

Spring 2014



Teens at Work

Work-Related Injuries to Teens in Massachusetts, 2007-2011

Teens at Work: Injury Surveillance and Prevention Project
Occupational Health Surveillance Program • Massachusetts Department of Public Health

Preventing Injuries to Working Teens

Even in today's tough economy with fewer teens working than in the past, on average, over 17% of Massachusetts 15- to 17-year-olds are employed at any given point in time.¹

While work can provide benefits to teens, it can also pose health and safety risks: nationally, young workers have about twice the rate of nonfatal work-related injuries per hour worked than older workers.² This is partly explained by the fact that teens tend to be hired into industries that pose high risk to workers of all ages, such as restaurants and health care settings. Inexperience and lack of health and safety training are also factors.

More information about where and how teens are injured at work is essential to promote safer work opportunities for youth. Since 1993, the *Teens at Work: Injury Surveillance and Prevention Project* (TAW) at the Massachusetts Department of Public Health has tracked work-related injuries to teens under age 18 and collaborated with partners on a variety of initiatives to reduce workplace hazards and prevent injuries to working teens.

While there has been some success in reducing rates of work-related injuries to teens,³ the data for 2007-2011 reveal there is still work to be done. As we engage teens in workplace readiness—whether employers, schools, jobs programs, or parents—we need to provide them with basic health and safety skills that will help protect them now and in the future.

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Safety First: Speak Up for Youths



Liz Otero, Age 16 — 2014 1st Place Contest Winner

The 4th annual *Safe Jobs for Youth Poster Contest* has come and gone. Many thanks to the 154 teens that submitted posters, and congratulations to the winners and finalists. Thanks also to the 38 youth judges from across the state who voted on the winners.

Here is the 2014 winning poster!

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

www.mass.gov/dph/ohsp/teenpostercontest

Teen Injuries at a Glance, 2007 - 2011

The *Teens at Work Project* analyzes 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 2007-2011, there were 2,291 ED visits and 626 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 injuries were to 17-year-olds followed by 16-year-olds in both the ED and WC data sets. (Figure 1)

*There are limited types of work in which 14- and 15-year-olds may legally be employed. To view our **Child Labor Laws in Massachusetts** poster, visit our website:*

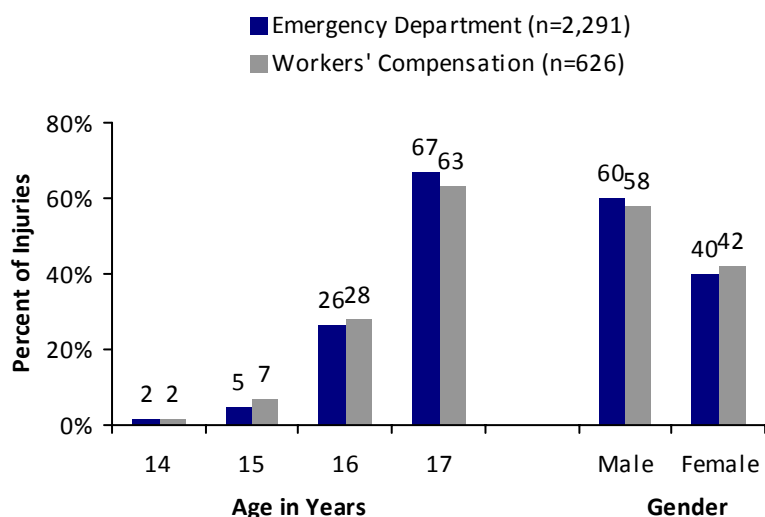
www.mass.gov/dph/teensatwork > Educational Materials > Working Teen Pamphlets

“I was playing with the little kids...tickling them and picking them up. I got extreme pain in my neck and shoulder. I went to the Health Center where they gave me a sling and some medication for the pain.

