THE UNIVERSITY OF IOWA

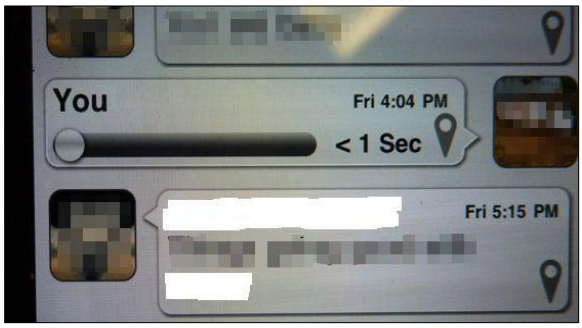
COLLEGE OF PUBLIC HEALTH
Department of Occupational and Environmental Health

Iowa FACE Report: **Diesel mechanic died in motor vehicle crash caused by distracted driving**

Case ID: **2012 IA 041**

Draft date: **4 March 2013**

Summary



A 37-year-old diesel mechanic employed by a railroad transportation company died when his loaded utility truck collided with the rear of a semi-trailer on a four-lane interstate highway. The mechanic was driving at highway speed during daylight hours when he failed to stop in time and struck the semi, which was moving slowly in traffic that had backed up due to a car fire two miles downstream. There was severe damage to the mechanic's truck, with underride of the cab and intrusion up to the right rear tires of the trailer ahead. The force of the collision caused a chain reaction, pushing the struck tractor-trailer forward into a second tractor-trailer that had stopped in backed up traffic. Fire and rescue responders arrived from the nearby town located four miles away. The mechanic, who was wearing a safety belt, suffered blunt force trauma as a result of the collision and was pronounced deceased at the scene. He was extricated by mechanical means from the truck cab and was found holding a cell phone. Law enforcement officers' examination of the phone activity revealed the mechanic had exchanged several voice/text messages prior to the crash and was initiating a voice/text message application at the time of the collision. The driver's failure to notice the tractor trailer ahead and stop in time was attributed to texting. Drivers of the other two vehicles were not severely injured.

To prevent similar fatalities, Iowa FACE recommends:

1. *Drivers should use cell phones and wireless communications devices only after pulling off the roadway and parking their vehicle.*
2. *Drivers should maintain a safe following distance, adjusting for weather, traffic, road conditions, and visibility.*
3. *Employers should implement policies banning use of cell phones and in-vehicle technologies while driving.*
4. *States should adopt and enforce laws prohibiting the use of cell phones and wireless devices while driving.*

Introduction

A diesel equipment mechanic employed by a rail transportation company died of multiple blunt force injuries after the utility truck he was driving collided at highway speed with the rear of a slow moving tractor-trailer on a four-lane interstate. The county medical examiner notified Iowa FACE of the fatality the day after the incident. Iowa FACE conducted telephone interviews with the county medical examiner and an Iowa State Patrol (ISP) officer who was present at the scene. This case investigation was prepared using information from the ISP/Iowa Department of Transportation Investigating Officer's Report of Motor Vehicle Accident, the ISP's Technical Collision Investigation, the county Sheriff's Department photographs, the Iowa State Medical Examiner's preliminary report, the final autopsy prepared by the pathology department of the local hospital, information provided by the railroad company safety personnel, and local news coverage of the event.

Employer

The mechanic was employed by a multi-state railroad franchise that transported diverse commodities including industrial products, chemicals, coal, agricultural products, vehicles, and other goods. The business employed over 1,700 workers in Iowa and over 40,000 employees nationally (2011).

Written safety programs and training

The employer's safety policy regarding cell phone use was noted to be 'the same as' the Federal Railroad Administration's (FRA) regulation on cell phone use; this regulation prohibits railroad operating employees from using personal and railroad-supplied mobile phones and electronic devices in trains and on the ground around trains, that would interfere with their own safety-related duties or the safety-related duties of another railroad operating employee (49 CFR Part 220, USDOT FRA, 2010). The company's policy did not cover use of cell phones by employees other than those operating and working around trains, or employee use of cell phones while operating motor vehicles. The career information provided on the employer's website indicated that review of driving records is included as part of the hiring process for mechanic and other job positions.

Exhibit 1. 1999 International 4700 truck cab, showing front "A" pillar

Victim

The victim was a 37-year-old diesel mechanic employed by the rail transportation company for an unspecified period of time. Prior to working for the rail transportation company, he served 11 years in the armed services as a diesel mechanic.

The mechanic worked on one of the railroad company's travelling crews which serviced all equipment travelling on the rail tracks. His work involved travel to numerous states, and he worked a schedule of roughly one week on, followed by one week off. The duties of this position included inspecting, repairing, and maintaining the engine

and mechanical parts on diesel electric locomotives (per employer website). Qualifications for this position included review of past driving records. The victim held a Class D (chauffer, noncommercial) driver license.

