



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

## Overview

More Massachusetts teens work in restaurants and other food service establishments than in any other single industry. Similarly, year after year, the largest proportion of work-related injuries to teens occur in this industry.

**From 2005 through 2010, food service injuries made up 503 (34%) of the 1,666 work-related injuries identified by the TAW Project.** 55% of these injuries were identified through workers' compensation lost wage claims, and 45% through hospital emergency department reports.

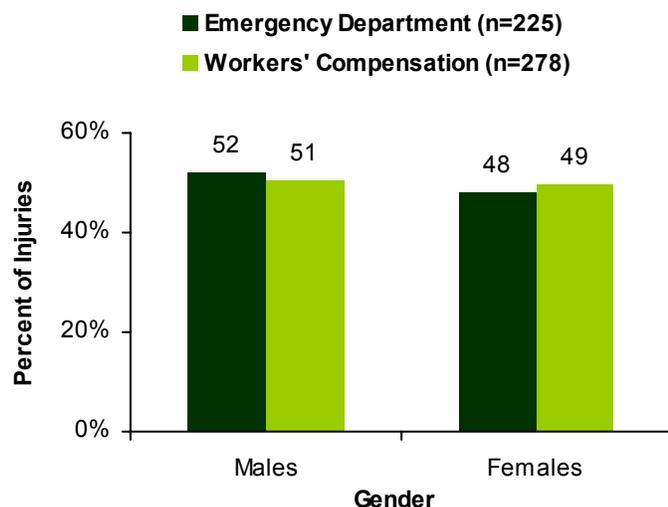
This fact sheet provides a closer look at these non-fatal injuries to teens working in the food service industry.

## Injuries by Gender

Males and females working in food service had similar numbers of injuries (Figure 1).

However, **even though males accounted for around half of all injuries identified, they only made up 38% of the teen workforce in restaurants and food services** (female teens made up 62%).

Figure 1. Work-related injuries to teens under age 18 in food service 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.

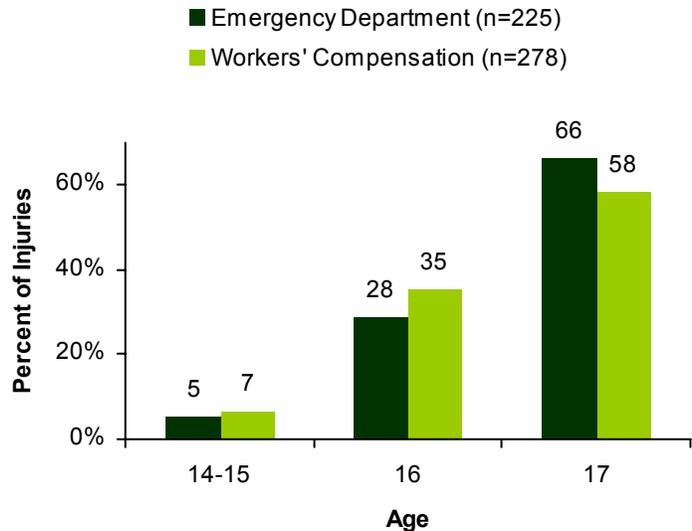
## Injuries by Age

The majority of injuries in both data sets occurred among 16- and 17-year-old workers (Figure 2).

This is not surprising as federal and state child labor laws prohibit 14- and 15-year-olds from performing many types of food service-specific tasks deemed too hazardous for younger teens, such as cooking.

