

2016 Emergency Department Data Annual Report

Health Systems Epidemiology Program
Epidemiology and Response Division
New Mexico Department of Health



2016 Emergency Department Data Annual Report

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Executive Summary

This report presents overall New Mexico emergency department visit numbers, rates by age, sex and region for NM residents. In 2016, 36 non-federal emergency departments reported emergency department data to the NMDOH.

Of the 828,259 reported ED visits, 54.6% were among females and 45.4% were among males. Eighteen percent of all visits occurred among residents over the age of 64 years, increasing from 14% in 2010 and no change from 2015. The Southeast Region had the highest rate of New Mexico ED visits in 2016 (5,260.1 visits per 10,000 population), decreasing 1.4% from 2015. Symptoms, signs, and ill-defined conditions had the highest rate (881.8 per 10,000 population), while congenital anomalies had the lowest rate (1.2 per 10,000 population) of visits in New Mexico in 2016 as compared to all other first listed diagnosis categories.



Key Findings

Overview of Emergency Department (ED) Visits in New Mexico

- In 2016, the 85+ year old age group had the highest rate of ED visits (7,457.2 per 10,000 population) followed closely by the less than 1 year age group at 6,922.1 visits per 10,000 population. The age group with the lowest rate of ED visits was 5-14 year olds at 2,500.7 per 10,000 population (similar to 2015).
- Females accounted for 54.6% of all ED visits.
- The Southeast Region had the highest rate of ED visits at 5,260.1 per 10,000 population.
- Medicaid was the top payer type in 2016 covering 47.1% of ED visits across the state. Medicare was the second highest payer type at 23.2%.
- The top reason for ED visit by category of first-listed diagnosis group was Symptoms, Signs and Ill-Defined Conditions with an overall state rate of 881.8 visits per 10,000 population (up from 812.7 in 2015). This category includes the following health conditions: chest pain, fever, cough, nausea and vomiting, and abdominal pain.
- The Southeast Region had the highest rates (per 10,000 population) of Diseases of the Respiratory System (580.9), Diseases of the Nervous System and Sense Organs (178.7), Diseases of the Blood and Blood-Forming Organs (23.1), and Injury and Poisoning (1,074.3) compared to the other four health regions.
- Diseases of the Respiratory System was the top reason for ED visits for children 4 years or younger. Injury and Poisoning was the top reason for patients 85+ years old (similar to 2015).

Quality Indicators

- In 2016, the Southeast Region (175.8 per 10,000 population) had the highest rate of acute ambulatory care sensitive condition (ACSC) visits and the Metro Region (92.5 per 10,000 population) had the lowest visit rate.
- Three health regions had an increase in acute ACSC ED visit rates from 2015 to 2016: Metro, Southeast, and Southwest Regions.
- In 2016, the Southeast Region (133.1 per 10,000 population) had the highest rate for chronic ACSC and the Metro Region had the lowest rate (70.7 per 10,000 population). The Southeast Region had the highest ED visit rates for chronic ACSC for the past four years, from 2013-2016.

Infectious Disease

- In 2016, there were 7,242 ED visits due to Hepatitis C Virus (HCV) infection.
- The primary risk factor for HCV infection in New Mexico is injection drug use.

Maternal and Child Health

- In 2016, there were over 48,000 ED visits due to injuries in children 0-17 years of age in New Mexico.
- Unintentional injuries (e.g. falls, motor vehicle injuries) accounted for 89.9% of the injury-related ED visits among 0-17 year olds.



Key Findings

Chronic Disease & Environmental Health Related Visits

- The Southeast Region had the highest age-adjusted asthma ED visit rates; a trend that has been observed since 2014.

Injury

- Heroin overdose and opioid overdose ED visit rates increased from 2010 to 2016.
- In 2016, the opioid overdose ED visit rate among men was 9.2 ED visits per 10,000 population, with higher rates among men ages 15-54 years, compared to other male age groups. Among women, the rate was 6.4, with higher rates among women ages 15-54 years, compared to other female age groups.
- In 2016, the heroin overdose ED visit rate among men was 5.5 ED visits per 10,000 population, with higher rates among men ages 15-54 years, compared to other male age groups. Among women, the rate was 3.9, with higher rates among women age 15-54 years, compared to other female age groups.
- In 2016 there were 61,428 fall-related ED visits; an increase of 9.2% from 2015.
- More females (59% of visits) than males were treated in the ED for motor vehicle traffic-related injuries in 2016, a similar finding present in both 2013, 2014, and 2015 data.
- Females had a higher motor vehicle traffic-related ED visit rate for all age groups except for persons aged <1 years, 1-4 years, and age 85+ years.



