data through 2004. However, Exhibit 7 shows that trend has reversed. BLS data back to 1992 shows an increase in the share through 2005 and then a decline beginning in 2006. The share of nonfatal motor vehicle-related lost-time injuries increased from 2.3% in 1992 to 3.9% in 2005 (an increase of 70%) before falling back to 3.1% in 2010 (a decline of about 20%). However, that is still a 35% increase over the entire period. Note that the share is impacted by the different rates of decline in the number of traffic and nontraffic nonfatal injuries. For example, from 1992 to 2005, the number of nonfatal traffic-related injuries fell at a slower pace (10%) than nonfatal nontraffic-related injuries (48%), pushing the share of traffic-related injuries up. The opposite occurred from 2005 to 2010, when traffic-related injuries fell by 40% and all other injuries fell by 24%, causing the share to decline.

The Share of Workplace Nonfatal Motor Vehicle-Related Accidents Has Fallen Since 2006

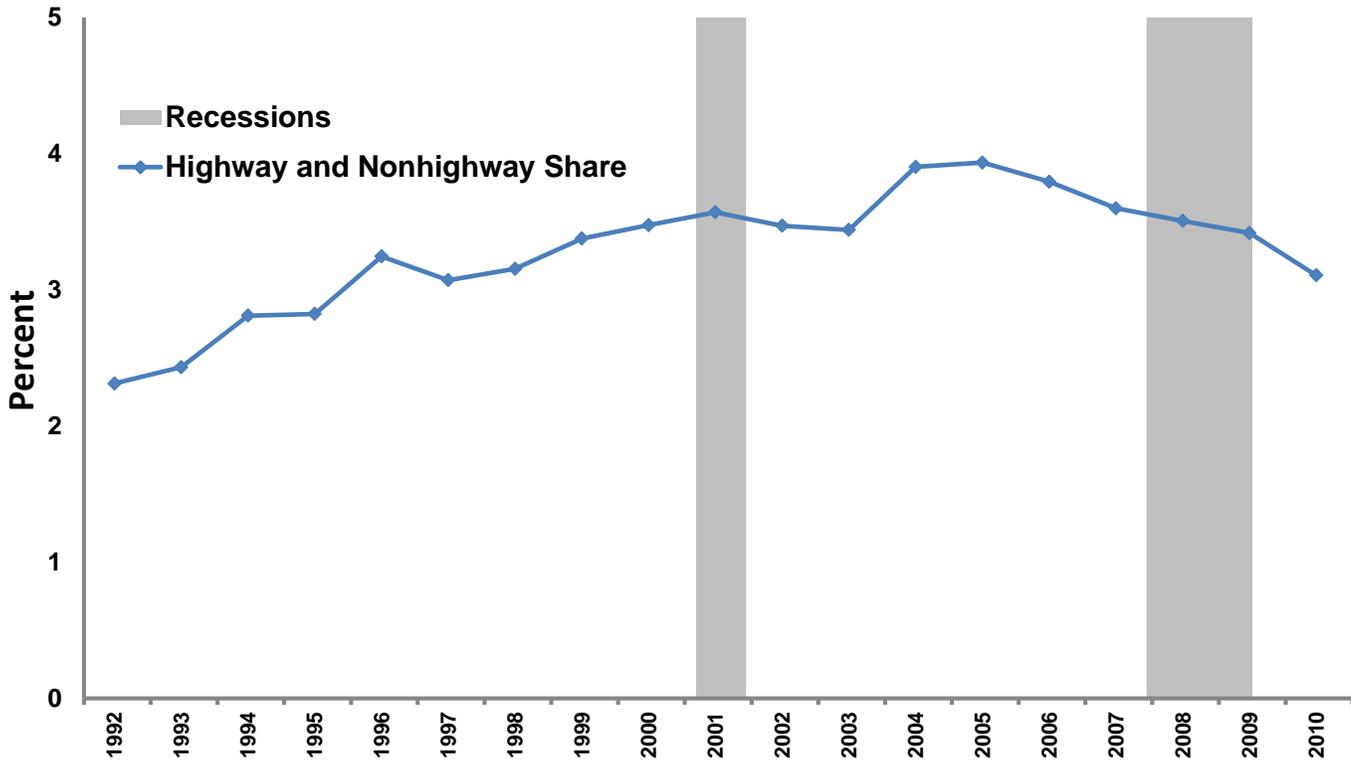


Exhibit 7. Nonfatal Motor Vehicle (Nonhighway and Highway) Accidents as a Share of Total Nonfatal Cases Involving Days Away From Work, Calendar Years 1992–2010, Bureau of Labor Statistics.

Traffic Accidents as a Source of Multiple Claims

Workplace accidents that result in injuries to more than one worker are of special concern to employers. In this section we analyze traffic accidents as a source of multiple workers compensation claims.<sup>13</sup> The data used in this section is from *Statistical Plan for Workers Compensation and Employers Liability Insurance* data for 36 NCCI states for Accident Years 2002 to 2008 as of the 2nd report for both medical-only and lost-time claims.<sup>14</sup>

<sup>13</sup> Accident events are defined as those with claims having the same policy ID, state, accident date, and cause of injury. We are assuming that if these four variables match, the claims resulted from the same accident event. However, since accident address is not available, we cannot be sure they came from the same accident address, only from the same employer. This definition could overstate multiple-claim accidents especially for large risks because separate accidents with the same cause of injury on the same policy on the same day in the same state would be treated as a multiple-claim event under this definition.

<sup>14</sup> States that are excluded from charts using *Statistical Plan for Workers Compensation and Employers Liability Insurance* data are CA, DE, MA, MI, MN, NJ, NY, ND, OH, PA, TX, WA, WV, WI, and WY. The accident year data was obtained from data for Policy Years 2001–2008 evaluated at a 2nd report (30 months after the effective date of the policy). If it weren't for subrogation, these reported claim costs would have been higher because *Statistical Plan* data is reported net of subrogation. Subrogation is discussed beginning with Exhibit 26.

This analysis uses four cause of injury codes to define motor vehicle-related accidents.<sup>15</sup> They are:

- Collision or sideswipe with another vehicle
- Collision with a fixed object
- Vehicle upset
- Motor vehicle not otherwise classified

Throughout this study, when we refer to motor vehicle causes or motor vehicle accidents in exhibits using NCCI data, it is based on the combination of these four causes of injury.

The focus of this analysis is on highway traffic accidents, but NCCI’s data does not differentiate between highway and nonhighway motor vehicle accidents. As seen in earlier exhibits, data from the BLS does allow this distinction, with highway accidents having much higher incidence rates than nonhighway accidents.<sup>16</sup>

Exhibit 8 shows that motor vehicle accidents are more likely to result in multiple claims than other causes of injury. Close to 6% of motor vehicle events are multiple-claim events, compared with 2.5% on average for all causes. More than 12% of motor vehicle claims are from multiple-claim events, compared with less than 6% for all causes.

Exhibit 9 shows the top 10 cause of injury codes with the largest shares of events that are multiple-claim events and claims from multiple-claim events.<sup>17</sup> The exhibit is sorted in descending order by the share of multiple-claim events.<sup>18</sup> Motor vehicle accidents are in the top 10 for both measures, ranking 6th in the share of events that are multiple-claim events and 8th in the share of claims from multiple-claim events. The top-ranking cause of injury code is crash of airplane. However, it has only 1,187 claims. Cause of injury codes in the top 10 with larger numbers of claims include:

- Miscellaneous causes: absorption, ingestion or inhalation, not otherwise classified
- Burn or scald—heat or cold exposure: dust, gases, fumes, or vapors
- Miscellaneous causes: other miscellaneous, not otherwise classified<sup>19</sup>
- Miscellaneous causes: person in act of a crime
- Struck or injured by: fellow worker, patient

### Motor Vehicle Accidents Are More Likely to Result in Multiple Claims

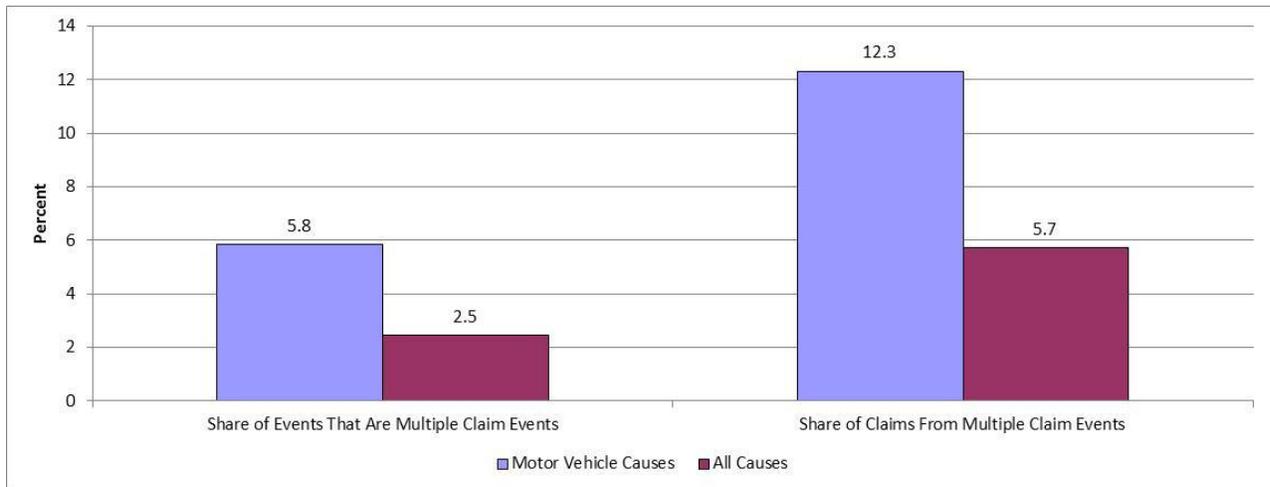


Exhibit 8. Share of Events That Are Multiple-Claim Events and Share of Claims From Multiple-Claim Events, 2nd Report, Accident Years 2002–2008, *Statistical Plan for Workers Compensation and Employers Liability Insurance Data*.

<sup>15</sup> This is the same definition that was used in the 2006 report.

<sup>16</sup> As mentioned earlier, nonhighway accidents are those involving motor vehicles that occur entirely off the road, on industrial or commercial premises, on farms, or in parking lots.

<sup>17</sup> Tables in this section exclude claims with invalid cause of injury codes.

<sup>18</sup> Rankings are determined using nonrounded data.

<sup>19</sup> The number of multiple events for this cause of injury code may be inflated by the approximation logic.

