



### **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 guide 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](http://www.mass.gov/dph/teensatwork).

## Injuries by Gender

Unlike most other industries, the majority of teen workers in health care services were female.

It is not surprising, then, that **far more female workers were injured in health care facilities than males.** This was reflected in both data sources (Figure 1).

**47% of injured teens interviewed said they received no safety training prior to their health care injury.**

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

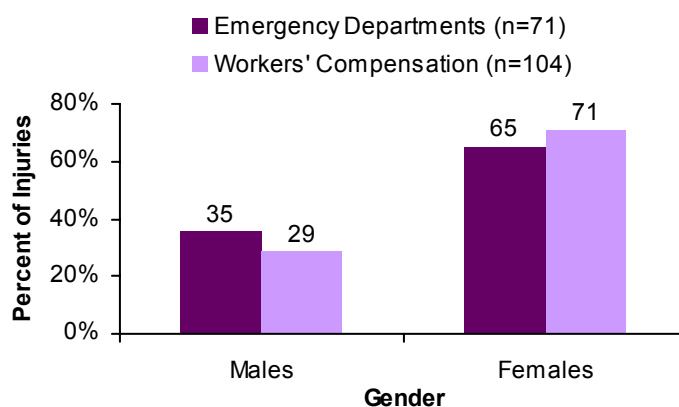
## Overview

Healthcare is the largest industry in Massachusetts, and has grown nationwide over the past decade<sup>1</sup>. While only 4% of working MA 15- to 17-year-olds worked in health care from 2005-2010<sup>2</sup>, this proportion is also likely to grow.

Despite the small percentage of MA teens working in health care, **175 (12%) of the 1,666 work-related injuries identified by the TAW Project from 2005 through 2010 (for which industry was known) occurred in this industry.** 59% of these injuries were identified through WC lost wage claims, and 41% through hospital ED reports.

This fact sheet provides a closer look at these non-fatal injuries to teens working in health care service.

**Figure 1. Work-related injuries to teens under age 18 in health care by gender and data source, Massachusetts, 2005-2010**



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

<sup>1</sup> US Bureau of Labor Statistics, *Occupational Outlook Handbook, 2012-2013 Edition*, Projections Overview, available online at <http://www.bls.gov/ooh/about/projections-overview.htm> (accessed 19 Sept 2012)

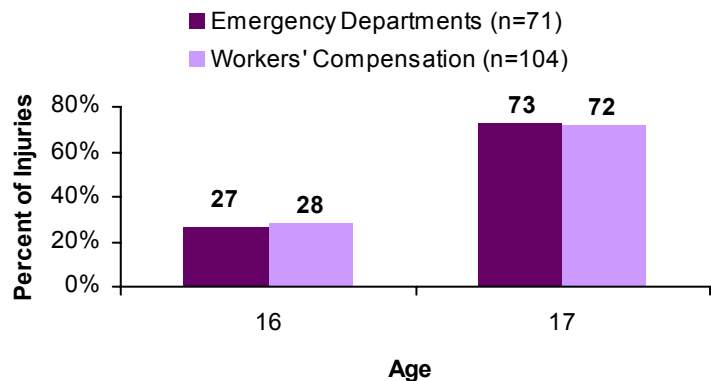
<sup>2</sup> US Bureau of Labor Statistics, 2005-2010. Note: See Figure 1 in the *Teens at Work Fact Sheet: Overview*.

## Injuries by Age

Nearly all injuries occurred among 16- and 17-year-olds—92% in WC data, and 99% in ED data. There were very few injuries to younger teens (Figure 2).

*Persons under 14 may not work.* View our “Child Labor Laws in Massachusetts” poster online: [www.mass.gov/dph/teensatwork](http://www.mass.gov/dph/teensatwork). Click on ‘Educational Materials’ then ‘Working Teen Pamphlets.’

**Figure 2. Work-related injuries to teens under age 18 in health care by age and data source, Massachusetts, 2005-2010**



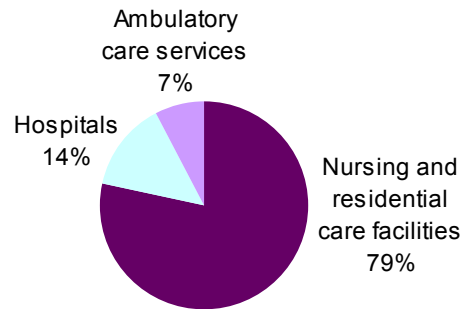
Note: Cases where either age was missing or teens were <16 were not included in the calculations.  
Source: Teens at Work: Injury Surveillance System, MDPH.