Methods

The New Mexico Public Health Act grants the New Mexico Department of Health the authority to “Investigate, control and abate the cause of disease” (Section 24-1-3C). Additional authority was enacted (NMAC 7.4.3.10) on April 30, 2009, which specifically requires that all non-federal emergency departments in the State of New Mexico report emergency department (ED) data to the NMDOH. The 2010-2016 ED data were requested annually via letter from all non-federal New Mexico emergency departments. This does not include any visits of New Mexico residents to non-New Mexico emergency departments, Indian Health Service (IHS) facilities and the Veterans Affairs (VA) Hospital.

The approaches to emergency department data acquisition in New Mexico have been going through many changes in design, approach, authority, and mechanisms. The next approach is being piloted through the New Mexico Health Information Collaborative (NMHIC) exchange as part of the E-Reporting project. Ultimately, the E-Reporting project will collect a wider array of information in a more timely fashion on all ED visits.

In this report, rates were calculated using the New Mexico 2011-2016 population estimates, determined by NM Population Estimates, Geospatial and Population Studies (GPS) Program, University of New Mexico. Population estimates from UNM were recently updated in October 2017. These estimates were expanded to include 2016 population estimates, but also update population estimates from 2010 to the present. For this report, trend analysis that includes previous years will reflect the new population estimates. All age-adjusted rates were standardized to the Standard US 2000 Population. Rates are per 10,000 population.

The Category of First Listed Diagnosis Tables (Table 3) had an increased number and rate of ‘Ungroupable’ classifications in 2013, as compared to 2011, 2012 and 2014. This was due to an increased number of missing diagnoses by a facility who was unable to capture this information. In 2014-present, corrections were made for this facility, as reflected in the number of observations for this diagnostic category.

This report is intended to provide the general public with an overview analysis of emergency department visits to non-federal emergency facilities in New Mexico. Although data were verified with the submitting hospital, all data and information presented in this report are as submitted by reporting emergency departments to the NMDOH.

This report was supported in part by the Cooperative Agreement Number 5 U38 EH000949-05, funded by the Centers for Disease Control and Prevention.

Limitations: Non-federal NM hospitals are not included in these data. Thus, ED visits and rates in areas with large American Indian/Alaskan Native populations are lower than they would be if IHS hospital ED visit data were included. In addition, ED visits for NM residents to out of state hospitals are not included.



Overview of Emergency Department Hospitals

New Mexico Hospitals Reporting ED Data in 2016	
Alta Vista Regional Hospital	Memorial Medical Center
Artesia General Hospital	Mimbres Memorial Hospital
Carlsbad Medical Center	Miners' Colfax Medical Center
CHRISTUS St. Vincent Regional Medical Center	Mountain View Regional Medical Center
Cibola General Hospital	Nor-Lea General Hospital
Dr. Dan C Trigg Memorial Hospital	Plains Regional Medical Center - Clovis
Eastern NM Medical Center	Presbyterian Hospital
Gerald Champion Regional Medical Center	Presbyterian Espanola Hospital
Gila Regional Medical Center	Presbyterian Kaseman Hospital
Guadalupe County Hospital	Presbyterian Rust Medical Center
Holy Cross Hospital	Rehoboth McKinley Christian Health
Lea Regional Hospital	Roosevelt General Hospital
Lincoln County Medical Center	San Juan Regional Medical Center
Los Alamos Medical Center	Sierra Vista Hospital
Lovelace Medical Center/Heart Hospital of NM	Socorro General Hospital
Lovelace Regional Hospital-Roswell	Union County General Hospital
Lovelace Westside Hospital	UNM Hospital
Lovelace Women's Hospital	UNM Sandoval Regional Medical Center

