



# INCIDENT REPORT



900 South Spring Street, Springfield, IL 62704 • 217.782.9386

## INCIDENT HIGHLIGHTS

**DATE:**

April 11, 2020

**TIME:**

6:43 PM (approximate)

**VICTIM:**

57-year-old police chief

**INDUSTRY/NAICS CODE:**

Police Protection / 922120

**EMPLOYER:**

Municipal Police Department

**SAFETY & TRAINING:**

No documented safety training on emergency vehicle operations in the last five years.

**SCENE:**

State highway

**LOCATION:**

Northwest Illinois

**EVENT TYPE:**

Emergency vehicle crash

**INSPECTION #:** 1472321    **REPORT DATE:** August 24, 2020

## Police Chief Fatally Injured While Responding to a Transformer Fire

### SUMMARY

On April 11, 2020, at 11:30 PM, the Illinois Department of Labor – Division of Occupational Safety and Health (IL-OSHA) received notice of an occupationally related death of a municipal police chief. IL-OSHA opened an inspection to investigate the death of a 57-year-old male involved in a single-vehicle crash on the evening of April 11, 2020. The police chief was responding in an emergency vehicle to a report of a utility pole transformer fire when he lost control of the vehicle and crashed. The chief was later pronounced dead at a local hospital.

### CONTRIBUTING FACTORS

**Key contributing factors identified in this investigation include:**

- Vehicle speed.
- Roadway conditions and time of day.
- No seat belt in use.
- Seat belt warning system disabled.

### RECOMMENDATIONS

**To help prevent similar occurrences, employers should:**

- Require initial and annual refresher training for police officers in emergency vehicle operations with classroom and behind the wheel training components.
- Implement or revise and enforce a department policy requiring officers to wear seat belts and train officers on tactical seat belt use.
- Implement or revise and enforce a department policy prohibiting the deliberate or inadvertent mechanical or electrical disabling of vehicle safety systems.
- Implement or revise and enforce a department emergency vehicle response policy.
- Utilize the NIOSH Officer Road Code Toolkit.



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### SUMMARY

On April 11, 2020, at 11:30 PM, the Illinois Department of Labor – Division of Occupational Safety and Health (IL-OSHA) received notice of an occupationally related death of a municipal police chief. IL-OSHA opened an inspection to investigate the death of a 57-year-old male involved in a single-vehicle crash on the evening of April 11, 2020. The police chief was responding in an emergency vehicle to a report of a utility pole transformer fire when he lost control of the vehicle and crashed. The officer was later pronounced dead at a local hospital.

### BACKGROUND

The victim attained an associate's degree in law enforcement in 1984 from a local public college and began work as a police officer for the same college in 1985. In 2000, he received the Award of Valor from the International Association of Campus Law Enforcement Administrators. In 2007, the victim started working as a part-time officer for the involved municipality. In 2014, he was appointed as the police chief. In 2018, he resigned as police chief and accepted a position as a security officer at a local airport. In 2019, the municipality rehired the victim as police chief.

The emergency vehicle involved was an unmarked, 2016 Ford Explorer equipped with emergency lights and siren.

The vehicle crash occurred on a two-lane highway, with one lane for northbound traffic and one lane for southbound traffic. The posted speed limit is 55 miles per hour, and the average daily traffic volume is approximately 6,300 motorists.

The municipality, as of 2010, had 1,863 citizens and encompassed approximately 1.5 square miles. The municipality currently has 32 employees. The police department has 14 employees, three full-time and 11 part-time. Police officers work 12-hour shifts.

### INCIDENT

The incident occurred on April 11, 2020, at approximately 6:43 PM. The chief started his shift that morning at 7:00 AM and was scheduled to get off work at 7:00 PM. There was a total of four activities over the course of the shift; two burning complaints/investigations, one park check, and one accident with unknown injuries. No other unusual circumstances were reported during the day. At 6:36 PM, the chief was requested by dispatch to investigate a transformer fire on a utility pole outside of municipal limits. The chief responded to the call in his emergency vehicle with emergency lighting and audible siren activated. At 6:43 PM, dispatch received a 911 call that a motor vehicle crash had occurred. At 6:48 PM, a civilian bystander accessed the damaged emergency vehicle and utilized the chief's radio to request assistance. Police arrived on the scene at 6:51 PM, the ambulance arrived at 6:56 PM, and the fire department arrived at 7:02 PM. The chief was extricated from the vehicle with life-threatening injuries and transported to a local hospital. He was pronounced dead at 8:50 PM. No other vehicles or persons were involved in the crash.



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### Traffic Crash Reconstruction

Traffic crash reconstruction was completed by the Illinois State Police Traffic Crash Reconstruction Unit. The following information is from their report.

