



Teens at Work: Injury Surveillance and Prevention Project

Occupational Health Surveillance Program
Massachusetts Department of Public Health

Background

While work can provide benefits to youth, it can also pose safety risks. The Massachusetts Department of Public Health's *Teens at Work: Injury Surveillance and Prevention Project* (TAW) collects data on work-related injuries to minors, and uses the information to help plan prevention activities throughout the state.

The findings presented here are based on data collected by TAW during the calendar years 2005-2010 using information from workers' compensation (WC) lost wage claims, for injuries resulting in five or more lost work days, and reports from a sample of hospital emergency departments (ED).

For a detailed description of the project, please see our "Overview Fact Sheet." All of our materials are available online: www.mass.gov/dph/teensatwork.

Overview

After food service establishments, grocery stores are the second most common industry in which Massachusetts teens are employed. Grocery stores also rank second only to restaurants in the number of teen workers injured on the job.

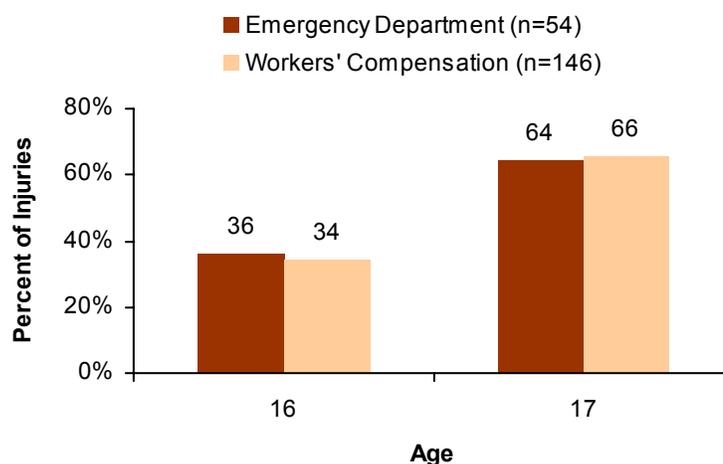
From 2005 through 2010, grocery store injuries accounted for 200 (13%) of the 1,666 work-related injuries (for which industry was known) identified by the TAW Project. 73% of these injuries were identified through workers' compensation lost wage claims, and 27% through hospital emergency department reports.

This fact sheet provides a closer look at these non-fatal injuries to teens working in grocery stores.

Injuries by Age

The majority of injuries in both data sets occurred among 16- and 17-year-olds. There were very few injuries to 14- and 15-year olds (Figure 1).

Figure 1. Work-related injuries to teens under age 18 in grocery stores by age group and data source, Massachusetts, 2005-2010



22% of injured teens interviewed said there was no supervisor on site at the time of their grocery store injury.

Source: Teens at Work: Injury Surveillance System, 2000-2010, MDPH.

Note: Cases where either age was missing or teens were <16 were not included in the calculations.

Source: Teens at Work: Injury Surveillance System, MDPH.

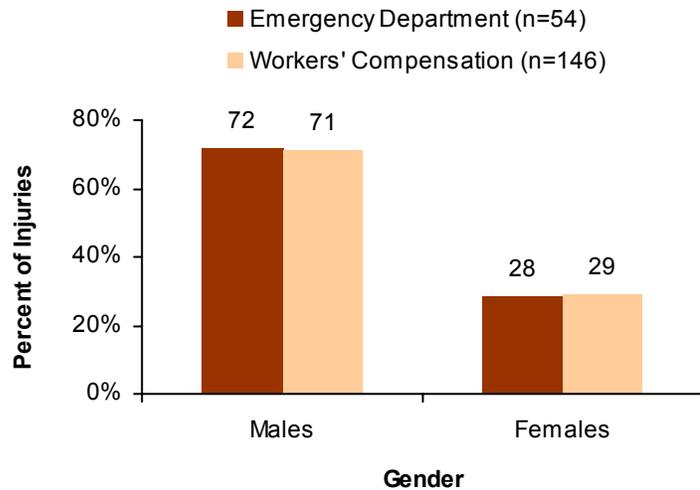
Injuries by Gender

Male teen workers suffered far more injuries working in grocery stores than female workers.

