KENTUCKY State FACE Program
Fatality Assessment & Control Evaluation

Kentucky Injury Prevention and Research Center
Bona fide agent for Kentucky Department for Public Health
333 Waller Avenue, Suite 242 • Lexington, KY 40504 • 859-257-5839

REPORT#: 19KY013 REPORT DATE: 8/27/2019

IT Consultant Dies on Kentucky Interstate in Single Vehicle Collision.

INCIDENT HIGHLIGHTS

DATE:
February 19, 2019

TIME:
6:36 AM

VICTIM:
Age: 37
Sex: Male
Occupation: Medical IT Consultant

INDUSTRY/NAICS CODE:
541618

EMPLOYER:
Management consulting services

SAFETY & TRAINING:
No driver focused training

SCENE:
Public highway: Interstate

LOCATION:
Kentucky

EVENT TYPE:
Motor Vehicle Collision

SUMMARY

On Tuesday, February 19, 2019, a 37-year-old male information technologist (IT) consultant (victim) was traveling from a client's business in Kentucky to a regional airport in order to return to his home state. While driving, the driver lost control of the passenger vehicle, contacted the guardrail, overcorrected, and then struck the concrete median barrier.

READ THE FULL REPORT> (p.6)

CONTRIBUTING FACTORS

Key contributing factors identified in this investigation include:

- Texting while driving.
- Failing to use a seat belt.
- Lack of driver safety training.

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RECOMMENDATIONS

Kentucky FACE investigator concluded that, to help prevent similar occurrences, employers should:

- Implement a texting while driving policy with associated training.
- Mandate the use of seat belts while driving on company time.
- Implement defensive driver training for employees who are required to travel.
- Replace W-beam highway guardrails with cable barriers.

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Fatality Assessment and Control Evaluation (FACE) Program

This case report was developed to draw the attention of employers and employees to a serious safety hazard and is based on preliminary data only. This publication does not represent final determinations regarding the nature of the incident, cause of the injury, or fault of employer, employee, or any party involved.

This Case report was developed by the Kentucky Fatality Assessment and Control Evaluation (FACE) Program. Kentucky FACE is a NIOSH-funded occupational fatality surveillance program with the goal of preventing fatal work injuries by studying the worker, the work environment, and the role of management, engineering, and behavioral changes in preventing future injuries. The FACE program is located in the Kentucky Injury Prevention and Research Center (KIPRC). KIPRC is a bona fide agent for the Kentucky Department for Public Health.

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INTRODUCTION

On Tuesday, February 19, 2019, a medical IT consultant was involved in a single-vehicle collision while traveling westbound on a major, six-lane interstate. The victim succumbed to the injuries sustained in the crash on Friday, March 1, 2019. On March 4, 2019, the Kentucky Labor Cabinet informed the Kentucky Fatality Assessment and Control Evaluation (FACE) Program of the incident. On July 15, 2019, the Kentucky FACE investigator conducted a site visit. Photographs of the scene were taken at that time.

EMPLOYER

The employer is a global consulting company founded in 2002. The company offers a wide variety of consulting services ranging from aerospace to medical technology. According to the company's website, they employ over 1,000 consultants. Consultants are required to travel frequently, both abroad and nationwide to meet the demands of clients. On average, a consultant can expect a typical work week to consist of 45 – 60 hours.

WRITTEN SAFETY PROGRAMS and TRAINING

The company has no safety program as it relates to the operation of an automobile.

WORKER INFORMATION

The victim was a 37-year-old single male. The decedent had received a bachelor's degree and worked as a medical IT consultant. He had been employed with the company for one year and three months.

INCIDENT SCENE

The incident occurred in the westbound lanes of a major, six lane interstate. East and west traffic is separated by a concrete median barrier that measures 42 inches in height. On the right shoulder of the interstate, a W-beam highway guardrail separates the emergency lane and a wooded area. The posted speed limit for this area is 65 miles per hour.

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Photo 1. The **RED** arrows represent the initial path of the vehicle as it exited the travel portion of the roadway. The **YELLOW** arrow represents the first point of contact. (Vehicle vs. guardrail) Photo created by and property of KY FACE

