NORTHERN NEVADA
Public Health

Emergency Medical Services Advisory Board
Meeting Notice and Agenda

Thursday, August 1, 2024
9:00 a.m.

Members

Eric Brown (Chair) – County Manager, Washoe County

Jackie Bryant (Vice-Chair) – Interim City Manager, City of Reno

Dion Louthan – City Manager, City of Sparks

Dr. John Hardwick – Emergency Room Physician

Chad Kingsley – District Health Officer, Northern Nevada Public Health

Joe Macaluso – Director of Risk Management, Renown

This meeting will be held virtually only.

This meeting will be accessible via ZOOM webinar. To attend via ZOOM, click this link: https://washoecounty-gov.zoom.us/j/84218377051

Or

Type https://zoom.us/ in your computer browser, click **"Join a Meeting"** on the ZOOM website, and enter this **Meeting ID: 842 1837 7051. NOTE**: This option will require a computer with audio and video capabilities.

Alternatively, you can join the meeting by telephone by dialing **1-669-444-9171**, entering the **Meeting ID: 842 1837 7051** and **pressing #**.

NORTHERN NEVADA
Public Health

1. ***Roll Call and Determination of Quorum**

2. ***Public Comment**
   Action may not be taken on any matter raised during this public comment period until the matter is specifically listed on an agenda as an action item. All public comment is limited to three minutes per person.

   The meeting will be held via Zoom webinar. Members of the public may submit public comment by either attending the meeting via teleconference or attending by telephone only. To provide public comment via Zoom, please log into the Zoom webinar via the above link and utilize the "Raise Hand" feature during any public comment period. To provide public comment via telephone only, press *9 to "Raise Hand" and *6 to mute/unmute. Reasonable efforts will be made to hear all public comment during the meeting. NOTE: The Zoom option will require a computer with audio and video capabilities.

   Requests for public comment via Zoom must be submitted by email to almiller@nnph.org before the scheduled meeting.

3. **Consent Items** (For Possible Action)
   Matters which the Emergency Medical Services Advisory Board may consider in one motion. Any exceptions to the Consent Agenda must be stated prior to approval.
   A. Approval of Draft Minutes
   May 2, 2024

4. ***Regional Computer Aided Dispatch (CAD) Update** – Public Board Activities, Technology Updates, Special Projects, Partnering Agency Discussions, CAD Team Goals
   Erick Willrich, Technology Coordinator, Washoe County

5. ***Prehospital Medical Advisory Committee (PMAC) Update** – Review of Current and Future Activities
   John Hardwick

6. ***Presentation of the Washoe County Trauma Data Report 2023** – Background of the Nevada Trauma Registry, Summary and Purpose of the Washoe County Trauma Data Report, Case Fatality Rates by Mechanism of Injuries in Washoe County
   Anastasia Gunawan
   A. Washoe County Trauma Data Report 2023

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Public Health

7. ***EMS Oversight Program and Performance Data Updates** – Joint Advisory Committee Activities, Special Projects, EMS Planning, Data Performance, REMSA Health Franchise Agreement Updates, REMSA Health Exemption Requests, Community Services Department Reviews, Mass Gatherings and Special Events Reviews
   Andrea Esp

8. ***Agency Reports and Updates**
   A. ***REMSA Health EMSAB Report, Adam Heinz**
      Data Performance Report, EMS Operations Report
   B. ***City of Sparks Fire Department EMSAB Report, Chief Jeff Sullivan**
      Data Performance Report, EMS Operations Report
   C. ***Truckee Meadows Fire and Rescue EMSAB Report, Chief Joe Kammann**
      Data Performance Report, EMS Operations Report
   D. ***Reno Fire Department EMSAB Report, Chief Cindy Green**
      Data Performance Report, EMS Operations Report

9. ***Board Comment**
   Limited to announcements or issues for future agendas. No action may be taken.

10. ***Public Comment**
    Limited to three (3) minutes per person. No action may be taken.

Adjournment

Items on the agenda may be taken out of order, combined with other items, withdrawn from the agenda, moved to the agenda of a later meeting; or they may be voted on in a block. Items with a specific time designation will not be heard prior to the stated time, but may be heard later. An item listed with asterisk (*) next to it is an item for which no action will be taken.

The Emergency Medical Services Advisory Board meetings are accessible to the disabled. Disabled members of the public who require special accommodations or assistance at the meeting are requested to notify Ms. April Miller at Northern Nevada Public Health, 1001 E. 9th St, Reno, NV 89512, or by calling 775-326-6049, at least 24 hours prior to the meeting.

Time Limits: Public comments are welcome during the Public Comment periods for all matters whether listed on the agenda or not. All comments are limited to three (3) minutes per person. Additionally, public comment of three

(3) minutes per person may be heard during individual action items on the agenda. Persons are invited to submit comments in writing on the agenda items and/or comment on that item at the Board meeting. Persons may not allocate unused time to other speakers.

Response to Public Comments: The Emergency Medical Services Advisory Board can deliberate or take action only if a matter has been listed on an agenda properly posted prior to the meeting. During the public comment period, speakers may address matters listed or not listed on the published agenda. The Open Meeting Law does not expressly prohibit responses to public comments by the Emergency Medical Services Advisory Board. However, responses from the Board members to unlisted public comment topics could become deliberation on a matter without notice to the public. On the advice of legal counsel and to ensure the public has notice of all matters the Emergency Medical Services Advisory Board will consider, Board members may choose not to respond to public comments, except to correct factual inaccuracies, ask for Public Health Staff action or to ask that a matter be listed on a future agenda. The Emergency Medical Services Advisory Board may do this either during the public comment item or during the following item: "Board Comments – Limited to announcements or issues for future agendas."

Posting of Agenda; Location:
Pursuant to NRS 241.020, Notice of this meeting was posted at the following locations:
Washoe County Administration Complex, 1001 E. 9th St., Reno, NV 89512
Northern Nevada Public Health Website https://www.nnph.org
State of Nevada Website: https://notice.nv.gov

Supporting materials are available at Northern Nevada Public Health located at 1001 E. 9th St., Reno, NV 89512 and on the website www.nnph.org pursuant to the requirements of NRS 241.020. Ms. April Miller, Sr. Office Specialist to the Emergency Medical Services Advisory Board, is the person designated by the Emergency Medical Services Advisory Board to respond to requests for supporting materials. Ms. Miller may be reached by telephone at (775) 326-6049, or by email at almiller@nnph.org.

NORTHERN NEVADA Public Health

Emergency Medical Services Advisory Board
Meeting Minutes

Date and Time of Meeting: Thursday, May 2, 2024
9:00 a.m.

Members

Eric Brown (Chair) – County Manager, Washoe County

Doug Thornley (Vice-Chair) – City Manager, City of Reno

Chris Crawforth – Interim City Manager, City of Sparks

Dr. John Hardwick – Emergency Room Physician

Kevin Dick – District Health Officer, Northern Nevada Public Health

Joe Macaluso – Director of Risk Management, Renown

This meeting was held virtually via Zoom.

1. ***Roll Call and Determination of Quorum**
   Chair Brown called the meeting to order at 9:00am.
   The following members and staff were present:

   Members present: Eric Brown
   JW Hodge, representing Doug Thornley
   Chris Crawforth
   Kevin Dick
   Joe Macaluso

   Ms. Miller verified that a quorum was present.

   Staff present: Dania Reid
   Dr. Nancy Diao
   Andrea Esp
   April Miller
   Sarah Smith

2. ***Public Comment**

Limited to three (3) minutes per person. No action may be taken.

Chair Brown opened the public comment period.

Cody Shadle, Public Safety Dispatch Director, with the City of Reno providing an update to the CAD project. There is some technology that we are instituting and is underway in our regional 911 system that has direct impact to emergency medical services in our region.

Some of you have varying degrees of information in this topic, so I'd like to give you some background which is the replacement of our regional computer aided dispatch system. This is the backbone of our technology that we use locally here for a 911 system and most PSAPs and dispatch centers across the nation are using some sort of CAD system.

In 2019 and 2020, we began exploring the option of replacing our CAD system. At the time, Reno, Sparks, and Washoe County were the primary users in the system.

REMSA is on a different system; however, there have been some changes in that process. In 2019 we began searching for a consultant to aid us in the process.

In 2021, we began the RFP process and in collaboration with that consultant much of 2021 was spent vetting. In 2022, we began doing vendor demonstrations, evaluating the responses to that RFP, and sending staff out to see live demonstrations of the system in productive use.

Simultaneously in 2022, our local leadership found it a priority to establish a regionalization working group specific to the 911 call process and fire and medical service delivery.

From that meeting, that work began mid-2022 and extended into 2023. Through this process we identified that our scope of our original CAD project was insufficient, and we needed to expand the scope and include REMSA as a partner, expanding from what was originally three partners being Reno, Sparks, and Washoe to now include four partners, being Reno, Sparks, Washoe and REMSA.

In 2023, we established a governance structure, signed agreements, and began work with our vendor.

The main pillars of this project were establishing governance and identifying the software that we needed to bring on board. We had to build infrastructure which took an additional partnership with Hewlett-Packard, and then the project management side. Federal Engineering was the original consultant that we used to establish the RFP process and we decided to retain them to continue with the project. They are helping onboard the system and will act as our third-party unbiased project manager for the region. To give some insight into the governance structure, we've created three public boards who oversee this CAD and it's not just computer aided dispatch, it's also a records management for the law enforcement side as well.

We have a Managers Board with representatives from all of those four partnering agencies. We have the Executive Board who also has representatives, and there will be representatives from every partner agency at every level. With defined roles, the Managers Board is going to provide

direct oversight, final budget approval, and any conflict resolution. Our Executive Board does a lot of the operational work, establishing guidelines and administering policy, and then our Change Advisory Board.

Ms. Miller brought to the boards attention that the 3 minute time limit had expired.

Mr. Shadle asked if the information and materials could be sent to the remaining members or if he could come back to provide additional information later.

Manager Brown stated that we could do both and asked for any additional public comment.

Hearing none, Chair Brown closed the public comment period.

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3. **Consent Items** (For Possible Action)
Matters which the Emergency Medical Services Advisory Board may consider in one motion. Any exceptions to the Consent Agenda must be stated prior to approval.

A. **Approval of Draft Minutes**
February 1, 2024

Mr. Dick moved to approve the draft minutes. Joe Macaluso seconded the motion, which passed unanimously.

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4. ***Prehospital Medical Advisory Committee (PMAC) Update**
Dr. John Hardwick

Ms. Andrea Esp stated that Dr. Hardwick would not be able to be in attendance and no update was provided.

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5. ***EMS Oversight Program and Performance Data Updates –** Joint Advisory Committee Activities, Special Projects, EMS Planning, Data Performance, REMSA Health Franchise Agreement Updates, REMSA Health Exemption Requests, Community Services Department Reviews, Mass Gatherings and Special Events Reviews

Ms. Esp presented the staff report to the board. No questions were presented.

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6. ***Agency Reports and Updates**

A. ***REMSA EMSAB Report, Adam Heinz**

Data Performance Report, EMS Operations Report

Mr. Heinz reported that the week of May 19th through the 25th is the 50th Anniversary of EMS week, with this year's theme "Honoring the Past, Forging the Future". REMSA Health has many events planned and hopes for a good turnout on the 21st from 7:30 to 9:30. They will also host their annual awards and recognition ceremony. REMSA Health is also celebrating the accomplishment of their Regional Emergency Communications Center. They were also recently awarded and received notification from the International Academy of Emergency Dispatch acknowledging that they are the 76th Accredited Center of Excellence for Fire Dispatch in the world and the second in Nevada. Mr. Heinz added that they are very proud of their medically trained emergency medical and fire dispatchers and plan to celebrate that this coming week. REMSA is also very excited to announce that their board recently approved the purchase of (16) sixteen new Type 3 ambulances to continue to support the demand in our community.

B. ***City of Sparks Fire Department EMSAB Report, Chief Jeff Sullivan**
Data Performance Report, EMS Operations Report

Chief Sullivan is excited to report that the City of Sparks Fire Department just received their first ambulance. This is a really great asset to the community, as the department hasn't had an ambulance in service since the 1970's. They are in the process of developing a training program for the new ambulance. Chief Sullivan also expressed thanks to Sparks Police Department and Chief Crawforth with their assistance in the fingerprinting process with state EMS.

C. ***Truckee Meadows Fire and Rescue EMSAB Report, Chief Joe Kammann**
Data Performance Report, EMS Operations Report

Chief Kammann reported that the department has been conducting leadership training and introduced Senior EMS Coordinator Zeb Nomura to highlight some of these achievements. Mr. Zeb Nomura reported that TMFR has added (25) twenty-five new firefighter medics to their EMS team in preparation of the wildfire season that is coming up. They were able to participate in a week-long 50-hour continuing education class at East Fork Fire and are excited to report that TMFR continues to conduct their own CE class that is roughly 2 hours every month. It was also reported that TMFR has received some calls from Spanish Springs ED to assist in patient stabilization and transport to the main hospital(s).

D. ***Reno Fire Department EMSAB Report, Chief Cindy Green**
Data Performance Report, EMS Operations Report

Chief Green is excited to report that Reno Fire Department hired a handful of more single-role employees, which included AEMT's and they have been trained and working in their respective positions. This has allowed RFD to provide (3) three ambulances covering District 2, District 3, and District 6 for mutual aide transport requests. RFD continues to conduct continuing education courses through their training center which also allows them to educate and certify the line staff in tactical emergency casualty care and help further the rescue task force.

7. ***Board Comment**
   Limited to announcements or issues for future agendas. No action may be taken.

   Mr. Dick expressed his enthusiasm and welcomed Sarah Smith as new EMS Coordinator for NNPH and expressed his thanks to Cody Shadle for providing the CAD update through public comment.

   JW Hodge requested that a standing item be added to the agenda to provide a quarterly update on the CAD project and the collaboration between the different groups. There were no questions or objections to this request.

   Chair Brown closed board comment.

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8. ***Public Comment**
   Limited to three (3) minutes per person. No action may be taken.

   Chair Brown opened the public comment period.

   Charlie Moore with TMFR expressed his well wishes to Mr. Kevin Dick and his upcoming retirement and thanked him for the spectacular job he has done for public health.

   Cody Shadle presented to continue with his presentation on the CAD update. Resuming at the Change Advisory Board which is how we're going to maintain the health of the system, provide equitable ways for all agencies to present changes to the group, and make sure that those changes are vetted before implementation. The Executive Board held the Hexagon meeting in January with our regional stakeholders and highlighted some accomplishments thus far. This includes physically installing the infrastructure. We were able to upload the Software for CAD as well as the records management system and we were able to bring our GIS and our mapping systems online, which is extremely helpful. We've also finished one of our workshops where we started building out the system ourselves. The CAD team had the opportunity to start building out responses when having discussions about fire responses. We invited our Fire Operations Chiefs into the conversation and reviewed how this system should operate regardless of any agreements as they exist now. There are roughly 50 integrations into the system at this time based on these recommendations. The NDA process has begun, and the vendors are working with the CAD vendor. At this point, the project is successful, on time, and on budget. We anticipate the program going live in September 2025. The expectation is to simplify the 911 process, be able to share information across agencies without making phone calls or over the radio, and be able to do it in immediate real time. We also expect to meet some of the goals of the region that were identified through the regionalization workshop. Mr. Shadle concluded his presentation.

