Minnesota *Toward Zero Deaths*Fatal & Serious Injury Crash Review Committee Guide



[2017]

TOWARD ZERO ZERO DEATHS



Department of Public Safety, Office of Traffic Safety October, 2016

Fatal & Serious Injury Crash Review Committee Overview

Each Toward Zero Deaths (TZD) Safe Roads Coalition must establish a Fatality & Serious Injury Crash Review Committee (FSIRC) to review every fatal crash and at least some serious injury crashes in their area.

[A serious injury is an injury that usually requires hospitalization, and/or is life altering/changing.]

The purpose of the FSIRC is to:

- Identify patterns that contributed to recent crashes and their resulting fatalities and serious injuries.
- Determine specific actions that the TZD Coalition will initiate to help prevent similar crashes and outcomes.
- Follow through with action items.
- Inform stakeholder leaders.

Action items may involve:

- Initiating a specific community awareness initiative.
- Informing engineering, enforcement, EMS, TZD Regional Coordinators, and other stakeholder leaders about the committee meeting, the patterns identified, what the committee is going to do to raise community awareness of the identified patterns, and share other ideas brainstormed during the meeting. (see example letter)

Actions must consider respect for the family and friends of the person(s) killed or injured. To properly impact the community, it's recommended that the FSIRC acts on its actions as soon as possible after each quarterly meeting.

Contact should be made with the lead investigating officers and if appropriate, the County Attorney's Office to ensure that details of the crashes can be discussed without impeding or threatening the outcomes of any pending criminal prosecutions. While the documentation of discussions at FSIRC meetings may be considered "confidential" by those at the table, they are also potentially discoverable in a court of law and would need to be revealed if ordered by a court.

The FSIRC will review every fatal crash, and at a minimum, some serious injury crashes, looking at contributing factors and elements which may include:

- Who was involved in the crashes: drivers, passengers, pedestrians, etc.
- Number and types of vehicles involved: cars, light trucks, SUV, motorcycles, etc.
- Where the crashes occurred: identifying the specific roadways, intersections, and detailed locations,
- When the crashes happened: time of day, day of the week, weather conditions, etc.
- What human factors contributed to the crashes: alcohol, speed, distractions, etc.
- What factors contributed to the cause of deaths or injuries: non-seat belt use, no helmet worn, delayed response time, etc.
- What roadway environment factors contributed to the crashes: roadway types, surface types, curve, grade, construction, animal, etc.
- What vehicle factors contributed to the crashes: tire failure, air-bag deployment failure, etc., and
- Any other factors that contributed to the crashes.

Considering the number and types of recent crashes and other resources, the process to review fatal crashes may differ from those to review serious injury crashes. The priority is on reviewing fatal crashes. Serious injury crashes may be reviewed in less detail than fatal crashes for the purposes of identifying contributing factor trends and to facilitate discussion on potential prevention strategies.

It's recommended that the coalition coordinator set up quarterly FSIRC meetings for the entire year. If no fatal or serious injury crashes occur, or the incidents cannot be reviewed due to pending litigation or investigations, a scheduled meeting may be cancelled.

Committee Participants

The Fatality & Serious Injury Review Committee should be a sub-group of the regular TZD Safe Roads Coalition. Because some of the information discussed at the FSIRC meetings may be confidential and/or sensitive, the FSIRC

should not include members of the media, schools, or other individuals that are not essential to the FSIRC discussions.

At a minimum, the FSIRC should include representatives from:

- Local and State Law Enforcement
- County and State District Traffic Engineers
- Emergency Medical Services
- TZD Safe Roads Coordinator

Ideally, in addition to the representatives listed above, the FSIRC should make efforts to include:

- Law enforcement officers that were at the scene of the crashes
- EMS personnel that were at the scene of the crashes
- Law enforcement officers responsible for investigating the crashes
- A representative from the County Attorney's Office for cases involving potential negligence

Obtaining Crash Information

The TZD Safe Roads Coalition Coordinator commonly learns of fatal or serious injury crashes from contacts with law enforcement and emergency medical services personnel. It's important for the FSIRC members to know as many the details of the crashes as possible. It's preferred the details are provided by someone who was at the crash scenes. Ideally, officers and EMS staff that were at the crash scenes will attend the FSIRC meetings. If this isn't possible, officers and EMS staff who will attend the meetings should obtain information from staff that were at the crash scenes.