### Motor Vehicle Accidents Rank in the Top 10 for Share of Multiple-Claim Events and Share of Multiple-Event Claims

Cause of Injury Code	Number of Claims	Number of Multiple Claim Events	Share of Events That Are Multiple Claim Events	Rank	Share of Claims From Multiple Claim Events	Rank
ALL CAUSES OF INJURY	14,316,013	339,380	2.5		5.7	
MOTOR VEHICLE: CRASH OF AIRPLANE	1,187	113	11.3	1	25.4	1
MISCELLANEOUS CAUSES: ABSORPTION, INGESTION OR INHALATION, NOC	83,173	4,879	6.8	2	20.1	2
BURN OR SCALD - HEAT OR COLD EXPOSURE: DUST, GASES, FUMES OR VAPORS	44,161	2,607	6.7	3	18.0	3
MISCELLANEOUS CAUSES: OTHER-MISCELLANEOUS, NOC	871,718	51,946	6.7	4	17.1	4
MOLD	352	19	5.9	5	13.4	7
<b>MOTOR VEHICLE ACCIDENTS</b>	<b>346,920</b>	<b>18,838</b>	<b>5.8</b>	<b>6</b>	<b>12.3</b>	<b>8</b>
MISCELLANEOUS CAUSES: PERSON IN ACT OF A CRIME	38,601	1,881	5.2	7	11.1	9
STRAIN OR INJURY BY: CONTINUAL NOISE	8,706	412	5.2	8	13.4	6
MOTOR VEHICLE: CRASH OF WATER VEHICLE	2,661	113	4.5	9	9.5	13
STRUCK OR INJURED BY: FELLOW WORKER, PATIENT	144,151	5,898	4.3	10	9.0	15
STRUCK OR INJURED BY: EXPLOSION OR FLARE BACK	8,342	311	4.0	12	9.9	10
NATURAL DISASTER	115	3	3.0	18	15.7	5

Exhibit 9. Top 10 Cause of Injury Codes for Share of Events That Are Multiple-Claim Events and Share of Claims From Multiple-Claim Events, 2nd Report, Accident Years 2002–2008, *Statistical Plan for Workers Compensation and Employers Liability Insurance Data*.

Exhibit 10 contains the top 10 cause of injury codes for the average number of claims per multiple event and the maximum claims per event. It shows that motor vehicle events are not in the top 10 causes of injury for either of these.<sup>20</sup> Exhibit 10 is sorted in descending order of average claims per multiple event. Motor vehicle accidents are ranked 25th in terms of the average number of claims per multiple event and are about average, with just over 2 claims per multiple event for both motor vehicles (2.3 claims) and all causes of injury (2.4 claims). Motor vehicle accidents rank 14th in the maximum number of claims per event, with 31. This event occurred on a farm and involved a collision with another vehicle.<sup>21</sup>

Although motor vehicle accidents are lower in the rankings for average and maximum claims per multiple event, they loom large in terms of the number of multiple-claim events (18,838 from 2002–2008) and the total number of claims resulting from those events (42,716 from 2002–2008).

<sup>20</sup> Rankings for the averages are determined using nonrounded data. Since maximum number of claims per event is a whole number, there may be ranking ties for that data.

<sup>21</sup> Miscellaneous Causes: Absorption, Ingestion, or Inhalation, NOC is the top-ranked cause of injury for the maximum number of claims per event, with 129. This event took place at a call center with the nature of injury coded as Poisoning—General. Almost all of the claims were medical only.

**Motor Vehicle Accidents Are Not in the Top 10 for Average or Maximum Claims per Multiple-Claim Event**

	Number of Claims	Number of Multiple Claim Events	Average Claims per Multiple Event	Rank	Maximum Claims per Event	Rank
ALL CAUSES OF INJURY	14,316,013	339,380	2.4		129	
NATURAL DISASTER	115	3	6.0	1	12	31
MISCELLANEOUS CAUSES: ABSORPTION, INGESTION OR INHALATION, NOC	83,173	4,879	3.4	2	129	1
BURN OR SCALD - HEAT OR COLD EXPOSURE: DUST, GASES, FUMES OR VAPORS	44,161	2,607	3.1	3	39	10
BURN OR SCALD - HEAT OR COLD EXPOSURE: CONTACT WITH, NOC	75,547	2,347	2.9	4	90	5
MISCELLANEOUS CAUSES: OTHER THAN PHYSICAL CAUSE OF INJURY	41,875	1,217	2.9	5	98	3
BURN OR SCALD - HEAT OR COLD EXPOSURE: RADIATION	4,442	152	2.9	6	13	29
MISCELLANEOUS CAUSES: OTHER-MISCELLANEOUS, NOC	871,718	51,946	2.9	7	105	2
STRAIN OR INJURY BY: CONTINUAL NOISE	8,706	412	2.8	8	77	7
STRIKING AGAINST OR STEPPING ON: STRIKING AGAINST OR STEPPING ON, NOC	323,873	8,846	2.8	9	27	18
CAUGHT IN OR BETWEEN: COLLAPSING MATERIALS (SLIDES OF EARTH)	5,422	90	2.7	10	18	21
STRUCK OR INJURED BY: EXPLOSION OR FLARE BACK	8,342	311	2.7	11	47	9
MISCELLANEOUS CAUSES: CUMULATIVE, NOC	151,454	3,545	2.5	15	98	3
STRAIN OR INJURY BY: STRAIN OR INJURY BY, NOC	817,947	24,658	2.4	18	85	6
<b>MOTOR VEHICLE ACCIDENTS</b>	<b>346,920</b>	<b>18,838</b>	<b>2.3</b>	<b>25</b>	<b>31</b>	<b>14</b>
STRUCK OR INJURED BY: FELLOW WORKER, PATIENT	144,151	5,898	2.2	35	49	8

Exhibit 10. Top 10 Cause of Injury Codes for Average Claims per Multiple Event and Maximum Claims per Event, 2nd Report, Accident Years 2002–2008, *Statistical Plan for Workers Compensation and Employers Liability Insurance Data*.

Exhibit 11 shows that total incurred severity for motor vehicle claims from multiple-claim events is 15% higher, at \$27,489, than total incurred severity for motor vehicle claims from single-claim events, at \$23,827. This difference is in contrast to total incurred severity for all causes of injury, which is about the same whether the claim is from a multiple-claim or single-claim event.

**Total Incurred Severity for Motor Vehicle Claims Is Higher From Multiple-Claim Events**

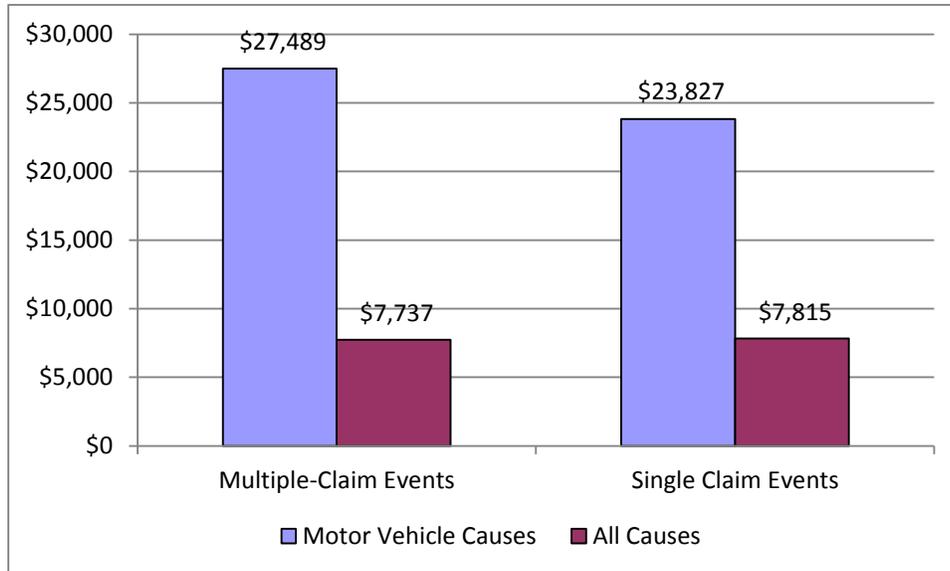


Exhibit 11. Total Incurred Severity, 2nd Report, Accident Years 2002–2008, *Statistical Plan for Workers Compensation and Employers Liability Insurance Data*.

### What Do We Know About These Claims?

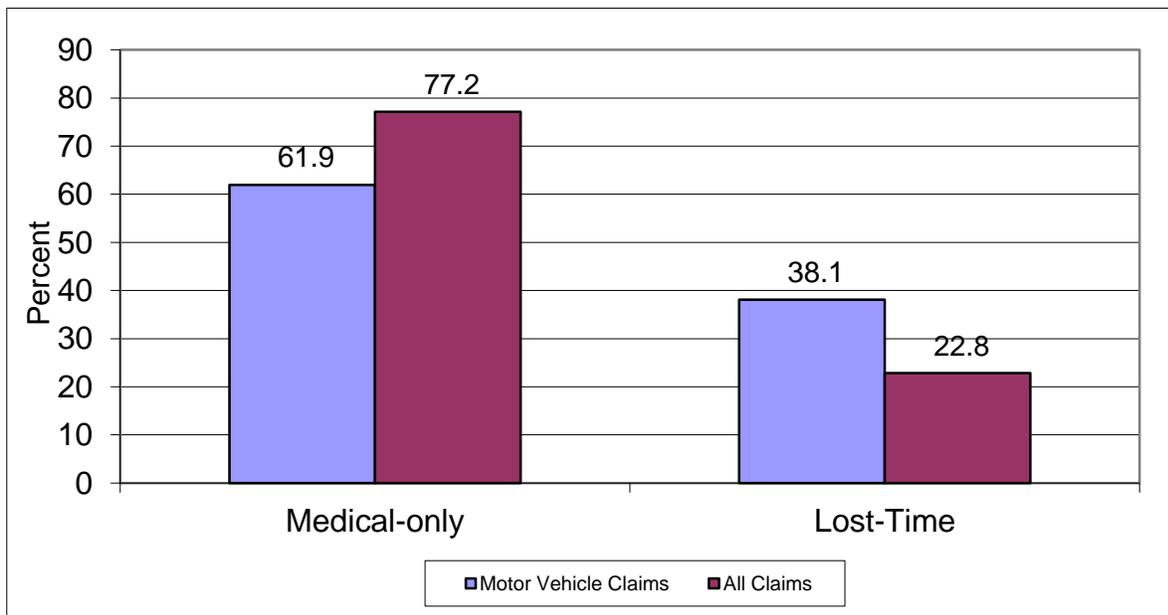
The following sections update exhibits from the prior NCCI traffic study with data for 2002 to 2008, which replaces data from 1997 to 2003. This section focuses on all workers compensation claims related to traffic accidents, not just those resulting in multiple claims. Several NCCI data sources are used in this study including the **Statistical Plan** and claims databases.<sup>22</sup> We examine characteristics of motor vehicle claims using NCCI data by injury type, class code, diagnosis, duration, subrogation, attorney involvement, age, and gender. Observations are consistent with those in the prior traffic study. Some observations include:

- Motor vehicle claims are more likely to be lost-time and make up a disproportionate share of the most severe claim types.
- Occupations in addition to trucking have significant exposure to motor vehicle claims.
- Neck injuries are among the top diagnoses for motor vehicle claims in terms of both number of claims and total incurred loss dollars.
- Average duration is more than a third longer for motor vehicle claims 60 months after injury date.
- Subrogation is a significant consideration in claims regarding motor vehicle accidents. More than 20% of motor vehicle claims involve subrogation compared with 1% for workers compensation overall. In fact, motor vehicle claims make up more than *half* of all workers compensation claims with subrogation.
- Motor vehicle claims are three times as likely to involve a claimant attorney compared with all claims.
- Compared to the distribution of all claims, motor vehicle shares are below average for the youngest workers, above average for ages 25–44, and about average for older age cohorts.
- Traffic accident claimants are more likely to be male.