- 14-year-old daycare worker

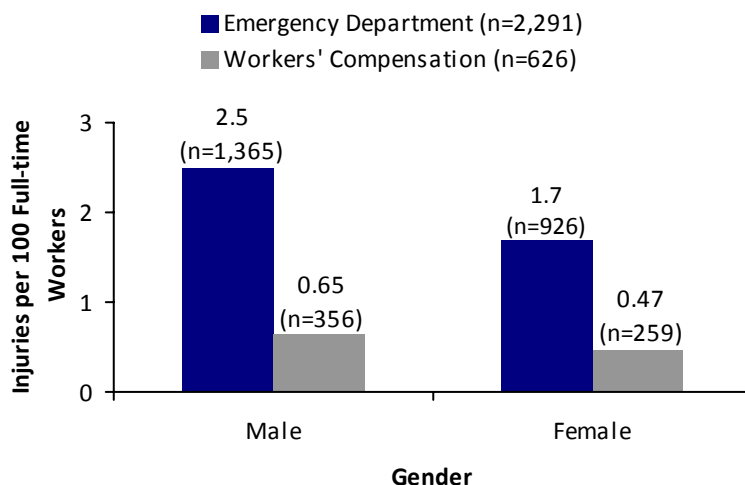
- Male teens not only accounted for more injuries than females, they also had higher rates of injury. (Figures 1 and 2)
- The average rate of work-related ED visits for all 15- to 17-year-olds, male and female, was 2.1 per every 100 full-time workers (two half-time workers count as one full-time worker). (Figure 2)

Figure 1. Distribution of work-related injuries to teens under age 18, by age, gender and data source, Massachusetts, 2007-2011



Note: Cases for which 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 among 15- to 17-year-olds, by gender and data source, Massachusetts, 2007-2011

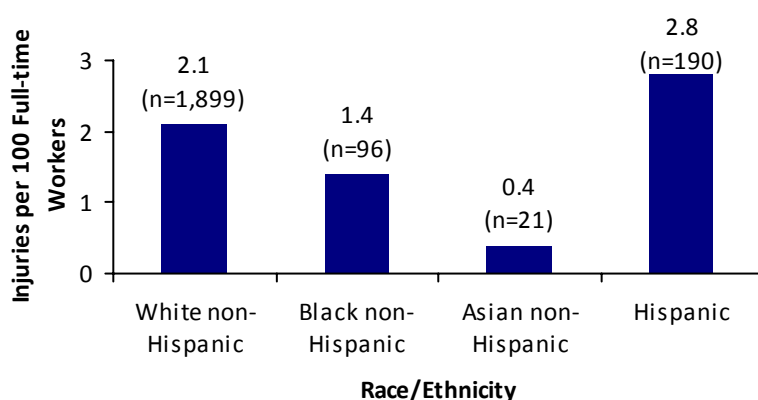


Note: Cases for which gender was missing were not included in the calculations.
Source: Teens at Work: Injury Surveillance System, MDPH.

Race & Ethnicity

- When looking at race and ethnicity among 15- to 17-year-olds, Hispanics had the highest rate of work-related injury: 2.8 injuries per 100 full-time workers versus 2.0 for all non-Hispanic teen groups combined. (Figure 3)
- White non-Hispanic teens had a higher rate of injury than each Black non-Hispanic and Asian non-Hispanic teens. (Figure 3)

Figure 3. Average annual rates for work-related ED visits among 15- to 17-year-olds, by race and ethnicity, Massachusetts, 2007-2011 (n=2,291)



Note: In FY2007 the MA Center for Health Information and Analysis implemented new regulations for collecting and coding race/ethnicity in hospital records. Due to the new methods, numbers/rates of ED visits among Hispanics in FY2007 are likely underestimated.

Note: "Other" race/ethnicity category not shown in figure.