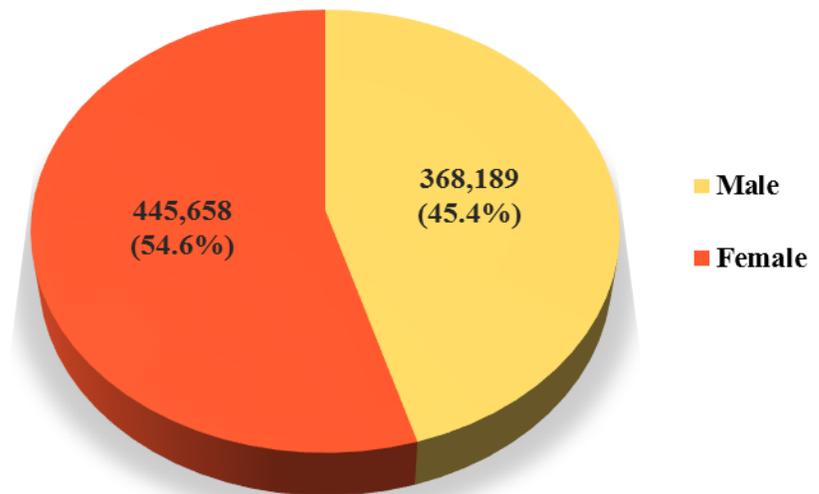


Overview of Emergency Department Visits

Table 1. Number of Emergency Department Visits, Percent Distribution, and Rate* by Age Group, NM, 2016

Age Group	Number of Visits	Percent of Total Visits	Rate (per 10,000 population)
Less than 1 Year	17,933	2.2	6,922.1
1-4 Years	48,958	5.9	4,608.6
5-14 Years	69,525	8.4	2,500.7
15-24 Years	115,706	14.0	4,004.5
25-34 Years	131,185	15.8	4,633.5
35-44 Years	106,317	12.8	4,340.9
45-54 Years	99,540	12.0	3,918.6
55-64 Years	88,568	10.7	3,206.0
65-74 Years	69,416	8.4	3,376.7
75-84 Years	51,443	6.2	5,102.6
85+ Years	29,667	3.6	7,457.2
Unknown	0	0.0	N/A

Figure 1. Number of Emergency Department Visits and Percent Distribution by Sex, NM, 2016



*Rates were calculated and adjusted using the U.S. 2000 standard population; using <https://ibis.health.state.nm.us/>



Overview of Emergency Department Visits

Figure 2. Number of Emergency Department Visits and Percent Distribution by Health Region, NM, 2016