Both ED data and WC data showed a similar distribution of injuries to males and females (Figure 2)

The greater number of injuries among males is likely explained in large part by the different tasks assigned to male and female employees. There is research that shows even when males and females have the same job title, they may be assigned different tasks.

Figure 2. Work-related injuries to teens under age 18 in grocery stores by gender and data source, Massachusetts, 2005-2010



Note: Cases where gender was missing were not included in the calculations.
Source: Teens at Work: Injury Surveillance System, MDPH.

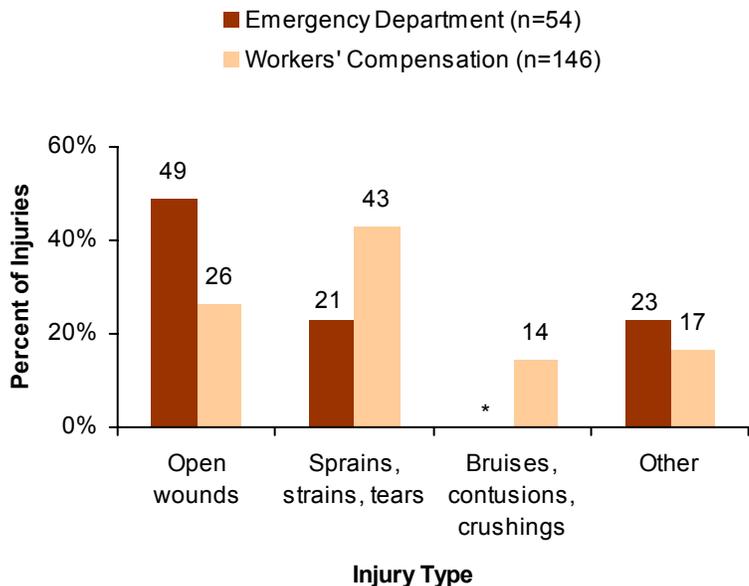
Injury Type

Injury Type by Data Source

Within the ED data, “open wounds” (including cuts) accounted for nearly half of all injuries; “sprains, strains and tears” was the most common injury type found in WC data at 43% (Figure 3).

While “bruises, contusions and crushings” made up a smaller percentage of total injuries, **1 out of every 5 cases involved contact with a car**, showing that some teen grocery store workers are exposed to parking lot and other outdoor hazards as part of their everyday work tasks.

Figure 3. Work-related injuries to teens under age 18 in grocery stores by injury type and data source, Massachusetts, 2005-2010



* Counts not shown for categories with less than four cases.
Note: Cases where injury type was unknown were not included in the calculations.
Source: Teens at Work: Injury Surveillance System, MDPH.

Injury Type (continued)

Sprains, Strains and Tears by Body Part Affected

Nearly half of the “sprains, strains and tears” were to teen workers’ backs; shoulder injuries followed but were not as common (Figure 4).

Among the 31 injuries for which event type was known, **about two-thirds involved overexertion from either lifting or pushing or pulling.**

Open Wounds by Body Part Affected

The majority of “open wounds,” including cuts, lacerations and punctures, were to teen grocery store workers’ fingers (Figure 5).

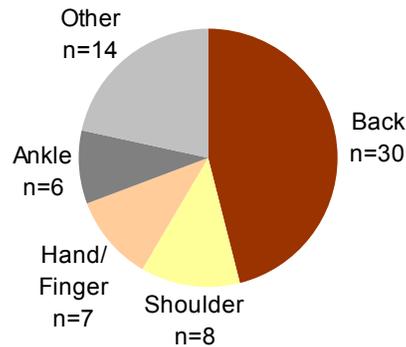
Among the 28 open wounds for which source of injury was known, 17 were from knives, box cutters or other hand-held cutters, and **6 involved contact with machinery, including 2 injuries from food slicers.** *Child labor laws prohibit the use of power-driven food slicers by teens under age 18.*

Injury Type by Gender

For female grocery store workers, “sprains, strains and tears” made up over half of all injuries (Figure 6).

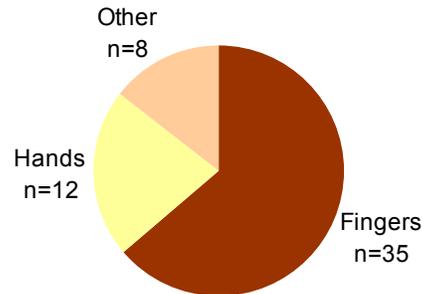
For males, “sprain” injuries made up about a third of all injuries, but “open wounds” (including cuts) were slightly more common.