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

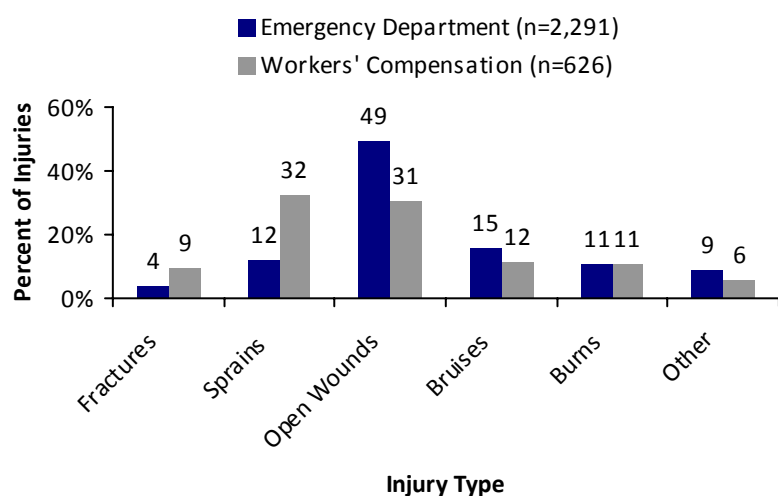
Nature of Injury

- Among ED visits, open wounds, including cuts, accounted for close to half of all injuries reported (49%). (Figure 4)
- Within the WC dataset, sprain injuries and open wounds each accounted for nearly a third of lost wage claims filed (32% and 31% respectively). (Figure 4)

"My boss was cutting a branch with a chainsaw and I was holding [the branch] it so it wouldn't fall. When the branch was cut, its weight pulled my arm into the blade."

- 16-year-old landscaper

Figure 4. Distribution of work-related injuries to teens under age 18, by type and data source, Massachusetts, 2007-2011



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

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

Fatal Injuries to Teens

From 2007 through 2011, two teens under age 18 were fatally injured on the job:

- A 17-year-old boy was electrocuted when a pole he was carrying came into contact with an overhead power line; he was helping his father dismantle a scaffold.
- A 17-year-old boy fell 23 feet to the ground while carrying shingles up a ladder to the roof of a building.*

* Massachusetts and federal child labor laws prohibit anyone under age 18 from performing roofing work.

Teen Injuries at a Glance, 2007 - 2011 (continued)

Industry Type

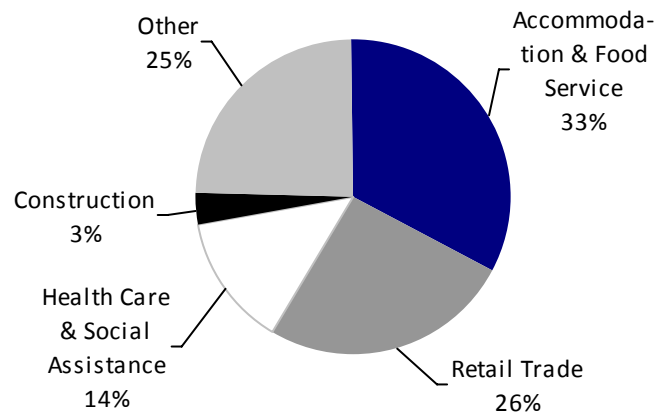
- Accommodation & Food Service, including restaurants, accounted for the most work-related injuries to teens (33%); Retail Trade trailed close behind (26%). (Figure 5)
- Health Care & Social Assistance made up only 14% of injuries, but nursing/residential care facilities had a high rate of injury at 16 per 100 full-time workers. (not shown)

More detailed fact sheets for each of the following industries are available online:

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

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, 2007-2011 (n=626)



*NAICS 1997

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

What Injured Teens Have to Say

Teens at Work Project staff completed 289 interviews with young workers injured on the job from 2007 through 2011. (Figure 6) 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.

32 DAYS:

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

My injury could have been prevented if...

“...a supervisor was present.”

“...the broken [machine] part was replaced.”

“...the floor was dry.”

“...I was helped by someone else.”

Figure 6. Select questions from interviews with teens injured at work in Massachusetts, 2007-2011 (n=289)



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

A Work Permit for Every Teen Job: It's the Law

Interviews with teens conducted by TAW demonstrate a lack of work permits among 25% of teens injured on the job. (Figure 6) In Massachusetts, work permits are required for any minor hired by an employer for pay (M.G.L. ch.149, sec.86-89). The teen must obtain a permit and the employer must have it on file before work can begin.

Many parties play a role in ensuring there is a work permit for every teen job, including schools, employers, and parents. Below is a summary of what everyone should know about the Massachusetts work permit process.