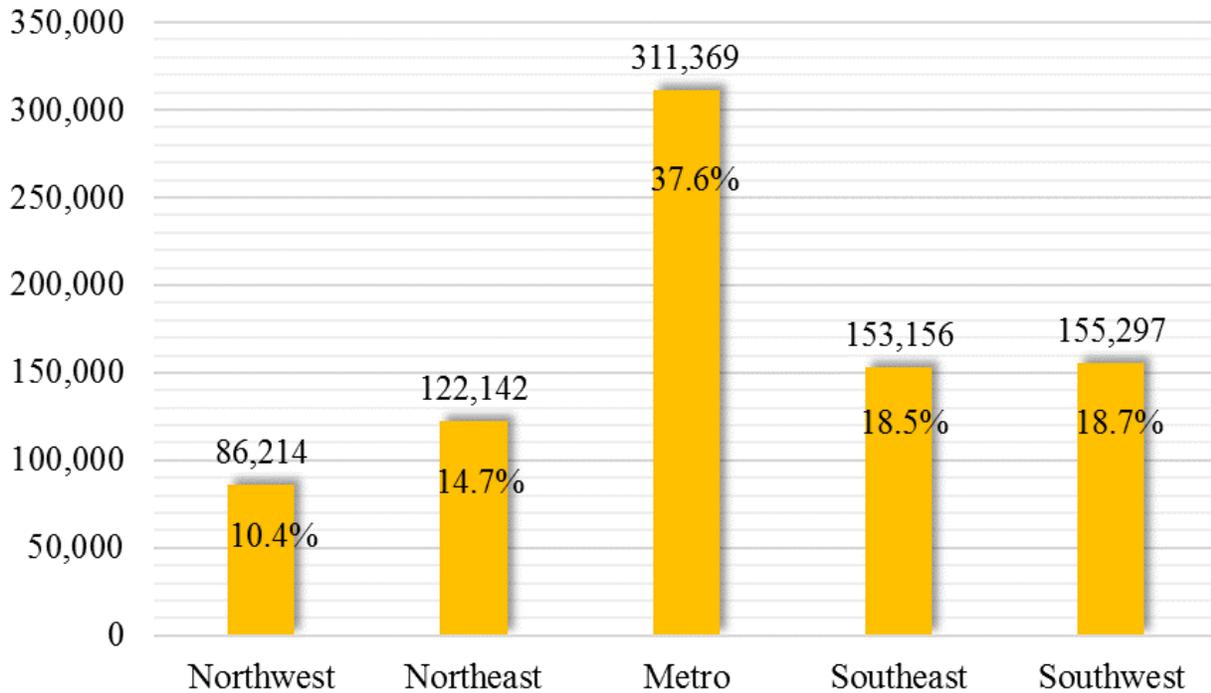
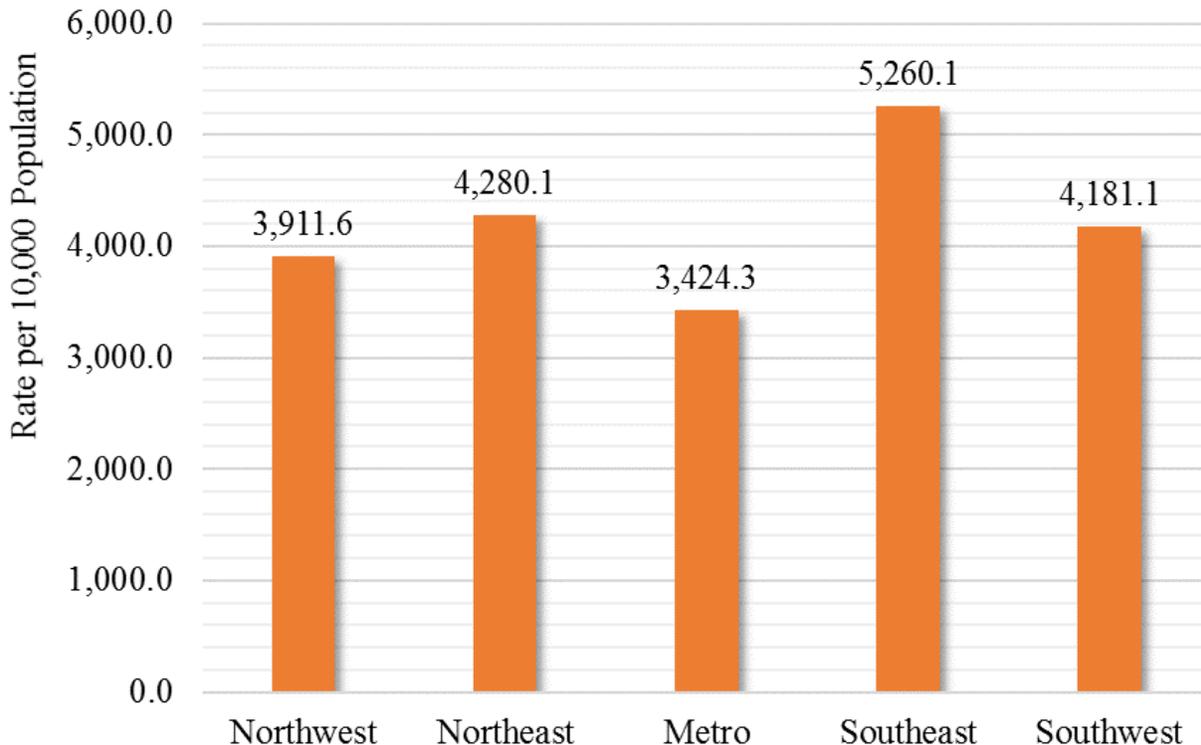


Figure 3. Rate* of ED Visits by Health Region, NM, 2016



*Rates were calculated and adjusted using the U.S. 2000 standard population; using <https://ibis.health.state.nm.us/>



