NEVADA DIVISION of PUBLIC and BEHAVIORAL HEALTH

STATE OF NEVADA

BUREAU OF HEALTH PROTECTION AND PREPAREDNESS

ANNUAL TRAUMA REGISTRY REPORT 2023

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Nevada Department of Health and Human Services
DIVISION OF PUBLIC AND BEHAVIORAL HEALTH
Helping People. It's Who We Are and What We Do.

Table of Contents

TABLES

Figures

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PURPOSE OF REPORT

This report aims to provide a picture of trauma occurrences within the state of Nevada based on data submitted by hospitals to the Nevada Trauma Registry (NTR). This report presents data in a usable format for local health authorities, healthcare providers, the media, and the public. Nevada regulations require the Nevada Division of Public and Behavioral Health (DPBH) to prepare an Annual Trauma Report in accordance with Nevada Administrative Code (NAC) 450B.768. This annual report's data is based on the calendar year and summarizes data submitted by Nevada hospitals regarding reported traumas handled by each facility.

It should be noted that the data depicted in this report reflects only data entered and reported to the NTR. Therefore, if a facility fails to report trauma data to the registry, it is not reflected in this report. In addition, ongoing staffing challenges during the pandemic contributed to challenges in reporting.

The information included in this report is accurate to the best knowledge of all reporting facilities and the State of Nevada Trauma Registry.

INTRODUCTION

What is the Nevada Trauma Registry (NTR)?

Per Nevada Revised Statutes (NRS) 450B.238 and Nevada Administrative Code (NAC) 450B.768 the NTR was established in 1987 to collect data on persons who sustain a physical (blunt or penetrating) injury caused by an accident or violence. The NTR data is collected from all licensed acute care hospitals and trauma centers in Nevada.

The NTR currently collects required data points from the National Trauma Data Bank (NTDB) established by the *American College of Surgeons* and data points identified in NAC 450B.766 and NAC 450B.768. Included (but not limited to) are data on the event causing the injury, severity of the injury, place of the injury, length of hospital stays, diagnosis(es) of the patient, discharge destination of the patient, and payer source.

Information on the frequency, occurrence, morbidity, and mortality of injuries reported in Nevada is available from the NTR. Data can be filtered by county, hospital, race, or age range. To measure the effects of trauma in Nevada and launch health education initiatives, grant applicants can use this data, which is available to state, private, or federal entities. Additionally, the Local Health Authorities are given access to data for data analysis, surveillance, and improving outcomes for public health.

The 2023 Annual Trauma Report is based upon data submitted to the NTR by Nevada's five designated trauma centers and 42 non-trauma center hospitals, for a total of 47 facilities that operated during calendar 2023. To comply with NAC 450B.768, a hospital must enter all trauma records into the NTR or notify the State NTR Manager that no records meet the criteria to be submitted by the quarterly due date.

The percentage of facilities that comply with submitting data to the NTR each year is summarized in the table below.

YEAR	% of Non-Trauma Centers Compliant	% of Trauma Centers Compliant
2019	89%	75%
2020	88%	94%
2021	88%	100%
2022	94%	100%
2023	99%	100%

In 2023, all trauma centers provided the NTR with the required information. There was one noncompliance incident involving a facility that isn't a designated trauma center in the past year.

To ensure that the NTR software is used correctly, and that the data is of the highest quality and accuracy, regular training is conducted for hospital personnel. In addition, hospital personnel have open access to the NTR help desk for questions or concerns. It is the state's NTR staff's priority to continue training hospital staff to increase accuracy.

Preparation → Analysis (Mapping) → Development (Conversion) → Testing → Deployment

It is not recommended to compare year-over-year data due to multiple reporting changes over the years. These changes include transitions to modified ICD codes, the addition or removal of facilities, and the submission of trauma data during a global pandemic that affected the overall prevalence of trauma.

Throughout the state, collaborations have continued with trauma personnel in a variety of disciplines. To date, these efforts have included:

- Participating in local healthcare coalitions.
- Quarterly NTR user group meetings.
- Hosting quarterly conference calls with trauma center staff.
- Meeting hospital staff who enter NTR data in person, if possible.

Educating hospitals about trauma data requirements, creating relationships across the state, and communicating regularly have all contributed to improving hospital data entry compliance. The data from hospitals is both of higher quality and reliability enhancing the overall understanding of trauma in the state.

Nevada Trauma Registry Background

The definition of a traumatic incident and the requirements for trauma reporting are outlined in the Nevada Revised Statutes and Nevada Administrative Code.

NEVADA REVISED STATUTE (NRS)

NRS 450B.105 "Trauma" defined. "Trauma" means any acute injury which, per standardized criteria for triage in the field, involves a significant risk of death or the precipitation of complications or disabilities.

NRS 450B.238 Regulations requiring a hospital to record and maintain information. The State Board of Health shall adopt regulations which require each hospital to record and

maintain information concerning the treatment of trauma in the hospital. The Board shall consider the guidelines adopted by the American College of Surgeons, which concern the information which must be recorded.

NEVADA ADMINISTRATIVE CODE (NAC)

The NAC regarding trauma treatment in Nevada and the corresponding Trauma Registry reporting requirements, guidelines, and procedures can be found at NAC 450B.760 through NAC 450B.774, inclusive.

To summarize, the regulations require that the Public and Behavioral Health Division develop a standardized system for collecting trauma treatment information. It is necessary to maintain records regarding treatment both before and after admission to a hospital. This requirement is fulfilled by the Nevada Trauma Registry (NTR).

Each hospital must submit quarterly trauma data to the Division, which meets the criteria prescribed by the Division and contains the minimum data set required by the National Trauma Data Bank (NTDB) established by the American College of Surgeons, as well as any other information required by the Division or State Board.

Data submitted by hospitals on trauma patients shall be compiled into an annual report by the Division for the preceding calendar year.

METHODOLOGY

The NTR is a depository of trauma incident data from across the state. All hospitals within Nevada are required to submit data quarterly to the NTR. Each year the data within the NTR will be statistically analyzed to evaluate incident traumas in Nevada. It should be noted that the data presented in this report is a reflection based solely on data points recorded within the NTR. It does not include patient history or examination. This evaluation is presented in the Annual Trauma Report, prepared by the state, per NAC 450B.768.

A series of criteria identified by the American College of Surgeons must be met to be classified as a trauma. For an incident to be classified as a trauma, the patient must have:

- At least one diagnosis code for injury:
    - ICD-10 code from the following ranges: S00 -S99 (7th Character Modifier A, B, or C), T07, T14, T20-T28 (7th Character modifier A), T30-32, and T79.A1-T79.A9 (7th character modifier A) and the patient must have either:
- At least one of the following criteria:
    - The patient was hospitalized for at least 24 hours due to injuries, or
    - The injury resulted in death; or
    - The patient was transferred between hospitals using a ground or air ambulance.

In 2023, the NTR captured 16,421 trauma cases. This report includes cases for patients with an Emergency Department/Hospital Arrival Date between January 1, 2023, and December 31, 2023. All data were analyzed using Statistical Analysis System (SAS) Version 9.4 (SAS Institute, Cary, NC).

RESULTS

From January 1, 2023, to December 31, 2023, a total of 16,421 traumas were recorded in the NTR from the 47 facilities in Nevada. The following pages include data analysis on trauma cases, risk factors, demographics, injury characteristics, injury location and mechanism, patient discharge and transfer, patient transport, safety equipment, and fall data breakdown.

TRAUMA CENTER LEVELS

Outlined below are standard criteria for Trauma Centers verified by the ACS and designated by states and municipalities. Facilities are set/confirmed as adult and/or Pediatric Trauma Centers. It is not uncommon for facilities to have different designations for each group (i.e., a Trauma Center may be a Level 1 Adult facility and a Level II Pediatric Facility).

Level I

A Level I Trauma Center is a comprehensive regional resource, a tertiary care facility central to the trauma system. A Level I Trauma Center can provide total care for every aspect of injury – from prevention to rehabilitation.

Elements of Level I Trauma Centers Include:

- 24-hour in-house coverage by general surgeons and prompt availability of care in specialties such as orthopedic surgery, neurosurgery, anesthesiology, emergency medicine, radiology, internal medicine, plastic surgery, oral and maxillofacial, pediatric, and critical care.
- Referral resources for communities in nearby regions.
- Provides leadership in the prevention and public education to surrounding communities.
- Provides continuing education to the trauma team members.
- Incorporates a comprehensive quality assessment program.
- Operates an organized teaching and research effort to help direct innovations in trauma care.
- Program for substance abuse screening and patient intervention.
- Meets minimum requirement for annual volume of severely injured patients.

Level II

A Level II Trauma Center can initiate definitive care for all injured patients.
Elements of Level II Trauma Centers Include:

- 24-hour immediate coverage by general surgeons and by the specialties of orthopedic surgery, neurosurgery, anesthesiology, emergency medicine, radiology, and critical care.
- Tertiary care needs such as cardiac surgery, hemodialysis, and microvascular surgery may be referred to as a Level 1 Trauma Center.
- Provides trauma prevention and continuing education programs for staff.
- Incorporates a comprehensive quality assessment program.

Level III

A Level III Trauma Center has demonstrated an ability to provide prompt assessment, resuscitation, surgery, intensive care, and stabilization of injured patients and emergency operations.

Elements of Level III Trauma Centers Include:

- 24-hour immediate coverage by emergency medicine physicians and prompt availability of general surgeons and anesthesiologists.
- Incorporates a comprehensive quality assessment program.
- Has developed transfer agreements for patients requiring more comprehensive care at a Level I or Level II Trauma Center.
- Provides backup care for rural and community hospitals.
- Offers continued education of the nursing and allied health personnel or the trauma team.
- Involved with prevention efforts and must have an active outreach program for its referring communities.

Level IV

A Level IV Trauma Center has demonstrated the ability to provide advanced trauma life support (ATLS) before transferring patients to a higher-level trauma center. In addition, it provides evaluation, stabilization, and diagnostic capabilities for injured patients.

Elements of Level IV Trauma Centers Include:

- Basic emergency department facilities to implement ATLS protocols and 24-hour laboratory coverage. Available trauma nurse(s) and physicians are available upon patient arrival.
- May provide surgery and critical-care services if available.
- Has developed transfer agreements for patients requiring more comprehensive care at a Level I or Level II Trauma Center.
- Incorporates a comprehensive quality assessment program.
- Involved with prevention efforts and must have an active outreach program for its referring communities.

Level V

A Level five Trauma Center provides initial evaluation, stabilization, and diagnostic capabilities and prepares patients for transfer to higher levels of care.

Elements of Level V Trauma Centers Include:

- Basic emergency department facilities to implement ATLS protocols.
- Available trauma nurse(s) and physicians are available upon patient arrival.
- After-hours activation protocols if the facility is not open 24 hours a day.
- May provide surgery and critical-care services if available.
- Has developed transfer agreements for patients requiring more comprehensive care at Level 1 through III Trauma Centers.

TECHNICAL NOTES

There are three ways in which the Nevada Trauma Registry presents traumas. Each category found in the report is explained below.

- Total Trauma Cases include all cases reported to the Nevada Trauma Registry, including transfers between facilities. Therefore, if a trauma patient is presented initially to one facility and is transferred to another facility, that case is represented twice.
- Unique Trauma Cases are calculated by matching trauma records based on birth date, injury date, patient zip code, and discharge/arrival date. Unique trauma cases include only the first presentation to a facility and not transfers between facilities, except in Tables 3, 8, 10, 15, 16, 17, and Figure 11, where traumas are assigned to the last transfer facility. This logic to include the previous transfer facility was used to account for the following situations:
    - When considering traumas that resulted in deaths, it is important to analyze based on the facility at the time of death. Therefore, throughout this report, when a table lists Mortality Proportion and 16,421 in Unique Traumas, the table is based upon the last facility.
    - There were some instances where the mechanism of injury differed between the facility of the first presentation and the facility at the time of death. In this case, the mechanism was assigned based on the facility at the time of death.
        - Please note that the state of Nevada does not attempt to change/correct patient records at the first facility if it does not match information at the last facility.
- Patient Transfer Trauma Cases are determined by the following question reported by the facilities, "if transferred, to which facility?" This question is self-reported by hospital staff and does not always align with the results of the Division's match to calculate unique trauma cases.