The Minnesota State Patrol (MSP) conducts investigations for all fatal crashes that occur on state highways. Each State Patrol district handles crash information differently. TZD Safe Roads Coordinators and FSIRC members should work with their TZD State Patrol representatives to obtain MSP crash information. Troopers should address any problems or concerns regarding the FSIRC obtaining MSP crash information with their District Captains.

State Patrol Incidents (Crashes) can be viewed at: https://app.dps.mn.gov/mspmedia/DisplayAllIncidents.asp

The Department of Public Safety implemented a new Crash Records System (MNCrash) on January 1, 2016. Eventually, MNCrash will have a public portal that will enhance crash information availability.

Fatal and serious injury crashes that occur on a County or Municipal road may be investigated by the Sheriff's Department or Police Department. Each department may handle crash information differently. TZD Safe Roads Coordinators should work with their local TZD Law Enforcement representatives to obtain local crash information.

Ideally, the FSIRC will have access to information found in the investigating agencies crash reconstruction report. These reports can take several months to complete. It's recommended that the FSIRC discuss the fatal or serious injury crashes using whatever information they can obtain, rather than delaying discussion until the reconstruction report is completed.

If there is an ongoing criminal investigation or pending charges related to a fatal or serious injury crash, it's likely the prosecutor will prohibit the release of information for the FSIRC to discuss the incident. These incidents should be noted and reviewed at a later date when the information becomes available.

Crash Factors

Many factors combine to produce circumstances that may lead to a motor vehicle crash - there is rarely a single cause of such an event. Experts and studies have identified three categories of factors that contribute to crashes:

- <u>Human</u>: Human factors involve the actions taken by or the condition of the driver, including speeding, being affected by alcohol or drugs, lack of seat belt use, inattention, decision errors, violating traffic laws, and age.
- <u>Roadway Environment</u>: Roadway environment factors include the design of the roadway, roadside hazards, and roadway conditions.
- <u>Vehicle</u>: Vehicle factors include any failures in the vehicle or its design.

Human factors contribute to crashes most often, followed by roadway environment and vehicle factors.

Human factors associated with non-drivers may contribute to crashes. For example, a pedestrian may be distracted or impaired by alcohol or drugs, or a bicyclist may cross an intersection against a traffic light.

A vehicle occupant who neglects to wear a seat belt may not contribute directly to causing a crash, but is a likely factor that contributed to the resulting fatality or serious injury.

Post-crash factors that may influence survival/fatality outcomes include:

- Emergency response time
- Extrication time
- Transport time to a hospital or trauma center

Crash victims have a much smaller chance of survival if they are not attended to in an emergency room within one hour from the time of the crash. This is known as "The Golden Hour."

Committee Action

Members of the FSIRC may be able to act on specific agreed upon action items, such as submitting a newspaper article, or informing law enforcement, engineering, or emergency medical services stakeholders about the committee's findings and action items. Circumstances where an appropriate action item doesn't exist may occur, however this should rarely happen. It's important to remember that all action items must consider respect for the family and friends of the person(s) killed or injured. Committee members need to follow through with the action items and report back to the committee as appropriate.

Initiatives to enhance public awareness of issues relative to fatal or serious injury crashes, or crash trends identified by the FSIRC, must be carefully worded and not refer to a specific crash or individual. This is where looking at both fatal and serious injury crashes may be beneficial in educating the community about trends the FSIRC is seeing, rather than focusing on a single crash. Although it is often difficult to do in smaller communities, it's essential that names and personal details about victims are not included in any public awareness actions. If the FSIRC action could potentially reveal the identity of a victim, written consent should first be obtained from the victim's family. The FSIRC Coordinator should maintain a copy of the written consent.