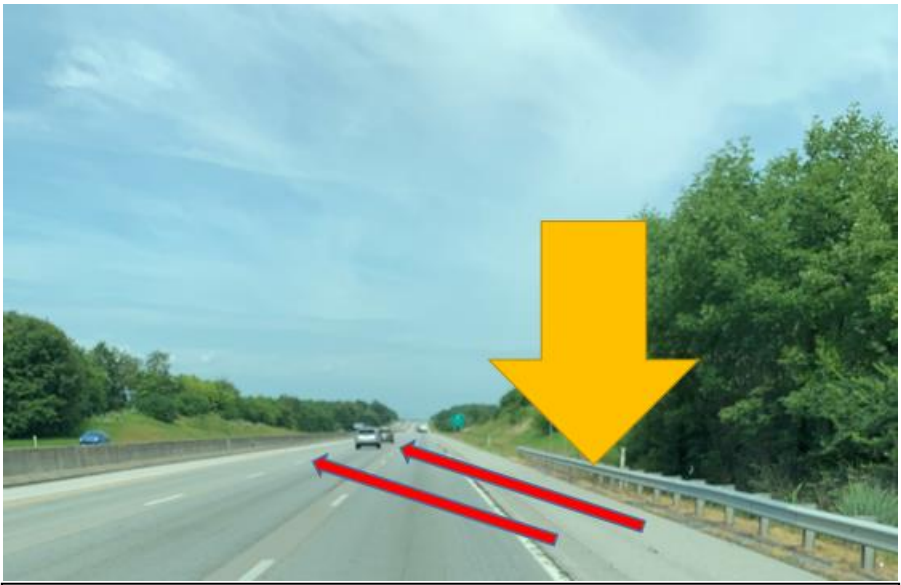

Photo 2. After the initial contact with the guardrail (**YELLOW** arrow), the victim took evasive action in an attempt to regain control. The victim overcorrected which resulted in the vehicle crossing all three lanes of traffic. (**RED** arrows) Photo created by and property of KY FACE

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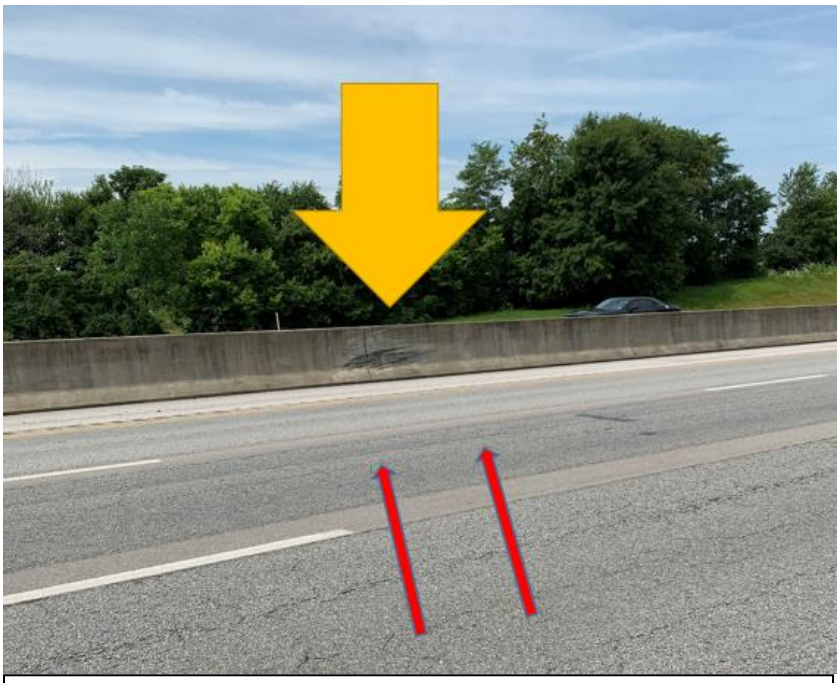

Photo 3. After crossing all three lanes of traffic (**RED** arrows), the victims vehicle struck the concrete divider (**YELLOW** arrow) where it came to final rest. Photo created by and property of KY FACE

WEATHER

The temperature was approximately 34°F at the time of the incident. The humidity was 89% with a northeast wind at 8 mph[1]. There was no precipitation and the roadway was dry. Weather was not considered to be a contributing factor in the accident.

INVESTIGATION

On Friday, March 1, 2019, a medical IT consultant was driving on a major, six-lane interstate within the city limits of a metropolitan area, en route to a regional airport while on work-related travel out of state. This particular section of the interstate has three total lanes of westbound travel, with the victim traveling in the far-right lane in the moments leading up to the collision, traffic flow was light. At approximately 6:36 AM, a police officer on routine patrol witnessed the crash. The police officer stated that as the victim passed his police cruiser on the right side, he observed the driver texting on a mobile phone while operating his 2019 Chevrolet Impala. At that moment, the victim's vehicle began exiting the travel portion of the roadway onto the right shoulder. The victim attempted to regain control, but was unable to do so before striking the guardrail on the right shoulder. After contacting the guardrail, the victim attempted to regain control. Unfortunately, the force of the impact in addition to the driver overcorrecting, propelled the vehicle across all three travel lanes and into the concrete median barrier which separates east and west traffic flow. The vehicle

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struck the barrier on the front driver's side bumper where it came to final rest. No other vehicles were involved in the collision.