The chief was traveling north on a slight left curve when he lost control of the emergency vehicle on wet pavement and left the roadway. The emergency vehicle crossed the yellow, center dash lane divider lines, the southbound lane, the west shoulder, and a walking path before becoming airborne at the top of the west ditch. The emergency vehicle struck a tree at the bottom of the ditch with the front driver's side and then rotated approximately 180 degrees counterclockwise, striking additional brush and another tree with the passenger side rear. At the time of the crash, rain was falling, and the roadway was wet. The crash occurred in the dark, and there was no artificial lighting in the area.

The emergency vehicle sustained significant contact damage to the front driver's side and into the engine compartment. Additional damage occurred to the rear passenger side quarter panel, rear passenger side door, and front passenger side door.

An analysis of the emergency vehicle Airbag Control Module (ACM) data determined the Ford Explorer was traveling at 81.1 miles per hour five seconds prior to the impact that triggered the ACM to record the event. At 1.5 seconds prior to impact the accelerator pedal was no longer being pressed. At one second prior to impact the brake was being pressed and the vehicle Antilock Brake System (ABS) was engaged. At zero seconds the vehicle speed was recorded at 46.6 miles per hour. The posted speed limit in the area is 55 miles per hour. The airbag system deployed prior to the Ford Explorer striking the embankment or the tree.

While the ACM indicated the driver's seat belt was worn at the time of the crash, this is a false reading. The driver's seat belt was observed to be tight against the "B" pillar of the vehicle. When the vehicle airbags deployed, the vehicle locked the seat belt in place. Photographs taken of the driver's compartment at the scene show that a seat belt extender was inserted into the driver's seat belt buckle. This is why the ACM recorded the driver's seat belt as buckled, but the seat belt was not in use and the victim was unrestrained.

An examination of the vehicle determined all four tires had proper tread depth, and no other issues were visible.

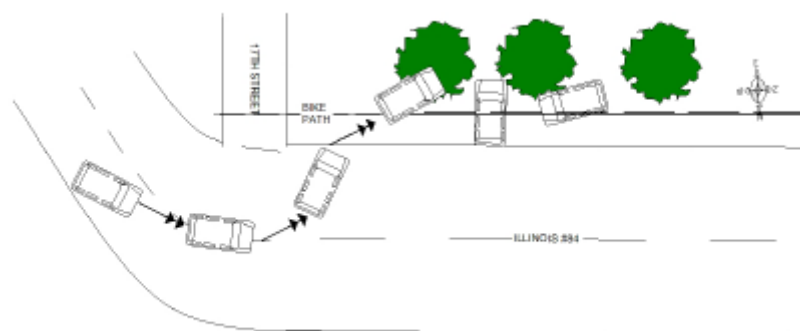


Figure 1 - Crash Diagram (ISP Traffic Crash Reconstruction Report).



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*Figure 2 - 2016 Ford Explorer (fire department photograph).*

### **Coroners' Report**

The coroners' report indicated that the decedent suffered multiple bone fractures and other traumatic injuries. The toxicology report showed no abnormal findings. Due to the documentation of the multiple traumatic injuries, no autopsy was performed by the coroner.

### **INVESTIGATION BY IL-OSHA**

On Monday, April 13, 2020, Illinois OSHA conducted a basic inquiry to determine if an investigation would be opened. After contact with the Illinois State Police district operations officer and the crash reconstruction officer via phone, a fatality investigation and inspection was opened, and two public safety inspectors were assigned.



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Opening and closing conferences were conducted with the affected employer on April 14, 2020. IL-OSHA reviewed the investigation and inspection process, noting that the investigation's goal is not to find fault, but rather learn what occurred and reduce the risk of it happening again. IL-OSHA advised that the investigation and inspection would take a significant amount of time and requested cooperation from the employer.

### Review of the Police Department Records and Policies

The police department has a robust policy manual that provides essential safeguards for the officers and employees. The victim signed off on the department policy manual as chief of police. Selected, applicable policy language stipulates that:

"Officers should only respond using emergency lights and siren when so dispatched or when circumstances reasonably indicate an emergency response is required. Officers not authorized to respond using emergency lights and siren should observe all traffic laws and proceed without the use of emergency lights and siren."

"All members should wear properly adjusted safety restraints when operating or riding in a seat equipped with restraints, in any vehicle owned, leased or rented by this department, while on or off-duty, or in any privately owned vehicle while on-duty. The member driving such a vehicle shall ensure that all other occupants, including those who are not members of the department, are also properly restrained."

"Exceptions to the requirement to wear safety restraints may be made only in exceptional situations where, due to unusual circumstances, wearing a seat belt would endanger the department member, the public or if the officer needs to quickly exit the squad. Members must be prepared to justify any deviation from this requirement."