It's recommended that the committee inform all stakeholder leaders of the committee's findings, action items, and important points of discussion. Stakeholders may include; Emergency Medical Service Providers, Engineering Departments, and Law Enforcement Agencies. The TZD Regional Coordinator should also be informed. Please see the "Sample Letter to Stakeholder Leaders".

Committee Meeting Reports

Conducting quarterly FSIRC meetings is a <u>required</u> TZD Safe Roads grant activity.

FSIRC meetings should not be held if no crashes can be discussed due to no crashes occurring, pending charges or active investigations. If a FSIRC meeting is not held in a given quarter, the coalition coordinator must explain the reason(s) in the progress report for the last month of the quarter; December, March, June, September.

A meeting summary that includes participant names, the number of fatal crashes reviewed, the number of serious injury crashes reviewed, the trends identified, the action items agreed upon, and the persons responsible for completing the actions, must be submitted with the TZD Safe Roads Monthly Progress Report to the OTS. The meeting summary does not have to include a list of individual crashes reviewed. Meeting summaries must be updated to document progress with action items and other follow through, and submitted with monthly progress reports as appropriate.

At the end of the grant period, each TZD Safe Roads Grantee must provide a written summary of the FSIRC findings and action items that occurred during the grant period. The report must be submitted along with the TZD Safe Roads Final Progress Report.

Sample Letter to Stakeholder Leaders

January 11, 2017

Mr. Thomas Olson Good County Engineer (address)

Dear Mr. Olson,

The Good County Toward Zero Deaths Fatal and Serious Injury Crash Review Committee met on January 6, 2017 to review two fatal crashes and one serious injury crash that recently occurred in the county.

Our review identified the contributing factors, and the resulting fatalities and injuries of these crashes as;

- 1. Road departure, crossing center median
- 2. Driver inexperience
- 3. Drowsy or distracted driving
- 4. Poor tire condition for winter driving
- 5. Use of cruise control on icy roads

As a result of these findings, with the objective of preventing similar crashes and outcomes, the Committee members will implement the following actions:

- Submit articles to local newspapers & radio stations to educate the public on distracted driving risks and laws, driving at safe speeds for conditions, not using cruise control during inclement weather, and the effects of drowsy driving.
- Post articles on the County TZD Web Site and develop a radio PSA to raise awareness of, and suggest
 participation in, crash avoidance skills training programs offered at Dakota County Technical College and the
 Minnesota Highway Safety Research Center in St. Cloud
- 3. Provide information for local driver educators and law enforcement to use to educate parents on the importance of teaching their teens how to drive in winter conditions, and equipping their vehicles with good winter tires, during the *Point of Impact* Parent Awareness Classes.

Here are some other ideas that the Committee members brainstormed at the meeting that we would like to share with you:

- 1. Installing cable median barriers to reduce the severity of cross-over crashes.
- 2. Installing rumble strips & safety edges may reduce the likelihood and severity of run-off the road and cross-over crashes.

Note: The above information is provided for discussion purposes only and does not constitute a formal or implied request for action.

Please feel free to contact me if there are any questions or concerns.

Sincerely,

Sally Johnson, Good County TZD Safe Roads Coalition Coordinator

E-Mail: sally.johnson@good.co.mn.us

Phone: (555-432-1234

Copy; Michael Potter, County Sheriff; Jane Johnson, City Police Chief;

Pamela Theisen, Regional EMS Committee Chair; Holly Youngs, TZD Regional Coordinator

The following four pages are <u>samples</u> of forms that <u>may</u> be used by Fatality & Serious Injury Review Committees.

The forms may be edited to meet your committee's needs.