To see all prohibited jobs for minors, 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 food service by age and data source, Massachusetts, 2005-2010**



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

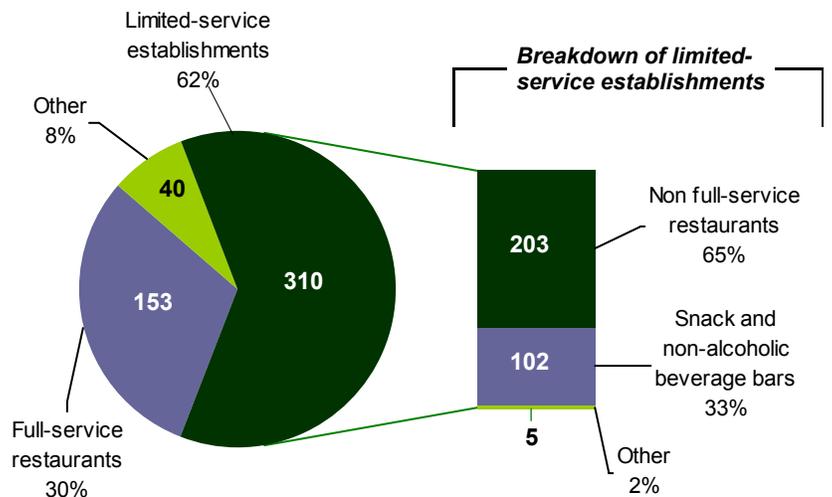
## Injuries by Establishment Type

Most of the 503 food service worker injuries identified occurred in “limited-service establishments,” for a total of 310 injuries.

Within limited-service establishments, “non full-service restaurants,” like fast-food places and pizzerias, accounted for nearly two-thirds of the injuries (n=203, 65%). “Snack and non-alcoholic beverage bars,” like coffee or bagel/donut shops accounted for one-third (n=102, 33%).

30% of all injuries in the industry occurred in “full-service restaurants” and 8% occurred in “other” types of food services, like caterers and food service contractors (Figure 3).

**Figure 3. Work-related injuries to teens under age 18 in food service by establishment type, Massachusetts, 2005-2010 (n=503)**



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

## Injury Type

### Injury Type by Data Source

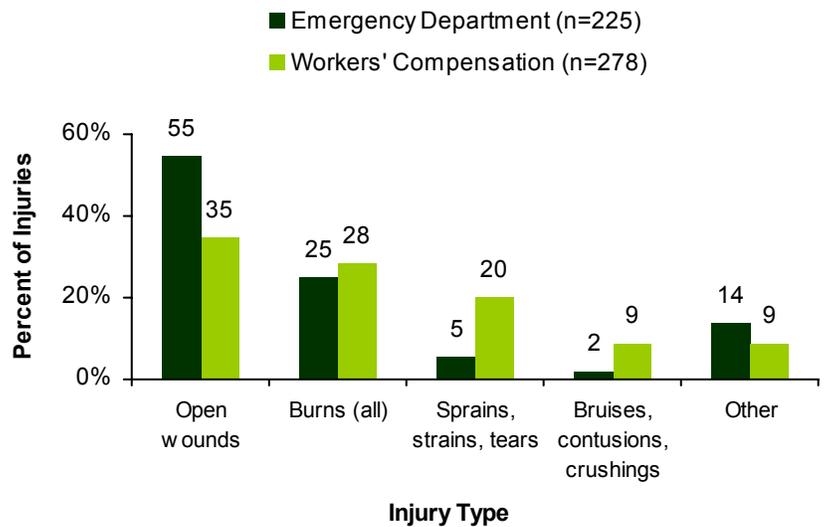
In both data sets, “open wounds” (including cuts) were the most common injury sustained by teens working in food service. “Burns” were the second most common.

There were more “sprains, strains and tears” identified through WC data than through ED reports (Figure 4).