### Claim Characteristics—More Lost-Time, More Severe, More Expensive

The previous section shows that traffic accidents account for a disproportionate share of claims from multiple claim events. That is not the only bad news. Here we see that they also account for a disproportionate share of more severe claims. As in the previous report, Exhibit 12 shows that motor vehicle claims are more likely to be lost-time claims. Nearly 40% of motor vehicle claims are lost-time, opposed to just under 23% for all claims.

**Motor Vehicle Claims Are More Likely to Involve Lost-Time**

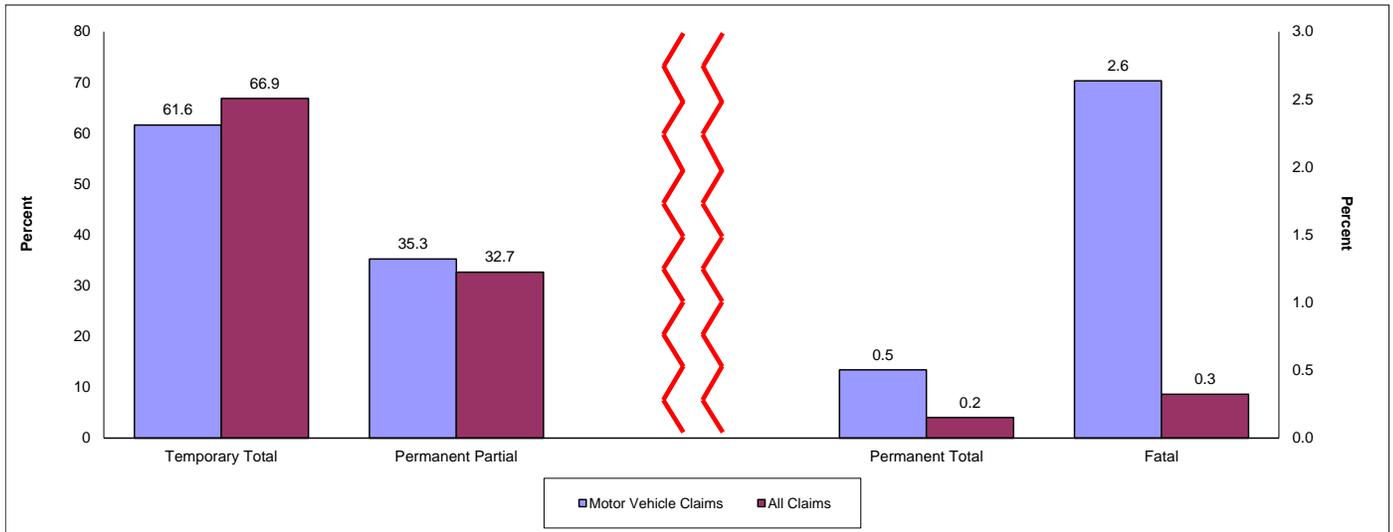


*Exhibit 12. Medical-Only vs. Lost-Time Split at 2nd Report, Accident Years 2002–2008, Statistical Plan for Workers Compensation and Employers Liability Insurance Data.*

<sup>22</sup> As discussed previously, **Statistical Plan** data includes 36 NCCI states. The claims database contains data licensed to NCCI by insurers for purposes of this study and includes all states.

For those that are lost-time, Exhibit 13 shows that motor vehicle claims are more likely to be permanent partial (PP), permanent total (PT), and fatal than all claims. This is consistent with the last study.

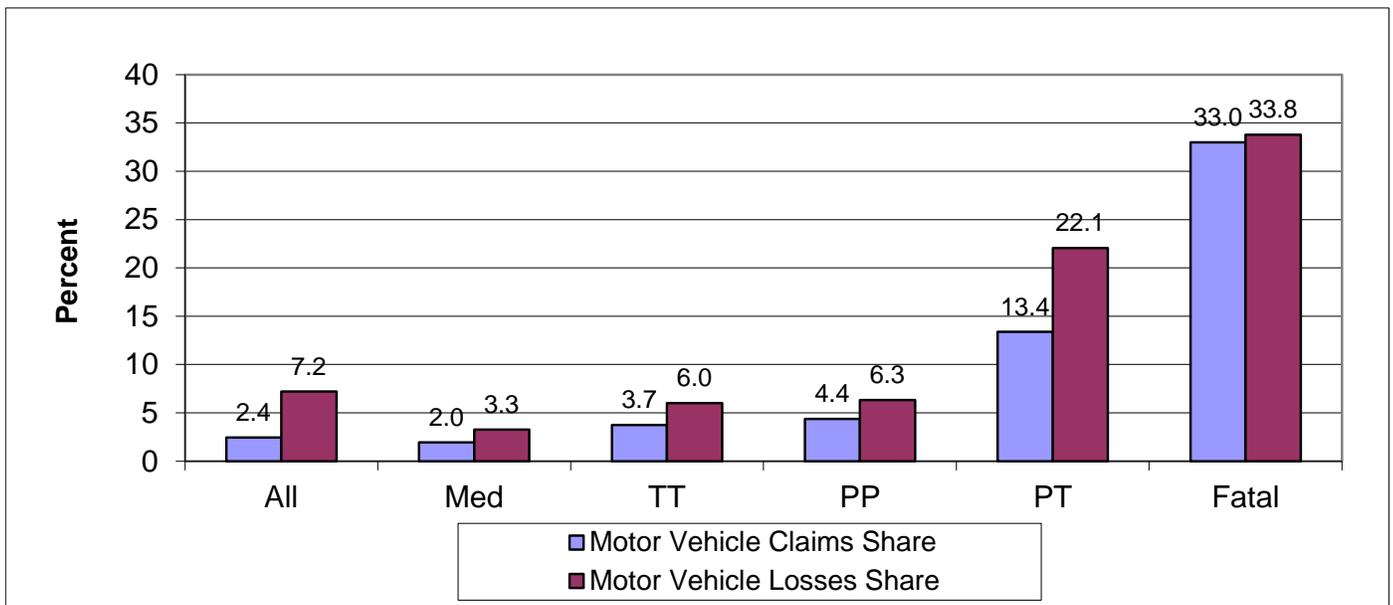
**Motor Vehicle Lost-Time Claims Are More Likely to Be PP, PT, and Fatal**



*Exhibit 13. Lost-Time Claims Injury Type Distribution at 2nd Report, Accident Years 2002–2008, Statistical Plan for Workers Compensation and Employers Liability Insurance Data.*

Because motor vehicle injuries comprise a disproportionate share of the more severe workers compensation claim types, the share of losses is higher than the share of claims. Exhibit 14 shows that while motor vehicle claims comprise just over 2% of all claims, they comprise 7% of losses. While motor vehicle claims make up just over 2% of claims overall, they account for a third of fatalities and over 13% of permanent total injuries. In terms of losses, motor vehicle claims make up more than 7% of all losses but more than 20% of permanent total losses and a third of fatal losses.

**Motor Vehicle Accidents Comprise a Larger Share of Losses Than Claims**



*Exhibit 14. Motor Vehicle Claims and Incurred Losses Shares by Each Injury Type at 2nd Report, Accident Years 2002–2008, Statistical Plan for Workers Compensation and Employers Liability Insurance Data.*

Furthermore, for each injury type but fatal, severities due to motor vehicle accidents are higher than for all claims (see Exhibit 15). The percentages above each set of the bars in Exhibit 15 indicate the difference in severity between motor vehicle claims and claims for all causes of injury for that injury type. For example, on average for temporary total injuries, motor vehicle claims are 62% more costly than severity for all claims.

**For Each Injury Type but Fatal, Severities Due to Motor Vehicle Accidents Are Higher Than for All Claims (Percentages Indicate the Difference in Severity)**