The mechanic was the driver and sole occupant of a company-owned 1999 International Model 4700 utility truck – an eight-ton, two-axle straight truck, fully loaded with equipment used in his job. He had departed from home the morning of the incident, en route to a work assignment at a site approximately 400 miles east of home, where he was to begin work the following morning at three o'clock. He had driven about 240 miles of the trip (roughly four hours excluding fuel or other stops) at the time of the collision. A photo of a 1999 International 4700 truck is shown in Exhibit 1.

Incident scene

The driver was travelling on a gently rolling, straight section of interstate highway with two eastbound and two westbound asphalt lanes separated by a center grass median. Each direction of travel had asphalt shoulders demarcated from the travel lanes by a white fog line on the outside shoulder, and a yellow fog line on the inside shoulder. A white dashed line separated the right and left travel lanes. There was a continuous rumble strip on the outside shoulder. Outer shoulders of each direction of traffic were bordered by mowed grass ditches with slight grade for drainage. The posted speed limit was 70 miles per hour (mph). There were no traffic controls and no road construction activities on this rural stretch of interstate. There were no roadway defects found that would have contributed to or caused the collision.

Exhibit 2. Aerial view of collision location

The collision occurred midway between two hills along the interstate, 2,487 feet (roughly one-half mile) east of the crest of the hill (Exhibit 2).

Approximately two miles downstream from (east of) the collision location, fire and law enforcement personnel were on site responding to a car fire on the right shoulder of the road, near a rest area exit ramp. One fire truck was on site extinguishing the fire, and two

marked law enforcement units with flashing top lights were on location directing traffic to reduce speed and merge into a single traffic lane to proceed around the car fire. Traffic upstream (west) of the car fire was backed up two miles and vehicles were stopped or proceeding slowly.

Weather

The incident occurred at 16:04 on a clear dry summer afternoon. Weather conditions were as follows:

temperature:	85 °F	barometric pressure:	0.0 in
humidity:	29%	wind:	NW, 12 mph
dew point**:**	50 °F	visibility:	clear, 10.0 miles
civil twilight:	21:18		

Investigation

The collision occurred at the bottom of a slight hill, midway between two hills with one mile of straight, visible roadway between them (Exhibit 2). Prior to the crash, the victim's truck was travelling east at highway speed in the right travel lane and had crested the west hill. Two thousand four hundred eighty-seven feet east of this hill crest, the utility truck struck the rear of the slowly moving tractor semi-trailer travelling in the right lane, with a force that drove both vehicles forward into a third tractor semi-trailer that was stopped in traffic. The collision occurred at 16:04.

The three vehicles are described below, with a depiction of their resting positions shown in Exhibit 3.

Vehicle	Description
1*	1999 International 4700 utility truck, a two-axle/six-wheel straight truck; gross vehicle weight rating (GVWR) = 26,000 lb.
2	2012 Kenworth Construct T600 tractor (GVWR = 80,000 lb.) with 2009 Great Dane refrigerated semi-trailer ("reefer trailer")
3	2013 Freightliner tractor (GVWR = 80,000 lb.) with 2007 Wabash semi-trailer