THE COMMONWEALTH OF MASSACHUSETTS EXECUTIVE OFFICE OF LABOR AND WORKFORCE DEVELOPMENT DEPARTMENT OF LABOR STANDARDS	
EMPLOYMENT PERMIT for 14-17 year-old workers	
This permit is issued to 14-17 year-old workers in accordance with M.G.L. c. 149, § 86B.	
Permit Number:	
Date of Issuance:	
Name of Minor:	
Minor's Address:	
Minor's Date of Birth:	
Minor's Place of Birth:	
Current Age:	_____ years

1. The teen receives a job offer.
2. A work permit application is downloaded from online: www.mass.gov/dols/youth.
3. The application is filled out and signed by the teen, parent/guardian, and employer. (If the teen is under age 16, a physician must also sign.)
4. The teen brings the application to the Superintendent's or other designated office in the school district where he or she lives or goes to school.
5. The school issues the proper work permit to the teen (general or co-op), available on the Dept. of Elementary & Secondary Education Security Portal.
6. The teen brings the permit to his or her employer to keep on file, before beginning work.
7. When the job ends, the employer returns the permit to the Superintendent within two days.

A teen needs a new work permit for every new job or change in position.

For more information:

Work Permit Applications — MA Department of Labor Standards, (617) 626-6952

Work Permit Enforcement — MA Office of the Attorney General, (617) 727-3465

Work Permit Process — Your local Superintendent's Office

Young Adults Injuries: Another Take on “Young Workers”

The term “young worker” has typically been used in the U.S. to describe workers under age 18—those who are protected by state and federal Child Labor Laws. But in other countries, and increasingly in the U.S., this term is being used to include young adult workers—those ages 18-24—who are also new workers and at high risk of being injured on the job.

18- to 24-year-olds enter the workforce as legal adults. They are no longer protected by Child Labor Laws, which means they can be employed in any job and without the task and hours restrictions that hold for younger teens. It is not surprising, then, that according to national data, while all young workers have high on-the-job injury rates compared to older workers (ages 25+), young adults have even higher rates than the younger teens.² These statistics underscore the need for employers to reduce workplace hazards and, together with educators and other stakeholders, do more to prepare teens and young adults for work.



There is wide recognition in the U.S. of the need to prepare a skilled workforce to meet the complex challenges of the 21st century. There is also growing appreciation that health and safety skills need to be part of work-readiness and that a **“ready worker” is both a skilled worker and a safe and healthy worker**. All new workers should have the basic skills needed to stay safe on the job and contribute to a safe, healthy and productive workplace.³

Young Adult Injuries (continued)

In 2010, TAW expanded its scope to collect data on injuries to workers ages 18-24 to learn more about the experience of the young adult worker population in Massachusetts. This new information is intended to inform efforts to protect young workers and to achieve a safe, skilled and ready workforce.

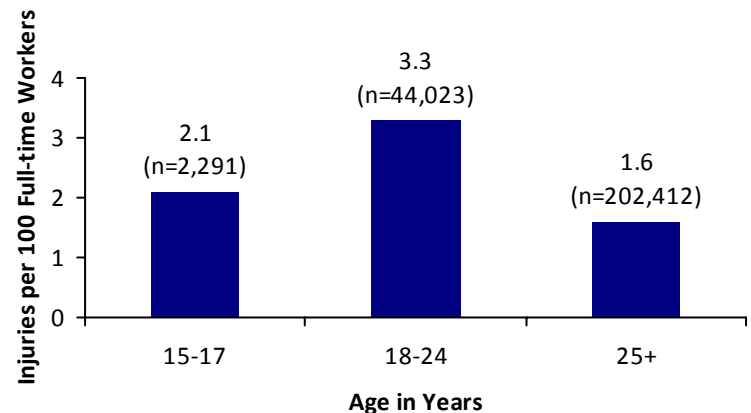
TAW used statewide emergency department (ED) and hospital discharge (HD) datasets to identify nonfatal work-related injuries to young adults ages 18-24. TAW also interviewed a small sample of Hispanic young adult workers ages 18-24 in the state, due to the even higher injury rates among this population.