   As there was no one else one wishing to speak, Chair Brown closed the public comment period.

Adjournment

Chair Brown adjourned the meeting at 9:25 a.m.

HEXAGON

Washoe County & Participating Agencies

OnCall Dispatch & Records Implementation

EMSAB

August 1, 2024

Status Summary: Project continues to gain steam as we work in partnership on the build & configuration phase of the project. The synergy between the Agency Coordinators, Customer Core Team, & Hexagon resources continues to be strong. While common in projects, both change orders and interfaces are expected impacts. No major roadblocks at this time.

Project Status Dashboard

Overall	Schedule	Resources	Interfaces	Data Migration	Go Live Date
					**09/09/2025**

Accomplishments

OnCall Dispatch:

- System Build Workshop #2
- Provided remote/online support (for system build and response plan workshops)
- Installed version 2309.3.3

Accomplishments

Custom Interfaces:

- ICD's Completed & Signed:
  - Telestaff
  - FUSUS
  - Dataworks Plus Livescan
- Developed:
  - CryWolf
  - EM Resource

Accomplishments

OnCall Records:

- COTS Report Training
- MFR Installations
- RMS Configuration Workshop #2
- Installed NIBRS Validation
- Address Server Training
- Provided remote/online support (for configuration workshops)

Change Order #1

Data Conversion/Interfaces:

- Hexagon to finalize change order for ART & interfaces

Upcoming Activities

OnCall Dispatch:

- Agencies to continue system build & response plans (On Going)
- CAD Data Conversion Scripting (On Going)
- OCD Fundamentals for Core Team
  - 7/23 – 7/25
- COTS Interface Installation
  - Week of 8/26
- System Configuration #1
  - 9/17 – 9/19

Upcoming Activities

Custom Interfaces

- Continue to support meetings with 3rd parties
- Continue to document workflows
- Complete, review and update ICD's
- Continue development

Upcoming Activities

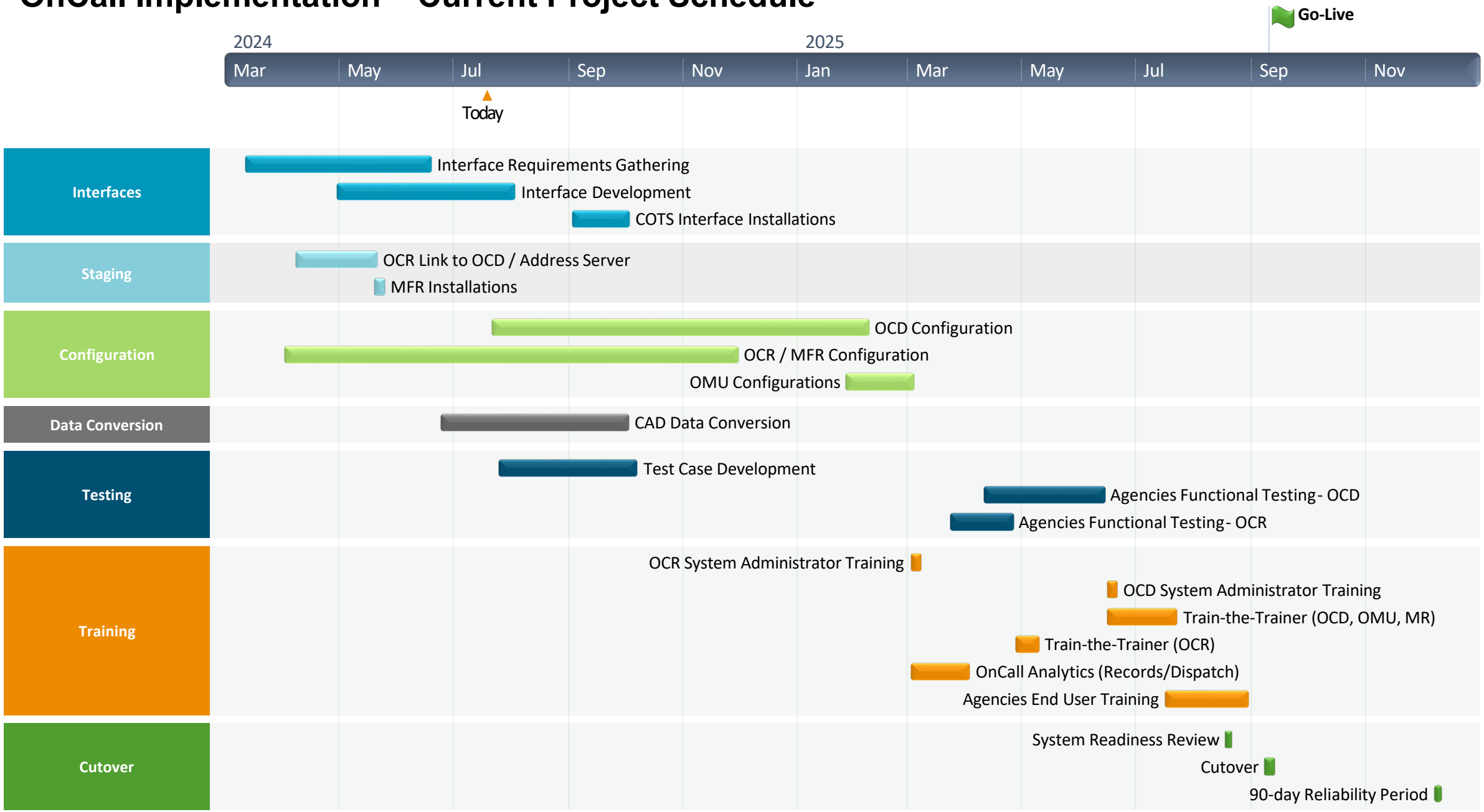
OnCall Records:

- Update configuration spreadsheet (On Going)
- Upgrade OCR to 2309.3.3
  - Week of 7/29
- Configuration Workshop #3
  - 9/10 – 9/13

Key Areas of Concern

- **Overall Number of Interfaces:**
  - 57 Interfaces
  - This necessitates rigorous tracking and concentrated effort from both customer and vendor teams.
- **Change Management:**
  - Change orders are currently underway for additions, removals, and modifications.
  - The change order process can be lengthy.
  - It demands a high degree of focus and meticulous attention to detail.

OnCall Implementation – Current Project Schedule



Regional Improvements by Design

- Regionalizing Unit Definitions
- Regionalizing Incident Types
- Designing Integrated Multi-Jurisdictional Response Plans
- Designing Automated Triggers for Automatic Aid Responses
- Regionalizing Data Elements for Consistent Accurate Reporting
- New Integrations to Third Party Systems to Improve Workflow
- Advanced Information Sharing to Improve Interagency Coordination

NORTHERN NEVADA Public Health
Serving Reno, Sparks & Washoe County

Staff Report
Emergency Medical Services Advisory Board
Board Meeting Date: August 1, 2024

DATE: 7/24/2024

TO: Emergency Medical Services Advisory Board

FROM: Anastasia Gunawan, EMS Oversight Statistician
agunawan@nnph.org

SUBJECT: **Presentation of the Washoe County Trauma Data Report 2023**

SUMMARY

The EMS Oversight Program Statistician is providing a summary of purpose for the trauma data report, a descriptive analysis of trauma and injury from calendar year 2023 in Washoe County.

District Health Strategic Priorities supported by this item:

4. **Impactful Partnerships:** Extend our impact by leveraging partnerships to make meaningful progress on health issues.

PREVIOUS ACTION

No previous action.

BACKGROUND

The Washoe County Trauma Data Report provides summary and assessment of trauma and injuries that meets the National Trauma Data Standards and Nevada Trauma Registry reporting guidelines established under NRS 450B.238, and NAC 450B on an annual basis. According to most recent statistics published by the Centers for Disease Control and Prevention, injuries are the leading cause of deaths among persons 1 to 45 years of age, accounting for 59% of deaths in that age group in the United States.

The rate of traumatic injuries reported by Washoe County facilities increased by 20.5% in 2023 compared to the previous year 2022. The highest case fatality rate reported among trauma patients aged 85+ years old, 10-14 years old, and 0-4 years old. The deadliest injury reported in 2023 is sustained from vehicle traffic accidents, firearm, and suffocation. More than 60% of trauma captured by the Nevada Trauma Registry in Washoe County were transported by ground ambulance.

FISCAL IMPACT

There is no fiscal impact.

ATTACHMENT

Washoe County Trauma Data Report 2023

NORTHERN NEVADA

Public Health

Serving Reno, Sparks & Washoe County

Washoe County Trauma Data Report 2023

June 2024

NORTHERN NEVADA

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MISSION

To improve and protect our community's quality of life and increase equitable opportunities for better health.

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INTRODUCTION

In the context of public health framework, understanding injury trends is crucial for effective prevention and intervention strategies. Fatal and non-fatal injuries have significant implications for individual well-being, healthcare, and public expenditures. The purpose of this report is to highlight prevalence, morbidity, and mortality associated with patterns of fatal and non-fatal injuries due to trauma in 2023, as defined by The American College of Surgeons (ACS), in Washoe County. Assessment of trauma and injuries presented in this report utilizes the Nevada Trauma Registry (NTR) standardized dataset established under NRS 450B.238, and NAC 450B.768. This report provides characteristics and trends for specific trauma and injury data submitted in calendar year 2023 in Washoe County.

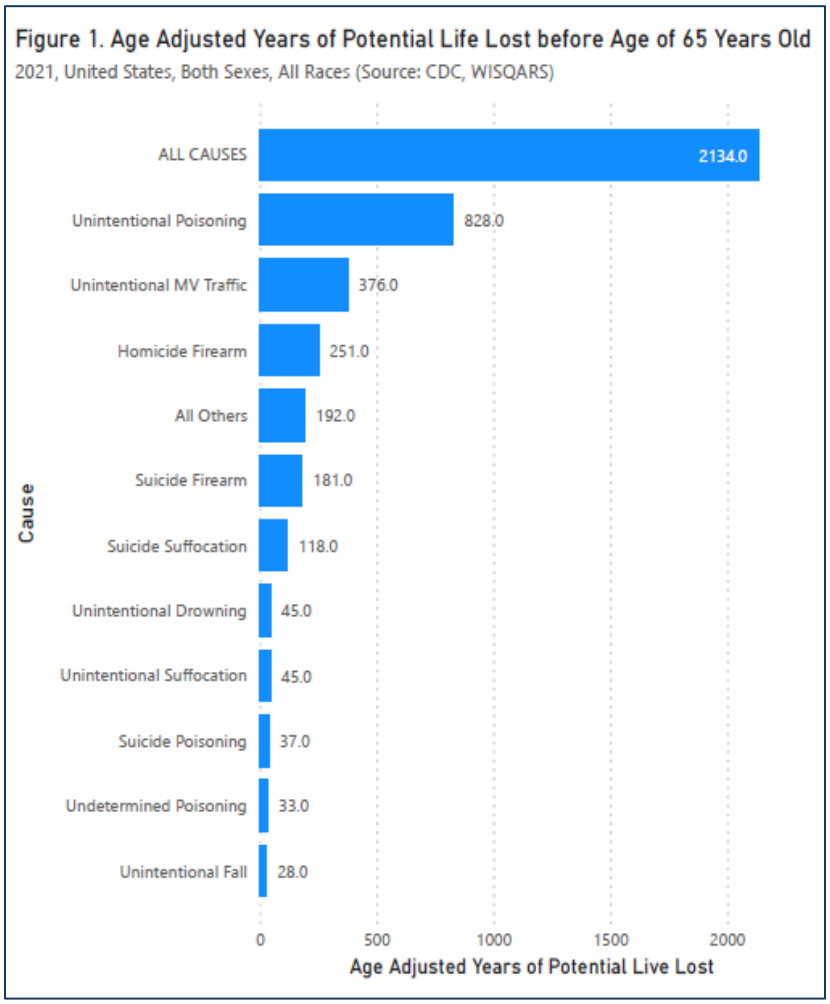
This report is divided into sections describing the current burden and magnitude of injuries and hospitalization trends for patient trauma care in Washoe County with accompanying information on:

a) demographic distribution of traumatic injuries;
b) specific mechanisms causing the injury;
c) severity of the injury;
d) place of injury; and
e) length of hospital stay in the intensive care unit (ICU).

These sections were curated to augment the Northern Nevada Public Health strategic priority to promote impactful partnership with stakeholders in the community and mission to protect and enhance the well-being and quality of life for all in Washoe County. In this annual report, 2018-2021 trends on non-adjudicated traffic citations leading to motor vehicle crashes in Washoe County are also available. The non-adjudicated citation report and analysis was completed by University of Nevada Las Vegas Traffic Safety team in cooperation with a research grant from Nevada Office of Traffic Safety #TS-2023-UNLV-000777 (Appendix B and C).

TRAUMATIC INJURY IN UNITED STATES

Unintentional and violence-related injuries, for example, motor vehicle crashes (MVC), drug overdoses, falls, assaults and suicides are among the most frequent causes of deaths for all age groups (Figure 1), accounting for nearly 23 million non-fatal emergency department ED visits in the US. The combined economic cost of fatal and non-fatal preventable injury-related to employee uninsured costs, vehicle damage, fire costs, medical costs, work productivity, live lost, and quality of life in the United States was $6.2 trillion in 2020, which is 47.% increase in costs compared to 2019 ($4.2 trillion). For every injury related premature mortality (early death), Years of Potential Life Lost (YPLL) helps quantify the impact of premature mortality due to injury on society compared to other leading causes of death. According to the Centers for Disease Control and Prevention, unintentional injuries are the leading cause of deaths among persons 1 to 44 years of age, accounting for half of deaths in that age group in the United States (Graphic A). In addition to those that survive, millions of people still suffer from injuries each year[1].



[1] "FASTSTATS - Injuries." Centers for Disease Control and Prevention, Centers for Disease Control and Prevention, 12 May 2016, https://www.cdc.gov/nchs/fastats/injuries.htm.

