



Minnesota State Fire Chiefs Association – Conference 2010

Firefighter Hit by Car on Interstate I-94

Presented by

Doug Nieters
Clearwater Fire Chief



Minnesota State Fire Chiefs Association – Conference 2010

Tuesday, January 26th 2010

Approximately 0645 hours

It all started as a “routine car fire”



Minnesota State Fire Chiefs Association – Conference 2010

- Temperature 0° - Humidity 86%.
- The sky was reported to be clear however the photos have the appearance of cloud cover.
- Visibility reported to be 10 miles.
- The crash occurred at 0717 hours, sunrise was reported to occur at 0744 hours.
- The wind was reported to be 3 mph from the northwest.
- The road surface was dry.
- There was no accumulations of sand, gravel, or other debris on the roadway.
- There was no standing or pooled water, or oil on the roadway.
- There were no man-made vision obstructions present on or adjacent to the roadway.
- There was no road construction or signage present.





Minnesota State Fire Chiefs Association – Conference 2010



Clearwater, Minnesota – Population 1,634 (2009)





Minnesota State Fire Chiefs Association – Conference 2010



Dispatching is provided by the Stearns County Sherriff, State Patrol, Gold Cross, and Life Link III.



Clearwater Fire Department





Minnesota State Fire Chiefs Association – Conference 2010

Fire Department - 30 Firefighter / First Responders





Minnesota State Fire Chiefs Association – Conference 2010

Department Training





Minnesota State Fire Chiefs Association – Conference 2010

The Clearwater Fire & Rescue Mission Statement

The purpose of the Clearwater Fire & Rescue Department is to protect lives and property of all residents and businesses in our service area.

The following goals are set forth:

- To provide the highest level of fire & rescue protection with maximum efficiency within the limits of existing resources.
- To provide 24 hours a day protection from the devastation fire, medical and other emergencies.
- To never sacrifice the safety of the department members.
- To maintain a high standard of training and education for the department and the community.
- To promote teamwork, loyalty and respect within the department and the community.
- To be dedicated to the preservation of the historical and natural beauty of our community.

Clearwater Fire & Rescue pledges to provide these services to the best of its ability and in a professional manner at all time.



Minnesota State Fire Chiefs Association – Conference 2010

We Have Obligations to Our Members



And Their Families



Minnesota State Fire Chiefs Association – Conference 2010

Clearwater Fire & Rescue Auxiliary

The Clearwater Fire & Rescue Auxiliary is made up of the spouses or significant others of the Clearwater Fire Department Firefighters. Meetings are held the first Monday of every even month.

Mission Statement:

The Clearwater Fire & Rescue Auxiliary exists to help foster support of the fire department personnel, their families, members of the auxiliary, and the Clearwater community.



Minnesota State Fire Chiefs Association – Conference 2010

A full paved shoulder is located to the right of the right eastbound travel lane. Leading up to, and through the crash scene, Interstate Highway 94 makes a gradual curve to the left with no visibility issues. The posted speed limit is 70 MPH.





Minnesota State Fire Chiefs Association – Conference 2010

A Clearwater Fire Department fire truck was parked blocking the right eastbound lane with the truck angled from the fog line to the dashed white center line. The emergency lights of this fire truck were active at the time of the crash.





Minnesota State Fire Chiefs Association – Conference 2010

The Clearwater Fire Department Engine (pumping truck) was parked partially in the right EB lane with its right side tires between the eastbound fog line and the rumble strips on the eastbound shoulder. This truck also had its emergency lights active at the time of the crash.





Minnesota State Fire Chiefs Association – Conference 2010



The burning vehicle was a red 1997 Pontiac Grand Am 2 door sedan which was parked on the right shoulder of Interstate Highway 94 with its right side tires off of the asphalt. The driver had pulled over due to mechanical problems, and the car then started to burn.



Minnesota State Fire Chiefs Association – Conference 2010

Traffic was slowed and restricted to the inside lane while the car fire was being fought.

Minnesota State Patrol in-car camera view.





Minnesota State Fire Chiefs Association – Conference 2010

Replay

As traffic slowed and backed up, one car had to brake hard to avoid hitting the vehicle in front of her.



Minnesota State Patrol in-car camera view.





Minnesota State Fire Chiefs Association – Conference 2010

The maroon 2007 Chevrolet Malibu 4 door sedan was eastbound on Interstate Highway 94 at the time of the crash.





Minnesota State Fire Chiefs Association – Conference 2010

Firefighter Cory Broich was performing his duties at the time of this crash and was standing near the driver's door area of engine when he was hit. Cory was thrown into the engine and received serious injuries as a result of this crash





Minnesota State Fire Chiefs Association – Conference 2010

Firefighter Broich was wearing his fire department issued turn-out gear at the time of this crash which is tan in color with reflective yellow striping.





Minnesota State Fire Chiefs Association – Conference 2010



The driver of the burnt car initially spoke to the State Trooper in her squad car and upon the conclusion of their conversation he stepped out of her squad car and was looking in a westerly direction when he heard the sound of squealing tires.



Minnesota State Fire Chiefs Association – Conference 2010

The car driver wasn't using her cell phone at the time of the crash. She also informed the State Patrol that from what she remembers she initially began to brake hard for slower traffic in front of her and didn't turn her steering wheel to get her car to rotate to the right.