Overview of Emergency Department Visits

Figure 4. Percent of Emergency Department Visits by Payer Type, NM, 2016

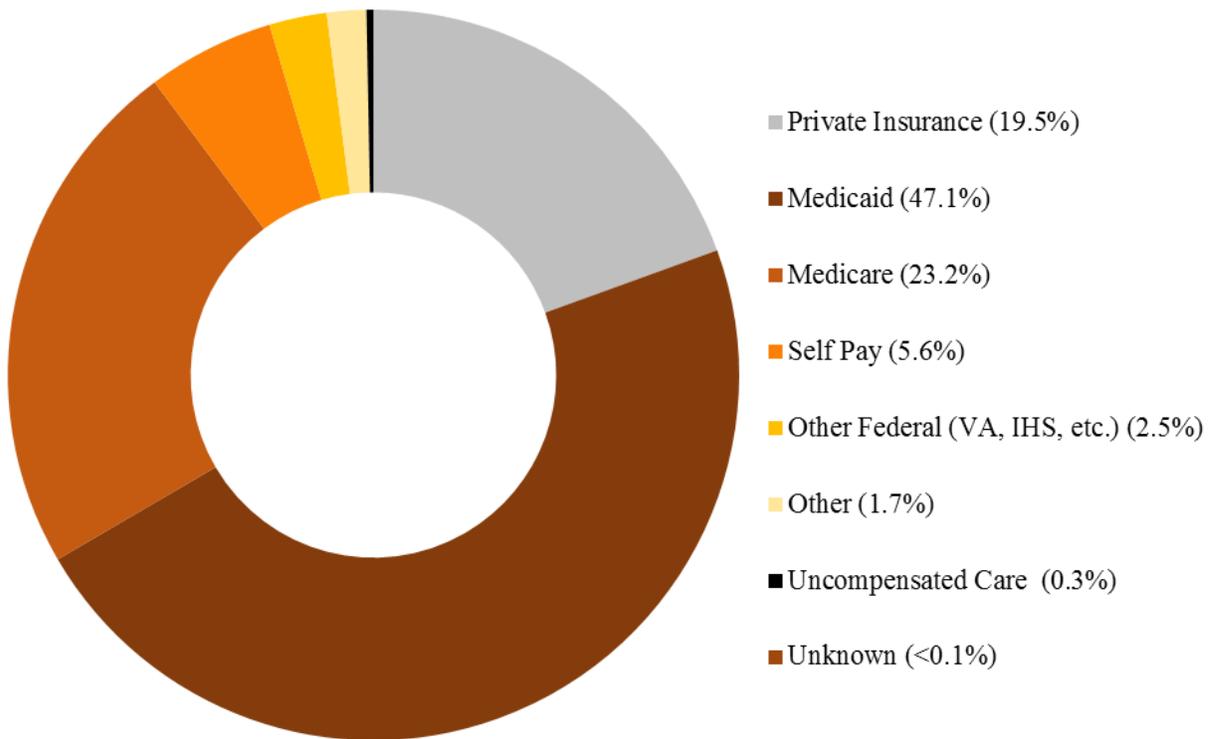


Table 2. Percent of Emergency Department Visits by Payer Type and Health Region, NM, 2016

Payer Type	NW	NE	Metro	SE	SW	NM
Private Insurance	22.7	18.2	21.2	21.0	13.6	19.5
Medicaid	52.5	44.5	46.7	45.4	48.7	47.1
Medicare	17.7	25.9	22.9	20.7	27.2	23.2
Self Pay	4.9	7.5	5.7	7.2	2.8	5.6
Other Federal (VA, IHS, etc.)	1.0	0.8	1.6	4.1	5.1	2.5
Other	1.2	2.7	1.5	1.4	2.0	1.7
Charity	0.0	0.4	0.4	0.1	0.5	0.3
Unknown	0.0	<0.1	0.0	0.0	0.0	<0.1

*Rates were calculated and adjusted using the U.S. 2000 standard population; using <https://ibis.health.state.nm.us/>



Overview of Emergency Department Visits

Table 3. Number and Rate* (per 10,000 population) of Emergency Department Visits by Category of First-Listed Diagnosis and Sex, NM, 2016

