



## DATA BRIEF

# Teens at Work Project: Work-Related Injuries to Teens in Massachusetts, 2008-2012

Massachusetts Department of Public Health

June 2015

## Preventing Injuries to Working Teens

In 2012, 14% of 15- to 17-year-olds in Massachusetts were employed at any given point in time.<sup>1</sup> While work can provide teens with important benefits, it can also pose health and safety risks. Nationally, teen workers have about twice the risk of nonfatal on-the-job injuries per hour worked than older workers.<sup>2</sup> This is partly explained by the fact that teens tend to work in industries that are high risk for workers of all ages, such as restaurants and healthcare. Inexperience and lack of health and safety training are also factors.

Information about where and how teens are injured at work is essential to prevent future injuries and promote safer work opportunities for youth. For over 20 years, the *Teens at Work: Injury Surveillance and Prevention Project* at the Massachusetts Department of Public Health has tracked work-related injuries to teens under age 18. Over the years, the *Teens at Work Project* has collaborated with partners on a variety of initiatives to prevent injuries to working teens.

Continued efforts are needed to ensure jobs in which teens are employed are safe. And as we engage teens in the workplace—whether as employers, schools, jobs programs, or parents with family businesses—we need to provide them with basic health and safety skills that will help protect them now and in the future.

### In This Issue:

Teen Injuries at a Glance....2-4

What Injured Teens Have to Say....4

Wait a Minute—Can I Drive That?...5

Resources....6

## Tapping into Social Media to Promote Safer Teen Jobs

**TEENS SHOULD BE  
ABLE TO RECOGNIZE  
UNSAFE  
CONDITIONS  
IN THE WORKPLACE  
AS EASILY AS  
THEY RECOGNIZE  
THESE ICONS.**



Congratulations to the winners and finalists of the 2015 Safe Jobs for Youth Poster Contest. And thank you to the 119 teens from across the state who submitted entries, and to the 68 youth judges who voted for the winners.

This year's first place poster, by Cori Farrow of North Attleboro, highlights the role that social media play in our lives and ties it to recognizing workplace hazards. Many of the icons shown — Tumblr, Snapchat, Facebook and Instagram — have meaning even among those of us who don't use the apps.

As the poster suggests, let's work to make workplace health and safety as commonplace as social media use, for both teens and adults alike!

All winning and finalist posters from this year can be viewed online.

Please visit: [www.mass.gov/dph/ohsp/teenpostercontest](http://www.mass.gov/dph/ohsp/teenpostercontest)

## Teen Injuries at a Glance, 2008 - 2012

The *Teens at Work Project* collects data from hospital emergency departments (ED) and workers' compensation (WC) lost wage claims to identify work-related injuries to teens. WC claims are for injuries resulting in five or more days of missed work, while ED injuries can range in severity.

From 2008-2012, there were **1,906 ED visits** and **576 WC lost wage claims** filed for work-related injuries to teens under age 18. A more detailed account of these injuries follows.

### Age & Gender

- The majority of work-related injuries to teens were among 17-year-olds in both the ED and WC data sets. (Figure 1)
- Fourteen- and 15-year-olds accounted for a small proportion of injuries. (Figure 1)

Special laws limit the types of tasks that teens may perform at work. View the “Child Labor Laws in Massachusetts” poster online:

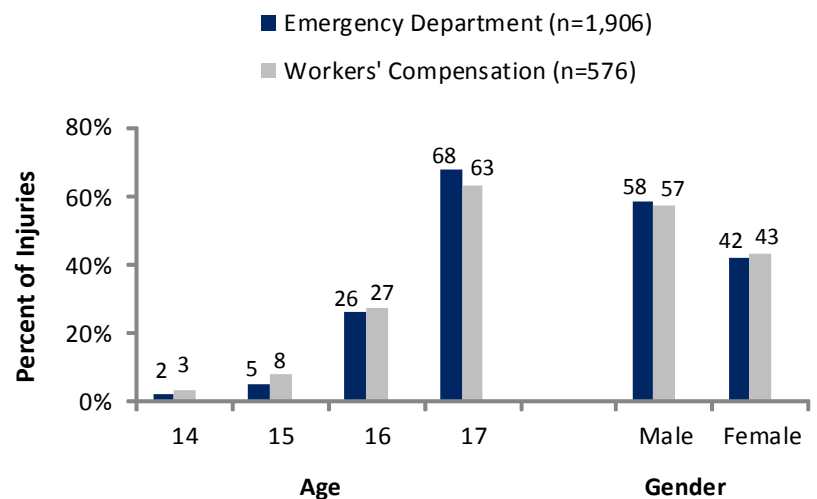
[www.mass.gov/dph/teensatwork](http://www.mass.gov/dph/teensatwork) > Educational Materials > Working Teen Pamphlets

“I was bagging groceries...I went to lift a 24-pack of [bottled] water and my back cracked.”

