



The National Institute for Occupational Safety and Health (NIOSH)

NIOSH > Workplace Safety and Health Topics
> Fatality Assessment and Control Evaluation(FACE) Program > State FACE Reports



Massachusetts Newspaper Girl Dies After Being Struck By a Jeep While Delivering Her Route From a Bicycle

Massachusetts FACE 94MA016
September 12, 1994

SUMMARY

On May 5, 1994, a twelve year old, female news carrier was fatally injured when she was struck by a jeep while delivering papers from her bicycle. The girl, who was not wearing a helmet, had just made a delivery and was coming out of the customer's driveway when she was struck. Although the customer did not witness the incident, she heard the collision, and immediately called emergency services. Rescue personnel and the police arrived within minutes of the collision. The youth was treated for massive head and other injuries, then driven by ambulance to another location where she was airlifted to a metropolitan hospital. She was pronounced dead at the hospital one hour following the incident.

In order to prevent future similar occurrences, the Massachusetts FACE Program recommends that employers:

- require all carriers delivering from a bicycle to wear an approved bicycle helmet;
- give serious consideration to the safety of news carriers by taking into account traffic patterns and the age of carriers when making route assignments;
- hold periodic (monthly or quarterly) safety meetings for news carriers at the district or community level.

INTRODUCTION

On May 6, 1994 the MA FACE Program learned from an article in a metropolitan newspaper that a 12 year old news carrier had been killed the previous day in a motor vehicle collision. An investigation was immediately initiated. The MA FACE Project Director and the MA Department of Public Health's Teen Injury at Work Surveillance Project Manager met with the employer on May 18. The incident scene was visited and the investigating police officer and the customer to whom the victim made her last delivery were also interviewed. Copies

of the police report, the company's safety materials, news stories on the girl, the fire department report, and the death certificate were collected during the course of the investigation.

The employer was a family-run, daily, suburban newspaper, serving one Massachusetts community. The paper was a subsidiary of a larger newspaper serving 5 communities. The newspaper was started as a weekly edition in 1870, and in 1981 it became a daily paper. The company employed 50 part-time and 50 full-time workers, and 107 news carriers. Carriers were hired as independent contractors under the "Little Merchant System." Neither a work permit nor parental consent were prerequisites for employment.

When a new carrier was hired, an employee of the circulation department met with the child at their home. The circulation department employee provided an orientation session which covered the route assignment, instructions for doing the accounting for the route, and safety tips. A packet of safety fact sheets was handed out to the new carrier. In addition to bicycle safety, other topics included dog safety and safety for dealing with strangers. Shoulder bags with reflective trim were also handed out.

The employer did not have required safety rules or procedures. Its safety tips were simply guidelines. There were no periodic safety meetings. There was no designated safety officer in charge of safety for news carriers.

The victim had delivered papers for approximately 6 months, and at the time of the incident she had 29 customers. The average route size was reportedly 35 papers.

According to the employer, it took approximately 30 minutes to deliver a one and a half mile route of 29 papers. The child's route was comprised of two streets but she had to travel half a mile to begin the route. The victim worked a total of four hours per week; three hours were spent on delivery, and the remaining hour was spent on collection. The papers were delivered after 2:30 PM when school let out. Carriers earned \$.08 on each paper per day, plus approximately \$25 a week in tips.

INVESTIGATION

The twelve year old news carrier had been delivering her two street route in a suburban neighborhood for half a year. Her normal routine was to deliver her papers on the first street, and then cut through one of her customer's driveways to continue delivering the route on the second, roughly parallel, street. The customer had a driveway which could be accessed from both streets. The end of the driveway which the victim routinely entered was flat; however, the end from which she routinely exited had a steep hill. In addition, a row of five tall pine trees lined the steep hill, obstructing the view. Ordinarily the girl walked her bike down the steep hill; she had been encouraged to do this by both her family and the owner of the home.

At 4:00 PM on Thursday May 5, 1994 the child delivered a paper to the customer with the double access driveway. Although she was wearing a reflector vest and a white jacket, she was not wearing a helmet. Instead of walking her bike down the driveway, she rode down the steep hill. As she entered the road, she was struck, and fatally injured, by a Jeep. The only individuals who witnessed the incident were the driver and his son.