## Injuries by Establishment Type

Of the 175 injuries identified, 137 (79%) occurred in “nursing and residential care facilities,” accounting for the vast majority of injuries to teens working in health care facilities.

Injuries also occurred in “hospitals” (n=25) and “ambulatory health care services” (n=13) establishments, but were far fewer in number (Figure 3).

**Figure 3. Work-related injuries to teens under age 18 in health care by establishment type, Massachusetts 2005-2010 (n=175)**



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

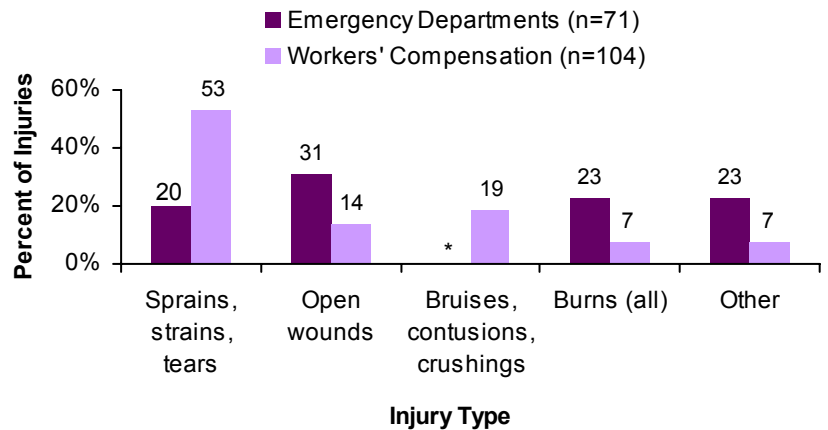
## Injury Type

### Injury Type by Data Source

“Open wounds” (including cuts) accounted for about a third of all injuries identified in ED data.

“Sprains, strains and tears” accounted for more than half of all injuries identified through WC data (Figure 4).

**Figure 4. Work-related injuries to teens under age 18 in health care 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

Among “sprains, strains and tears” to teens working in health care facilities, **backs were affected more than all other body parts combined**, accounting for 38 of the cases (Figure 5).

Nearly half of the 39 “sprain” injuries for which source was known involved contact with a health care patient. Among the 42 cases for which event type was known, 18 were due to overexertion (as opposed to another event type, such as a slip or a twisting).

### Open Wounds by Body Part Affected

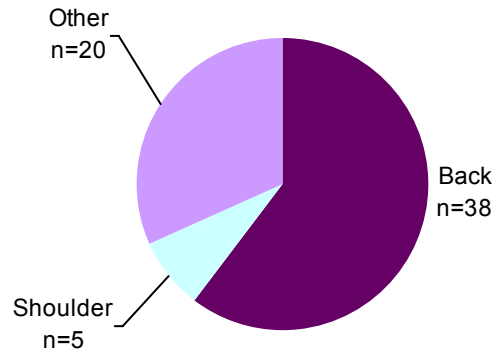
The majority of “open wounds” sustained by teen workers in health care, including cuts, lacerations and punctures, were to their fingers (Figure 6). Due to the small numbers, little information was available about the source or event involved in these injuries however, several indicated involvement in food preparation.

### Injury Type by Gender

“Sprains, strains and tears” were the most common type of injury among female teen workers, accounting for nearly half of all injuries identified.

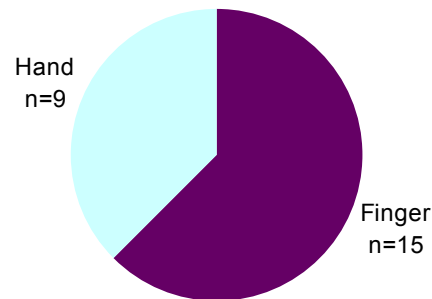
For male teen workers, “open wounds” (including cuts) were most common, making up 38% of injuries, but “sprains” still accounted for a quarter of all male injuries (Figure 7).