* *Victim's truck*

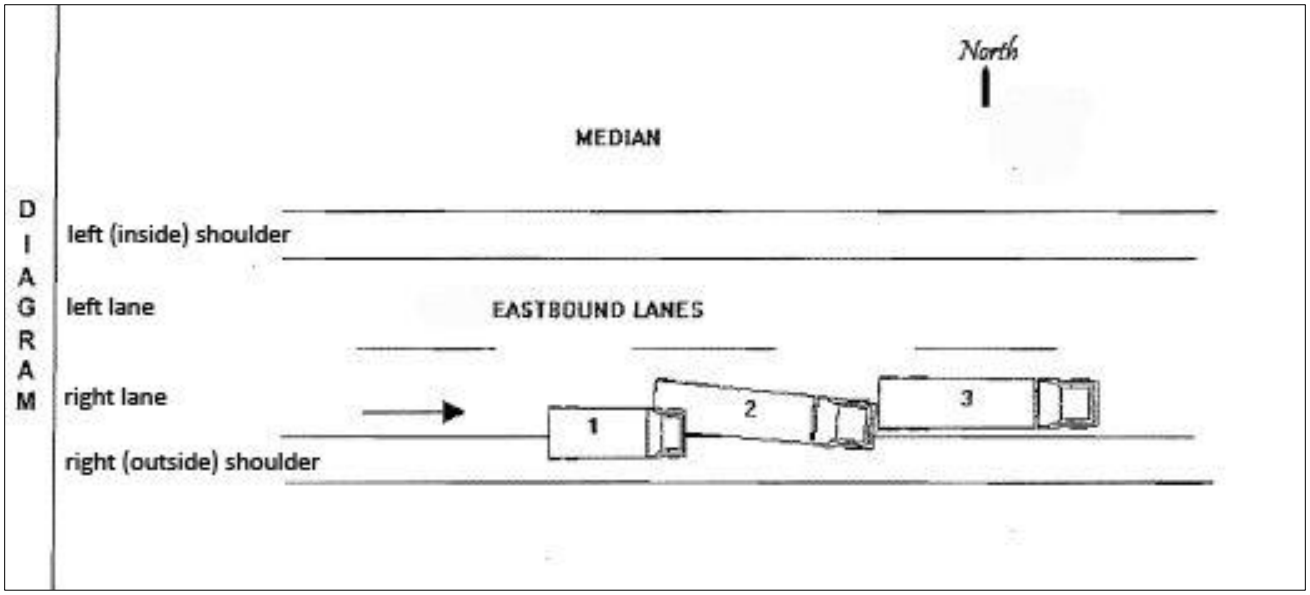
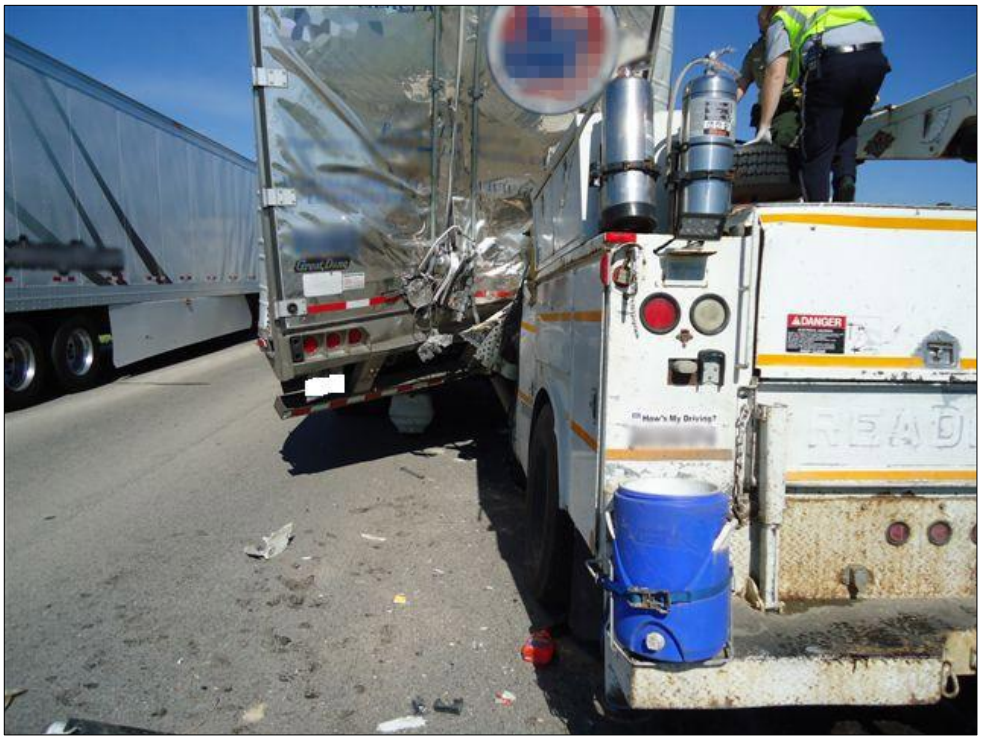


Exhibit 3. Depiction of vehicles' resting position post-collision. Vehicle 1 is victim's truck.

No information was available regarding the following distance maintained between the victim's truck and Vehicle 2 prior to encountering backed up traffic, but the ISP examination of the vehicles and measurement of skid marks pre- and post-impact provided information regarding the relationship of the vehicles to each other at the point of maximum impact.

The victim's utility truck left a 68.5-foot pre-impact skid mark on the roadway that veered toward the south ditch (outside shoulder), indicating the victim applied the brakes immediately before striking Vehicle 2.

Upon impact, the victim's truck intruded into the reefer trailer up to the right rear wheels. At this point, the victim's truck was engaged with the trailer of Vehicle 2 (Exhibits 4 & 5), and continued east, leaving a 72.5-foot post-impact skid on the roadway.



Exhibits 4 & 5.

Resting position of victim's truck (white) and Vehicle 2 following collision.

Primary contact and extensive damage occurred at the driver's side cab of the utility truck. The A-pillar (i.e., front pillar, shown on Exhibit 1) on the driver side of the cab was pushed back five feet, four inches into the driver compartment where the victim was located, resulting in fatal injuries (Exhibit 6).