- 17-year-old grocery store clerk

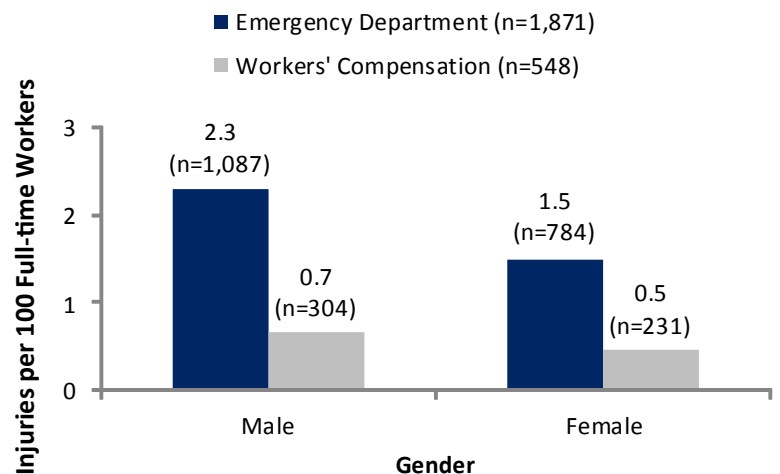
- Male teens accounted for more work-related injuries and had higher rates of injury than females. (Figures 1 and 2)
- The average rate of work-related ED visits for all 15- to 17-year-olds was 1.9 visits per 100 full-time workers (two half-time workers count as one full-time worker). For WC lost wage claims, the overall rate was 0.6 claims per 100 full-time workers. (Figure 2)

**Figure 1.** Distribution of work-related injuries to teens under age 18, by age, gender, and data source, Massachusetts, 2008-2012



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

**Figure 2.** Average annual rates of work-related injuries to 15- to 17-year-olds, by gender and data source, Massachusetts, 2008-2012



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

## Fatal Injuries to Teens

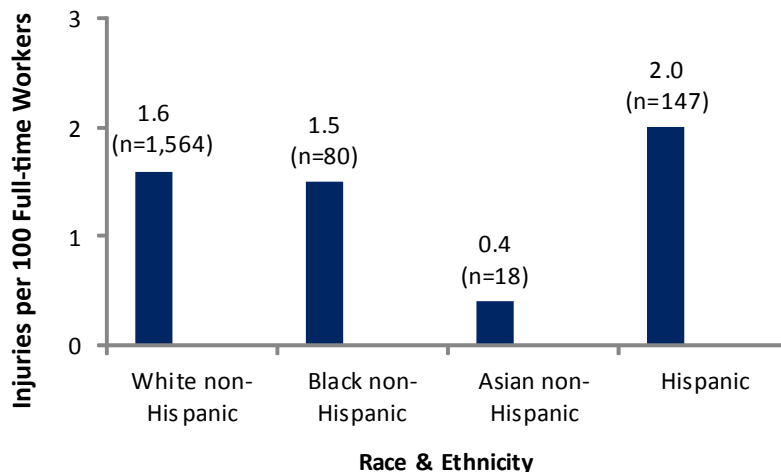
There were **no** fatal injuries to teen workers under age 18 from 2008-2012.

This is the first 5-year-period since 1993, when TAW began collecting data, in which there have been no work-related fatalities to report among Massachusetts teens.

## Race & Ethnicity

- The rate of work-related injuries for Hispanic teens was 2.0 injuries per 100 full-time workers. The rate was 1.6 for White non-Hispanic teens. (Figure 3)

**Figure 3.** Average annual rates of work-related ED visits among 15- to 17-year-olds, by race and ethnicity, Massachusetts, 2008-2012 (n=1,871)



Note: "Other" race/ethnicity category not shown in figure.  
Source: Teens at Work: Injury Surveillance System, MDPH.

