



Inter Tribal Council of Arizona, Inc.

Regional Community Health Profile of American Indians and Alaska Natives in Arizona, Nevada, and Utah

2014-2019

Tribal Epidemiology Center

Regional Community Health Profile of American Indians and Alaska Natives in Arizona, Nevada, and Utah 2014-2019

Prepared by:

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Funded by:

Indian Health Service

Department of Health and Human Services

Grant No. U1B1IHS0003

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Acknowledgements

We would like to thank the Arizona Department of Health Services, Nevada Department of Health and Human Services, and Utah Department of Health for their assistance in creating this report.

Recommended Citation

Inter Tribal Council of Arizona, Inc., Tribal Epidemiology Center. *Regional Community Health Profile for American Indians and Alaska Natives in Arizona, Nevada, and Utah 2014-2019*. September 2021.



September 30th, 2021

TO: Tribal Leaders and Tribal Health Directors

FROM: Inter Tribal Council of Arizona, Inc.
Maria Dadgar, MBA, Executive Director

RE: *Regional Community Health Profile for American Indians and Alaska Natives in Arizona, Nevada, and Utah 2014-2019*

On behalf of the Inter Tribal Council of Arizona, Inc. (ITCA), Tribal Epidemiology Center (TEC), ITCA TEC is pleased to present the *Regional Community Health Profile for American Indians and Alaska Natives in Arizona, Nevada, and Utah 2014-2019* Report.

In response to public health concerns among Tribal communities within the Indian Health Service Phoenix and Tucson Areas, this comprehensive report was produced to serve as a tool in assisting Tribal leadership in making informed decisions regarding the health and welfare of their respective communities. The information compiled in this report can assist tribes in tracking trends in health outcomes that impact their community members. This data may be used to support proposal writing and grant applications.

The information presented in this report was compiled from a variety of data sources, including: the Arizona Department of Health Services, the Nevada Department of Health and Human Services, the Utah Department of Health, Census data, and the Indian Health Service Epi Data Mart.

The ITCA TEC is pleased to continue to support Tribes' efforts in improving the health status of their members through this report, trainings, and technical assistance.

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Purpose

The purpose of the *Regional Community Health Profile for American Indians and Alaska Natives in Arizona, Nevada, and Utah 2014-2019* report is to provide information on the health and wellness of the Tribes in the Indian Health Service Phoenix and Tucson (IHS) Areas. The target audience for this report includes: Tribal Health Directors, public health professionals, Tribal Leadership, and health researchers. This report provides an overview of demographics and various health indicators for the American Indian and Alaska Native (AI/AN) population in the Phoenix-Tucson Service Areas.

Introduction

The Inter Tribal Council of Arizona, Inc. (ITCA), Tribal Epidemiology Center's (TEC) purpose is to assist Tribes with building local public health capacity in the Indian Health Service Phoenix and Tucson Areas with the goal of enhancing AI/AN health and well-being. The TEC staff members are available to provide public health programming support, administrative, and technical support for Tribes.

The ITCA TEC serves the Indian Health Service Phoenix and Tucson Areas. This includes 48 Tribes and Bands within Arizona, Nevada, and Utah.

The report is organized into ten main sections:

- ❖ Purpose
- ❖ Introduction
- ❖ Technical Notes
- ❖ Demographics
- ❖ Mortality
- ❖ Chronic Disease
- ❖ Dental
- ❖ Injury
- ❖ Behavioral Health and Substance Abuse
- ❖ Maternal and Child Health

The analyses in this report focus on health indicators among the American Indian and Alaska Native population within Arizona, Nevada, and Utah. Additional analysis may be provided upon request. For inquiries, please contact ITCA TEC at: tecinfo@itcaonline.com.

Technical Notes

Data Sources

American Community Survey - United States Census Bureau

The American Community Survey (ACS) is a mandatory, ongoing survey that samples a small percentage of the United States (U.S.) population every year, and the data is weighted to reflect the entire population. Since the American Indian and Alaska Native population size is small, the corresponding sampling is small, which may lead to inaccuracies in these generalizations. The ACS does not provide official counts of the population in between censuses, and may not reflect actual conditions of a particular community. Demographic data was downloaded from the ACS via the American Fact Finder website provided by the U.S. Census Bureau. The ACS releases three different estimates: a one-year, a three-year, and a five-year, from their survey in order to accommodate small geographic regions such as small counties, neighborhoods, and some tribal lands. For consistency in analysis, the 5-year estimates were used for all of the information from ACS compiled in this report. All margin of error estimates are based on a 90 percent confidence level. There is a consistent low response rate to ACS among many Tribes across the United States. With the exception of educational attainment where only the one year estimates were available, the five year estimates were used.

Mortality Data

State-level mortality data was requested and provided by each state health department's Vital Records team in the region. The top 5 leading causes of death were reported by year.

Indian Health Services Epidemiology Data Mart

The Epidemiology Data Mart (EDM) is a national repository of healthcare information gathered from associated Indian Health Service (IHS), Tribal and Urban healthcare sites, and regional administrative offices of the Indian health system. The purpose of the EDM is to provide a snapshot of the broad system for the purpose of public health surveillance and reporting on community health status for constituent Tribes. The information in this report includes records for American Indians that were active IHS users who utilized IHS facilities within the Phoenix Service Area. Tribal health facilities that chose to report their data via the Resource and Patient Management System, a software that houses IHS data, are also included in this report. The purpose of the IHS National Data Warehouse, that the EDM is a subset of, is primarily administrative data. Therefore data from this source cannot be used to calculate representative population based rates, or prevalence (proportions) of health outcomes. The data only represents the IHS User Population for the corresponding fiscal year.

Inpatient and Emergency Department Hospital Discharge Data

Arizona Department of Health Services, Nevada Department of Health and Human Services and Utah's Department of Health track all inpatient hospital discharges within their respective state. Hospital discharge data is a hospital reporting system that contains information on the utilization of hospital services and is used for medical billing and payment. Hospital discharge datasets include patient demographics, length of admission, and ICD-9/ICD-10 diagnosis and procedure codes. The results from the hospital discharge data is presented by calendar year.

Centers for Disease Control And Prevention Web-Based Injury Statistics Query And Reporting System (Wisqars)

CDC's WISQARS is an interactive, online database that provides fatal and nonfatal injury, violent death, and cost of injury data from a variety of trusted sources. Researchers, the media, public health professionals, and the public can use WISQARS data to learn more about the public health and economic burden associated with unintentional and violence-related injury in the United States.

Data Barriers

Race/Ethnicity Misclassification

It is known that race/ethnicity, particularly among American Indians is often misclassified, or American Indians are considered a different race/ethnicity group. The race/ethnicity misclassification likely under reports the number of cases of an outcome of interest among American Indians. The lower number of cases would then lower the rate or prevalence of a given disease or condition among American Indians.

This was seen in the analysis of the Nevada hospital discharge data. The dataset limited persons to identify as multiple races. When excluding non-American Indian persons, the population of our analysis decreased in the 2016-2019 data years. For this reason, we ask that you interpret Nevada's 2016-2019 results with caution.

Glossary

AI/AN: American Indian or Alaska Native.

Age-adjusted rate: A rate that controls for the different age distributions in populations, which allows for more accurate comparisons of event rates between populations.

CDC: Centers for Disease Control and Prevention.

Count: Number of disease, events, or other health-related occurrences.

Data: Items of information expressed as measurements or statistics used to learn more about a disease or risk factor. Data are used for calculations, support of evidence, assessments, and often for decision making.

ICD: International Classification of Diseases.

Indian Health Service: (IHS) U.S. Department for Health and Human Services funded agency responsible for providing health services to American Indians and Alaska Natives. The IHS provides health services for approximately 1.9 million American Indians and Alaska Natives who belong to 574 federally recognized Tribes, state recognized Tribes, and California Indians in 35 states. The IHS is divided into 12 geographic “Areas” of the United States: Alaska, Albuquerque, Aberdeen, Bemidji, Billings, California, Nashville, Navajo, Oklahoma, Phoenix, Portland, and Tucson.

Incidence: Number of new cases of a condition in a population that occur during a specified time period; usually presented as a rate.

Misclassification: The incorrect assignment of a person, value, or item into a grouping which it should not be assigned.

Race: A social construct created to categorize human beings into broad and generic groupings that are self-selected based on the United States Office of Management and Budget required categories.

Rate: A measure of how fast a disease is occurring or accelerating in the population.

Statistics: A branch of mathematics that focuses on the act of collecting, summarizing, and analyzing numeric data.

Surveillance: Systematic and continuous collection, analysis and interpretation of data, along with the timely dissemination (distribution) of the results to those who have the right to know so that action can be taken.

Demographics

Demographics

Office of Management & Budget Race Category Counts by State

American Community Survey 5-year estimates – United States Census Bureau¹

Arizona

Year	White	AI/AN	Black or African American	Asian	Native Hawaiian and Other Pacific Islander
2014	5,210,335	294,721	281,576	200,090	12,471
2015	5,174,082	290,780	274,380	191,071	12,638
2016	5,235,158	296,732	287,110	205,229	12,863
2017	5,277,661	300,182	292,831	213,417	13,364
2018	5,364,141	309,580	305,259	228,887	14,112
2019	5,444,453	317,414	317,462	233,213	14,458

Nevada

Year	White	AI/AN	Black or African American	Asian	Native Hawaiian and Other Pacific Islander
2014	1,935,379	30,155	229,638	207,610	17,207
2015	1,929,661	31,393	235,721	214,846	17,942
2016	1,933,057	31,927	243,552	222,612	18,334
2017	1,936,453	32,426	253,013	232,502	19,019
2018	1,935,103	35,845	261,123	234,693	19,352
2019	1,949,707	38,026	271,005	242,267	20,022

Utah

Year	White	AI/AN	Black or African American	Asian	Native Hawaiian and Other Pacific Islander
2014	2,515,352	31,999	31,163	60,631	26,491
2015	2,544,735	31,824	31,909	64,102	26,147
2016	2,572,595	31,686	32,512	66,039	26,411
2017	2,600,077	32,079	33,619	67,545	26,742
2018	2,632,056	32,657	35,862	69,810	27,096
2019	2,676,482	33,721	36,849	71,977	27,554

Demographics

Office of Management & Budget Ethnicity-Non-Hispanic or Latino Category Counts by State

American Community Survey 5-year estimates – United States Census Bureau¹

Arizona

Year	White	AI/AN	Black or African American	Asian	Native Hawaiian and Other Pacific Islander
2014	3,734,853	262,626	257,620	186,451	11,720
2015	3,752,853	265,099	264,119	194,757	11,422
2016	3,777,876	266,191	270,045	199,520	11,832
2017	3,786,418	266,680	276,146	207,330	12,009
2018	3,825,886	271,946	286,614	222,477	12,523
2019	3,857,007	276,396	297,107	226,597	12,878

Nevada

Year	White	AI/AN	Black or African American	Asian	Native Hawaiian and Other Pacific Islander
2014	1,455,192	24,304	220,503	203,924	16,552
2015	1,455,277	24,538	225,782	211,271	17,078
2016	1,455,508	24,377	233,440	218,782	17,081
2017	1,457,272	24,402	242,682	228,268	17,510
2018	1,458,093	26,355	249,967	229,928	17,703
2019	1,463,237	27,070	259,802	237,588	18,162

Demographics

Office of Management & Budget Ethnicity-Non-Hispanic or Latino Category Counts by State Continued

American Community Survey 5-year estimates – United States Census Bureau¹

Utah

Year	White	AI/AN	Black or African American	Asian	Native Hawaiian and Other Pacific Islander
2014	2,279,901	28,134	28,719	59,852	25,754
2015	2,308,090	27,538	29,450	63,106	25,540
2016	2,339,279	27,209	30,243	65,192	25,861
2017	2,365,205	28,210	31,714	66,594	26,216
2018	2,394,238	28,047	33,713	68,747	26,607
2019	2,425,647	28,515	34,571	71,000	26,961

Demographics

Office of Management & Budget Ethnicity-Hispanic or Latino Category Counts by State

American Community Survey 5-year estimates – United States Census Bureau¹

Arizona

Year	White	AI/AN	Black or African American	Asian	Native Hawaiian and Other Pacific Islander
2014	1,439,229	28,154	16,760	4,620	918
2015	1,457,482	29,622	17,457	5,333	1,049
2016	1,457,282	30,541	17,065	5,709	1,031
2017	1,491,243	33,502	16,685	6,087	1,355
2018	1,538,255	37,634	18,645	6,410	1,589
2019	1,587,446	41,018	20,355	6,616	1,580

Nevada

Year	White	AI/AN	Black or African American	Asian	Native Hawaiian and Other Pacific Islander
2014	480,187	5,851	9,135	3,686	655
2015	474,384	6,855	9,939	3,575	864
2016	477,549	7,550	10,112	3,830	1,253
2017	479,181	8,024	10,331	4,234	1,509
2018	477,010	9,490	11,156	4,765	1,649
2019	486,470	10,956	11,203	4,679	1,860

Demographics

Office of Management & Budget Ethnicity-Hispanic or Latino Category Counts by State Continued

American Community Survey 5-year estimates – United States Census Bureau¹

Utah

Year	White	AI/AN	Black or African American	Asian	Native Hawaiian and Other Pacific Islander
2014	235,451	3,865	2,444	779	737
2015	236,645	4,286	2,459	996	607
2016	233,316	4,477	2,269	847	550
2017	234,872	3,869	1,905	951	526
2018	237,818	4,610	2,149	1,063	489
2019	250,835	5,206	2,278	977	593

Demographics

Decennial Data for AI/AN alone or in combination with another race

American Community Survey 5-year estimates – United States Census Bureau¹

Arizona

Race Combination	2010	2020
American Indian Alaska Native Alone	296,529	319,512
White; American Indian and Alaska Native	34,584	84,795
Black or African American; American Indian and Alaska Native	5,891	7,977
American Indian and Alaska Native; Asian	1,435	1,492
American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander	580	570
American Indian and Alaska Native; Some Other Race	5,979	10,400
White; Black or African American; American Indian and Alaska Native	4,194	7,360
White; American Indian and Alaska Native; Asian	1,098	2,296
White; American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander	203	428
White; American Indian and Alaska Native; Some Other Race	1,173	13,994
Black or African American; American Indian and Alaska Native; Asian	184	254
Black or African American; American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander	34	87
Black or African American; American Indian and Alaska Native; Some Other Race	212	479
American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander	79	117
American Indian and Alaska Native; Asian; Some Other Race	116	111
American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander; Some Other Race	58	36
White; Black or African American; American Indian and Alaska Native; Asian	366	732
White; Black or African American; American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander	48	115
White; Black or African American; American Indian and Alaska Native; Some Other Race	187	1450
White; American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander	153	299
White; American Indian and Alaska Native; Asian; Some Other Race	45	410
White; American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander; Some Other Race	12	50
Black or African American; American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander	22	35
Black or African American; American Indian and Alaska Native; Asian; Some Other Race	7	27
Black or African American; American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander; Some Other Race	2	13

American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander; Some Other Race	1	18
White; Black or African American; American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander	141	174
White; Black or African American; American Indian and Alaska Native; Asian; Some Other Race	32	215
White; Black or African American; American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander; Some Other Race	5	12
White; American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander; Some Other Race	2	28
Black or African American; American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander; Some Other Race	2	4
White; Black or African American; American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander; Some Other Race	12	70
Total	353,386	453,560

Nevada

Race Combination	2010	2020
American Indian Alaska Native Alone	32,062	43,932
White; American Indian and Alaska Native	14,235	36,364
Black or African American; American Indian and Alaska Native	2,476	4,265
American Indian and Alaska Native; Asian	700	738
American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander	210	262
American Indian and Alaska Native; Some Other Race	1,351	4,814
White; Black or African American; American Indian and Alaska Native	2,303	4,309
White; American Indian and Alaska Native; Asian	716	1,735
White; American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander	147	366
White; American Indian and Alaska Native; Some Other Race	443	5,503
Black or African American; American Indian and Alaska Native; Asian	160	260
Black or African American; American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander	31	86
Black or African American; American Indian and Alaska Native; Some Other Race	94	328
American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander	88	106
American Indian and Alaska Native; Asian; Some Other Race	48	73
American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander; Some Other Race	8	16
White; Black or African American; American Indian and Alaska Native; Asian	283	540
White; Black or African American; American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander	54	136

White; Black or African American; American Indian and Alaska Native; Some Other Race	99	792
White; American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander	221	472
White; American Indian and Alaska Native; Asian; Some Other Race	29	179
White; American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander; Some Other Race	5	38
Black or African American; American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander	22	41
Black or African American; American Indian and Alaska Native; Asian; Some Other Race	4	29
Black or African American; American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander; Some Other Race	1	11
American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander; Some Other Race	2	0
White; Black or African American; American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander	116	184
White; Black or African American; American Indian and Alaska Native; Asian; Some Other Race	15	127
White; Black or African American; American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander; Some Other Race	6	7
White; American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander; Some Other Race	6	31
Black or African American; American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander; Some Other Race	3	3
White; Black or African American; American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander; Some Other Race	7	43
Total	55,945	105,790

Utah

Race Combination	2010	2020
American Indian Alaska Native Alone	32,927	41,644
White; American Indian and Alaska Native	12,638	31,850
Black or African American; American Indian and Alaska Native	608	888
American Indian and Alaska Native; Asian	290	373
American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander	292	333
American Indian and Alaska Native; Some Other Race	1,194	3,090
White; Black or African American; American Indian and Alaska Native	779	1,520
White; American Indian and Alaska Native; Asian	335	774
White; American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander	161	378
White; American Indian and Alaska Native; Some Other Race	379	4,847
Black or African American; American Indian and Alaska Native; Asian	27	46

Black or African American; American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander	8	36
Black or African American; American Indian and Alaska Native; Some Other Race	15	80
American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander	38	57
American Indian and Alaska Native; Asian; Some Other Race	18	29
American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander; Some Other Race	14	8
White; Black or African American; American Indian and Alaska Native; Asian	83	125
White; Black or African American; American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander	19	52
White; Black or African American; American Indian and Alaska Native; Some Other Race	48	533
White; American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander	91	207
White; American Indian and Alaska Native; Asian; Some Other Race	19	115
White; American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander; Some Other Race	15	35
Black or African American; American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander	5	11
Black or African American; American Indian and Alaska Native; Asian; Some Other Race	0	7
Black or African American; American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander; Some Other Race	1	8
American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander; Some Other Race	6	10
White; Black or African American; American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander	45	54
White; Black or African American; American Indian and Alaska Native; Asian; Some Other Race	1	63
White; Black or African American; American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander; Some Other Race	1	17
White; American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander; Some Other Race	5	31
Black or African American; American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander; Some Other Race	0	5
White; Black or African American; American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander; Some Other Race	2	8
Total	50,064	87,234

Demographics

Gender Assigned at Birth Counts

American Community Survey 5-year estimates – United States Census Bureau¹

Arizona

Year	Total AI AN Population	Female	Male
2014	290,780	149,624	141,156
2015	294,721	152,004	142,717
2016	296,732	151,915	144,817
2017	300,182	153,783	146,399
2018	309,580	158,284	151,296
2019	317,414	162,128	155,286

Nevada

Year	Total AI AN Population	Female	Male
2014	30,155	15,243	14,912
2015	31,393	16,082	15,311
2016	31,927	16,213	15,714
2017	32,426	16,324	16,102
2018	35,845	18,118	17,727
2019	38,026	19,121	18,905

Utah

Year	Total AI AN Population	Female	Male
2014	31,999	16,471	15,528
2015	31,824	16,392	15,432
2016	31,686	16,162	15,524
2017	32,079	16,635	15,444
2018	32,657	17,163	15,494
2019	33,721	17,614	16,107

Key points:

- ❖ All states had more females than males for AI/AN self-reported race.
- ❖ Utah has the lowest ratio of men to women, with 91 men for every 100 women. Arizona follows at 96 men per 100 women, while Nevada has 99 men per 100 women.

Demographics

Age Counts by Sex

American Community Survey 5-year estimates – United States Census Bureau¹

Arizona:

Female

Age Category	2014	2015	2016	2017	2018	2019
Under 5	12,658	12,688	12,814	12,449	12,559	12,509
5-9	13,095	13,195	13,169	12,608	12,827	12,679
10-14	12,394	12,492	12,250	12,672	12,972	13,429
15-19	13,365	13,133	12,715	12,425	12,425	12,709
20-24	14,104	14,028	13,380	13,045	13,092	13,006
25-34	21,911	22,803	22,521	23,603	24,574	25,462
34-45	17,793	17,765	18,060	18,345	18,997	19,740
45-54	18,726	18,931	18,835	18,919	19,083	19,312
55-64	13,331	13,880	14,466	15,384	16,399	16,864
65-74	7,261	7,884	8,252	8,669	9,221	9,975
75-84	3,631	3,757	3,932	4,032	4,355	4,699
85 and Over	1,355	1,448	1,521	1,632	1,780	1,744
Total	149,624	152,004	151,915	153,783	158,284	162,128

Male

Age Category	2014	2015	2016	2017	2018	2019
Under 5	12,506	12,583	12,641	12,150	12,802	12,593
5-9	12,723	12,759	12,879	12,873	12,612	12,868
10-14	13,208	12,989	12,599	13,051	13,409	13,939
15-19	12,913	12,979	13,007	12,893	13,141	13,333
20-24	14,197	14,077	14,356	14,409	14,773	14,603
25-34	21,105	21,938	23,175	23,933	25,459	26,731
34-45	17,864	17,963	18,249	18,151	18,875	19,382
45-54	16,561	16,700	16,482	16,321	16,574	16,534
55-64	10,906	11,173	11,647	12,336	12,764	13,623
65-74	5,626	5,978	6,063	6,442	6,933	7,584
75-84	2,791	2,841	2,970	3,038	3,025	3,149
85 and Over	756	737	749	802	929	947
Total	141,156	142,717	144,817	146,399	151,296	155,286

Key points:

- ❖ In Arizona, the most AI/AN individuals were in the 25-34 age group from 2014 to 2019 regardless of gender.