Top 10 Leading Causes of Death, 2021, All Age Groups

	<1	1-4	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65+	All Ages
1	Congenital Anomalies 3,963	Unintentional Injury 1,299	Unintentional Injury 827	Unintentional Injury 915	Unintentional Injury 15,792	Unintentional Injury 34,452	Unintentional Injury 36,444	Covid-19 36,881	Malignant Neoplasms 108,023	Heart Disease 553,214	Heart Disease 695,547
2	Short Gestation 2,946	Congenital Anomalies 412	Malignant Neoplasms 347	Suicide 598	Homicide 6,635	Suicide 8,862	Covid-19 16,006	Heart Disease 34,535	Heart Disease 89,342	Malignant Neoplasms 446,354	Malignant Neoplasms 605,213
3	Sids 1,459	Homicide 309	Homicide 188	Malignant Neoplasms 449	Suicide 6,528	Homicide 7,571	Heart Disease 12,754	Malignant Neoplasms 33,567	Covid-19 73,725	Covid-19 282,457	Covid-19 416,893
4	Unintentional Injury 1,306	Malignant Neoplasms 282	Congenital Anomalies 171	Homicide 298	Covid-19 1,401	Covid-19 6,133	Malignant Neoplasms 11,194	Unintentional Injury 31,407	Unintentional Injury 33,471	Cerebrovascular 139,257	Unintentional Injury 224,935
5	Maternal Pregnancy Comp. 1,113	Heart Disease 116	Heart Disease 66	Congenital Anomalies 179	Malignant Neoplasms 1,323	Heart Disease 4,155	Suicide 7,862	Liver Disease 10,501	Diabetes Mellitus 18,603	Chronic Low. Respiratory Disease 120,152	Cerebrovascular 162,890
6	Placenta Cord Membranes 672	Perinatal Period 68	Covid-19 63	Heart Disease 132	Heart Disease 944	Malignant Neoplasms 3,615	Liver Disease 5,833	Diabetes Mellitus 7,597	Liver Disease 17,664	Alzheimer's Disease 117,922	Chronic Low. Respiratory Disease 142,342
7	Bacterial Sepsis 557	Cerebrovascular 55	Chronic Low. Respiratory Disease 54	Covid-19 79	Congenital Anomalies 419	Liver Disease 1,833	Homicide 4,863	Suicide 7,401	Chronic Low. Respiratory Disease 17,620	Diabetes Mellitus 72,451	Alzheimer's Disease 119,399
8	Respiratory Distress 414	Covid-19 54	Cerebrovascular 35	Cerebrovascular 53	Diabetes Mellitus 345	Diabetes Mellitus 1,285	Diabetes Mellitus 2,961	Cerebrovascular 5,755	Cerebrovascular 14,634	Unintentional Injury 69,003	Diabetes Mellitus 103,294
9	Circulatory System Disease 402	Influenza & Pneumonia 47	Septicemia 28	Chronic Low. Respiratory Disease 45	Complicated Pregnancy 214	Complicated Pregnancy 797	Cerebrovascular 2,189	Chronic Low. Respiratory Disease 3,174	Suicide 7,267	Nephritis 44,013	Liver Disease 56,585
10	Intrauterine Hypoxia 358	Benign Neoplasms 37	Influenza & Pneumonia 27	Diabetes Mellitus 39	Cerebrovascular 190	Cerebrovascular 624	Septicemia 1,108	Homicide 2,768	Septicemia 6,477	Parkinson's Disease 37,568	Nephritis 54,358

Graphic A. Ten Leading Causes of Death, United States. 2021. Source: WISQARS Centers for Disease Control and Prevention.

TRAUMA CENTERS IN THE UNITED STATES

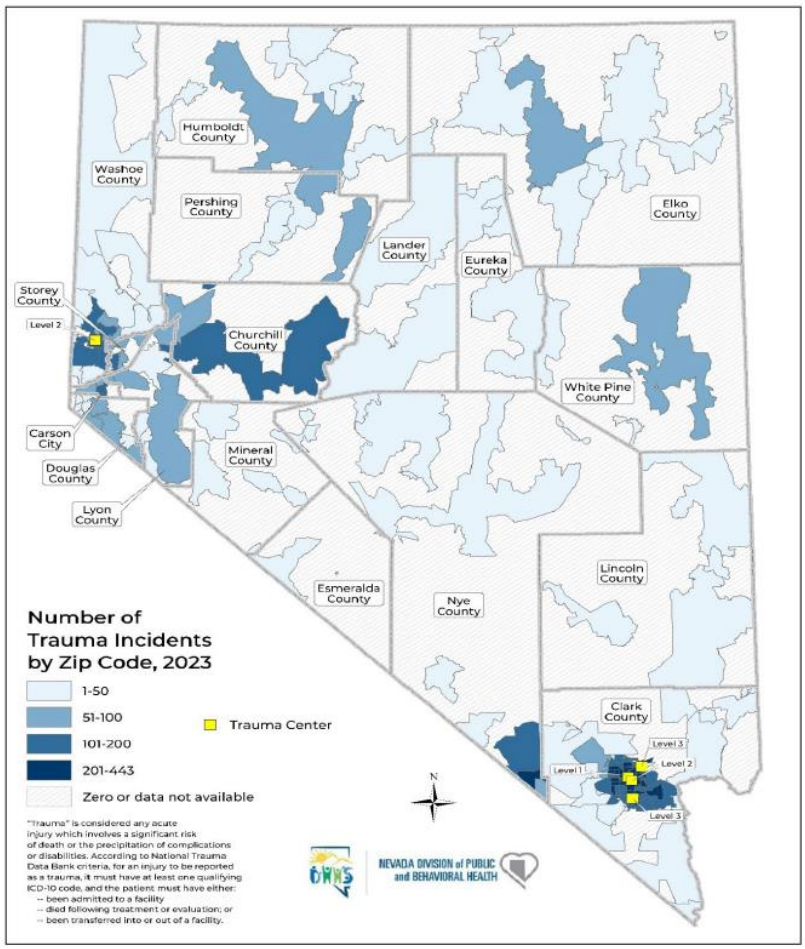
Designation and verification of trauma centers are two separate independent activities directed to assist hospitals to enhance and optimize trauma care. The designation of trauma facilities in the U.S. is a geopolitical process by which empowered entities, government or otherwise, are authorized to designate[2]. Although the American College of Surgeons (ACS) does not designate trauma centers, the ACS conducts consultation and verification activities through ACS Verification, Review, and Consultation (VRC) programs. Designated trauma centers may receive certification through voluntary review of essential elements such as trained and capable personnel, adequate facilities, and performance improvement to confirm resource capability readiness as a Trauma Center[3]. Trauma Centers are classified into various Levels (Level I, II, III, IV, or V), based on the kinds of resources available in the facility and the number of patients admitted annually[4].

[2] American College of Surgeons. Verification, Review and Consultation (VRC) Program. Source: https://www.facs.org/quality-programs/trauma/tqp/center-programs/vrc/about

[3] American College of Surgeons. Resource for Optimal Care of the Injured Patient 6th edition. Source: https://www.facs.org/Quality-Programs/Trauma/TQP/center-programs/VRC/resources

[4] Trauma Center Levels and Capabilities. Washoe County 2017 Trauma Data Report. Source: https://www.washoecounty.us/health/files/ephp/emergency-medical-services/

TRAUMA CENTERS IN NEVADA



Graphic B. Trauma Centers in Nevada. Source: https://dpbh.nv.gov/Programs/NVTrauma/NVTrauma_-_Home/

Nevada Trauma Centers are located in the most populated counties in Nevada: Clark County and Washoe County (Graphic B). Trauma centers and EMS services collaborate closely to ensure effective care for trauma patients. Patients with traumatic injury may arrive at a facility which is not a designated Trauma Center. Medical personnel make an informed decision as to whether a patient should be transferred to a designated Trauma Center in the region[5].

Washoe County:

- Renown Regional Medical Center, (Level II Adult Trauma Center)

Clark County:

- University Medical Center of Southern Nevada, (Level I Adult Trauma Center)
- Sunrise Hospital & Medical Center (Trauma Level II Center)
- St. Rose Dominican Hospitals Siena Campus (Trauma Level III Center).

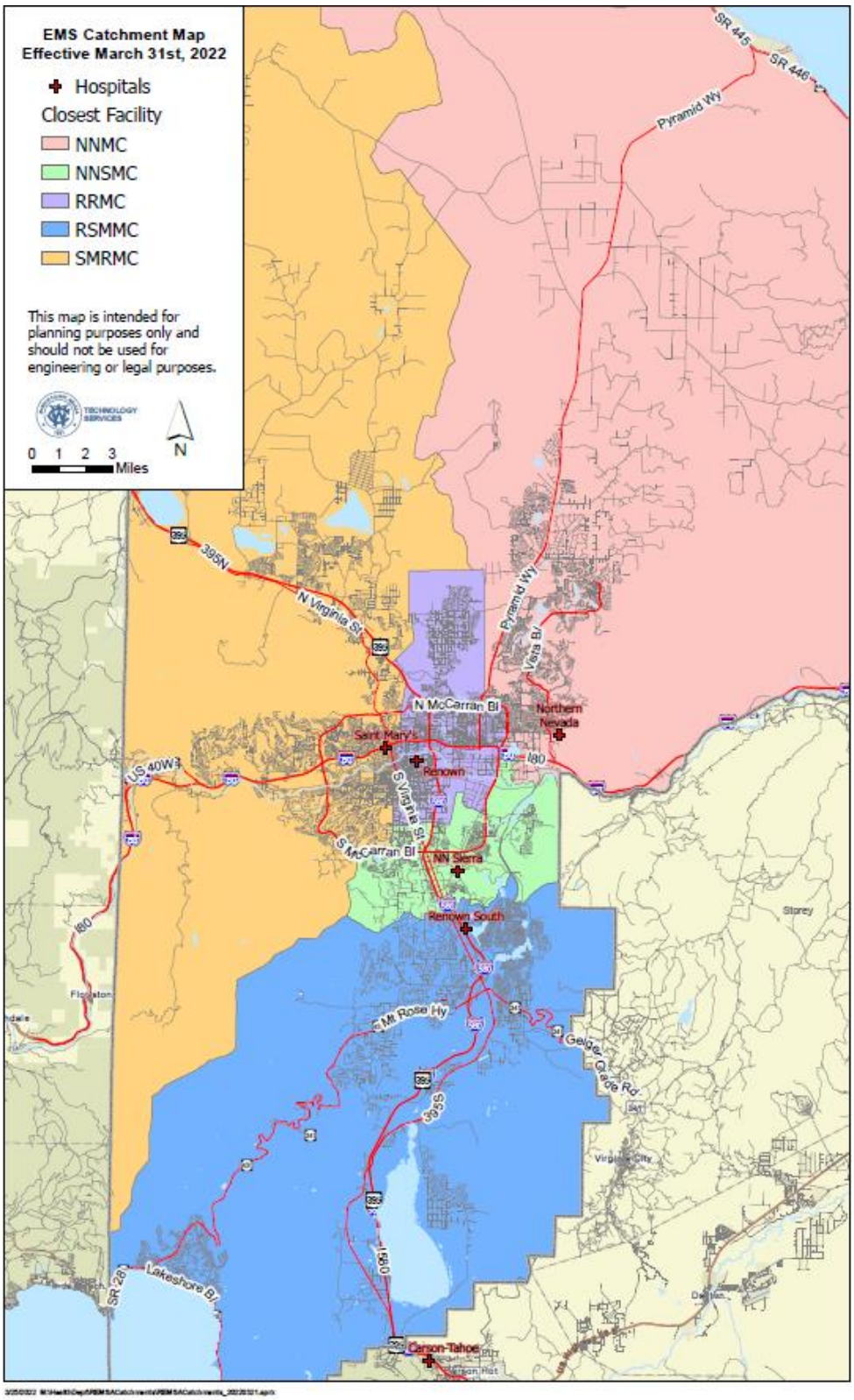
[5] Annual Trauma Registry Report 2023. State of Nevada Bureau of Health Protection and Preparedness. Source: https://dpbh.nv.gov/Programs/NVTrauma/NVTrauma_-_Home/

CATCHMENT ZONE MAP IN WASHOE COUNTY

Adult and pediatric patients identified as trauma candidates sustaining minor to very severe injuries in Washoe County will be transported to the most appropriate adult trauma center assigned per the Washoe County EMS Catchment Zone Map (Graphic C). EMS Catchment Zone(s) in Washoe County is a geographic area with defined boundaries assigned to designated facilities and trauma centers for the purposes of care of identified adult and pediatric trauma candidates. Designated EMS Catchment Zone facilities in Washoe County includes:

- Northern Nevada Medical Center
- Northern Nevada Sierra Medical Center
- Renown Regional Medical Center
- Renown South Meadows Medical Center
- Saint Mary's Regional Medical Center

For trauma incident reporting, all facilities listed in the Catchment Zone are actively submitting trauma data into the Nevada Trauma Registry (NTR). The NTR data quality and assurance is operated and maintained by the Nevada Department of Health and Human Services.

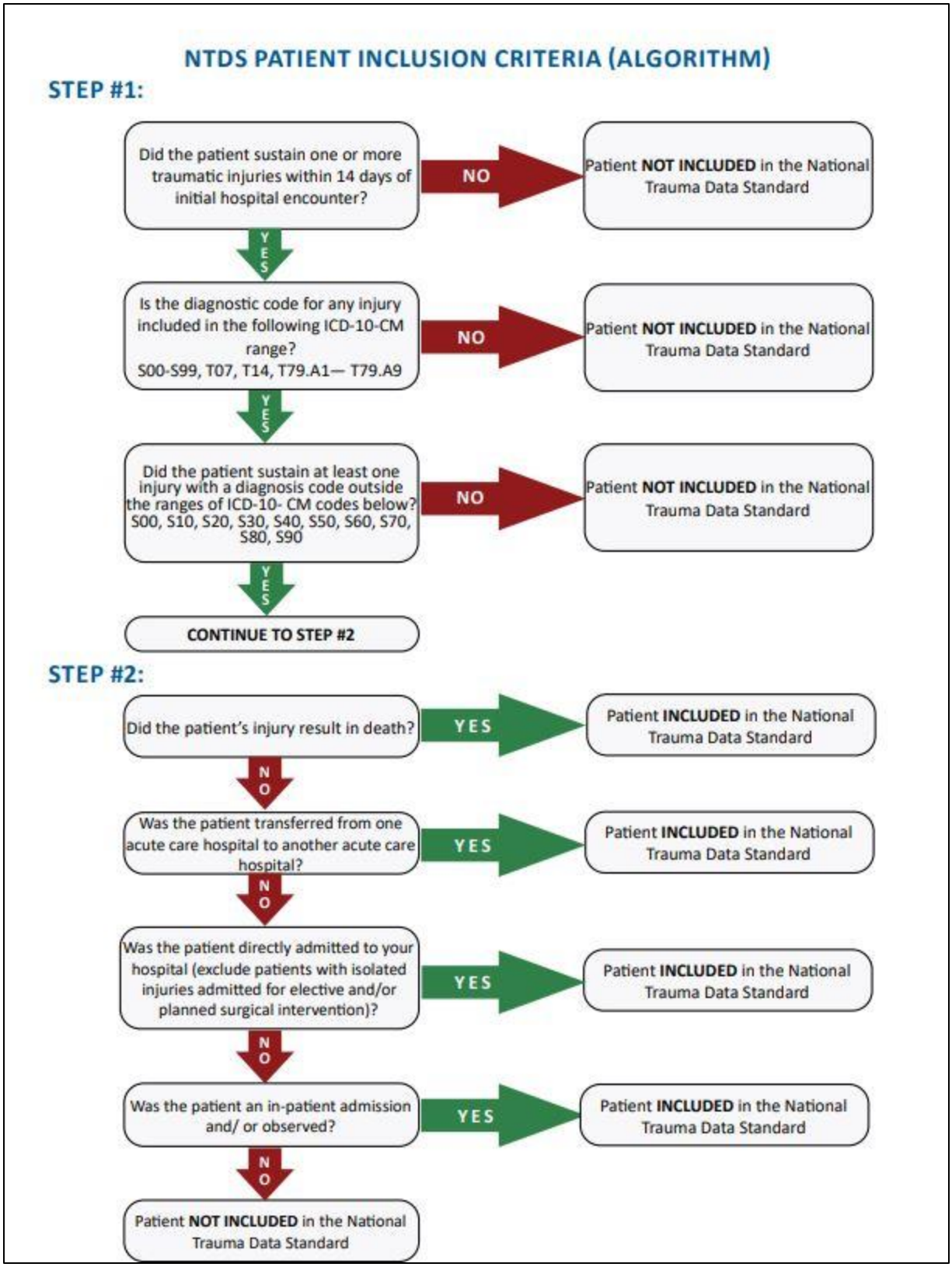


Graphic C. Washoe County EMS Catchment Zone Map 2022

TRAUMA REPORTING IN WASHOE COUNTY

The National Trauma Data Bank (NTDB) is the largest combined trauma registry in the United States. Healthcare facilities across the nation report patient level trauma information to the NTDB that ranges from basic demographics to quantitative, and qualitative data describing the nature of the injury, level of care received, and the outcome of the injury. The National Trauma Data Standard defines a standardized set of data variables to capture and report to Nevada Trauma Registry (Graphic D). A facility does not have to be designated or a verified Trauma Center to report data on a patient experiencing traumatic injury to the Nevada Trauma Registry.