The police officer who witnessed the event was on scene immediately. As the officer approached the vehicle, he noticed the victim partially in the front passenger's side seat. The officer observed that the driver was not wearing a seatbelt and appeared to be unconscious. The police officer immediately began resuscitation attempts on the victim until paramedics arrived on scene. The victim was transported to a local area hospital where he died ten days later on Friday, March 1, 2019.

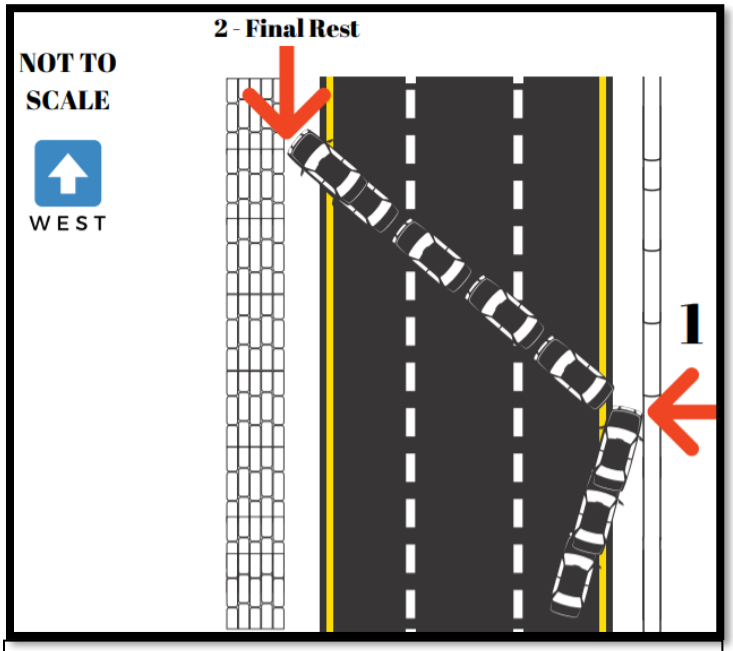

Photo 4. Animation showing the path of the car as it struck the guardrail and then the concrete barrier. Photo created by and property of KY FACE.

CAUSE OF DEATH

The cause of death was traumatic brain injury due to blunt force trauma sustained when the victims head struck the windshield of his vehicle.

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CONTRIBUTING FACTORS

Occupational injuries and fatalities are often the result of one or more contributing factors or key events in a larger sequence of events that ultimately result in the injury or fatality. Kentucky FACE investigator identified the following unrecognized hazards as key contributing factors in this incident:

- Texting while driving
- Failing to use seat belt
- Lack of driver safety training

RECOMMENDATIONS/DISCUSSION

Recommendation #1: Implement a texting while driving policy with associated training

Discussion: Texting while driving was determined to be a contributing factor that lead to the occurrence of the collision. According to The National Highway Traffic Safety Administration (NHTSA), distracted driving was found to be the contributing factor that lead to 3,157 fatal collisions in 2016; 444 of the total distracted driving fatal collisions were attributed specifically to cell phone usage, which equates to 14% of all distraction-affected crashes[2]. Texting while driving is one of the most dangerous forms of distracted driving according to The Centers for Disease Control and Prevention. Texting while driving combines all three types of distraction:

- Visual: taking your eyes off of the road;
- Manual: taking your hands off of the wheel; and
- Cognitive: taking your mind off of driving[3].

Kentucky law prohibits motor vehicle operators from texting while driving. In addition to requiring employees to follow each state's laws, companies who require employees to travel should consider implementing a policy which prohibits texting while driving. By doing so, the employer sets an expectation and raises awareness surrounding the dangers associated with texting while driving.

Fatal Crashes, Drivers in Fatal Crashes, and Fatalities, 2016

	Crashes	Drivers	Fatalities
Total	**34,439**	**51,914**	**37,461**
Distraction-Affected (D-A)	3,157 (9% of total crashes)	3,210 (6% of total drivers)	3,450 (9% of total fatalities)
Cell Phone in Use	444 (14% of D-A crashes)	457 (14% of distracted drivers)	486 (14% of fatalities in D-A crashes)

Photo 5. Chart depicting fatal crash statistics from the National Highway Traffic Safety Administration[2].
(Photo courtesy of The National Highway Traffic Safety Administration)

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Recommendation #2: Mandate the use of seat belts while driving on company time

Discussion: The victim was not wearing a seat belt at the time of the collision. Wearing a seat belt can greatly reduce the severity of injuries sustained in a crash. The Centers for Disease Control and Prevention estimates seat belts have saved nearly 250,000 lives from 1975 to 2008[4]. All U.S. states - with the exception of New Hampshire - now mandate the use of seat belts for at least the driver. In addition to requiring employees to abide by each states law, companies who require employees to travel should consider implementing a safety policy mandating the use of seat belts while operating motor vehicles.