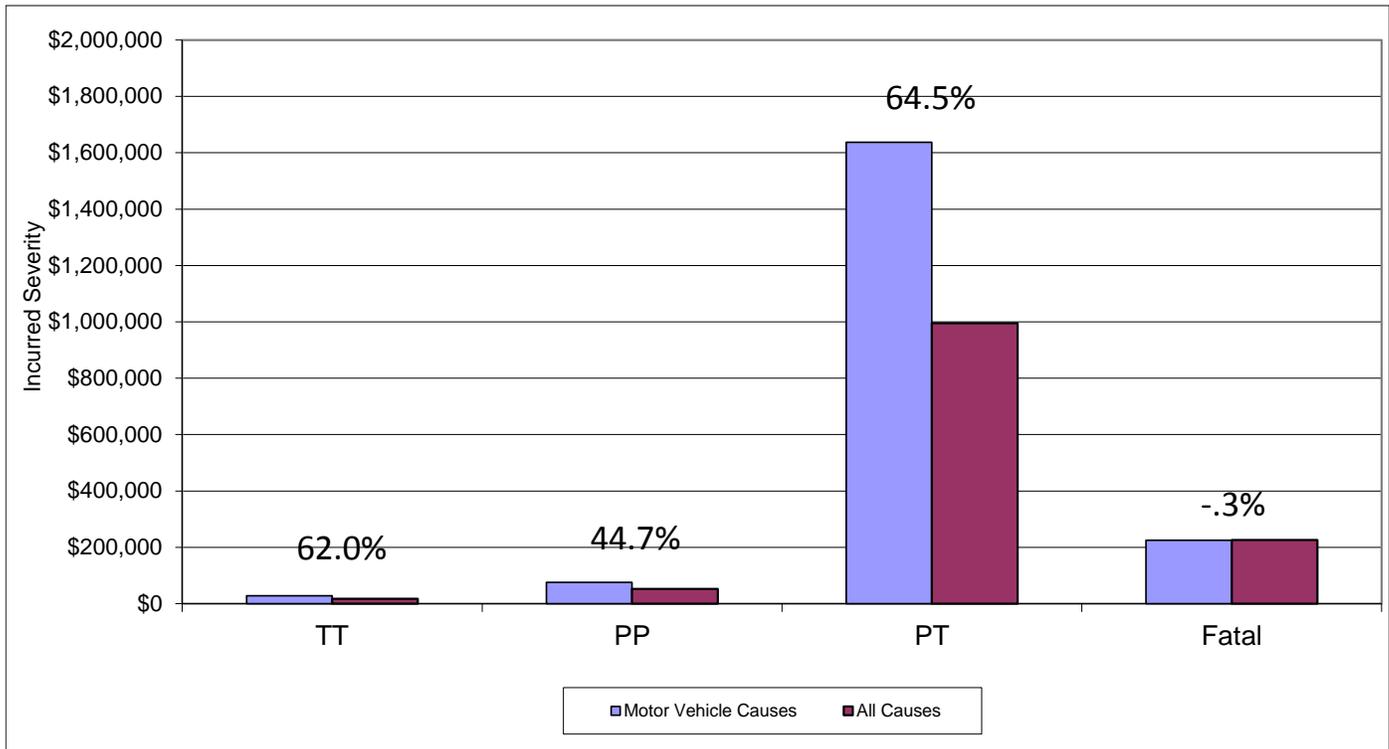


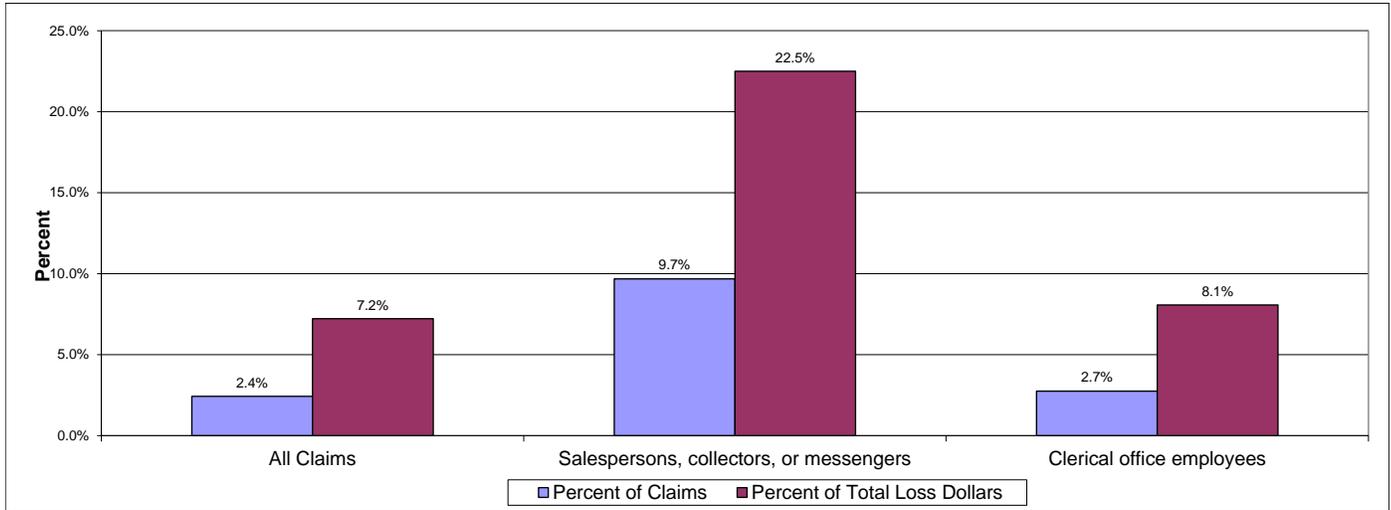
Exhibit 15. Average Incurred Dollars at 2nd Report by Injury Type, Accident Years 2002–2008, *Statistical Plan for Workers Compensation and Employers Liability Insurance Data*.

**Claim Characteristics—Not Just Truckers**

As reported in the prior study, a 1996 BLS press release noted that in spite of the large share of highway fatalities that involved trucks, only approximately 40% of the victims were truck drivers. Other top occupations involved workers driving or riding to various locations to perform their work. These include home health nurses, sales representatives, farm workers, police officers and other emergency service personnel, and managers and executives.<sup>23</sup> This is still the case. Exhibit 16 shows that motor vehicle accidents make up a slightly above-average share of both claims and losses in the large office and clerical class code; they also represent a high share of the salespersons, collectors, or messengers class code.

<sup>23</sup> “Deadly Highway Accidents Outnumber Other Fatal Work Incidents,” *Issues in Labor Statistics*, US Department of Labor, Bureau of Labor Statistics, Summary 96–13, December 1996.

**Salespersons and Clerical Have Above-Average Shares of Motor Vehicle Accidents**



*Exhibit 16. Motor Vehicle Accident Percent of Claims and Total Incurred Loss Dollars at 2nd Report Overall and for Two Class Codes, Accident Years 2002–2008, **Statistical Plan for Workers Compensation and Employers Liability Insurance Data.***

Exhibit 17 contains a table ranking the top class codes for all motor vehicle accidents. In addition to the expected codes such as salespersons, drivers, trucking,<sup>24</sup> police officers, and home health nurses, clerical office employees are ranked second. The class codes in the top 10 (based on data for 2002–2008) are unchanged from the previous report (data for 1997–2003). The order of some changed, including clerical moving to second from first, and salespersons moving to first from second.

**Top Class Codes With Motor Vehicle Accidents Include Sales, Clerical, Truckers, Drivers, and Police Officers**

Rank	Class Code	Claim Counts Due to Motor Vehicle Causes	Class' Share of Total Claims Due to Motor Vehicle Causes (%)	Cumulative Share of Claims Due to Motor Vehicle Causes (%)
1	SALESPERSONS OR COLLECTORS-OUTSIDE	20,484	5.9	5.9
2	CLERICAL OFFICE EMPLOYEES NOC	19,585	5.6	11.5
3	DRIVERS, CHAUFFEURS, MESSENGERS AND THEIR HELPERS NOC-COMMERCIAL	17,699	5.1	16.6
4	TRUCKING-LONG DISTANCE HAULING-& DRIVERS	13,659	3.9	20.5
5	AUTOMOBILE SERVICE OR REPAIR CENTER & DRIVERS	11,160	3.2	23.7
6	TRUCKING-LOCAL HAULING ONLY-& DRIVERS	9,558	2.7	26.4
7	POLICE OFFICERS & DRIVERS	9,092	2.6	29.0
8	TRUCKING: NOC-ALL EMPLOYEES & DRIVERS	8,004	2.3	31.3
9	BUS CO.: ALL OTHER EMPLOYEES & DRIVERS	7,484	2.1	33.5
10	HOME, PUBLIC, AND TRAVELING HEALTHCARE-ALL EMPLOYEES	7,187	2.1	35.5

*Exhibit 17. Top 10 Class Codes at 2nd Report for All Claims Due to Motor Vehicles, Accident Years 2002–2008, **Statistical Plan for Workers Compensation and Employers Liability Insurance Data.***

<sup>24</sup> In 1996, the class code Trucking: NOC—All Employees and Drivers was discontinued in most states and replaced with Trucking—Local Hauling Only—& Drivers and Trucking—Long Distance Hauling—& Drivers. The original class code Trucking: NOC—All Employees and Drivers was retained in AK, CA, FL, LA, MA, MI, MT, NY, OR, TN, and TX, although **Statistical Plan** data that is used for this section does not include CA, MA, MI, NY, or TX. If the three trucking class codes were still combined, they would rank first, with 9% for claims and 15% for loss dollars for the states included.

There is very little difference among the top class codes by injury type as seen in Exhibit 18. The table highlights in yellow the rankings by injury type that are in the top 10. The class codes in the top 10 for permanent partial (PP), temporary total (TT), and medical only (Med-Only) match those for all claims combined, but the order changes. The differences occur for fatal and permanent total (PT).

- Gasoline dealers and drivers, excavation and drivers, and street pavers and drivers show up in the top 10 class codes for fatal injuries
- Lumberyard and warehouse employees and drivers, and excavation and drivers are in the top 10 for PT injuries

**Top Class Codes for Motor Vehicle Accidents by Injury Type**

	ALL	FATAL	PT	PP	TT	MED-ONLY
SALESPERSONS OR COLLECTORS-OUTSIDE	1	2	1	1	3	1
CLERICAL OFFICE EMPLOYEES NOC	2	5	2	4	4	2
DRIVERS, CHAUFFEURS, MESSENGERS AND THEIR HELPERS NOC-COMMERCIAL	3	4	4	3	2	3
TRUCKING-LONG DISTANCE HAULING-& DRIVERS	4	1	3	2	1	6
AUTOMOBILE SERVICE OR REPAIR CENTER & DRIVERS	5	7	4	6	7	4
TRUCKING-LOCAL HAULING ONLY-& DRIVERS	6	3	4	5	5	9
POLICE OFFICERS & DRIVERS	7	11	8	9	10	5
TRUCKING: NOC-ALL EMPLOYEES & DRIVERS	8	6	7	7	6	10
BUS CO.: ALL OTHER EMPLOYEES & DRIVERS	9	24	14	8	8	8
HOME, PUBLIC, AND TRAVELING HEALTHCARE--ALL EMPLOYEES	10	15	11	10	9	7
GASOLINE DEALER & DRIVERS	42	8	14	33	40	51
EXCAVATION & DRIVERS	15	9	10	15	12	21
STREET OR ROAD CONSTRUCTION: PAVING OR REPAVING & DRIVERS	35	10	28	26	31	38
LUMBERYARD NEW MATERIALS ONLY: ALL OTHER EMPLOYEES & YARD, WAREHOUSE, DRIVERS	16	12	9	12	15	19

Exhibit 18. Top 10 Class Codes at 2nd Report by Injury Type for All Claims Due to Motor Vehicles, Accident Years 2002–2008, **Statistical Plan for Workers Compensation and Employers Liability Insurance Data.**

In terms of dollars, the top 10 class codes are similar to those in terms of claims, but trucking is in the top spot. Bus drivers and home and traveling healthcare employees, which were in the top 10 for claims, are replaced by excavation and lumberyard employees in terms of dollars (see Exhibit 19).

**The Top Class Codes in Dollars Are Similar to Those in Terms of Number of Claims**

Rank	Class Code	Total Incurred Dollars Due to Motor Vehicle Causes	Class' Share of Total Incurred Dollars Due to Motor Vehicle Causes (%)	Cumulative Share of Total Incurred Dollars Due to Motor Vehicle Causes (%)
1	TRUCKING-LONG DISTANCE HAULING-& DRIVERS	593,884,239	7.5	7.5
2	SALESPERSONS OR COLLECTORS-OUTSIDE	469,378,837	5.9	13.4
3	CLERICAL OFFICE EMPLOYEES NOC	389,392,061	4.9	18.2
4	DRIVERS, CHAUFFEURS, MESSENGERS AND THEIR HELPERS NOC-COMMERCIAL	362,211,693	4.5	22.8
5	TRUCKING-LOCAL HAULING ONLY-& DRIVERS	355,662,982	4.5	27.3
6	TRUCKING: NOC-ALL EMPLOYEES & DRIVERS	273,130,389	3.4	30.7
7	AUTOMOBILE SERVICE OR REPAIR CENTER & DRIVERS	191,857,749	2.4	33.1
8	EXCAVATION & DRIVERS	156,976,351	2.0	35.1
9	POLICE OFFICERS & DRIVERS	136,927,323	1.7	36.8
10	LUMBERYARD NEW MATERIALS ONLY: ALL OTHER EMPLOYEES & YARD, WAREHOUSE, DRIVERS	135,975,218	1.7	38.5

Exhibit 19. Top 10 Class Codes at 2nd Report for Total Incurred Losses Due to Motor Vehicles, Accident Years 2002–2008, **Statistical Plan for Workers Compensation and Employers Liability Insurance Data.**

Exhibit 20 shows there are similarities in the top 10 class codes by injury type in terms of dollars, but there are a few differences. These include:

- Gasoline dealers and drivers are in the top 10 for fatal
- Construction or erection permanent yard and restaurant are in the top 10 for PT
- Garbage collection and drivers are in the top 10 for PP
- Home and traveling healthcare workers and bus company employees and drivers are in the top 10 for medical-only