Upon hearing the collision, the customer called emergency services. Police and rescue personnel arrived within minutes of the incident. The youth was stabilized, and driven by ambulance to another location where she was air lifted to a city hospital.

The investigating police believe that the victim was struck by the right front corner of the Jeep, and that as the Jeep continued on she was dragged along by the side of the vehicle. Some part of her body, most likely her head, struck the mirror, and dislodged it from the door.

The road on which the incident occurred is an undivided two lane road, approximately 25 feet wide, and paved with blacktop. The road intersects a major Massachusetts four lane highway several miles from where the incident occurred. According to the customer to whom the victim made her last delivery, the road was recently widened and since that time speeding has become a problem. The road was slightly wet from previous rain, and traffic was heavy when the incident occurred.

When asked by the police to estimate his speed, the driver said he could not provide an estimate.

Since there were no skid marks on the road, the investigating police concluded that there was no evidence to indicate that the driver was speeding. However, since the road was wet, the vehicle was less likely to leave skid marks. According to the police officer, the police ordinarily rely on motor vehicle to motor vehicle damage to determine whether one or both of the drivers was speeding. When a collision occurs between a bicycle and a car, however, it is difficult to determine the speed of either. Given that the driver was unable to estimate his speed, and that it took him 90 feet to stop his vehicle, MA FACE concludes that his speed was likely a contributory factor in the incident.

CAUSE OF DEATH

The Medical Examiner listed the cause of death as blunt trauma to head.

RECOMMENDATIONS/DISCUSSION

Recommendation #1: Employers should require all carriers delivering from a bicycle to wear an approved helmet.

If the carrier had been wearing a bicycle helmet when the collision occurred, her death may have been prevented. While it is not possible to say in any single event whether a bicycle helmet could have prevented a severe head injury, research shows that approximately 85% of severe head injuries occurring on bicycles can be averted with helmet use. With the enactment of the Massachusetts Bicycle Helmet Law on November 29, 1993, (effective date March 8, 1994) all children aged twelve and under, including news carriers, must wear an approved bicycle helmet when they ride their bikes. While this law does not apply to children over age 12, employers should require carriers of all ages delivering from a bike to wear a helmet.

Recommendation #2: Employers should give serious consideration to the safety of news carriers by taking into account traffic patterns and the age of carriers when making route assignments.

Employers should give serious consideration to the route assignments they give to young children. In this case the victim was killed on a road in which speeding and heavy commuter traffic were common occurrences. Employers should consider the feasibility of restricting newspaper delivery on particularly busy or dangerous streets to adult carriers only. Alternatively, employers should consider restricting delivery by bicycle to quiet, residential streets with a lower volume of traffic.

A one time safety review is not enough to motivate safe work practices. In any workplace setting, employees need continual encouragement and motivation to follow safety rules. At such meetings news carriers should be encouraged to discuss any safety concerns or issues that they may have encountered. Youth workers, respected community leaders or safety personnel could on occasion be invited to participate in such meetings, as a possible motivational tool.

REFERENCES:

1. Thomas S., et al., Effectiveness of bicycle helmets in preventing head injury in children: case control study, British Medical Journal, 1994; 308:173-6.
2. Thompson RS, Rivara FP, Thompson DC, A case-control study of the effectiveness of bicycles safety helmets. New England Journal of Medicine, 1989; 320:1361-7.
3. Massachusetts Bicycle Helmet Law, Massachusetts General Law 85 Section 13a.

To contact Massachusetts State FACE program personnel regarding State-based FACE reports, please use information listed on the Contact Sheet on the NIOSH FACE web site Please contact In-house FACE program personnel regarding In-house FACE reports and to gain assistance when State-FACE program personnel cannot be reached.

[Back to Massachusetts FACE reports](http://www.cdc.gov/NIOSH-FACE/Default.cshtml?Category=0000&Category2=ALL&State=MA&Submit=Submit) (<http://www.cdc.gov/NIOSH-FACE/Default.cshtml?Category=0000&Category2=ALL&State=MA&Submit=Submit>)

[Back to NIOSH FACE Web](#)

Page last reviewed: November 18, 2015
Content source: National Institute for Occupational Safety and Health