	Single Crash Review Worksheet Example			
Date of Review	November 4, 2016			
Crash Type	Fatal: X Serious Injury: X			
Reviewers	Jan Bengal, Public Health; Dean Anderson, State Patrol; Dan Ellingson, City PD; Ryan Booth, MnDOT; Capt. Matt Johnson, Sheriff's Dept; Gary Donaldson, County Highway; Jim King, Ambulance Service			
Date & Time of Crash	September 13, 2015 6:30 p.m.			
Primary Responding Agency	County Sheriff's Department			
City/Township	Rosebud Twp.			
Location	Hwy 7 & Hwy 77			
Road Surface	Asphalt, Dry			
Weather	Aspnait, Dry Cloudy			
Collision Factors	Intersection with traffic light. Right-angle.			
Other Factors	Traffic light function checked by MN-DOT and found to be functioning properly.			
Notes	Witnesses claim driver #2 had a red light and entered the intersection while braking hard. Skid marks confirm this.			
DRIVER 1 Age/Sex	45 year old Male			
Physical Conditions	Normal, no physical impairment			
Seat Belt	Yes			
Ejection	No No			
Injury Severity	B			
	Driver claimed to have had a green light and didn't see the other vehicle in time.			
Contributing Factors Vehicle 1 Type	SUV			
Vehicle 1 PASSENGERS	One 8 year old child in back seat, behind driver.			
Contributing Factors	None			
Seat Belt	Yes			
Ejection	No No			
Injury Severity	B			
injury severity	D			
DRIVER 2 Age/Sex	38 year old Male			
Physical Conditions	Normal, no physical impairment			
Seat Belt	Yes			
Ejection	No			
Injury Severity	No			
Contributing Factors	Driver claimed to have had a green light and applied brakes in an attempt to avoid hitting the other vehicle. He stated he was having a conversation with his passenger, but was not distracted.			
Vehicle 2 Type	Semi Tractor-Trailer			
Vehicle 2 PASSENGERS	Front seat 46-yr old female			
Contributing Factors	Lap belt was worn with the shoulder belt placed behind the right shoulder. Severe head and neck injuries occurred as a result of hitting the dash board.			
Seat Belt	Yes			
Ejection	No			
Injury Severity	Fatal			
Conclusion	Vehicle 1 struck on the rear passenger side by Vehicle 2. Proper seat belt use likely contributed to limiting injury severity to level B. Improper seat belt use likely contributed to the fatality. Distraction by the driver of Vehicle 2, and a lack of defensive observation by the driver of Vehicle 1, may have contributed to the crash.			
Action Items	An article will be submitted to local newspapers, county newsletter, radio stations, and posted on social media, stressing that the county is experiencing fatal crashes at rural intersections. Attention will be given to avoiding distractions, driving defensively, judging distances and times correctly, and wearing seat belts properly.			

Crash Review Worksheet: Example 2

TYPE: FAT	AL	JS INJURY			
DEMOGRAPHICS:					
Date:	Time:		_ Weather	Conditions:	
Road Conditions:					
Location:					
Responding Agencie	es:				
<u>Vehicle A:</u>					
Make:	Model:			Vehicle Year:	
Driver A:					
	Occupation (if known):			_ Chemical Use:	
Lap Belt Use:	Shoulder Belt Use:	Air Bag:	Ejected: _		
Front Passenger A:					
Age: Sex:	Occupation (if known):			_ Chemical Use:	-
Medical Condition:		Health Status:	·		
Lap Belt Use:	Shoulder Belt Use:	Air Bag:	Ejected: _		
Rear Passenger A1:					
Age: Sex:	Occupation (if known):			_ Chemical Use:	,
Medical Condition:		Health Status:			
Lap Belt Use:	Shoulder Belt Use:	Air Bag:	Ejected: _		
Rear Passenger A2:					
Age: Sex:	Occupation (if known):			_ Chemical Use:	
Medical Condition:		Health Status:	:		
Lap Belt Use:	Shoulder Belt Use:	Air Bag:	Ejected: _		
Possible Contribut	ting Factors:				
		Fatal / Serio	ous Injury C	Crash Review Worksheet Example	e 2, Page 1 of 3
Vehicle B:	A A . 1 . 1			Valetala Varia	
Make:	iviodel:				