**65% of injured teens interviewed thought their food service injury could have been prevented.**

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

Figure 4. Work-related injuries to teens under age 18 in food service by injury type and data source, Massachusetts, 2005-2010



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

### Injury Type by Gender

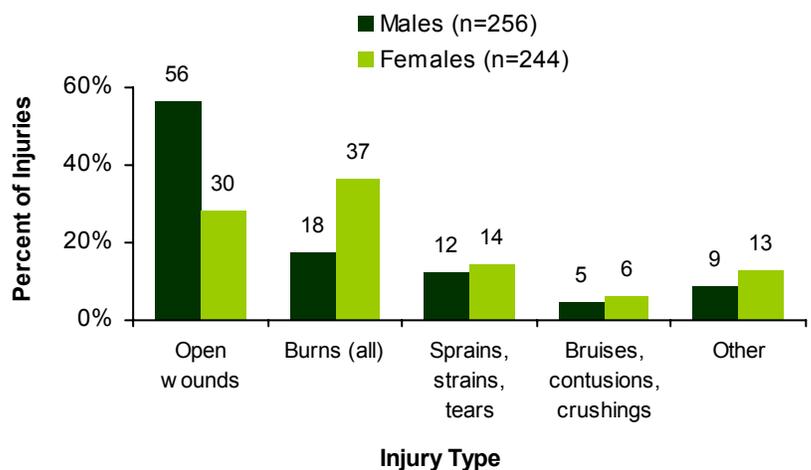
The most common type of injury by far among males was “open wounds” (including cuts) which accounted for more than half of the injuries to males.

Among females, “burns” was the most common type of injury at 37%, though “open wounds” followed as the second most common type of injury (30%) (Figure 5).

**Differences in injury type by gender are likely explained, in large part, by differences in the kinds of tasks assigned to males and females.**

There is research that shows even when males and females have the same job title, they may be assigned different tasks.

Figure 5. Work-related injuries to teens under age 18 in food service by injury type and gender, Massachusetts, 2005-2010



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

## Type of Injury (continued)

### Open Wounds by Body Part Affected

Among teen workers with “open wounds” injuries, including cuts, lacerations and punctures, fingers were the body part most often affected (Figure 6).

Of the 186 open wounds reported, source information was available for 56 cases. **Knives were the cause of 24 of these injuries**, and 14 caused by dishes and other broken glass.

### Burns by Body Part Affected

One out of every two burn injuries affected the teen’s hand. The second most common specific body part affected by burns was the arm (Figure 7).

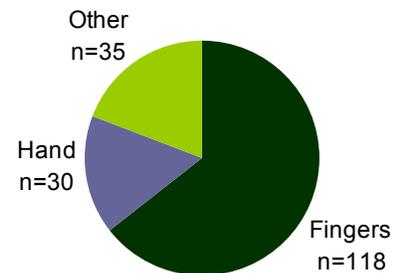
Of the 120 burns reported, source information was available for 47 cases: **a hot liquid or hot oil caused 32 of these burns—well over half—** and 8 were caused by cooking equipment.

### Sprains, Strains & Tears by Body Part Affected

“Sprains, strains and tears” most frequently affected the back. Less common, but still affected, were the knee and ankle (Figure 8).

Of the 59 sprains, strains and tears reported, information about the type of event during which the injury occurred was available for 35 cases: **14 of these injuries were related to lifting or moving an object**, and 13 were the result of falls.

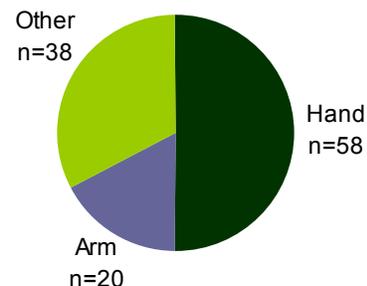
**Figure 6. Work-related open wounds to teens under age 18 in food service by body part affected, Massachusetts 2005-2010, Massachusetts (n=186)**



Note: Cases where body part was missing were not included in the calculations.

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

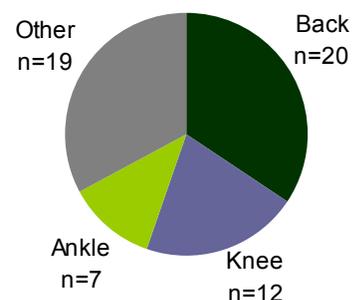
**Figure 7. Work-related burns to teens under age 18 in food service by body part affected, Massachusetts 2005-2010, Massachusetts (n=120)**



Note: Cases where body part was missing were not included in the calculations.

