

# What Risk Factors Are Associated With Young Workers Experiencing Disproportionate Injuries in WRT Sectors?

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## Abstract

The wholesale and retail trade (WRT) sectors employ a large percentage of young workers. This analysis focused on the demographic features and characteristics of fatal/non-fatal injuries of young WRT workers from 2005–2009. The data sets were drawn from the Bureau of Labor Statistics (BLS), including Survey of Occupational Injuries and Illnesses (SOII), Census of Fatal Occupational Injuries (CFOI), and Current Population Survey (CPS). The findings include the 4–5th NAICS codes, designating the industry group, and primary subsector of the NAICS industry, respectively.

Table 1 shows a gradual decrease in nearly all measures of WRT burden from 2005 through 2009.

Figure 1 shows that although the Education/Health Sector (E/HS) has the largest burden of nonfatal injuries /illnesses at 21.6%, they constitute just 16.5% of the private sector work population, as compared with 20.7% burden for the WRT sector, and nearly 19% of the work population.

Figure 2 shows for each age category WRT workers experience a disproportionate percentage of nonfatal injury/illness.

Figure 3 shows that workplace violence in retail and motor injury in wholesale are the two events that are most responsible for fatalities in the WRT sectors. Figure 4 shows that the combination of WRT sectors exceeds the nonfatal injuries for all WRT workers age 16–19.

Figure 5 shows the percent change in injuries over the years 2003–2009 for all aged workers as compared to those workers under age 24 years in the private sector. Figure 6 shows the source of serious injuries/illnesses for workers age 16–19 are worker motions or position, floor ground surface, containers, hand tools.

Figure 7 shows young workers have a risk of contact with object/equipment, overexertion injuries and falls on same level. Figure 8 shows those categories in the year 2009 defining the nature of the injuries/illnesses for workers age 18–19, which included sprains/ strains, cuts, lacerations, and punctures, and bruises.

Table 1. WRT Burden, 2005-2009

	2005	2006	2007	2008	2009
Fatality	609	581	555	481	477
Nonfatal (A)	849700	820500	822200	751300	673100
Lost time (B)	256100	238500	242020	218200	199400
MSD	83710	81480	76580	69410	65030
Overexertion	68750	67250	62750	57010	54530
Lost time/(A)	30.1%	29.1%	29.4%	29.0%	29.6%
MSD/(B)	32.7%	34.2%	31.6%	31.8%	32.6%
Overexertion/(B)	26.8%	28.2%	25.9%	26.1%	27.3%
Wholesale injury/illness rate per 100 FTE	4.5	4.1	4.0	3.7	3.3
Retail injury/illness rate	5.0	4.9	4.8	4.4	4.2
Private injury/ill rate per 100 FTE	4.6	4.4	4.2	3.9	3.6

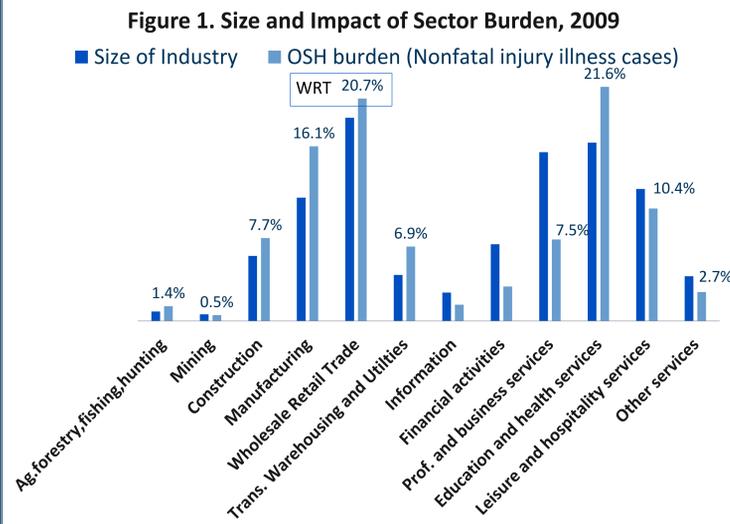


Figure 2. WRT share of nonfatal injury/illness and employment in all industries by age group, 2009