<u>Driver B:</u>				
Age: Sex: Occupation (if known):			Chemical Use:	
Medical Condition:	Health Status:			
Lap Belt Use: Shoulder Belt Use:	Air Bag:	Ejected:		
Front Passenger B:				
Age: Sex: Occupation (if known):			Chemical Use:	
Medical Condition:	Health Status:			
Lap Belt Use: Shoulder Belt Use:				
Rear Passenger B1:				
Age: Sex: Occupation (if known):			Chemical Use:	
Medical Condition:	Health Status:			
Lap Belt Use: Shoulder Belt Use:	Air Bag:	Ejected:		
Rear Passenger B2:				
Age: Sex: Occupation (if known):			Chemical Use:	
Medical Condition:	Health Status:			
Lap Belt Use: Shoulder Belt Use:				
Possible Contributing Factors:				
 				
EDUCATION, Notes and Action Plan:				
Person(s) Responsible for Implementing E	EDUCATION	Action Pla	<u></u>	

EMERGENCY MEDICAL SERVICES, Notes and Action Plan:
Person(s) Responsible for Implementing EMS Action Plan:
LAW ENFORCEMENT Notes and Action Plan:
Person(s) Responsible for Implementing LAW ENFORCEMENT Action Plan:
ENGINEERING Notes and Action Plan:
Person(s) Responsible for Implementing ENGINEERING Action Plan:
OTHER Notes and Action Plans:
Person(s) Responsible for Implementing OTHER Action Plans:

The following pages provide two examples of Quarterly FSIRC Reports

and the

Final Report Form

that TZD Safe Roads Grantees must submit to OTS.

QUARTERLY REPORT EXAMPLE 1

Meeting Date: October 1, 2016

<u>Names & Titles of Attendees</u>: Sally Johnson, Coalition Coordinator; Dep. Ann Henry, Sheriff's Office; Sgt. Mike Schneider, City P.D; Mary Holmes, Ambulance Service; Bridget Booth, County Engineer

Summary of Crashes Reviewed:

The committee reviewed 3 fatal and 5 serious injury crashes, resulting in 5 deaths and 8 serious injuries, which occurred in Blue Lake County in June, July and August, 2016.

- Two fatal and three serious injury crashes involved younger male drivers under age 30.
- Four of the five deaths and six of the eight serious injuries were attributed to no seat belt use.
- One fatality was a pedestrian.
- Three crashes were attributed to driver impairment (alcohol).
- Speed was a contributing factor in three crashes.
- Three crashes occurred during dark (nighttime) conditions.
- One crash occurred during rainy weather.
- Two were single-vehicle run-off-the-road crashes. One on a county road curve, the other at a t-intersection on a city street.
- Two crashes occurred on rural gravel roads.
- Emergency response at one crash was delayed due to an unknown construction related road closure.

Summary of Primary Contributing Factors:

- 1. Lack of seat belt use.
- 2. Younger male drivers.
- 3. Alcohol
- 4. Speed
- 5. Nighttime

Action Items:

- 1. The TZD Safe Roads Coalition will place additional emphasis on the importance of seat belt use for every vehicle occupant during all activities and outreach efforts. Additional effort to reach younger males will be made by working with companies that employ, and sports venues frequented by, young males. Specifically; ABC Lumber, AAA Metal Fabrication, Speed-Track Raceway.
 - Action Item 1 to be completed by: All coalition members.
- 2. Letters will be sent to County Sheriff Sam Peterson, City Police Chief Bill Grams, EMS Manager Mary McMillan, and Tom Larson TZD Regional Coordinator, to inform them of the committee's findings, action items, and important points of discussion.

Note: The information provided to local stakeholders is for discussion purposes only and does not constitute a formal or implied request for action.