Exhibit 6. View of front of victim's truck showing underride and intrusion into driver compartment

At the time of the collision, Vehicle 2 was travelling "very slowly" at the bottom of the hill, and Vehicle 3 was stopped in backed-up traffic. The force of the initial collision pushed Vehicle 2 forward into the trailer of Vehicle 3, leaving an 86.5-foot post-impact skid mark from Vehicle 2 on the roadway. Vehicle 2 had primary damage to the right rear half of the trailer, secondary damage to the front bumper and grille, and the engine was leaking fluids. Damage to Vehicle 3 was minor and limited to dents and scratches at the rear trailer and bumper. The drivers of Vehicles 2 and 3 were not seriously injured.

Witnesses called 911, and law enforcement and emergency rescue personnel arrived at the scene within minutes. The mechanic was pronounced deceased at 16:23. The utility truck was towed to a towing service site where the victim was extricated by mechanical means, with law enforcement personnel present.

While the victim was being extricated, law enforcement agents observed a cell phone in the victim's left hand. Examination of the contents of the cell phone's voice text/message application showed dates, times, and content of text messages exchanged prior to the accident, including a message that the victim was initiating at 16:04 (4:04 p.m.), when the crash occurred (Exhibit 7). Additional messages in the text conversation had been exchanged over a two-hour period prior to the crash.

The Iowa State Patrol investigation noted no other conditions contributing to this crash related to weather, road surface, roadway junction, or environment. There was no known vehicle defect.

Cause of death

The local hospital's Department of Pathology autopsy reported the driver's cause of death as multiple blunt force injuries. The autopsy reported blunt force injuries of the head and neck, trunk, and arms and legs. Toxicology testing revealed the presence of caffeine and cotinine (a metabolite of nicotine) only. There was no evidence of alcohol or drugs that would have impaired the victim's ability to operate his vehicle safely.

Exhibit 7. Photographs of victim's cell phone screen display, showing times of messages exchanged between the victim (driver, shown as "YOU") and recipient the afternoon of the fatal collision. Identities and content are masked.

4:04 PM - time of collision while initiating message

Recommendations

1. Drivers should use cell phones and wireless communications devices only after pulling off the roadway and parking their vehicle.

Motor vehicle crashes are the top cause of work-related deaths, accounting for 24 percent of all fatal occupational injuries (CDC 2011), and are among the top three causes of death during a person's lifetime (NSC 2010). At least 24 percent of all 2010 traffic crashes involved drivers using cell phones or texting (NSC 2012, *Annual Estimate of Cell Phone Crashes 2010*). The trade group representing the wireless industry reported these statistics for the one-year period ending June 2012: 2.32 trillion minutes of cell phone use, 2.27 trillion text messages (a three percent increase over 2011), and the number of cell phone subscriptions exceeded the 2011 US population (CTIA, 2012). With this increase in cell phone use, nine percent of all drivers on the road at any given time during daytime hours are estimated to be using a phone while driving, and one percent are manipulating (texting or dialing) a phone (*NHTSA Traffic Safety Facts*, 2011).

The Virginia Tech Transportation Institute's naturalistic studies[1] of commercial vehicle drivers identified distracting activities that increased the likelihood for crash and near-crash events. Activities associated with greatest risks were those that involved complex tasks that took drivers' eyes away from the forward road for the longest periods.

Activity (task)	Odds Ratio
text message	23.23
other – complex task (e.g., cleaning side mirror, rummaging through grocery bag, etc.)	10.07
interact with/ look at dispatching device	9.93
write on pad or notebook	8.98
use calculator	8.21
look at paper map	7.02
use/reach for other electronic device (video camera, 2-way radio)	6.72
dial cell phone	5.93
other-moderate task (e.g., opening pill bottle to take medicine, exercising in cab)	5.86
personal grooming	4.48
read book / paperwork / newspaper	3.97
reach for object in vehicle	3.09
talk on or listen to cell phone	1.04

Exhibit 8. Increased risk of crash or near-crash due to distracting activity while driving (FMCSA, Olson, 2009)

The most dangerous activity identified was ***texting***, which increased the risk for a collision more than 23-fold (Exhibit 8). Of all activities observed, ***texting*** involved looking away from the roadway the longest: 4.6 seconds over a six-second interval. This equates to driving a distance longer than one and one-half football fields at 70 mph without looking at the road[2]. ***Dialing*** a cell phone increased the risk for crash by a factor of six compared to non-distracted driving, and involved looking away from the road for an average duration of 3.8 seconds (FMCSA, Olson, 2009). Riskiest tasks were visual-manual in nature; most involved several steps to complete and multiple glances away from the road.

[1] Naturalistic driving studies involve equipping vehicles with instrumentation including video cameras that record participant driving behaviors and performance in the context of the driving environment, including the minutes and seconds preceding a crash or near-crash.