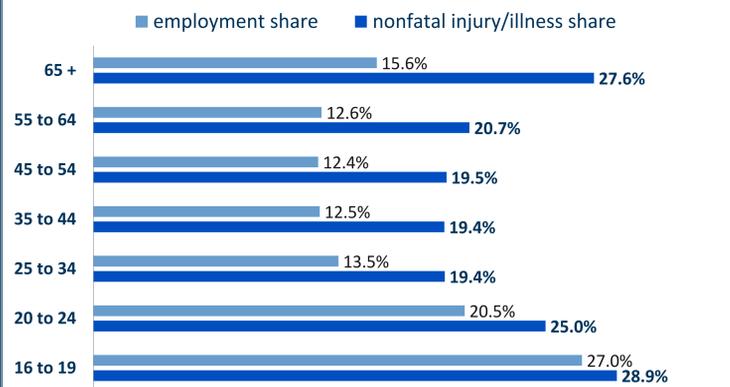
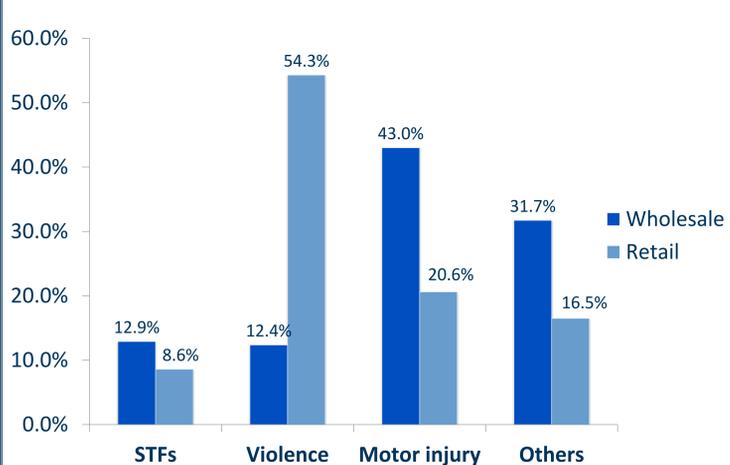


Figure 3. Retail trade fatalities from workplace violence, 2009



WRT accounts for the largest share of injury and illness cases (29%) for young workers.

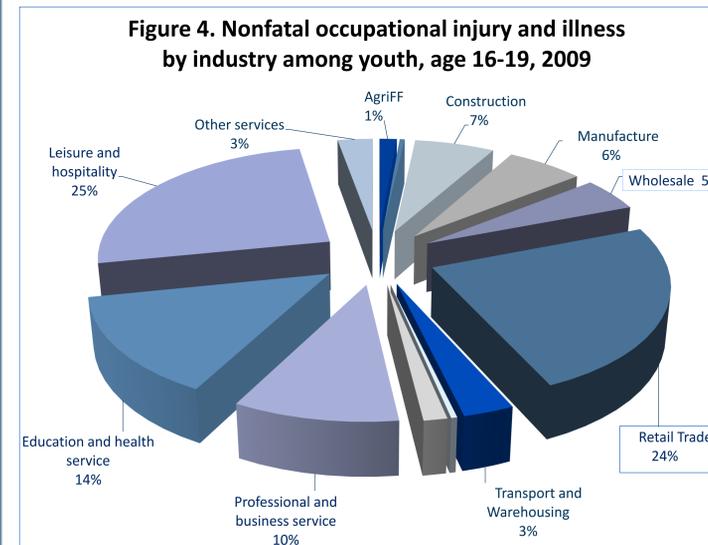


Figure 5. Percent changes of injured youth (under age 24) in WRT among private industry, 2003–2009