Patient level trauma data is reported to Nevada Trauma Registry (NTR) by facilities in the Catchment Zone. Reporting facilities also admit trauma patients who sustained injuries in location(s) outside Washoe County. The NTR does capture patient level information for trauma patients transported from Northern California region(s) to healthcare facilities in Washoe County. Graphic D illustrates inclusion criteria that a patient must meet to be reported to the NTR. For consistency in data reporting, the Washoe County Trauma 2023 report does not exclude out-of-state patients injured in Washoe County treated in Washoe County facilities. We intend to continue to report incidences based on injury location, and the utilization and demand of resources (EMS and hospital) in the region regardless of residency.



Graphic D. National Trauma Data Standard Data Dictionary 2023 Admissions. Source: https://www.facs.org/quality-programs/trauma/quality/national-trauma-data-bank/national-trauma-data-standard/

OVERVIEW OF INJURY IN WASHOE COUNTY

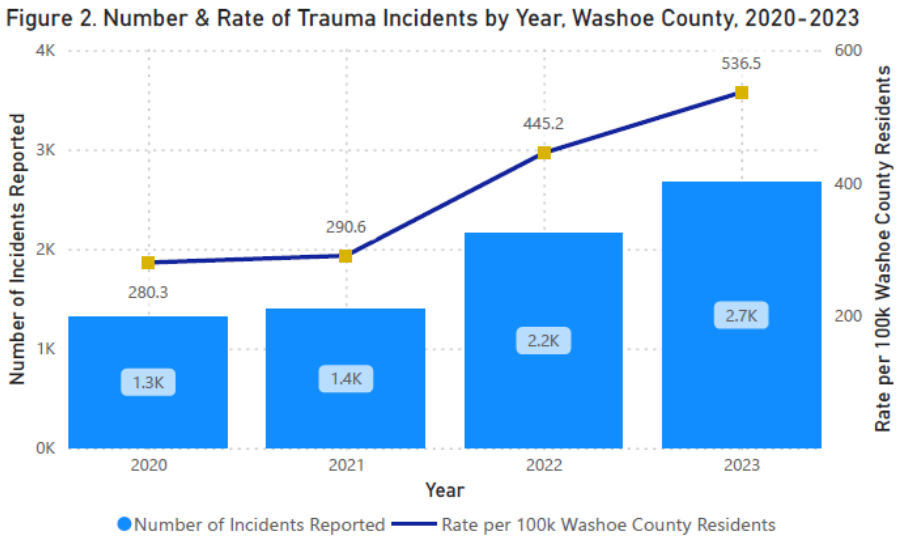


Figure 2 depicts the trend of trauma cases reported in Washoe County to the Nevada Trauma Registry from 2020 to 2023. The rate of injury classified as traumatic that were reported by Washoe County facilities ***increased by 20.5% in 2023*** (536.5 per 100,000 population) compared to the previous year in 2022 (445.2 per 100,000 population). The increase in the number of incidents was partly due to free standing emergency room added to NTR, and more incidents reported by designated trauma hospitals due to a growing population trend in Washoe County. Nevada Trauma Registry does not mandate compliance tracking by facilities pursuant to NRS 450B.238, and NAC 450B.768. Facilities that do report trauma cases to the registry are encouraged by the state to conduct internal data checks independently.

In 2023, nearly 3/4 (74.6%) of trauma patients reported to NTR were white, non-Hispanic. Hispanics of any race accounted for 9.5%, 2.5% were Asian/Pacific Islander, non-Hispanic, 2.4% were African American, non-Hispanic, and 1.3% were American Indian, non-Hispanic (Figure 3). Race-specific rate calculated for trauma incidents affecting American Indian population. disproportionately compared to African American and Hispanic patients (Table 1). ***Racial and ethnic disparities*** span the entire continuum of trauma care among insured and uninsured patients' population in Washoe County. Race adjusted injury rates for Hispanics and Asian/PI patients were among the lowest in Washoe County (Figure 4).

DEMOGRAPHIC CHARACTERISTICS

Race/Ethnicity

Figure 3. Percent of Trauma Patients by Race and Ethnicity, Washoe County, 2023

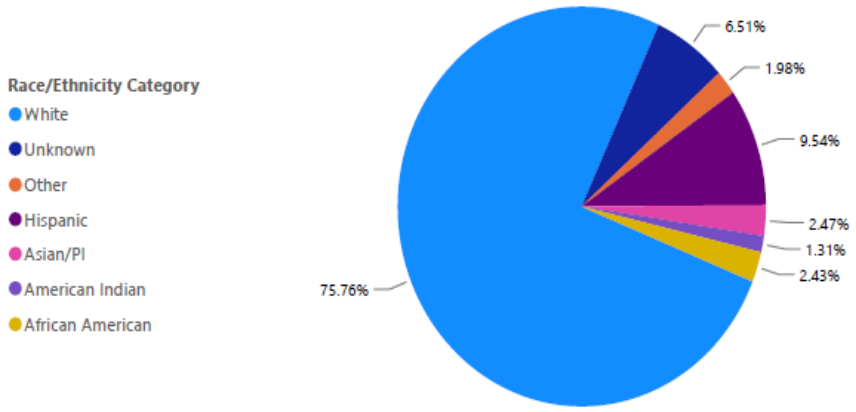
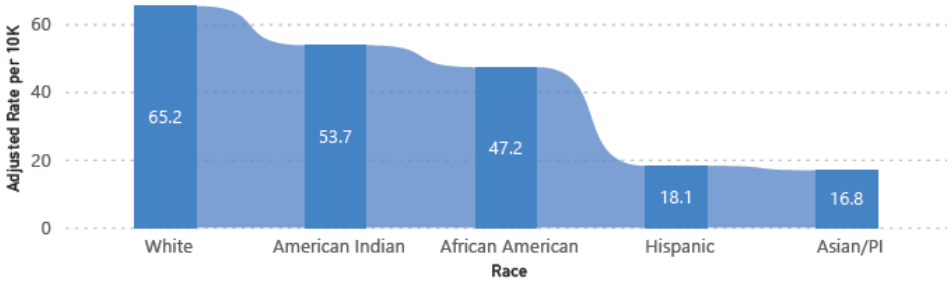


Table 1. Race Adjusted Traumatic Injuries per 10,000 residents, Washoe County, 2023

Race	Adjusted Rate per 10K	Frequency
White	65.2	2024
Hispanic	18.1	255
Asian/PI	16.8	66
African American	47.2	65
American Indian	53.7	35
Total		**2445**

Figure 4. Race Adjusted Traumatic Injuries per 10,000 residents, Washoe County, 2023



Gender and Age Group

Figure 5 depicts demographic characteristics of trauma patients by age, and gender. Almost half (48%) of the trauma incidents reported in 2023 captured trauma patients between the age of 25 to 64 years old age group. Case Fatality Rate (CFR) per 100 trauma patients in Washoe County varies across age groups in 2023 (Figure 6). The largest decrease in case fatality rate was observed among trauma patients in the 65-74 years age group; CFR: 5.5 per 100 trauma patients in 2023 compared to 3.20 per 100 trauma patients in 2021. Table 2 summarizes case fatality rates among injuries reported. *The highest case fatality rate reported among patients aged 85+ years old, 10 - 14 years old (6 deaths per 100 trauma patients), and 0-4 years old patients (4 deaths per 100 trauma patients).*

Figure 5. Trauma Incidents by Gender and Age Group, Washoe County, 2023

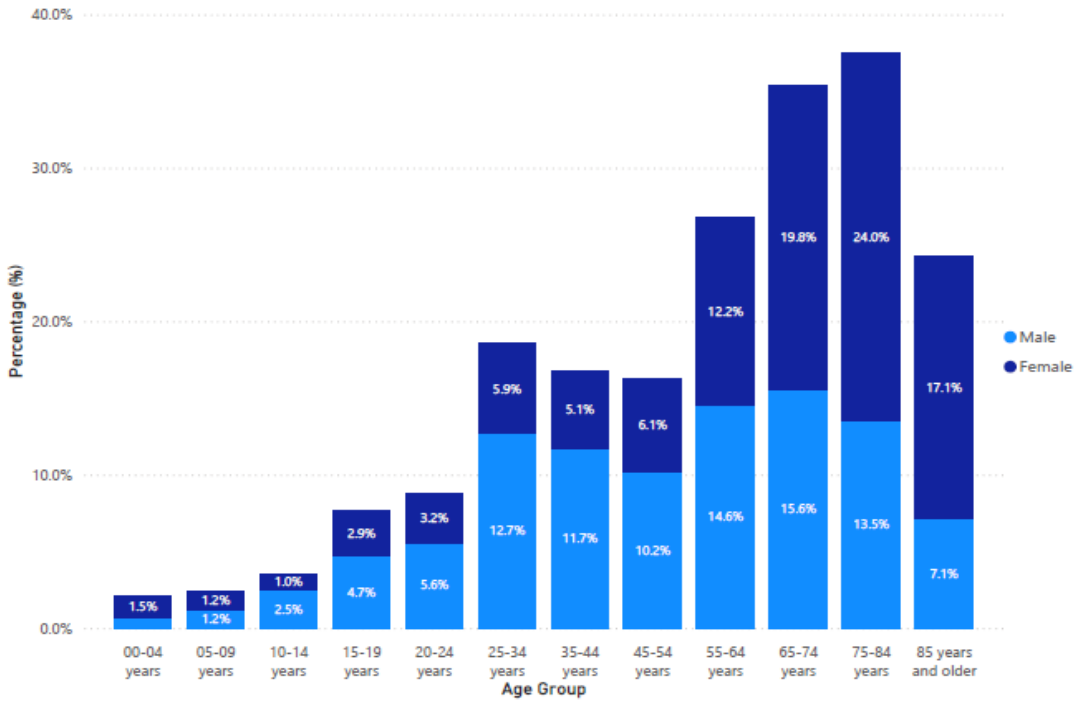
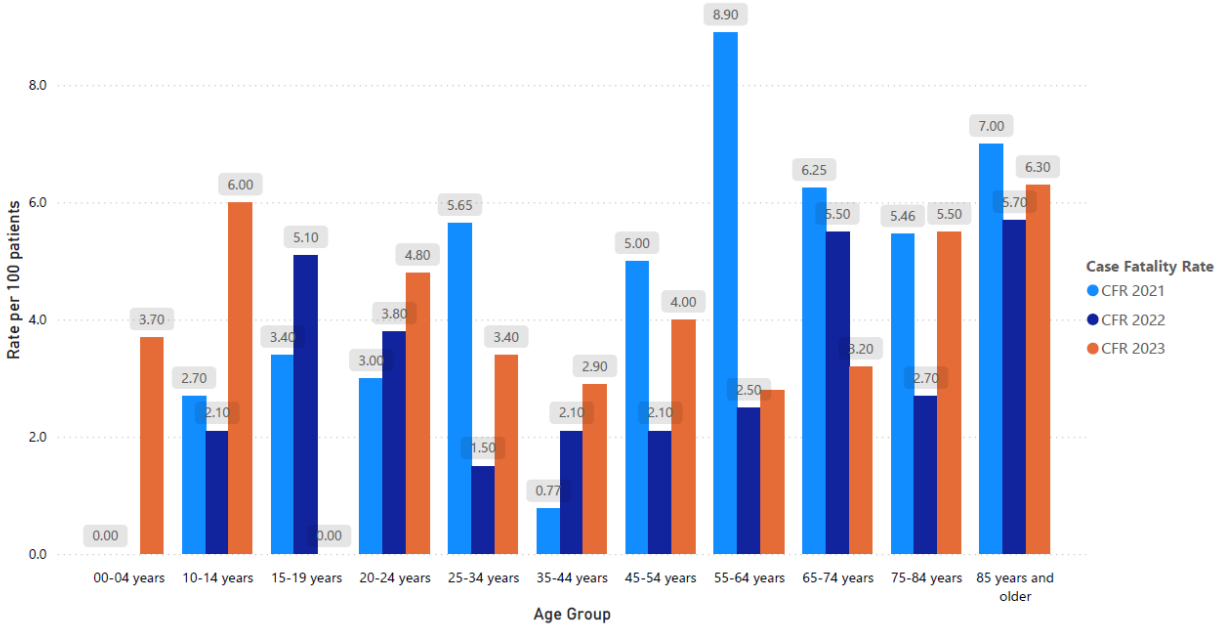


Figure 6. Case Fatality Rate per 100 Trauma Patient in Washoe County 2021 - 2023



INJURY CHARACTERISTICS

Intent of Injury

Unintentional injuries accounted for 92% of trauma, with reported case fatality rate of 3.6 per 100 trauma patients. Intentional injury accounted for 7.6% of overall trauma reported, with a case fatality rate of 7.8 per 100 trauma patients. The intent of injury reported over the span of four years from 2020 – 2023 has consistently predominantly captured unintentional injuries (Figure 7). Among injuries sustained from all intent, self-inflicted injuries are the deadliest (Figure 8). A quarter of patients with self-inflicted injuries die at the hospital with the highest mortality when compared to other injury patterns such as assault, unintentional and undetermined intent in Washoe County. Efforts to prevent both intentional and unintentional injuries remain critical for public health and well-being.