Demographics

Age by Sex Counts - Continued

American Community Survey 5-year estimates – United States Census Bureau¹

Nevada

Female

Age Category	2014	2015	2016	2017	2018	2019
Under 5	935	997	864	872	1,128	1,296
5-9	872	944	944	916	1,140	1,335
10-14	1,051	1,184	1,136	1,224	1,200	1,116
15-19	1,073	1,025	992	969	1,120	1,148
20-24	1,096	1,132	1,163	1,176	1,296	1,392
25-34	2,302	2,417	2,444	2,464	2,886	2,933
34-45	2,250	2,342	2,345	2,417	2,581	2,682
45-54	2,227	2,257	2,273	2,114	2,186	2,237
55-64	1,792	1,969	2,121	2,212	2,389	2,558
65-74	1,035	1,165	1,258	1,308	1,414	1,594
75-84	435	422	433	438	553	627
85 and Over	175	228	240	214	225	203
Total	15,243	16,082	16,213	16,324	18,118	19,121

Male

Age Category	2014	2015	2016	2017	2018	2019
Under 5	1,161	1,235	1,289	1,290	1,401	1,518
5-9	1,038	993	1,229	1,108	1,287	1,323
10-14	1,200	1,114	998	979	1,256	1,373
15-19	1,176	1,155	1,306	1,305	1,339	1,351
20-24	1,190	1,192	1,165	1,118	1,158	1,264
25-34	2,096	2,318	2,413	2,731	3,082	3,385
34-45	1,582	1,826	1,910	2,015	2,308	2,551
45-54	2,470	2,432	2,281	2,336	2,428	2,446
55-64	1,545	1,613	1,637	1,717	1,821	1,969
65-74	976	942	1,035	1,075	1,036	1,074
75-84	348	396	396	374	502	527
85 and Over	130	95	55	54	109	124
Total	14,912	15,311	15,714	16,102	17,727	18,905

Key points:

- ❖ In Nevada, the most AI/AN individuals were in the 25-34 age group from 2014 to 2019 regardless of gender.

Demographics

Age Counts by Sex Continued

American Community Survey 5-year estimates – United States Census Bureau¹

Utah

Female

Age Category	2014	2015	2016	2017	2018	2019
Under 5	1,412	1,396	1,281	1,356	1,421	1,404
5-9	1,194	1,143	1,083	1,206	1,340	1,588
10-14	1,432	1,323	1,459	1,481	1,492	1,302
15-19	1,612	1,451	1,468	1,439	1,461	1,525
20-24	1,661	1,780	1,739	1,649	1,715	1,733
25-34	2,408	2,276	2,316	2,481	2,652	2,898
34-45	2,286	2,256	2,171	2,273	2,221	2,209
45-54	2,087	2,351	2,196	2,036	2,023	2,035
55-64	1,404	1,531	1,551	1,715	1,757	1,749
65-74	582	521	497	544	615	733
75-84	331	292	341	369	372	364
85 and Over	62	72	60	86	94	74
Total	16,471	16,392	16,162	16,635	17,163	17,614

Male

Age Category	2014	2015	2016	2017	2018	2019
Under 5	1,551	1,425	1,495	1,452	1,409	1,417
5-9	1,162	1,234	1,289	1,268	1,259	1,348
10-14	1,724	1,531	1,388	1,497	1,394	1,272
15-19	1,507	1,594	1,340	1,158	1,149	1,294
20-24	1,271	1,458	1,514	1,529	1,588	1,625
25-34	2,682	2,532	2,700	2,661	2,715	2,901
34-45	2,059	2,012	1,939	2,085	2,044	2,054
45-54	1,687	1,695	1,849	1,733	1,674	1,874
55-64	1,166	1,233	1,226	1,245	1,380	1,413
65-74	481	452	520	518	576	643
75-84	235	253	233	255	253	197
85 and Over	3	13	31	43	53	69
Total	15,528	15,432	15,524	15,444	15,494	16,107

Key points:

- ❖ In Utah, the most AI/AN individuals were in the 25-34 age group from 2014 to 2019 regardless of gender.

Demographics

Percentage of Highest Educational Attainment

American Community Survey 5-year estimates – United States Census Bureau¹

Arizona

Female

Percentage of AI/AN and State population of Educational Attainment for Females by Year							
	AI/AN						State Average
Education Attainment	2014	2015	2016	2017	2018	2019	2014-2019
Less Than High School	10.2	10.0	8.7	7.7	8.3	6.8	5.6
Some High School	11.9	14.1	11.7	13.3	12.3	12.5	7.1
High School Graduate or GED	28.2	29.5	29.9	28.1	28.9	30.0	23.6
Some College	26.1	26.0	28.9	32.3	29.0	28.7	25.9
Associate's Degree	11.4	9.9	8.8	7.2	8.7	8.9	9.2
Bachelor's Degree	7.9	6.5	7.6	7.7	8.0	8.6	18.2
Graduate or Professional Degree	4.2	4.0	4.4	3.7	4.8	4.4	10.6
Total	100	100	100	100	100	100	100

Male

Percentage of AI/AN and State population of Educational Attainment for Males by Year							
	AI/AN						State Average
Education Attainment	2014	2015	2016	2017	2018	2019	2014-2019
Less Than High School	9.7	7.9	7.6	7.4	7.7	6.3	5.7
Some High School	15.1	14.5	15.5	18.3	15.8	15.4	7.9
High School Graduate or GED	39.4	39.7	37.2	36.8	37.7	36.5	24.6
Some College	22.8	21	23.3	24.2	25.6	25.9	24.7
Associate's Degree	6.2	7.5	7.5	5.5	5.7	6.8	8.1
Bachelor's Degree	4.6	6.9	5.8	5.4	4.7	6.6	18
Graduate or Professional Degree	2.1	2.4	3	2.4	2.7	2.6	11.1
Total	100	100	100	100	100	100	100

Key points:

- ❖ From 2014 to 2019, AI/AN students had a higher percentage of high school or GED education level compared to the state average.
- ❖ The percentage of AI/AN students that have some college experience grew in Arizona. However both males and females had a lower percentage of graduate or professional degrees than the state average in all years.

Demographics

Percentage of Highest Educational Attainment Continued

American Community Survey 5-year estimates – United States Census Bureau¹

Nevada

Female

Percentage of AI/AN and State population of Educational Attainment for Females by Year							
	AI/AN						State Average
Education Attainment	2014	2015	2016	2017	2018	2019	2014-2019
Less Than High School	5.0	4.5	4.2	3.3	9.2	7.8	5.7
Some High School	15.6	9.9	9.0	10.8	12.7	18.9	7.9
High School Graduate or GED	33.3	31.1	31.5	23.6	27.0	25.3	27.6
Some College	26.6	30.4	39.1	43.7	30.5	24.9	25.5
Associate's Degree	7.0	14.0	6.0	7.4	10.4	10.2	8.8
Bachelor's Degree	9.6	5.8	6.9	8.0	5.8	10.1	16.2
Graduate or Professional Degree	2.8	4.3	3.2	3.2	4.3	2.9	8.3
Total	100	100	100	100	100	100	100

Male

Percentage of AI/AN and State population of Educational Attainment for Males by Year							
	AI/AN						State Average
Education Attainment	2014	2015	2016	2017	2018	2019	2014-2019
Less Than High School	5.3	4.9	1.9	7.1	7.5	6.9	5.7
Some High School	8.0	18.9	10.5	14.6	15.7	14.8	8.3
High School Graduate or GED	37.8	38.2	33.6	36.1	26.9	29.3	28.8
Some College	32.4	24.9	37.5	27.2	29.5	29.7	25.5
Associate's Degree	5.1	6.6	6.5	7.8	8.2	2.7	7.7
Bachelor's Degree	9.1	3.1	6.9	4.0	9.9	9.2	15.6
Graduate or Professional Degree	2.4	3.4	3.1	3.2	2.2	7.5	8.4
Total	100	100	100	100	100	100	100

Key points:

- ❖ From 2014 to 2019, the percentage of AI/AN females that completed at least a high school degree or GED decreased from 33.3% to 25.3%. AI/AN males also had a decrease in percentage of high school degree or GED attainment from 37.8% to 29.3%.
- ❖ The percent of AI/AN students that attended college and obtained a college degree of any kind increased in Nevada among both males and females. Male AI/AN students with a graduate or professional degree increased from 2.4% in 2014 to 7.5% in 2019.

Demographics

Percentage of Highest Educational Attainment Continued

American Community Survey 5-year estimates – United States Census Bureau¹

Utah

Female

Percentage of AI/AN and State population of Educational Attainment for Females by Year							
	AI/AN						State Average
Education Attainment	2014	2015	2016	2017	2018	2019	2014-2019
Less Than High School	8.0	9.9	5.1	12.6	9.7	7.2	2.7
Some High School	15.5	14.6	8.3	10.8	9.1	9.6	4.9
High School Graduate or GED	28.2	32.0	36.1	29.9	29.3	33.9	23.6
Some College	24.0	24.3	21.5	24.0	26.1	31.0	26.8
Associate's Degree	13.2	6.5	16.5	6.9	9.2	7.3	10.9
Bachelor's Degree	8.5	9.1	9.1	11.9	14.6	7.2	22.3
Graduate or Professional Degree	2.7	3.4	3.4	3.9	2.0	3.9	8.8
Total	100	100	100	100	100	100	100

Male

Percentage of AI/AN and State population of Educational Attainment for Males by Year							
	AI/AN						State Average
Education Attainment	2014	2015	2016	2017	2018	2019	2014-2019
Less Than High School	8.0	3.9	4.1	6.1	9.1	6.9	2.8
Some High School	16.1	18.3	9.4	15.9	9.0	12.3	5.6
High School Graduate or GED	33.1	40.4	40.8	37.5	33.2	34.3	22.4
Some College	17.7	25.9	28.7	17.5	29.5	29.6	25.3
Associate's Degree	11.8	4.6	7.9	4.4	9.2	4.6	8.5
Bachelor's Degree	10.0	5.1	7.3	13.7	8.6	8.1	21.8
Graduate or Professional Degree	3.3	1.8	2.0	5.0	1.5	4.1	13.7
Total	100	100	100	100	100	100	100

Key points:

- ❖ From 2014 to 2019, the percentage of AI/AN females that completed at least a high school degree or GED increased from 28.2% to 33.9% in Utah. This is higher than the state average of 23.6%.
- ❖ Percentage of AI/AN males that completed at least a high school degree or GED increased from 33.1% to 34.3%. This is higher than the state average of 22.4%.
- ❖ The percentage of AI/AN females attending at least some college increased from 24% to 31% and AI/AN males increased from 17.7% to 29.6%. This is also higher than the state average of 26.8% and 25.3%.
- ❖ While the percentage of AI/AN students that have some college experience grew in Utah, the percent with an associate's or bachelor's degree decreased in both female and male AI/AN students.

Demographics

Percent of Poverty

American Community Survey 5-year estimates – United States Census Bureau¹

Arizona

	Families in Poverty (%)		People in Poverty (%)		Children in Poverty (%)	
Year	State	AI/AN	State	AI/AN	State	AI/AN
2014	13.3	33.2	18.2	38.5	25.9	47.1
2015	13.3	33.2	18.2	38.0	26.0	47.4
2016	12.9	31.4	17.7	36.4	25.3	45.3
2017	12.3	30.6	17.0	35.7	24.0	44.7
2018	11.6	29.5	16.1	34.9	22.8	44.3
2019	10.8	27.6	15.1	32.9	21.5	42.4

Nevada

	Families in Poverty (%)		People in Poverty (%)		Children in Poverty (%)	
Year	State	AI/AN	State	AI/AN	State	AI/AN
2014	11.5	25.9	15.6	27.0	22.4	35.1
2015	11.4	24.5	15.5	25.2	22.1	32.4
2016	11.0	22.7	14.9	25.6	21.3	33.8
2017	10.3	21.7	14.2	25.6	20.3	36.3
2018	9.8	23.4	13.7	26.5	19.1	38.8
2019	9.4	21.7	13.1	23.6	18.2	33.7

Utah

	Families in Poverty (%)		People in Poverty (%)		Children in Poverty (%)	
Year	State	AI/AN	State	AI/AN	State	AI/AN
2014	9.4	30.6	12.8	32.4	14.9	38.7
2015	9.1	29.3	12.3	31.7	14.3	37.4
2016	8.4	27.0	11.7	30.9	13.4	39.1
2017	7.9	25.9	11.0	29.7	12.5	37.2
2018	7.3	25.9	10.3	29.4	11.5	38.8
2019	6.8	23.1	9.8	27.1	10.9	36.7

Key points:

- ❖ In all three states, the general population and AI/AN population experienced decreases in poverty for families, individuals, and children from 2014 to 2019.
- ❖ However, child poverty among AI/AN children was above one-third of all children in Arizona, Nevada, and Utah in all years.

Demographics

Other Economic Indicators

American Community Survey 5-year estimates – United States Census Bureau¹

Arizona

Year	Median Income		Receiving Food Stamp Benefits (%)		Unemployed (%)	
	State	AI/AN	State	AI/AN	State	AI/AN
2014	\$49,928	\$31,549	13.6	34.0	9.9	21.9
2015	\$50,255	\$31,593	13.5	34.2	8.9	20.3
2016	\$51,340	\$32,267	13.2	33.1	8.0	18.9
2017	\$53,510	\$33,402	12.5	31.2	7.1	16.6
2018	\$56,213	\$35,251	11.8	29.7	6.5	14.6
2019	\$58,945	\$37,974	11.1	28.9	5.9	13.2

Nevada

Year	Median Income		Receiving Food Stamp Benefits (%)		Unemployed (%)	
	State	AI/AN	State	AI/AN	State	AI/AN
2014	\$52,205	\$42,555	11.4	21.0	11.8	20.0
2015	\$51,847	\$42,104	12.1	22.1	10.5	17.3
2016	\$53,094	\$41,468	12.4	22.9	9.3	15.6
2017	\$55,434	\$41,749	12.3	22.6	8.0	13.9
2018	\$57,598	\$41,478	12.2	21.5	6.9	12.9
2019	\$60,365	\$44,324	11.8	20.0	6.2	10.1

Utah

Year	Median Income		Receiving Food Stamp Benefits (%)		Unemployed (%)	
	State	AI/AN	State	AI/AN	State	AI/AN
2014	\$59,846	\$33,113	9.0	25.3	6.9	15.2
2015	\$60,727	\$36,428	8.9	24.4	5.8	12.4
2016	\$62,518	\$37,536	8.3	24.8	5.1	11.6
2017	\$65,325	\$41,569	7.7	24.4	4.4	12.5
2018	\$68,374	\$41,942	7.2	22.1	3.9	11.3
2019	\$71,621	\$45,957	6.7	20.6	3.6	9.0

Key points:

- ❖ For AI/AN in Arizona, Nevada, and Utah responding to the ACS, median income was lower than the general state population. The proportion of AI/AN receiving food stamps and that are unemployed was higher than the general population in each state.

Mortality

Mortality

Top 5 Causes of Death among American Indian Residents in Arizona

Arizona Department of Health Services – Bureau of Public Health Statistics²

Arizona

Year	Cause of Death	Rank	Mortality Rate Per 100,000 Population
2014	Heart Disease	1	108
	Cancer	2	97
	Unintentional Injury	3	85
	Diabetes	4	63
	Chronic Liver Disease and Cirrhosis	5	53
2015	Unintentional Injury	1	139
	Cancer	2	124
	Heart Disease	3	120
	Chronic Liver Disease and Cirrhosis	4	78
	Diabetes	5	74
2016	Heart Disease	1	140
	Unintentional Injury	2	139
	Cancer	3	101
	Chronic Liver Disease and Cirrhosis	4	86
	Diabetes	5	80
2017	Heart Disease	1	151
	Unintentional Injury	2	142
	Cancer	3	117
	Diabetes	4	82
	Chronic Liver Disease and Cirrhosis	5	74
2018	Unintentional Injury	1	145
	Heart Disease	2	130
	Cancer	3	115
	Chronic Liver Disease and Cirrhosis	4	89
	Diabetes	5	74
2019	Heart Disease	1	133
	Cancer	2	132
	Unintentional Injury	3	129
	Diabetes	4	91
	Chronic Liver Disease and Cirrhosis	5	83

Key points:

- ❖ Among AI/AN residents in Arizona, the top five leading causes of death every year from 2014 to 2019 did not change, but rank order varied.
- ❖ Heart disease had the highest mortality rate in 2014, 2016, 2017, and 2019.
- ❖ Unintentional injuries caused the most mortality in 2015 and 2018.

Mortality

Top 5 Causes of Death among American Indian Residents in Nevada

Nevada Electronic Death Registry Data and Demographics Data³

Nevada

Year	Cause of Death	Rank	Mortality Rate Per 100,000 Population
2014	Heart Disease	1	120
	Cancer	2	65
	Non-transport Accidents	3	37
	Chronic Lower Respiratory Diseases	4	28
	Intentional Self-harm	5	22
2015	Heart Disease	1	123
	Cancer	2	82
	Chronic Liver Disease and Cirrhosis	3	44
	Non-transport Accidents	4	35
	Diabetes	5	21
2016	Heart Disease	1	151
	Cancer	2	99
	Chronic Lower Respiratory Diseases	3	35
	Non-transport Accidents	4	32
	Chronic Liver Disease and Cirrhosis	5	29
2017	Heart Disease	1	121
	Cancer	2	95
	Diabetes	3	37
	Chronic Lower Respiratory Diseases	4	32
	Chronic Liver Disease and Cirrhosis	5	23
2018	Heart Disease	1	154
	Cancer	2	71
	Diabetes	3	46
	Non-transport Accidents	4	43
	Chronic Lower Respiratory Diseases	5	29
2019	Heart Disease	1	107
	Cancer	2	96
	Chronic Lower Respiratory Diseases	3	42
	Symptoms, Signs, not elsewhere Classified	4	40
	Diabetes	5	37

Key points:

- ❖ Among Nevada AI/AN, heart disease and cancer were the leading causes of death each year from 2014 to 2019.
- ❖ Order changed between the third and fifth leading causes, with diabetes, chronic lower respiratory diseases, and chronic liver disease and cirrhosis often being included.

Mortality

Top 5 Causes of Death among American Indian Residents in Utah

Utah Department of Health - Office of Vital Records and Statistics⁴

Utah

Year	Cause of Death	Rank	Mortality Rate Per 100,000 Population
2014	Unintentional Injury	1	154
	Heart Disease	2	112
	Cancer	3	110
	Chronic Liver Disease and Cirrhosis	4	61
	Diabetes	5	57
2015	Heart Disease	1	125
	Cancer	2	119
	Diabetes	3	103
	Unintentional Injury	4	81
	Chronic Liver Disease and Cirrhosis	5	67
2016	Cancer	1	109
	Heart Disease	2	104
	Unintentional Injury	3	92
	Diabetes	4	61
	Chronic Liver Disease and Cirrhosis	5	33
2017	Heart Disease	1	145
	Unintentional Injury	2	110
	Cancer	3	66
	Chronic Liver Disease and Cirrhosis	4	65
	Diabetes	5	44
2018	Heart Disease	1	135
	Unintentional Injury	2	133
	Cancer	3	108
	Diabetes	4	60
	Influenza and Pneumonia	5	49
2019	Heart Disease	1	139
	Unintentional Injury	2	116
	Diabetes	3	103
	Cancer	4	81
	Intentional Self-Harm	5	53

Key points:

- ❖ Top five causes of death for AI/AN in Utah changed from 2014 to 2019.
- ❖ In 2014, unintentional injury was the leading cause of death. In 2015, the leading cause of death was cancer. Whereas from 2016 to 2019, heart disease was the leading cause.
- ❖ In 2019, the leading causes of death were heart disease, unintentional injury, diabetes, cancer, and intentional self-harm. This was the first year intentional self-harm was included in the top five causes for Utah over this period.

Chronic Disease

Chronic Disease

Heart Disease Inpatient visits by State and Year

Inpatient Hospital Discharge and Indian Health Service Epi Data Mart^{5,6,7,8}

Arizona

	2014	2015	2016	2017	2018	2019
Count	6,387	6,015	5,707	5,272	6,001	5,880

Nevada

	2014	2015	2016	2017	2018	2019
Count	1,596	2,054	853	853	788	854

Utah

	2014	2015	2016	2017	2018	2019
Count	63	99	85	120	111	125

IHS Phoenix Service Area

	2014	2015	2016	2017	2018
Count	17,737	16,842	20,032	21,341	21,420

Key points:

- ❖ In Arizona, the most inpatient hospital discharges for AI/AN patients occurred in 2014 (6,387) and the least occurred in 2017 (5,272).
- ❖ In Nevada, inpatient hospital discharges for AI/AN patients peaked in 2015 before a decline in 2016. Inpatient hospital discharges in 2018 were lowest (788).
- ❖ In Utah, inpatient hospital discharge numbers for AI/AN patients were much lower than the other states, but have been gradually increasing. In 2014, there were 63 inpatient hospital discharges and this increased to 125 in 2019.
- ❖ In the IHS Phoenix Service Area there was a decrease in 2015 before increases over the next three years. This decrease may be a result of the ICD-9 transition to ICD-10.