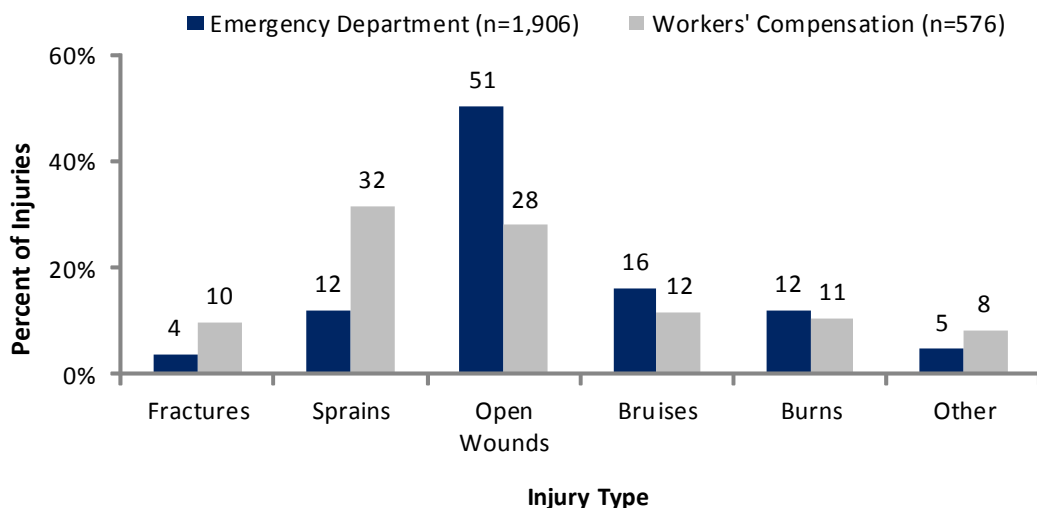
## Nature of Injury

- Open wounds, including cuts, accounted for over half (51%) of all work-related injuries seen in EDs. (Figure 4)

Of 100 interviewed Massachusetts teens with a work-related cut, 18% expected some kind of permanent effect from the injury.

- Sprains were the most common injury (32%) for which teens filed WC lost wage claims. (Figure 4) Of these, 40% (61) were back injuries, putting the injured teens at risk for future back pain.<sup>3</sup>

**Figure 4.** Distribution of work-related injuries to teens under age 18, by type and data source, Massachusetts, 2008-2012



Note: Cases for which injury type was missing were not included in the calculations.  
Source: Teens at Work: Injury Surveillance System, MDPH.

"I was using a very sharp knife to prepare tuna sashimi in the restaurant. I accidentally cut off the front tip of my left thumb including about two-thirds of the nail. The piece of my thumb was left on the knife."

- 17-year-old food preparer

## Teen Injuries at a Glance, 2008 - 2012 (continued)

### Industry Type

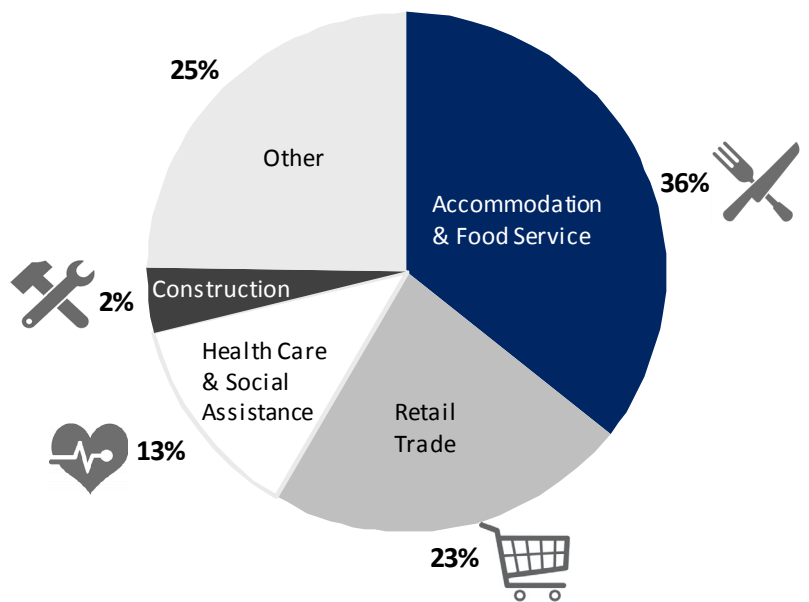
- Accommodation and Food Service, including fast food and full-service restaurants, accounted for the most WC claims (n=202), followed by Retail Trade (n=132), which includes grocery stores. (Figure 5)
- Nursing care facilities, within Healthcare & Social Assistance, had an injury rate of 4.8 per 100 full-time workers. (Not shown)
- The four industries in Figure 5 accounted for nearly 75% of work-related injuries to teens.