TRAUMA CASES BY FACILITY

Out of all facilities listed in Table 1, the designated trauma centers had the highest number of trauma cases treated. There were five designated trauma centers in the State of Nevada during 2023.

Table 1: Trauma Cases by Facility, 2023 (includes Nevada Residents and Non-Residents)

County	Facility	Unique Trauma Patients^		Total Trauma Cases*	
Clark County	Boulder City Hospital	53	0.3%	53	0.3%
	Centennial Hills Hospital	348	2.1%	374	2.1%
	Desert Springs Hospital Center	69	0.4%	69	0.4%
	Henderson ER at Green Valley Ranch	32	0.2%	32	0.2%
	Henderson Hospital	429	2.6%	432	2.4%
	Mesa View Regional Hospital	54	0.3%	54	0.3%
	Mike O'Callaghan Federal Medical Center	129	0.8%	129	0.7%
	Mountain View ER at Aliante	21	0.1%	21	0.1%
	Mountain View - ER at Skye Canyon	10	0.1%	10	0.1%
	Mountain View Hospital	790	4.8%	805	4.5%
	North Vista Hospital	143	0.9%	143	0.8%

	Southern Hills ER at South Las Vegas Blvd	25	0.2%	25	0.1%
	Southern Hills ER at the Lakes	33	0.2%	33	0.2%
	Southern Hills Hospital Medical Center	345	2.1%	375	2.1%
	Spring Valley ER at Blue Diamond	69	0.4%	69	0.4%
	Spring Valley Hospital Medical Center	746	4.5%	807	4.5%
	St. Rose Dominican Hospital Blue Diamond	46	0.3%	46	0.3%
	St. Rose Dominican Hospital De Lima Campus	105	0.6%	105	0.6%
	St. Rose Dominican Hospital North Las Vegas	80	0.5%	80	0.4%
	St. Rose Dominican Hospital San Martin Campus	164	1.0%	170	0.9%
	St. Rose Dominican Hospital Siena Campus	1300	7.9%	1316	7.3%
	St. Rose Dominican Hospital West Flamingo	26	0.2%	26	0.1%
	St. Rose Dominican Hospital West Sahara	55	0.3%	55	0.3%
	Summerlin Hospital Medical Center	466	2.8%	525	2.9%
	Sunrise Hospital Medical Center	3473	21.1%	4370	24.2%
	University Medical Center	3533	21.5%	3778	20.9%
	Valley Hospital Medical Center	22	0.1%	22	0.1%
Washoe County	Northern Nevada Medical Center	173	1.1%	174	1.0%
	NNMC - ER at McCarran	32	0.2%	32	0.2%
	NNMC - ER at Spanish Springs	58	0.4%	58	0.3%
	Northern Nevada Sierra Medical Center	56	0.3%	56	0.3%
	Renown Regional Medical Center	1718	10.5%	1978	11.0%
	Renown South Meadows Medical Center	145	0.9%	145	0.8%
	St. Mary's Regional Medical Center	273	1.7%	276	1.5%
All Other Counties	Banner Churchill Community Hospital	89	0.5%	89	0.5%
	Battle Mountain General Hospital	27	0.2%	27	0.1%
	Carson Tahoe Regional Medical Center	445	2.7%	448	2.5%
	Carson Valley Medical Center	170	1.0%	170	0.9%
	Desert View Hospital	271	1.7%	271	1.5%
	Grover C. Dils Medical Center	32	0.2%	32	0.2%
	Humboldt General Hospital	70	0.4%	70	0.4%
	Mt. Grant General Hospital	36	0.2%	36	0.2%
	Northeastern Nevada Regional Hospital	135	0.8%	135	0.7%
	Pershing General Hospital	23	0.1%	23	0.1%
	South Lyon Medical Center	42	0.3%	42	0.2%
	Williams Bee Ririe Hospital	60	0.4%	60	0.3%
Nevada (Total)		**16,421**	**100.0%**	**18,046**	**100.0%**

**Unique trauma patients are calculated by matching transferred patient based on birthdate, injury date, patient zip code, and discharge/arrival date and only counted once by the facility where they first presented with the trauma (excepted when mortality data is analyzed), which is represented as Unique Trauma.*

** Total trauma cases are all cases reported to the Nevada Trauma Registry, for 2023.*

Table 2: Trauma Incidence and Mortality Ratio for Levels 1-3 by Trauma Center Designation

Trauma Center designation	Count	Column Percent	Deaths	Mortality Proportion (Row Percent)
Trauma Center Level 1	3778	34.0%	208	5.5%
Trauma Center Level 2	6347	57.2%	264	4.2%
Trauma Center Level 3	974	8.8%	14	1.4%
Total	**11099**	**100.0%**	**486**	**4.4%**

**There were 10 unknown discharge status (dead/alive) cases.*

DEMOGRAPHICS

Of 16,421 unique traumas recorded in the NTR between January 1, 2023, and December 31, 2023, 55.2% of all trauma cases among males, and 44.8% were in females. (Table 3)

Table 3: Nevada Trauma Cases by Sex (Unique Traumas)

Sex	Count	Percent	Rate per 100,000 (95% CI)
Male	9067	55.2%	555.8 (544.4-567.2)
Female	7353	44.8%	448.2 (438.0-458.4)
Sex Not Reported	1	0.0%	-
Total	**16,421**	**100%**	**501.9 (494.2-509.6)**

Table 4: Nevada Trauma Cases by Race/Ethnicity (Unique Traumas)

Race/Ethnicity	Count	Percent	Rate per 100,000 (95% CI)
White	10,034	61.1%	632.9 (620.5-645.3)
Black	1,533	9.3%	507.7 (482.3-533.1)
American Indian, Alaskan Native	69	0.4%	195.2 (149.1-241.2)
Asian	722	4.4%	216.1 (200.3-231.9)
Hispanic	2,017	12.3%	198.7 (190.0-207.4)
Other	966	5.9%	0.0 (0.0-0.0)
Unknown	1,080	6.6%	0.0 (0.0-0.0)
Total	**16,421**	**100.0%**	**501.9 (494.2-509.6)**

White individuals had significantly more traumas than any other racial/ethnic groups in the state due to the high concentration of white residents. Figure 4 shows the frequencies and percentages among the racial/ethnic of trauma injuries in the Nevada in 2023.

Figure 1: Percentage of Unique Trauma Cases by Race/Ethnicity

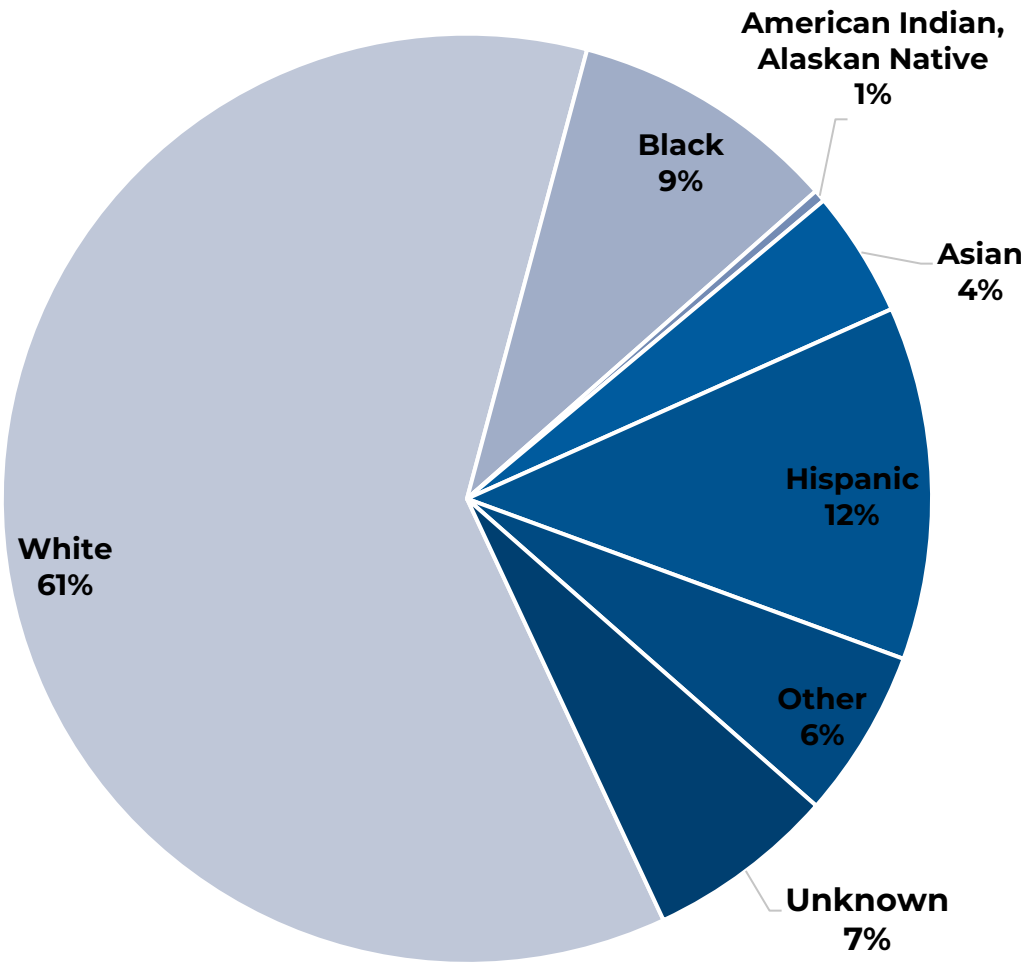


Table 5: Age-Specific Trauma Cases by Race/Ethnicity (Unique Traumas)

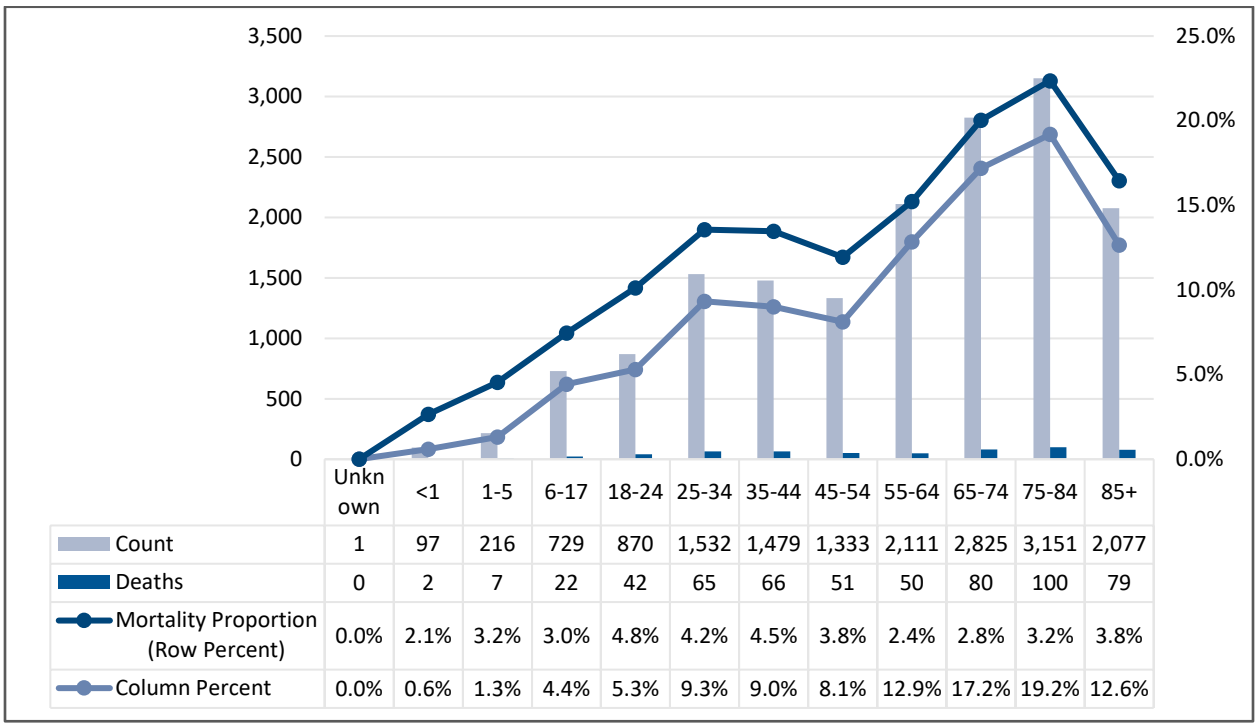
Age Groups	White	Black	American Indian, Alaskan Native	Asian	Hispanic	Other	Unknown	Total
<1	32	17	2	5	17	13	11	97
1-5	78	36	0	8	50	22	22	216
6-17	277	118	4	40	164	58	68	729
18-24	299	157	7	32	212	61	102	870
25-34	560	278	4	39	359	157	135	1,532
35-44	663	237	9	46	286	112	126	1,479
45-54	732	165	13	48	199	72	104	1,333
55-64	1,342	193	10	66	222	125	153	2,111
65-74	2,054	155	10	150	205	119	132	2,825
75-84	2,393	116	4	182	190	125	141	3,151
85+	1,604	61	6	106	113	102	85	2,077
Unknown	0	0	0	0	0	0	1	1
Total	**10,034**	**1,533**	**69**	**722**	**2,017**	**966**	**1,080**	**16,421**