From 2007-2011, there were 44,023 ED visits and 397 hospitalizations for work-related injuries to young adults. Following is a more detailed account of these findings.

Age

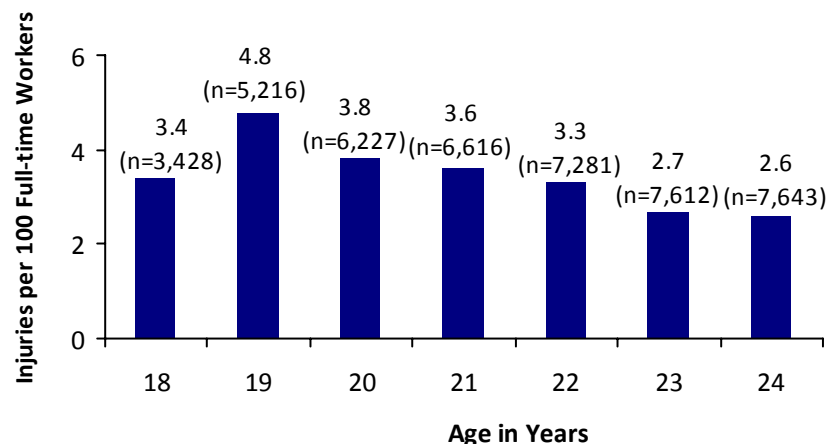
- 15- to 17-year-olds and 18- to 24-year-olds combined accounted for more than 46,000 work-related ED visits in this timeframe—over 9,200 every year. (Figure 7)
- All young workers (both teens and young adults) had significantly higher rates of ED visits than adults ages 25 and older; 18- to 24-year-olds had the highest rate at 3.3 per 100 full-time workers. (Figure 7)
- Among all young adults, 19-year-olds showed the highest rates of work-related injuries in both the ED and HD datasets. (Figure 8; HD data not shown)

Figure 7. Rates for work-related ED visits among workers, by age, Massachusetts, 2007-2011



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

Figure 8. Rates for work-related ED visits among 18- to 24-year-olds, by age, Massachusetts, 2007-2011 (n=44,023)



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

“There was an [assault] at the store next to us. So now I’m really nervous because we are the [two] stores that close the latest on weekdays. Our work...they didn’t really take it that seriously.”

- 19-year-old retail sales associate

Gender

- Male workers had significantly higher rates of work-related ED visits than females. (Figure 9)
This was also true for work-related hospitalizations. (not shown)

Race & Ethnicity

- Hispanic young adults had significantly higher rates of work-related ED visits than all other non-Hispanic workers. (Figure 10)
- The disparity between Hispanic young adults and their white non-Hispanic counterparts was even greater for the more serious injuries, with double the rate of hospitalizations. (not shown)

Health & Safety Awareness

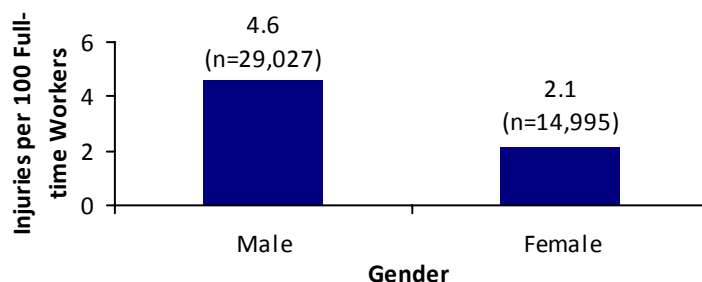
TAW's data show high rates of work-related injuries for all young adults, but particularly among Hispanics. To learn more about the work experiences of this population, TAW conducted a small study in 2013. Twenty-three interviews were completed with Hispanic workers ages 18-24 about their health and safety awareness.

- Less than half (48%) of Hispanic young adults interviewed had heard of workers' compensation (Figure 11), and in most cases the information they had was incorrect.
- Only a quarter (26%) of Hispanic young adults had ever heard of OSHA** (Occupational Safety & Health Administration), even though all had worked for pay within the past year. (Figure 11)

In the coming years, TAW will conduct interviews with 18- to 24-year-olds of all races and ethnicities to learn more about factors contributing to injuries among young adult workers.