Detailed industry facts sheets are available online:

- ◇ Food Service
- ◇ Retail Trade (not including grocery stores)
- ◇ Grocery Stores
- ◇ Health Care Service
- ◇ Construction

[www.mass.gov/dph/teensatwork](http://www.mass.gov/dph/teensatwork) > Educational Materials > Working Teen Pamphlets

**Figure 5.** Distribution of WC lost wage claims for teens under age 18, by industry sector\*, Massachusetts, 2008-2012 (n=576)



\*NAICS 1997

Note: Cases for which industry was missing were not included in the calculations.

Note: Numbers do not add up to 100 because of rounding.

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

## What Injured Teens Have to Say

*Teens at Work Project* staff completed 229 interviews with young workers injured on the job from 2008 through 2012. While the information from these interviews does not necessarily represent the experience of all young injured workers, it provides important information for targeting prevention efforts.

### 34 DAYS:

Average number of days that teens could not perform everyday activities due to their injuries, among those who reported being affected.

**Figure 6.** Select questions from interviews with teens injured at work, Massachusetts, 2008-2012 (n=229)



\* MA child labor laws require teens to have work permits.

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

## Wait a Minute — Can I Drive That?

Can teens drive for work?

This question often comes up among employers, educators, parents, and teens. In fact, many parents have never thought about driving on the job as something that would be off limits for licensed teens.

Just as teens are new to the workforce, so are they inexperienced and new to driving. Motor vehicle crashes are the number one killer of teens in the nation,<sup>4</sup> and in Massachusetts, in 2011 alone, there were 2 teen fatalities and 985 combined ED visits and hospital stays among 16- to 17-year-old drivers.<sup>5</sup> This is one of the reasons Massachusetts has such a comprehensive Junior Operator's License (JOL) law and Driver Education Program.

Protections for teen drivers extend to the workplace, too. While the federal child labor law allows 17-year-olds to drive cars and trucks under limited circumstances, Massachusetts has a more stringent law that prohibits driving on the job for anyone under age 18. Additionally, teens under age 16 may not ride in or on vehicles at work, except in a passenger seat while wearing a seatbelt.



What *is* allowed in Massachusetts? Teens under age 18 can drive to and from work as long as it's in accordance with the JOL law: no driving without a guardian between 12:30 and 5:00am—times teens aren't allowed to work anyway. But once a teen clocks in at work, autos are off limits—not even driving to or from different work sites.

Child labor laws go beyond cars and trucks. Another vehicle often asked about is forklifts. Under no circumstance may a minor operate or ride on a forklift due to the dangerous nature of these machines. Other prohibited vehicles include bunker rakes, tractors, utility carts, front-end loaders, and riding mowers (Reel, Rotary and Greens).

The only driving-for-work exceptions under MA child labor laws, for licensed 16- and 17-year-olds, are the operation of golf carts on golf courses, certain tasks in auto repair shops, and the operation of certain vehicles in connection with agricultural work (see below for a link to the laws).

If any of this information is news to you, please spread the word. It is probably new to others, as well.

## Resources

### MA Child Labor Laws Concerning Prohibited Activities

<https://malegislature.gov/Laws/GeneralLaws/PartI/TitleXXI/Chapter149/Section61>

<https://malegislature.gov/Laws/GeneralLaws/PartI/TitleXXI/Chapter149/Section62>

### MA Junior Operator License Law

<https://malegislature.gov/Laws/GeneralLaws/PartI/TitleXIV/Chapter90/Section8>

### MA Driver Education Program Curriculum

<http://www.massrmv.com/rmv/jol/DriverEducationProgram.pdf>

## Vehicle-related Injuries to Teen Workers in MA

From 2008-2012, 41 teens workers under age 18 were injured while working in or around motor vehicles. A sample of the various vehicles involved in these incidents include:

- Cars/Trucks
- Forklifts
- Golf carts
- Mini tractors

Some of the types of events that caused these teen injuries include:

- 9 struck-by incidents
- 3 motor vehicle accidents
- 2 caught-between incidents
- 1 rollover incident (forklift)



---

# Massachusetts and National Young Worker Resources

Please take advantage of the resources below, which cover a range of topics on young worker health and safety.