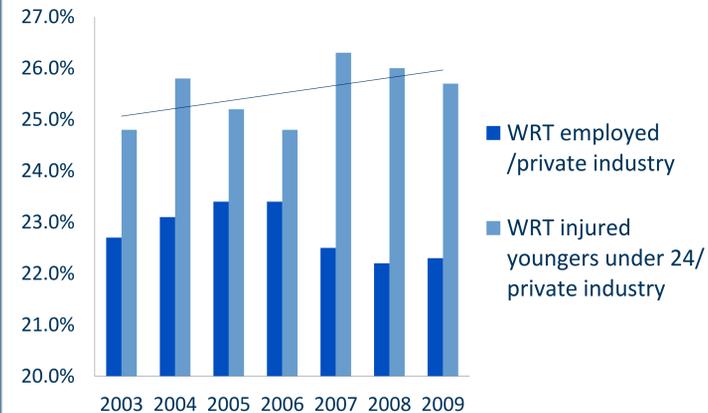


Figure 6. Nonfatal injury and illness cases involving lost workdays

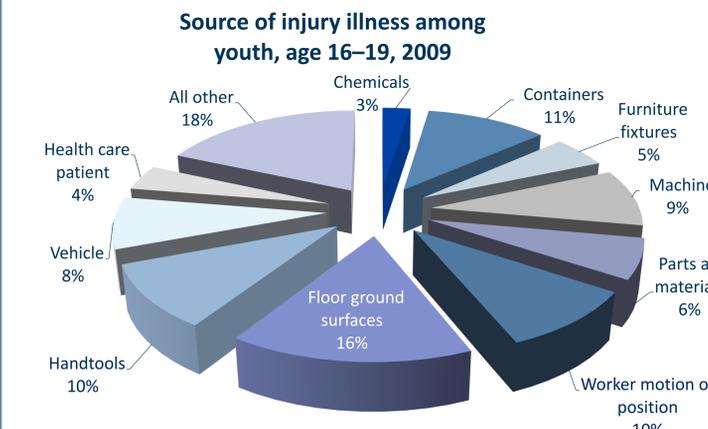


Figure 7. Young workers have a high risk of contact of objects/equipment

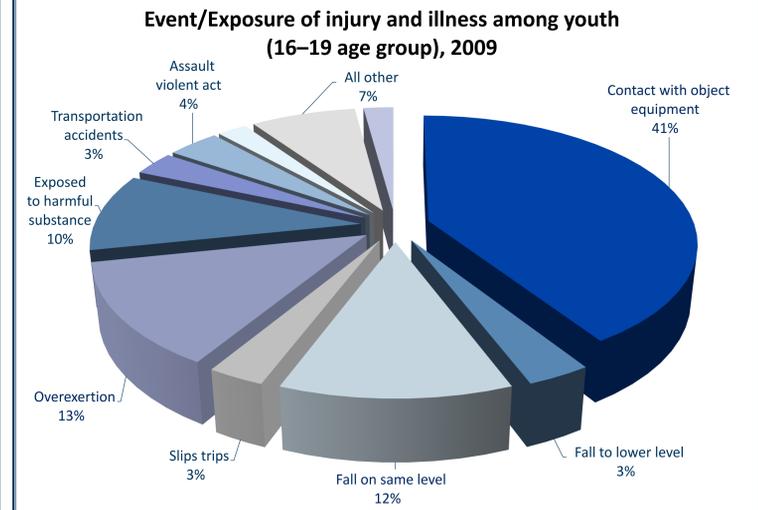
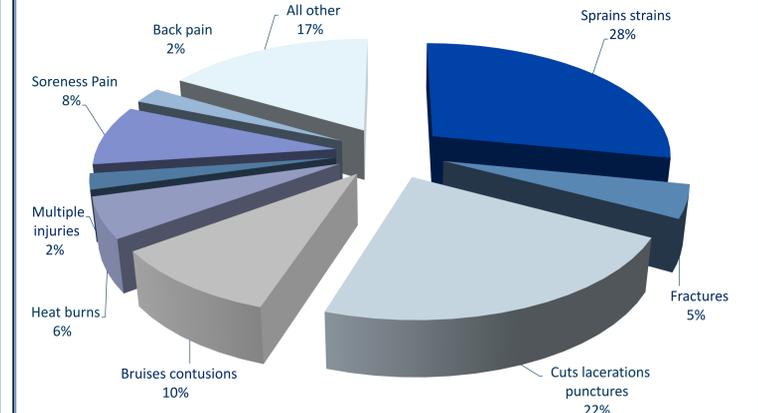


Figure 8. Nature of injury and illness among youth age 16–19, 2009



- Young workers who are hurt on job have the following occupations: Service (45%), Transportation & Material Moving (16%), Sales and related (11%).
- Young workers (under age 24) work at grocery stores (21%), Department discount stores (14%), clothing/accessories (10%), pharmacies (5%), automobile dealer(4%), sporting goods, hobby and toy stores.

## WRT Summary: Nonfatal Injury and Illness of Youth

**Event/Exposures:** Contact Objects, Falls, Overexertion

**Nature/Type:** Sprains, Strains, Cuts, Lacerations, Punctures

**Source:** Floors, Containers, Vehicles

**Body Part:** Upper(39%) and Lower(25%) Extremities, Trunk