Figure 5. Work-related sprains, strains and tears to teens under age 18 in health care by body part affected, Massachusetts, 2005-2010 (n=63)



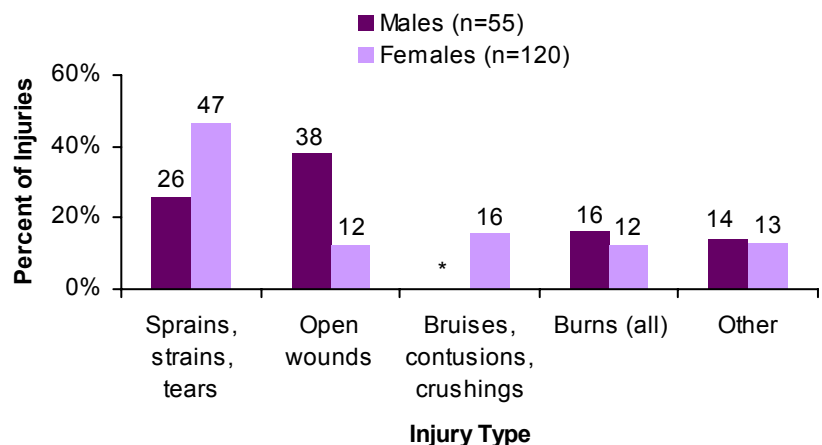
Source: Teens at Work: Injury Surveillance System, MDPH.

Figure 6. Work-related open wounds to teens under age 18 in health care by body part affected, Massachusetts, 2005-2010 (n=32)



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

Figure 7. Work-related injuries to teens under age 18 in health care by injury type and gender, Massachusetts, 2005-2010



\* Counts not shown for categories with less than four cases.  
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 58 teens health care 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.

Nearly half (47%) of all interviewed teens reported that they had received no training on how to perform their job safely prior to their injury; over half (57%) thought their injury could have been prevented in some way; and over a quarter (28%) of interviewed teens said they did not have a work permit for their job at the time they were injured (Figure 8).

**Massachusetts child labor laws require minors to have work permits**, which may be obtained through the school district in which the teen lives or goes to school.

## Young Worker Voices:

“A co-worker and I were lifting a patient to help her sit up in bed...there weren't enough people helping. I pulled my lower back and strained my ligaments.”

— 17-year-old female CNA, nursing home

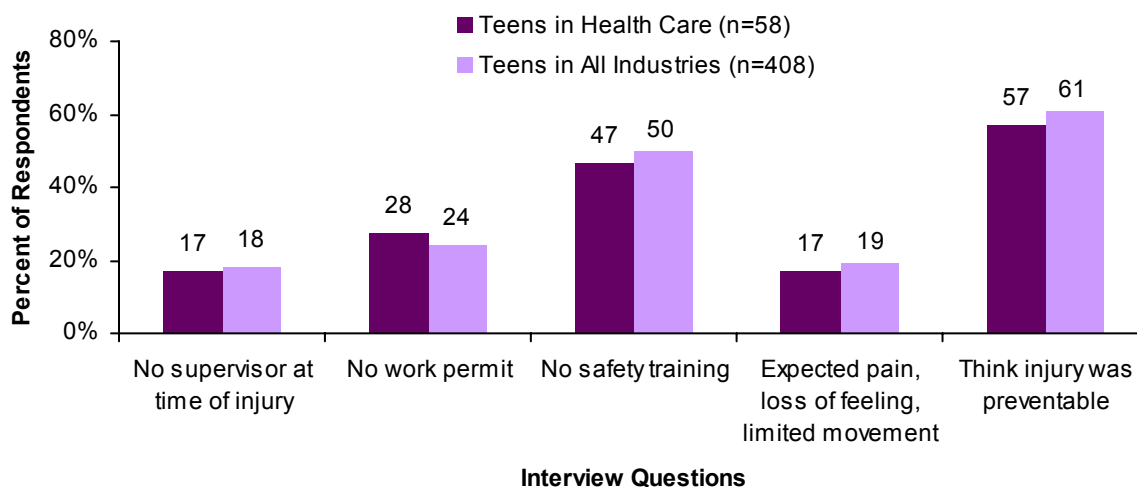
“I was at the sink cleaning a large knife. I got distracted and the knife slipped and the blade cut my finger.”

— 16-year-old male cook, hospital

“I was lifting a water cooler above me and I felt my right wrist snap. I did this while cleaning up after lunch was served. I drove myself to the doctor...he X-rayed my arm/wrist and gave me exercises to do. He told me not to lift or play softball until further notice.”

— 17-year-old dietary aide, nursing home

**Figure 8. Interviews with teens injured at work in health care services, 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](mailto:Beatriz.Pazos@state.ma.us).

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