## **Child Labor Laws & Wages**

Massachusetts Office of the Attorney General  
Fair Labor Division  
(617) 727-3465  
[www.mass.gov/ago](http://www.mass.gov/ago)

U.S. Department of Labor  
Wage & Hour Division  
(617) 624-6700  
[www.dol.gov/whd](http://www.dol.gov/whd)  
[www.youthrules.dol.gov](http://www.youthrules.dol.gov)

## **Workers' Compensation**

Massachusetts Department of Industrial Accidents  
(800) 323-3249  
[www.mass.gov/dia](http://www.mass.gov/dia)

## **Discrimination at Work**

Massachusetts Commission Against Discrimination  
(617) 727-3990  
[www.mass.gov/mcad](http://www.mass.gov/mcad)

U.S. Equal Employment Opportunity Commission  
Boston Area Office—(617) 669-4000  
[www.eeoc.gov/youth](http://www.eeoc.gov/youth)

## **Health & Safety and Work Permits**

Massachusetts Department of Labor Standards  
Work Permits—(617) 626-6952  
Workplace Safety & Health Program—(508) 616-0461  
[www.mass.gov/dols/youth](http://www.mass.gov/dols/youth)

Massachusetts Department of Public Health  
Teens at Work: Injury Surveillance & Prevention Project  
(617) 624-5632  
[www.mass.gov/dph/teensatwork](http://www.mass.gov/dph/teensatwork)

U.S. Department of Labor  
Occupational Safety & Health Administration (OSHA)  
North Boston Area Office—(978) 837-4460  
South Boston Area Office—(617) 565-6924  
Springfield Area Office—(413) 785-0123  
[www.osha.gov/SLTC/teenworkers](http://www.osha.gov/SLTC/teenworkers)

National Institute for Occupational Safety & Health (NIOSH)  
Workplace Safety & Health Topics  
[www.cdc.gov/niosh/topics/youth](http://www.cdc.gov/niosh/topics/youth)  
Youth @ Work: Talking Safety (Curriculum)  
<http://www.cdc.gov/niosh/talkingsafety/>

## **Data Sources**

Teens at Work: Injury Surveillance System. Massachusetts Department of Public Health. [www.mass.gov/dph/teensatwork](http://www.mass.gov/dph/teensatwork).  
Emergency department and data were obtained through the Massachusetts Center for Health Information and Analysis, [www.mass.gov/chia](http://www.mass.gov/chia). Workers' compensation claims were obtained through the Massachusetts Department of Industrial Accidents, [www.mass.gov/dia](http://www.mass.gov/dia).

## **References**

- 1 US Bureau of Labor Statistics, Current Population Survey. Washington, DC: US Bureau of Labor Statistics. 2012.
- 2 MMWR Morbidity Mortality Weekly Report. Occupational Injuries and Deaths Among Younger Workers—United States, 1998-2007. 2010. 59(15):449-455. <http://www.cdc.gov/mmwr/pdf/wk/mm5915.pdf>. Accessed March 31, 2015.
- 3 Hestbaek L, Leboeuf-Yde C, Manniche C. Low back pain: what is the long-term course? A review of studies of general patient populations. European Spine Journal. April 2003, Volume 12, Issue 2, pp 149-165. [http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3784852/pdf/586\\_2003\\_Article\\_508.pdf](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3784852/pdf/586_2003_Article_508.pdf) Accessed April 27, 2015.
- 4 Centers for Disease Control and Prevention, Web-based Injury Statistics Query and Reporting System (WISQARS) [Online]. (2013). National Center for Injury Prevention and Control, Centers for Disease Control and Prevention (producer). Cited March 31, 2015.
- 5 Injury Surveillance Program: Massachusetts Department of Public Health. Massachusetts Registry of Motor Vehicles: Some Statistics that You Should Know about Teen Drivers. <http://www.massrmv.com/rmv/jol/accrates.htm>. Accessed March 30, 2015.

## **Acknowledgements**

This Injury Surveillance Update 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

---