Table 6: Age-Specific Trauma Cases and Mortality Proportion (Unique Traumas)

Age Groups	Count	Percentage of Cases	Deaths among Cases	Mortality Proportion (Row Percent)
Unknown	1	0.0%	0	0.0%
<1	97	0.6%	2	2.1%
1-5	216	1.3%	7	3.2%
6-17	729	4.4%	22	3.0%
18-24	870	5.3%	42	4.8%
25-34	1,532	9.3%	65	4.2%
35-44	1,479	9.0%	66	4.5%
45-54	1,333	8.1%	51	3.8%
55-64	2,111	12.9%	50	2.4%
65-74	2,825	17.2%	80	2.8%
75-84	3,151	19.2%	100	3.2%
85+	2,077	12.6%	79	3.8%
Total	**16,421**	**100.0%**	**565**	**3.4%**

In Tables 5 and 6, trauma cases are presented by age groups and death rate among cases. During 2023, Nevada experienced 16,421 unique trauma cases. Of those, 2,825 were in the 65-74 age group, 3,151 in the 75-84 age group, and 2,111 in the 55-64 age group. In Figure 2, the 18-24 age group has the highest percentage of deaths from trauma, with 4.8%, followed by the 35-44 age group with 4.5%, and the 25-34 age group with 4.2%. There is a mortality rate of 3.82% in both the 45-54 and 85+ age ranges.

Figure 2: Age-Specific Trauma Cases and Mortality Proportion (Unique Traumas)



	Unknown	<1	1-5	6-17	18-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
Count	1	97	216	729	870	1,532	1,479	1,333	2,111	2,825	3,151	2,077
Deaths	0	2	7	22	42	65	66	51	50	80	100	79
Mortality Proportion (Row Percent)	0.0%	2.1%	3.2%	3.0%	4.8%	4.2%	4.5%	3.8%	2.4%	2.8%	3.2%	3.8%
Column Percent	0.0%	0.6%	1.3%	4.4%	5.3%	9.3%	9.0%	8.1%	12.9%	17.2%	19.2%	12.6%

Table 7: Age and Sex-Specific Trauma Rate per 100,000 Nevada Residents (Unique Traumas)

Age Group	Male		Female		Unknown	Total	
	Residents	Rate per 100,000 (95% CI)	Residents	Rate per 100,000 (95% CI)	Residents	Residents	Rate per 100,000 (95% CI)
Pediatric <18	565	154.0 (141.3-166.7)	316	90.1 (80.1-100.0)	0	881	122.7 (114.6-130.9)
Adult 18-64	3,986	387.7 (375.7-399.8)	1,874	186.2 (177.8-194.7)	1	5,861	288.1 (280.7-295.5)
Geriatric >64	2,895	1224.9 (1180.2-1269.5)	4,113	1450.7 (1406.4-1495.1)	0	7,008	1348.0 (1316.5-1379.6)
Total	7,446	456.4 (446.1-466.8)	6,303	384.2 (374.7-393.7)	1	13,750	420.2 (413.2-427.3)

Figure 3: Age and Sex-Specific Trauma Rates per 100,000 Nevada Residents

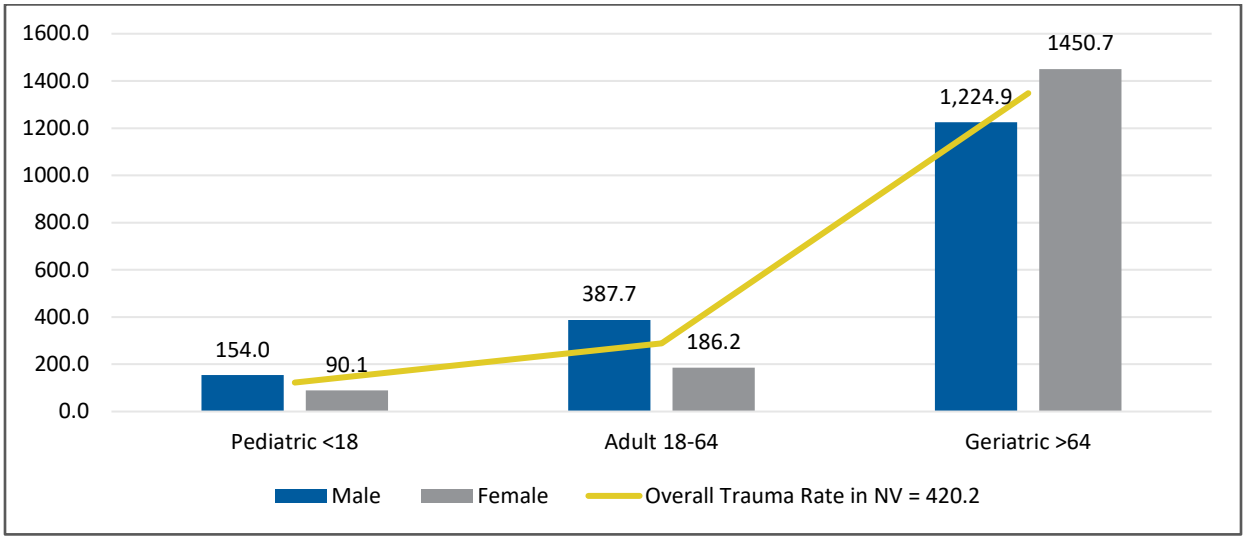
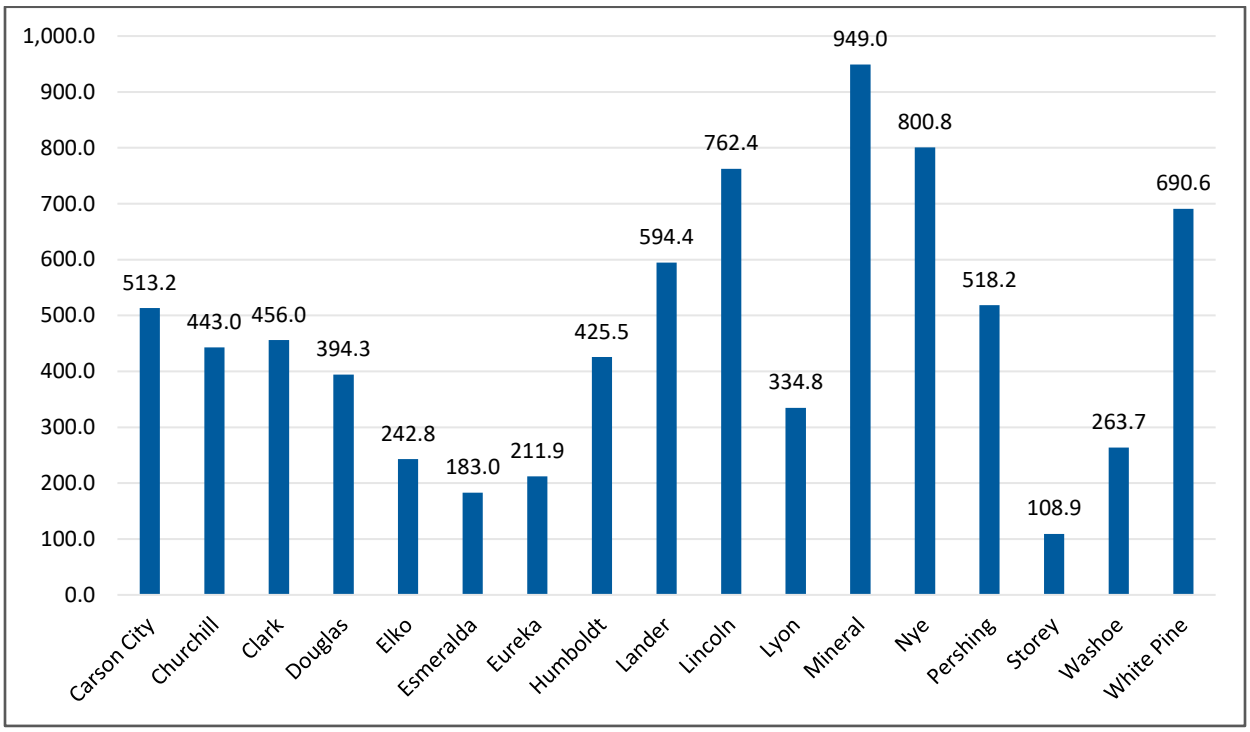


Table 8: Nevada Trauma Cases by County of Injury (non-duplicated)

County	Count	Rate per 100,000 (95% CI)
Carson City	303	513.2 (455.4-571.0)
Churchill	118	443.0 (363.1-523.0)
Clark	10,908	456.0 (447.4-464.5)
Douglas	211	394.3 (341.1-447.5)
Elko	137	242.8 (202.1-283.5)
Esmeralda	2	183.0 (0.0-436.6)
Eureka	4	211.9 (4.2-419.5)
Humboldt	76	425.5 (329.8-521.1)
Lander	37	594.4 (402.9-785.9)
Lincoln	38	762.4 (520.0-1004.9)
Lyon	206	334.8 (289.1-380.6)
Mineral	46	949.0 (674.8-1223.3)
Nye	417	800.8 (723.9-877.6)
Pershing	38	518.2 (353.4-683.0)
Storey	5	108.9 (13.4-204.3)
Washoe	1,349	263.7 (249.6-277.8)
White Pine	70	690.6 (528.8-852.4)
Out of State	1,100	-
Unknown	1,356	-

Figure 4: County-Specific Trauma Rates per 100,000 County Residents



This analysis found that Mineral County, with 949.0, had the highest rate of trauma cases per 100,000 residents. Nye County came in second with 800.8, followed by Lincoln County with 762.4.

According to the Federal Information Processing Standard (FIPS) code for trauma cases, Trauma Rates per county are calculated exclusively based on ICD-10 diagnosis coding recorded by treating facilities, without regard for backgrounds, patient histories, or examinations.

Highest Trauma Cases (Figure 5)

Utilizing FIPS codes of where an injury occurred:

#1) Clark County recorded the highest number of Trauma Cases at 10,908 Cases.

#2) Washoe with 1,349 Trauma Cases.

#3) Carson City with 303 Trauma Cases.

1,100 Trauma Cases occurred out-of-state.