Chronic Disease

Heart Disease Inpatient Visits by Age, State, and Year

Inpatient Hospital Discharge^{5,6,7}

Arizona

Age Category	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
0-17	251	3.9	210	2.4	138	2.4	104	2.0	110	1.8	74	1.3
18-29	387	6.1	324	2.9	166	2.9	165	3.1	208	3.5	167	2.8
30-49	1,433	22.4	1,297	21.6	1,199	21.0	1,095	20.8	1,200	20.0	1,151	19.6
50-64	2,002	31.3	1,874	31.2	1,803	31.6	1,702	32.3	1,986	33.1	1,934	32.9
65+	2,314	36.2	2,310	38.4	2,401	42.1	2,206	41.8	2,497	41.6	2,554	43.4
Total	6,387	100.0	6,015	100.0	5,707	100.0	5,272	100.0	6,001	100.0	5,880	100.0

Nevada

Age Category	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
0-17	7	0.4	10	0.5	*	*	*	*	8	1.0	*	*
18-29	39	2.4	25	1.2	10	1.2	12	1.4	10	1.3	9	1.1
30-49	181	11.3	300	14.6	89	10.4	97	11.4	109	13.8	116	13.6
50-64	536	33.6	769	37.4	320	37.5	309	36.2	270	34.3	310	36.3
65+	833	52.2	950	46.3	432	50.6	431	50.5	391	49.6	416	48.7
Total	1,596	100.0	2,054	100.0	853	100.0	853	100.0	788	100.0	854	100.0

* = counts and totals with less than 6 participants in a category are suppressed for confidentiality

Utah

Age Category	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
0-17	*	4.8	8	8.1	6	7.1	*	1.7	*	1.8	*	0.0
18-29	*	3.2	*	2.0	*	1.2	*	3.3	*	4.5	*	2.4
30-49	27	42.9	12	12.1	19	22.4	38	31.7	33	29.7	35	28.0
50-64	9	14.3	32	32.3	27	31.8	47	39.2	39	35.1	35	28.0
65+	22	34.9	45	45.5	32	37.6	29	24.2	32	28.8	52	41.6
Total	63	100.0	99	100.0	85	100.0	120	100.0	111	100.0	125	100.0

* = counts and totals with less than 6 participants in a category are suppressed for confidentiality

Chronic Disease

Heart Disease Inpatient Visits by Age, State, and Year Continued

Indian Health Service Epi Data Mart⁸

IHS Phoenix Service Area

Age Category	2014		2015		2016		2017		2018	
	n	%	n	%	n	%	n	%	n	%
0-17	846	4.8	698	4.1	185	0.9	152	0.7	160	0.7
18-29	561	3.2	463	2.7	376	1.9	471	2.2	452	2.1
30-49	3,202	18.1	2,693	16.0	2,694	13.4	3,154	14.8	3,213	15.0
50-64	5,636	31.8	5,207	30.9	6,903	34.5	7,388	34.6	7,245	33.8
65+	7,492	42.2	7,781	46.2	9,874	49.3	10,176	47.7	10,350	48.3
Total	17,737	100.0	16,842	100.0	20,032	100.0	21,341	100.0	21,420	100.0

Key points:

- ❖ Heart disease inpatient hospital discharges among the AI/AN population in all states increased after the age of 30.
- ❖ More visits occurred in AI/AN 65 and older in Arizona and Nevada than other age groups in all years.
- ❖ In Utah, heart disease inpatient hospital visits were highest among those 50-64 in some years (2017 and 2018) and 65 and older in all others.

Chronic Disease

Heart Disease by Sex, State, and Year

Inpatient Hospital Discharge and Indian Health Service Epi Data Mart^{5,6,7,8}

Arizona

	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
Female	3,188	49.9	2,858	47.5	2,711	47.5	2,568	48.7	2,800	46.7	2,824	48.0
Male	3,199	50.1	3,157	52.5	2,996	52.5	2,704	51.3	3,201	53.3	3,056	52.0
Total	6,387	100.0	6,015	100.0	5,707	100.0	5,272	100.0	6,001	100.0	5,880	100.0

Nevada

	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
Female	756	47.4	889	43.3	366	42.9	420	49.2	401	50.9	406	47.5
Male	840	52.6	1,165	56.7	487	57.1	433	50.8	387	49.1	448	52.5
Total	1,596	100.0	2,054	100.0	853	100.0	853	100.0	788	100.0	854	100.0

Utah

	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
Female	28	44.4	43	43.4	39	45.9	51	42.5	61	55.0	54	43.2
Male	35	55.6	56	56.6	46	54.1	69	57.5	50	45.0	71	56.8
Total	63	100.0	99	100.0	85	100.0	120	100.0	111	100.0	125	100.0

IHS Phoenix Service Area

	2014		2015		2016		2017		2018	
	n	%	n	%	n	%	n	%	n	%
Female	8,298	46.8	7,714	45.8	8,991	44.9	9,663	45.3	9,320	43.5
Male	9,439	53.2	9,128	54.2	11,041	55.1	11,678	54.7	12,100	56.5
Total	17,737	100.0	16,842	100.0	20,032	100.0	21,341	100.0	21,420	100.0

Key points:

- ❖ The AI/AN population in Arizona, Nevada, and Utah had small differences in hospital inpatient visits for heart disease by sex. Males experienced slightly more hospital discharges for heart disease than females in all years for the IHS Phoenix Service Area.

Chronic Disease

Stroke by State and Year

Inpatient Hospital Discharge^{5,6,7}

Arizona

	2014	2015	2016	2017	2018	2019
Count	903	889	1,011	784	970	941

Nevada

	2014	2015	2016	2017	2018	2019
Count	214	314	140	139	127	124

Utah

	2014	2015	2016	2017	2018	2019
Count	11	12	7	15	14	10

Key points:

- ❖ In Arizona, the number of inpatient hospital discharges for AI/AN were relatively similar each year between 2014 and 2019. There were 903 in 2014, and a low of 784 in 2017. The most recent number of stroke inpatient hospital discharges among AI/AN in 2019 was 941.
- ❖ In Nevada, the number of stroke inpatient discharges peaked in 2015 at 314 before a decline in 2016 at 140. Stroke inpatient visits continued to decline to 124 in 2019.
- ❖ In Utah, stroke inpatient hospital discharges remained fairly consistent.

Chronic Disease

Stroke by Age, State, and Year

Inpatient Hospital Discharge^{5,6,7}

Arizona

Age Category	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
0-17	22	2.4	23	2.6	17	1.7	17	2.2	17	1.8	10	1.1
18-29	30	3.3	23	2.6	32	3.2	15	1.9	11	1.1	21	2.2
30-49	152	16.8	127	14.3	153	15.1	127	16.2	182	18.8	188	20.0
50-64	302	33.4	294	33.1	361	35.7	253	32.3	341	35.2	295	31.3
65+	397	44.0	422	47.5	448	44.3	372	47.4	419	43.2	427	45.4
Total	903	100.0	889	100.0	1011	100.0	784	100.0	970	100.0	941	100.0

Nevada

Age Category	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
0-17	*	0.5	0	0.0	*	0.7	0	0.0	0	0.0	0	0.0
18-29	*	0.9	*	0.3	*	2.1	0	0.0	*	2.4	*	1.6
30-49	11	5.1	33	10.5	19	13.6	15	10.8	18	14.2	19	15.3
50-64	72	33.6	93	29.6	53	37.9	40	28.8	48	37.8	36	29.0
65+	128	59.8	187	59.6	64	45.7	84	60.4	58	45.7	67	54.0
Total	214	100.0	314	100.0	140	100.0	139	100.0	127	100.0	124	100.0

* = counts and totals with less than 6 participants in a category are suppressed for confidentiality

Utah

Age Category	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
0-17	0	0.0	0	0.0	0	0.0	0	0.0	*	7.1	*	10.0
18-29	0	0.0	0	0.0	0	0.0	0	0.0	*	7.1	0	0.0
30-49	*	45.5	0	0.0	*	28.6	6	40.0	0	0.0	*	50.0
50-64	*	9.1	6	50.0	0	0.0	6	40.0	8	57.1	*	10.0
65+	*	45.5	6	50.0	*	71.4	*	20.0	*	28.6	*	30.0
Total	11	100.0	12	100.0	7	100.0	15	100.0	14	100.0	10	100.0

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Chronic Disease

Stroke by Sex, State, and Year

Inpatient Hospital Discharge^{5,6,7}

Arizona

	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
Female	488	54.0	467	52.5	516	51.0	406	51.8	486	50.1	451	47.9
Male	415	46.0	422	47.5	495	49.0	378	48.2	484	49.9	490	52.1
Total	903	100.0	889	100.0	1011	100.0	784	100.0	970	100.0	941	100.0

Nevada

	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
Female	102	47.7	141	44.9	69	49.3	76	54.7	75	59.1	62	50.0
Male	112	52.3	173	55.1	71	50.7	63	45.3	52	40.9	62	50.0
Total	214	100.0	314	100.0	140	100.0	139	100.0	127	100.0	124	100.0

Utah

	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
Female	9	81.8	*	25.0	6	85.7	9	60.0	9	64.3	*	50.0
Male	*	18.2	9	75.0	*	14.3	6	40.0	*	35.7	*	50.0
Total	11	100.0	12	100.0	7	100.0	15	100.0	14	100.0	10	100.0

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Key points:

- ❖ Age
 - ❖ In Arizona and Nevada, stroke inpatient hospital visits among AI/AN were largely experienced by older individuals. Those under 30 made up about 5% of hospital discharges for stroke in Arizona and less than 3% in Nevada. In 2019, 45.4% of strokes in Arizona were attributed to those 65 and older. This age group made up 54% of strokes in Nevada. Utah had lower numbers of stroke visits, and many age groups were suppressed in most years.
- ❖ Sex
 - ❖ Among the AI/AN population in Arizona and Nevada, there were small differences in hospital discharges for stroke by sex. In Utah, low counts make it difficult to discern differences by sex

Chronic Disease

Hypertension by State and Year

Inpatient Hospital Discharge and Indian Health Service Epi Data Mart^{5,6,7,8}

Arizona

	2014	2015	2016	2017	2018	2019
Count	11,379	10,991	11,438	10,715	11,706	11,670

Nevada

	2014	2015	2016	2017	2018	2019
Count	2,427	3,126	1,423	1,378	1,285	1,373

Utah

	2014	2015	2016	2017	2018	2019
Count	123	190	195	194	221	248

IHS Phoenix Service Area

	2014	2015	2016	2017	2018
Count	136,691	109,381	74,430	75,813	77,776

Key points:

- ❖ Documented inpatient hospital discharges for hypertension among AI/AN in Arizona were similar from 2014 to 2019.
- ❖ AI/AN hospital visits for hypertension in Nevada peaked at 3,126 in 2015 then experienced a drop in 2016 to 1,423. This level remained similar through 2019.
- ❖ In Utah, AI/AN hospital visits for hypertension increased from 2014 to 2019 with over a 100% increase from 123 to 248.
- ❖ In the IHS Phoenix Service Area, declines in inpatient hospital discharges were experienced from 2014 to 2015 and 2015 to 2016 before leveling off. This decrease may be a result of the ICD-9 transition to ICD-10.

Chronic Disease

Hypertension by Age, State, and Year

Inpatient Hospital Discharge^{5,6,7}

Arizona

Age Category	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
0-17	64	0.6	72	0.7	58	0.5	63	0.6	64	0.5	64	0.5
18-29	565	5.0	498	4.5	566	4.9	518	4.8	543	4.6	505	4.3
30-49	3469	30.5	3174	28.9	3427	30.0	3138	29.3	3392	29.0	3270	28.0
50-64	3954	34.7	3827	34.8	3790	33.1	3616	33.7	3961	33.8	3978	34.1
65+	3327	29.2	3420	31.1	3597	31.4	3380	31.5	3746	32.0	3853	33.0
Total	11,379	100.0	10,991	100.0	11,438	100.0	10,715	100.0	11,706	100.0	11,670	100.0

Nevada

Age Category	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
0-17	*	0.0	*	0.1	*	0.1	0	0.0	*	0.2	0	0.0
18-29	28	1.2	48	1.5	29	2.0	19	1.4	35	2.7	38	2.8
30-49	390	16.1	579	18.5	249	17.5	244	17.7	244	19.0	294	21.4
50-64	926	38.2	1,239	39.6	558	39.2	534	38.8	481	37.4	496	36.1
65+	1,082	44.6	1,257	40.2	586	41.2	581	42.2	522	40.6	545	39.7
Total	2,427	100.0	3,126	100.0	1,423	100.0	1,378	100.0	1,285	100.0	1,373	100.0

* = counts and totals with less than 6 participants in a category are suppressed for confidentiality

Utah

Age Category	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
0-17	*	0.8	0	0.0	*	0.5	*	1.5	*	1.4	*	0.4
18-29	*	0.8	*	2.6	9	4.6	*	2.6	9	4.1	19	7.7
30-49	40	32.5	41	21.6	53	27.2	62	32.0	65	29.4	77	31.0
50-64	35	28.5	69	36.3	71	36.4	84	43.3	83	37.6	77	31.0
65+	46	37.4	75	39.5	61	31.3	40	20.6	61	27.6	74	29.8
Total	123	100.0	190	100.0	195	100.0	194	100.0	221	100.0	248	100.0

* = counts and totals with less than 6 participants in a category are suppressed for confidentiality

Chronic Disease

Hypertension by Age and Year Continued

Indian Health Service Area Epi Data Mart⁸

IHS Phoenix Service Area

Age Category	2014		2015		2016		2017		2018	
	n	%	n	%	n	%	n	%	n	%
0-17	295	0.2	238	0.2	184	0.2	188	0.2	153	0.2
18-29	3,388	2.5	2,558	2.3	2,036	2.7	2,091	2.8	1,907	2.5
30-49	35,583	26.0	27,142	24.8	18,747	25.2	19,058	25.1	19,784	25.4
50-64	55,863	40.9	44,700	40.9	29,345	39.4	29,805	39.3	30,376	39.1
65+	41,562	30.4	34,743	31.8	24,118	32.4	24,671	32.5	25,556	32.9
Total	136,691	100.0	109,381	100.0	74,430	100.0	75,813	100.0	77,776	100.0

Key points:

- ❖ Among the Arizona AI/AN population from 2014 to 2019, those under 29 made up less than 6% of all hospital discharges for hypertension in each year. The 30-49, 50-64, and 65 and up age groups each made up about 30% of hospital discharges in each year.
- ❖ Utah and Nevada trends were similar to Arizona, where in 2019 the older age groups comprised similar proportions of the hypertension hospital visits.
- ❖ Decreases experienced in the IHS Phoenix Service Area may be a result of the change from ICD-9 to ICD-10. From 2014 to 2016, there were drops in documented hypertension among AI/AN before leveling off.

Chronic Disease

Hypertension by Sex, State, and Year

Inpatient Hospital Discharge and Indian Health Service Epi Data Mart^{5,6,7,8}

Arizona

	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
Female	5,856	51.5	5,505	50.1	5,802	50.7	5,396	50.4	5,796	49.5	5,892	50.5
Male	5,523	48.5	5,486	49.9	5,636	49.3	5,319	49.6	5,910	50.5	5,778	49.5
Total	11,379	100.0	10,991	100.0	11,438	100.0	10,715	100.0	11,706	100.0	11,670	100.0

Nevada

	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
Female	1,221	50.3	1,492	47.7	676	47.5	726	52.7	659	51.3	694	50.5
Male	1,206	49.7	1,634	52.3	747	52.5	652	47.3	626	48.7	679	49.5
Total	2,427	100.0	3,126	100.0	1,423	100.0	1,378	100.0	1,285	100.0	1,373	100.0

Utah

	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
Female	64	52.0	88	46.3	100	51.3	102	52.6	121	54.8	135	54.4
Male	59	48.0	102	53.7	95	48.7	92	47.4	100	45.2	113	45.6
Total	123	100.0	190	100.0	195	100.0	194	100.0	221	100.0	248	100.0

IHS Phoenix Service Area

	2014		2015		2016		2017		2018	
	n	%	n	%	n	%	n	%	n	%
Female	74,980	54.9	60,057	54.9	41,098	55.2	41,868	55.2	42,842	55.1
Male	61,711	45.1	49,324	45.1	33,332	44.8	33,945	44.8	34,934	44.9
Total	136,691	100.0	109,381	100.0	74,430	100.0	75,813	100.0	77,776	100.0

Key points:

- ❖ Hypertension hospital visits by sex for each state were similar from 2014 to 2019.

Chronic Disease

Diabetes by State and Year

Inpatient Hospital Discharge and Indian Health Service Epi Data Mart^{5,6,7,8}

Arizona

	2014	2015	2016	2017	2018	2019
Count	10,312	10,169	10,432	9,944	10,811	10,605

Nevada

	2014	2015	2016	2017	2018	2019
Count	1,529	1,945	969	951	859	962

Utah

	2014	2015	2016	2017	2018	2019
Count	111	193	190	214	231	247

IHS Phoenix Service Area

	2014	2015	2016	2017	2018
Count	232,190	202,059	160,624	169,412	162,194

Key points:

- ❖ Among the AI/AN population in Arizona, diabetes inpatient visits remained relatively consistent from 2014 to 2019. There were 10,312 inpatient hospital discharges for diabetes in 2014 and 10,605 in 2019.
- ❖ In Nevada, the AI/AN population experienced the highest number of hospital discharges for diabetes in 2014 and 2015 before a decline in 2016. Counts remained similar from 2016 to 2019.
- ❖ Inpatient hospital discharges for diabetes among the AI/AN population increased over in Utah from 111 in 2014 to 247 in 2019.
- ❖ Drops in hospital discharges for diabetes in the IHS Phoenix Service Area from 2014 to 2016 may be a result of the change from ICD-9 to ICD-10. From 2014 to 2016, discharges fell yearly before leveling off.

Chronic Disease

Diabetes by Age, State, and Year

Inpatient Hospital Discharge^{5,6,7}

Arizona

Age Category	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
0-17	82	0.8	72	0.7	50	0.5	47	0.5	75	0.7	55	0.5
18-29	682	6.6	638	6.3	739	7.1	710	7.1	732	6.8	707	6.7
30-49	3,392	32.9	3,213	31.6	3,410	32.7	3,175	31.9	3,425	31.7	3,224	30.4
50-64	3,492	33.9	3,511	34.5	3,437	32.9	3,309	33.3	3,599	33.3	3,551	33.5
65+	2,664	25.8	2,735	26.9	2,796	26.8	2,703	27.2	2,980	27.6	3,068	28.9
Total	10,312	100	10,169	100	10,432	100	9,944	100	10,811	100	10,605	100

Nevada

Age Category	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
0-17	*	0.1	8	0.4	*	0.4	6	0.6	*	0.6	6	0.6
18-29	23	1.5	55	2.8	27	2.8	27	2.8	33	3.8	35	3.6
30-49	311	20.3	411	21.1	193	19.9	184	19.3	170	19.8	206	21.4
50-64	594	38.8	757	38.9	387	39.9	393	41.3	353	41.1	373	38.8
65+	600	39.2	714	36.7	358	36.9	341	35.9	298	34.7	342	35.6
Total	1,530	100.0	1,945	100.0	969	100.0	951	100.0	859	100.0	962	100.0

* = counts and totals with less than 6 participants in a category are suppressed for confidentiality

Utah

Age Category	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
0-17	*	1.8	*	0.5	*	1.1	*	1.9	*	0.9	*	0.4
18-29	*	3.6	11	5.7	13	6.8	7	3.3	19	8.2	28	11.3
30-49	42	37.8	50	25.9	67	35.3	78	36.4	72	31.2	75	30.4
50-64	27	24.3	75	38.9	65	34.2	82	38.3	82	35.5	81	32.8
65+	36	32.4	56	29.0	43	22.6	43	20.1	56	24.2	62	25.1
Total	111	100.0	193	100.0	190	100.0	214	100.0	231	100.0	247	100.0

* = counts and totals with less than 6 participants in a category are suppressed for confidentiality

Chronic Disease

Diabetes by Age and Year Continued

Indian Health Service Epi Data Mart⁸

IHS Phoenix Service Area

Age Category	2014		2015		2016		2017		2018	
	n	%	n	%	n	%	n	%	n	%
0-17	1,667	0.7	1,845	0.9	834	0.5	781	0.5	750	0.5
18-29	8,953	3.9	7,524	3.7	7,348	4.6	7,593	4.5	6,900	4.3
30-49	70,136	30.2	59,752	29.6	48,941	30.5	51,165	30.2	48,084	29.6
50-64	95,479	41.1	82,877	41.0	63,624	39.6	68,366	40.4	65,117	40.1
65+	55,955	24.1	50,061	24.8	39,877	24.8	41,507	24.5	41,343	25.5
Total	232,190	100.0	202,059	100.0	160,624	100.0	169,412	100.0	162,194	100.0

Key points:

- ❖ Hospital discharges for diabetes among AI/AN increased after age 30 across all three states from 2014 to 2019.
- ❖ In Arizona, those in the 30-49, 50-64, and 65 and older categories had a similar number of diabetes visits. Those 50-64 made up the biggest group of diabetes visits in all years, followed by 30-49, and a drop slightly after 65.
- ❖ In Nevada, the 50-64 age groups made up the largest proportion in most years and was followed by those 65 and older.
- ❖ Utah trends are similar to those in Arizona where the middle age groups made up the most hospital visits for diabetes, followed by those 65 and older.

Chronic Disease

Diabetes by Sex, State, and Year

Inpatient Hospital Discharge and Indian Health Service Epi Data Mart^{5,6,7,8}

Arizona

	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
Female	5,734	55.6	5,520	54.3	5,767	55.3	5,473	55.0	5,884	54.4	5,876	55.4
Male	4,578	44.4	4,649	45.7	4,665	44.7	4,471	45.0	4,927	45.6	4,729	44.6
Total	10,312	100	10,169	100	10,432	100	9,944	100	10,811	100	10,605	100

Nevada

	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
Female	766	50.1	935	48.1	468	48.3	523	55.0	472	54.9	500	52.0
Male	763	49.9	1,010	51.9	501	51.7	428	45.0	387	45.1	462	48.0
Total	1,529	100.0	1,945	100.0	969	100.0	951	100.0	859	100.0	962	100.0

Utah

	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
Female	61	55.0	98	50.8	111	58.4	127	59.3	138	59.7	146	59.1
Male	50	45.0	95	49.2	79	41.6	87	40.7	93	40.3	101	40.9
Total	111	100.0	193	100.0	190	100.0	214	100.0	231	100.0	247	100.0

IHS Phoenix Service Area

	2014		2015		2016		2017		2018	
	n	%	n	%	n	%	n	%	n	%
Female	137,074	59.0	118,880	58.8	94,494	58.8	99,737	58.9	95,252	58.7
Male	95,116	41.0	83,179	41.2	66,130	41.2	69,675	41.1	66,942	41.3
Total	232,190	100.0	202,059	100.0	160,624	100.0	169,412	100.0	162,194	100.0

Key points:

- ❖ Inpatient hospital discharges for diabetes among AI/AN in Arizona, Nevada, and Utah were experienced slightly more often by females.
- ❖ Utah had the highest difference with women making up 59.1% of diabetes discharges in 2019, while Arizona had 55.4% women and Nevada had 52% women.