Category of First Listed Diagnosis†	# of Male Visits	# of Female Visits	Male Rate	Female Rate	NM Rate
Symptoms, Signs, and Ill-Defined Conditions*	77,186	106,436	7,471.1	10,199.1	881.8
Injury and Poisoning	85,187	78,512	836.6	747.9	794.3
Diseases of the Respiratory System	35,114	43,432	341.9	419.4	379.8
Diseases of the Musculoskeletal System and Connective Tissue	25,768	31,987	250.3	298.6	274.9
Diseases of the Digestive System	25,846	30,383	249.9	283.6	266.5
Mental, Behavioral, and Neurodevelopmental Disorders	30,555	19,150	308.7	192.3	250.5
Diseases of the Genitourinary System	12,436	32,107	117.5	309.5	211.8
Infectious and Parasitic Diseases	13,005	15,149	125.1	141.0	132.7
Diseases of the Skin and Subcutaneous Tissue	13,356	13,593	131.5	133.4	132.2
Diseases of the Circulatory System	15,738	15,221	139.5	118.5	128.7
Factors Influencing Health Status and Contact with Health Services	12,538	11,858	123.6	117.7	120.3
Diseases of the Nervous System	8,781	14,820	84.6	145.1	114.5
Diseases of the Ear and Mastoid Process	7,097	8,303	71.0	83.8	77.4
Pregnancy, Childbirth, and the Puerperium	0	15,909	0.0	160.0	77.2
Endocrine, Nutritional and Metabolic Diseases, and Immunity Disorders	6,513	7,634	61.9	67.1	64.6
Diseases of the Eye and Adnexa	3,374	3,600	33.1	35.3	34.1
Diseases of the Blood and Blood-Forming Organs	1,133	1,722	10.4	15.5	12.9
Neoplasms	1,159	1,456	10.0	12.2	11.0
Ungroupable Diagnoses	699	645	6.9	6.3	6.6
Certain Conditions Originating in the Perinatal Period	320	281	3.3	3.0	3.1
Congenital Anomalies	140	97	1.4	1.0	1.2
Total	375,945	452,295	3,654.2	4,310.9	3,976.2

Note: 19 records had missing/unknown information for patient sex.

† Specific ICD-10-CM codes used to define the First Listed Diagnosis Category can be found in the Appendix.

* Major health conditions include chest pain, fever, cough, nausea and vomiting, and abdominal pain.

*Rates were calculated and adjusted using the U.S. 2000 standard population; using <https://ibis.health.state.nm.us/>



Overview of Emergency Department Visits

Table 4. Emergency Department Visit Rate* (per 10,000 population) by Category of First-Listed Diagnosis and Health Region, NM, 2016

Category of First Listed	Diagnosis†	Northwest	Northeast	Metro	Southeast	Southwest
Symptoms, Signs, and Ill-Defined Conditions*		766.2	884.0	979.8	976.0	791.1
Injury and Poisoning		843.8	892.6	641.2	1,074.3	849.3
Diseases of the Respiratory System		451.3	443.0	252.7	580.9	435.2
Diseases of the Musculoskeletal System and Connective Tissue		224.3	294.2	267.2	360.8	246.2
Diseases of the Digestive System		286.5	282.0	199.4	392.5	311.8
Mental, Behavioral, and Neurodevelopmental Disorders		268.1	311.5	248.6	231.9	213.0
Diseases of the Genitourinary System		200.6	216.8	178.7	289.9	238.7
Infectious and Parasitic Diseases		143.2	135.9	105.0	201.3	134.4
Diseases of the Skin and Subcutaneous Tissue		131.1	163.5	103.2	184.8	140.9
Diseases of the Circulatory System		118.5	120.3	105.3	190.9	155.7
Factors Influencing Health Status and Contact with Health Services		102.3	136.2	87.1	129.1	195.8
Diseases of the Nervous System and Sense Organs		79.8	115.2	91.4	178.7	146.3
Diseases of the Ear and Mastoid Process		83.5	78.3	54.3	126.7	84.2
Pregnancy, Childbirth, and the Puerperium		69.4	86.1	54.7	110.9	103.6
Endocrine, Nutritional and Metabolic Diseases, and Immunity Disorders		70.5	62.1	52.2	118.8	54.1
Diseases of the Eye and Adnexa		35.0	32.3	29.1	51.6	32.7
Diseases of the Blood and Blood-Forming Organs		12.0	12.7	9.6	23.1	13.7
Neoplasms		11.3	9.8	10.0	11.9	13.6
Ungroupable Diagnoses		4.0	9.0	8.4	3.7	4.6
Certain Conditions Originating in the Perinatal Period		3.4	3.6	2.7	3.3	3.6
Congenital Anomalies		0.7	1.4	1.2	1.3	1.2
Total		3,911.6	4,280.1	3,424.3	5,260.1	4,181.1

† Specific ICD-10-CM codes used to define the First Listed Diagnosis Category can be found in the Appendix.