### Employee Training

During the investigation, IL-OSHA requested all training records for the police department. On review of the records, IL-OSHA was unable to verify the victim had received any type of training related to operating an emergency vehicle. IL-OSHA was also unable to verify the victim had received any type of training related to operating an emergency vehicle during previous employment as a law enforcement officer. Furthermore, IL-OSHA was unable to verify that any officers with the affected department had received any type of training related to operating an emergency vehicle; however, an officer employed with the affected department did state that driver training is completed during an officer's initial training at a police academy.

### Employee Interviews

IL-OSHA conducted a phone interview with one police officer in the affected department. The officer stated that the department had purchased seat belt extenders for all the police vehicles and that they are still in use. The police officer explained that the seat belt extenders are used for the convenience of buckling their seat belt due to the cumbersome nature of the officer's firearm and duty belt.



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### FINDINGS

**Direct Cause:** Loss of vehicle control that resulted in the vehicle departing the roadway and colliding with objects.

#### Indirect Causes:

- 1. Vehicle speed:** Just prior to the loss of control, the vehicle was traveling more than 25 miles per hour over the speed limit. Nearly all research studies conclude that crash rates increase when speed increases. Increased speed reduces the amount of information a driver can visually see and limits the time available to receive and process this information. Higher speeds are also linked with increased injury severity from crashes, and the likelihood of a driver being involved in a fatal crash increases when their speed is over the posted speed limit. In addition, as stated in the department policy manual, it does not appear that the circumstances of a transformer fire on a utility pole reasonably indicate that an emergency response was required.
- 2. Roadway conditions and weather:** Approximately 22 percent of all vehicle crashes are due to adverse weather, and 73 percent of weather-related crashes are due to wet pavement. Water on a roadway acts as a lubricant and can significantly reduce surface friction that is necessary to maintain vehicle control.
- 3. Time of day:** Nighttime driving can reduce visibility and increase visual reaction times.
- 4. No seat belt use:** The use of seatbelts can reduce the risk of fatal injuries by 86 percent and reduce serious injuries by 50 percent. A fatality analysis of marked patrol unit vehicle crashes showed that 40.4 percent of unbelted occupants died, compared to 15.5 percent of those wearing seat belts. From 1980 to 2015, the National Highway Traffic Safety Administration reviewed motor vehicle crashes involving law enforcement officers and found that 42 percent of police officers killed in vehicle crashes during that period were not wearing seat belts. In addition, as stated in the department policy manual, it does not appear that a transformer fire on a utility pole could be considered an exceptional situation or unusual circumstance to exempt the victim from the department's seat belt requirement.
- 5. Seat belt warning system disabled:** The seat belt extender which was connected to the female portion of the seat belt buckle disabled the visual and audible warnings from the vehicle seat belt warning system. The seat belt warning system is designed to produce enough audible and visual warnings to induce the occupant to put on their seat belt.
- 6. Lack of emergency vehicle operations training:** IL-OSHA was unable to verify any emergency vehicle operations training in subjects such as vehicle dynamics, how and why crashes occur, roadway friction, critical curve speeds, hydroplaning, and other important topics. Formal training can prepare police officers for safe emergency vehicle driving and teach them how to match vehicle speed with the roadway and environmental conditions, and the circumstances of the response.



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### CONCLUSION

The victim had no record of emergency vehicle operations training and was operating the emergency vehicle in an unsafe manner and against department policy. The vehicle speed did not match the roadway and environmental conditions leading to a loss of vehicle control. The victim was not wearing a seat belt, which increased the risk of suffering fatal injuries as a result of the crash.

### RECOMMENDATIONS

- Require initial and annual refresher training for police officers in emergency vehicle operations with classroom and behind the wheel training components. Training topics should include but not be limited to vehicle dynamics, how and why crashes occur, routine and emergency operations, roadway friction, critical curve speeds, hydroplaning, and inclement weather driving.
- Revise and enforce the department policy requiring officers to wear seat belts and train officers on tactical seat belt use. The seat belt policy should provide for corrective action for failing to comply with the policy. Tactical seat belt use training can assist with cultural change and promote good seat belt habits. This training also focuses on muscle memory and teaches officers that they can still remain situationally aware and respond to potential threats while also being seat belted.
- Establish and enforce a department policy prohibiting the deliberate or inadvertent mechanical or electrical disabling of emergency vehicle safety systems. Prohibit use of seat belt extenders and other devices that could be buckled into the seat belt that result in disabling of the seat belt warning system and allowing an occupant to operate the vehicle while unrestrained. Emergency vehicles may allow certain safety systems to be disabled through electronic programming. This should also be prohibited.
- Revise and enforce the department emergency vehicle response policy. The policy should include a cap on emergency vehicle speed during response and pursuit operations. The department should consider enforcement of the policy through the use of vehicle monitoring devices.
- Utilize the NIOSH Officer Road Code Toolkit. The Officer Road Code Toolkit is designed to promote cultural change and safe driving practices within an agency so that patrol officers operate by a unified code behind the wheel: *Drive to Arrive Alive*.