Chronic Disease

Body Mass Index by State and Year

Indian Health Service Epi Data Mart⁸

Arizona

BMI Category	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
Underweight	256	1	240	1	249	1	257	1	233	1	1,235	1
Normal Weight	4,102	11	4,217	11	4,337	11	4,396	11	4,364	11	21,416	11
Overweight	8,422	22	8,488	22	8,662	22	8,704	22	8,688	22	42,964	22
Obese	25,322	66	25,756	67	26,193	66	26,630	67	26,098	66	129,999	66

Nevada

BMI Category	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
Underweight	20	0	23	0	24	0	33	1	28	1	128	0
Normal Weight	578	11	625	11	540	11	647	11	580	11	2,970	11
Overweight	1,287	24	1,328	24	1,149	23	1,376	24	1,264	24	6,404	24
Obese	3,409	64	3,536	64	3,285	66	3,771	65	3,337	64	17,338	65

Utah

BMI Category	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
Underweight	7	0	8	1	8	0	8	1	8	1	39	0
Normal Weight	145	9	128	8	138	8	122	8	122	9	655	8
Overweight	314	19	300	19	301	18	284	18	255	18	1,454	18
Obese	1,169	71	1,130	72	1,247	74	1,164	74	1,021	73	5,731	73

Chronic Disease

Body Mass Index by Age and State

Indian Health Service Epi Data Mart⁸

Arizona

BMI Category	Age Category											
	18-29		30-39		40-49		50-59		60-69		70+	
	n	%	n	%	n	%	n	%	n	%	n	%
Underweight	572	1	165	0	67	0	142	0	100	0	189	2
Normal Weight	8,846	15	2,779	7	2,211	7	2,789	9	2,271	11	2,520	23
Overweight	12,363	21	7,621	19	6,351	20	7,491	23	5,435	27	3,703	33
Obese	36,603	63	30,472	74	23,830	73	22,014	68	12,317	61	4,763	43

Nevada

BMI Category	Age Category											
	18-29		30-39		40-49		50-59		60-69		70+	
	n	%	n	%	n	%	n	%	n	%	n	%
Underweight	63	1	*	0	16	0	11	0	*	0	31	1
Normal Weight	1,077	17	373	8	263	6	383	7	311	9	563	20
Overweight	1,465	24	944	20	797	19	1,336	25	893	26	969	35
Obese	3,619	58	3,468	72	3,182	75	3,574	67	2,289	65	1,206	44
* = counts and totals with less than 6 participants in a category are suppressed for confidentiality												

Utah

BMI Category	Age Category											
	18-29		30-39		40-49		50-59		60-69		70+	
	n	%	n	%	n	%	n	%	n	%	n	%
Underweight	10	1	*	0	*	0	9	1	8	1	11	2
Normal Weight	212	12	85	5	63	4	96	6	82	9	117	23
Overweight	323	18	274	15	221	16	286	19	224	25	126	25
Obese	1,232	69	1,435	80	1,124	80	1,116	74	566	64	258	50
* = counts and totals with less than 6 participants in a category are suppressed for confidentiality												

Chronic Disease

Body Mass Index by Sex, State and Year

Indian Health Service Epi Data Mart⁸

Arizona

Female

BMI Category	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
Underweight	157	1	149	1	155	1	153	1	140	1	754	1
Normal Weight	2,294	10	2,327	10	2,371	10	2,410	10	2,408	10	11,810	10
Overweight	4,704	20	4,793	20	4,816	20	4,873	20	4,850	20	24,036	20
Obese	16,024	69	16,192	69	16,552	69	16,722	69	16,544	69	82,034	69

Male

BMI Category	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
Underweight	99	1	91	1	94	1	104	1	93	1	481	1
Normal Weight	1,808	12	1,890	12	1,966	13	1,986	13	1,956	13	9,606	12
Overweight	3,718	25	3,695	24	3,846	25	3,831	24	3,838	25	18,928	25
Obese	9,298	62	9,564	63	9,641	62	9,908	63	9,554	62	47,965	62

Nevada

Female

BMI Category	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
Underweight	13	0	15	0	18	1	25	1	20	1	91	1
Normal Weight	372	12	408	12	351	12	428	12	375	12	1,934	12
Overweight	725	23	746	22	661	22	806	22	721	23	3,659	22
Obese	2,075	65	2,163	65	2,000	66	2,330	65	2,069	65	10,637	65

Male

BMI Category	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
Underweight	7	0	8	0	6	0	8	0	8	0	37	0
Normal Weight	206	10	217	10	189	10	219	10	205	10	1,036	10
Overweight	562	27	582	27	488	25	570	25	543	27	2,745	26
Obese	1,334	63	1,373	63	1,285	65	1,441	64	1,268	63	6,701	64

Chronic Disease

Body Mass Index by Sex, State and Year Continued

Indian Health Service Epi Data Mart⁸

Utah

Female

BMI Category	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
Underweight	7	1	7	1	7	1	7	1	6	1	34	1
Normal Weight	91	9	83	8	82	8	81	8	80	9	417	8
Overweight	173	17	173	17	166	16	165	17	149	17	826	17
Obese	758	74	726	73	786	76	741	75	633	73	3,644	74

Male

BMI Category	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
Underweight	0	0	*	0	*	0	*	0	*	0	5	0
Normal Weight	54	9	45	8	56	9	41	7	42	8	238	8
Overweight	141	23	127	22	135	21	119	20	106	20	628	21
Obese	411	68	404	70	461	71	423	72	388	72	2,087	71

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Key points

- ❖ Most AI/AN from 2014 to 2018 where BMI was captured during hospital visits in Arizona, Nevada, and Utah were overweight or obese regardless of sex or age.
- ❖ Levels of obesity in all three states increased through the middle ages then declined in older age groups.

Chronic Disease

Asthma by State and Year

Emergency Room Hospital Discharge^{5,8,9,10}

Arizona

	2014	2015	2016	2017	2018	2019
Count	5,744	6,920	7,569	7,308	6,896	6,132

Nevada

	2014	2015	2016	2017	2018	2019
Count	685	897	719	677	564	598

Utah

	2014	2015	2016	2017	2018	2019
Count	25	36	53	61	63	76

IHS Phoenix Service Area

	2014	2015	2016	2017	2018
Count	37,699	32,046	20,910	19,339	18,335

Key points:

- ❖ Asthma emergency room visits among AI/AN in Arizona increased from 2014 to 2016, then declined each subsequent year until the most recent estimate of 6,132 in 2019.
- ❖ Asthma emergency room visits among AI/AN in Nevada peaked in 2015 (897) then declined to a low in 2018 (564). This level remained similar in 2019 at 598.
- ❖ In Utah, asthma emergency room visits increased every year from 2014 to 2019. Twenty-five documented cases of asthma emergency room visits occurred in 2014, while 76 occurred in 2019.
- ❖ IHS hospital discharges for asthma decreased each year. The decline from 2014-2016 may be the result of the ICD-9 change to ICD-10.

Chronic Disease

Asthma by Age, State, and Year

Emergency Room Hospital Discharge^{5,9,10}

Arizona

Age Category	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
0-17	1,676	29.2	1,922	27.8	1,824	24.1	1,843	25.2	1,589	23	1,446	23.6
18-29	1,195	20.8	1,433	20.7	1,612	21.3	1,430	19.6	1,300	18.9	1,165	19.0
30-49	1,894	33.0	2,315	33.5	2,614	34.5	2,569	35.2	2,466	35.8	2,136	34.8
50-64	739	12.9	971	14.0	1,164	15.4	1,133	15.5	1,159	16.8	1,091	17.8
65+	240	4.2	279	4.0	355	4.7	333	4.6	382	5.5	294	4.8
Total	5,744	100.0	6,920	100.0	7,569	100.0	7,308	100.0	6,896	100.0	6,132	100.0

Nevada

Age Category	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
0-17	119	17.4	123	13.7	139	19.3	127	18.8	107	19.0	103	17.2
18-29	113	16.5	181	20.2	131	18.2	136	20.1	108	19.1	122	20.4
30-49	290	42.3	352	39.2	232	32.3	246	36.3	215	38.1	215	36.0
50-64	122	17.8	208	23.2	183	25.5	121	17.9	97	17.2	101	16.9
65+	41	6.0	33	3.7	34	4.7	47	6.9	37	6.6	57	9.5
Total	685	100.0	897	100.0	719	100.0	677	100.0	564	100.0	598	100.0

Utah

Age Category	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
0-17	13	52.0	13	36.1	27	50.9	19	31.1	16	25.4	22	28.9
18-29	*	8.0	7	19.4	*	3.8	8	13.1	8	12.7	10	13.2
30-49	*	16.0	9	25.0	15	28.3	21	34.4	23	36.5	22	28.9
50-64	*	16.0	*	13.9	9	17.0	9	14.8	10	15.9	9	11.8
65+	*	8.0	*	5.6	0	0.0	*	6.6	6	9.5	13	17.1
Total	25	100.0	36	100.0	53	100.0	61	100.0	63	100.0	76	100.0

* = counts and totals with less than 6 participants in a category are suppressed for confidentiality

Chronic Disease

Asthma by Age, State, and Year Continued

Indian Health Service Epi Data Mart⁸

IHS Phoenix Service Area

Age Category	2014		2015		2016		2017		2018	
	n	%	n	%	n	%	n	%	n	%
0-17	9,975	26.5	9,459	29.5	6,665	31.9	5,963	30.8	5,090	27.8
18-29	4,637	12.3	4,090	12.8	2,700	12.9	2,553	13.2	2,306	12.6
30-49	10,904	28.9	8,653	27.0	5,736	27.4	5,228	27.0	5,302	28.9
50-64	8,682	23.0	6,956	21.7	4,075	19.5	3,874	20.0	3,811	20.8
65+	3,501	9.3	2,888	9.0	1,734	8.3	1,721	8.9	1,826	10.0
Total	37,699	100.0	32,046	100.0	20,910	100.0	19,339	100.0	18,335	100.0

Key points:

- ❖ In all three states, 30-49 year olds experienced the most emergency room visits for asthma among AI/AN.
- ❖ In Arizona and Utah, 0-17 year olds made up the second largest age group for asthma hospital discharges. In Nevada, 18-29 year olds were the second largest group.
- ❖ Hospital discharges for asthma tended to decrease after age 50.

Chronic Disease

Asthma by Sex, State, and Year

Emergency Room Hospital Discharge and Indian Health Service Epi Data Mart^{5,8,9,10}

Arizona

	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
Female	3,820	66.5	4,737	68.5	5,157	68.1	4,942	67.6	4,643	67.3	4,090	66.7
Male	1,924	33.5	2,183	31.5	2,412	31.9	2,366	32.4	2,253	32.7	2,042	33.3
Total	5,744	100	6,920	100	7,569	100	7,308	100	6,896	100	6,132	100

Nevada

	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
Female	460	67.2	598	66.7	499	69.4	493	72.8	402	71.3	419	70.1
Male	225	32.8	299	33.3	220	30.6	184	27.2	162	28.7	179	29.9
Total	685	100.0	897	100.0	719	100.0	677	100.0	564	100.0	598	100.0

Utah

	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
Female	13	52.0	29	80.6	31	58.5	42	68.9	42	66.7	52	68.4
Male	12	48.0	7	19.4	22	41.5	19	31.1	21	33.3	24	31.6
Total	25	100.0	36	100.0	53	100.0	61	100.0	63	100.0	76	100.0

IHS Phoenix Service Area

	2014		2015		2016		2017		2018	
	n	%	n	%	n	%	n	%	n	%
Female	23,801	63.1	19,994	62.4	13,150	62.9	11,936	61.7	11,565	63.1
Male	13,898	36.9	12,052	37.6	7,760	37.1	7,403	38.3	6,770	36.9
Total	37,699	100.0	32,046	100.0	20,910	100.0	19,339	100.0	18,335	100.0

Key points:

- ❖ Females in Arizona, Nevada, and Utah AI/AN experienced about two thirds of all emergency room hospital discharges for asthma between 2014 and 2019.

Chronic Disease

Cancer by State and Year

Inpatient Hospital Discharge and Indian Health Service Epi Data Mart^{5,6,7,8}

Arizona

	2014	2015	2016	2017	2018	2019
Count	2,069	2,018	1,613	1,410	1,705	1,693

Nevada

	2014	2015	2016	2017	2018	2019
Count	411	398	213	177	164	168

Utah

	2014	2015	2016	2017	2018	2019
Count	26	33	28	34	28	24

IHS Phoenix Service Area

	2014	2015	2016	2017	2018
Count	15,510	13,599	13,018	13,514	14,450

Key points:

- ❖ Arizona had the highest number of hospital visits for cancer among AI/AN individuals between 2014 and 2019, followed by Nevada then Utah.
- ❖ Hospital discharges for cancer visits were at a high in Arizona in 2014, then decreased until 2017. An increase was experienced in 2018 before leveling off in 2019. Nevada cancer discharges were highest in 2014 and dropped between 2015 and 2016. Cancer visits kept decreasing and leveled off in 2019 at 168.
- ❖ Cancer visits among AI/AN residents of Utah remained relatively consistent from 2014 to 2019 (26 discharges to 24).

Chronic Disease

Cancer by Age, State, and Year

Inpatient Hospital Discharge^{5,6,7}

Arizona

Age Category	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
0-17	127	6.1	148	7.3	115	7.1	135	9.6	136	8.0	92	5.4
18-29	109	5.3	127	6.3	85	5.3	81	5.7	57	3.3	74	4.4
30-49	471	22.8	374	18.5	361	22.4	307	21.8	381	22.3	381	22.5
50-64	632	30.5	605	30.0	507	31.4	458	32.5	557	32.7	549	32.4
65+	730	35.3	764	37.9	545	33.8	429	30.4	574	33.7	597	35.3
Total	2,069	100.0	2,018	100.0	1,613	100.0	1,410	100.0	1,705	100.0	1,693	100.0

Nevada

Age Category	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
0-17	*	0.2	*	0.3	*	1.9	0	0.0	*	3.0	*	2.4
18-29	7	1.7	10	2.5	*	1.9	*	2.3	*	2.4	8	4.8
30-49	46	11.2	52	13.1	29	13.6	24	13.6	31	18.9	26	15.5
50-64	134	32.6	126	31.7	76	35.7	66	37.3	70	42.7	55	32.7
65+	223	54.3	209	52.5	100	46.9	83	46.9	54	32.9	75	44.6
Total	411	100.0	398	100.0	213	100.0	177	100.0	164	100.0	168	100.0

* = counts and totals with less than 6 participants in a category are suppressed for confidentiality

Utah

Age Category	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
0-17	0	0.0	*	3.0	*	14.3	*	2.9	0	0.0	*	4.2
18-29	0	0.0	*	6.1	*	3.6	*	11.8	*	3.6	*	4.2
30-49	12	46.2	10	30.3	14	50.0	*	14.7	6	21.4	6	25.0
50-64	*	3.8	*	15.2	*	17.9	18	52.9	12	42.9	6	25.0
65+	13	50.0	15	45.5	*	14.3	6	17.6	9	32.1	10	41.7
Total	26	100.0	33	100.0	28	100.0	34	100.0	28	100.0	24	100.0

* = counts and totals with less than 6 participants in a category are suppressed for confidentiality

Chronic Disease

Cancer by Age and Year Continued

Indian Health Services Electronic Data Mart⁸

IHS Phoenix Service Area

Age Category	2014		2015		2016		2017		2018	
	n	%	n	%	n	%	n	%	n	%
0-17	522	3.4	461	3.4	531	4.1	500	3.7	408	2.8
18-29	713	4.6	629	4.6	597	4.6	591	4.4	561	3.9
30-49	3,759	24.2	3,387	24.9	2,849	21.9	3,300	24.4	3,596	24.9
50-64	5,802	37.4	4,916	36.1	4,985	38.3	4,861	36.0	5,215	36.1
65+	4,714	30.4	4,206	30.9	4,056	31.2	4,262	31.5	4,670	32.3
Total	15,510	100.0	13,599	100.0	13,018	100.0	13,514	100.0	14,450	100.0

Key points:

- ❖ On average from 2014 to 2019, there were more cancer visits among AI/AN in those ages 50 and older in Arizona, Nevada, and Utah.
- ❖ Cancer hospitalizations increased starting at the age group of 30-49 year olds in all states.

Chronic Disease

Cancer by Sex, State, and Year

Inpatient Hospital Discharge and Indian Health Service Epi Data Mart^{5,6,7,8}

Arizona

	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
Female	1,178	56.9	1,107	54.9	865	53.6	776	55.0	920	54.0	949	56.1
Male	891	43.1	911	45.1	748	46.4	634	45.0	785	46.0	744	43.9
Total	2,069	100.0	2,018	100.0	1613	100.0	1,410	100.0	1,705	100.0	1,693	100.0

Nevada

	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
Female	224	54.5	213	53.5	112	52.6	87	49.2	91	55.5	95	56.5
Male	187	45.5	185	46.5	101	47.4	90	50.8	73	44.5	73	43.5
Total	411	100.0	398	100.0	213	100.0	177	100.0	164	100.0	168	100.0

Utah

	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
Female	10	38.5	21	63.6	15	53.6	15	44.1	17	60.7	15	62.5
Male	16	61.5	12	36.4	13	46.4	19	55.9	11	39.3	9	37.5
Total	26	100.0	33	100.0	28	100.0	34	100.0	28	100.0	24	100.0

IHS Phoenix Service Area

	2014		2015		2016		2017		2018	
	n	%	n	%	n	%	n	%	n	%
Female	10,133	65.3	8,583	63.1	8,002	61.5	8,473	62.7	8,758	60.6
Male	5,377	34.7	5,016	36.9	5,016	38.5	5,041	37.3	5,692	39.4
Total	15,510	100.0	13,599	100.0	13,018	100.0	13,514	100.0	14,450	100.0

Key points:

- ❖ On average from 2014 to 2019, there were more cancer visits among females AI/AN than males in Arizona, Nevada, and Utah.

Dental

Dental

Dental Visits by State and Year

Indian Health Service Epi Data Mart⁸

Arizona

Dental Visit	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
No	63,913	74	61,909	72	62,081	72	65,663	75	74,549	75	328,115	74
Yes	22,248	26	24,502	28	24,710	28	21,764	25	24,369	25	117,593	26

Nevada

Dental Visit	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
No	7,496	68	8,582	73	8,728	78	9,849	82	8,647	84	43,302	77
Yes	3,553	32	3,153	27	2,476	22	2,153	18	1,630	16	12,965	23

Utah

Dental Visit	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
No	3,044	92	2,825	83	2,719	83	2,601	81	2,554	83	13,743	84
Yes	255	8	576	17	569	17	629	19	534	17	2,563	16

Key points:

- ❖ IHS Dental visits decreased between 2014 and 2018 in Arizona. In 2014, 26% of the Arizona IHS User Population had at least one dental visit to 25% in 2018.
- ❖ Nevada IHS dental visits declined consistently from 2014 to 2018. In 2014, 32% of AI/AN made a dental visit. This value declined to 16% in 2018.
- ❖ Utilization of IHS dental services in Utah were lowest in 2014 before increasing to 19% in 2017.

Dental

Dental Visits by Age, State, and Year

Indian Health Service Epi Data Mart⁸

Arizona

Age Category	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
0-17	9,072	41	10,892	44	11,082	45	10,085	46	10,845	45	51,976	44
18-29	4,248	19	4,305	18	4,144	17	3,514	16	3,914	16	20,125	17
30-39	2,661	12	2,861	12	2,964	12	2,497	11	3,057	13	14,040	12
40-49	2,318	10	2,266	9	2,171	9	1,773	8	2,048	8	10,576	9
50-59	2,216	10	2,276	9	2,261	9	1,992	9	2,229	9	10,974	9
60-69	1,209	5	1,303	5	1,415	6	1,232	6	1,540	6	6,699	6
70+	523	2	599	2	673	3	671	3	736	3	3,202	3

Nevada

Age Category	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
0-17	1,100	31	895	28	635	26	586	27	435	27	3,651	28
18-29	634	18	552	18	422	17	338	16	262	16	2,208	17
30-39	445	13	389	12	346	14	277	13	239	15	1,696	13
40-49	456	13	402	13	284	11	243	11	166	10	1,551	12
50-59	463	13	468	15	379	15	326	15	231	14	1,867	14
60-69	288	8	284	9	252	10	238	11	177	11	1,239	10
70+	167	5	163	5	158	6	145	7	120	7	753	6

Utah

Age Category	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
0-17	84	33	177	31	136	24	195	31	117	22	709	28
18-29	62	24	135	23	155	27	95	15	124	23	571	22
30-39	25	10	110	19	105	18	127	20	106	20	473	18
40-49	36	14	64	11	60	11	81	13	74	14	315	12
50-59	31	12	55	10	66	12	72	11	55	10	279	11
60-69	13	5	23	4	38	7	48	8	42	8	164	6
70+	4	2	12	2	9	2	11	2	15	3	51	2

Dental

Dental Visits by Sex, State, and Year

Indian Health Service Epi Data Mart⁸

Arizona

Female

Dental Visit	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
No	34,873	73	33,709	71	33,773	71	35,794	74	41,070	75	179,219	73
Yes	12,815	27	13,959	29	14,064	29	12,329	26	13,898	25	67,065	27

Male

Dental Visit	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
No	29,040	75	28,200	73	28,308	73	29,869	76	33,479	76	148,896	75
Yes	9,433	25	10,543	27	10,646	27	9,435	24	10,471	24	50,528	25

Nevada

Female

Dental Visit	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
No	4,051	66	4,732	72	4,831	77	5,536	82	4,844	83	23,994	76
Yes	2,064	34	1,827	28	1,444	23	1,241	18	973	17	7,549	24

Male

Dental Visit	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
No	3,445	70	3,850	74	3,897	79	4,313	83	3,803	85	19,308	78
Yes	1,489	30	1,326	26	1,032	21	912	17	657	15	5,416	22

Dental

Dental Visits by Sex, State, and Year Continued

Indian Health Service Epi Data Mart⁸

Utah

Female

Dental Visit	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
No	1,717	92	1,585	82	1,510	81	1,510	80	1,431	82	7,753	83
Yes	152	8	349	18	354	19	378	20	322	18	1,555	17

Male

Dental Visit	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
No	1,327	93	1,240	85	1,209	85	1,091	81	1,123	84	5,990	86
Yes	103	7	227	15	215	15	251	19	212	16	1,008	14

Key points:

- ❖ Age
 - ❖ From 2014 to 2018, 0-17 year olds utilized dental services most often among AI/AN in all three states. In 2018, this age group made up 45% of all individuals who made a dental visit in Arizona, 27% in Nevada, and 22% in Utah.
 - ❖ Utilization decreased with age in every state in each year with a few exceptions.
- ❖ Sex
 - ❖ In Arizona, IHS dental utilization decreased among both males and females from 2014 to 2018 (25% to 24%; 27% to 25%).
 - ❖ In Nevada, IHS dental utilization decreases were more pronounced: 34% to 17% for females and 30% to 15% for males.
 - ❖ Among AI/AN IHS users from Utah, dental utilization increased over this period. Females increased utilization from 8% to 18% and males increased from 7% to 16%.

