

## Purpose

The purpose of a traffic-related fatal case review (FCR) is to examine and discuss observations made from detailed case materials of fatal crashes to identify modifiable risk and protective factors that if present or absent could prevent future fatalities.

Review and discussion of case materials are organized around modifiable risk and protective factors within the [Safe System Approach](#) and across the [Spectrum of Prevention](#) framework.

**The observations reported by the Impaired Driving FCR Study Team are not official recommendations of the Washington Traffic Safety Commission (WTSC) or the Washington Impaired Driving Advisory Council (WIDAC).** The review team submits a summary of their observations to WIDAC and the WTSC's Impaired Driving team to consider for further action.

## Scope of Review

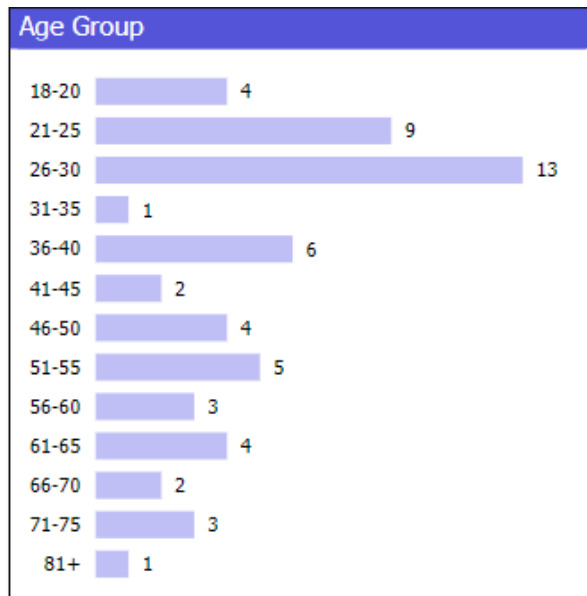
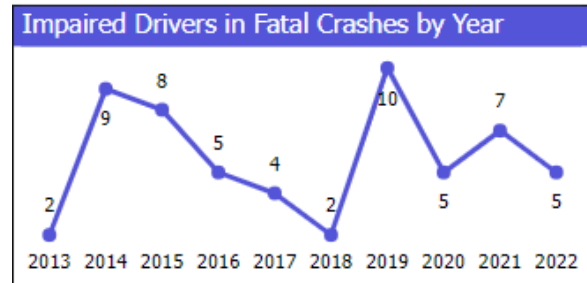
Meeting Date:	Thursday, March 14, 2024
Case Selection Topic for Review:	Impaired driver with a BAC between 0.05 and 0.079
Case Selection Criteria:	Fatal crashes that occurred between 2021-2022, involving an impaired driver with a BAC between 0.05 and 0.079 and <i>no</i> drugs in their system. There were seven cases in 2021 and five in 2022; six cases were selected for review.  These cases <i>involve</i> an impaired driver, which does not indicate that the driver was the cause of the crash or drove the striking vehicle.

## Data Summary

Data regarding impaired drivers with a BAC between 0.05 and 0.079 and no drugs in their system were extracted March 4, 2024, from the following WTSC data dashboard: Impaired Drivers Involved in Fatal Crashes, <https://wtsc.wa.gov/impairment-dashboard/> and fatal crash data. For additional details on fatal crashes by driver BAC, contact Dr. Max Roberts at [mroberts@wtsc.wa.gov](mailto:mroberts@wtsc.wa.gov).

The summary includes 10-year trends for the scope of review and describes driver demographics, high-risk behaviors involved, passenger presence, prevalence of motorcyclists and single vs. multi-vehicle crash status. Data for crash characteristics spanning the same 10-year period are included describing the month, day of week and time of day the crash occurred, and the road type that the crash occurred on. Additionally, maps presenting the locations throughout Washington where these fatal crashes occurred, and the locations of the crashes included in the fatal case review are included. Lastly, data describing driver demographics, high-risk behaviors involved, passenger presence, prevalence of motorcyclists and single vs. multi-vehicle crash status of the six cases reviewed are presented.