Figure 5: NV Trauma Cases by Zip Code of Injury (Unique Traumas)

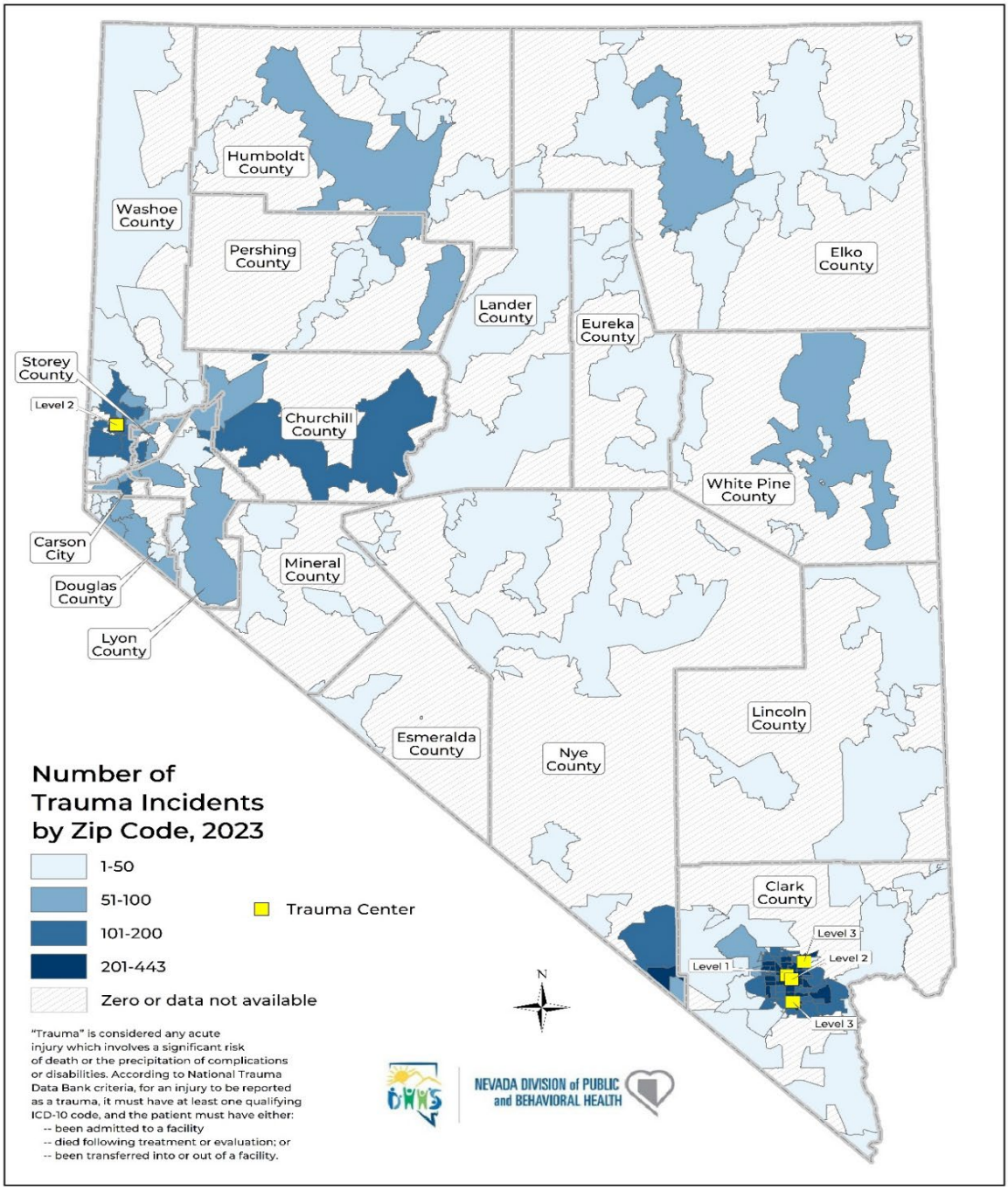


Figure 6: NV Trauma Cases by County of Injury (Unique Traumas)

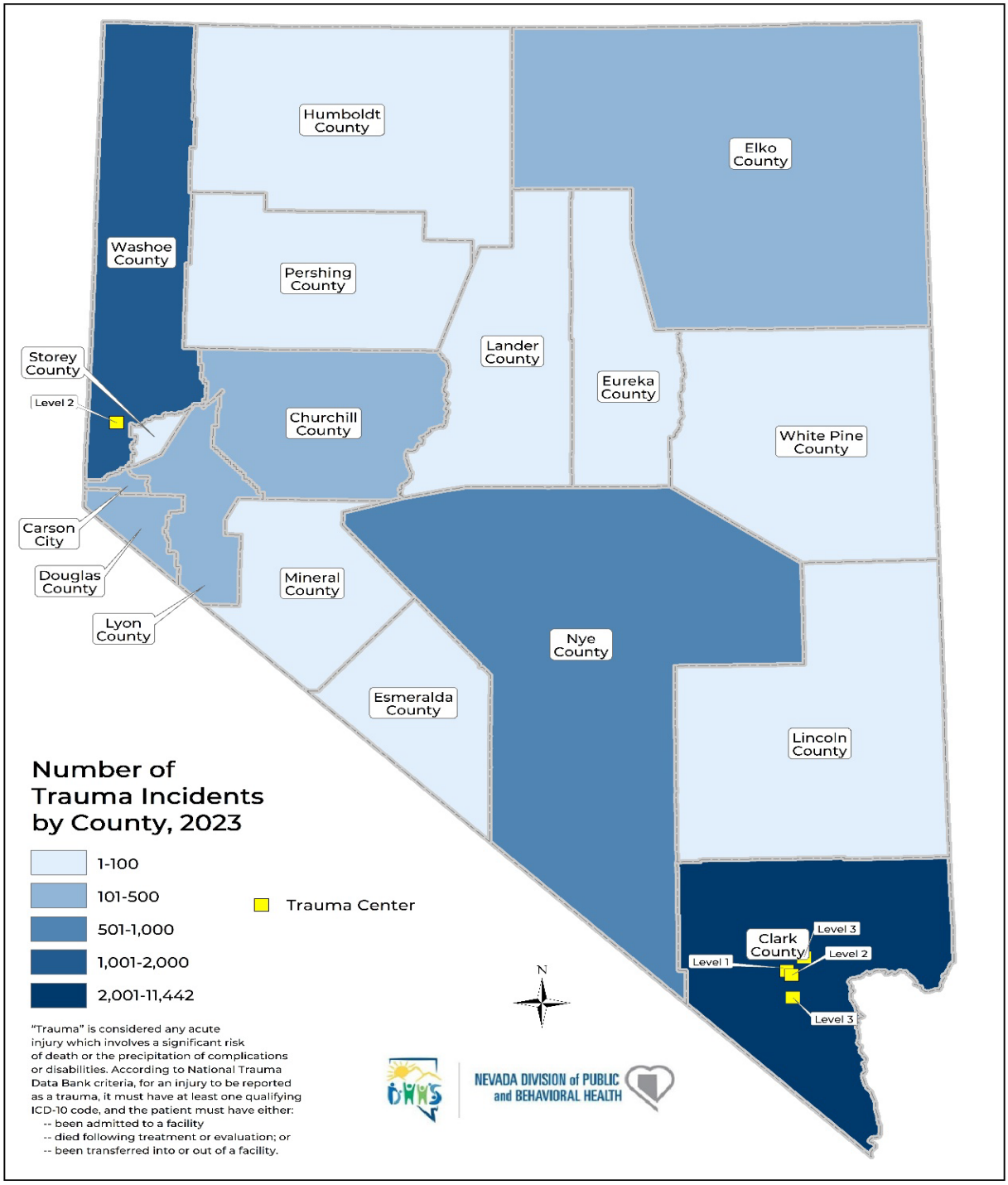


Figure 7: NV Trauma Cases by County of Injury (Unique Traumas)

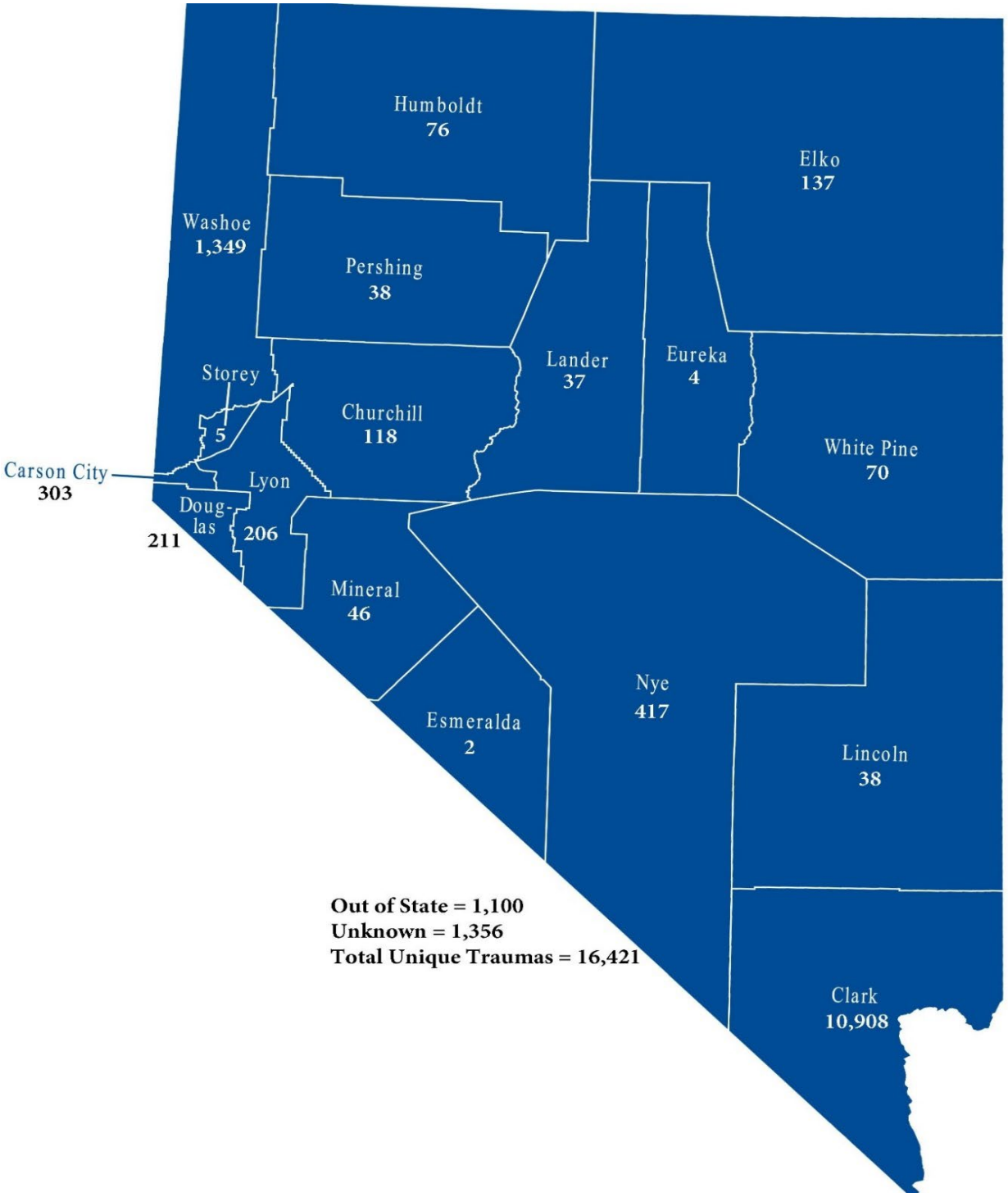


Table 9: Age-Specific Traumatic Brain Injury Incidence and Mortality Proportion (Unique Traumas)