**Top Class Codes for Motor Vehicle Accident Dollars by Injury Type**

	ALL	FATAL	PT	PP	TT	MED-ONLY
TRUCKING-LONG DISTANCE HAULING-& DRIVERS	1	1	2	1	1	6
SALESPERSONS OR COLLECTORS-OUTSIDE	2	2	1	2	2	1
CLERICAL OFFICE EMPLOYEES NOC	3	4	3	3	4	2
DRIVERS, CHAUFFEURS, MESSENGERS AND THEIR HELPERS NOC-COMMERCIAL	4	6	4	5	3	3
TRUCKING-LOCAL HAULING ONLY-& DRIVERS	5	3	5	4	5	7
TRUCKING: NOC-ALL EMPLOYEES & DRIVERS	6	5	7	6	6	8
AUTOMOBILE SERVICE OR REPAIR CENTER & DRIVERS	7	10	6	7	7	5
EXCAVATION & DRIVERS	8	8	9	8	8	16
POLICE OFFICERS & DRIVERS	9	9	24	11	9	4
LUMBERYARD NEW MATERIALS ONLY: ALL OTHER EMPLOYEES & YARD, WAREHOUSE, DRIVERS	10	13	16	10	10	19
GASOLINE DEALER & DRIVERS	19	7	31	20	37	44
CONSTRUCTION OR ERECTION PERMANENT YARD	31	23	8	57	36	70
RESTAURANT NOC	36	108	10	39	55	32
GARBAGE, ASHES OR REFUSE COLLECTION & DRIVERS	12	17	52	9	16	20
HOME, PUBLIC, AND TRAVELING HEALTHCARE--ALL EMPLOYEES	11	26	33	12	11	9
BUS CO.: ALL OTHER EMPLOYEES & DRIVERS	17	54	95	13	18	10

Exhibit 20. Top 10 Class Codes at 2nd Report by Injury Type for Total Incurred Losses Due to Motor Vehicles, Accident Years 2002–2008, **Statistical Plan for Workers Compensation and Employers Liability Insurance Data.**

**Claim Characteristics—Neck Injuries Are a Leading Diagnosis**

Exhibit 21 shows the top 10 diagnoses for all motor vehicle accidents in terms of number of claims. Neck injuries occupy the top two spots. Sprain of neck and cervicalgia (pain in neck) make up 23% of all motor vehicle claims but less than 3% of all claims. Diagnosis codes in the top 10 are similar to those in the previous report, but are more concentrated using the new data. The top 10 diagnosis codes now represent 35% of all motor vehicle claims, compared to 25% before.

Exhibit 22 is similar but ranks the top diagnoses in terms of total incurred dollars. While sprain of neck, cervicalgia, and cervical disc displacement are among the top diagnoses in terms of both claims and total incurred dollars 24 months after injury date, many of the diagnoses appearing in the top 10 in terms of incurred dollars are not in the top 10 in terms of claims. The second ranked diagnosis in terms of total incurred dollars at 24 months is other brain injury, which ranks 33rd in terms of claims, while the sixth in terms of total incurred dollars is lumbar disc displacement, which ranks 13th in terms of claims. Again, the more recent data is more concentrated, with the top 10 representing 27% of incurred dollars from 2002–2008, but 23% from 1997–2003.

**Neck Injuries Are the Top Motor Vehicle-Related Diagnoses in Terms of Claims**

Rank	Primary Medical Diagnosis	Motor Vehicle Claim Counts	Share of All Motor Vehicle Claim Counts (%)	Cumulative Share of Motor Vehicle Claim Counts (%)	Rank by Total Incurred	Total Incurred Dollars 24 Months After Date of Injury
1	SPRAIN OF NECK	27,341	13.1	13.1	3	129,780,583
2	CERVICALGIA	20,654	9.9	22.9	1	416,130,937
3	SPRAIN LUMBAR REGION	6,223	3.0	25.9	19	27,342,500
4	CONTUSION FACE/SCALP/NCK	3,733	1.8	27.7	59	10,447,838
5	SPRAIN SHOULDER/ARM UNSP	2,999	1.4	29.1	38	15,704,753
6	LUMBAGO	2,731	1.3	30.4	15	39,239,290
7	INJURY OF FACE/NECK	2,494	1.2	31.6	39	15,637,834
8	HEADACHE	2,454	1.2	32.8	40	14,787,671
9	LUMBOSACRAL NEURITIS UNS	2,452	1.2	33.9	5	95,270,372
10	CERVICAL DISC DISPLACMNT	2,410	1.2	35.1	4	119,849,309

Exhibit 21. Top 10 Primary Diagnoses for All Motor Vehicle Injuries by Claim Counts 24 Months After Date of Injury, Accident Years 2002–2008, NCCI.

**Neck Injuries Also Rank High in Terms of Total Incurred Dollars**

Rank	Primary Medical Diagnosis	Motor Vehicle Total Incurred Dollars 24 Months After Date of Injury	Share of All Motor Vehicle Total Incurred Dollars (%)	Cumulative Share of Motor Vehicle Total Incurred Dollars (%)	Rank by Claim Counts	Claim Counts
1	CERVICALGIA	416,130,937	9.0	9.0	2	20,654
2	BRAIN INJURY OT	138,985,221	3.0	12.0	33	1,034
3	SPRAIN OF NECK	129,780,583	2.8	14.8	1	27,341
4	CERVICAL DISC DISPLACMNT	119,849,309	2.6	17.4	10	2,410
5	LUMBOSACRAL NEURITIS UNS	95,270,372	2.1	19.4	9	2,452
6	LUMBAR DISC DISPLACEMENT	93,394,621	2.0	21.4	13	2,032
7	CONCUSSION W COMA UNSPEC	74,444,641	1.6	23.0	36	780
8	SPRAIN ROTATOR CUFF	64,468,580	1.4	24.4	22	1,411
9	CERV DISC DIS W MYELOPAT	63,858,334	1.4	25.8	37	777
10	ROTATOR CUFF SYND UNSPEC	54,383,837	1.2	27.0	25	1,334

Exhibit 22. Top 10 Primary Medical Diagnoses for All Motor Vehicle Injuries by Total Incurred Dollars 24 Months After Date of Injury, Accident Years 2002–2008, NCCI.

### Claim Characteristics—Longer Duration

Motor vehicle claims, on average, have longer duration than all claims. Exhibits 23, 24, and 25 illustrate this point. Exhibit 23 shows that motor vehicle-related claims have fewer claims closed than average when measured both 24 and 60 months after date of injury. For example, 24 months after date of injury, 78% of motor vehicle claims are closed, compared with 91% for all claims. At 60 months, the difference is smaller (about 94% vs. about 97%), but still fewer motor vehicle claims are closed. This is consistent with the prior study.

Exhibits 24 and 25 compare the average duration in terms of number of days of temporary benefit payments. Exhibit 24 is for closed claims, and Exhibit 25 is for both open and closed claims. This is an updated method of calculating duration from what was used in the previous study, but results still indicate that motor vehicle claims have longer duration.<sup>25</sup> Sixty months after date of injury, closed motor vehicle claims were 36% longer (153 days on average, compared with 112 days for all claims). Duration for both open and closed claims was 38% longer for motor vehicle claims versus all claims 60 months after date of injury (195 days for motor vehicle versus 141 days for all claims).

#### Motor Vehicle-Related Claims Have Fewer Claims Closed Than Average Both 24 and 60 Months After Date of Injury

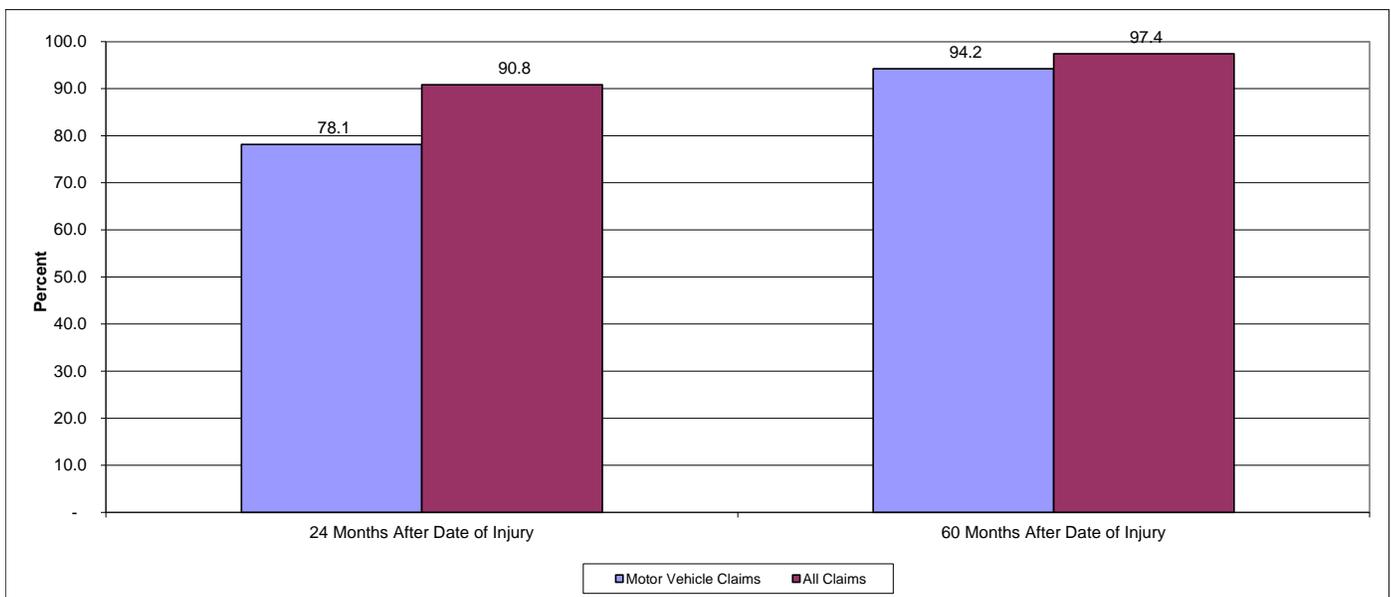


Exhibit 23. Percent of Claims That Are Closed, Accident Years 2002–2008, NCCI.

<sup>25</sup> To measure duration, the previous traffic study used the average number of days from date of injury to closure. We now use the number of days a claim received temporary benefit payments.