- From 2013 to 2022, there were 57 drivers with a BAC between 0.05 and 0.079 involved in fatal crashes in Washington.
- Of these 57 drivers:
  - 23 (40%) were speeding
  - 9 (16%) were distracted
  - 4 (7%) were unrestrained



- Four out of five (79%) were male.
- Nearly half of these drivers were under the age of 30 (n=26, 47%)
- About one-third (n=20, 35%) of these drivers had a passenger in their vehicle.
- One in five (21%) drivers were motorcyclists. None of whom had passengers.
- About one-third (n=17, 30%) occurred on county roads, followed by city streets (n=13, 23%), and state routes (n=11, 19%).
- Most (n=35, 61%) were single-vehicle crashes

- Four out of five fatal crashes occurred between 3 p.m. and 3 a.m. (n=46, 80%)
- One-quarter occurred on Saturdays (n=14), followed by Fridays (n=13, 23%), and Sundays (n=11, 19%).

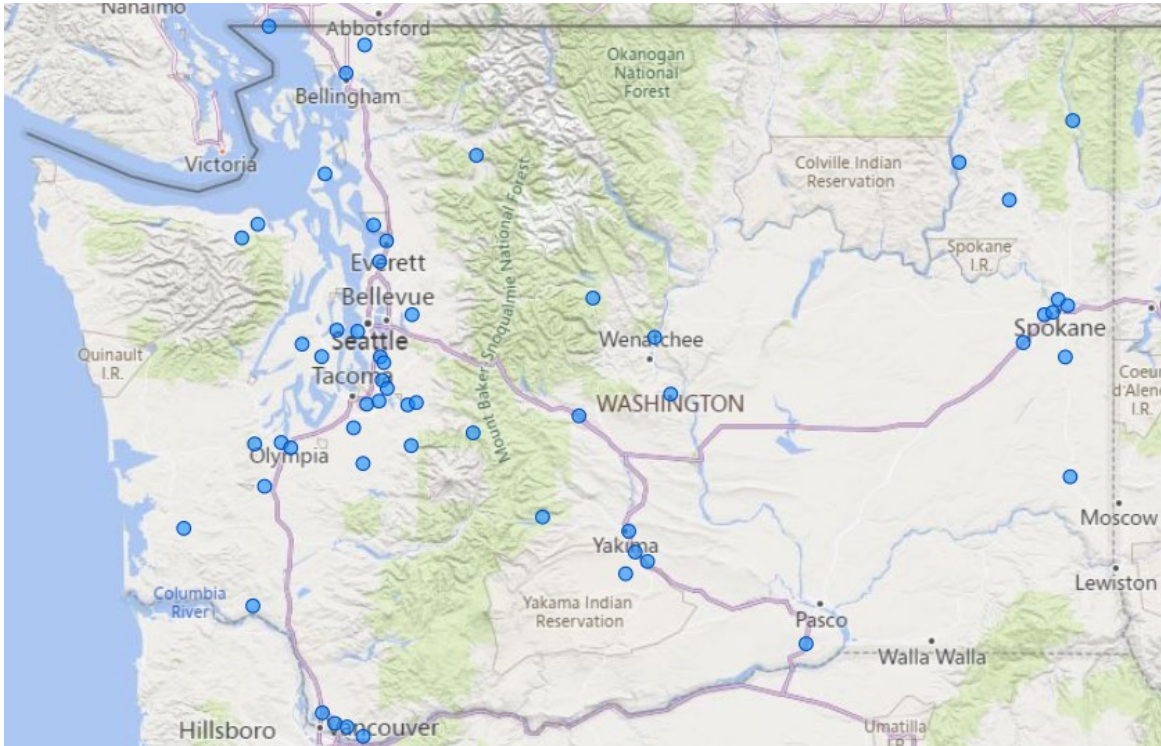
Time of Day	Frequency	Percent
00:00-02:59	9	15.79
03:00-05:59	5	8.77
06:00-08:59	1	1.75
09:00-11:59	3	5.26
12:00-14:59	2	3.51
15:00-17:59	12	21.05
18:00-20:59	10	17.54
21:00-23:59	15	26.32

Month	Frequency	Percent
January	5	8.77
February	3	5.26
March	10	17.54
April	3	5.26
May	4	7.02
June	8	14.04
July	3	5.26
August	10	17.54
September	4	7.02
October	0	0.00
November	3	5.26
December	4	7.02

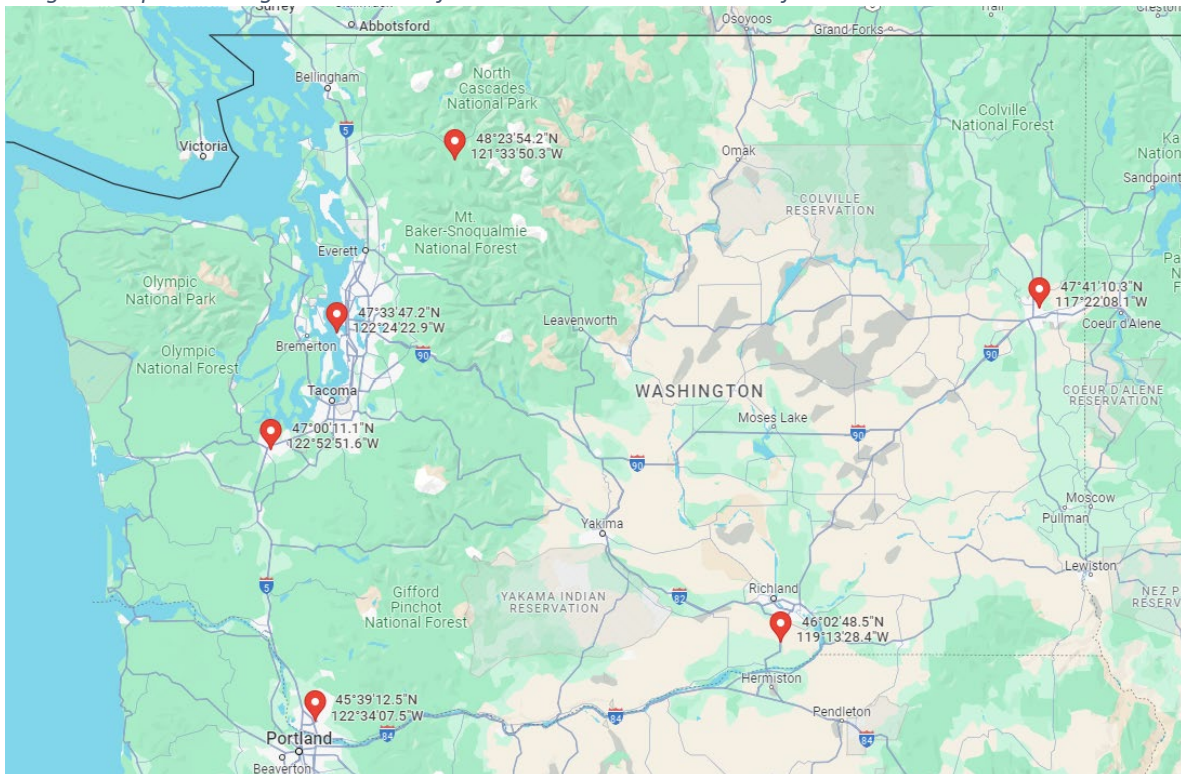
- Most fatal crashes occurred in March (n=10, 17.5%) and August (n=10, 17.5%)

Day of Week	Frequency	Percent
Sunday	11	19.30
Monday	3	5.26
Tuesday	4	7.02
Wednesday	6	10.53
Thursday	6	10.53
Friday	13	22.81
Saturday	14	24.56

*Image 1: Map visualizing the locations of all fatal crashes from 2013-2022 involving a driver with a BAC between 0.05 and 0.079 and no drugs in their system.*



*Image 2: Map visualizing the locations of the six crashes included in this fatal case review.*



Of the cases randomly selected for review, five occurred in 2021 and one in 2022. They were weighted towards 2021 due to pulling cases prior to 2022 data being completed. Data describing the six cases in this review include the following:

- Four out of six drivers (66%) were male drivers.
- Half the drivers were between 56-65; the remaining drivers were split evenly between age ranges 66-70, 46-55, and 16-25.
- Three out of six drivers (50%) were speeding.
- Four out of six crashes (66%) involved a single vehicle.
- Four out of six crashes (66%) involved a motorcycle. None of whom had a passenger.
- Two out of six crashes (33%) involved an SUV and included passengers.
  - In one vehicle, both the driver and passenger were unrestrained; in the other both were restrained.
- Three crashes (50%) occurred on city streets, two (33%) on an interstate, and one (17%) on a county road.
- Five crashes (83%) occurred between 3 p.m. and 3 a.m., and one (17%) between 3-6 a.m.
- Two (33%) crashes occurred on a Thursday. Of the remaining four, one occurred on each of the following days: Wednesday, Friday, Saturday, and Sunday.

## Observations

The following are observations, factors, and considerations discussed by the study team based on the individual cases randomly selected for this review.

### Safe Road Users

1. Drivers with a BAC between 0.05-0.79 demonstrated decreased driving skills and high-risk behaviors such as speeding, not using seat belts, driving vehicles beyond education and experience levels (e.g., motorcycles), and driving while drowsy. Motorcycle riders may be at a higher risk due to slowed reaction times. Consider the following:
  - a. Continue supporting legislation lowering the BAC limit from 0.08 to 0.05.
  - b. Consider legislation lowering the BAC limit to 0.05 for motorcyclists.
  - c. Continuing developing campaigns educating the public that impairment can occur even below the legal limit, encourage bystander intervention, and to have a plan in place when going out and drinking.
2. The study team noted data trends are showing an increase in people over 40 years of age drinking and consuming cannabis, and day-time drinking. Consider the following:
  - a. Researching this trend and correlations to impaired driving data
    - i. LCB can gather data about the times of day alcohol is purchased.
  - b. Continuing high visibility enforcement efforts and conduct them during the daytime in locations where DUIs are more likely to occur.
3. Mental health and substance abuse continues to impact safety on roadways. Consider the following:
  - a. Supporting policies that provide mental health and substance abuse services.
  - b. Partnering with substance abuse providers and promoting traffic safety best practices.

4. Most of the cases involving motorcycles showed riders lacked an endorsement and behaviors showed lack of understanding or care of risks (e.g., breaking too hard and navigating a turn too fast). Additionally, an endorsement is not required to purchase or register a motorcycle. Consider the following:
  - a. Require motorcycle education before a person can register a motorcycle in their name.
    - i. Research the other states with this law already in place and whether it reduced fatal crashes involving motorcycles.
  - b. Create a tiered endorsement process correlated to the engine's power (the faster it goes, the more safety education required).
  - c. Continue promoting motorcycle education courses to riders, the importance of regular equipment checks and maintenance, and developing campaigns promoting positive culture norms for riders.
    - i. The WTSC has a website that supports safe rider behavior, learn more at [www.ridesaferideon.com](http://www.ridesaferideon.com).
5. Motorcycle riders that wear their helmet improperly, especially not strapping it on correctly, are at a higher risk of experiencing fatal injuries in crashes. Consider the following:
  - a. Conduct a review of motorcycle crashes involving improper helmet wear to determine how often this occurs.
  - b. Continue developing campaigns educating motorcycle riders about the importance of a good helmet (DOT compliant, in good condition, etc.) and proper wear.
6. Drivers and motorcycle riders benefit from education (both pre- and post- endorsement) about driving laws, best practices, hazard perception, etc. Additionally, people licensed in other states that relocate to Washington state may not have the same level of education and awareness of traffic safety. Consider the following:
  - a. Require anyone wanting a driver's license to take a DOL-approved educational course before testing for a license. Consider and address barriers to accessing education and licensing.
  - b. Require reoccurring education and retesting throughout a driver's lifetime.
  - c. Require anyone relocating to Washington state to show proof of graduating from a DOL-approved educational course. If not, require that and retesting to be licensed in Washington.
  - d. Support DOL's hazard perception pilot program, if proven effective, and encourage its adoption into driving skills testing.
7. People in remote areas and involved in a crash are at higher risk of serious injuries becoming fatal due to slower first responder times and lack of cell phone service. Motor vehicle crashes are the second leading cause of death in National Parks. Consider the following:
  - a. Partner with national, county, and local parks and campgrounds to co-develop public safety campaigns – prioritizing impaired driving, speeding, seat belt use, and hazard awareness such as gravel roads.
  - b. Support the installation of emergency phones stations along rural roads and in remote recreation areas that lack cell service.
8. Studies show a higher percentage of people not wearing seat belts in rural areas, especially in recreational vehicles such as ATVS. Consider the following:
  - a. Researching if the studies mentioned are applicable to Washington residents and visitors.

- b. Targeting rural audiences in public safety campaigns promoting seat belt wear.
9. Drivers' DOL records showed a history of citations occurring in previous years leading up to fatal incidents. Consider the following:
  - a. Partner with DOL and conduct a study of driving records to determine if they are a predictor of serious injury or death.

### **Safe Vehicles**

1. Driving impaired increases the risk of involvement in fatal crashes. Consider requiring all vehicles be manufactured with passive alcohol detection systems.
2. Airbags seem to have inconsistent reactions to fatal crashes. Consider researching airbag deployment data (what triggers deployment; as vehicles age, does deployment systems integrity decline; are airbag systems checked as part of regular vehicle maintenance, etc.).
3. Vehicles lifted post manufacturing have a higher risk of flipping over in crashes. Consider educating law enforcement to enforce infractions when they observe vehicles lifted past legal limits.

### **Safe Speeds**

1. Vehicles often travel faster than posted speed limits or travel at the posted speed limit even when conditions, such as limited visibility, warrant slowing down. Consider expanding the use of variable speed limits to more locations.
2. Remote recreational roads lack speed limit signage. Consider policy and funding to have those signs installed.

### **Safe Roads**

1. Popular businesses with their entrance and exit locations near intersections, especially sharing a turn lane into the business with the intersection turn lane, increases the risk of crashes occurring. People may assume a vehicle is traveling in the turn lane to turn at the intersection versus entering a business lot. Consider requiring that any vehicle entry and exit points cannot be near an intersection turn lane.
2. People parked next to a curb on a curve in the roadway have limited visibility of oncoming traffic and pedestrians. Consider the following:
  - a. Restrict parking on roadways near curves.
  - b. Installing roundabouts on long straightaways to deter illegal U-turns.
  - c. Placing concave mirrors in these areas to improve visibility, where feasible when considering reflection of sunlight off mirrors.

### **Post-Crash Care**

1. There are gaps in traffic records systems and between agencies collecting data that comes from the police traffic collision report (PTCR). The review team's observations included:
  - a. Handwritten PTCRs are not being captured in DOL's data systems.
  - b. Law enforcement is not always fully completing PTCRs or may input inaccurate information.

- c. Law enforcement agencies are not submitting PTCRs consistently for fatal crashes, nor supplemental reports. When supplemental PTCRs are submitted, they are not being routed to crash data customers.
- d. DOL is not receiving proper death notifications which results in deceased individuals recorded as still having a current license.