[2] > 470 feet. Calculation: (70 mph) * (5280ft/mi)* (1hr/3600sec) * 4.6 sec

The US Department of Transportation (DOT) is researching the effectiveness of cellphone disabling technologies that block or limit cell phone communications in a moving vehicle by preventing outgoing calls and texts, rerouting voice calls to voice mail, sending auto-responses that the driver will respond after reaching their destination, and holding incoming texts and emails to be retrieved after the vehicle stops. Some devices that both prevent cell phone use and monitor driver behavior are being developed and marketed for specific industries, to provide feedback to employers regarding risky driver behavior (http://www.denverpost.com/commented/ci_22204587?source=commented-business). Other apps and on-vehicle devices are marketed to parents of teen drivers and can be installed on later model vehicles' on-board diagnostics port, but their limitations are evident: the use of devices is voluntary, they do not prevent drivers from switching phones, and they do not prevent the use of hands-free or headset devices, which encourage distracted driving.

An immediate and direct solution involves avoiding cell phone use while driving. Drivers should inform their coworkers, family, and friends ahead of time that while driving, **they will not be answering phone calls or responding to text messages**. A voicemail message on the cell phone can indicate the same information. Drivers should turn off or silence the phone, or put it in the trunk or an area where it can't be reached, and make plans to pull off the roadway and park the vehicle periodically if there is a need to check messages or make calls. Drivers should seek support from their friends, coworkers, and family by informing them ahead of time that they are making an effort to break the practice of using a cell phone when driving.

2. Drivers should maintain a safe following distance, adjusting for weather, traffic, road conditions, and visibility.

The mechanic's distraction due to using his cell phone prevented him from focusing on traffic ahead and maintaining a safe following distance from downstream traffic.

Driver safety guidelines and state driver manuals recommend creating a space cushion around a moving vehicle, using the "three-second following rule" to maintain a safe minimum following distance in clear, dry, low-traffic conditions (Exhibit 9). In heavy traffic, night-driving, or inclement weather, the three-second following rule should be doubled to six seconds; and tripled to nine seconds in very poor weather, such as heavy rain, fog, or snow. Additional seconds should be added to the "following rule" for high speeds over 60 mph, extra vehicle weight (towing), or following motorcycles. The minimum space cushion following distance should be maintained as a buffer zone even in traffic, to allow for adequate time and space in which to respond to changing traffic conditions.

Defensive driving involves looking beyond the vehicle one is following, and scanning the roadway ahead in anticipation of potential problems. Focusing 10 seconds ahead (using the same counting method described in the "three-second following rule") is roughly equivalent to monitoring roadway conditions one-fourth- to one-third- mile ahead on the highway, and one block in city driving (Demand Media). The

Three-second following rule

- Focus on a fixed object on the roadway ahead (a signpost, overpass, tree, shadow on roadway, etc.)
- When the rear of the vehicle ahead of you passes this object, start counting "one-thousand one, one-thousand two, one-thousand three."
- If the front of your car reaches the fixed object before completing the count, you are following too close, and should fall back to allow ample time and distance to respond to problems in the lane ahead.

Exhibit 9. Three-second following rule

Federal Motor Carrier Safety Administration (FMSCA) advises commercial drivers to look at least 15 seconds ahead (one-third to one-half-mile ahead on a highway), to allow drivers of large vehicles to respond early and smoothly to changing conditions, and to avoid dangerous, abrupt braking situations (FMCSA, CMV Web-based driving tips).

The collision occurred roughly midway between two hills spaced a mile apart (0.47 mile east of the hill crested, with approximately one mile of visible roadway ahead). Had the driver kept his focus one-fourth to one-half-mile ahead on the roadway, he would have realized the need to reduce his speed gradually and to avoid emergency braking.

Effective stopping distance includes the distance travelled by the vehicle in the time it takes a driver to *perceive a hazard* (eye signals brain, 0.75 seconds) and *respond to the hazard* (brain signals foot, 0.75 seconds) - together noted as "reaction time" of 1.5 seconds for an alert driver in undistracted situation - plus the distance covered by a vehicle while brakes are applied ("effective braking distance"). Exhibit 10 illustrates the distance required to stop a car at various speeds in normal driving conditions (NHTSA).