**Average Duration Is Longer for Motor Vehicle Claims for Closed Claims**

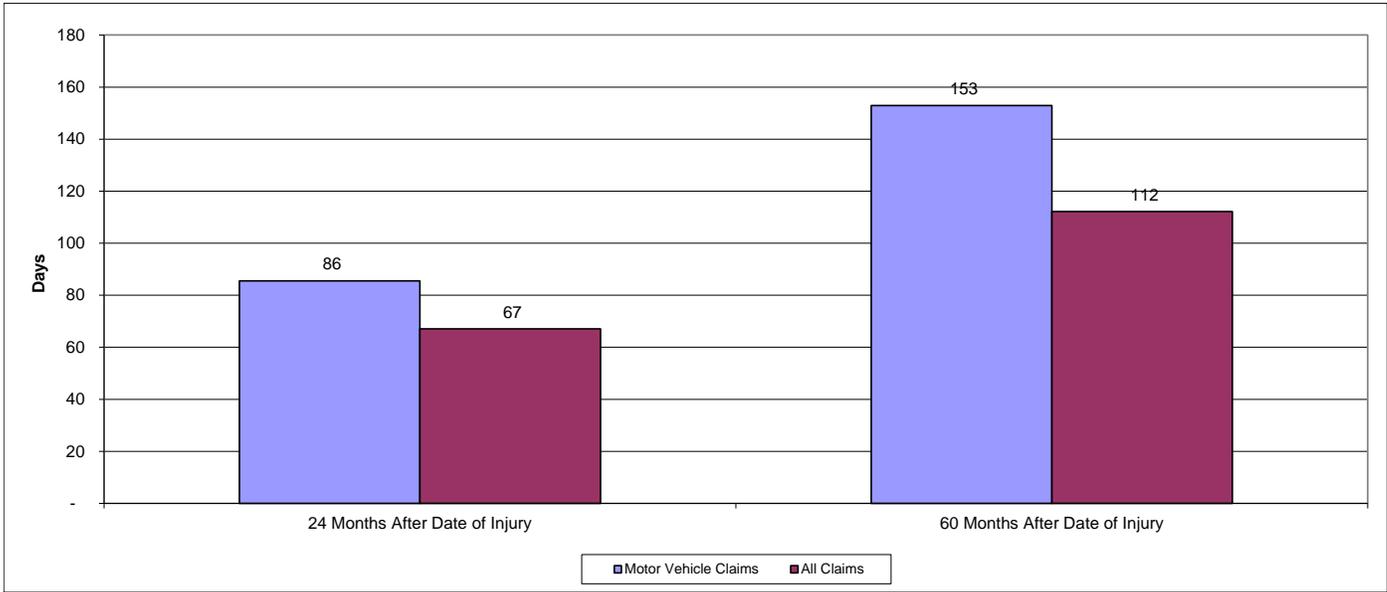
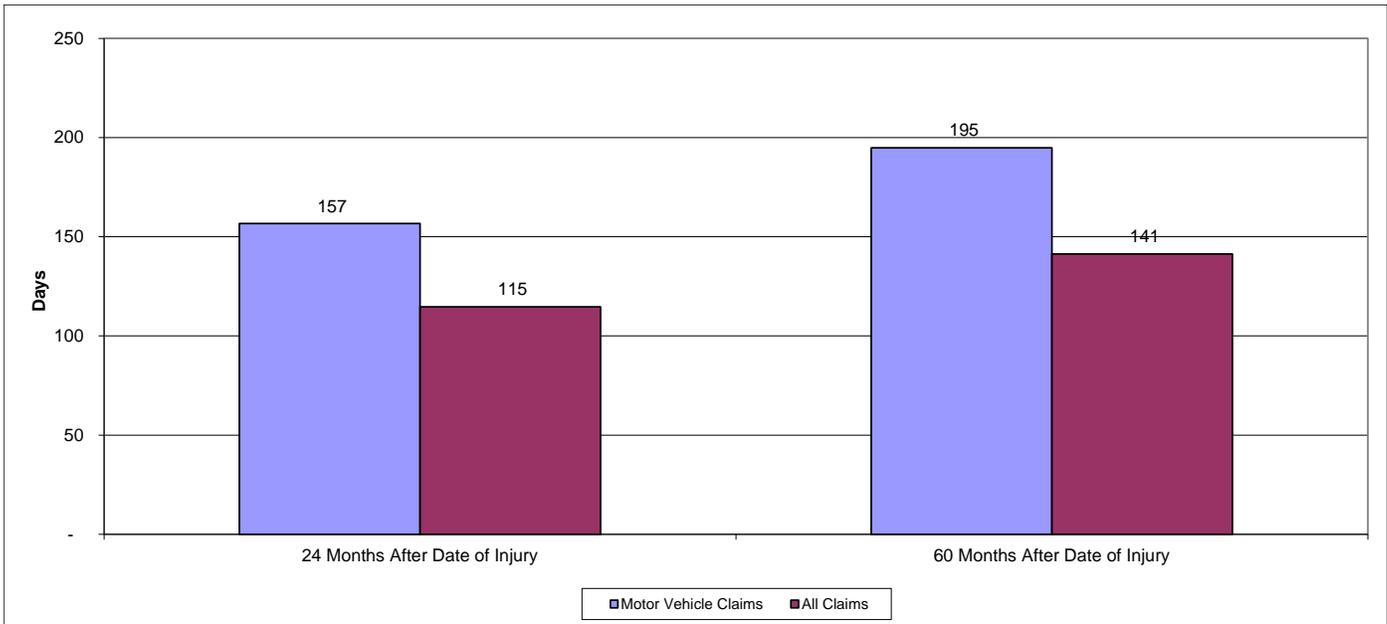


Exhibit 24. Average Duration (Days of Temporary Benefit Payments), Closed Claims, Accident Years 2002–2008, NCCI.

**Average Duration Is Longer for Motor Vehicle Claims for Open and Closed Claims**



Exhibt 25. Average Duration (Days of Temporary Benefit Payments), Open and Closed Claims, Accident Years 2002–2008, NCCI.

### Claim Characteristics—Significant Subrogation

Exhibit 26 shows that for each maturity period, motor vehicle claims are much more likely to involve subrogation than the average claim. At 60 months after date of injury, about 1% of all claims involve subrogation. But for motor vehicle claims, the percentage involving subrogation is almost 25%. The average subrogation amount for motor vehicle claims is not as consistent, and it changed from above average at the earliest maturity period to below average in later periods. The average amount of subrogation is over 20% lower for motor vehicle claims than for all claims at 60 months (\$8,570 for motor vehicle claims vs. \$10,871 for all claims). Exhibit 26 illustrates that both the percentage of claims with subrogation and the average amount increase over maturity periods.<sup>26</sup> These results are comparable to those published in the previous study on traffic accidents.

#### At 60 Months After Date of Injury, About 1% of All Claims Are Subrogated vs. 25% for Motor Vehicle Claims

	12 Months After Date of Injury	24 Months After Date of Injury	36 Months After Date of Injury	48 Months After Date of Injury	60 Months After Date of Injury
<b>Percentage of Claims with Subrogation</b>					
All Claims	0.4	0.7	0.8	1.0	1.1
Motor Vehicle Claims	8.4	16.7	21.2	23.5	24.5
Other Than Motor Vehicle Claims	0.2	0.3	0.4	0.5	0.5
<b>Average Subrogation Amount (\$)</b>					
All Claims	(2,116)	(4,519)	(7,182)	(9,429)	(10,871)
Motor Vehicle Claims	(2,292)	(4,563)	(6,380)	(7,813)	(8,570)
Other Than Motor Vehicle Claims	(1,922)	(4,458)	(8,210)	(11,293)	(13,261)

Exhibit 26. Subrogation Claims and Amount by Cause of Injury, Accident Years 2002–2008, NCCI.

The next two subrogation exhibits focus on claims valued at 60 months after date of injury. Future development will likely have some impact on the numbers, but probably would not change the overall conclusion. Exhibit 27 ranks subrogation claims by cause of injury and shows that the most common reasons for claims to have subrogation are motor vehicle-related. The top three codes likely to involve subrogation (motor vehicle collision or sideswipe with another vehicle; motor vehicle, not otherwise classified; and struck or injured by a motor vehicle) make up more than half of all subrogation claims.<sup>27</sup> Vehicle upset ranks 16th, and collision with a fixed object is further down the list at 23rd. Again, these rankings are similar to those from the previous report.

<sup>26</sup> There is likely to be additional development beyond 60 months, but the basic observation remains unchanged. A significant portion of motor vehicle claims is subrogated; but only a very small portion of all other claims is subrogated.

<sup>27</sup> Data is not available on the third party payers. But since traffic accidents are the most common types of workers compensation claims involving subrogation, it is likely that automobile insurance payers are involved.

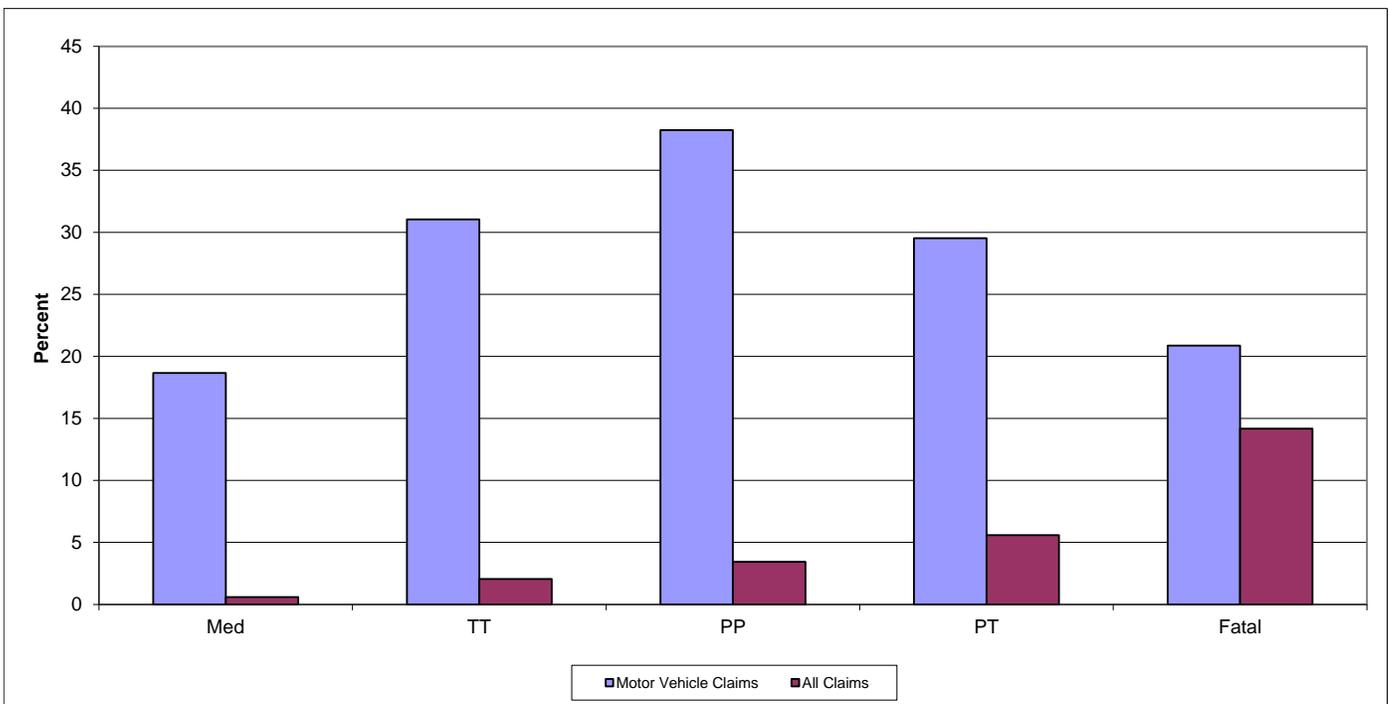
**The Top Three Causes With Subrogation Are Motor Vehicle-Related and Make up More Than 50% of Subrogation Claims**