Minnesota State Fire Chiefs Association – Conference 2010

Firefighter Cory Broich was in the process of disconnecting a fire hose in a compartment behind the driver's door when he was hit from behind by car. Cory didn't see the car coming and could only recall lying on the pavement and knowing that he had been hit and was alive. Cory suffered two fractured tibias with his lower right leg completely shattered.





Minnesota State Fire Chiefs Association – Conference 2010

The car's driver was transported to the St Cloud Hospital for possible injuries as a result of this crash. She was restrained by a lap and shoulder belt with the driver's front airbag deployed as a result of this crash.





Minnesota State Fire Chiefs Association – Conference 2010

Testing of the airbag module download indicated a pre-skid speed of 50 MPH with a speed of 29 MPH one second prior to airbag deployment. The pre-skid speed of 50 MPH is under the posted limit of 70 MPH, however, it is visibly faster than the other vehicles driving eastbound past the scene and in this instance was an unsafe speed for the conditions at the time. Testing also indicates a steering wheel angle of -16% which, as stated in the State patrol report, shows that the steering wheel was turned slightly to the left when the emergency brake application was applied.





Minnesota State Fire Chiefs Association – Conference 2010



The pre-skid/pre-crash steer angle (-16%) can be explained by the freeway making a gradual turn to the left which means that eastbound vehicles had to turn slightly to the left to navigate the roadway. This also shows that the car's driver didn't turn her wheel to the right toward Firefighter Broich which is consistent with the State Patrol's analysis that the left front brake wasn't functioning properly. Tests indicated the speed at the end of the skid at 38.62-36.71 MPH.



Minnesota State Fire Chiefs Association – Conference 2010

The State Patrol developed the following opinions relative to this crash:

- Neither road nor weather conditions contributed to this crash.
- Brake operation contributed to the Chevrolet turning to right during the emergency brake application, but that doesn't take away from the driver's responsibilities.
- There were no manmade or natural vision obstructions that contributed to this crash.
- There were no known medical or physical conditions that affected the drivers that contributed to this crash.
- The contributing factor for this crash is the driver travelling at a speed greater than that to allow for the safe operation of her vehicle at the time of this crash in violation of the following statues:



Minnesota State Fire Chiefs Association – Conference 2010

169.13 Subd.2 Careless driving. Any person who operates or halts any vehicle upon any street or highway carelessly or heedlessly in disregard of the rights of others, or in a manner that endangers or is likely to endanger any property or any person, including the driver or passengers of the vehicle, is guilty of a misdemeanor.

169.14 Subd.1 Duty to drive with due care. No person shall drive a vehicle on a highway at a speed greater than is reasonable and prudent under the conditions. Every driver is responsible for becoming and remaining aware of the actual and potential hazards then existing on the highway and must use due care in operating a vehicle. In every event speed shall be so restricted as may be necessary to avoid colliding with any person, vehicle or other conveyance on or entering the highway in compliance with legal requirements and the duty of all persons to use due care.



Minnesota State Fire Chiefs Association – Conference 2010

169.14 Subd.3 Reduced speed required, (a) The driver of any vehicle shall, consistent with the requirements, drive at an appropriate reduced speed when approaching or passing an authorized emergency vehicle stopped with emergency lights flashing on any street or highway, when approaching and crossing an intersection or railroad grade crossing, when approaching and going around a curve, when approaching a hill crest, when travelling upon any narrow or winding roadway, and when special hazards exist with respect to pedestrians or other traffic or by reason of weather or highway conditions.

(b) A person who fails to reduce speed appropriately when approaching or passing an authorized emergency vehicle stopped with emergency lights flashing on a street or highway shall be assessed an additional surcharge equal to the amount of the fine imposed for the speed violation, but not less than \$25.



Minnesota State Fire Chiefs Association – Conference 2010

Clearwater, Minnesota

Telling Cory's family and sharing with our own families.

Clearwater Fire Department had to shut down and neighboring departments took our calls for 3 days.



Minnesota State Fire Chiefs Association – Conference 2010

Clearwater, Minnesota Debriefings

- Initial Debriefing (after clearing the accident)
- Family Debriefing (night of incident)
- Critical Debriefing (following night)
- Technical Debriefing (3 weeks later)



Minnesota State Fire Chiefs Association – Conference 2010

Media was a help through our incident.





Minnesota State Fire Chiefs Association – Conference 2010

Community efforts in fund raising.





Minnesota State Fire Chiefs Association – Conference 2010

Clearwater, Minnesota

Regarding things we'd do differently?

Modifications to our procedures.





Minnesota State Fire Chiefs Association – Conference 2010

Clearwater, Minnesota

Modifications to Cory's home.

Short time for a home makeover.

99% of help was donated. Most pay for the job was returned to the Broichs.



Minnesota State Fire Chiefs Association – Conference 2010

**“Everyone goes home”
Cory’s homecoming**





Minnesota State Fire Chiefs Association – Conference 2010

Clearwater, Minnesota

Cory's progress and long term recovery.

Staff infection delays recovery.

Last surgery to date 9-14-10



Minnesota State Fire Chiefs Association – Conference 2010

Clearwater, Minnesota

Summary of lessons learned/reinforced



Minnesota State Fire Chiefs Association – Conference 2010

Clearwater, Minnesota

Contact information:

Doug Nieters, Fire Chief
Clearwater Fire and Rescue
605 County Road 75 Box 9
Clearwater MN 55320
320-558-6561

Donations accepted by
Annandale State Bank of Clearwater
Clearwater MN 55320
www.annabank.com