Dental

Dental Sealant by State and Year

Indian Health Service Epi Data Mart⁸

Arizona

Sealant	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
No	21,859	89	21,583	87	20,992	85	21,278	86	24,642	88	110,354	87
Yes	2,765	11	3,206	13	3,597	15	3,547	14	3,329	12	16,444	13

Nevada

Sealant	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
No	2,504	91	2,626	92	2,444	92	2,617	94	2,160	92	12,351	92
Yes	256	9	230	8	211	8	179	6	189	8	1,065	8

Utah

Sealant	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
No	837	98	840	96	764	96	727	95	672	95	3,840	96
Yes	15	2	32	4	34	4	37	5	36	5	154	4

Dental

Dental Sealant by Age, State, and Year

Indian Health Service Epi Data Mart⁸

Arizona

Age Category	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
2- 5	382	14	474	15	322	9	220	6	118	4	1,516	9
6-10	1,329	48	1,630	51	1,836	51	1,802	51	1,600	48	8,197	50
11-15	1,054	38	1,102	34	1,439	40	1,525	43	1,611	48	6,731	41

Nevada

Age Category	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
2- 5	13	5	14	6	17	8	16	9	23	12	83	8
6-10	119	46	95	41	83	39	76	42	69	37	442	42
11-15	124	48	121	53	111	53	87	49	97	51	540	51

Utah

Age Category	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
2- 5	0	0	*	3	0	0	*	3	0	0	2	1
6-10	9	60	13	41	14	41	14	38	14	39	64	42
11-15	6	40	18	56	20	59	22	59	22	61	88	57

* = counts and totals with less than 6 participants in a category are suppressed for confidentiality

Key points:

- ❖ For AI/AN in Arizona from 2014 to 2018, half of child IHS users had a visit for dental sealants between the ages of 6 and 10 (50%). Eleven to 15 year olds made up 41% of dental visits, and those between two and five made up 9%.
- ❖ In Nevada, children 11 to 15 made up the largest portion (51%) of dental visits for sealants, followed by six to ten year olds (42%) and two to five year olds (8%).
- ❖ Utah had even less two to five year olds with a visit for dental sealant (1%). Eleven to 15 year olds made up the largest group (57%) receiving dental sealants, followed by six to ten year olds (42%).

Dental

Dental Sealant by Sex, State, and Year

Indian Health Service Epi Data Mart⁸

Arizona

Female

Sealant	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
No	10,957	88	10,734	86	10,345	84	10,482	85	12,283	87	54,801	86
Yes	1,463	12	1,701	14	1,952	16	1,897	15	1,766	13	8,779	14

Male

Sealant	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
No	10,902	89	10,849	88	10,647	87	10,796	87	12,359	89	55,553	88
Yes	1,302	11	1,505	12	1,645	13	1,650	13	1,563	11	7,665	12

Nevada

Female

Sealant	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
No	1,267	91	1,324	91	1,216	92	1,322	94	1,070	92	6,199	92
Yes	130	9	123	9	110	8	80	6	95	8	538	8

Male

Sealant	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
No	1,237	91	1,302	92	1,228	92	1,295	93	1,090	92	6,152	92
Yes	126	9	107	8	101	8	99	7	94	8	527	8

Dental

Dental Sealant by Sex, State, and Year Continued

Indian Health Service Epi Data Mart⁸

Utah

Female

Sealant	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
No	428	98	449	97	394	96	386	95	339	94	1,996	96
Yes	9	2	15	3	17	4	22	5	21	6	84	4

Male

Sealant	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
No	409	99	391	96	370	96	341	96	333	96	1,844	96
Yes	6	1	17	4	17	4	15	4	15	4	70	4

* = counts and totals with less than 6 participants in a category are suppressed for confidentiality

Key points:

- ❖ There were no big differences between males and females for dental sealant visits among AI/AN for the IHS Phoenix Service Area. From 2014 to 2018, males and females had the same utilization in Nevada (8%) and Utah (4%). In Arizona, there was a 2% difference (14% female, 12% male).

Dental

Dental Fluoride by State and Year

Indian Health Service Epi Data Mart⁸

Arizona

Fluoride	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
No	19,096	78	17,525	71	17,104	70	15,187	61	17,939	64	86,851	68
Yes	5,528	22	7,264	29	7,485	30	9,638	39	10,032	36	39,947	32

Nevada

Fluoride	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
No	2,150	78	2,333	82	2,125	80	2,199	79	1,812	77	10,619	79
Yes	610	22	523	18	530	20	597	21	537	23	2,797	21

Utah

Fluoride	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
No	790	93	715	82	679	85	615	80	645	91	3,444	86
Yes	62	7	157	18	119	15	149	20	63	9	550	14

Key points:

- ❖ From 2014 to 2018, usage of dental fluoride visits increased in Arizona. Those who had a visit using fluoride increased from 22% to 36%.
- ❖ Utilization of dental fluoride visits remained around the same level from 2014 to 2018 in Nevada, with 21% utilizing services over the time period.
- ❖ Utah rates fluctuated; 7% utilized fluoride services in 2014 before increasing to above 15% the next three years. This fell back to 9% in 2018.

Dental

Dental Fluoride by Age, State, and Year

Indian Health Service Epi Data Mart⁸

Arizona

Age Category	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
2- 5	2,018	37	2,246	31	1,959	26	2,636	27	2,503	25	11,362	28
6-10	2,130	39	3,069	42	3,278	44	4,039	42	4,166	42	16,682	42
11-15	1,380	25	1,949	27	2,248	30	2,963	31	3,363	34	11,903	30

Nevada

Age Category	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
2- 5	146	24	109	21	151	28	203	34	151	28	760	27
6-10	248	41	192	37	184	35	193	32	179	33	996	36
11-15	216	35	222	42	195	37	201	34	207	39	1,041	37

Utah

Age Category	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
2- 5	14	23	61	39	32	27	59	40	4	6	170	31
6-10	25	40	45	29	37	31	44	30	25	40	176	32
11-15	23	37	51	32	50	42	46	31	34	54	204	37

* = counts and totals with less than 6 participants in a category are suppressed for confidentiality

Key points:

- ❖ From 2014 to 2018, there was a fairly even age distribution among children who utilized dental fluoride services. In Arizona compared to Nevada and Utah, more six to ten year olds received fluoride treatment by IHS (42% in Arizona, 36% in Nevada, 32% in Utah).

Dental

Dental Fluoride by Sex, State, and Year

Indian Health Service Epi Data Mart⁸

Arizona

Female

Fluoride	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
No	9,562	77	8,651	70	8,402	68	7,436	60	8,915	63	42,966	68
Yes	2,858	23	3,784	30	3,895	32	4,943	40	5,134	37	20,614	32

Male

Fluoride	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
No	9,534	78	8,874	72	8,702	71	7,751	62	9,024	65	43,885	69
Yes	2,670	22	3,480	28	3,590	29	4,695	38	4,898	35	19,333	31

Nevada

Female

Fluoride	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
No	1,091	78	1,188	82	1,062	80	1,092	78	900	77	5,333	79
Yes	306	22	259	18	264	20	310	22	265	23	1,404	21

Male

Fluoride	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
No	1,059	78	1,145	81	1,063	80	1,107	79	912	77	5,286	79
Yes	304	22	264	19	266	20	287	21	272	23	1,393	21

Dental

Dental Fluoride by Sex, State, and Year Continued

Indian Health Service Epi Data Mart⁸

Utah

Female

Fluoride	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
No	405	93	378	81	343	83	322	79	327	91	1,775	85
Yes	32	7	86	19	68	17	86	21	33	9	305	15

Male

Fluoride	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
No	385	93	337	83	336	87	293	82	318	91	1,669	87
Yes	30	7	71	17	51	13	63	18	30	9	245	13

Key points:

- ❖ No significant differences among dental fluoride services and sex were seen from 2014 to 2018.

Injury

Injury

Age Adjusted Injury Mortality Rates by State and Year

Centers for Disease Control and Prevention. Web-based Injury Statistics Query and Reporting System (WISQARS)¹¹

Arizona

	2014	2015	2016	2017	2018
Arizona	72.8	75.5	80.8	82.8	83.1
Arizona AI/AN	134	149.1	156.7	160.8	161

Nevada

	2014	2015	2016	2017	2018
Nevada	67.6	72.7	76.9	78.6	78.8
Nevada AI/AN	62.5	67.8	58.1	49	75.6

Utah

	2014	2015	2016	2017	2018
Utah	73.3	75.4	73	73.3	72.4
Utah AI/AN	141.4	102.2	97.3	101.3	125.7

Key points:

- ❖ In Arizona, age-adjusted injury mortality rates increased for the total population and the AI/AN population from 2014 to 2018. The AI/AN population in Arizona had nearly double the age-adjusted injury mortality rate of the general population in 2019 (83.1 and 161).
- ❖ Age-adjusted injury mortality rates were similar in Nevada for total population and AI/AN population in 2018 (78.8 and 75.6)
- ❖ In Utah, AI/AN experienced a decrease in age adjusted injury mortality rates from 2014 to 2016, then increased again until most recent measures in 2018.

Injury

All Injury by State and Year

Emergency Room Hospital Discharges^{5,9,10}

Arizona

	2014	2015	2016	2017	2018	2019
Count	19,849	21,109	19,831	18,072	18,500	18,115

Nevada

	2014	2015	2016	2017	2018	2019
Count	3,670	3,526	1,534	2,203	1,943	2,062

Utah

	2014	2015	2016	2017	2018	2019
Count	242	352	532	613	641	581

Key points:

- ❖ In Arizona, the highest number of emergency room discharges for injuries were in 2015 (21,109) and decreased in the subsequent years.
- ❖ Nevada had the highest number of emergency room discharges in 2014 and 2015, before a sharp decline in 2016. This number then increased in 2017 and remained around the same level until 2019 (2,062).
- ❖ Utah emergency room discharges for injury increased from 2014 to 2019. The lowest number was in 2014 (242) and increased to a high in 2018 (641).

Injury

All Injury by Age, State, and Year

Emergency Room Hospital Discharges^{5,9,10}

Arizona

Age Category	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
0-17	5,630	28.4	5,749	27.2	5,149	26.0	4,812	26.6	4,742	25.6	4,660	25.7
18-29	4,820	24.3	5,150	24.4	4,724	23.8	3,901	21.6	3,954	21.4	3,789	20.9
30-49	6,088	30.7	6,558	31.1	6,253	31.5	5,831	32.3	5,875	31.8	5,779	31.9
50-64	2,286	11.5	2,491	11.8	2,514	12.7	2,390	13.2	2,447	13.2	2,459	13.6
65+	1,025	5.2	1,161	5.5	1,191	6	1,138	6.3	1,482	8	1,428	7.9
Total	19,849	100	21,109	100	19,831	100	18,072	100	18,500	100	18,115	100

Nevada

Age Category	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
0-17	673	18.3	614	17.4	302	19.7	494	22.4	426	21.9	434	21
18-29	788	21.5	731	20.7	314	20.5	429	19.5	434	22.3	411	19.9
30-49	1,207	32.9	1,163	33	498	32.5	677	30.7	559	28.8	582	28.2
50-64	693	18.9	694	19.7	299	19.5	403	18.3	364	18.7	421	20.4
65+	309	8.4	324	9.2	121	7.9	200	9.1	160	8.2	214	10.4
Total	3,670	100	3,526	100	1,534	100	2,203	100	1,943	100	2,062	100

Utah

Age Category	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
0-17	86	35.5	109	31	167	31.4	183	29.9	195	30.4	168	28.9
18-29	67	27.7	98	27.8	96	18	133	21.7	137	21.4	116	20
30-49	56	23.1	90	25.6	163	30.6	195	31.8	185	28.9	187	32.2
50-64	24	9.9	40	11.4	72	13.5	80	13.1	83	12.9	63	10.8
65+	9	3.7	15	4.3	34	6.4	22	3.6	41	6.4	47	8.1
Total	242	100	352	100	532	100	613	100	641	100	581	100

Key points:

- ❖ For all three states in 2018, 30-49 year olds made up the largest proportion of hospital discharges for injury among the AI/AN population. In Arizona and Utah, the 0-17 year old category made up the next largest category. Nevada was skewed slightly older with 50-64 year olds making the next largest age category.

Injury

All Injury by Sex, State, and Year

Emergency Room Hospital Discharges^{5,9,10}

Arizona

	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
Female	9,601	48.4	10,264	48.6	9,598	48.4	8,939	49.5	9,258	50.1	8,999	49.7
Male	10,247	51.6	10,844	51.4	10,233	51.6	9,132	50.5	9,239	49.9	9,115	50.3
Total	19,848	100	21,108	100	19,831	100	18,071	100	18,497	100	18,114	100

Nevada

	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
Female	1,838	50.1	1,744	49.5	752	49.1	1,070	48.6	1,002	51.6	1,081	52.4
Male	1,832	49.9	1,782	50.5	781	50.9	1,133	51.4	941	48.4	981	47.6
Total	3,670	100	3,526	100	1,533	100	2,203	100	1,943	100	2,062	100

Utah

	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
Female	111	45.9	161	45.7	264	49.6	301	49.1	345	53.8	334	57.5
Male	131	54.1	191	54.3	268	50.4	312	50.9	296	46.2	247	42.5
Total	242	100	352	100	532	100	613	100	641	100	581	100

Key points:

- ❖ In all three states, the percentage of emergency room visits for injury among male and female AI/AN was nearly even from 2014 to 2019, with the exception of Utah in 2019.

Injury

Top Causes of Injury Among AI/AN by State, 2019

Emergency Room Hospital Discharges^{5,9,10}

Arizona

Rank	Cause of Injury	Count
1	Fall	5,543
2	Struck By/Against	3,310
3	Motor Vehicle	1,670
4	Overexertion	1,386
5	Cut/Pierce	1,318

Nevada

Rank	Cause of Injury	Count
1	Fall	632
2	Struck By/Against	323
3	Motor Vehicle	206
4	Overexertion	150
5	Cut/Pierce	119

Utah

Rank	Cause of Injury	Count
1	Fall	187
2	Struck By/Against	126
3	Motor Vehicle	53
4	Overexertion	46
5	Cut/Pierce	44

Key points:

- ❖ Across the three states' AI/AN populations experienced the same top five causes of emergency room visits for injuries. Falls, struck by/against injuries, motor vehicle accidents, overexertion, and cuts/pierces were the top five for all.

Injury

Unintentional Injury by State and Year

Emergency Room Hospital Discharges^{5,9,10}

Arizona

	2014	2015	2016	2017	2018	2019
Count	16,764	17,991	17,066	15,626	16,028	15,802

Nevada

	2014	2015	2016	2017	2018	2019
Count	3,282	3,129	1,359	1,973	1,733	1,852

Utah

	2014	2015	2016	2017	2018	2019
Count	216	297	476	532	559	520

Key points:

- ❖ Emergency room visits for unintentional injury among AI/AN in Arizona were relatively consistent from 2014 to 2019. Emergency room visits were highest in 2015 (17,991) before decreasing (15,802 in 2019).
- ❖ Nevada emergency room visits decreased after 2015. The lowest number of emergency room visits occurred in 2016 (1,359) before increasing to a more stable level the next three years.
- ❖ From 2014 to 2017, emergency room visits in Utah for unintentional injury increased over two-fold. This remained around the same level through 2019.

Injury

Unintentional Injury by Age, State, and Year

Emergency Room Hospital Discharges^{5,9,10}

Arizona

Age Category	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
0-17	5,397	28.4	5,498	30.6	4,949	29.0	4,636	29.7	4,548	28.4	4,428	28.0
18-29	3,623	21.6	3,912	21.7	3,671	21.5	3,057	19.6	3,081	19.2	3,005	19.0
30-49	4,734	28.2	5,212	29.0	4,992	29.3	4,659	29.8	4,724	29.5	4,723	29.9
50-64	2,011	12.0	2,231	12.4	2,288	13.4	2,158	13.8	2,218	13.8	2,246	14.2
65+	999	6.0	1,138	6.3	1,166	6.8	1,116	7.1	1,457	9.1	1,400	8.9
Total	16,764	100	17,991	100	17,066	100	15,626	100	16,028	100	15,802	100

Nevada

Age Category	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
0-17	652	19.9	590	18.9	288	21.2	481	24.4	419	24.2	421	22.7
18-29	674	20.5	614	19.6	267	19.6	345	17.5	343	19.8	344	18.6
30-49	1,022	31.1	977	31.2	411	30.2	574	29.1	475	27.4	495	26.7
50-64	637	19.4	631	20.2	273	20.1	375	19.0	343	19.8	384	20.7
65+	297	9.0	317	10.1	120	8.8	198	10.0	153	8.8	208	11.2
Total	3,282	100	3,129	100	1,359	100	1,973	100	1,733	100	1,852	100

Utah

Age Category	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
0-17	85	39.4	102	34.3	162	34.0	177	33.3	177	31.7	166	31.9
18-29	52	24.1	69	23.2	78	16.4	94	17.7	113	20.2	93	17.9
30-49	47	21.8	77	25.9	132	27.7	160	30.1	147	26.3	153	29.4
50-64	23	10.6	36	12.1	71	14.9	79	14.8	81	14.5	62	11.9
65+	9	4.2	13	4.4	33	6.9	22	4.1	41	7.3	46	8.8
Total	216	100	297	100	476	100	532	100	559	100	520	100

Key points:

- ❖ Unintentional injury emergency room visits among AI/AN from 2014 to 2019 in the three states occurred most often in the 30-49 and 0-17 age categories.

Injury

Unintentional Injury by Sex, State, and Year

Emergency Room Hospital Discharges^{5,9,10}

Arizona

	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
Female	8,234	49.1	8,920	49.6	8,448	49.5	7,830	50.1	8,093	50.5	7,984	50.5
Male	8,530	50.9	9,071	50.4	8,618	50.5	7,795	49.9	7,932	49.5	7,818	49.5
Total	16,764	100	17,991	100	17,066	100	15,625	100	16,025	100	15,802	100

Nevada

	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
Female	1,649	50.2	1,564	50	677	49.9	968	49.1	889	51.3	995	53.7
Male	1,633	49.8	1,565	50	681	50.1	1,005	50.9	844	48.7	857	46.3
Total	3,282	100	3,129	100	1,358	100	1,973	100	1,733	100	1,852	100

Utah

	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
Female	96	44.4	133	44.8	230	48.3	260	48.9	299	53.5	294	56.5
Male	120	55.6	164	55.2	246	51.7	272	51.1	260	46.5	226	43.5
Total	216	100	297	100	476	100	532	100	559	100	520	100

Key points:

- ❖ In 2019, males and females experienced about the same proportion of emergency room visits for unintentional injury in Arizona, Nevada, and Utah.

Injury

Fall Injuries by State, and Year

Emergency Room Hospital Discharges^{5,9,10}

Arizona

	2014	2015	2016	2017	2018	2019
Count	5,326	5,852	6,076	5,394	5,660	5,543

Nevada

	2014	2015	2016	2017	2018	2019
Count	1,030	984	489	653	596	644

Utah

	2014	2015	2016	2017	2018	2019
Count	74	106	184	197	205	187

Key points:

- ❖ Emergency room visits for all injuries for AI/AN in Arizona remained relatively consistent from 2014 to 2019.
- ❖ Nevada emergency room visits for falls declined from 2014 to a low in 2016, then back up to a relatively consistent count.
- ❖ Utah fall emergency room visits increased from 2014 to a high of 205 in 2018.

Injury

Fall Injuries by Age, State, and Year

Emergency Room Hospital Discharges^{5,9,10}

Arizona

Age Category	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
0-17	1,801	33.8	1,824	31.2	1,866	30.7	1,673	31.0	1,648	29.1	1,577	28.5
18-29	710	13.3	846	14.5	825	13.6	610	11.3	672	11.9	665	12.0
30-49	1,377	25.9	1,525	26.1	1,606	26.4	1,386	25.7	1,359	24	1,322	23.8
50-64	833	15.6	980	16.7	1,023	16.8	1,006	18.7	1,004	17.7	1,040	18.8
65+	605	11.4	677	11.6	756	12.4	719	13.3	977	17.3	939	16.9
Total	5,326	100	5,852	100	6,076	100	5,394	100	5,660	100	5,543	100

Nevada

Age Category	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
0-17	206	20	200	20.3	100	20.4	167	25.6	138	23.2	129	20
18-29	118	11.5	125	12.7	54	11	66	10.1	73	12.2	62	9.6
30-49	249	24.2	222	22.6	135	27.6	138	21.1	131	22	132	20.5
50-64	286	27.8	226	23	117	23.9	158	24.2	156	26.2	192	29.8
65+	171	16.6	211	21.4	83	17	124	19	98	16.4	129	20
Total	1,030	100	984	100	489	100	653	100	596	100	644	100

Utah

Age Category	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
0-17	27	36.5	38	35.8	63	34.2	66	33.5	72	35.1	55	29.4
18-29	13	17.6	18	17	19	10.3	24	12.2	17	8.3	19	10.2
30-49	17	23	22	20.8	52	28.3	49	24.9	47	22.9	58	31
50-64	14	18.9	19	17.9	35	19	43	21.8	38	18.5	30	16
65+	*	4.1	9	8.5	15	8.2	15	7.6	31	15.1	25	13.4
Total	74	100	106	100	184	100	197	100	205	100	187	100

Key points:

- ❖ In Arizona and Utah, 0-17 year olds made up the largest proportion of fall emergency room visits. However, in Nevada, 50-64 year olds were the largest group.