Cause	Subrogation Claims	Percent	Cumulative Percent	Rank
ALL	58,686	100.0		.
<b>MOTOR VEHICLE: COLLISION OR SIDESWIPE WITH ANOTHER VEHICLE</b>	<b>15,716</b>	<b>26.8</b>	<b>26.8</b>	<b>1</b>
<b>MOTOR VEHICLE: MOTOR VEHICLE, NOC</b>	<b>12,878</b>	<b>21.9</b>	<b>48.7</b>	<b>2</b>
<b>STRUCK OR INJURED BY: MOTOR VEHICLE</b>	<b>3,039</b>	<b>5.2</b>	<b>53.9</b>	<b>3</b>
FALL OR SLIP INJURY: ON SAME LEVEL	1,996	3.4	57.3	4
STRUCK OR INJURED BY: ANIMAL OR INSECT	1,946	3.3	60.6	5
FALL OR SLIP INJURY: FALL, SLIP OR TRIP, NOC	1,935	3.3	63.9	6
MISCELLANEOUS CAUSES: OTHER-MISCELLANEOUS, NOC	1,851	3.2	67.1	7
STRUCK OR INJURED BY: FALLING OR FLYING OBJECT	1,695	2.9	70.0	8
STRAIN OR INJURY BY: LIFTING	1,429	2.4	72.4	9
STRUCK OR INJURED BY: STRUCK OR INJURED, NOC	1,148	2.0	74.4	10

*Exhibit 27. Subrogation Claims Rankings by Cause of Injury 60 Months After Date of Injury, Accident Years 2002–2005, NCCI.*

Subrogation by injury type shows that motor vehicle claims follow a different pattern than all claims (see Exhibit 28). For all claims, the percentage of claims involving subrogation increases as the claim becomes more severe. But for motor vehicle claims, the percentage of claims with subrogation peaks for permanent partial and then declines for the permanent total and fatal injury types. For each injury type, motor vehicle claims have a higher-than-average percentage of claims with subrogation, although the difference is smaller for fatalities. These results are similar to those previously published.

**For Each Injury Type, Motor Vehicle Claims Have a Higher-Than-Average Percentage of Claims With Subrogation**



*Exhibit 28. Percentage of Claims by Injury Type With Subrogation 60 Months After Date of Injury, Accident Years 2002–2005, NCCI.*

### Claim Characteristics—Greater Attorney Involvement

Exhibit 29 shows the percentage of claims involving a claimant attorney for all claims and motor vehicle claims. Overall, close to three times as many motor vehicle claims involve an attorney, compared with all claims (14% vs. 5%). More motor vehicle claims involve attorneys for every injury type other than fatal, where the shares are about even. Overall, the share of claims with an attorney has increased slightly from that reported in the previous study for both motor vehicle claims (12% for 1997–2003) and all claims (4% for 1997–2003).

#### Overall, Three Times as Many Motor Vehicle Claims Involve an Attorney

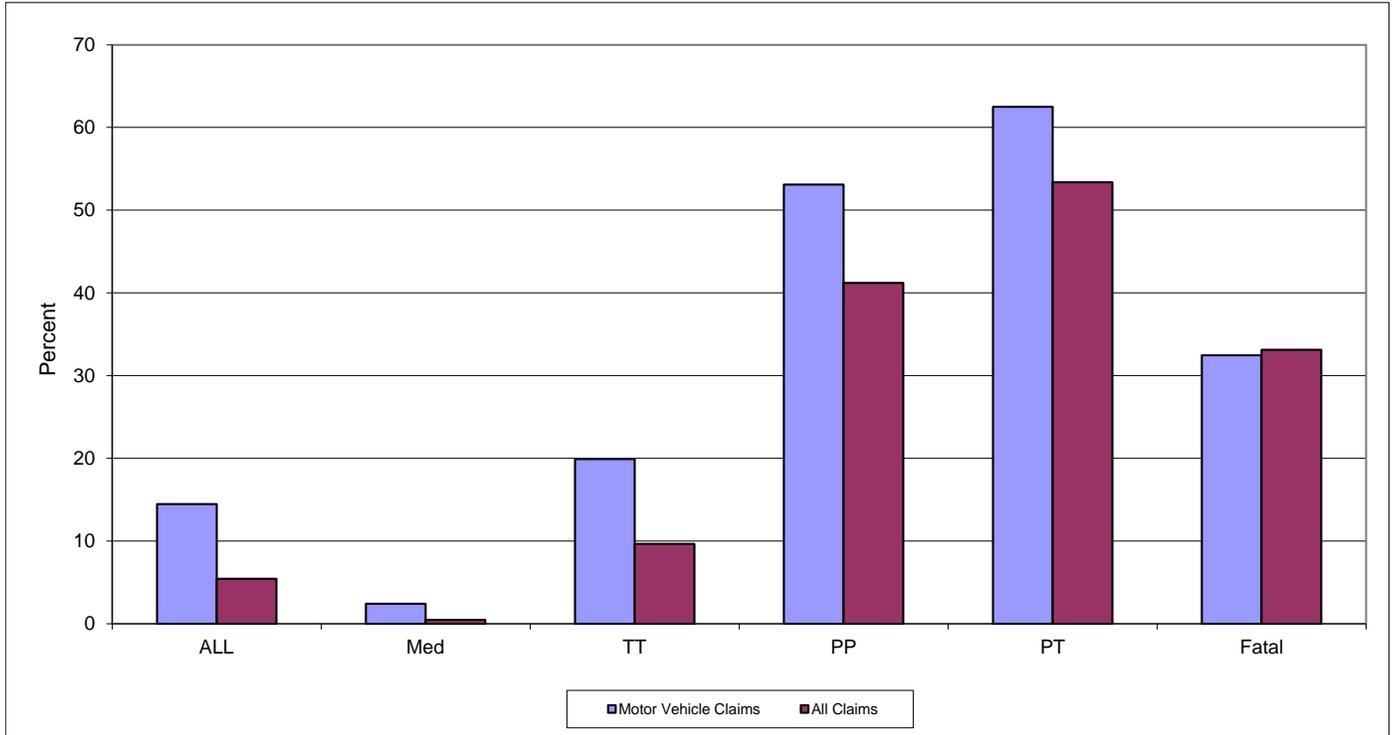


Exhibit 29. Percentage of Claims With Claimant Attorney, Accident Years 2002–2008, NCCI.

### Subrogation and Attorney Involvement

Exhibit 30 breaks out attorney involvement for subrogation and non-subrogation claims 60 months after date of injury. It shows that for non-subrogation claims, the percentage of claims with an attorney is higher for motor vehicle claims than for all claims. But for subrogation claims, the share of motor vehicle claims with an attorney is nearly identical to all claims. Results are very similar to those in the previous report for non-subrogation claims. For subrogation claims, there was a slightly larger difference previously, with the shares of motor vehicle claims with a claimant attorney lower than average.

#### For Subrogation Claims, the Shares of Motor Vehicle Claims With a Claimant Attorney Are Slightly Less Than Average

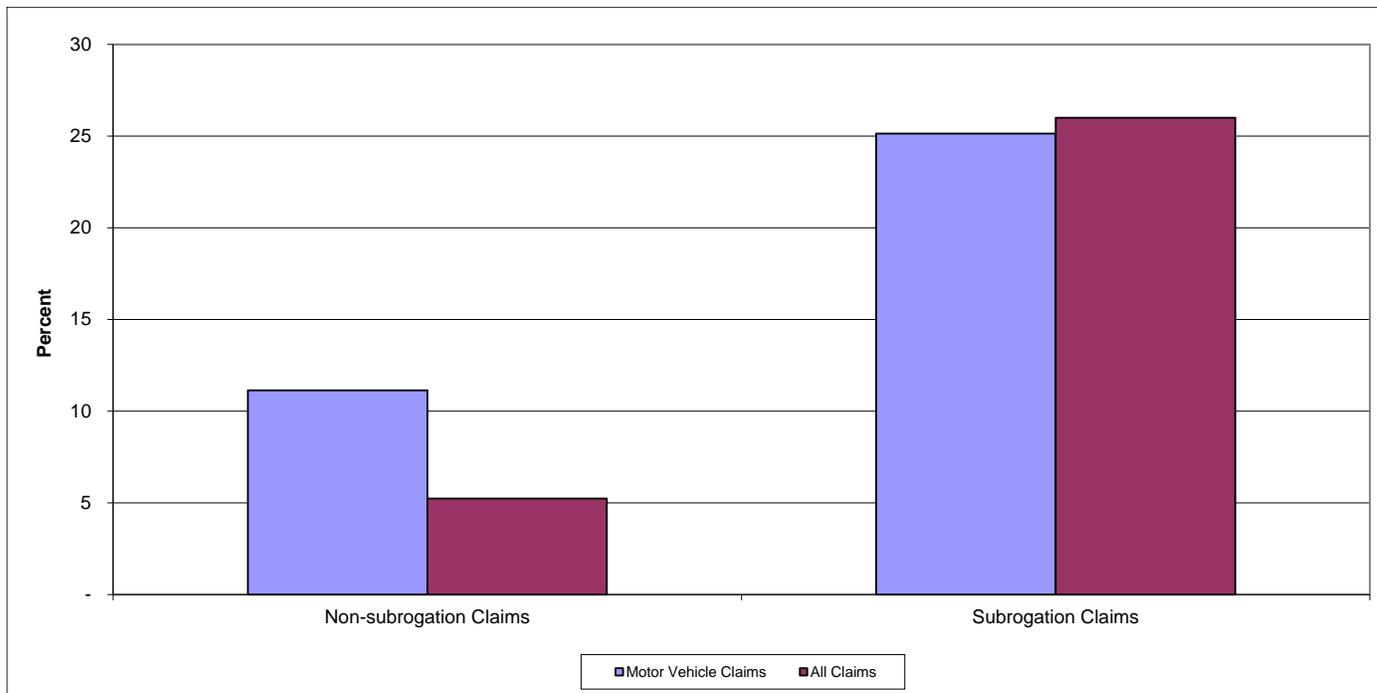


Exhibit 30. Percentage of Non-Subrogation Claims and Subrogation Claims With Claimant Attorney 60 Months After Date of Injury, Accident Years 2002–2005, NCCI.

### Age Distributions

Exhibit 31 shows the distribution of claims by age for all claims and motor vehicle claims. Higher-than-average percentages of motor vehicle claims occur in the 25–34 and 35–44 age cohorts, and a lower-than-average percentage occurs for 20–24-year olds. Motor vehicle shares are about average for older age cohorts. This is similar to the age distribution from the previous study.