Figure 7. Percent Distribution of Injury by Intent and Year, Washoe County, 2020-2023

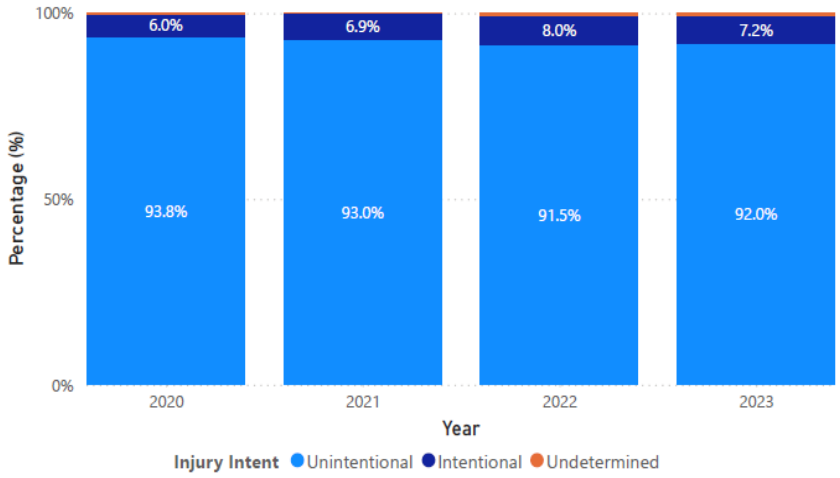
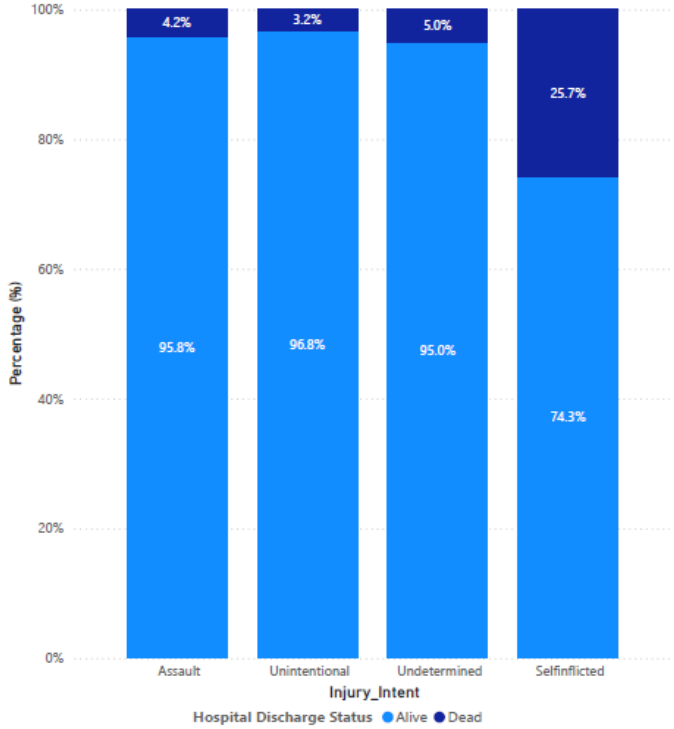


Figure 8. Percent Discharge Status Based on Injury Intent, Washoe County, 2023



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Mechanism of Injury (MOI)

The Mechanism of Injury (MOI) was determined by the International Classification of Diseases, Tenth Revision, Clinical Modification (ICD10-CM) primary external cause code (e-code) reported as the main cause of the injury. ICD10-CM is a standardized classification system of diagnosis in medical reporting for healthcare systems in the United States. The percentage of reported unintentional injuries make up most injuries reported to the registry (Table 2).

Table 2. Fatality Rate Among Trauma Patient Due to Unintentional Injuries, Washoe County, 2023

Unintentional Classification	Total	Deaths	Case Fatality Rate
Cut/Pierce	17	0	0.00
Drowning/Submersion	2	0	0.00
Fall	1394	56	4.02
Fire/Flame	3	0	0.00
Firearm	25	0	0.00
Hot Object/Substance	2	0	0.00
Machinery	10	0	0.00
MVT Motorcyclist	119	3	2.52
MVT Occupant	321	16	4.98
MVT Other	43	0	0.00
MVT Pedal Cyclist	26	1	3.85
MVT Pedestrian	82	8	9.76
MVT Unspecified	1	0	0.00
Natural/Environmental Bites and Stings	13	0	0.00
Natural/Environmental Other	18	0	0.00
Other Specified and Classifiable	48	0	0.00
Other Specified Not Elsewhere Classifia	14	0	0.00
Overexertion	11	0	0.00
Pedal Cyclist Other	67	0	0.00
Pedestrian Other	25	3	12.00
Struck by or Against	62	0	0.00
Transport Other	129	1	0.78
Total	**2432**	**88**	

Case Fatality Rate are per 100 trauma patients.

The highest number of unintentional injuries reported in Washoe County is due to falls. There are approximately 1,394 incidents that resulted in 56 deaths due to fall in 2023 (CFR 4.0 per 100 trauma patients). Out of all pedestrian accidents (MVT or Other) reported, combined pedestrian accidents have the highest case fatality rate in 2023 (CFR 12 per 100) (Table 2).

Based on the analysis of ICD10-CM, the deadliest injuries are sustained from motor vehicle traffic related accidents (combined), suffocation, and firearm (Table 2 and Table 3). Given the large number of unintentional and intentional injuries, death may be prevented with the appropriate timely 911 medical response and care for injuries sustained during intentional incidents.

Table 3. Fatality Rate Among Trauma Patient Due to Unintentional Injuries, Washoe County, 2023

Intentional Classification	Total	Deaths	Case Fatality Rate
Unspecified	11	0	0.00
Suffocation	5	3	60.00
Struck by or Against	57	2	3.51
Other Specified Not Elsewhere Classifia	2	0	0.00
Other Specified and Classifiable	5	0	0.00
MVT Pedestrian	1	0	0.00
MVT Other	1	1	100.00
MVT Occupant	2	0	0.00
Firearm	46	9	19.57
Fall	2	0	0.00
Cut/Pierce	71	1	1.41
Total	**203**	**16**	

Case Fatality Rate are per 100 trauma patients.

Mechanism of Injury by Age Group

Figure 9. Percent of Traumatic Injuries by Intent and Age Groups, Washoe County, 2020-2023

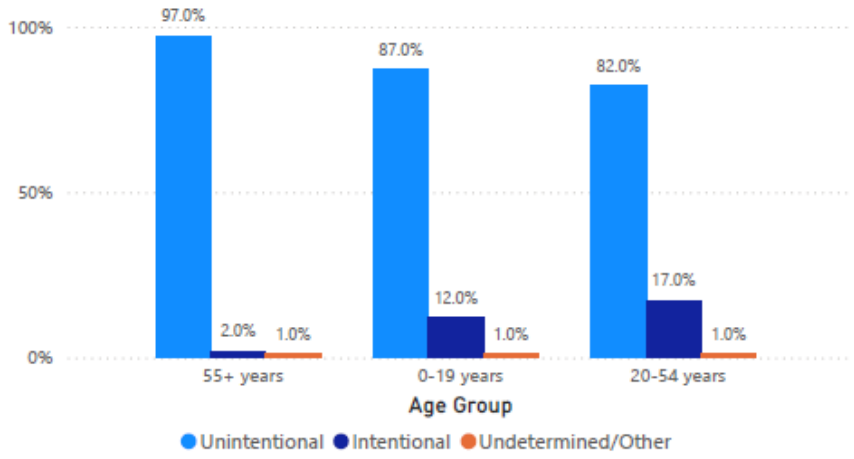


Table 4. Injury due to Selected Mechanism of Injuries by Age Group, Washoe County, 2023

Classification	0 to 19 years old	20 to 54 years old	55 years and older
Cut/Pierce	7.69%	76.92%	15.38%
Drowning/Submersion	50.00%	50.00%	
Fall	3.65%	13.47%	82.88%
Fire/Flame		66.67%	33.33%
Firearm	19.23%	67.95%	12.82%
Hot Object/Substance	100.00%		
Machinery		59.99%	40.01%
MVT Motorcyclist	10.08%	57.14%	32.78%
MVT Occupant	10.22%	49.23%	40.56%
MVT Other	34.09%	38.64%	27.27%
MVT Pedal Cyclist	3.84%	53.85%	42.31%
MVT Pedestrian	14.46%	51.81%	33.74%
MVT Unspecified			100.00%
Natural/Environmental Bites and Stings	61.56%	15.38%	23.06%
Natural/Environmental Other	5.55%	50.00%	44.45%
Other Specified and Classifiable	11.32%	35.85%	52.83%
Other Specified Not Elsewhere Classifia	3.57%	32.14%	64.29%
Overexertion			100.00%
Pedal Cyclist Other	11.94%	35.82%	52.24%
Pedestrian Other	15.99%	44.01%	40.00%
Struck by or Against	19.33%	55.46%	25.21%
Suffocation	19.99%	80.01%	
Transport Other	9.30%	62.02%	28.68%
Unspecified		81.82%	18.18%

Blank cells are indicative of no reporting for specified injuries in the selected age groups.

The largest intentional injuries occurred among those in the 20-54 years old age group in Washoe County and common unintentional injuries occurred among those 55 years and older (Figure 9). Table 4 indicates top mechanisms of intentional and unintentional traumatic injury by selection of age groups: 0-19 years, 20-54 years old, and 55 years and older. Motor vehicle traffic (MVT) accidents were among the top mechanisms of injury across all age groups. The most common type of injury in MVT accidents is MVT passengers' injury. Following previous' years trends, fall injuries are common among individuals 55+ years and older with 82.8% of fall hospitalization attributed to this age group in Washoe County (Table 4) Firearm and assault injuries reported were more common among individuals 0-19 years, and 20-54-years old age group. The statistics within age groups analysis reveal that *firearm injuries are more common among individuals in 20-54 years old age group (57.7%) compared to 0-19 years old age groups (42.3%).* The trend with firearm is very similar to pattern of injuries due to assault or struck by/against, with far more injuries occurring among 20-54 years old compared to 0 -19 years old and 55 years and older age groups. The data shows that mechanism of injuries differ across age groups, and they can be likely due to combination of physiological, behavioral, and environmental factors.

Place of Injury

The Nevada Trauma Registry database captures data on traumatic injuries to improve patient care and outcomes. The place of injury is a crucial aspect, influencing the nature of both prevention and treatment of injuries. The place of injury (POI) collected and identified through ICD-10-CM codes, which allows for detailed classification of the place of injury. ***There were approximately 258 or roughly 10% of total injuries that occurred in Washoe County took place in a local residence.*** Among the top three places of common injuries are interstate highway, recreational places, bedroom, and bathroom (Figure 11 and Figure 10). A significant portion of traumatic injuries reported to the Nevada Trauma Registry occur in the home, especially among the elderly and children such as falls, burns, cuts and poisoning. Road traffic injuries are prevalent because MVT accidents are leading causes of traumatic injuries across all age groups. Sports and recreational injuries are common among children, adolescents, and young adults. By understanding where and how injuries occur, interventions can be more effective to reduce both incidence and severity of traumatic injuries.

Figure 10. Detailed Place of Injury, Washoe County, 2023

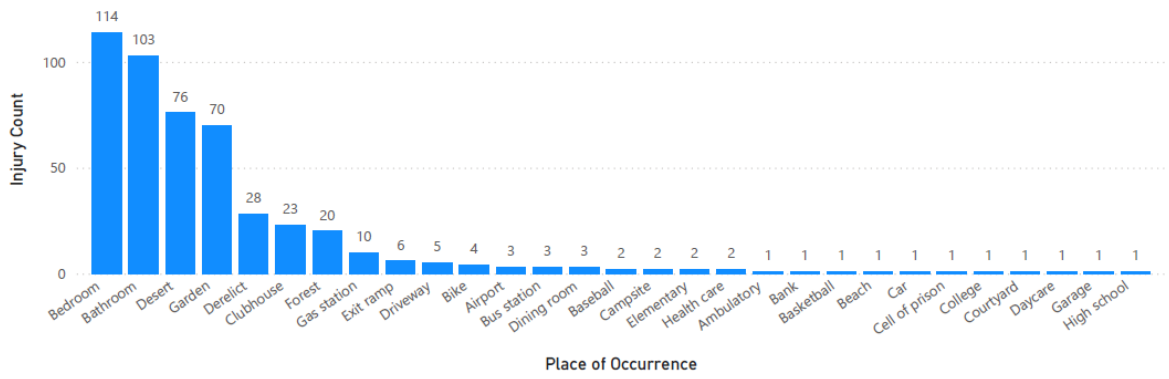
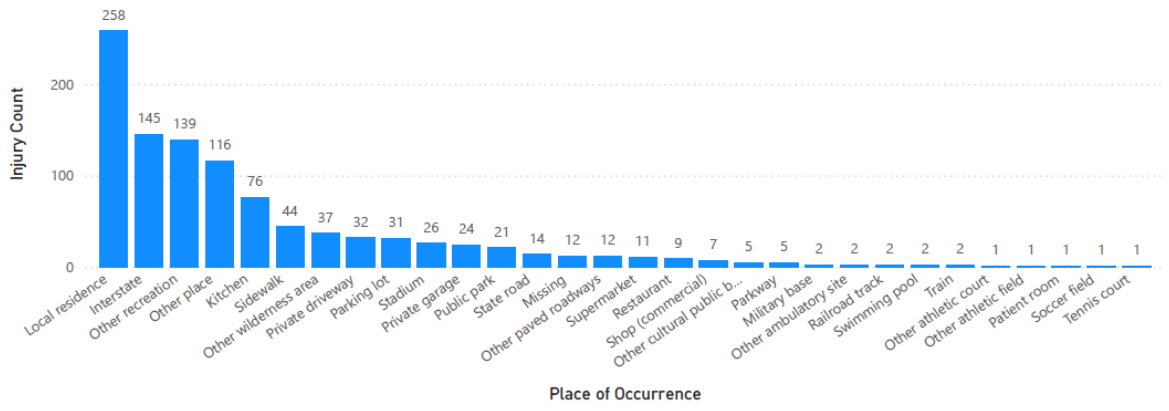


Figure 11. Detailed Place of Injury, Washoe County, 2023



Injury Severity

The Injury Severity Score (ISS) is an ordinal anatomical scoring system that provides an overall score for patients with multiple injuries. It's a valuable tool in trauma medicine for standardized measure of injury severity that often guides treatment decisions and improves trauma outcomes. The score may range from 1-75. The ISS score is calculated as the sum of the squares of the highest Abbreviated Injury Score (AIS) for the three most severely injured region out of six AIS grouped regions: head or neck, face, chest, abdominal or pelvic contents, extremities, or pelvic girdle, and external[6]. The categories of the injury severity are minor, moderate, severe, or very severe. Categories were derived based on the 2016 National Trauma Data Bank Annual Report which assigns ISS into the groups[6].

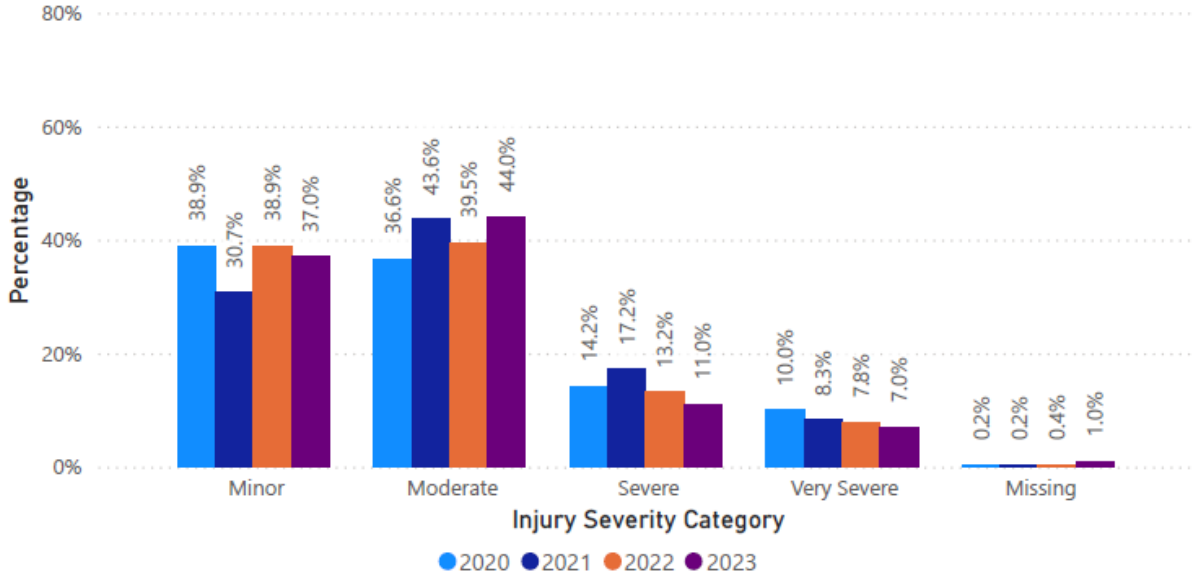
Approximately 81% of all injuries in Washoe County in 2023 were categorized as minor or moderate injuries (Table 5). *While severe and very severe injuries make up only 18% of all traumatic injuries, risk fatality increases with higher ISS*. In 2023, trauma cases with very severe injuries accounted for 55 deaths or 29 deaths per 100 patients vs. 12 deaths or 1 death per 100 patients. Over the span of 2020 – 2023, minor injuries based on ISS decreased from 38.9% to 37.0% *and the percentage decrease seen for very severe injuries from 10% to 7% in Washoe County (Figure 12)*.