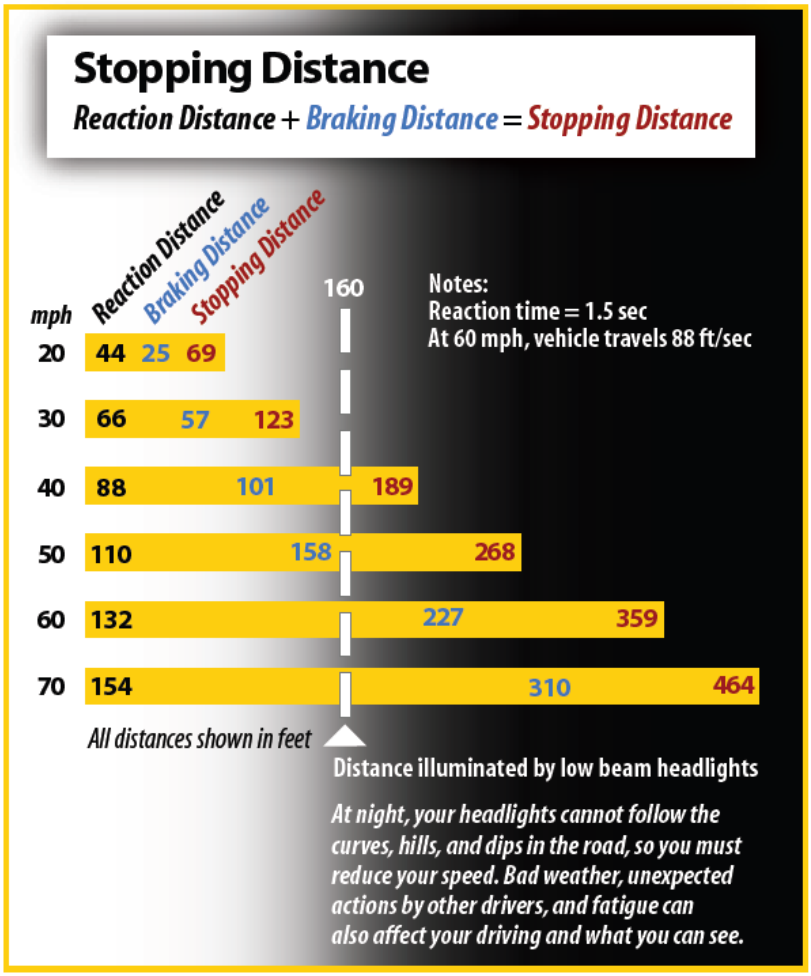


Exhibit 10. Stopping distance required for passenger vehicles travelling at different speeds, with undistracted driver

Stopping distances are increased for larger vehicles; for drivers whose reaction time is longer due to driver distraction, fatigue, or effects of medication or alcohol; and other factors related to vehicle and road surface, and road conditions.

The table on the following page (Exhibit 11) shows the relative stopping distances calculated for a truck travelling 70 mph (the speed limit on the interstate, and presumed speed of victim's truck before braking), comparing scenarios for an alert, undistracted driver, and scenarios incorporating eyes-off-the-road distraction times found in the VTTI naturalistic study while dialing a cell phone or texting. [Calculations are based on using a truck deceleration rate of 14 feet per second per second (fpsps) [3] and the calculation model found at: http://www.csgnetwork.com/stopdistinfo.html.]

[3] Truck deceleration rate found at: http://www.fmcsa.dot.gov/rules-regulations/administration/fmcsr/fmcsrruletext.aspx?reg=393.52

	Undistracted		Distraction			
			Dialing phone		Texting	
	Elapsed time, seconds (s)	Distance traveled, feet (ft)	Elapsed time, (s)	Distance traveled, (ft)	Elapsed time, (s)	Distance traveled, (ft)
Distraction from eyes off road	-	-	3.8	391	4.6	474
Reaction time = recognition time (0.75 s) + response time (0.75 s)	1.5	154	1.5	154	1.5	154
Stopping time (effective braking)	7.4 [a]	381 [b]	7.4	381	7.4	381
Total	8.9 [c]	535 [d]	12.7	926	13.5	1009

[a] Stopping time (while brakes applied) = speed/deceleration rate = 103 fps/14 fpsps = 7.4 seconds

[b] Stopping distance (while brakes applied) = ½ initial velocity * braking time

[c] Total elapsed time = distraction time + reaction time + stopping time

[d] Total distance traveled = distance traveled during distraction time + distance traveled during reaction time + distance traveled during stopping

Exhibit 11. Comparison of stopping times and distances for truck travelling 70 mph (103 ft/second)

Assuming the vehicle, tires, brakes, and road are in good shape, an undistracted driver should be able to stop the vehicle within 10 seconds, and in an effective stopping distance less than 600 feet. In this comparison, looking away from the road for 4.6 seconds (the duration of distraction associated with texting) nearly doubles the distance required to stop a truck travelling at 70 mph on a dry highway in good condition (1009 ft. vs. 535 ft).

Individual case factors - such as road condition, type of tire and brakes and their condition, and weight of vehicle - can affect truck deceleration rate and the resulting figures in the table above. Although these specific vehicle condition details are not known in the victim's case, there were no roadway or vehicle factors noted in the technical collision report that were attributed to the cause of the accident. There was, however, adequate visibility, distance, and time[4] for a driver focusing ahead on the roadway to slow the vehicle safely upon observing backed up traffic nearly one-half mile ahead.