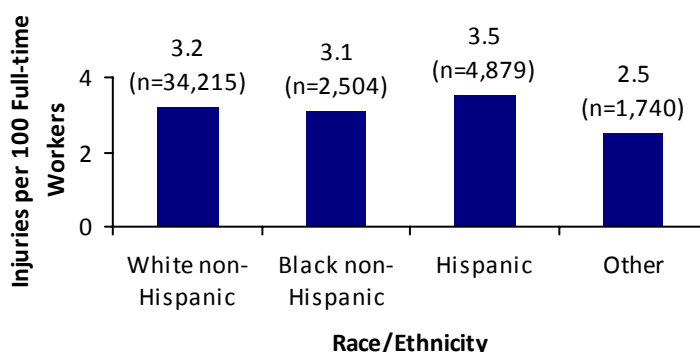
We continue to explore ways to reach workers in this age group, and welcome suggestions. E-mail us: teens.atwork@state.ma.us.

Figure 9. Rates for work-related ED visits among 18- to 24-year-olds, by gender, Massachusetts, 2007-2011 (n=44,023)



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

Figure 10. Rates for work-related ED visits among 18- to 24-year-olds, by race and ethnicity, Massachusetts, 2007-2011 (n=44,023)



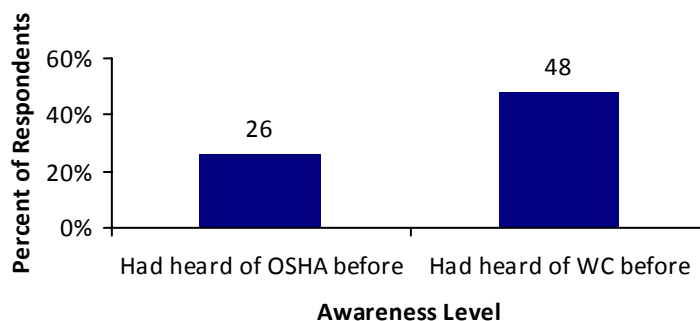
Note: Cases for which race was missing were not included in calculations.
Source: Teens at Work: Injury Surveillance System, MDPH.

Question: What do you know about Workers' Comp?

"I have sick days...so I can get hurt or something then I can use one of those days."

- 21-year-old office cleaner

Figure 11. Awareness of the Occupational Safety & Health Administration (OSHA) and workers' compensation (WC) among Hispanic 18- to 24-year-old workers, Massachusetts, 2013 (n=23)



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

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

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

Workers' Compensation

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

Discrimination at Work

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

U.S. Equal Employment Opportunity Commission
Boston Area Office—(617) 669-4000
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

Massachusetts Department of Public Health
Teens at Work: Injury Surveillance & Prevention Project
(617) 624-5632
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

National Institute for Occupational Safety & Health (NIOSH)
www.cdc.gov/niosh/topics/youth

Data Sources

Teens at Work: Injury Surveillance System. Massachusetts Department of Public Health. www.mass.gov/dph/teensatwork.
Emergency department and hospital discharge datasets were obtained through the Massachusetts Center for Health Information and Analysis, www.mass.gov/chia. Workers compensation claims were obtained through the Massachusetts Department of Industrial Accidents, www.mass.gov/dia.

References

- ¹ US Bureau of Labor Statistics, Current Population Survey. Washington, DC: US Bureau of Labor Statistics. 2011.
- ² MMWR Morbidity Mortality Weekly Report. Occupational Injuries and Deaths Among Younger Workers—United States, 1998-2007. 2010. 59(15):449-455. <http://cdc.gov/mmwr/preview/mmwrhtml/mm5915a2.htm>. Accessed January 8, 2014.
- ³ NIOSH Programs: Safe Skilled Ready Workforce Initiative. 2013. The National Institute for Occupational Safety and Health, Centers for Disease Control and Prevention. <http://www.cdc.gov/niosh/safe-skilled-ready/> Accessed January 8, 2014.

Acknowledgements

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