Table 5. Rate of Fatality by Injury Severity Category, Washoe County, 2023

Injury Severity	Number of Injuries	Injury Percent	Number of Deaths	Case Fatality Rate
01_Minor	997	37.0%	12	1.20
02_Moderate	1177	44.0%	22	1.90
03_Severe	306	11.0%	16	5.20
04_Very Severe	192	7.0%	55	28.60
Total	**2672**	**99.0%**	**105**	**36.90**

[6] An overview of the injury severity score and the new injury severity score. BMJ Injury Prevention. Accessed

Figure 12. Injury Severity Trends for All Traumatic Injury, Washoe County, 2020-2023



PREHOSPITAL CHARACTERISTICS

Figure 13. Mode of Transportation for All Traumatic Injury, Washoe County, 2020-2023

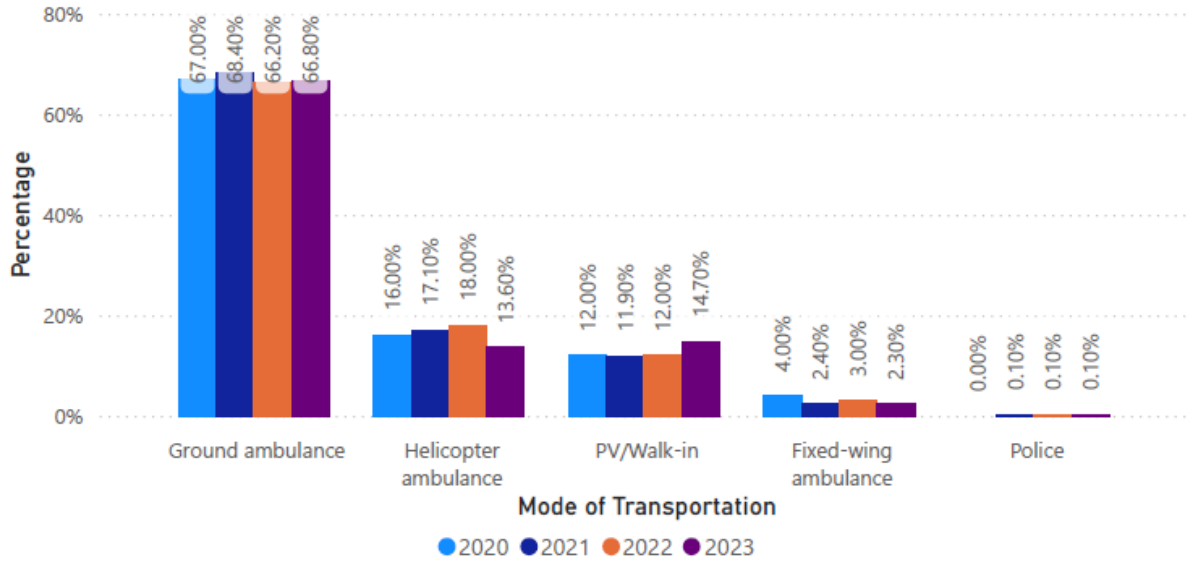


Figure 13 summarizes the distribution of transport by mode of arrival from 2020 – 2023. ***More than 2/3 of trauma patients captured by the Nevada Trauma Registry in Washoe County were transported by ground ambulance (66.8%),*** followed by private vehicle/walk in (14.7%), and by helicopter ambulance (13.6%). The trend for medical transport by helicopter ambulance declined in 2023 (13.6%) compared to 2020 (16%). The majority of transport via helicopter or a fixed-wing ambulance dispatched to injury location outside of the city center. In 2023, injuries occurring in rural areas such as Susanville, Austin, Dayton, Fallon, Hawthrone, and Incline Village did require air transport. In contrast, ***walk in or private vehicles as a means for medical transport increased to 14.7% from 12%,*** from 2023 to 2020, respectively.

SUBSTANCE USE

Trends for the number of patients that were tested for substance use increased year to year (Figure 14). ***Alcohol was confirmed to be present in a large percentage of patients with intentional injuries like assault and/or self-inflicted wounds***. As summarized in Table 19, approximately 34.5% assault patients with traumatic injury in Washoe County had test-confirmed alcohol use above legal limits and Approximately 25.7% of reported self-inflicted wounds reported in 2023 had test-confirmed alcohol use above legal limits. Trace alcohol level present in 6.5% of assault patients and 11.4% of self-inflicted patients. Among patients with unintentional injuries, only 9.7% had test-confirmed alcohol use above legal limits and 3% had test-confirmed trace level alcohol use (Figure 15).

Figure 14. Detected Substance Use Among Trauma Patients, Washoe County, 2020-2023

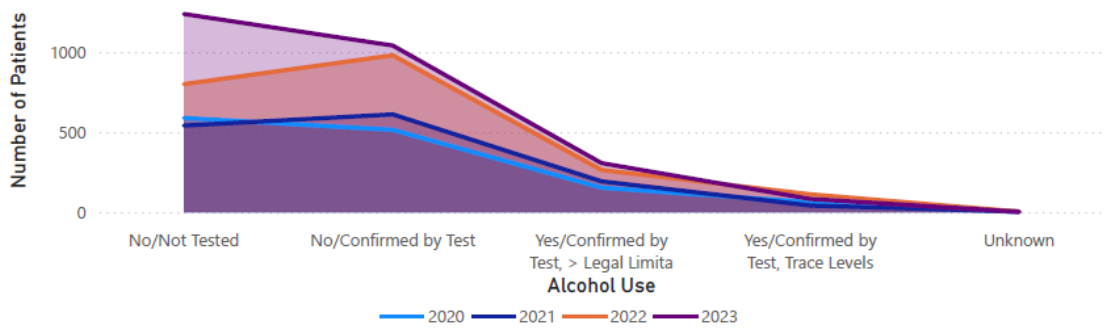


Figure 15. Detected Substance Use Among Trauma Patient by Mechanism of Injury. Washoe County, 2023

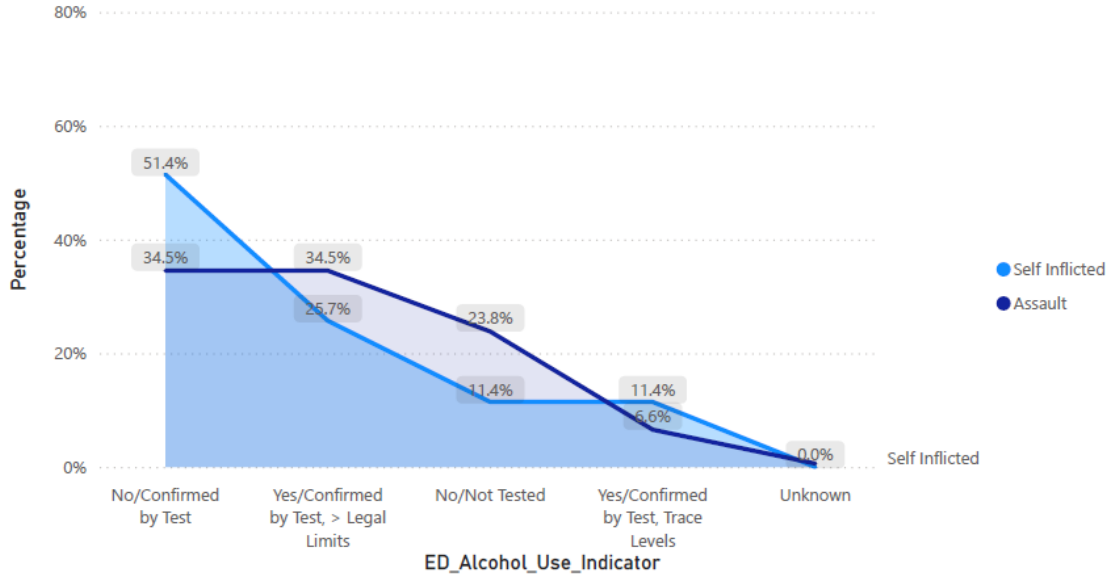
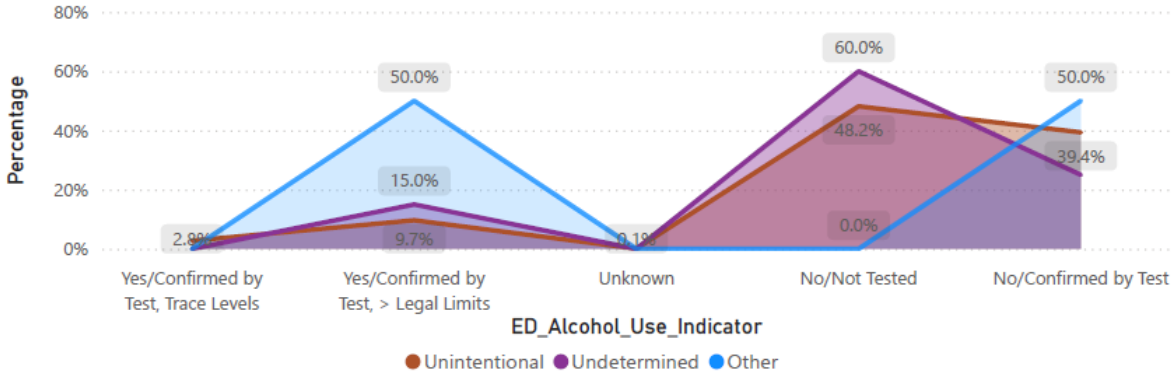


Figure 16. Detected Substance Use Among Trauma Patients by Intent, Washoe County, 2023



PATIENT OUTCOMES

Patient outcomes highlighted in this section include median length of stay spent in an intensive care unit, total length of stay (LOS) by ISS category and top ten highest median length of stay by MOI. Fifteen percent (15%) of patients with traumatic injury classified as minor were discharged within a week. The length of stay increases as the severity of the injury increases, as demonstrated by nearly 27.6% of patients with severe traumatic injury, and 32.0% of patients with very severe traumatic injuries being hospitalized for more than four weeks (Figure 17). With increasing injury score, hospital LOS increases. Median length of stay spent in Intensive Care Unit (ICU) also shares a similar pattern (Table 6). Median LOS for ICU stay for all injuries doubles for severe and very severe category, 3 and 6 days, respectively. The top three highest ICU length of stay are reported due to injuries involving drowning/submersion (9 days), suffocation (5 days), and motor vehicle traffic pedestrian accidents (4 days).

Figure 17. Incidents by Length of Stay and Severity, Washoe County, 2023

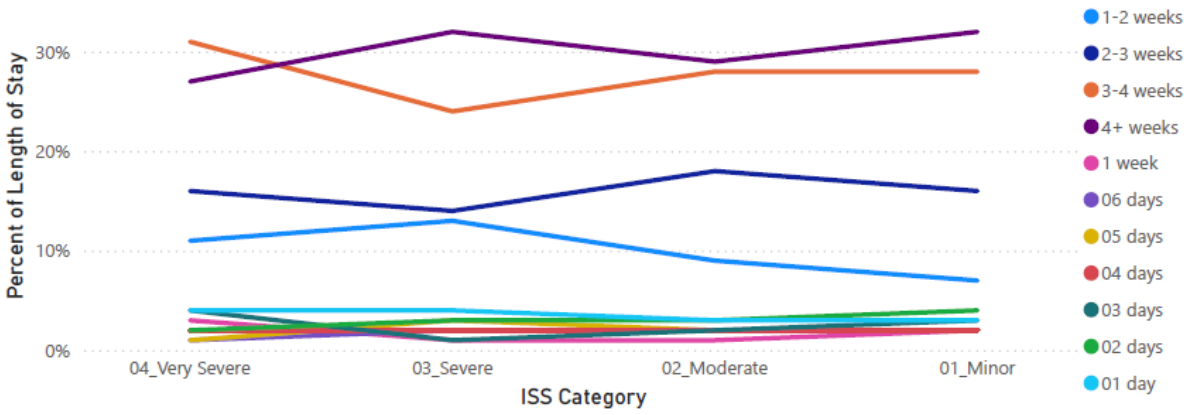


Table 6. ICU Median Length of Stay, Washoe County, 2020-2023

ISS Category	2020	2021	2022	2023
Minor	0	0	0	0
Moderate	2	2	2	2
Severe	4	4	4	3
Very Severe	6	5	6	6

CONCLUSION

The burden of trauma injuries is rising in Washoe County as the region's population increases. Trauma registries play a crucial role in documenting and analyzing injuries to address disparities and improving trauma care accessibility. In 2023, hospitalized trauma patients aged 10-14 years old and 85+years old had the highest case fatality rate compared to case fatalities in all other age groups. Motor vehicle and transport related accidents continue to be a common preventable unintentional injury. Local residential and business streets, recreational areas and interstate highways are among the most common places of injury reported in Washoe County. In addition to motor vehicle injuries, falls are the second most common unintentional injury reported. Falls also account for a large proportion of reported trauma injuries to the registry. Intentional injuries are more commonly reported among patients aged 20-54 years old, and injuries from this category are likely to test positive for alcohol use (trace level or above legal limit). Roughly 18% of traumatic injuries are severe and very severe with median ICU length of stay for more than 3 days.

Due to the nature of registries and extensive inclusion criteria, this data report highlights a subset of patient population that utilize 911 system and trauma centers. However, many high-risk trauma patients receive initial care in non-trauma facilities. Those cases often are unrepresented in registry statistics, as a result, the true burden of injuries Washoe County are likely to be more extensive than described in this report.

Suggested Citation

Northern Nevada Public Health, Division of Epidemiology and Public Health Preparedness. (June 2024). Washoe County Trauma Data Report 2023. Reno, NV.