### CITATIONS

- ***Serious - 820 ILCS 219/20(a): Every public employer must provide reasonable protection to the lives, health, and safety of its employees and must furnish to each of its employees employment and a workplace which are free from recognized hazards that cause or are likely to cause death or serious physical harm to its employees.***

The employer failed to provide adequate training to employees that operate emergency vehicles. During the investigation, the police department was not able to produce any type of documents that showed that they have adequately trained their employees on operating an emergency vehicle and the department emergency vehicle operation policy.

Failure to properly train employees on operating an emergency vehicle and the department emergency vehicle



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operation policy can expose employees to hazards that cause or are likely to cause death or serious physical harm to employees.

Abatement documentation in the form of a photo, invoice, or other means is required in addition to a signed Abatement Certification form. Among other methods, one feasible and acceptable means of abatement would be to conduct formal classroom and hands-on training from a state or nationally recognized curriculum in emergency vehicle operations and policies for all police officers expected to operate emergency vehicles.

- ***Serious - 820 ILCS 219/20(a): Every public employer must provide reasonable protection to the lives, health, and safety of its employees and must furnish to each of its employees employment and a workplace which are free from recognized hazards that cause or are likely to cause death or serious physical harm to its employees.***

The employer failed to ensure proper operation of an emergency vehicle safety system (seat belt warning system) during emergency vehicle operation. On or about April 11, 2020, a seat belt extender device was used in a department emergency vehicle. This device disabled the vehicle seat belt warning system and allowed the vehicle operator to drive the vehicle with no seat belt warnings while unrestrained.

Failure to ensure proper operation of an emergency vehicle safety system can expose employees to hazards that cause or are likely to cause death or serious physical harm to employees.

Abatement documentation in the form of a photo, invoice, or other means is required in addition to a signed Abatement Certification form. Among other methods, one feasible and acceptable means of abatement would be to establish and enforce a department policy prohibiting the deliberate or inadvertent mechanical or electrical disabling of emergency vehicle safety systems.

- ***Serious - 820 ILCS 219/20(a): Every public employer must provide reasonable protection to the lives, health, and safety of its employees and must furnish to each of its employees employment and a workplace which are free from recognized hazards that cause or are likely to cause death or serious physical harm to its employees.***

The employer failed to ensure the safe operation of an emergency vehicle. On or about April 11, 2020, a police department emergency vehicle was operated at speeds that were not matched with roadway conditions, environmental conditions, or the circumstances that required a response.

Failure to ensure the safe operation of an emergency vehicle can expose employees to hazards that cause or are likely to cause death or serious physical harm to employees.

Abatement documentation in the form of a photo, invoice, or other means is required in addition to a signed Abatement Certification form. Among other methods, one feasible and acceptable means of abatement would be to establish and enforce a department emergency vehicle operation policy that places speed restrictions during routine and emergency driving that are matched to roadway conditions, environmental conditions, and the circumstances of the response.

- ***Serious - 820 ILCS 219/20(a): Every public employer must provide reasonable protection to the lives, health, and safety of its employees and must furnish to each of its employees employment and a workplace which are free from recognized hazards that cause or are likely to cause death or serious physical harm to its employees.***





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The employer failed to ensure the use of an emergency vehicle safety restraint system (seat belt) during emergency vehicle operation. On or about April 11, 2020, an emergency vehicle was operated at speeds above the posted speed limit of 55 miles per hour without the vehicle operator using the vehicle safety restraint system (seat belt).

Failure to ensure the use of a vehicle safety restraint system during high-speed emergency vehicle operation can expose employees to hazards that cause or are likely to cause death or serious physical harm to employees.

Abatement documentation in the form of a photo, invoice, or other means is required in addition to a signed Abatement Certification form. Among other methods, one feasible and acceptable means of abatement would be to revise and enforce the department policy requiring officers to wear seat belts and train officers on tactical seat belt use.

- ***Other than Serious - 56 IL Admin Code Part 350.420(a): When an authorized government representative asks for the records kept under this Subpart B, provide copies of the records within 4 business hours.***

On April 13, 2020, May 20, 2020, and July 17, 2020, Illinois OSHA requested the OSHA 300, 300A logs for calendar years 2017, 2018, 2019, and 2020 for the police department. As of July 22, 2020, Illinois OSHA had not received these documents.

Abatement documentation in the form of OSHA 300 logs and 300A logs for 2017, 2018, 2019, 2020 shall be provided to Illinois-OSHA.

Documentation was received on July 31, 2020. A signed Abatement Certification form is required.