Figure 4. Work-related sprains, strains and tears to teens under age 18 in grocery stores by body part, Massachusetts, 2005-2010 (n=65)



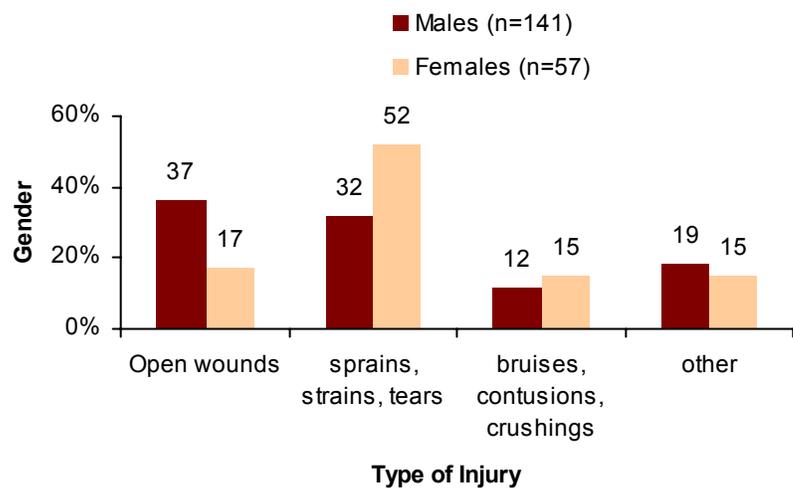
Source: Teens at Work: Injury Surveillance System, MDPH.

Figure 5. Work-related open wounds to teens under age 18 in grocery stores by body part, Massachusetts, 2005-2010 (n=56)



Note: Cases where body part was unknown were not included in the calculations.
Source: Teens at Work: Injury Surveillance System, MDPH.

Figure 6. Work-related injuries to teens under age 18 in grocery stores by injury type and gender, Massachusetts, 2005-2010



Note: Cases where gender was known but injury type was unknown were not included in the calculations.
Source: Teens at Work: Injury Surveillance System, MDPH.

What Injured Teens Have to Say

From 2000 through 2010, TAW staff completed interviews with 65 teen grocery store workers who were injured on the job. While the information from these interviews does not necessarily represent all young workers who have been injured, it provides important insights about the impact of injuries on teens, and safety gaps that need to be addressed.

Over half of interviewed teens believed their injuries could have been prevented, and close to a quarter reported that there was no supervisor on site at the time of their injury (Figure 7).

Massachusetts law requires direct adult supervision after 8pm for workers under age 18, especially pertinent for grocery stores with evening hours.

It is noteworthy, however, that MA teens working in grocery stores were more likely to have received safety training from their employer and much more likely to have a work permit for their job, when compared to teens working in other industries.

Young Worker Voices:

“I had just replaced the blade in my box cutter and I was cutting up a cantaloupe box when the blade caught the box and skipped off across my left hand on the webbing of my thumb. The cut was about a 1/4-inch deep, 1/2-inch wide, and 1-inch long.”

—17-year-old male cashier/clerk

“I was bagging groceries...I went to lift a 24-pack of bottled water and my back cracked. I stood straight up and then fell on the floor and my manager called an ambulance because I couldn't move.”

—16-year-old female cashier/cashier

“[I was] retrieving shopping carts from the parking lot. In order to avoid a car from hitting the line of carts, as the driver was backing up without looking, I pulled the carts sharply and injured my forearm in the process.”

—17-year-old male stock handler/bagger

Figure 7. Interviews with teens injured at work in grocery stores, Massachusetts, 2000-2010



Source: Teens at Work: Injury Surveillance System, MDPH.

If you have questions about the information presented here, contact Project Coordinator Beatriz Pazos Vautin: 617-624-5632 or Beatriz.Pazos@state.ma.us.

Acknowledgements This fact sheet was prepared by the Massachusetts Department of Public Health's Teens at Work: Injury Surveillance and Prevention Project, and supported by cooperative agreement # 2U60OH008490-06 from CDC-NIOSH. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of CDC-NIOSH.