Additional Information

For additional information regarding the Washoe County Trauma Data Report contact:

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APPENDIX A – MECHANISM OF INJURY DESCRIPTION(S)

Cut/Pierce
Assault by sharp object
Contact with other sharp objects
Contact with sharp glass
Intentional self-harm by sharp object
Fall
Fall due to ice and snow
Fall from bed
Fall from chair
Fall from cliff
Fall from non-moving wheelchair, nonmotorized scooter and motorized mobility scooter
Fall from other furniture
Fall from, out of or through building or structure
Fall on and from ladder
Fall on and from playground equipment
Fall on and from scaffolding
Fall on and from stairs and steps
Fall on same level from slipping, tripping and stumbling
Fall while being carried or supported by other persons
Fall, jump or diving into water
Other fall from one level to another
Other fall on same level due to collision with another person
Other slipping, tripping, and stumbling and falls
Pedestrian conveyance accident
Fire/Flame
Exposure to ignition of highly flammable material
Firearm
Accidental discharge and malfunction from other and unspecified firearms and guns
Accidental handgun discharge and malfunction
Accidental rifle, shotgun and larger firearm discharge and malfunction
Assault by handgun discharge
Assault by other and unspecified firearm and gun discharge
Intentional self-harm by handgun discharge
Intentional self-harm by other and unspecified firearm and gun discharge
Legal intervention
Hot Object/Substance
MVT Motorcyclist
Motorcycle rider injured in collision with car, pick-up truck or van
Motorcycle rider injured in collision with fixed or stationary object
Motorcycle rider injured in collision with heavy transport vehicle or bus

APPENDIX A CONTINUED – MECHANISM OF INJURY DESCRIPTION(S)

Motorcycle rider injured in collision with two- or three-wheeled motor vehicle
Motorcycle rider injured in non-collision transport accident
Motorcycle rider injured in other and unspecified transport accidents
MVT Occupant
Car occupant injured in collision with car, pick-up truck or van
Car occupant injured in collision with fixed or stationary object
Car occupant injured in collision with heavy transport vehicle or bus
Car occupant injured in collision with pedestrian or animal
Car occupant injured in non-collision transport accident
Car occupant injured in other and unspecified transport accidents
Occupant of heavy transport vehicle injured in non-collision transport accident
Occupant of pick-up truck or van injured in collision with car, pick-up truck, or van
Occupant of pick-up truck or van injured in collision with fixed or stationary object
Occupant of pick-up truck or van injured in collision with heavy transport vehicle or bus
Occupant of pick-up truck or van injured in non-collision transport accident
Occupant of special all-terrain or other off-road motor vehicle, injured in transport accident
MVT Pedal Cyclist
Pedal cycle rider injured in collision with car, pick-up truck or van
Pedal cycle rider injured in other and unspecified transport accidents
MVT Pedestrian
Pedestrian injured in collision with car, pick-up truck or van
Machinery
Contact with other and unspecified machinery
Natural/Environmental Other
Contact with dog
Contact with other mammals
Toxic effect of contact with venomous animals and plants
Other Specified and Classifiable
Caught, crushed, jammed or pinched in or between objects
Discharge of firework
Legal intervention
Overexertion
Other slipping, tripping and stumbling and falls
Pedal Cyclist
Pedal cycle rider injured in collision with car, pick-up truck or van
Pedal cycle rider injured in collision with fixed or stationary object
Pedal cycle rider injured in collision with other pedal cycle
Pedal cycle rider injured in collision with pedestrian or animal
Pedal cycle rider injured in non-collision transport accident
Pedal cycle rider injured in other and unspecified transport accidents

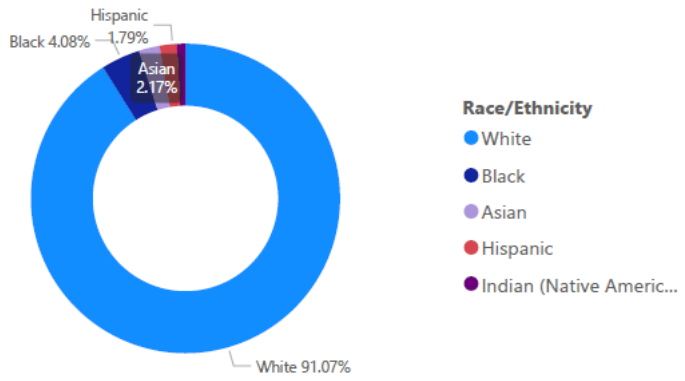
APPENDIX A CONTINUED – MECHANISM OF INJURY DESCRIPTION(S)

Pedestrian Other
Pedestrian injured in collision with car, pick-up truck or van
Pedestrian injured in other and unspecified transport accidents
Struck by or Against
Accidental hit, strike, kick, twist, bite or scratch by another person
Accidental striking against or bumped into by another person
Assault by blunt object
Assault by bodily force
Other slipping, tripping and stumbling and falls
Striking against or struck by other objects
Striking against or struck by sports equipment
Struck by thrown, projected or falling object
Accidental hit, strike, kick, twist, bite or scratch by another person
Transport
Accident to nonpowered aircraft causing injury to occupant
Animal-rider or occupant of animal-drawn vehicle injured in transport accident
Occupant of special all-terrain or other off-road motor vehicle, injured in transport accident
Unspecified
Assault by unspecified means

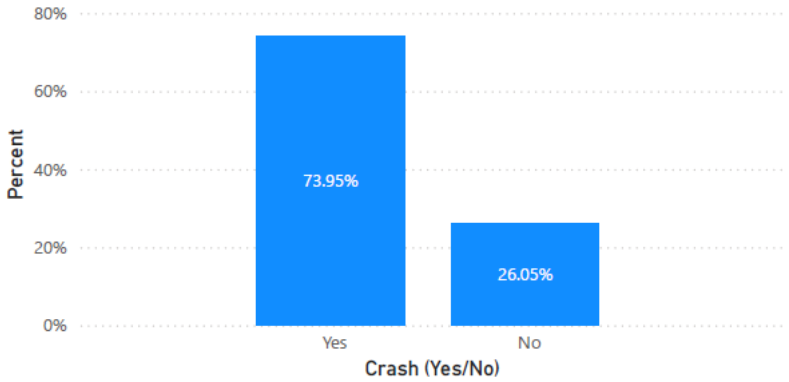
APPENDIX B: Motor Vehicle Non-Adjudicated Citation Statistics, Washoe County, 2018-2021

Data adopted from ***Washoe County, Nevada Non-Adjudicated Citations 2018-2021: Failure to Use Due Care*** NV Law Enforcement Non-Adjudicated Traffic Citation Data obtained from the Nevada Office of Traffic Safety #TS-2023-UNLV-00077.

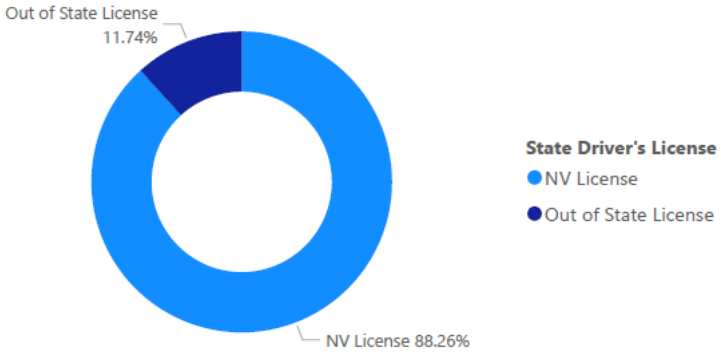
Percentage of Non-Adjudicated Citation based on Race, Washoe County, 2018-2021



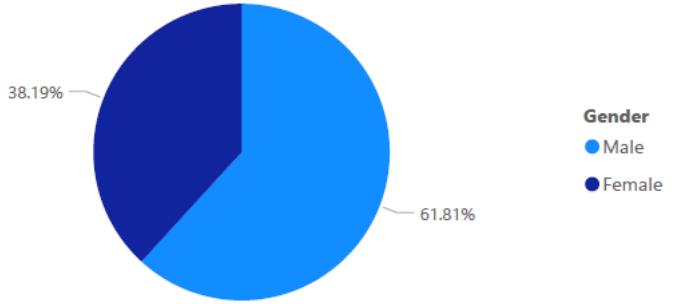
Percentage of Failure to Use Due Care, Impede Traffic, Careless Driving, Aggressive Driving, and Reckless Driving Citations based on the Crash Outcome, Washoe County, 2018 -2021



Percentage of Non-Adjudicated Citation based on Motor Residency, Washoe County, 2018-2021



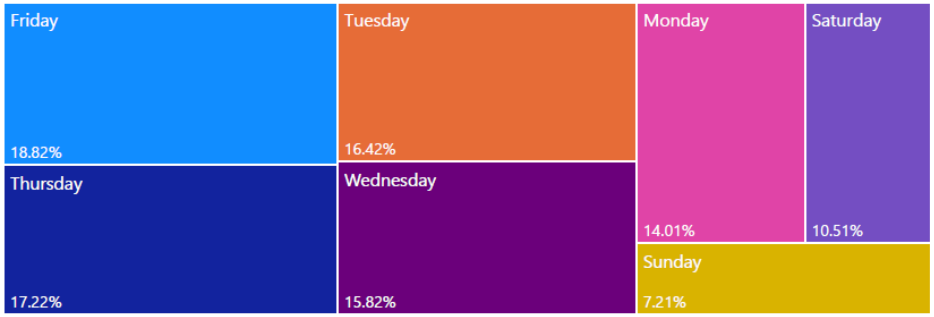
Percentage of Failure to Use Due Care, Impede Traffic, Careless Driving, Aggressive Driving, and Reckless Driving Citations based on the Driver's Birth Assigned Gender, Washoe County, 2018 - 2021



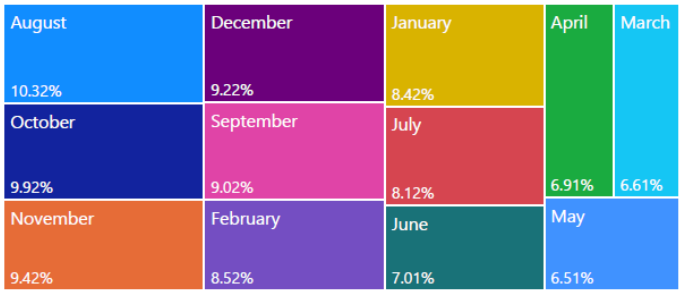
APPENDIX C: Motor Vehicle Non-Adjudicated Citation Statistics, by Month, Day and Time, All Age Group, Washoe County, 2018-2021

Data adopted from ***Washoe County, Nevada Non-Adjudicated Citations 2018-2021: Failure to Use Due Care*** NV Law Enforcement Non-Adjudicated Traffic Citation Data obtained from the Nevada Office of Traffic Safety #TS-2023-UNLV-00077.

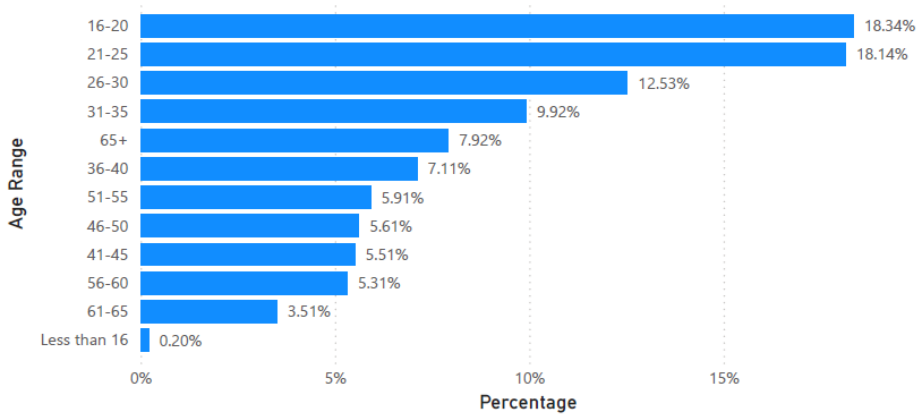
Percentage of Failure to Use Due Care, Impede Traffic, Careless Driving, Aggressive Driving, and Reckless Driving Citations based on Days of the Week



Percentage of Failure to Use Due Care, Impede Traffic, Careless Driving, Aggressive Driving, and Reckless Driving Citations based on Days of the Week



Percentage of Failure to Use Due Care by Age Range



Percentage of Failure to Use Due Care, Impede Traffic, Careless Driving, Aggressive Driving, and Reckless Driving Citations based on the Time of Day

Time Block	Percent
12:00am -3:59am	1.80%
8:00pm -11:59pm	7.91%
4:00am -7:59am	11.61%
8:00am -11:59am	17.42%
12:00pm -3:59pm	28.43%
4:00pm -7:59pm	32.83%
Total	**100.00%**

NORTHERN NEVADA

Public Health

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NORTHERN NEVADA Public Health
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Staff Report
Emergency Medical Services Advisory Board
Board Meeting Date: August 1, 2024

DATE: July 26, 2024

TO: Emergency Medical Services Advisory Board

FROM: Andrea Esp, Preparedness and EMS Program Manager
775-326-6042, aesp@nnph.org

SUBJECT: **EMS Oversight Program and Performance Data Updates -** Joint Advisory Committee Activities, EMS Strategic Plan, Special Projects, EMS Planning, Data Performance, REMSA Health Franchise Agreement Updates, REMSA Health Exemption Requests, Community Services Department Reviews, Mass Gatherings and Special Events Reviews

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EMS Partners – Joint Advisory Committee (JAC)

JAC meetings within the fourth quarter of fiscal year (FY) 2024 focused on the topics of the upcoming REMSA Health Franchise Agreement revisions, growing collaboration between EMS and police response for suicidal/behavioral health calls, Emergency Medical Dispatch response priorities, and implementation of data sharing and standardization amongst all EMS agencies.

EMS Strategic Plan

Progress on the Washoe County EMS Strategic Plan 2023 – 2028 is ongoing.

Special Projects

EMS Data Standardization Development Project – As outlined in the Interlocal Agreement under duties of the EMS Oversight Program, monitoring response and performance of each agency providing EMS, systems characteristics, data and outcomes of the EMS in RENO, SPARKS, WASHOE COUNTY, FIRE and REMSA has become increasingly more complex since 2014. For nearly a decade, reporting of computer aid dispatch data and responses have been disparate in format submissions to the EMS Oversight Program. The EMS Data Standardization Development Project is a proposal to modernize and reduce the complexities of disparate reporting elements to a standardized format that can be easily understood and analyzed regardless of jurisdictional boundaries. The goal for uniformity for data across all EMS providers aims to significantly improve information gathering and quality assurance processes. The project's proposal was introduced to the Washoe County EMS JAC for continuous feedback and discussions amongst the EMS agencies. This project is ongoing, and each EMS agency will be joining an electronic platform called ESO to collect standardized data across agencies.

EMS Planning

During this fiscal year, the program updated both the Multi-Casualty Incident (MCI) Plan and the Alpha MCI Plan. The planning process to update the Mutual Aid Evacuation Agreement (MAEA) has begun. These plans will continue to be updated annually. A training video for the MAEA was filmed in March and April in collaboration with multiple healthcare partners. In May, a full-scale MCI Exercise was performed with multiple collaborative hospital and healthcare partners.

Data Requests

Table 1: Data Requests Q4 FY 2024

Requestor	Summary of request	Date of request	Request completed
Truckee Meadows Fire Protection District	P1 Call Analysis and Station Maps	5/2/2024	5/31/2024
Truckee Meadows Fire Protection District	P1-P3 Regional Call Volume Map 2021-2023	5/2/2024	5/31/2024
Sparks Fire Department	Quarterly Sparks Jurisdiction Performance Report 2024	Ongoing	6/27/2024

REMSA Health Franchise Agreement

Through the Joint Advisory Committee, the REMSA Health Franchise Agreement is being reviewed for potential revisions. Meetings to address potential revisions started in June 2024 and anticipates to conclude in August 2024.

Community Services Department Reviews

The EMS Oversight Program staff reviews and analyzes project applications received from the Planning and Building Division of the CSD and City of Reno Housing and Urban Development (HUD) and provides feedback. Program staff received fifteen (15) project applications and reviewed thirteen (13) in the fourth quarter of fiscal year 2024 and had no comments and/or concerns regarding impact on EMS response.