QUARTERLY REPORT EXAMPLE 2

Meeting Date: January 6, 2017

<u>Names & Titles of Attendees</u>: Sally Johnson, Coalition Coordinator; Dep. Ann Henry, Sheriff's Office; Sgt. Mike Schneider, City P.D; Mary Holmes, Ambulance Service; Bridget Booth, County Engineer

<u>CRASH 1</u>: A 23 year old male, wearing lap & shoulder belts, had not slept for over 48 hours. Crash occurred at 11:30 p.m. after the driver lost control, rolled several times, & crossed the center median on a state highway before being t-boned by a vehicle travelling the opposite direction. The driver died at the scene. The driver was not ejected. Chemical impairment was not a factor. Cruise control was set at 74 mph. The roads had icy spots with blowing snow. First responders arrived 14 minutes after the crash.

Crash 1 Action Plans:

- 1. The TZD Safe Roads Coalition will educate the public on driving at safe speeds for conditions, not using cruise control during inclement weather, & the effects of drowsy driving. This will be done by submitting articles to local newspapers & radio stations.
- 2. Parents will be educated on the importance of teaching their novice teen drivers how to drive in winter conditions. The Coalition Coordinator will ask driver educators to do this during their *Point of Impact* Parent Awareness Classes.

Other Discussion: Installing cable median barriers may reduce the severity of this type of crash.

<u>CRASH 2</u>: A 16 year old female, wearing lap & shoulder belts, crashed head-on into a school bus at 3:30 p.m. She was not texting & not ejected. Chemical impairment was not a factor. Road conditions included blowing snow & icy spots. She applied the brakes & slid 50 feet before impact. Tires on her vehicle had very little tread. The driver was newly licensed & died at the scene.

Crash 2 Action Plans:

- 1. Educate young drivers & parents on the importance of proper vehicle maintenance, especially tires. The Coalition Coordinator will ask driver educators to do this during their *Point of Impact* Parent Awareness Classes.
- 2. Parents will be educated on the importance of teaching their novice teen drivers how to drive in winter conditions. The Safe Roads Coalition Coordinator will ask driver educators to do this during their *Point of Impact* Parent Awareness Classes.

<u>CRASH 3</u>: A 26 year old female, wearing lap & shoulder belts, was checking a website on her phone when the right side tires left the paved portion of the roadway. She over corrected, crossed the center median, & struck an oncoming vehicle. The crash occurred at 4:30 p.m. There are no rumble strips on the edge of the road as the road is too narrow. The driver was not ejected & chemical impairment was not a factor. The driver was transported to the hospital with life threatening injuries & survived. The road conditions were good to fair.

Crash 3 Action Plans:

- Continue educating the public on distracted driving risks & laws with a focus on laws that prohibit texting &
 accessing the internet while being a part of traffic. The Safe Roads Coalition will submit articles to local
 newspapers & radio stations.
- Educate drivers on how to safely manage & recover from right-side run-off the road situations. This will be done
 by posting articles on the County TZD Web Site, developing a radio PSA message, & suggesting participation in
 crash avoidance skills training programs offered at Dakota County Technical College& the Minnesota Highway
 Safety Research Center in St. Cloud.

Letters will be sent to County Sheriff Sam Peterson, City Police Chief Bill Grams, EMS Manager Mary McMillan, and Tom Larson TZD Regional Coordinator, to inform them of the committee's findings, action items, and important points of discussion.

Note: Information provided to local stakeholder leaders is for discussion purposes only and does not constitute a formal or implied request for action.

Fatal & Serious Injury Review Committee OTS FINAL REPORT FORM

October 1, 2016 – September 30, 2017

Grantee:

Number of meetings held	
Number of Fatal Crashes Reviewed	
Number of Fatalities	
Number of Serious Injury Crashes Reviewed	
Number of Serious Injuries	

Identified Trends	Frequency
Seat Belt	1 2
Speed	
Distraction	
Inexperience	
Equipment	
Weather	
Alcohol	
Other Substances	
Other: (please list below)	
-	
-	
-	
-	

ACTION ITEMS				
Meeting #	Actions	Completed	Not Completed	
1				
2				
3				
4				

STAKEHOLDER LEADERS INFORMED OF COMMITTEE FINDINGS, ACTIONS, DISCUSSION POINTS			
Meeting #	Stakeholder Leaders	Completed	Not Completed
1			
2			
3			
4			

Notes, Comments: