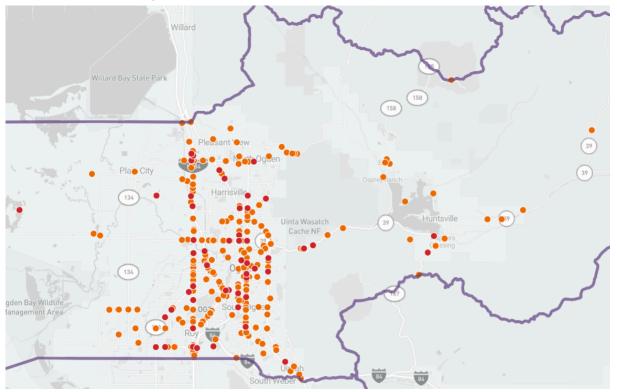


Severe Motor Vehicle Related Crash Report Weber and Morgan Counties

Prepared for the Weber-Morgan Health Department April 2025 By Zachary Heuscher, MS Epidemiology

This report summarizes severe motor vehicle related crashes from 2023-2024 that resulted in serious injuries or fatalities, utilizing data from the Utah Department of Transportation and CDC's Syndromic Surveillance System. It highlights severe injuries and fatalities among vulnerable road users and compares motor vehicle-related fatality rates and Emergency Department trends over time.

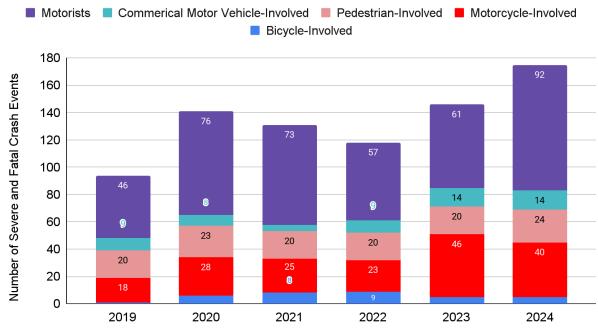


Weber County Severe Motor Vehicle Related Crash Events

Figure 1:2023-2024: 321 severe motor vehicle related (MVR) crashes (269 serious injury, 52 fatal events).

- **Total Crash Events:** 8,450 with 321 (3.8%) severe, 1,666 (20%) suspected minor injury, and 2,138 (25%) possible injury events (see the Data Notes section description of suspect minor and possible injury definitions)
- Severe Crash Events: 269 suspected serious injury and 52 fatal events
 - Mode of Transit (see Figure 2)
 - 27% Motorcycle-involved
 - 14% Pedestrian-involved
 - 9% Commercial Motor Vehicle-involved
 - 3% Bicycle-involved
 - Age of Driver
 - 17% Teenage driver-involved (16-19 years) and 11% young adult (20-23 years of age)
 - 17% Older driver-involved (65+ years)
 - Behavioral Factors
 - 16% Speed-related
 - 9% DUI involved and 5% drugs suspected
 - 6% Distracted driving
 - 1% Drowsy driving-involved
 - Seat belt use (11% Unrestrained involved and 2% improper restraint)
 - Environmental Factors
 - 41% Intersection-related 24% roadway departure
 - 9% Adverse weather and 5% work zone-involved

Summary: Severe MVR crashes can result in fatal or suspected serious injuries (e.g. lacerations, broken extremities, crush injuries, significant burns, unconsciousness, or paralysis). Intersections and driver negligence (speed, lack of seat belts, impaired/distracted driving) were common contributing factors. Hot spots for severe crashes included: Washington Blvd (Rte 89), 1900 W (Rte 126), I-15, and 12th Street to Ogden Canyon (Rte 36).



Six Year Comparison- Weber County

Weber County- Severe Motor Vehicle Related Crashes, 2019-2024

Figure 2: In 2024 severe crash events increased by 20%, with motorists and pedestrian-involved incidents increasing. Severe motorcycle and CMV-involved crashes remain elevated.

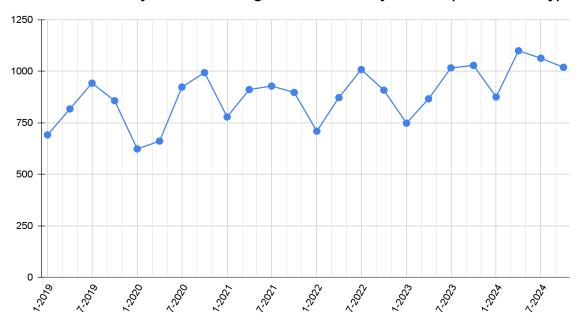
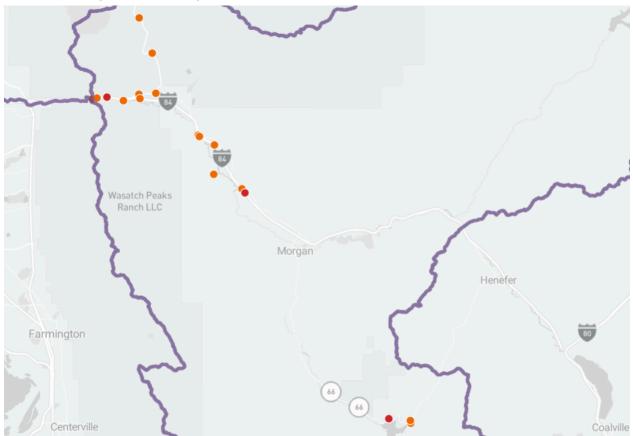




Figure 3: Total traffic related injuries presenting for healthcare (ED and outpatient clinic visits) among Weber County residents averaged 1,014 visits per quarter in 2024 increasing 23% from 2019.



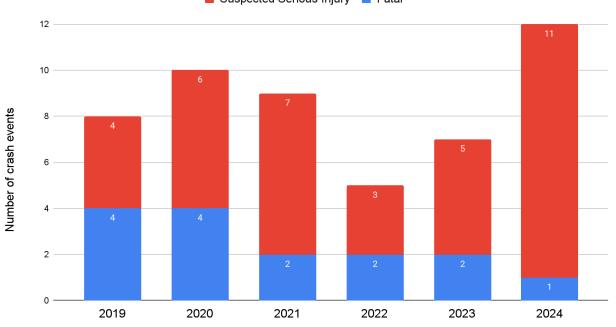
Morgan County Severe Motor Vehicle Related Crashes

Figure 4: 2023-2024: 19 severe MVR crashes (16 serious injury, 3 fatal events) in Morgan County

- **Total Crash Events:** 438 crashes with 19 (4.3%) severe, 80 (18%) suspected minor injury, and 69 (16%) possible injury.
- Severe Crash Events: 16 suspected serious injuries and 3 fatal events
 - Mode of Transit
 - 47% Motorcycle-involved
 - 5% Pedestrian-involved
 - 10% CMV-involved
 - Age of Driver
 - 10% Teenage driver-involved (16-19 years) and 15% young adult (20-23 years)
 - 5% Older driver-involved (65+ years)
 - Behavioral Factors
 - 37% Speed-related
 - 16% DUI involved
 - 11% Distracted driving and 11% drugs suspected
 - 5% Drowsy driving-involved
 - 11% Improper restraint
 - Environmental Factors
 - 68% Roadway departure and 11% adverse weather
 - 5% Intersection-related 5% work zone-involved

Summary: Road conditions (road departure and adverse weather), and driver negligence (speed, lack of seat belts, impaired, and distracted driving) were common contributing factors.

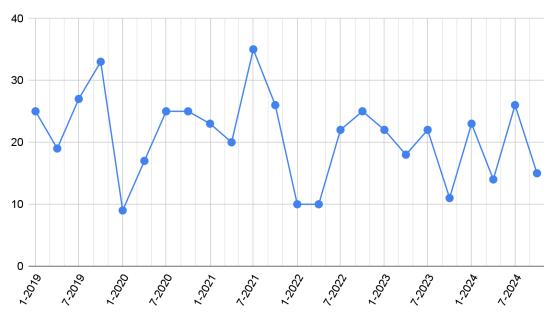
Six Year Comparison- Morgan County



Morgan County Severe Motor Vehicle Related Crashes, 2019-2024

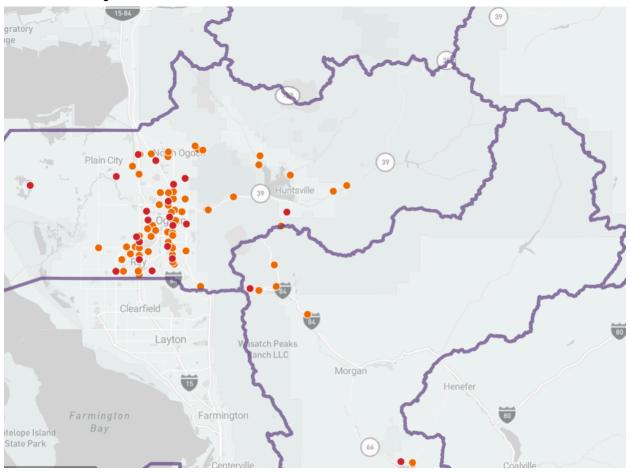
Suspected Serious Injury Fatal

Figure 5: In 2024 suspected serious injuries increased 70% among Morgan County road users. Among the severe crashes: 60% roadway departure, 49% motorcycle involved, 35% speed related, and 23% were DUI.



Traffic Related Injuries Presenting for Healthcare by Quarter (Morgan County)

Figure 6: Total traffic related injuries presenting for healthcare (ED and outpatient clinic visits) among Morgan County residents averaged 19.5 visits per quarter in 2024 declining by 25% from 2019.



Motorcycle-Involved Severe Motor Vehicle Related Crashes

Figure 7: 2023-2024: 95 severe motorcycle-involved crashes (**73 serious injury events, 22 fatal events**) within Weber and Morgan County.

- Weber and Morgan County Total Motorcycle Crashes: 276 with 95 (34%) severe
- Severe Motorcycle Crash Events: 73 suspected serious injuries and 22 fatal
 - Age of Driver
 - 17% Teenage driver-involved (16-19 years) and 15% young adult (20-23 years)
 - 9% Older driver-involved (65+ years)
 - Behavioral Factors
 - 27% Speed-related
 - 8% DUI involved
 - 4% Drugs suspected
 - Road Conditions/Contributing Factors
 - 71% Collision with other motor vehicle in transport
 - 41% Intersection-related
 - 24% Roadway departure
 - 5% Adverse weather and 1% work zone-involved

Summary: Road conditions (intersection-related and roadway departure) and driver negligence (speeding) being the most common contributing factors. May, June, and July had the highest number of crashes.

Pedestrian-Involved Severe Motor Vehicle Related Crashes

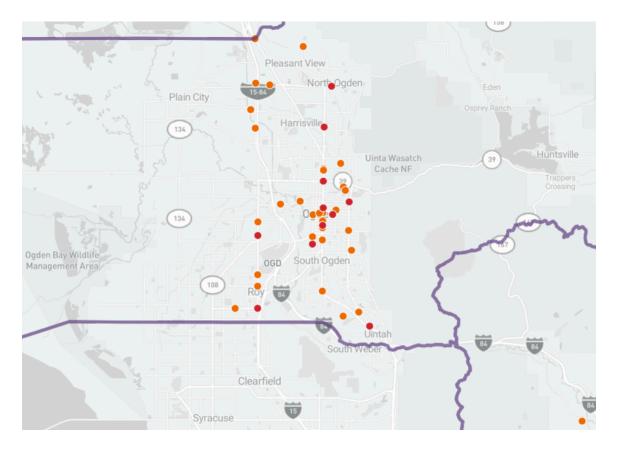


Figure 8: 2023-2024: 45 severe MVR pedestrian-involved crashes (**34 serious injury events, 11 fatal** events) in Weber and Morgan County.

- Total Pedestrian-Involved Motor Vehicle Crash Events: 179 with 45 (25%) severe
- Severe Pedestrian-Involved Crashes: 34 suspected serious injury and 11 fatal
 - Age of Driver
 - 16% Teenage (16-19 years) and 6% young adult driver (20-23 years)
 - 9% Older driver-involved (65+ years)
 - Age of Pedestrian
 - 12% children 0-9 years and 20% youth 10-19 years
 - Behavioral Factors
 - 7% Speed-related
 - 7% DUI involved and 2% drugs suspected
 - Environmental Factors
 - 40% Intersection-related and 13% involved adverse weather
 - 27% Dark-not lighted road and 29% dark-lighted road
 - 67% Near school crashes
 - 25% involved a traffic control signal
 - Location of Crash: 53% Ogden, 9% in Roy, and 9% in West Haven

Summary: Road conditions (intersection, dark road, and adverse weather) and driver negligence (speeding and driving impaired) being the most common contributing factors. August, December, and March had the highest number of pedestrian-involved crash events. Hot spots for severe pedestrian crashes included: Washington Blvd (Route 89) and 1900 W (Route 126).

Bicycle-Involved Motor Vehicle Related Crashes

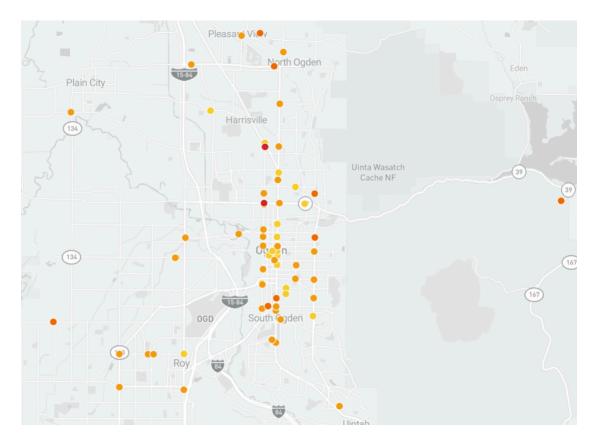


Figure 9: 2023-2024: 67 MVR bicycle-involved crash events resulting in injury (2 fatal events, 8 serious injury events, 39 suspected minor injuries, and 18 possible injuries) in Weber and Morgan County.

• Total Bicycle-Involved Motor Vehicle Crash Events Resulting in Injury: 67

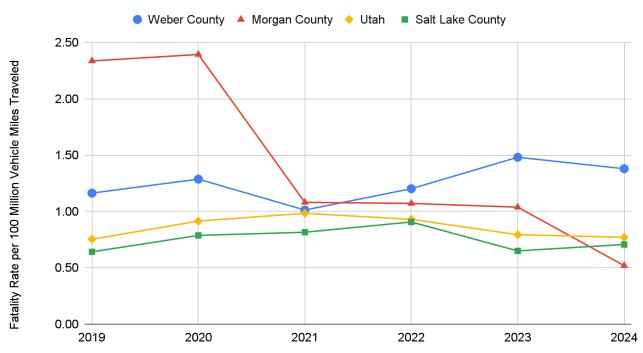
- Characteristics of Bicyclist
 - 19% 20 to 29 years, 18% 40 to 49 years, 15% 10 to 19 years, 11% 32 to 39 years, and 10% 0 to 9 years
 - 65% Male
 - 18% Injury to lower extremity, 12% upper extremity, and 9% head injury
- Contributing Factors
 - Intersection-related: 58%
 - Night Nark Condition: 14%
 - Heavy Truck Involved: 4%
- Severe Bicycle-Involved Crashes: 10 (14% of total events causing injury) with 8 suspected serious injury and 2 fatal
 - Age of Bicyclist:
 - 22% were children 0-9 years and 19% were seniors 50-59 years

Summary: Common locations for MVR bicycle-involved crashes: Washington Blvd (15 events), Wall Ave (13 events), and Harrison Blvd (6 events).

Over the past decade in Weber County, there have been 41 suspected serious injuries and 12 fatalities in motor vehicle-bicycle crashes. These severe incidents disproportionately affect children: 28% (15 crashes) involved children under 9, and another 28% (15 crashes) involved those aged 10-19. Notably, 41% of these severe bicycle-involved crashes resulted in a head injury.

Fatal Crash Rate Comparison

Fatal crash rates, based on 100 million vehicle miles traveled (VMT), are influenced by driver behavior, road conditions, vehicle safety, weather, vulnerable road users, and emergency response. Weber and Morgan Counties have disproportionately high fatal crash rates compared to the State of Utah and Salt Lake City, primarily due to a high incidence of motorcyclist fatalities. From 2023-2024 motorcyclists, while representing 19% of Utah's traffic fatalities, accounted for 40% of traffic fatalities in the Weber-Morgan Health District.

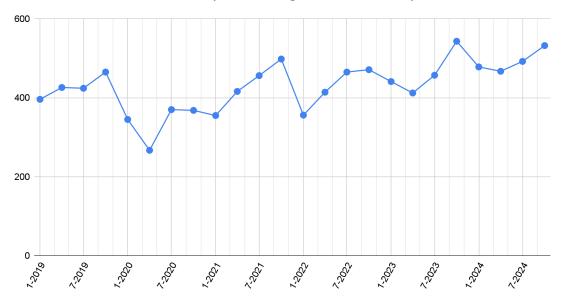


Motor Vehicle Related Fatality Rates by County and Utah

Figure 10: Weber County's 2024 fatal crash rate (1.38 fatalities/100 million VMT) exceeds Utah's (0.77) by 79%

Motor Vehicle Related Emergency Department Visits

The CDC's National Syndromic Surveillance Program can identify patient encounters in real time among Weber or Morgan County residents due to motor vehicle related crashes. Motor vehicle crash related injuries comprise about 2.5% of Emergency Department visits each year among residents of the Weber-Morgan Health District representing a significant burden on the healthcare system.



Emergency Department Visits due to Motor Vehicle Crash Occupant Injury by Quarter (Weber-Morgan Health District)

Figure 11: Emergency Department encounters among motor vehicles occupants due to crash events by quarter. The number of ED visits has increased to almost 2,000 per year.



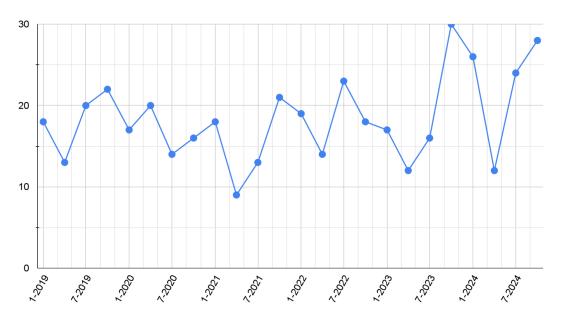


Figure 12: Emergency Department visits due to pedestrian motor vehicle traffic injuries have increased to 22.5 visits per quarter in 2024 increasing by 23% from 2019.

Health Improvement- What Is Being Done?

The Weber-Morgan Health Department receives funding from the Violence and Injury Prevention Program and Utah Highway Safety Office to run motor vehicle safety programs and Safe Kids Coalition activities. These initiatives address child passenger safety, seat belt use, vulnerable roadway users, and teen driving. Preventing traffic fatalities involves numerous agencies, including the Utah DPS, UDOT, Utah Legislature, law enforcement, media, vehicle manufacturers, emergency response, and medical treatment.

The **Ogden City Police Department** is actively working to improve safety for vulnerable roadway users (pedestrians, bicyclists, motorcyclists, skateboarders, scooter riders, etc.) by awareness campaigns through:

news and social media, educational contacts with both drivers and pedestrians, and visible proactive enforcement. Printed material has been created and is regularly being distributed to drivers and pedestrians. One example of the efforts being made was a crosswalk enforcement campaign held in January. During that event, 103 drivers were stopped and educated after they failed to yield to a pedestrian in a crosswalk. Over the course of the year additional enforcement and educational campaigns will occur. Our Community Outreach Coordinators as well as our Car Seat Safety Technicians work to bring awareness to the importance of car seats, seat belts, and protective equipment on bicycles. Our goal is to work together with the community to reduce crashes.

Available Services:

Weber-Morgan Health Department, call 801-399-7186 or visit our website to register for a car seat class: <u>https://www.webermorganhealth.gov/classes/car-seat-class/</u>

Zero Fatalities Program https://zerofatalities.com/

Utah Highway Safety Office for various safety programs Call 801-293-2480 <u>https://highwaysafety.utah.gov/</u>

Utah Safety Council for defensive driving course Call 801-262-5400 https://www.utahsafetycouncil.org/content/Default.aspx

Data Sources:

- 1. Utah Department of Transportation, Crash Reports, American Association of State Highway and Transportation Official (AASHTOWare) Crash Query System. Retrieved from: https://www.aashtoware.org/products/safety/aashtoware-safety-segment/
- 2. Utah Department of Transportation. Vehicle Miles Travelled retrieved from: https://www.udot.utah.gov/connect/business/traffic-data/traffic-statistics/
- 3. Center for Surveillance, Epidemiology and Laboratory Services (U.S.). Division of Health Informatics and Surveillance. (2021). National Syndromic Surveillance Program. CDC Stacks. https://stacks.cdc.gov/view/cdc/103138

Data Notes:

Utah Department of Transportation Data

- The 2024 Motor Vehicle Crash data is preliminary and is still being reviewed and validated.
- This data may be protected under 23 USC 407
- For the motor vehicle crash report data dictionary go to the following website: <u>https://highwaysafety.utah.gov/wp-content/uploads/sites/22/2021/03/Utah-Crash-Report-Data-Dictionary-2021-v8-030121.pdf</u>
 - Severe MVR crashes are defined as crashes that are fatal or result in suspected serious injuries (e.g. lacerations, broken extremities, crush injuries, significant burns, unconsciousness, or paralysis).
 - Suspected Minor Injury are any minor injury that is evident at the scene of the crash, other than fatal or serious injuries. Examples include lump on the head, abrasions, bruises, minor lacerations (cuts on the skin surface with minimal bleeding and no exposure of deeper tissue/muscle).
 - Possible Injury are injuries reported or claimed which are not a fatal, suspected serious, or suspected minor injury. Examples include momentary loss of consciousness, claim of injury, limping, or complaint of pain or nausea. Possible injuries are those that are reported by the person or are indicated by his/her behavior, but no wounds or injuries are readily evident.
 - Crash events may include one to 9 vehicles and each event can have more than one fatality or serious injury.

Syndromic Surveillance Data

- Emergency Department visits are shown based on patient zipcode; therefore the crash event may have occurred outside the Weber-Morgan Health District.
- For more information on inclusion/exclusion criteria used to when querying the NSSP see the CDC Motor Vehicle Crash Occupant Injury v1 Definition Factsheet & Technical Brief: <u>https://cdn.ymaws.com/www.cste.org/resource/resmgr/cdc_motor_vehicle_crash_pdf/CDC_Moto_r_Vehicle_Crash_Occu.pdf</u>
- CDC Emergency Department Visits due to Pedestrian Motor Vehicle Traffic Injury: <u>https://knowledgerepository.syndromicsurveillance.org/sites/default/files/2023-10/CDC%20Pede</u> <u>strian%20Motor%20Vehicle%20Traffic%20Injury%20v1.pdf</u>
- All Traffic Related v2 Washington State Department of Health, 2019: <u>https://knowledgerepository.syndromicsurveillance.org/all-traffic-related-v2-washington-state-department-health-2019</u>