At the time of this report, the FMCSA is in the midst of testing the effectiveness of on-board monitoring systems in improving safety. Forward Collision Warning Systems (CWS) are in-vehicle electronic systems with capability to monitor the roadway ahead of the vehicle, warn the driver of potential collision risks, and reduce the likelihood of hard braking events. Results of the FMCSA's evaluation of these and other on-board monitoring systems are expected in 2013.

[4] A driver would traverse the distance from west hill crest to collision site in 24 seconds at 70 mph, or in 28 seconds at 60 mph.

3. *Employers should implement and enforce total-ban cell phone policies that prohibit use of all cellphones and wireless communications devices while driving, as a measure of best safety practices.*

Currently, several federal regulations restrict or ban the use of cell phones and electronic devices for some employee groups:

- A 2009 Executive Order prohibited federal employees from texting when driving government or personal vehicles while conducting government business, or when using government-supplied electronic equipment while driving.
- In 2010, the Federal Aviation Administration recommended that pilots and operators minimize cockpit distractions, including the use of personal electronic devices and cell phones in tasks not related to safe operation of flights.
- In 2011, the Federal Railroad Administration (FRA) restricted railroad operating employees from using their own and railroad-supplied cell phones and personal electronic devices in trains, and on the ground around trains, that could interfere with their own safety-related duties or those of other employees.
- In January 2012, the Federal Motor Carrier Safety Administration (FMCSA) and Pipeline and Hazardous Materials Safety Association (PHMSA) prohibited commercial drivers from texting (entering text, reading text, or pressing more than one button to initiate or terminate a voice communication) and from using all hand-held devices while driving. The rules are simple: *No REACHING, No HOLDING, No DIALING, no TEXTING, no READING* (FMSCA, 2012). The FMSCA regulations apply to commercial motor vehicles (GVWR > 26000 lb) and drivers holding commercial driver license (CDL).

The railroad company's cell phone policy, which was described as the equivalent of the current FRA regulation, did not cover the victim in this case. The FRA regulation specifically addresses the use of cell phones and electronic devices by employees working on and around trains. The company policy regarding cell phone use did not extend to employees operating motor vehicles; nor did the employee fall under FMCSA criteria with respect to his operator license (he held a non-commercial chauffer license) or vehicle classification (vehicle GVWR ≤ 26000 lb.)

Beyond those industries responding to federal regulations regarding cell phone use, an increasing number of private employers are implementing cell phone policies to reduce risk, protect employees and others, and protect themselves from liability. In a National Safety Council (NSC) survey of 2000 members, 58 percent of responders said their organization had some type of cell phone policy in place; 23 percent had a total cell phone ban in place. Ninety-nine percent of those with policies reported no decline in employee productivity, and more than 20 percent reported decreases in employee crash reports (NSC Member Survey Results 2009). A 2010 survey of Fortune 500 companies showed similar results: 20 percent of respondents (covering two million employees) had total bans; over 20 percent with total bans noted declines in crashes and property damage (NSC State of the Nation, 2012).

Employers whose workers drive in the course of business should ensure workers are aware of local laws regarding phone use while driving, and clearly articulate in their driver safety policies that employees are expected to comply with states' driving regulations regarding cell phone use. For those employers with employees working in or traveling in different states, maintaining awareness of the multitude of states' evolving legislation regarding cell phone use can be challenging (see discussion under Recommendation 4, below). A broad employer policy that is based on best practices and that covers state regulations is recommended.

The NSC recommends that employers implement a total ban policy prohibiting the use of cell phones by employees while driving as a best-practices policy that goes beyond existing state or federal regulations regarding use of cell phones and electronic devices (NSC white paper, *Employer Liability…*, 2012). The implications and conditions of the total ban policy should be well defined and clearly stated, noting that ***a total ban covers use of any phone for any reason, while driving***. Company policies can further be extended to include contractors, drivers, and visitors on company premises. In this victim's case, compliance with a total ban policy would have prevented the victim from being distracted by his cellphone while driving.

Written cell phone policies can be included in employee handbooks, and may include signed contracts that employees understand and pledge to follow the policy. NSC provides a free, downloadable, comprehensive resource kit on their website to assist employers; this kit includes policy scripts, news releases, presentations to employees, and training materials (http://shop.nsc.org/eProducts-Cell-Phone-Policy-Download-P252.aspx).

Employers that expect and require employees to conduct business while away from the office should make clear that this work excludes communications and manipulation of electronic devices, tablets, and phones (e.g., making and returning phone calls or texts related to business) while driving.