Injury

Fall Injuries by Sex, State, and Year

Emergency Room Hospital Discharges^{5,9,10}

Arizona

	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
Female	2,708	50.8	3,089	52.8	3,148	51.8	2,834	52.5	2,997	53	2,981	53.8
Male	2,618	49.2	2,763	47.2	2,928	48.2	2,560	47.5	2,663	47	2,562	46.2
Total	5,326	100	5,852	100	6,076	100	5,394	100	5,660	100	5,543	100

Nevada

	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
Female	569	55.2	536	54.5	273	55.8	353	54.1	332	55.7	393	61
Male	461	44.8	448	45.5	216	44.2	300	45.9	264	44.3	251	39
Total	1,030	100	984	100	489	100	653	100	596	100	644	100

Utah

	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
Female	36	48.6	51	48.1	98	53.3	106	53.8	129	62.9	119	63.6
Male	38	51.4	55	51.9	86	46.7	91	46.2	76	37.1	68	36.4
Total	74	100	106	100	184	100	197	100	205	100	187	100

Key points:

- ❖ In 2019 among AI/AN, women experienced a higher number of fall injury emergency room visits than men in Arizona, Nevada, and Utah.
- ❖ In 2019, the difference in emergency room visits was biggest in Utah (63.6% women) followed by Nevada (61%) and Arizona (53.8%).

Injury

Struck By/Against Injuries by State and Year

Emergency Room Hospital Discharges^{5,9,10}

Arizona

	2014	2015	2016	2017	2018	2019
Count	3,343	3,572	3,838	3,567	3,657	3,310

Nevada

	2014	2015	2016	2017	2018	2019
Count	636	567	270	389	331	325

Utah

	2014	2015	2016	2017	2018	2019
Count	43	53	108	142	138	126

Key points:

- ❖ Struck by/against emergency room discharges among AI/AN peaked in 2016 in Arizona. This fell in 2019 to levels similar to the beginning of the period in 2014.
- ❖ Nevada struck/by against injuries emergency room discharges were highest in 2014 before falling to a low in 2016. This then increased slightly.
- ❖ Utah AI/AN emergency room discharges for struck by/against injuries increased from 2014 to 2017 then remained fairly consistent.

Injury

Struck By/Against Injuries by Age, State, and Year

Emergency Room Hospital Discharges^{5,9,10}

Arizona

Age Category	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
0-17	1,006	30.1	1,026	28.7	977	25.5	924	25.9	912	24.9	861	26
18-29	994	29.7	1,037	29.0	1,108	28.9	933	26.2	976	26.7	855	25.8
30-49	1,008	30.2	1,178	33	1,366	35.6	1,316	36.9	1,323	36.2	1,202	36.3
50-64	281	8.4	276	7.7	315	8.2	319	8.9	371	10.1	306	9.2
65+	54	1.6	55	1.5	72	1.9	75	2.1	75	2.1	86	2.6
Total	3,343	100	3,572	100	3,838	100	3,567	100	3,657	100	3,310	100

Nevada

Age Category	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
0-17	126	19.8	119	21	50	18.5	91	23.4	78	23.6	89	27.4
18-29	169	26.6	133	23.5	68	25.2	107	27.5	87	26.3	76	23.4
30-49	242	38.1	228	40.2	103	38.1	140	36	118	35.6	94	28.9
50-64	77	12.1	68	12	46	17	42	10.8	34	10.3	50	15.4
65+	22	3.5	19	3.4	*	1.1	9	2.3	14	4.2	16	4.9
Total	636	100	567	100	270	100	389	100	331	100	325	100

Utah

Age Category	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
0-17	19	44.2	15	28.3	33	30.6	44	31	50	36.2	41	32.5
18-29	16	37.2	21	39.6	27	25	43	30.3	30	21.7	36	28.6
30-49	*	11.6	15	28.3	39	36.1	49	34.5	48	34.8	45	35.7
50-64	*	4.7	*	3.8	*	2.8	6	4.2	7	5.1	*	2.4
65+	*	2.3	0	0	6	5.6	0	0	*	2.2	*	0.8
Total	43	100	53	100	108	100	142	100	138	100	126	100

* = counts and totals with less than 6 participants in a category are suppressed for confidentiality

Injury

Struck By/Against Injuries by Sex, State, and Year

Emergency Room Hospital Discharges^{5,9,10}

Arizona

	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
Female	1,326	39.7	1,452	40.7	1,699	44.3	1,631	45.7	1,726	47.2	1,482	44.8
Male	2,016	60.3	2,119	59.3	2,139	55.7	1,936	54.3	1,931	52.8	1,827	55.2
Total	3,342	100	3,571	100	3,838	100	3,567	100	3,657	100	3,309	100

Nevada

	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
Female	301	47.3	247	43.6	110	40.7	179	46	162	48.9	154	47.4
Male	335	52.7	320	56.4	160	59.3	210	54	169	51.1	171	52.6
Total	636	100	567	100	270	100	389	100	331	100	325	100

Utah

	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
Female	12	27.9	24	45.3	55	50.9	69	48.6	66	47.8	69	54.8
Male	31	72.1	29	54.7	53	49.1	73	51.4	72	52.2	57	45.2
Total	43	100	53	100	108	100	142	100	138	100	126	100

Key points:

- ❖ Age
 - ❖ Struck by/against injury emergency room visits were experienced most often by the 30-49 age group among AI/AN in all three states in 2019. In the three states, visits dropped off in the older age groups.
- ❖ Sex
 - ❖ From 2014 to 2019, Arizona and Nevada male AI/AN made up a higher proportion of emergency room visits for struck/by against injuries than females in every year.
 - ❖ In Utah, males generally had a higher proportions. However, in 2016 and 2019 females made up a higher proportion of emergency room visits.

Injury

Motor Vehicle Crash Injuries by State and Year

Emergency Room Hospital Discharges^{5,9,10}

Arizona

	2014	2015	2016	2017	2018	2019
Count	1,541	1,774	1,698	1,478	1,616	1,670

Nevada

	2014	2015	2016	2017	2018	2019
Count	273	272	126	199	143	206

Utah

	2014	2015	2016	2017	2018	2019
Count	14	25	30	34	41	53

Key points:

- ❖ Motor vehicle crash emergency room visits among AI/AN in Arizona slightly increased from 2014 to 2019.
- ❖ In Nevada, motor vehicle crash emergency room visits decreased sharply after 2015 before increasing again by 2019.
- ❖ Utah motor vehicle crash emergency room increased every year from 2014 to 2019.

Injury

Motor Vehicle Crash Injuries by Age, State, and Year

Emergency Room Hospital Discharges^{5,9,10}

Arizona

Age Category	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
0-17	290	18.8	335	18.9	268	15.8	209	14.1	249	15.4	257	15.4
18-29	495	32.1	575	32.4	579	34.1	479	32.4	486	30.1	521	31.2
30-49	523	33.9	553	31.2	572	33.7	518	35	567	35.1	602	36
50-64	176	11.4	232	13.1	207	12.2	200	13.5	218	13.5	197	11.8
65+	57	3.7	79	4.5	72	4.2	72	4.9	96	5.9	93	5.6
Total	1,541	100	1,774	100	1,698	100	1,478	100	1,616	100	1,670	100

Nevada

Age Category	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
0-17	20	7.3	21	7.7	16	12.7	14	7	17	11.9	19	9.2
18-29	87	31.9	89	32.7	42	33.3	49	24.6	52	36.4	73	35.4
30-49	104	38.1	95	34.9	42	33.3	81	40.7	34	23.8	70	34
50-64	47	17.2	59	21.7	17	13.5	41	20.6	31	21.7	28	13.6
65+	15	5.5	8	2.9	9	7.1	14	7	9	6.3	16	7.8
Total	273	100	272	100	126	100	199	100	143	100	206	100

Utah

Age Category	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
0-17	*	21.4	*	16	8	26.7	9	26.5	6	14.6	10	18.9
18-29	6	42.9	9	36	6	20	12	35.3	17	41.5	14	26.4
30-49	*	28.6	8	32	11	36.7	7	20.6	10	24.4	20	37.7
50-64	0	0	*	8	*	6.7	*	8.8	7	17.1	6	11.3
65+	*	7.1	*	8	*	10	*	8.8	*	2.4	*	5.7
Total	14	100	25	100	30	100	34	100	41	100	53	100

* = counts and totals with less than 6 participants in a category are suppressed for confidentiality

Injury

Motor Vehicle Crash Injuries by Sex, State, and Year

Emergency Room Hospital Discharges^{5,9,10}

Arizona

	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
Female	911	59.1	991	55.9	989	58.2	885	59.9	958	59.3	1013	60.7
Male	630	40.9	783	44.1	709	41.8	593	40.1	657	40.7	657	39.3
Total	1541	100	1774	100	1698	100	1478	100	1615	100	1670	100

Nevada

	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
Female	153	56	157	57.7	70	55.6	116	58.3	85	59.4	120	58.3
Male	120	44	115	42.3	56	44.4	83	41.7	58	40.6	86	41.7
Total	273	100	272	100	126	100	199	100	143	100	206	100

Utah

	2014		2015		2016		2017		2018		2019	
	n	%	n	%	n	%	n	%	n	%	n	%
Female	8	57.1	10	40	18	60	14	41.2	17	41.5	38	71.7
Male	6	42.9	15	60	12	40	20	58.8	24	58.5	15	28.3
Total	14	100	25	100	30	100	34	100	41	100	53	100

Key points:

- ❖ Age
 - ❖ Age groups for motor vehicle crash emergency room visits were similar by state in the three states.
 - ❖ A majority of motor vehicle crash emergency room visits in Arizona (67.2%), Nevada (69.4%) and Utah (64.1%) were 18-29 or 30-49.
- ❖ Sex
 - ❖ Motor vehicle crash emergency room visits disproportionately occurred with female AI/AN from 2014 to 2019 in Arizona, Nevada, and Utah in 2019.

Mental Health and Substance Abuse

Mental Health and Substance Abuse

Mental Health Hospital Visits by State and Year

Including mood disorders, schizophrenia, post-traumatic stress disorder, and alcohol abuse

Inpatient Hospital Discharge and Indian Health Service Epi Data Mart^{5,6,7,8}

Arizona

	2014	2015	2016	2017	2018	2019
Count	27,653	26,494	20,651	18,468	20,551	21,084

Nevada

	2014	2015	2016	2017	2018	2019
Count	2,382	3,310	1,070	989	927	1,015

Utah

	2014	2015	2016	2017	2018	2019
Count	142	230	167	180	155	167

IHS Phoenix Service Area

	2014	2015	2016	2017	2018
Count	107,875	95,154	55,013	53,785	61,803

Key points:

- ❖ In Arizona, the highest level of mental health hospital visits were in 2014 and decreased to a low in 2017. They then increased until 2019.
- ❖ Nevada had a similar course, but had a low in 2018 before increasing again in 2019.
- ❖ Utah was inconsistent over the time period. A high of 230 mental health hospital visits occurred in 2015 while a low of 142 occurred in 2014.
- ❖ In the IHS Phoenix Service Area, mental health inpatient hospital visits for AI/AN dropped between 2014 and 2015, and again between 2015 and 2016. The level then gradually increased until 2018. This drop may be a result of the change from ICD-9 to ICD-10.

Mental Health and Substance Abuse

Mental Health Hospital Visits by Age, State, and Year

Including mood disorders, schizophrenia, post-traumatic stress disorder, and alcohol abuse

Inpatient Hospital Discharge^{5,6,7}

Arizona

Age Category	2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
0-17	1,524	6	998	4	669	3	672	4	863	4	883	4	5,609	4
18-29	6,411	23	5,844	22	4,207	20	3,674	20	3,837	19	3,974	19	27,947	21
30-49	12,232	44	12,204	46	9,930	48	8,890	48	9,783	48	10,052	48	63,091	47
50-64	5,485	20	5,570	21	4,554	22	4,173	23	4,689	23	4,811	23	29,282	22
65+	1,999	7	1,878	7	1,290	6	1,057	6	1,378	7	1,364	6	8,966	7

Nevada

Age Category	2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
0-17	27	1	41	1	45	4	57	6	50	5	74	7	294	3
18-29	146	6	280	8	126	12	103	10	114	12	129	13	898	9
30-49	564	24	977	30	345	32	331	33	313	34	353	35	2,883	30
50-64	959	40	1,218	37	364	34	317	32	277	30	291	29	3,426	35
65+	686	29	794	24	190	18	181	18	173	19	168	17	2,192	23

Utah

Age Category	2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
0-17	9	6	11	5	12	7	13	7	6	4	6	4	57	5
18-29	15	11	29	13	23	14	25	14	18	12	32	19	142	14
30-49	56	39	76	33	69	41	72	40	57	37	73	44	403	39
50-64	36	25	61	27	40	24	59	33	48	31	32	19	276	27
65+	26	18	53	23	23	14	11	6	26	17	24	14	163	16

Mental Health and Substance Abuse

Mental Health Hospital Visits by Age, State, and Year Continued

Including mood disorders, schizophrenia, post-traumatic stress disorder, and alcohol abuse

Indian Health Service Epi Data Mart⁸

IHS Phoenix Service Area

Age Category	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
0-17	22,770	21	20,564	22	6,242	11	6,685	12	8,139	13	64,400	17
18-29	16,234	15	15,093	16	9,918	18	9,727	18	12,020	19	62,992	17
30-49	37,102	34	31,797	33	22,260	40	21,209	39	24,266	39	136,634	37
50-64	24,485	23	21,094	22	12,856	23	12,348	23	13,094	21	83,877	22
65+	7,284	7	6,606	7	3,737	7	3,816	7	4,284	7	25,727	7

Key points:

- ❖ In Arizona among AI/AN, the 30-49 year old age group made up a largest proportion of all mental health hospital visits (48% in 2019).
- ❖ In Nevada among AI/AN in 2014, 50-64 year olds made up 40% of all visits, 65 and older made up 29%, and 30-49 year olds had 24% of all visits. These decreased to 29% and 17% respectively in 2019, with 30-49 year olds increasing to 35%.
- ❖ Utah had a higher percentage of discharges in the 30-49 age category.
- ❖ For the AI/AN population in the IHS Phoenix Service Area, the 30-49 year old age group had the most mental health hospital visits from 2014 to 2018. In 2018, they made up 39% of all hospital visits, followed by 50-64 year olds (21%), 18-29 (19%), and 0-17 (13%). Those older than 65 consistently had the lowest rates (7% in all years).

Mental Health and Substance Abuse

Mental Health Hospital Visits by Sex, State, and Year

Including mood disorders, schizophrenia, post-traumatic stress disorder, and alcohol abuse

Inpatient Hospital Discharge and Indian Health Service Epi Data Mart^{5,6,7,8}

Arizona

	2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Female	13,115	47	12,430	47	9,674	47	9,048	49	9,672	47	9,927	47	63,866	47
Male	14,538	53	14,062	53	10,977	53	9,419	51	10,876	53	11,155	53	71,027	53

Nevada

	2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Female	1,155	48	1,613	49	509	48	494	50	471	51	504	50	4,746	49
Male	1,227	52	1,697	51	561	52	495	50	456	49	511	50	4,947	51

Utah

	2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Female	67	47	118	51	80	48	87	48	101	65	90	54	543	52
Male	75	53	112	49	87	52	93	52	54	35	77	46	498	48

IHS Phoenix Service Area

	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
Female	65,034	60	57,059	60	37,602	68	37,371	69	42,664	69	239,730	64
Male	42,841	40	38,095	40	17,411	32	16,414	31	19,138	31	133,899	36

Key points:

- ❖ In Arizona, Nevada, and Utah, hospital discharges for mental health visits were fairly even between male and female AI/AN.
- ❖ For mental health hospital visits among AI/AN between 2014 and 2018, females make up a larger portion than males in the IHS Phoenix Service Area.

Mental Health and Substance Abuse

Mood and Depressive Disorders by State and Year

Inpatient Hospital Discharge and Indian Health Service Epi Data Mart^{5,6,7,8}

Arizona

	2014	2015	2016	2017	2018	2019
Count	4,923	5,400	6,062	5,528	5,929	6,015

Nevada

	2014	2015	2016	2017	2018	2019
Count	965	1,603	482	425	379	428

Utah

	2014	2015	2016	2017	2018	2019
Count	99	180	128	145	123	119

IHS Phoenix Service Area

	2014	2015	2016	2017	2018
Count	37,925	31,933	24,234	24,146	27,151

Key points:

- ❖ Mood and depressive disorder inpatient hospital discharges among AI/AN increased in Arizona after 2014 and remained relatively consistent until 2019.
- ❖ Nevada mood and depressive disorders inpatient hospital discharges peaked in 2015 before sharply declining and remaining consistent.
- ❖ Utah experienced a slight increase in mood and depressive disorders inpatient hospital discharges from 2014 to 2019.
- ❖ In the IHS Phoenix Service Area, mood and depressive disorder inpatient hospital discharges were highest in 2014. This declined until 2016 then remained at a similar level.

Mental Health and Substance Abuse

Mood and Depressive Disorders by Age, State, and Year

Inpatient Hospital Discharge and Indian Health Service Epi Data Mart^{5,6,7,8}

Arizona

Age Category	2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
0-17	196	4	205	4	239	4	198	4	273	5	299	5	1,410	4
18-29	922	19	915	17	1,046	17	900	16	866	15	1,003	17	5,652	17
30-49	2,180	44	2,469	46	2,689	44	2,432	44	2,567	43	2,521	42	14,858	44
50-64	1,143	23	1,267	23	1,508	25	1,519	27	1,595	27	1,562	26	8,594	25
65+	482	10	544	10	580	10	479	9	628	11	630	10	3,343	10

Nevada

Age Category	2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
0-17	19	2	34	2	41	9	50	12	39	10	67	16	250	6
18-29	57	6	144	9	48	10	30	7	41	11	65	15	385	9
30-49	220	23	503	31	147	30	132	31	111	29	145	34	1,258	29
50-64	408	42	587	37	151	31	126	30	102	27	82	19	1,456	34
65+	261	27	335	21	95	20	87	20	86	23	69	16	933	22

Utah

Age Category	2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
0-17	*	5	11	6	11	9	13	9	*	4	*	4	50	6
18-29	11	11	14	8	17	13	20	14	15	12	20	17	97	12
30-49	36	36	51	28	49	38	56	39	40	33	47	39	279	35
50-64	26	26	57	32	34	27	45	31	41	33	26	22	229	29
65+	21	21	47	26	17	13	11	8	22	18	21	18	139	18

* = counts and totals with less than 6 participants in a category are suppressed for confidentiality

IHS Phoenix Service Area

Age Category	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
0-17	3,258	9	3,026	9	2,773	11	2,763	11	3,059	11	14,879	10
18-29	5,617	15	5,011	16	3,965	16	4,051	17	4,911	18	23,555	16
30-49	14,558	38	11,952	37	9,033	37	8,848	37	10,315	38	54,706	38
50-64	11,381	30	9,271	29	6,514	27	6,377	26	6,581	24	40,124	28
65+	3,111	8	2,673	8	1,949	8	2,107	9	2,285	8	12,125	8

Mental Health and Substance Abuse

Mood and Depressive Disorders by Sex, State, and Year

Inpatient Hospital Discharge and Indian Health Service Epi Data Mart^{5,6,7,8}

Arizona

	2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Female	3,131	64	3,423	63	3,856	64	3,475	63	3,632	61	3,699	61	21,216	63
Male	1,792	36	1,977	37	2,206	36	2,053	37	2,296	39	2,316	39	12,640	37

Nevada

	2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Female	521	54	829	52	268	56	250	59	238	63	248	58	2,354	55
Male	444	46	774	48	214	44	175	41	141	37	180	42	1,928	45

Utah

	2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Female	46	46	97	54	62	48	73	50	79	64	64	54	421	53
Male	53	54	83	46	66	52	72	50	44	36	55	46	373	47

IHS Phoenix Service Area

	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
Female	27,043	71	22,736	71	17,191	71	17,561	73	19,621	72	104,152	72
Male	10,882	29	9,197	29	7,043	29	6,585	27	7,529	28	41,236	28

Key points:

- ❖ Each state had a higher proportion of females experiencing mood and depressive disorder inpatient hospital discharges compared to males. Arizona (63%) had the largest proportion, followed by Nevada (55%), and Utah (53%).
- ❖ Mood and depressive disorder inpatient hospital visits between 2014 and 2018 were experienced more often by females (72%) compared to males (28%) in the IHS Phoenix Service Area.

Mental Health and Substance Abuse

Schizophrenia by State and Year

Inpatient Hospital Discharge and Indian Health Service Epi Data Mart^{5,6,7,8}

Arizona

	2014	2015	2016	2017	2018	2019
Count	525	700	945	946	1,088	1,121

Nevada

	2014	2015	2016	2017	2018	2019
Count	192	639	163	93	93	126

Utah

	2014	2015	2016	2017	2018	2019
Count	63	135	90	107	93	99

IHS Phoenix Service Area

	2014	2015	2016	2017	2018
Count	3,449	2,921	3,952	3,441	3,513

Key points:

- ❖ In Arizona, inpatient hospital discharges for schizophrenia increased every year from 2014 to 2019.
- ❖ Nevada experienced more inpatient hospital discharges for schizophrenia in 2015.
- ❖ In Utah inpatient hospital discharges for schizophrenia were lowest in 2014 before doubling in 2015.
- ❖ Inpatient hospital discharges for schizophrenia in the IHS Phoenix Area among AI/AN from 2014 to 2018 remained around the same count.