Special Event/Mass Gatherings Applications

The EMS Oversight Program received six (6) Mass Gathering applications and reviewed seven (7) in the fourth quarter of fiscal year 2024. The Program provided a letter to Nevada Emergency Medical Services Program informing the program NNPH will provide them with the appropriate information received mass gatherings so they can conduct inspections.

STAFF REPORT
EMERGENCY MEDICAL SERVICES ADVISORY BOARD
MEETING DATE: August 1, 2024

TO: EMS Advisory Board Members

FROM: Adam Heinz, Chief Operating Officer, REMSA Health

SUBJECT: EMSAB Report

SUMMARY

Update of the emergency medical services (EMS) operations for the 2nd quarter of 2024.

DATA PERFORMANCE REPORTS

	Apr 2024	May 2024	Jun 2024	TOTAL
TOTAL EMS RESPONSES	7,909	8,294	8,287	24,490
TOTAL EMS TRANSPORTS	5,113	5,198	5,171	15,482
TOTAL EMS RESPONSES CANCELED	2,800	3,101	3,121	9,022

*Includes Priority 1, 2, 3, 4, 9, 99 calls for service within the franchise service area.

QUARTERLY FRANCHISE DATA REPORTING

MUTUAL AID

To comply with section 12.2 (a) of the REMSA Franchise Agreement Amended August 25, 2022.

Number of incidents when a co-response partner is requested for mutual aid within the REMSA Health service area.

	TMFR	Percentage of Total Responses	Reno Fire	Percentage of Total Responses	Storey County Fire	Percentage of Total Responses
April 2024	11	0.1%	7	0.08%	2	0.02%
May 2024	11	0.1%	7	0.08%	0	0.0%
June 2024	9	0.1%	11	0.1%	0	0.0%
Total	**31**	0.1%	25	0.1%	2	0.0%

TIERED RESPONSE REPORTING

To comply with section 12.2 (b) of the REMSA Franchise Agreement Amended on August 25, 2022.

CALL PROCESSING

Call received by REMSA Health's Regional Emergency Communications Center (RECC) to final EMD determinate.

	P1	P2	P3	P9	Grand Total
April 2024	02:28	02:41	02:40	02:45	02:36
May 2024	02:26	02:35	02:32	02:58	02:32
June 2024	02:24	02:33	02:31	02:54	02:30
Quarterly Summary	02:26	02:36	02:34	02:52	02:33

SYSTEM ILS RESPONSES & NUMBER OF ILS RESPONSES AND TRANSPORTS TO ILS DETERMINATES

	Total ILS Response	Total ILS Transports	ILS Responses to ILS Determinants	ILS Transports to ILS Determinants
April 2023	684	528	623	479
May 2023	604	462	554	418
June 2023	698	541	642	490
Grand Total	1,986	1,531	1,819	1,387

*Total ILS responses includes ILS co-response with an ALS unit, interfacility, and ILS determinate responses.

NUMBER OF ILS RESPONSES UPGRADED TO ALS

The number of ILS eligible calls and responses that, once an ILS unit arrived on scene an ALS unit was requested to respond to provide care and transport.

Month	ILS Responses	ALS Intercepts	% of ILS Calls with ALS Intercept
April 2024	684	12	1.8%
May 2024	604	6	0.9%
June 2024	698	7	1.0%

AVERAGE ILS RESPONSE TIME BY ZONE

The response time target for low acuity, non-emergent ILS calls shall be less than 19:59 for Zone A, 24:59 Zone B, 29:59 Zone C, 39:59 Zone D, & ASAP for Zone E.

	Average Response Time Zone A	Average Response Time Zone BCD
April 2024	18:52	19:17
May 2024	18:44	20:15
June 2024	17:00	07:49
Grand Total	**18:11**	**16:52**

AVERAGE ON SCENE TIME FOR ILS

	Avg ILS Scene Time
April 2024	20:19
May 2024	20:34
June 2024	19:41
Grand Total	**20:11**

NUMBER OF CALLS REQUIRING FIRE RIDERS ON AN ILS TRANSPORT

Month	Number Of ILS Calls Requiring Fire to Ride into Hospital	Percentage of Responses
April 2024	0	0
May 2024	0	0
June 2024	0	0

NUMBER OF ILS UNITS PERCENTAGE BASED ON DAILY STAFFING

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
ALS	32	43	38	41	42	40	36
ILS	5	6	9	8	9	8	7
	13%	12%	19%	16%	18%	17%	16%

EMS OPERATIONS UPDATES

EMS Operations has seen an approximate 4% increase in our transports over this last quarter. This increase has led to a longer time on task for each call.

We hired and trained (81) new field providers. (55) part-time Special Events EMTs and (26) full-time providers. (12) EMTs, (6) AEMTs, and (8) Paramedics.

In June, 5 new ambulances were state-inspected and placed into service.

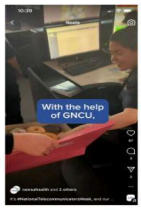
PUBLIC RELATIONS UPDATES

REMSA HEALTH

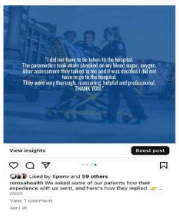
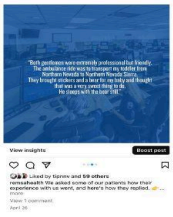
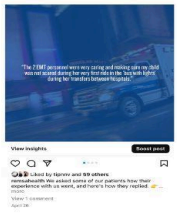
PUBLIC RELATIONS
APRIL 2024

April public relations efforts focused on digital communications and public education media coverage.

We celebrated National Public Safety Telecommunicators Week



We highlighted the way REMSA Health paramedics and EMTs cared for patients.

We shared news through our monthly email communication.

The Center for Integrated Health and Community Education launched a First On The Scene Class. Katie Timmons was interviewed about the benefits of the class.

REMSA Health joined with Nevada Donor Network to Celebrate Donate Life Month by reuniting an infant donor's mom and a REMSA Health dispatcher.

REMSA HEALTH

REMSA HEALTH

PUBLIC RELATIONS
MAY 2024

May public relations efforts focused on celebrating EMS Week, announcements about achieving Emergency Fire Dispatch ACE, and promotion of education courses.

We celebrated the 50th anniversary of National EMS Week. More than 25 individuals were honored with awards (selected from more than 150 nominations!). We hosted barbecues and a food truck, as well as a clinical competition, chair massages, giveaways and family-fun events.

In 2021, in addition to continuing to dispatch its emergency medical resources throughout Washoe County as a Medical ACE, REMSA Health began dispatching fire and medical resources for Truckee Meadows Fire Protection District (TMFPD). This public-private partnership provided REMSA Health with the opportunity to become an EFD ACE as well. Upon successfully completing this rigorous self-assessment, the ACE designation certifies that the center is performing at or above industry standards. REMSA Health now provides a level of emergency fire dispatch service never before offered in Washoe County, enhancing safety for our community.

Director Jenny Walters provided an in-depth interview on Face the State.

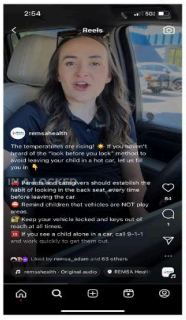
REMSA HEALTH

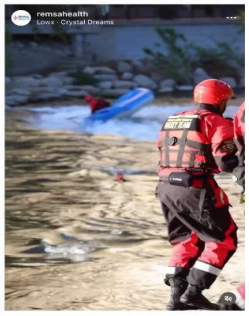
REMSA HEALTH

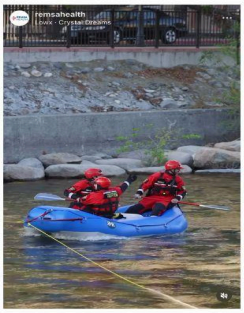
PUBLIC RELATIONS
JUNE 2024

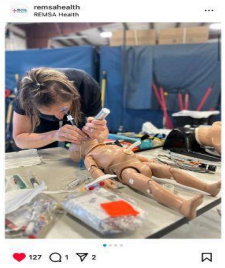
June public relations efforts focused on sharing heat-relataed health topics, provider training, and special teams training.

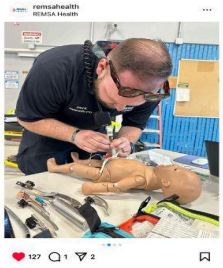
Social media posts included a continuation of recognizing our EMS Week award winners, training collaboration with the Washoe County HASTY team, and health and safety information.











REMSA Health hosted a press conference for all local media to share information on heat-related illness, the dangers of leaving children unattended in hot cars and how to practice safety in and around the water. The event received coverage on all three local television networks, as well as on Univision.


With temperatures expected to reach near triple digits this weekend, REMSA and the SPCA offered tips on how to keep kids and pets safe.

STAFF REPORT
EMERGENCY MEDICAL SERVICES ADVISORY BOARD
MEETING DATE: August 1 , 2024

TO: EMS Advisory Board Members
FROM: Jeff Sullivan, EMS Division Chief

SUBJECT: City of Sparks Fire Department EMSAB Report

SUMMARY

Update of the emergency medical services (EMS) operations for the second quarter of 2024 .

DATA PERFORMANCE REPORTS

	April	May	June	TOTAL
TOTAL EMS RESPONSES	958	1,063	1,075	3,097
TOTAL EMS TRANSPORTS	0	0	0	0
TOTAL EMS RESPONSES CANCELLED	227	245	247	719
MUTUAL AID RESPONSES	2	9	4	15
MUTUAL AID TRANSPORTS	0	0	0	0
MUTUAL AID RESPONSES CANCELLED	0	4	2	6

EMS OPERATIONS UPDATES

Following the arrival of our first ambulance, the unit was outfitted with the necessary equipment and supplies and passed inspection by the Nevada EMS office.

During this quarter, a service agreement with REMSA Health was reached which allows the Sparks Fire Department (SFD) to provide ground ambulance transport services effective July 1st, 2024 within a specified district. This district is primarily Sparks Fire district 5 (Wingfield Springs) with a small map section from district 4 added due to its close proximity to district 5.

The REMSA Health & Sparks Fire Department service agreement in addition to a billing agreement were presented and approved at the Sparks City Council meeting on June 24, 2024.

Training:

Department wide, Emergency Vehicle Operation Course (EVOC) training was provided for the new ambulance with makeup sessions provided in June and July. This course focuses on safe driving and operation of the ambulance.

Operational ambulance training was provided throughout the month of June, 2024. This training provided hands on training with the ambulance and equipment.

The SFD's medical director, John Hardwick provided an interaction based lecture regarding narcotics and non narcotics for pain management, sedation, medication assisted intubation, and management of fever.

IV Tylenol and pelvic binder training was provided to all battalions prior to implementation.

Several new personnel successfully passed their EMS field training which was a requirement prior to being allowed to operating independently on a fire engine.

STAFF REPORT
EMERGENCY MEDICAL SERVICES ADVISORY
BOARD MEETING DATE: August 1, 2024

TO: EMS Advisory Board Members

FROM: **Joe Kammann, Division Chief**
Truckee Meadows Fire Protection District

SUBJECT: EMSAB Report

SUMMARY

Update of the emergency medical services (EMS) operations for the 2nd quarter of 2024.

DATA PERFORMANCE REPORTS

	April	May	June	TOTAL
TOTAL EMS RESPONSES	634	719	675	2,028
TOTAL EMS TRANSPORTS	189	198	195	582
TOTAL EMS RESPONSES CANCELLED	148	199	126	473
MUTUAL AID RESPONSES	2	6	12	20

EMS OPERATIONS UPDATES

Operations Update– TMFR has deployed our Rapid Extraction Module Support (REMS) team to several fires throughout the western region of the country. Each REMS team unit will be comprised of 4 personnel with advanced training on high and low angle rescues, as well as full Advanced Life Support capabilities. The team is currently made up of over 25 members of the department, spanning all ranks from Firefighter to Captain.

The District, has completed our transition to the new ESO charting software. Both fire and EMS incidents will now be completed under this upgraded program, which allows us the ability to better monitor response data and treatment outcomes. The data analysis capabilities of this software will far exceed our prior abilities and can produce detailed Quality Assurance reports on a multitude of patient care parameters to ultimately provide better care to our citizens.

After years of trying to determine the feasibility of a regional position funded by TMFR, RFD, and SFD, we have finally been successful at securing a Regional Hazardous Material Response Team (RHMRT) Coordinator. Nick Klaich, of the Sparks Fire Department, has been selected to fill the Division Chief role for this position. Chief Klaich will be invaluable at providing

hazardous materials training for our team technicians, but will also help enhance the team's medical capabilities when treating patients exposed to the vast array of toxins present in the community. Chief Klaich will be working with TMFR staff to provide several advanced medical trainings in the next few months. We look forward to this collaboration and are excited to see how he can help enhance our specialty medical programs.

<u>Administrative Update</u>- We are proud to announce that 4 of our new probationary Firefighters have completed their 12-month probation process. We also have 3 Firefighter/Paramedic recruits that just successfully graduated from our regional 3-month fire academy. They are now assigned to the line in a training capacity under the guidance of a senior firefighter for 3 more months before being placed on their own. Lastly, the most recent hiring process for Firefighter and Firefighter/Paramedic has been completed, and we have 5 FF/PM and 3 FF/EMT positions that have been offered and accepted. These recruits will be starting the upcoming fire academy in the fall after completing their physicals and background check process.

<u>Training Update</u> – The second quarter training accomplishments include completion of our in-house EMS Academy for our probationary employees that just graduated from fire academy training. The EMS Academy is a comprehensive program that addresses training aspects including ambulance operations, in-depth medical protocol review, crew management, medication administration, and advanced medical lectures and scenarios. This training was opened up to all of our staff, and continuing education hours were provided to all attendees.

With the transition to the summer heat and wildfire dangers, the EMS Division assisted with our annual RT-130 wildland training requirements for all firefighters. Within this fire-based training opportunity we were able to insert an "Incident-Within-Incident" event to simulate the treatment and removal of an injured firefighter on the fireline. This successful training spanned several weeks, and involved our regional partners from all of TMFR's neighboring agencies.

STAFF REPORT
EMERGENCY MEDICAL SERVICES ADVISORY
BOARD MEETING DATE: August 1, 2024

TO: EMS Advisory Board Members

FROM: Cindy Green

SUBJECT: City of Reno Fire Department EMSAB Report

SUMMARY

Update of the emergency medical services (EMS) operations for the second quarter of 2024.

DATA PERFORMANCE REPORTS

	April	May	June	TOTAL
TOTAL EMS RESPONSES	3,820	3,568	3,608	10,996
TOTAL EMS TRANSPORTS	3	3	7	13
TOTAL EMS RESPONSES CANCELLED	1,268	1,164	1,022	3,454
MUTUAL AID RESPONSES	11	10	11	32
MUTUAL AID TRANSPORTS	3	3	7	13
MUTUAL AID RESPONSES CANCELLED	4	3	4	11

EMS OPERATIONS UPDATES

During the second quarter of 2024, the Reno Fire Department focused on implementing our new charting platform (ESO) for both fire and EMS documentation. Additionally, we held training on active assailant response in the stations and scheduled a regional training for the same topic to be held at the end of July. We deployed an additional ambulance to the north valleys to support an area that at times has limited access and extended response times, for extra support. We received new medical treatment equipment (video laryngoscope blades and new medications) that will be deployed by the end of the year after sufficient training is completed.
EMT - 76 AMT - 124 Paramedic - 94