A Total Cell Phone Ban Policy includes:

1. All employees
2. Both handheld and hands-free devices
3. Driving a company vehicle
4. Driving a personal vehicle on company business
5. Driving any vehicle on company property
6. All company supplied phone devices
7. All work-related communications, including those in a personal vehicle or on a personal cell phone

4. *States should adopt and enforce laws prohibiting the use of cell phones and wireless devices while driving.*

Policies among states vary with respect to distracted driving and cell phone use. As of January 2013, 10 states prohibit all drivers from using handheld phones while driving, and 39 states plus District of Columbia ban texting for all drivers, but enforcement varies with respect to primary offense[5] or secondary offense,[6] and age or license skill of driver. No states currently ban cell phone use for all drivers, but 33 states ban cell phone use for novice drivers.

Iowa law prohibits *any driver* to read, write, or send a text message while driving, citable as a secondary offense. Novice drivers (i.e., learners permit and intermediate license holders) are prohibited from using cell phones while driving, citable as a primary offense. This law went into effect July 2010.

Despite existing laws regarding distracted driving, more than two in three surveyed drivers report talking on cell phones while driving, more than one in four send texts while driving, and more than one in three report reading texts or email while driving. Yet at the same time, 71 percent support restricting hand held phones while driving and 53 percent support a complete ban (AAA Foundation, 2008).

[5] a driver can be cited without any other traffic offense taking place
[6] a driver can be cited for cell phone violation only if the driver is pulled over for another traffic offense

A National Highway Traffic Safety Administration (NHTSA)–sponsored high-visibility enforcement demonstration project, combining media campaigns to raise public awareness of pending increased law enforcement, and dedicated enforcement of state laws prohibiting texting and cell phone use, reduced cell phone use by over 50 percent, and texting by approximately 40 percent (Cosgrove, 2010). The National Transportation Safety Board recommends that all states enact complete bans of all electronic devices for all drivers (including hands-free devices, which, while reducing visual and manual driver distraction compared to hand-held devices, do not eliminate cognitive distraction), and use the NHTSA model of high-visibility enforcement and communication campaigns to inform drivers of such bans (NTSB, 2011).

Additional resources

National Safety Council (NSC) Free Cell Phone Policy Kit.
http://www.nsc.org/safety_road/Distracted_Driving/Pages/EmployerPolicies.aspx#.UMjjZ3ewV8E
downloadable at: http://shop.nsc.org/eProducts-Cell-Phone-Policy-Download-P252.aspx

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Investigator information

This investigation was conducted by Stephanie Leonard. This report was authored by Stephanie Leonard and reviewed by Renee Anthony and John Lundell.

Acknowledgements

Iowa FACE thanks The Iowa State Patrol and county Sheriff's Department for assistance in developing this report.

NAICS sector: **48 Transportation**

Keywords: **motor vehicle collision, distracted driving, cell phone, texting**

Fatality Assessment and Control Evaluation (FACE) Program

The National Institute for Occupational Safety and Health (NIOSH), an institute within the Centers for Disease Control and Prevention (CDC), is the federal agency responsible for conducting research and making recommendations for the prevention of work-related injury and illness. In 1982, NIOSH initiated the Fatality Assessment and Control Evaluation (FACE) Program. FACE examines the circumstances of targeted causes of traumatic occupational fatalities so that safety professionals, researchers, employers, trainers, and workers can learn from these incidents. The primary goal of these investigations is to make recommendations to prevent similar occurrences. The Iowa FACE Program is one of nine state-based programs funded by NIOSH that conducts surveillance of occupational fatalities and conducts in-depth investigations of targeted Iowa cases. FACE investigations are intended to reduce or prevent occupational deaths and are completely separate from the rulemaking, enforcement and inspection activities of any other federal or state agency. Under the FACE program, investigators interview persons with knowledge of the incident and review available records to develop a description of the conditions and circumstances leading to the deaths in order to provide a context for the FACE Program's recommendations. The FACE summary of these conditions and circumstances in its reports is not intended as a legal statement of facts. This summary, as well as the conclusions and recommendations made by Iowa FACE, should not be used for the purpose of litigation or the adjudication of any claim. For further information, visit the Iowa FACE Program website at http://www.public-health.uiowa.edu/face/ (or call toll-free 1-800-513-0998), and the NIOSH FACE Program website at www.cdc.gov/niosh/face/ (or call toll free 1-800-CDC-INFO (1-800-232-4643).

The Iowa FACE team at the University of Iowa includes T. Renée Anthony, and John Lundell, Co-Investigators; and Stephanie Leonard, Field Investigator. Additional expertise is provided from Iowa FACE partners John Kraemer, Director, Forensic Operations at Iowa Office of the State Medical Examiner; and Rita Gergely, Principal Investigator and Kathy Leinenkugel, Surveillance Specialist, both at the Iowa Department of Public Health.

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