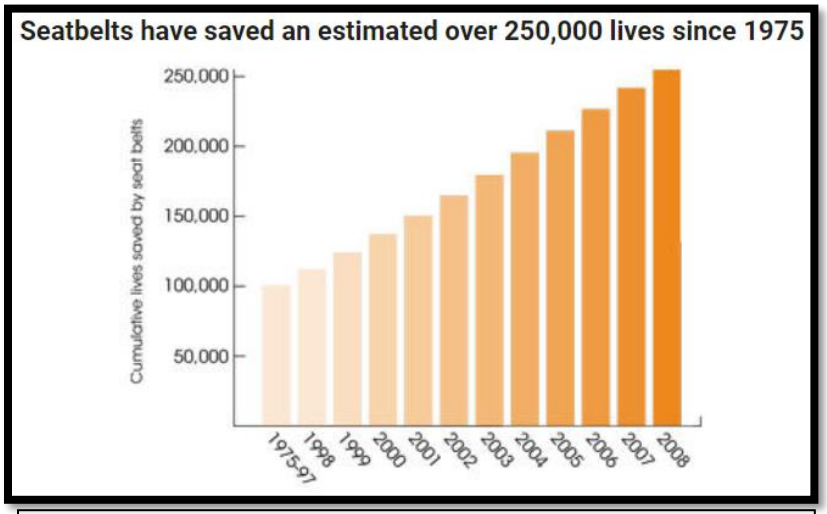

Photo 6. Chart depicting lives saved by use of seat belt from 1975 to 2008[4].
(Photo courtesy of The Centers for Disease Control and Prevention)

Recommendation #3: Implement defensive driver training for employees who are required to travel.

Discussion: Transportation and logistics companies have utilized defensive driver training for decades to educate drivers on the dangers of the highway and how to recognize hazards and tactics to prevent motor vehicle collisions. The Occupational Safety and Health Administration (OSHA) states that 40% of all occupational fatalities are the result of a vehicle-related crash[5]. Often times, if the primary function of a particular company isn't focused specifically on transportation, safety training geared toward the safe operation of a vehicle is never addressed. If a company requires an individual to travel to perform his or her job, regardless of the primary function of the company, employees are at risk of being involved in a traffic collision. Employers who require employees to travel should consider implementing a defensive driver program in an attempt to mitigate potential risk associated with the operation of a motor vehicle. In addition to initial training, employers may consider implementing annual refresher training to address complacency.

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Recommendation #4: Replace W-beam highway guardrails with cable barriers.

Discussion: Studies support that the use of cable barriers greatly reduce the severity of injuries sustained during vehicle vs. barrier crashes when compared to W-beam and concrete barriers. According to the Minnesota Department of Transportation, when cable barriers are struck, posts break and cables flex to absorb the kinetic energy and redirect the vehicle along the barrier[6]. W-beam guardrails are more rigid, which increase the probability of a vehicle being forced back into the travel portion of the roadway leading to overcorrection and a secondary impact. In this case, the initial impact occurred with a W-beam guardrail on the right shoulder of the highway. The force of the initial impact, in addition to the driver overcorrecting, propelled the vehicle across all three travel lanes and into the concrete median barrier which separates east and west traffic flow. The secondary impact with the concrete barrier resulted in the fatal injuries the victim sustained.

The Kentucky highway department should consider installing cable barriers in place of W-beam guardrails in an attempt to reduce the severity of injuries sustained during motor vehicle vs. barrier collisions. In this case, the use of a cable barrier may have absorbed the force of the initial impact and redirected the path of the victim's vehicle in a straight line preventing it from crossing all three travel lanes and striking the concrete median barrier.

Photo 7. Cable barrier on right shoulder of highway[7].

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DISCLAIMER

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REFERENCES

[1] Historical Weather Date. https://wunderground.com/history
[2] Collision Statistics "Distracted driving." https://crashstats.nhtsa.dot.gov
[3] Motor Vehicle Safety Types of Distraction. https://www.cdc.gov/motorvehiclesafety/distracted_driving
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[5] Motor Vehicle Safety. https://www.osha.gov/SLTC/motorvehiclesafety/
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INVESTIGATOR INFORMATION

This investigation was conducted by Beau Mosley, Fatality Investigator, Fatality Assessment and Control Evaluation, Kentucky Injury Prevention and Research Center, University of Kentucky, College of Public Health.

ACKNOWLEDGEMENTS

The Kentucky FACE Program would like to acknowledge the local police department and the county coroner for their assistance with the completion of this report.