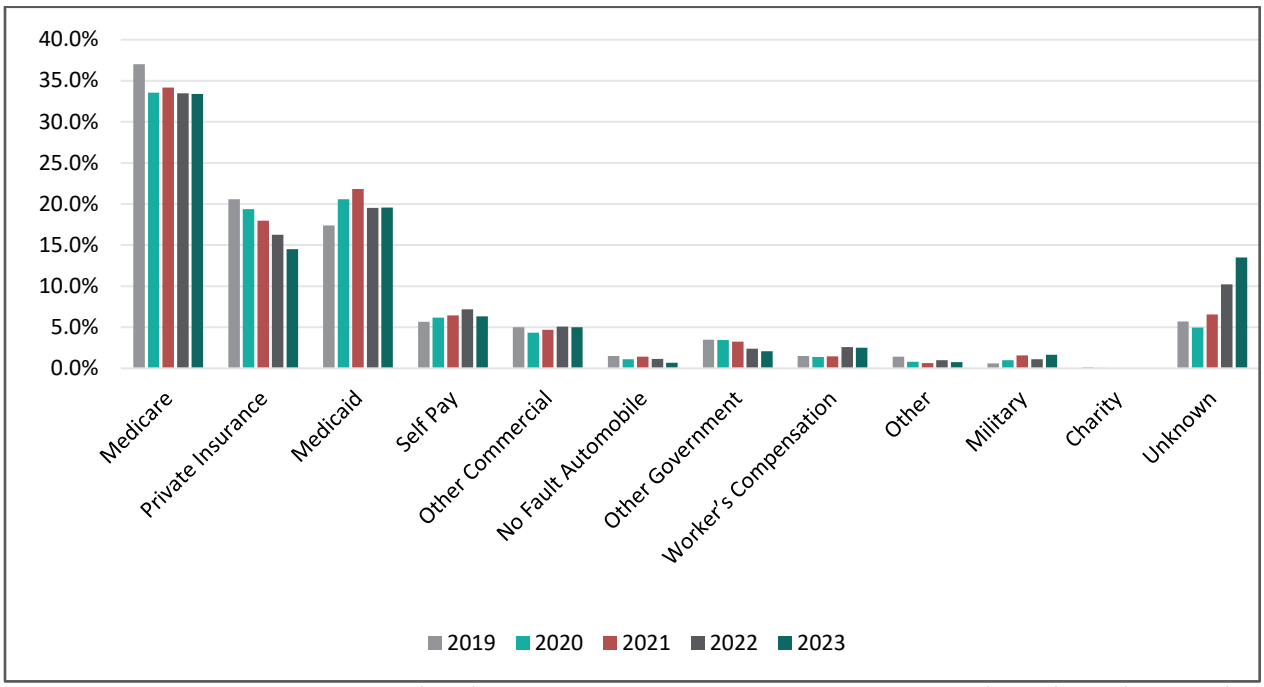
Age Group	Count	Column Percent	Deaths	Mortality Proportion (Row Percent)
Pediatric <18	228	7.9%	15	6.6%
Adult 18-64	1328	46.1%	114	8.6%
Geriatric >64	1326	46.0%	113	8.5%
Total	**2882**	**100.0%**	**242**	**8.4%**

*Throughout the report Unique Traumas are analyzed by where the patient first originated, but mortality data is analyzed based on their final facility. ** 6 unknown dead/alive status **

Table 10: Age-Specific Traumatic Brain Injury Incidence and Mortality Proportion (Unique Traumas)

Age Groups	Count	Column Percent	Deaths	Mortality Proportion (Row Percent)
<1	50	1.7%	1	2.0%
1-5	34	1.2%	4	11.8%
6-17	148	5.1%	10	6.8%
18-24	156	5.4%	17	10.9%
25-34	262	9.1%	27	10.3%
35-44	250	8.7%	26	10.4%
45-54	262	9.1%	20	7.6%
55-64	394	13.7%	24	6.1%
65-74	487	16.9%	42	8.6%
75-84	548	19.0%	46	8.4%
85+	291	10.1%	25	8.6%
Total	**2,882**	**100.0%**	**242**	**8.4%**

Figure 8: Proportion of Trauma Primary Payment Sources in Nevada, 2019-2023



**Year over year trauma data comparison is not recommended due to the changes mentioned in the introduction section of this report. However, the data from previous years in Figure 6 were included as it was derived from proportional data.*

Table 11: Proportion of Trauma Primary Payment Sources in Nevada, 2019-2023

Primary Source of Payment	2019	2020	2021	2022	2023
Medicare	37.0%	33.5%	34.2%	33.5%	33.4%
Private Insurance	20.6%	19.4%	18.0%	16.3%	14.5%
Medicaid	17.4%	20.6%	21.8%	19.5%	19.6%
Self-Pay	5.7%	6.2%	6.4%	7.2%	6.3%
Other Commercial	5.0%	4.3%	4.7%	5.1%	5.0%
No Fault Automobile	1.5%	1.1%	1.4%	1.2%	0.7%
Other Government	3.5%	3.4%	3.2%	2.4%	2.1%
Worker's Compensation	1.5%	1.4%	1.5%	2.6%	2.5%
Other	1.4%	0.8%	0.6%	1.0%	0.8%
Military	0.6%	1.0%	1.6%	1.1%	1.7%
Charity	0.1%	0.1%	0.0%	0.0%	0.0%
Unknown	5.7%	5.0%	6.6%	10.2%	13.5%

PLACE AND MECHANISM OF INJURY

Table 12: Trauma Incidence by Place of Injury (Unique Traumas)

Place of Injury	Trauma Count	Percent
Residence	8,053	49.04%
Street	4,032	24.55%
Trade and Service Area	960	5.85%
Recreation Area	328	2.00%
Wilderness Area	279	1.70%
Sports Area	225	1.37%
School or Public Area	222	1.35%
Other Specified	199	1.21%
Industrial and Construction	120	0.73%
Transport vehicle	79	0.48%
Farm	22	0.13%
Military Training Ground	11	0.07%
Railroad Track	7	0.04%
Unknown/Unspecified	1,884	11.47%
Total	**16,421**	**100%**

Table 13: Trauma Incidence and Mortality by Mechanism of Injury (Unique Traumas)

Mechanism	Count	Column Percent	Deaths	Mortality Proportion (Row Percent)
Falls	9,635	58.7%	234	2.4%
Motor Vehicle Traffic	2,670	16.3%	153	5.7%
Struck by/Against	890	5.4%	6	0.7%
Cut/Pierce	645	3.9%	18	2.8%
Firearm	590	3.6%	105	17.8%
Other Specified	265	1.6%	5	1.9%
Natural/Environmental	260	1.6%	3	1.2%
Suffocation	246	1.5%	10	4.1%
Motor Vehicle Non-Traffic	235	1.4%	2	0.9%
Pedal Cyclist, Other	197	1.2%	1	0.5%
Unknown	181	1.1%	4	2.2%
Other Transport (Land, Sea, Sky)	160	1.0%	4	2.5%
Pedestrian, Other	131	0.8%	17	13.0%
Overexertion	96	0.6%	0	0.0%
Unspecified	85	0.5%	1	1.2%
Machinery	68	0.4%	1	1.5%
Fire/Burn	62	0.4%	0	0.0%
Drowning	5	0.0%	1	20.0%
Total	**16,421**	**100.0%**	**565**	**3.4%**

In 2023, the state of Nevada saw the highest incidence of traumatic injury caused by Falls (58.7%), Traffic-Related Accidents (16.3%), and Being Struck by/Against (5.4%). In total trauma cases, the highest proportion of deaths came from Drowning incidents (20.0%), Firearm incidents (17.8%), and Pedestrian incidents (13.0%).

ICD-10 codes are currently used by the NTR to collect trauma data. Some trauma mechanisms are not coded in the ICD-10 system. If the cause of trauma cannot be identified using an ICD-10 code, there are still ICD-10 codes available: Pedestrian, Other, Other Specified, Unspecified, and Unknown.

Table 14: Trauma Rates for Top Three Mechanisms of Injury by Age (Unique Traumas)

Age Group	Falls		Struck by/Against		Motor Vehicle Traffic	
	n	Rate per 100,000 (95% CI)	n	Rate per 100,000 (95% CI)	n	Rate per 100,000 (95% CI)
Pediatric <18	344	47.9 (42.9-53.0)	111	15.5 (12.6-18.3)	179	24.9 (21.3-28.6)
Adult 18-64	2,443	120.1 (115.3-124.9)	622	30.6 (28.2-33.0)	1,887	92.8 (88.6-96.9)
Geriatric >64	6,854	1318.4 (1287.2-1349.6)	162	31.2 (26.4-36.0)	556	107.0 (98.1-115.8)
Total	**9,641**	**294.7 (288.8-300.5)**	**895**	**27.4 (25.6-29.1)**	**2,622**	**80.1 (77.1-83.2)**

Table 14 outlines the top three mechanisms for injury by age. The number one trauma injury per all age groups in 2023 was Falls.

Figure 9: Top Five Mechanisms of Unintentional Trauma

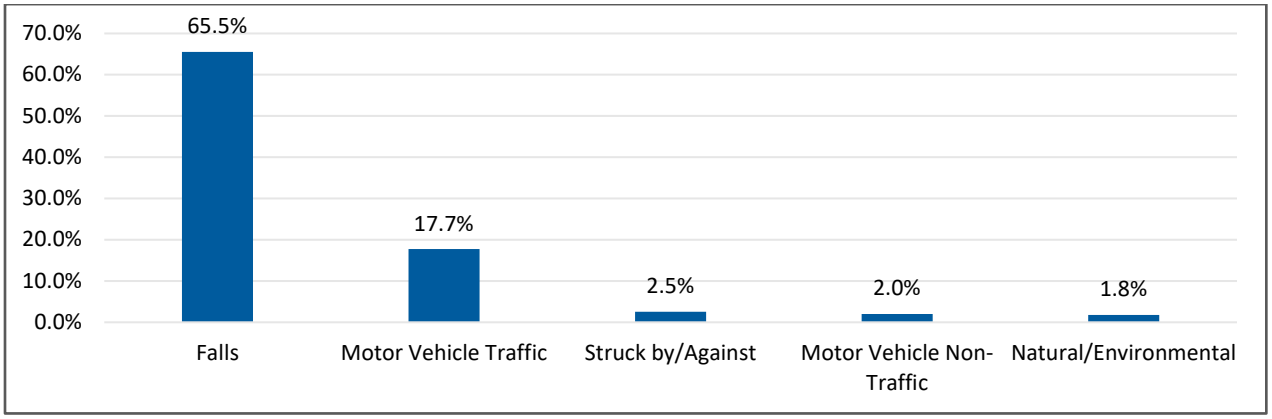


Figure 10: Top Five Mechanisms of Homicide/Assault-Related Trauma

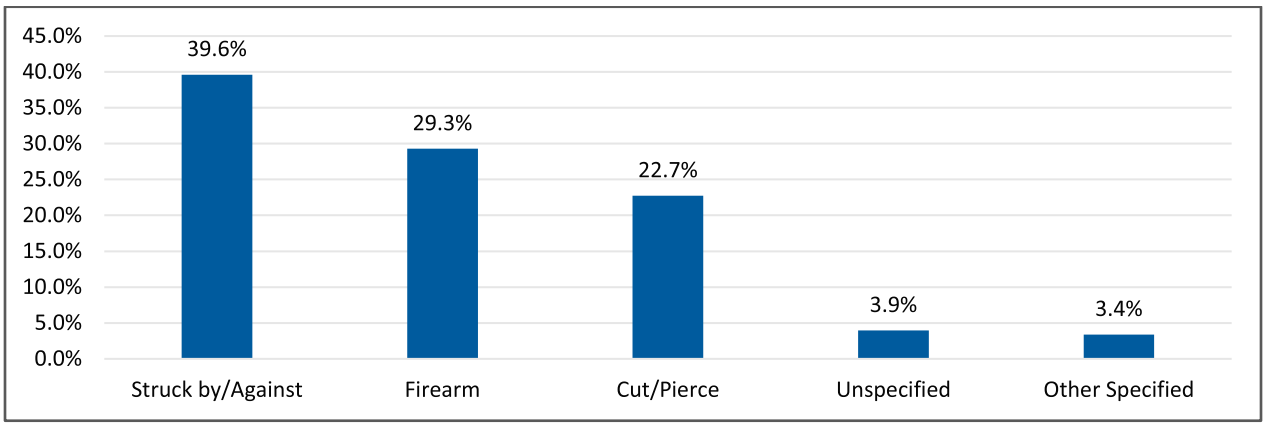


Figure 11: Top Five Mechanisms of Suicide/Self-Inflicted Trauma

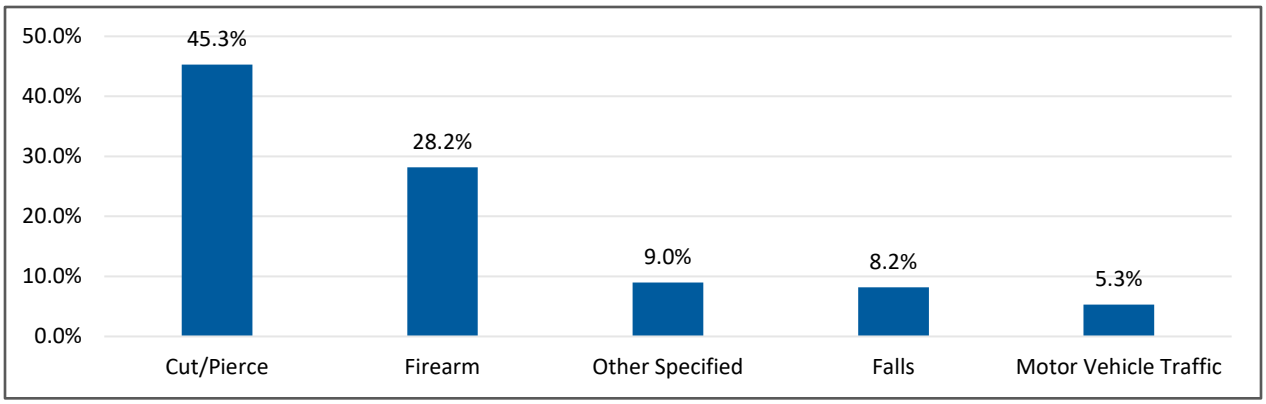
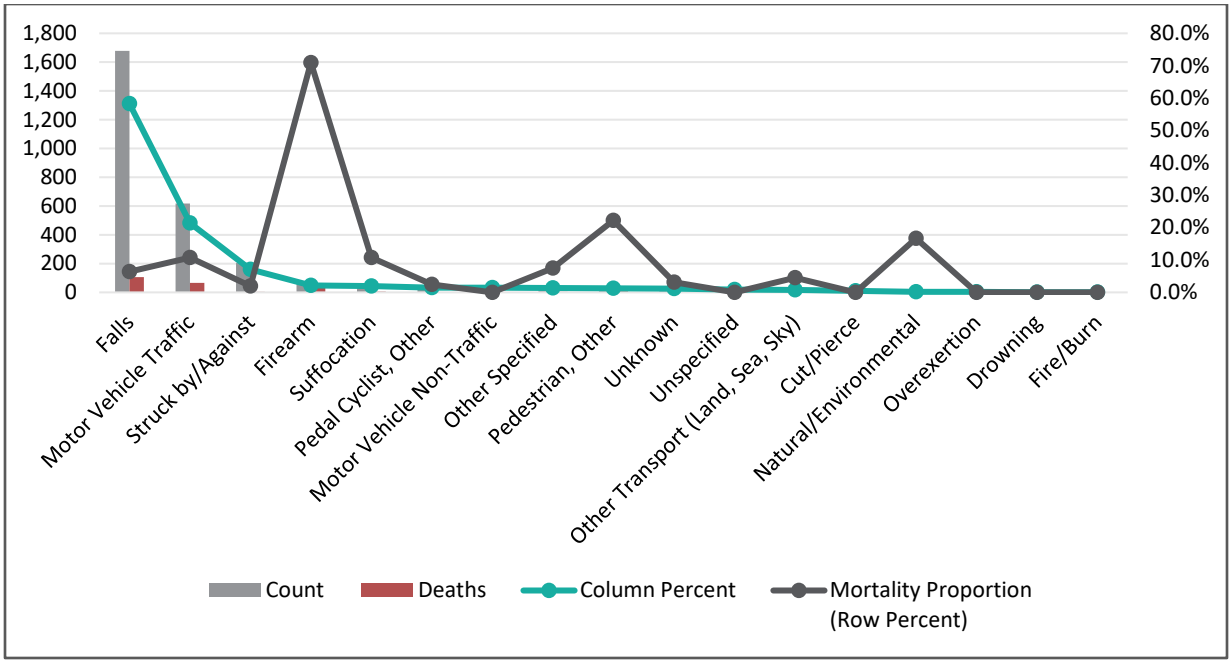


Table 15: Traumatic Brain Injury Incidence and Mortality by Mechanism of Injury

Mechanism	Count	Column Percent	Deaths	Mortality Proportion (Row Percent)
Falls	1,679	58.3%	107	6.4%
Motor Vehicle Traffic	617	21.4%	66	10.7%
Struck by/Against	205	7.1%	4	2.0%
Firearm	62	2.2%	44	71.0%
Suffocation	56	1.9%	6	10.7%
Pedal Cyclist, Other	41	1.4%	1	2.4%
Motor Vehicle Non-Traffic	41	1.4%	0	0.0%
Other Specified	40	1.4%	3	7.5%
Pedestrian, Other	36	1.2%	8	22.2%
Unknown	32	1.1%	1	3.1%
Unspecified	26	0.9%	0	0.0%
Other Transport (Land, Sea, Sky)	22	0.8%	1	4.5%
Cut/Pierce	12	0.4%	0	0.0%
Natural/Environmental	6	0.2%	1	16.7%

Overexertion	5	0.2%	0	0.0%
Drowning	1	0.0%	0	0.0%
Fire/Burn	1	0.0%	0	0.0%
Total	**2,882**	**100.0%**	**242**	**8.4%**

Figure 12: Mortality Proportion of Traumatic Brain Injury Incidence by Mechanism of Injury (Unique Traumas)



INJURY CHARACTERISTICS: INJURY SEVERITY SCORE (ISS)

Injury Severity Score (ISS) is an anatomical scoring system that provides an overall score for patients with multiple injuries. The ISS has values from 1 to 75:

ISS score of 1-8 = Minor
ISS score of 9-15 = Moderate
ISS score of 16-24 = Serious
ISS score of 25-75 = Severe

Table 16: Trauma Incidence and Mortality Proportion by Injury Severity Score (ISS) (Unique Traumas)

Injury Severity Score	Count	Column Percent	Deaths	Mortality Proportion (Row Percent)
Minor, 1-8	7,440	44.3%	85	1.1%
Moderate, 9-15	6,776	40.6%	122	1.8%
Serious, 16-24	1,292	8.1%	79	6.1%
Severe, 25-75	905	7.0%	279	30.8%
Missing/NA/ND	8	0.0%	0	0.0%
Total	16,421	100.0%	565	3.4%

Throughout the report Unique Traumas are analyzed by where the patient first originated, but mortality data is analyzed based on their final facility.

Table 17: Traumatic Brain Injury Incidence and Mortality Proportion (Unique Traumas) by Injury Severity

Injury Severity Score	Count	Column Percent	Deaths	Mortality Proportion (Row Percent)
Minor, 1-8	585	20.3%	6	1.0%
Moderate, 9-15	1,204	41.8%	33	2.7%
Serious, 16-24	582	20.2%	34	5.8%
Severe, 25-75	511	17.7%	169	33.1%
Total	**2,882**	**100.0%**	**242**	**8.4%**

Table 18: Injury to ED arrival time for a patient with a score of >15 for their injury, broken down by their location (Rural, Urban, or Statewide).

County	<1hour	1-3 hours	3-6 hours	6-9 hours	9-12 hours	>12 hours
Carson City	20	0	0	0	0	0
Churchill	13	2	0	1	0	0
Clark	1,177	135	33	19	13	48
Douglas	12	4	1	1	0	0
Elko	1	4	0	0	0	0
Esmeralda	0	0	0	0	1	0
Eureka	1	0	0	0	0	0
Humboldt	16	3	0	0	1	0
Lander	2	2	0	0	0	0
Lincoln	9	6	0	0	0	0
Lyon	21	3	1	0	0	0
Mineral	15	1	0	0	0	0
Nye	26	4	5	2	1	0
Pershing	5	0	0	0	0	0
Storey	0	1	0	0	0	0
Unknown	153	9	14	3	8	3
Washoe	171	4	2	2	0	1
White Pine	6	7	0	1	5	0
Out of State	176	23	30	13	1	10
Total	**1,824**	**208**	**86**	**42**	**30**	**62**

PATIENT TRANSPORTATION

In Nevada, ground ambulances outnumbered private cars and walk-ins when transporting trauma patients to hospitals in 2023 (Table 19)

Table 19: Trauma Incidence by Mode of Arrival (Unique Traumas)

Mode of Arrival	Trauma Count	Percent
Ground Ambulance	11,536	70.25%
Private Vehicle or Walk-in	3,755	22.87%
Helicopter Ambulance	948	5.77%
Fixed-Wing Ambulance	64	0.39%
Police	35	0.21%
Other	72	0.44%
Public Safety	2	0.01%
Missing	9	0.05%
Total	**16,421**	**100%**

It is useful to look at patient methods of arrival based on their Injury Severity Score (ISS) ranges in addition to reviewing the data by mode of patient arrival (Table 20). As demonstrated in Table 20, individuals with the greatest ISS were also the ones who were frequently transported to hospitals by ground ambulance.

Table 20: Mode of arrival by Injury Severity Score

Mode of Arrival	Injury Severity Score Range				
	Minor 1-8	Moderate 9-15	Serious 16-24	Severe 25-75	Missing/NA ISS Scores
Ground Ambulance	4,838	5,130	911	652	5
Private Vehicle or Walk-in	2,192	1,254	231	74	4
Helicopter Ambulance	237	345	175	191	0
Fixed-Wing Ambulance	26	28	6	4	0
Water Ambulance	0	0	0	0	0
Police	19	8	4	4	0
Other	68	4	0	0	0
Public Safety	2	0	0	0	0
Missing	2	7	0	0	0
Total	**7,384**	**6,776**	**1,327**	**925**	**9**

PATIENT DISCHARGE AND TRANSFER

Of the 16,421 trauma cases that occurred in Nevada in 2023, 1,903 were sent to trauma centers. The most trauma patients were transferred to Sunrise Hospital Medical Center from other facilities. The trauma center with the lowest average ISS was located at St. Rose Dominican Hospital – Siena Campus. (See Table 21)

Table 21: Patient Transfer to Nevada Trauma Centers by Injury Severity Score

Facility Patient Transferred To	Injury Severity Score Range			
	Trauma Cases	Mean ISS	Standard Deviation	ISS Range
Renown Regional Medical Center	452	8.9	8.0	1 - 75
St. Rose Dominican Hospital Siena Campus	33	5.5	3.3	1 - 14
Sunrise Hospital Medical Center	1095	8.8	6.9	1 - 48
University Medical Center	323	10.2	9.9	1 - 75
Total	1903	9.0	7.7	1 - 75

"Patient Transfer to" is determined by the question, "Was Patient Transferred to Facility?" and not through the matching process that creates the Unique Traumas

RISK FACTORS: DRUG/ALCOHOL USE

Table 22: Injury Intent and Drug/Alcohol Use (Unique Traumas)

Injury Intent	Trauma Cases	Drug/Alcohol Use	Percent Drug/Alcohol Use (Row Percent)
Unintentional	14,671	1,948	13%
Suicide	245	105	43%
Homicide/Assault	1,267	367	29%
Legal Intervention	25	6	24%
Undetermined (accidental/intentional)	123	28	23%
Unknown	90	7	8%
Total	**16,421**	**2,461**	**15%**

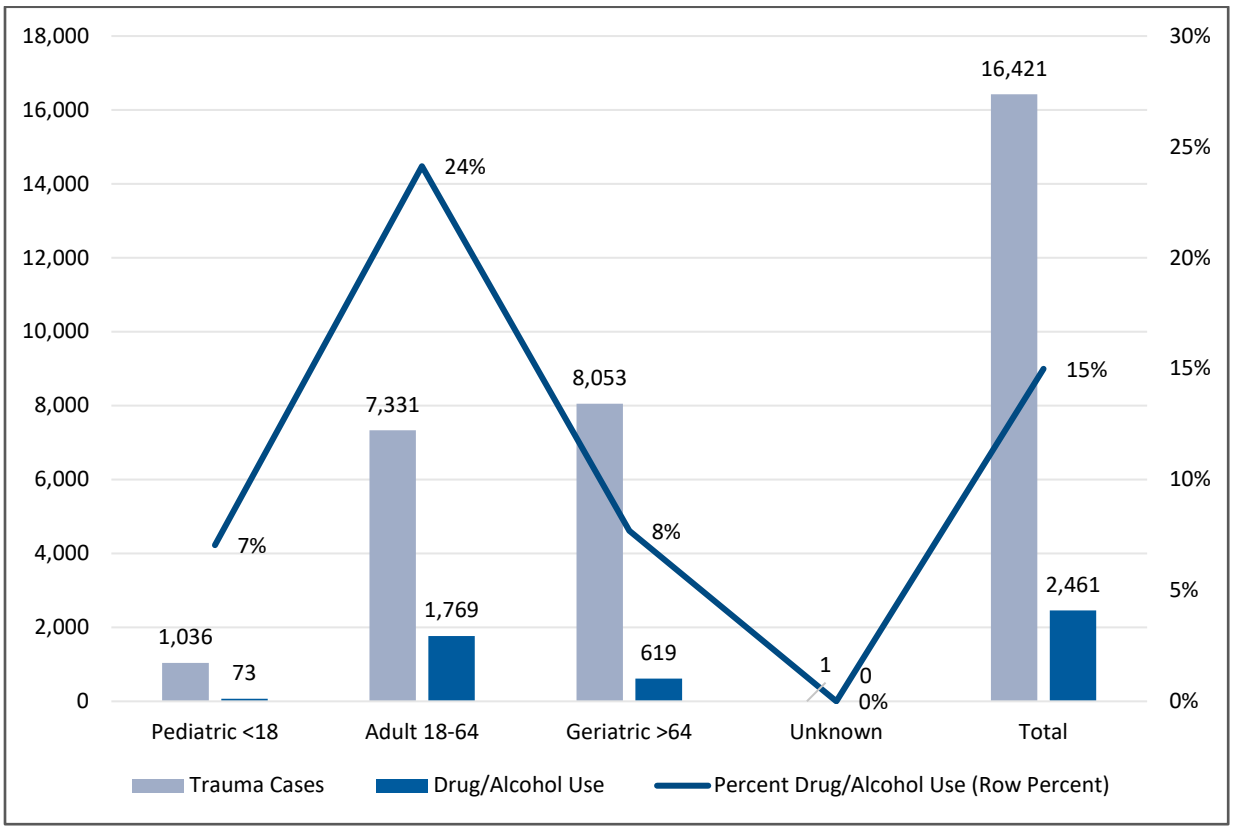
2,461 (15%) of the 16,421 distinct traumas listed in the NTR for 2023 involved drug or alcohol use. Additionally, drug or alcohol use was present in 43% of suicides and 29% of Homicide or Assault related trauma incidents.

Table 23: Age-Specific Prevalence of Restraint Use Among Passengers in Moving Vehicles (Positive Blood Alcohol Content [BAC])

Protective Device Restraint	Pediatric <18	Adult 18-64	Geriatric >64	Total
None	7	68	6	81
Seatbelt – Lap & Shoulder	2	93	12	107
Seatbelt – Lap Only	0	3	1	4
Seatbelt – Shoulder Only	0	1	0	1
Seatbelt – NFS	0	13	3	16
Unknown	0	34	3	37
Total	**9**	**212**	**25**	**246**

There was no restraint or safety measure used in 81 of the 246 unique trauma cases with reports of drug or alcohol use.

Figure 13: Age-Specific Trauma and Drug/Alcohol Use (Unique Traumas)



There was a high prevalence of adults between the ages of 18 and 64 with positive or high Blood Alcohol Content (BAC) at the time of the reported trauma incident. Among the 7,331 traumas recorded in this age range, 1,769 (24%) had positive BAC results.

Table 24: Age-Specific Ratio of Restraint Use Among Drivers and Passengers in Motor Vehicles (Use of Drugs and Alcohol)

Protective Device Restraint	Pediatric <18	Adult 18-64	Geriatric >64	Total
None	10	100	13	123
Seatbelt – Lap & Shoulder	6	136	26	168
Seatbelt – Lap Only	1	20	7	28
Seatbelt – NFS	0	17	10	27
Unknown	1	44	7	52
Total	**19**	**318**	**63**	**400**

Table 25: Trauma Incidence by Mechanism of Injury (Unique Traumas) and Drug/Alcohol Use

Mechanism	Trauma Cases	Drug/Alcohol Use	Percent Drug/Alcohol Use (Row Percent)
Falls	9,641	966	10%
Motor Vehicle Traffic	2,622	706	27%
Struck by/Against	895	174	19%
Cut/Pierce	641	177	28%
Firearm	589	147	25%
Motor Vehicle Non-Traffic	296	53	18%
Natural/Environmental	263	11	4%
Other Specified	253	34	13%
Suffocation	226	51	23%
Pedal Cyclist, Other	202	17	8%
Unknown	185	18	10%
Other Transport (Land, Sea, Sky)	154	25	16%
Pedestrian, Other	134	43	32%
Overexertion	96	6	6%
Unspecified	90	29	32%
Machinery	65	1	2%
Fire/Burn	64	2	3%
Drowning	5	1	20%
Total	**16,421**	**2,461**	**15%**

The following specific traumas were linked to the highest reported rates of drug and alcohol use: 32% of pedestrian cases and 28% of cases were related to cut/pierce incidents. These are followed by motor vehicle traffic injuries at 27% and firearm injuries at 25%. No injury mechanism was found in 32% of incidents.

Table 26: Trauma Incidence by Mechanism of Injury (Unique Traumas) and BAC Levels (Interval)

Mechanism	<0.08	0.08 to 1	2 to 20	21 to 50	51 to 100	101 to 200	More than 200	Unknown	Total
Falls	38	26	28	39	66	142	232	9,070	9,641
Motor Vehicle Traffic	1	1	25	28	46	122	187	2,212	2,622
Struck by/Against	2	3	8	2	12	29	49	790	895
Cut/Pierce	6	3	5	7	14	34	45	527	641
Firearm	2	0	5	16	13	29	23	501	589
Motor Vehicle Non-Traffic	0	1	1	2	3	13	10	266	296
Natural/Environmental	0	0	0	0	1	1	3	258	263
Other Specified	2	1	4	1	3	6	3	233	253

Suffocation	0	0	0	0	7	15	6	198	226
Pedal Cyclist, Other	0	0	0	2	1	0	3	196	202
Unknown	0	0	2	2	2	6	3	170	185
Other Transport (Land, Sea, Sky)	1	0	2	2	3	7	1	138	154
Pedestrian, Other	0	1	1	0	4	10	10	108	134
Overexertion	0	0	0	0	0	1	2	93	96
Unspecified	0	0	2	1	1	6	7	73	90
Machinery	0	0	0	0	0	0	0	65	65
Fire/Burn	0	0	1	0	0	0	0	63	64
Drowning	0	0	0	0	1	0	0	4	5
Total	**52**	**36**	**84**	**102**	**177**	**421**	**584**	**14,965**	**16,421**

Table 27: Trauma Incidence by County and BAC (Unique Traumas)

County	<0.08	0.08 to 1	2 to 20	21 to 50	51 to 100	101 to 200	more than 200	Unknown	Total
Out of State	1	1	11	13	17	35	22	1,000	1,100
Carson City	0	0	3	4	1	5	13	277	303
Churchill	0	0	0	0	2	6	6	104	118
Clark	45	26	38	50	102	241	383	10,023	10,908
Douglas	0	0	0	0	2	12	9	188	211
Elko	0	0	0	1	2	4	5	125	137
Esmeralda	0	0	0	0	0	0	0	2	2
Eureka	0	0	0	0	0	0	0	4	4
Humboldt	0	0	1	1	1	4	2	67	76
Lander	0	0	1	1	0	0	2	33	37
Lincoln	0	0	0	0	0	0	0	38	38
Lyon	0	0	1	4	2	5	10	184	206
Mineral	0	0	1	0	0	1	1	43	46
Nye	0	1	5	2	4	3	4	398	417
Pershing	0	0	0	0	0	2	3	33	38
Storey	0	0	0	0	0	1	0	4	5
Washoe	0	0	11	12	20	57	83	1,166	1,349
White Pine	0	0	0	0	0	1	3	66	70
Unknown	6	8	12	14	24	44	38	1,210	1,356
Total	**52**	**36**	**84**	**102**	**177**	**421**	**584**	**14,965**	**16,421**

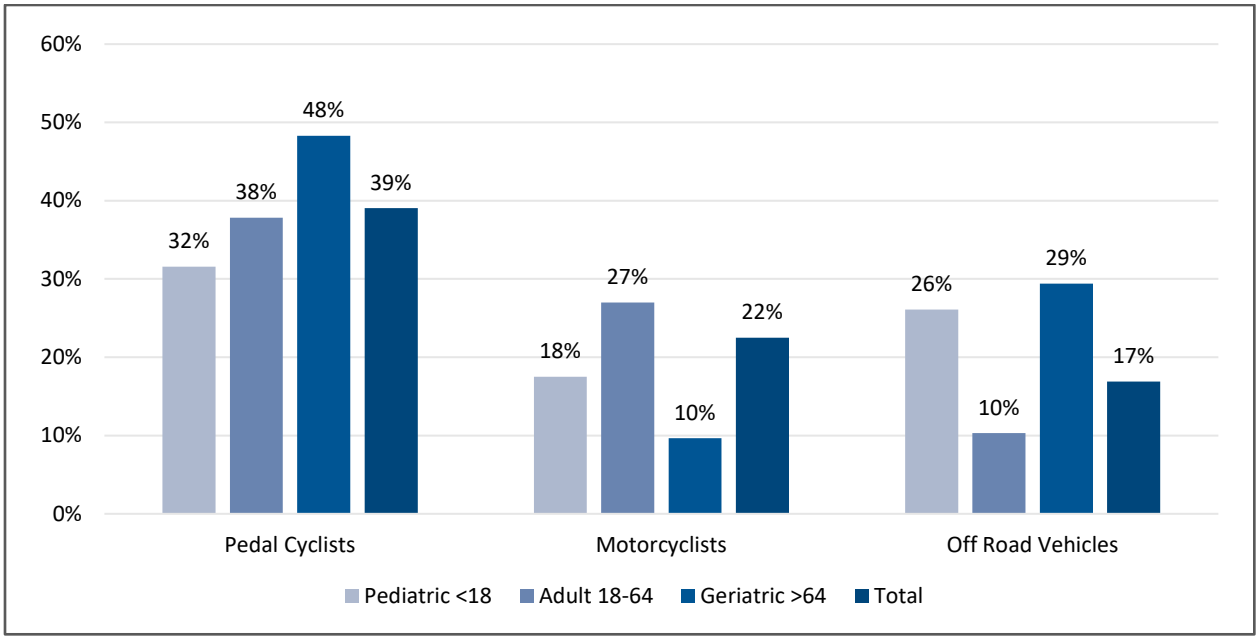
Table 28: Trauma Incidence by County and Drug/Alcohol Use (Unique Trauma)

County	Trauma Cases	Drug/Alcohol Use	Percent Drug/Alcohol Use (Row Percent)
Out of State	1,100	215	20%
Carson City	303	35	12%
Churchill	118	15	13%
Clark	10,908	1,640	15%
Douglas	211	25	12%
Elko	137	18	13%
Esmeralda	2	1	50%
Eureka	4	1	25%
Humboldt	76	11	14%
Lander	37	4	11%
Lincoln	38	0	0%
Lyon	206	23	11%
Mineral	46	4	9%
Nye	417	35	8%
Pershing	38	5	13%
Storey	5	1	20%
Washoe	1,349	213	16%
White Pine	70	5	7%
Unknown	1,356	210	15%
Total	**16,421**	**2,461**	**15%**

SAFETY EQUIPMENT

Wearing a helmet is crucial for safety, particularly when operating an off-road vehicle, motorcycle, or bicycle. —Figure 12.