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

**Figure 8. Work-related sprains, strains and tears to teens under age 18 in food service by body part affected, Massachusetts 2005-2010, (n=59)**



Note: Cases where body part was missing 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 209 teen food service 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 said they received no training on how to perform their job safely; 64% thought their injury could have been prevented; and 20% reported no supervisor on site at the time of their injury—all higher percentages when compared to all other industries. Nearly a quarter of interviewed teens said they had no work permit for the job at which they were injured (Figure 9).

**Massachusetts law requires direct adult supervision after 8pm for workers under age 18**, especially pertinent for restaurants with night hours.

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

## Young Worker Voices:

“I was making sandwiches and there was no more bread. I was rushing to cut more with a basic bread cutting knife, but it was new and very sharp. My hand was on top of the loaf and I sliced the tip of my finger off.”

—16-year-old female clerk, pizzeria

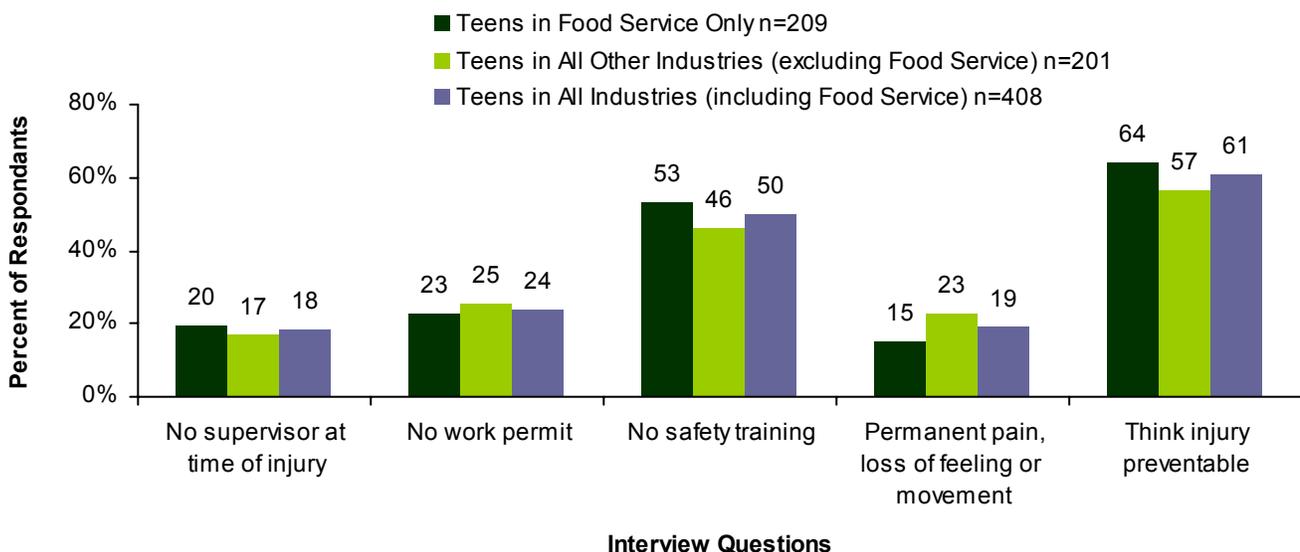
“I was using metal tongs to get a hash brown out of the grease. I was trying to avoid burning my hand on the sides. Then my whole hand slipped and fell into the grease.”

— 17-year-old female clerk, fast food restaurant

“During the early evening I was returning indoors after having taken out the trash. Stepping inside, I slipped on an area of the floor that was greasy.”

— 16-year-old male waiter, dine-in restaurant

**Figure 9. Interviews with teens injured at work in food service establishments, 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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