Consider the following:

- i. Pursue funding and other opportunities to improve state traffic records systems.
  - ii. Funding a position at WASPC that will work with local law enforcement to improve crash data reporting.
  - iii. Working with local and tribal law enforcement agencies to learn their needs to shift from using paper PTCRs to submitting them electronically.
  - iv. When updating equipment for law enforcement in 2025 (replacing SECTOR with TRaCs software), prioritize and identify agencies who are not submitting electronic reports or citations and update those who are interested first.
  - v. Mandating all law enforcement agencies to submit PTCRs electronically.
2. The Cooper Jones driver retest is not being consistently applied to drivers that cause fatal crashes. This is in part due to DOL not consistently capturing when a crash results in a fatality. Late reporting will not correct the Cooper Jones process oversight for any driver 120 days after their incident. Consider the following:
- a. Educating law enforcement about the Copper Jones driver retest and their ability to request this process for ANY driver they assess may need to go through a driver license retesting process.
  - b. Updating the PTCR form to include a check box to trigger the Copper Jones driver retest process with DOL.
3. Rural areas have limited resources when it comes to collision response time and investigations. Delays in crash response increase the risk of a serious injury becoming fatal. Consider the following:
- a. Researching the feasibility of using drones to monitor rural roadways and report crashes during times there's limited to no law enforcement coverage.
  - b. Support funding to develop multi-agency collision investigation units.
4. Bystander intervention can prevent serious injury crashes from becoming fatal. It can also be utilized to deter high-risk driving behavior before it occurs. Consider the following:
- a. Researching how many residents of Washington state are CPR and Stop the Bleed certified. Are there opportunities to increase these numbers?
  - b. Requiring CPR and Stop the Bleed training as part of the driver licensing process.
  - c. Continue developing campaigns highlighting the importance of bystander intervention to deter high-risk behaviors.
5. Collision investigations are often missing a speed analysis. This can result in not capturing this as a factor and skew aggregate data. Consider requiring this in all fatal crash investigations and funding mandatory training for officers involved in collision investigations.
6. Prosecuting and municipal courts are dealing with staffing shortages which makes it challenging for them to follow through on traffic infractions. Consider the following:
- a. Supporting funding prosecuting and municipal courts to increase staffing levels.
  - b. Funding education for prosecutors regarding civil law versus criminal law.

## FCR Improvements

1. The fatal case review team is missing the insight of EMS perspectives in reviews. Consider researching and inviting possible participants.

## Referring for Consideration

The Impaired Driving FCR Study Team is referring the following to the WTSC and the WIDAC for discussion by all members and consideration for further research, applicability, and evidence base to develop study teams, white papers, training, policy, and recommendations to prevent death and serious injury on Washington's roadways.

1. Continue to focus on legislation lowering the BAC limit from 0.08 to 0.05 and educating the public that impairment occurs at 0.05.
  - a. Consider legislation limiting motorcycle riders to a 0.05 BAC.
2. Address gaps in traffic records systems and collecting data from PTCRs.
  - a. Pursue funding and other opportunities to improve state traffic records systems.
    - i. Fund a position at WASPC that will work with local law enforcement to improve crash data reporting.
  - b. Work with local and tribal law enforcement agencies to learn their needs to shift from using paper PTCRs to submitting them electronically.
  - c. When updating equipment for law enforcement in 2025 (replacing SECTOR with TRaCs software), prioritize and identify agencies who are not submitting electronic reports or citations and update those who are interested first.
  - d. Mandate all law enforcement agencies to submit PTCRs electronically.
  - e. Educate law enforcement about the Cooper Jones law, which requires drivers involved in crashes that cause substantial bodily harm to retest to maintain their license. LE can request this process for ANY driver they assess may need to go through a driver license retesting process.
  - f. Update the PTCR form to include a check box to trigger the Cooper Jones retest process with DOL.
  - g. Research more about gaps between enforcement and adjudication. Especially, courts and DOL receiving traffic records, accuracy of records, and follow up on infractions.
3. Research bystander training opportunities and how best to promote the importance of bystander intervention.
  - a. Research how many residents of Washington state are CPR and Stop the Bleed certified. Are there opportunities to increase these numbers?
  - b. Require CPR and Stop the Bleed training as part of the driver licensing process.
  - c. Continue developing campaigns highlighting the importance of bystander intervention to deter high-risk behaviors.