#### Motor Vehicle Shares Are Below Average for the Youngest Workers, Above Average for 25–44, and About Average for Older Age Cohorts

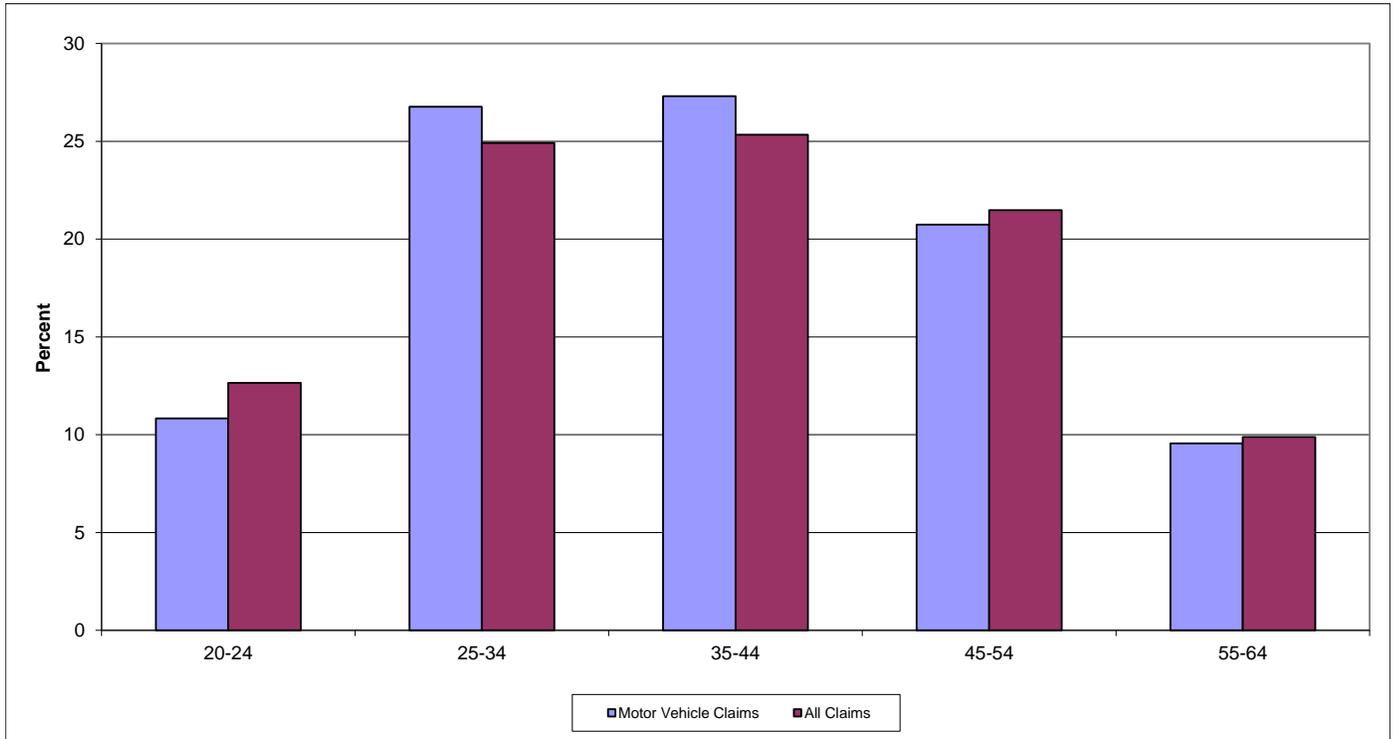
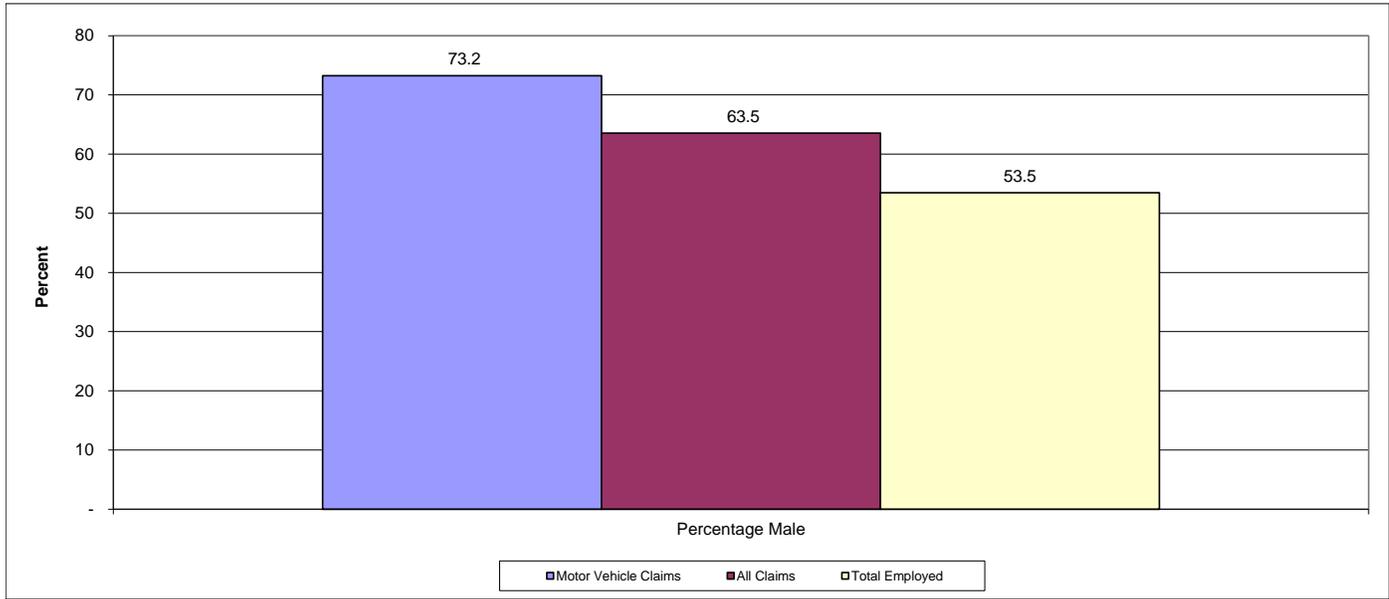


Exhibit 31. Percent of Claims by Age Cohort (Excludes Claims With Age Missing), Accident Years 2002–2008, NCCI.

**Gender Differences**

Exhibit 32 shows that motor vehicle accidents reflect a higher percentage of males (73%) than all claims (64%). Both numbers are higher than the male share of total employment (54%). Motor vehicle accidents have a higher percentage of males because many of the top industries and occupations with motor vehicle accidents are primarily made up of male employees. For example, data from the Bureau of Labor Statistics shows that from 2003 through 2008, employment in the trucking industry was 87% male, driver-sales workers were 95% male, the automobile service and repair industry was more than 90% male, and police officers were 85% male.<sup>28</sup>

**Motor Vehicle Accidents Reflect a Higher Percentage of Males Than All Claims and Overall Employment**



*Exhibit 32. Percentage of Males in Motor Vehicle Claims and All Claims (Accident Years 2002–2008) and Total Employed (Calendar Years 2002–2008), NCCI and Bureau of Labor Statistics.*

**Distracted Driving a Leading Cause of Traffic Accidents**

The previous NCCI report on traffic accidents cited a study by the National Highway Traffic Safety Administration (NHTSA) and the Virginia Tech Transportation Institute (VTTI) that found that driver distraction is the leading cause of traffic accidents and near accidents.<sup>29</sup> There is now an official US government website jointly sponsored by The National Highway Traffic Safety Administration and the US Department of Transportation that is dedicated to raising awareness of and reducing distracted driving.<sup>30</sup> It cites three main sources of distracted driving including:

- Manual—taking hands off the steering wheel
- Visual—taking eyes off the road
- Cognitive—taking mind off the task of driving

<sup>28</sup> Calculations are for 2003 through 2008 instead of 2002 through 2008, which is used in other sections of this study, because the BLS changed the industry and occupation definitions in 2003.

<sup>29</sup> “The Impact of Driver Inattention on Near-Crash/Crash Risk: An Analysis Using the 100-Car Naturalistic Driving Study Data,” National Highway Traffic Safety Administration and The Virginia Tech Transportation Institute, April 20, 2006.

<sup>30</sup> [www.distracted.gov](http://www.distracted.gov)

The website says that text messaging involves all three types of distraction, which creates a much higher crash risk than other types of distracting activities. Talking on a cell phone increases the risk of a crash four-fold,<sup>31</sup> but texting creates a crash risk *23 times higher* than driving while not distracted. On average, a text message takes a driver's eyes off the road for 4.6 seconds—the equivalent of traveling the length of an entire football field at 55 mph. Thirty-nine states and the District of Columbia now ban text messaging while driving, and 10 states and the District of Columbia have a ban on using hand-held cell phones while driving.<sup>32</sup>

## Workplace Practices

Workplace driving practices are essential to safety, and employers can play a big part in encouraging safe practices and procedures. Listed below are sources of information available to employers from several government agencies and websites to encourage safe driving.

Distraction.gov contains a sample employer-distracted driving policy, which businesses can download and customize. It suggests turning off cell phones before starting the vehicle and using phones only when pulled off the road to a safe location. It also contains a form for employees to sign, pledging that they will not text or talk on the phone while driving.

The Network of Employers for Traffic Safety sponsors a Drive Safely Work Week and publishes a toolkit for employers that focuses on steps to improve driving safety. In addition to tips to reduce driver distractions, it contains information on other aspects of safe driving such as promoting seat belt use, reducing driver fatigue, and reducing rear-end collisions—one of the most frequent types of crashes.<sup>33</sup>

The National Safety Council also has an employer traffic safety program to educate employers on the impact of crashes on their business and to promote highway safety. It contains information and suggested policies regarding distracted driving, impaired driving, aggressive driving, and passenger restraint.<sup>34</sup>

## Conclusions

The frequency of motor vehicle fatalities and injuries has declined significantly. The rate of decline tends to increase during recessions, particularly for accidents involving large trucks. In contrast to the previous study, which found that motor vehicle accidents comprised a growing share of nonfatal workplace injuries, this study shows that the share has fallen since 2006. Motor vehicle accidents are more likely to result in multiple claims, and severity is higher for motor vehicle claims from multiple-claim events versus those from single-claim events.

Injuries due to motor vehicle accidents are more severe than the average claim, comprising close to 2% of claims but more than 7% of losses, on average, over the 2002–2008 period. This is due to the fact that motor vehicle claims are more likely to be lost-time and comprise a disproportionate share of the most severe claim types. In addition to truckers and drivers, salespersons and clerical classes are also leading occupations for motor vehicle workers compensation claims. Motor vehicle claims have longer duration than average and are more likely to be subrogated and involve an attorney. Workplace driving practices are essential to safety, and employers can play a big part in encouraging safe practices and procedures.

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<sup>31</sup> Risk is similar for both hand-held and hands-free devices.

<sup>32</sup> See the facts and statistics and state laws sections of [www.distraction.gov](http://www.distraction.gov) for all information in this section.

<sup>33</sup> See [www.trafficsafety.org](http://www.trafficsafety.org).

<sup>34</sup> See [www.nsc.org/safety\\_road/Employer%20Traffic%20Safety/Pages/NationalHome.aspx](http://www.nsc.org/safety_road/Employer%20Traffic%20Safety/Pages/NationalHome.aspx).

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