Figure 14: Proportion of Helmet Use Among Pedal Cyclists, Motor Cyclists, and Off-Road Users (Unique Trauma)



In Nevada, 1,571 of the 2,670 people injured in motor vehicle accidents reported wearing age-appropriate restraints at the time of the accident. According to the National Highway Traffic Safety Administration (NHTSA), in 2023, 91.9 percent of Americans wore seat belts, showing that they are aware of the importance of doing so for their own safety. According to the NHTSA, using a seatbelt can reduce your risk of suffering a fatal injury by 45% and a moderate to critical injury by 50%.

Table 29: Age-Specific Restraint Use Among Motor-Vehicle Traffic Occupants

Age Group	Pediatric <18	Adult 18-64	Geriatric >64	Total
Seatbelt	48	678	317	1,043
Child or Infant booster/car seat	9	0	0	9
None	45	264	67	376
Unknown	6	89	48	143
Total	**108**	**1,031**	**432**	**1,571**

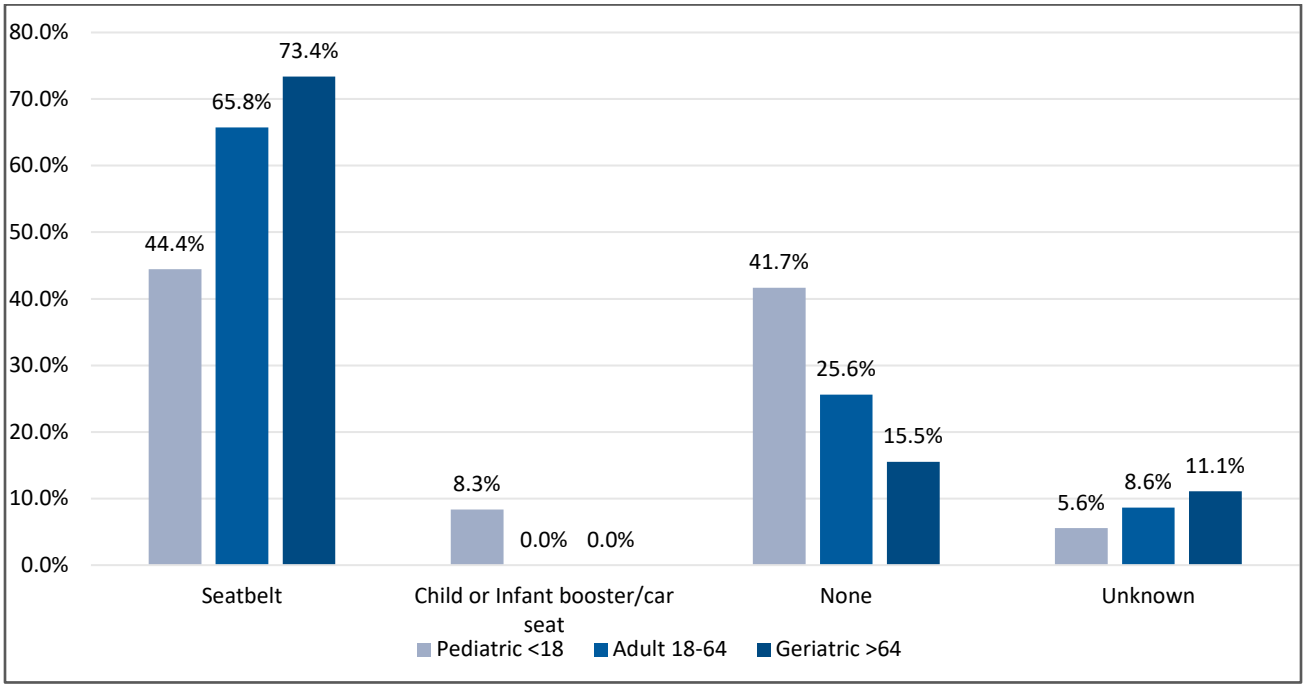
Table 30: Age-Specific Proportion of Restraint Use Among Motor-Vehicle Traffic Occupants

Age Group	Pediatric <18	Adult 18-64	Geriatric >64	Total (column percent)
Seatbelt	44.4%	65.8%	73.4%	66.4%
Child or Infant booster/car seat	8.3%	0.0%	0.0%	0.6%
None	41.7%	25.6%	15.5%	23.9%
Unknown	5.6%	8.6%	11.1%	9.1%
Total Age-Specific Proportion	**6.9%**	**65.6%**	**27.5%**	**100.0%**

- *Among Motor vehicle occupants: 6.9% are <18, 65.6% are 18-64 and 27.5% are >64years.*
- *Among Motor vehicle occupants 66.4% use seatbelt, 0.6% used Child booster/car seat, 23.9% used no restraint. 9.1% of motor vehicle occupants have unknown restraint information.*
- *Among all motor vehicle traffic occupants < 18 years, 44.4% used seatbelts.*

Table 30 and Figure 13 demonstrate that 44.4% of pediatric passengers involved in motor vehicle related traumas were properly restrained by a seat belt. While only 65.8% of adult drivers reported wearing a seatbelt, the elderly population over the age of 64 reported wearing one at a rate of 73.4%. As individuals' self-reported use of restraints at the time of incidents there is potential for some data inaccuracies. It is important to note Figure 13 refers to the populations in shown age range that reported being properly restrained using the correct type of safety restraint.

Figure 15: Age-Specific Proportion of Restraint Use Among Motor-Vehicle Traffic Occupants



FALLS – BY LAST TRANSFER FACILITY

Slipping, tripping, and stumbling were considered the main contributors to the types of falls that resulted in trauma injuries, accounting for 66.6%. This was also the most frequent types of falls that resulted in death.

In 2023, falls were Nevada's leading cause of trauma. In line with this, most traumas occur at home (Table 12). In analyzing the falls by sex, females experienced more trauma than males by 968 cases. (Table 31). A breakdown of the types of falls is provided in Table 32.

Table 31: Trauma Rate for Falls by Sex (Unique Traumas)

Sex	n	Rate per 100,000 (95% CI)
Female	5,418	330.3 (321.5-339.0)
Male	4,450	272.8 (264.8-280.8)
Total	**9,868**	**301.6 (295.6-307.5)**

Table 32: Incidence and Mortality Proportion by Type of Fall (Unique Traumas)

Type of Falls	Count	Percent of Falls (Column Percent)	Deaths	Mortality Proportion (Row Percent)
Same level (Slipping/Tripping/Stumbling)	6,577	66.6%	139	2.1%
Unspecified	911	9.2%	39	4.3%
From Furniture	669	6.8%	28	4.2%
Steps	546	5.5%	13	2.4%
Fall Due to Environmental Factors	267	2.7%	6	2.2%
Pedestrian Conveyance Accident	267	2.7%	4	1.5%
On or From Ladder/Scaffolding	236	2.4%	2	0.8%
Out of Building/Structure	117	1.2%	2	1.7%
Multi-Level: Cliff, Tree, Water, etc.	111	1.1%	0	0.0%
Collision/Push/Shove By/Oth. Person	63	0.6%	0	0.0%
Playground Equipment	62	0.6%	0	0.0%
Suicide Related	31	0.3%	5	16.1%
Undetermined Fall High Place	7	0.1%	0	0.0%
Assault Related	4	0.0%	0	0.0%
Total	**9,868**	**100.0%**	**238**	**2.4%**

Table 33: Trauma Rate by Age and Type of Fall (Unique Traumas)

Age Group	Type of Fall					
	Steps		From Same Level (tripping, slipping, stumbling)		From Furniture (bed, chair, etc.)	
	n	Rate per 100,000 (95% CI)	n	Rate per 100,000 (95% CI)	n	Rate per 100,000 (95% CI)
Pediatric <18	11	1.5 (0.6-2.4)	92	12.8 (10.2-15.4)	58	8.1 (6.0-10.2)
Adult 18-64	187	9.2 (7.9-10.5)	1,407	69.2 (65.6-72.8)	111	5.5 (4.4-6.5)
Geriatric >64	348	66.9 (59.9-74.0)	5,078	976.8 (949.9-1003.7)	500	96.2 (87.7-104.6)
Total	546	16.7 (15.3-18.1)	6,577	201.0 (196.2-205.9)	669	20.4 (18.9-22.0)

FINAL NOTE

Trauma Registry (NTR) continues to improve due to increased data entry compliance and accuracy. The NTR Manager and Coordinator thank all NTR users for their perseverance in mastering accurate data entry into the NTR at the various trauma and non-trauma centers throughout Nevada. We appreciate and are aware of your commitment.

We are working to compile and maintain complete historical data for Nevada's trauma centers as collaboration among the facilities and the Nevada Trauma Registry continues to grow. Additionally, these data and subsequent reports become more valuable to the various NTR community stakeholders through ongoing partnerships to improve the quantity and quality of the information in the NTR.

ADDITIONAL INFORMATION

For additional information regarding this publication, contact:

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Should any county or facility need specific trauma data for their hospital facilities and zip codes, please contact the contact listed above. As a reminder, all data from the Nevada State Trauma Registry is self-reported by treating facilities. Information requestors and readers should be aware that there may be minor inconsistencies if facilities do not capture trauma data correctly.

CITATIONS

American College of Surgeons. National Trauma Data Bank 2016 Annual Report. Available at: https://www.facs.org/media/ez1hpdcu/ntdb-annual-report-2016.pdf

United States Census Bureau. State of Nevada Facts 2020-2022 available at: https://www.census.gov/quickfacts/NV?

Nevada State Demographer's Office. 2001-2023 ASRHO Estimates and Projections. Division of Public and Behavioral Health edition. Vintage 2022. https://tax.nv.gov/Publications/Population_Statistics_and_Reports/

Nevada Revised Statutes. Treatment of Trauma. NRS 450B.105, 450B.236 – 450B.239. Available at: http://www.leg.state.nv.us/NRS/NRS-450B.html#NRS450BSec236

Nevada Administrative Code. Treatment of Trauma. Initial Procedures and Collection of Information. NRS 450B.760 – 450B.774. Available at: http://www.leg.state.nv.us/nac/NAC- 450B.html#NAC450BSec760

National Highway Traffic Safety Administration (NHTSA). Seat Belts Save Lives. https://www.nhtsa.gov/seat-belts/seat-belts-save-lives

National Highway Traffic Safety Administration (NHTSA) https://www.nhtsa.gov/vehicle-safety/seat-belts

National Highway Traffic Safety Administration (NHTSA). Traffic Safety Facts, Research notes. Seat Belt Use in 2023. https://acrobat.adobe.com/id/urn:aaid:sc:VA6C2:29ebe20a-1318-43cb-bc88-fb2cbe7e9efd

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RECOMMENDATIONS

Division of Public and Behavioral Health. *2022 Annual Trauma Registry Report*. Carson City, Nevada. e 1.0, June 2023. (Division of Public and Behavioral Health, 2022)