Mental Health and Substance Abuse

Schizophrenia by Age, State, and Year

Inpatient Hospital Discharge and Indian Health Service Epi Data Mart^{5,6,7,8}

Arizona

Age Category	2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
0-17	*	1	15	*	12	1	24	3	26	2	22	2	103	2
18-29	103	20	146	21	200	21	214	23	193	18	192	17	1,048	20
30-49	267	51	331	47	508	54	474	50	528	49	598	53	2,706	51
50-64	135	26	177	25	194	21	200	21	297	27	276	25	1,279	24
65+	16	3	31	4	31	3	34	4	44	4	33	3	189	4

** = counts and totals with less than 6 participants in a category are suppressed for confidentiality*

Nevada

Age Category	2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
0-17	*	1	*	0	*	2	*	3	*	3	*	2	16	1
18-29	17	9	94	15	35	21	16	17	15	16	27	21	204	16
30-49	49	26	282	44	66	40	42	45	37	40	55	44	531	41
50-64	105	55	199	31	48	29	26	28	26	28	23	18	427	33
65+	20	10	61	10	11	7	6	6	12	13	18	14	128	10

** = counts and totals with less than 6 participants in a category are suppressed for confidentiality*

Utah

Age Category	2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
0-17	*	3	*	3	0	0	*	1	0	0	0	0	7	1
18-29	*	3	*	3	8	9	9	8	10	11	16	16	49	8
30-49	21	33	38	28	38	42	44	41	29	31	42	42	212	36
50-64	20	32	48	36	32	36	44	41	35	38	25	25	204	35
65+	18	29	41	30	12	13	9	8	19	20	16	16	115	20

** = counts and totals with less than 6 participants in a category are suppressed for confidentiality*

IHS Phoenix Service Area

Age Category	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
0-17	7	0	33	1	111	3	108	3	119	3	378	2
18-29	814	24	675	23	940	24	837	24	867	25	4,133	24
30-49	1,622	47	1,348	46	1,868	47	1,584	46	1,558	44	7,980	46
50-64	879	25	753	26	828	21	769	22	817	23	4,046	23
65+	127	4	112	4	205	5	143	4	152	4	739	4

Mental Health and Substance Abuse

Schizophrenia by Sex, State, and Year

Inpatient Hospital Discharge and Indian Health Service Epi Data Mart^{5,6,7,8}

Arizona

	2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Female	218	42	292	42	365	39	388	41	395	36	402	36	2,060	39
Male	307	58	408	58	580	61	558	59	693	64	719	64	3,265	61

Nevada

	2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Female	65	34	273	43	60	37	29	31	31	33	52	41	510	39
Male	127	66	366	57	103	63	64	69	62	67	74	59	796	61

Utah

	2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Female	28	44	70	52	40	44	44	41	52	56	48	48	282	48
Male	35	56	65	48	50	56	63	59	41	44	51	52	305	52

IHS Phoenix Service Area

	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
Female	1,361	39	1,267	43	1,864	47	1,485	43	1,470	42	7,447	43
Male	2,088	61	1,654	57	2,088	53	1,956	57	2,043	58	9,829	57

Key points:

- ❖ Age
 - ❖ Inpatient hospital visits for schizophrenia among AI/AN were highest in the 30-49 year old age group.
 - ❖ There are fewer inpatient hospital visits for schizophrenia for those over 65 and under 17 years old.
- ❖ Sex
 - ❖ In the IHS User Population males experienced a higher count of inpatient hospital visits for schizophrenia than females among AI/AN from 2014 to 2019.

Mental Health and Substance Abuse

Post-Traumatic Stress Disorder by State and Year

Inpatient Hospital Discharge and Indian Health Service Epi Data Mart^{5,6,7,8}

Arizona

	2014	2015	2016	2017	2018	2019
Count	842	757	895	850	1,015	1,130

Nevada

	2014	2015	2016	2017	2018	2019
Count	88	118	58	63	52	86

Utah

	2014	2015	2016	2017	2018	2019
Count	42	95	91	104	99	93

IHS Phoenix Service Area

	2014	2015	2016	2017	2018
Count	3,363	3,423	4,027	4,190	6,373

Key points:

- ❖ In both Arizona and Utah, inpatient hospital visits for post-traumatic stress disorder increased from 2014 to 2019.
- ❖ In Nevada, inpatient visits for post-traumatic stress disorder were highest in 2015.
- ❖ Inpatient hospital visits for post-traumatic stress disorder increased in the IHS User Population from 2014 to 2018 with a high of 6,373 hospital visits in 2018.

Mental Health and Substance Abuse

Post-Traumatic Stress Disorder by Age, State, and Year

Inpatient Hospital Discharge^{5,6,7}

Arizona

Age Category	2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
0-17	131	16	83	11	103	12	111	13	162	16	137	12	727	13
18-29	191	23	130	17	166	19	155	18	162	16	246	22	1,050	19
30-49	377	45	406	54	458	51	400	47	480	47	518	46	2,639	48
50-64	118	14	107	14	114	13	146	17	165	16	181	16	831	15
65+	25	3	31	4	54	6	38	4	46	5	48	4	242	4

Nevada

Age Category	2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
0-17	*	5	6	5	*	7	12	19	12	23	17	20	55	12
18-29	*	5	25	21	6	10	7	11	7	13	20	23	69	15
30-49	27	31	41	35	26	45	30	48	21	40	32	37	177	38
50-64	27	31	26	22	15	26	10	16	8	15	10	12	96	21
65+	26	30	20	17	7	12	4	6	4	8	7	8	68	15

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Utah

Age Category	2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
0-17	*	2	*	2	*	1	*	2	*	5	0	0	11	2
18-29	*	10	6	6	9	10	7	7	12	12	13	14	51	10
30-49	18	43	33	35	37	41	45	43	27	27	41	44	201	38
50-64	12	29	31	33	32	35	41	39	36	36	23	25	175	33
65+	7	17	23	24	12	13	9	9	19	19	16	17	86	16

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Mental Health and Substance Abuse

Post-Traumatic Stress Disorder by Age, State, and Year Continued

Indian Health Service Epi Data Mart⁸

IHS Phoenix Service Area

Age Category	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
0-17	484	14	536	16	574	14	645	15	705	11	2,944	14
18-29	530	16	601	18	677	17	705	17	1,316	21	3,829	18
30-49	1,351	40	1,421	42	1,873	47	1,793	43	2,953	46	9,391	44
50-64	833	25	737	22	769	19	871	21	1,140	18	4,350	20
65+	165	5	128	4	134	3	176	4	259	4	862	4

Key points:

- ❖ Post-traumatic stress disorder inpatient hospitalizations occurred in all ages in the IHS User Population from 2014 to 2018. Inpatient hospitalizations were most prevalent in 30-49 year olds (44%) with 14% occurring in the 0-17 ages, 18% in the 18-29 age range, and 20% occurring in the 50-64 age range. Inpatient visits for post-traumatic stress disorder dropped off after age 65 (4%).

Mental Health and Substance Abuse

Post-Traumatic Stress Disorder by Sex, State, and Year

Inpatient Hospital Discharge and Indian Health Service Epi Data Mart^{5,6,7,8}

Arizona

	2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Female	501	60	422	56	480	54	445	52	533	53	626	55	3,007	55
Male	341	40	335	44	415	46	405	48	482	47	504	45	2,482	45

Nevada

	2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Female	41	47	69	58	30	52	39	62	33	63	58	67	270	58
Male	47	53	49	42	28	48	24	38	19	37	28	33	195	42

Utah

	2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Female	18	43	47	49	42	46	44	42	59	60	46	49	256	49
Male	24	57	48	51	49	54	60	58	40	40	47	51	268	51

IHS Phoenix Service Area

	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
Female	2,583	77	2,449	72	2,988	74	3,271	78	4,947	78	16,238	76
Male	780	23	974	28	1,039	26	919	22	1,426	22	5,138	24

Key points:

- ❖ In Arizona, inpatient hospital visits for post-traumatic stress disorder were higher for females (55%) than males (45%).
- ❖ From 2014-2019, Nevada had more inpatient hospital visits for post-traumatic stress disorder among females (58%) than males (42%).
- ❖ Utah had a nearly even split between male (51%) and female (49%) hospital visits for post-traumatic stress disorder.
- ❖ About three in four inpatient hospital visits for post-traumatic stress disorder among the IHS User Population were female (76%) between 2014 and 2018 compared to males (24%).

Mental Health and Substance Abuse

Mental Disorders Except for Drug and Alcohol-Induced Mental Disorders by State and Year

Inpatient Hospital Discharge and Indian Health Service Epi Data Mart^{5,6,7,8}

Arizona

	2014	2015	2016	2017	2018	2019
Count	10,916	10,707	10,299	9,575	10,320	10,625

Nevada

	2014	2015	2016	2017	2018	2019
Count	1,535	2,484	753	643	586	651

Utah

	2014	2015	2016	2017	2018	2019
Count	114	192	138	160	131	138

IHS Phoenix Service Area

	2014	2015	2016	2017	2018
Count	101,686	89,677	55,013	53,785	61,803

Key points:

- ❖ In Arizona, inpatient hospitalizations for any mental disorder (except for drug and alcohol-induced mental disorders) dropped slightly from 2014 to 2017 before increasing until 2019.
- ❖ Nevada Inpatient hospitalizations for any mental disorder (except for drug and alcohol-induced mental disorders) peaked in 2015 before decreasing to a steady level from 2016 to 2019.
- ❖ Utah Inpatient hospitalizations for any mental disorder (except for drug and alcohol-induced mental disorders) were relatively similar between 2014 and 2019 with a high occurring in 2015.
- ❖ Inpatient hospitalizations for any mental disorder (except for drug and alcohol-induced mental disorders) among IHS User Population dropped from 2014 to 2015 and again from 2015 to 2016 before leveling off.

Mental Health and Substance Abuse

Mental Disorders Except for Drug and Alcohol-Induced Mental Disorders by Age, State, and Year

Inpatient Hospital Discharge and Indian Health Service Epi Data Mart^{5,6,7,8}

Arizona

Age Category	2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
0-17	1,233	11	799	7	468	5	501	5	629	6	638	6	4,268	7
18-29	2,044	19	1,925	18	1,883	18	1,696	18	1,685	16	1,937	18	11,170	18
30-49	4,211	39	4,495	42	4,748	46	4,321	45	4,575	44	4,653	44	27,003	43
50-64	2,134	20	2,170	20	2,293	22	2,315	24	2,448	24	2,469	23	13,829	22
65+	1,294	12	1,318	12	907	9	742	8	983	10	928	9	6,172	10

Nevada

Age Category	2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
0-17	23	1	41	2	44	6	56	9	44	8	71	11	279	4
18-29	82	5	223	9	87	12	57	9	65	11	93	14	607	9
30-49	324	21	740	30	239	32	205	32	180	31	212	33	1,900	29
50-64	579	38	839	34	225	30	192	30	162	28	147	23	2,144	32
65+	527	34	641	26	158	21	133	21	135	23	128	20	1,722	26

Utah

Age Category	2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
0-17	8	7	11	6	11	8	13	8	6	5	*	4	54	6
18-29	12	11	16	8	20	14	22	14	15	11	26	19	111	13
30-49	41	36	59	31	53	38	63	39	43	33	56	41	315	36
50-64	31	27	57	30	35	25	51	32	43	33	28	20	245	28
65+	22	19	49	26	19	14	11	7	24	18	23	17	148	17

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IHS Phoenix Service Area

Age Category	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
0-17	22,755	22	20,540	23	6,242	11	6,685	12	8,139	13	64,361	18
18-29	15,355	15	14,392	16	9,918	18	9,727	18	12,020	19	61,412	17
30-49	34,529	34	29,698	33	22,260	40	21,209	39	24,266	39	131,962	36
50-64	22,357	22	19,000	21	12,856	23	12,348	23	13,094	21	79,655	22
65+	6,690	7	6,047	7	3,737	7	3,816	7	4,284	7	24,574	7

Mental Health and Substance Abuse

Mental Disorders Except for Drug and Alcohol-Induced Mental Disorders by Sex, State, and Year

Inpatient Hospital Discharge and Indian Health Service Epi Data Mart^{5,6,7,8}

Arizona

	2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Female	6,489	59	6,376	60	6,251	61	5,825	61	6,103	59	6,291	59	37,335	60
Male	4,427	41	4,331	40	4,048	39	3,750	39	4,216	41	4,333	41	25,105	40

Nevada

	2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Female	805	52	1,266	51	399	53	363	56	344	59	367	56	3,544	53
Male	730	48	1,218	49	354	47	280	44	242	41	284	44	3,108	47

Utah

	2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Female	55	48	103	54	66	48	79	49	86	66	78	57	467	53
Male	59	52	89	46	72	52	81	51	45	34	60	43	406	47

IHS Phoenix Service Area

	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
Female	61,606	61	53,925	60	37,602	68	37,371	69	42,664	69	233,168	64
Male	40,080	39	35,752	40	17,411	32	16,414	31	19,138	31	128,795	36

Key points:

- ❖ Age
 - ❖ Most mental health Inpatient hospitalizations for any mental disorder (except for drug and alcohol-induced mental disorders) were in the 30-49 and 50-64 year old age categories.
- ❖ Sex
 - ❖ Inpatient hospitalizations for any mental disorder (except for drug and alcohol-induced mental disorders) were experienced more often by females (64%) than males (36%) from 2014 to 2019 in the IHS Phoenix Area.

Mental Health and Substance Abuse

Suicide and Self-Harm by State and Year

Inpatient Hospital Discharge and Indian Health Service Epi Data Mart^{5,6,7,8}

Arizona

	2014	2015	2016	2017	2018	2019
Count	707	945	1,974	1,590	1,789	1,867

Nevada

	2014	2015	2016	2017	2018	2019
Count	50	120	140	148	165	158

Utah

	2014	2015	2016	2017	2018	2019
Count	75	99	117	45	27	33

IHS Phoenix Service Area

	2014	2015	2016	2017	2018
Count	397	486	396	398	466

Key points:

- ❖ Inpatient hospital visits for attempted suicide and self-harm among AI/AN peaked in Arizona in 2016.
- ❖ In Nevada, Inpatient hospital visits for attempted suicide and self-harm increased from 2014 to 2018.
- ❖ Utah inpatient hospital visits for attempted suicide and self-harm peaked in 2016 and decreased until 2019.

Mental Health and Substance Abuse

Suicide and Self-Harm by Age, State, and Year

Inpatient Hospital Discharge and Indian Health Service Epi Data Mart^{5,6,7,8}

Arizona

Age Category	2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
0-17	109	15	115	12	181	9	127	8	157	9	135	7	824	9
18-29	285	40	281	30	277	14	237	15	228	13	248	13	1,556	18
30-49	267	38	335	35	703	36	548	34	590	33	669	36	3,112	35
50-64	39	6	147	16	498	25	436	27	450	25	454	24	2,024	23
65+	7	1	67	7	315	16	242	15	364	20	361	19	1,356	15

Nevada

Age Category	2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
0-17	*	6	*	2	7	5	7	5	13	8	15	9	47	6
18-29	10	20	19	16	11	8	12	8	16	10	17	11	85	11
30-49	16	32	28	23	34	24	37	25	51	31	43	27	209	27
50-64	13	26	49	41	41	29	46	31	41	25	45	28	235	30
65+	8	16	22	18	47	34	46	31	44	27	38	24	205	26

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Utah

Age Category	2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
0-17	*	7	*	5	10	9	*	7	*	7	*	6	27	7
18-29	10	13	10	10	15	13	6	13	*	15	8	24	53	13
30-49	30	40	30	30	30	26	17	38	11	41	15	45	133	34
50-64	12	16	31	31	33	28	18	40	8	30	*	15	107	27
65+	18	24	23	23	29	25	*	2	*	7	*	9	76	19

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IHS Phoenix Service Area

Age Category	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
0-17	96	24	105	22	89	22	101	25	115	25	506	24
18-29	165	42	205	42	193	49	187	47	206	44	956	45
30-49	101	25	131	27	99	25	83	21	126	27	540	25
50-64	27	7	37	8	14	4	23	6	17	4	118	6
65+	8	2	8	2	*	0	*	1	*	0	23	1

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Mental Health and Substance Abuse

Suicide and Self-Harm by Sex, State, and Year

Inpatient Hospital Discharge and Indian Health Service Epi Data Mart^{5,6,7,8}

Arizona

	2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Female	390	55	518	55	1,087	55	887	56	1,042	58	1,043	56	4,967	56
Male	317	45	427	45	887	45	703	44	747	42	824	44	3,905	44

Nevada

	2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Female	25	50	62	52	75	54	86	58	95	58	94	59	437	56
Male	25	50	58	48	65	46	62	42	70	42	64	41	344	44

Utah

	2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Female	36	48	46	46	65	56	23	51	15	56	15	45	200	51
Male	39	52	53	54	52	44	22	49	12	44	18	55	196	49

IHS Phoenix Service Area

	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
Female	200	50	223	46	205	52	200	50	219	47	1,047	49
Male	197	50	263	54	191	48	198	50	247	53	1,096	51

Key points:

- ❖ Age
 - ❖ Inpatient hospitalizations for suicide and self-harm differed by age.
 - ❖ In the IHS Phoenix Service Area, inpatient hospitalizations tended to be younger.
 - ❖ In all three states, there were very few suicide or self-harm attempts in ages 17 and younger among AI/AN.
- ❖ Sex
 - ❖ In the IHS Phoenix Service Area data, males had a slightly higher percentage of hospital visits due to suicide or self-harm compared to females.
 - ❖ In each of the three states, females had more inpatient hospitalizations for suicide and self-harm. This was higher in Arizona and Nevada (both 56%) than Utah (51%).

Mental Health and Substance Abuse

Hospitalizations Attributable to Drugs with Potential for Abuse and Dependence by State and Year

Inpatient Hospital Discharge^{5,6,7}

Arizona

	2014	2015	2016	2017	2018	2019
Count	5,464	4,957	5,909	5,822	6,201	6,115

Nevada

	2014	2015	2016	2017	2018	2019
Count	449	761	353	368	353	406

Utah

	2014	2015	2016	2017	2018	2019
Count	95	192	133	150	122	130

Key points:

- ❖ Inpatient hospitalizations attributable to drugs with potential for abuse and dependence among AI/AN in Arizona increased from 2014 to 2019.
- ❖ In Nevada, inpatient hospitalizations attributable remained around the same proportion during 2014 to 2019 period.
- ❖ In Utah, 95 Inpatient hospitalizations attributable to drugs occurred in 2014 before a high of 192 in 2014. A total of 130 hospitalizations occurred in 2019.

Mental Health and Substance Abuse

Hospitalizations Attributable to Drugs with Potential for Abuse and Dependence by Age, State, and Year

Inpatient Hospital Discharge^{5,6,7}

Arizona

Age Category	2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
0-17	520	10	339	7	464	8	382	7	492	8	429	7	2,626	8
18-29	1,681	31	1,530	31	1,682	28	1,649	28	1,681	27	1,539	25	9,762	28
30-49	2,396	44	2,289	46	2,808	48	2,826	49	2,972	48	3,075	50	16,366	47
50-64	785	14	709	14	798	14	833	14	903	15	898	15	4,926	14
65+	82	2	90	2	157	3	131	2	152	2	174	3	786	2

Nevada

Age Category	2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
0-17	8	2	13	2	18	5	14	4	20	6	28	7	101	4
18-29	67	15	123	16	59	17	57	15	65	18	63	16	434	16
30-49	181	40	344	45	138	39	157	43	151	43	176	43	1,147	43
50-64	157	35	241	32	114	32	111	30	85	24	102	25	810	30
65+	36	8	40	5	24	7	29	8	32	9	37	9	198	7

Utah

Age Category	2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
0-17	4	4	9	5	9	7	4	3	4	3	3	2	33	4
18-29	13	14	17	9	13	10	20	13	12	10	22	17	97	12
30-49	34	36	62	32	58	44	65	43	42	34	57	44	318	39
50-64	23	24	55	29	38	29	52	35	42	34	29	22	239	29
65+	21	22	49	26	15	11	9	6	22	18	19	15	135	16

Key points:

- ❖ Inpatient hospital visits among AI/AN that were attributable to drugs with potential for abuse and dependence were experienced most frequently by those in the 30-49 year old age group in Arizona, Nevada, and Utah.
- ❖ In the three states, less than 10% of all inpatient hospital visits were attributed to those 17 or younger.
- ❖ Only Utah had more than 10% of inpatient hospital visits attributed to those that were 65 and older.

Mental Health and Substance Abuse

Hospitalizations Attributable to Drugs with Potential for Abuse and Dependence by Sex, State, and Year

Inpatient Hospital Discharge^{5,6,7}

Arizona

	2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Female	2,548	47	2,247	45	2,666	45	2,677	46	2,884	47	2,799	46	15,821	46
Male	2,916	53	2,710	55	3,241	55	3,142	54	3,315	53	3,315	54	18,639	54

Nevada

	2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Female	202	45	341	45	168	48	192	52	177	50	181	45	1,261	47
Male	247	55	420	55	185	52	176	48	176	50	225	55	1,429	53

Utah

	2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Female	46	48	94	49	66	50	74	49	73	60	68	52	421	51
Male	49	52	98	51	67	50	76	51	49	40	62	48	401	49

Key points:

- ❖ Inpatient hospital visits attributable to drugs with potential for abuse and dependence were fairly similar between males and females in the Arizona, Nevada, and Utah.

Mental Health and Substance Abuse

Opioid Abuse and Dependence by State and Year

Inpatient Hospital Discharge^{5,6,7}

Arizona

	2014	2015	2016	2017	2018	2019
Count	972	829	908	841	867	909

Nevada

	2014	2015	2016	2017	2018	2019
Count	124	160	91	103	69	78

Utah

	2014	2015	2016	2017	2018	2019
Count	46	105	93	103	94	99

Key points:

- ❖ Opioid abuse and dependence inpatient hospitalizations among AI/AN in Arizona remained at a similar level from 2014 to 2019.
- ❖ In Nevada, inpatient hospitalizations dropped to close to half from 2014 to 2019.
- ❖ Utah inpatient hospitalizations for opioid abuse and dependence doubled over time.

Mental Health and Substance Abuse

Opioid Abuse and Dependence by Age, State, and Year

Inpatient Hospital Discharge^{5,6,7}

Arizona

Age Category	2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
0-17	26	3	12	1	8	1	7	1	10	1	20	2	83	2
18-29	218	22	187	23	169	19	180	21	151	17	177	19	1,082	20
30-49	446	46	395	48	456	50	422	50	455	52	437	48	2,611	49
50-64	246	25	207	25	224	25	180	21	200	23	206	23	1,263	24
65+	36	4	28	3	51	6	52	6	51	6	69	8	287	5

Nevada

Age Category	2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
0-17	0	0	0	0	0	0	0	0	*	4	*	5	7	1
18-29	21	17	18	11	20	22	10	10	14	20	15	19	98	16
30-49	39	31	58	36	31	34	39	38	26	38	23	29	216	35
50-64	47	38	69	43	31	34	42	41	14	20	17	22	220	35
65+	17	14	15	9	9	10	12	12	12	17	19	24	84	13

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Utah

Age Category	2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
0-17	*	4	*	2	*	1	0	0	0	0	0	0	*	1
18-29	7	15	9	9	7	8	7	7	10	11	14	14	54	10
30-49	19	41	39	37	41	44	44	43	30	32	45	45	218	40
50-64	11	24	32	30	33	35	43	42	35	37	23	23	177	33
65+	7	15	23	22	11	12	9	9	19	20	17	17	86	16

* = counts and totals with less than 6 participants in a category are suppressed for confidentiality

Key points:

- ❖ Inpatient hospitalizations for opioid abuse and dependence among AI/AN occurred most often in 30-49 year olds and 50-64 year olds in Arizona, Nevada, and Utah.

Mental Health and Substance Abuse

Opioid Abuse and Dependence by Sex, State, and Year

Inpatient Hospital Discharge Data^{5,6,7}

Arizona

	2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Female	489	50	429	52	487	54	460	55	439	51	462	51	2,766	52
Male	483	50	400	48	421	46	381	45	428	49	447	49	2,560	48

Nevada

	2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Female	62	50	84	53	47	52	60	58	38	55	33	42	324	52
Male	62	50	76	48	44	48	43	42	31	45	45	58	301	48

Utah

	2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Female	18	39	48	46	43	46	44	43	53	56	48	48	254	47
Male	28	61	57	54	50	54	59	57	41	44	51	52	286	53

Key points:

- ❖ Arizona and Nevada had a similar prevalence of opioid inpatient hospitalizations among females (52%) and males (48%).
- ❖ In Utah, there was a slightly higher proportion of opioid inpatient hospitalizations among males.

Mental Health and Substance Abuse

Drug Use in Pregnancy by State and Year

Inpatient Hospital Discharge^{5,6,7}

Arizona

	2014	2015	2016	2017	2018	2019
Count	136	182	481	399	465	423

Nevada

	2014	2015	2016	2017	2018	2019
Count	6	12	23	21	29	24

Utah

	2014	2015	2016	2017	2018	2019
Count	46	101	15	14	8	8

Key points:

- ❖ In Arizona, inpatient hospitalizations for drug use in pregnancy doubled after 2015 and remained at a relatively consistent level until 2019.
- ❖ In Nevada, inpatient hospitalizations for drug use in pregnancy counts remained low, but increased from 2014 to 2018.
- ❖ In Utah, inpatient hospitalizations for drug use in pregnancy was highest in 2015 at 101 and lower in 2019 (8).

Maternal and Child Health

Maternal and Child Health

Infant Mortality by State

State Health Departments^{2,3,4}

Arizona

Infant Mortality Rates per 1,000 Live Births					
	2014	2015	2016	2017	2018
Arizona State	6.2	5.6	5.4	5.6	5.6
AI/AN	8.7	7.8	8.3	9.5	9.3

Nevada

Infant Mortality Rates per 1,000 Live Births					
	2014	2015	2016	2017	2018
Nevada State	5.9	5.3	5.7	5.8	5.8
AI/AN	6.4	4.6	4.6	5.4	4.9

Utah

Infant Mortality Rates per 1,000 Live Births					
	2014	2015	2016	2017	2018
Utah State	4.9	5.1	5.4	5.8	5.4
	2014-2018				
	Rate	Count	Standard Error		
AI/AN	2.34*	7	37.8		
*Use caution in interpreting; the estimate has a coefficient of variation > 30% and is therefore deemed unreliable by Utah Department of Health standards. Consider aggregating years to decrease the relative standard error and improve the reliability of the estimate.					

Key points:

- ❖ The disparity in infant mortality rates between AI/AN in Arizona and the rest of the state increased from 2014 to 2018. In each year, infant mortality was higher among AI/AN than the state total and the largest disparity occurred in 2017 (5.6 per 1,000 for the state, 9.5 per 1,000 for AI/AN).
- ❖ In Nevada, infant mortality rates for AI/AN decreased from 2014 to 2018. In 2014, rates were higher than the state total. While the state rate remained similar, AI/AN rate dropped.
- ❖ Due to low population, infant mortality rate for AI/AN in Utah cannot be properly estimated.

Maternal and Child Health

Preterm Births by State and Year

Inpatient Hospital Discharge and Indian Health Service Epi Data Mart^{5,6,7,8}

Arizona

Preterm Delivery	2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
No	2,827	92	2,558	90	2,711	90	2,269	90	2,310	88	2,269	89	14,944	90
Yes	253	8	287	10	302	10	254	10	306	12	274	11	1,676	10

Nevada

Preterm Delivery	2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
No	213	96	222	94	196	93	193	95	163	87	183	91	1,170	93
Yes	9	4	15	6	15	7	11	5	24	13	18	9	92	7

Utah

Preterm Delivery	2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
No	30	83	53	95	56	92	37	86	36	97	19	83	231	90
Yes	6	17	3	5	5	8	6	14	1	3	4	17	25	10

IHS Phoenix Service Area

Preterm Delivery	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
No	753	96	748	95	683	95	666	95	441	98	3,291	96
Yes	33	4	38	5	39	5	34	5	11	2	155	4

Key points:

- ❖ Around 10% of all AI/AN births in Arizona and Utah from 2014 to 2019 were classified as preterm deliveries. On average, 7% of births were considered preterm in Nevada.
- ❖ On average, the IHS Phoenix Service Area percentage for preterm births was lower than any of the state hospital discharge values.

Maternal and Child Health

Birthweight by State and Year

Inpatient Hospital Discharge^{5,6,7}

Arizona

Birthweight	2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Low	237	8	263	9	274	9	211	8	236	9	219	9	1,440	9
Normal	2,545	83	2,309	81	2,459	82	2,056	81	2,144	82	2,099	83	13,612	82
High	298	10	273	10	280	9	256	10	236	9	225	9	1,568	9

Nevada

Birthweight	2016		2017		2018		Average	
	n	%	n	%	n	%	n	%
Low	16	5	29	8	27	8	72	7
Normal	288	87	285	82	280	83	853	84
High	26	8	35	10	29	9	90	9

Utah

Birthweight	2013		2014		2015		2016		2017		2018		2019		Average	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Low	9	6	16	10	10	6	16	12	8	7	11	9	7	7	77	8
Normal	129	82	127	82	141	88	108	80	98	85	105	83	93	90	801	84
High	20	13	11	7	9	6	11	8	9	8	10	8	3	3	73	8

Key points:

- ❖ Low and high birthweight counts remained similar in each state from 2014 to 2019. On average, 9% of births in Arizona, 7% in Nevada, and 8% in Utah were considered to be low birthweight.

Maternal and Child Health

Children (Ages 2-5) Body Mass Index by State and Year

Indian Health Service Epi Data Mart⁸

Arizona

BMI Category	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
Normal Weight	2,386	40	2,715	46	3,004	51	2,954	51	2,538	49	13,597	48
Overweight	665	11	710	12	707	12	803	14	860	17	3,745	13
Obese	2,851	48	2,422	41	2,134	37	1,986	35	1,738	34	11,131	39

Nevada

BMI Category	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
Normal Weight	276	45	272	46	254	49	312	49	255	50	1,369	48
Overweight	86	14	88	15	71	14	107	17	83	16	435	15
Obese	245	40	232	39	191	37	217	34	171	34	1,056	37

Utah

BMI Category	2014		2015		2016		2017		2018		Average	
	n	%	n	%	n	%	n	%	n	%	n	%
Normal Weight	55	31	48	33	36	33	30	38	27	39	196	34
Overweight	26	15	22	15	15	14	10	13	12	17	85	15
Obese	98	55	75	52	58	53	39	49	30	43	300	52

Key points:

- ❖ In Arizona and Nevada, about half of all AI/AN children ages 2-5 were categorized as overweight or obese. This was slightly higher in Utah, with 67% of all children categorized as overweight or obese.

Maternal and Child Health

Body Mass Index by Age and State from 2014 – 2018

Indian Health Service Epi Data Mart⁸

Arizona

BMI Category	Child's Age								Average	
	2		3		4		5			
	n	%	n	%	n	%	n	%	n	%
Normal Weight	3,611	55	3,414	50	3,357	45	3,215	42	13,597	48
Overweight	736	11	778	11	1,108	15	1,123	15	3,745	13
Obese	2,189	33	2,625	39	3,076	41	3,241	43	11,131	39

Nevada

BMI Category	Child's Age								Average	
	2		3		4		5			
	n	%	n	%	n	%	n	%	n	%
Normal Weight	357	56	340	51	366	44	306	43	1,369	48
Overweight	63	10	91	14	161	19	120	17	435	15
Obese	217	34	242	36	306	37	291	41	1,056	37

Utah

BMI Category	Child's Age								Average	
	2		3		4		5			
	n	%	n	%	n	%	n	%	n	%
Normal Weight	43	43	57	40	52	29	44	28	196	34
Overweight	13	13	21	15	29	16	22	14	85	15
Obese	43	43	65	45	100	55	92	58	300	52

Key points:

- ❖ In each state, childhood BMI categorization increased with age. As age went up from 2 to 5, more children were categorized as overweight or obese.

Maternal and Child Health

Body Mass Index by Age, Sex, and State from 2014 – 2018

Indian Health Service Epi Data Mart⁸

Arizona

Female

BMI Category	Child's Age								Average	
	2		3		4		5			
	n	%	n	%	n	%	n	%	n	%
Normal Weight	1,712	54	1,636	49	1,630	44	1,580	41	6,558	46
Overweight	372	12	398	12	624	17	501	13	1,895	13
Obese	1,092	34	1,306	39	1,492	40	1,769	46	5,659	40

Male

BMI Category	Child's Age								Average	
	2		3		4		5			
	n	%	n	%	n	%	n	%	n	%
Normal Weight	1,899	57	1,778	51	1,727	46	1,635	44	7,039	49
Overweight	364	11	380	11	484	13	622	17	1,850	13
Obese	1,097	33	1,319	38	1,584	42	1,472	39	5,472	38

Nevada

Female

BMI Category	Child's Age								Average	
	2		3		4		5			
	n	%	n	%	n	%	n	%	n	%
Normal Weight	165	55	168	52	193	47	165	46	691	49
Overweight	32	11	41	13	83	20	49	14	205	15
Obese	105	35	116	36	134	33	147	41	502	36

Male

BMI Category	Child's Age								Average	
	2		3		4		5			
	n	%	n	%	n	%	n	%	n	%
Normal Weight	192	57	172	49	173	41	141	40	678	46
Overweight	31	9	50	14	78	18	71	20	230	16
Obese	112	33	126	36	172	41	144	40	554	38

Maternal and Child Health

Children Body Mass Index by Age, Sex, and State from 2014 – 2018

Continued

Indian Health Service Epi Data Mart⁸

Utah

Female

BMI Category	Child's Age								Average	
	2		3		4		5			
	n	%	n	%	n	%	n	%	n	%
Normal Weight	25	52	33	45	26	28	24	29	108	36
Overweight	8	17	13	18	17	18	14	17	52	18
Obese	15	31	27	37	49	53	45	54	136	46

Male

BMI Category	Child's Age								Average	
	2		3		4		5			
	n	%	n	%	n	%	n	%	n	%
Normal Weight	18	35	24	34	26	29	20	27	88	31
Overweight	5	10	8	11	12	13	8	11	33	12
Obese	28	55	38	54	51	57	47	63	164	58

Key points:

- ❖ There was little difference in levels of overweight and obesity between male and female children.

Maternal and Child Health

Severe Maternal Morbidity by State

State Severe Maternal Morbidity Reports^{12,13,14}

Arizona

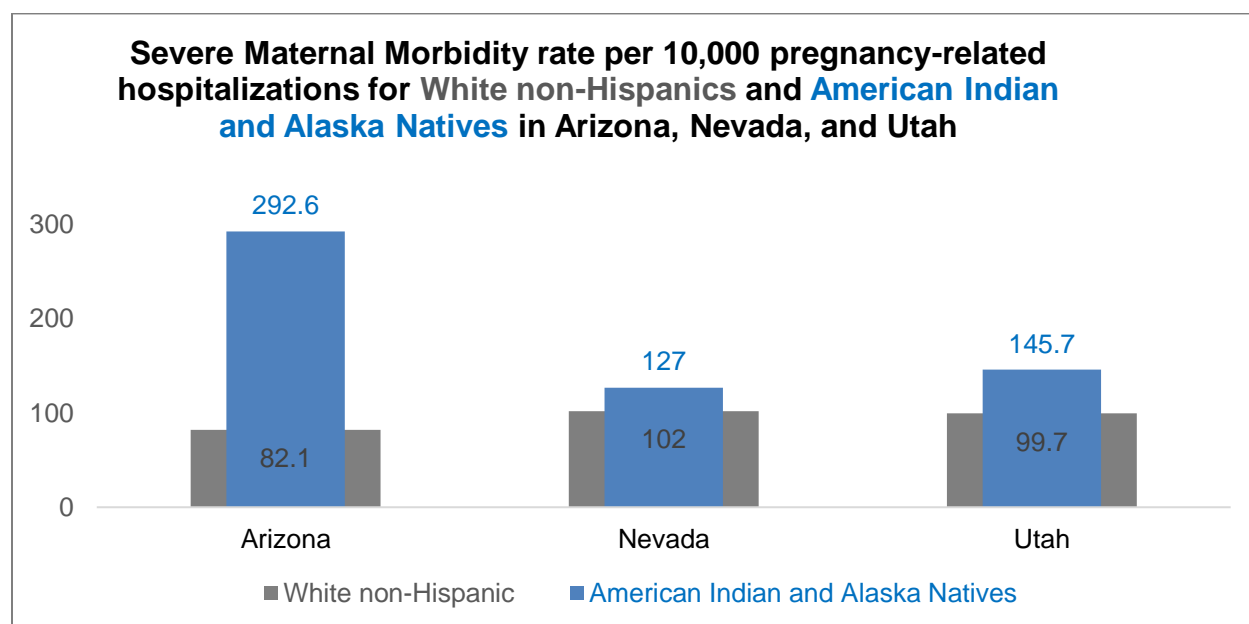
The Severe Maternal Morbidity (SMM) report published by Arizona Department of Health Services in 2020 identified AI/AN women to have a SMM rate of 292.6 cases per 10,000 delivery hospitalizations; 3.5 times the rate of White women¹.

Nevada

The Nevada Department of Health and Human Services published *Severe Maternal Morbidity, 2016*. The report found AI/AN non-Hispanic women to have a SMM rate of 127 per 10,000 deliveries compared to White non-Hispanics who had a SMM rate of 102².

Utah

In the *Severe Maternal Morbidity Utah, 2013-2015* report, Utah reported AI/AN women had a 145.7 rate of SMM per 10,000 pregnancy-associated hospitalizations compared to 99.7 among White women³.



SMM Rates within Arizona, Nevada, and Utah

SMM Reports	AI/AN Women SMM Rate	White non-Hispanic SMM Rate
Arizona – 2011-2015 ¹¹	292.6	82.1
Nevada – 2016 ¹²	127	102
Utah – 2013-2015 ¹³	145.7	99.7
Rates per 10,000 pregnancy-related hospitalizations		

Key points:

- ❖ Each state identified AI/AN women to have higher rates of SMM compared to white non-Hispanic women.

Maternal and Child Health

Severe Maternal Morbidity by IHS

Indian Health Service Epi Data Mart⁸

IHS Phoenix Service Area

All live birth deliveries were identified from the IHS EDM from January 2011 to September 2015 (n=4,064). Any hospital delivery that contained a SMM ICD-9 code (See [Definition of Indicators](#)) was grouped into the SMM Event dataset (n=100).

IHS Hospital Births from 2011-2015

Discharge Year	IHS SMM Event (n=100)			IHS Hospital Delivery (n=4,064)	
	n	%	Rate per 10,000 live deliveries	n	%
2011	14	14	158.9	881	22
2012	17	17	189.3	898	22
2013	20	20	260.8	767	19
2014	29	29	330.7	877	21
2015	20	20	312.0	641	16

Summary of SMM Events within IHS 2011-2015 Hospital Data

SMM Type	IHS SMM Event (n=100)		
	n	%	Rate per 10,000 live deliveries
SMM Diagnosis Code			
Yes	18	18	44.3
No	82	82	201.8
SMM Procedure Code			
Yes	86	86	211.6
No	14	14	34.5

Key points:

- ❖ Majority of the SMM events were identified through procedure codes.

Definition of Indicators

A case definition is a set of uniform criteria used to define a disease for public health surveillance. Case definitions enable public health to classify and count cases consistently across reporting jurisdictions, and are not to be used by healthcare providers to determine how to meet an individual patient's health needs. Therefore, not all clinically diagnosed cases are included. Any disease counts extracted from a surveillance system likely under-estimate the burden of disease in the population.

In this report, state hospital discharge records were used for estimating illness presence in a population. This only represents those individuals seeking care in a hospital and it is likely the true number of cases in the population is greater. Identification of a disease was gathered from the principal diagnosis code, or the condition that was responsible for admitting the patient, that was described by ICD-9-CM and ICD-10-CM codes. The case definitions for the conditions obtained from hospital discharge data in this report are presented below.

Chronic Disease Section		
Type of Encounter	ICD-9	ICD-10
Asthma	493	J45
Cancer	140-239	C00-D49, E31.22 E31.23, E88.3, G13.1, G73.1 G89.3, H47.42, H47.521, H47.522, H47.529, H47.631, H47.632, H47.639, J91.0, K12.31, K31.7, K63.5, M36.0, M36.1, N52.36, R18.0, R53.0, T80.810A, T80.810D, T80.810S
Diabetes	249 -250 , 790.2, 791.5, 791.6, V45.85, V53.91, V65.46	E08-E13, O24, E89.1, O99.810 O99.814, O99.815
Heart Disease	391-398, 410-417 , 420-429, V45, 742.0, 742.1, 742.2, 742.3, 785.0, 785.1, 785.2 785.3, 786.50, 786.51, 786.59, V42.2, V43.3, V53.3, V53.31 V53.32, V53.39	I00, I11, I13, I97, J1082, J1182, I01-I02, I105- I09, I20-I28 , I30-I52, A18.884, A32.282, A36.681, A38.81, A39.950, A39.951, A39.952, A39.953, A52.203, A52.206, A54.483, B26.682, B37.76, B58.881, D86.685, I97.7710, I97.7711, J10.082, J11.182, M32.211, M32.212, O03.336, O03.386, O04.486, O07.736, O08.881, O29.9111, O29.9112, O29.9113, O29.9119, O29.9121, O29.9122, O29.9123, O29.9129, O90.03, R07.72, R07.789, R07.79, Z45.5010, Z45.5018, Z95.50, Z95.51, Z95.52, Z95.53 Z95.54, Z95.55, Z95.5811, Z95.5812,, Z98.861, B33.32, 197.71, M05.53
Hypertension	401-405, 437.2	I10-I13, I15-I16 O10-O11 O13 O16 I67.4 I97.3 A18.84 H35.031 H35.032 H35.033

Stroke	430-438	I60-I69, G46, R29.7, A52.04, A52.05, G43.601, G43.609, G43.611, G43.619, I97.810, I97.811, I97.820, I97.821
<p>Adult Body Mass Index Underweight = BMI <18.5 Normal weight = BMI 18.5-24.9 Overweight = BMI >25.0-29.9 Obese = BMI >29.0</p>		
Dental Section		
GPRA Measure	ADA CDT Codes	
Access to Dental Services	D0110 – D0390, D0415 – D9952, D9970 – D9974, D9999	
Dental Sealants	D1351, D1352, D1353	
Topical Fluoride	D1201, D1203, D1204, D1205, D1206, D1208, D5986	
Mental Health and Substance Abuse Section		
Type of Encounter	ICD-9	ICD-10
Any Mental Disorder	290-319	F10-F48
All Mental Disorders Except for Drug and Alcohol-Induced Mental Disorders	290, 293-302, 306-319	F20-F48
Drug Use in Pregnancy	648[.30-.34], 760.72, 760.73, 760.75, 779.5	P04.49, P04.41, P96.1, P96.2, O99[.320-.325]
Hospitalizations Attributable to Drugs with Potential for Abuse and Dependence	292.0, 304, 305.2-305.9, 648.3, 760[.72-.75], 779.5, 965-967, 969.4, 969[.6-.7], 970.81	F11-F16, F19, O9932, P044, P961, T400-T409, T423-T424, T426-T427, T436
Mood and Depressive Disorders	296, 311	F30-F39
Opioid Abuse and Dependence	292.85, 292.89, 304[.00-.03], 305[.50-.53]	F11[.10-.988]
Post-Traumatic Stress Disorder	309.81	F43.10, F43.11, F43.12
Schizophrenia	295	F20-F29
Suicide and Self-Harm	E950-E958.9	X71-X83, T36-T51

Definition of Indicators Continued

Maternal and Child Health Section		
Type of Encounter	ICD-9	ICD-10
Preterm Births	765.0-765.1	P07.2-P07.3
<u>Birthweight</u>		
	Low birthweight	Less than 5.5lbs
	Normal birthweight	5.5lbs – 8.8lbs
	High birthweight	Greater than 8.8lbs
<u>BMI for Children over 2 years of age</u>		
	<u>BMI Category</u>	<u>Percentile:</u>
	Underweight:	$\leq 4^{\text{th}}$
	Normal Weight:	$5^{\text{th}} \geq x < 85^{\text{th}}$
	Overweight:	$85^{\text{th}} \geq x < 95^{\text{th}}$
	Obese:	$\geq 95^{\text{th}}$
Type of Encounter	Procedure Codes	ICD-9 Diagnosis Codes
Severe Maternal Morbidity	35.xx, 36.xx, 37.xx, 39.xx, 31.1, 68.3x – 68.9, 89.6x, 93.90, 96.01-96.05, 96.7x, 99.0x, 99.6x,	038, 282.62, 282.64, 282.69, 286.6, 286.9, 410, 415.1, 427[.41-.42], 427.5, 428.1, 430-434, 436-437, 441, 518[.4-.5], 518[.81-82], 518.84, 584, 642.6, 666.3, 668[.0-.2], 669.1, 669[.3-.4], 671.5, 673[.0-.3], 673.8, 674.0, 785.5x, 799.1, 800-801, 803-804, 851-854, 860-869, 995.0, 995.4, 995[.91-.92], 997[.1-.2], 998.0, 999.2

Statistical Notes Table

Measurement	Definition	Formula
Counts	The number of observations	Total number of participants in category
Mortality Rate	The number of deaths per population in a given time period	$\left\langle \frac{\text{Total number of deaths within a subgroup during a specific time period}}{\text{Population size during the same time period}} \times 100,000 \right\rangle$
Percent	One part per hundred	$\left\langle \frac{\text{Number of participants in one category}}{\text{Total number of participants with valid data for the category}} \times 100 \right\rangle$
SMM Rate	The number of SMM cases per population in a given time	$\left\langle \frac{\text{Total number of SMM cases within a subgroup during a specific time period}}{\text{Number of live births during a specific time period}} \times 10,000 \right\rangle$

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