* Major health conditions include chest pain, fever, cough, nausea and vomiting, and abdominal pain.

*Rates were calculated and adjusted using the U.S. 2000 standard population; using <https://ibis.health.state.nm.us/>



Overview of Emergency Department Visits

Table 5. Number of Emergency Department Visits by Category of First-Listed Diagnosis and Age Group, NM, 2016

Category of First Listed Diagnosis	< 1 Year	1-4 Years	5-14 Years	15-24 Years	25-34 Years	35-44 Years	45-54 Years	55-64 Years	65-74 Years	75-84 Years	85+ Years	Total
All ED Visits	17,933	48,958	69,525	115,706	131,185	106,317	99,540	88,568	69,416	51,443	29,667	828,258
Symptoms, Signs, and Ill-Defined Conditions	5,644	11,038	14,302	24,384	27,215	24,152	23,057	20,627	16,231	11,317	5,660	183,627
Injury and Poisoning	1,367	10,929	22,724	27,157	25,376	18,791	17,014	14,835	11,021	8,564	5,926	163,704
Diseases of the Respiratory System	4,368	11,120	11,025	10,100	9,439	6,723	6,369	6,681	5,788	4,444	2,489	78,546
Diseases of the Musculoskeletal System and Connective Tissue	51	686	2,813	6,551	9,131	9,251	9,529	8,197	5,719	3,833	1,995	57,756
Diseases of the Digestive System	842	1,481	2,952	6,338	9,317	8,156	7,866	7,210	5,748	4,150	2,170	56,230
Mental, Behavioral, and Neurodevelopmental Disorders	12	31	1,483	7,271	12,015	10,503	9,800	5,460	1,787	836	506	49,704
Diseases of the Genitourinary System	243	927	1,927	7,742	8,453	6,284	4,903	4,434	4,068	3,394	2,169	44,544
Infectious and Parasitic Diseases	1,541	3,597	2,544	2,836	2,901	2,517	2,556	2,897	2,860	2,393	1,512	28,154
Diseases of the Skin and Subcutaneous Tissue	549	1,672	1,921	3,817	5,169	4,167	3,455	2,751	1,728	1,106	614	26,949
Diseases of the Circulatory System	23	45	367	603	1,195	2,236	3,702	5,673	7,082	6,096	3,937	30,959
Factors Influencing Health Status and Contact with Health Services	951	1,703	1,855	4,381	4,905	3,345	2,693	2,037	1,227	858	446	24,401
Diseases of the Nervous System and Sense Organs	45	154	819	2,838	4,441	4,371	3,825	3,022	2,011	1,354	722	23,602
Diseases of the Ear and Mastoid Process	1,230	4,290	3,253	1,508	1,484	953	842	739	593	369	139	15,400
Pregnancy, Childbirth, the and Puerperium	0	0	25	7,499	6,846	1,494	45	0	0	0	0	15,909
Endocrine, Nutritional and Metabolic Diseases, and Immunity Disorders	97	244	389	1,200	1,527	1,847	2,291	2,328	1,949	1,494	781	14,147
Diseases of the Eye and Adnexa	318	880	890	1,024	1,005	774	679	616	443	237	108	6,974
Diseases of the Blood and Blood-Forming Organs	16	52	90	153	305	309	389	399	465	436	241	2,855
Neoplasms	2	10	15	56	160	204	336	505	607	495	225	2,615
Ungroupable Diagnoses	14	73	107	209	269	219	162	144	72	54	21	1,344
Certain Conditions Originating in the Perinatal Period	586	10	0	5	0	0	0	0	0	0	0	601
Congenital Anomalies	34	16	24	34	32	21	27	13	17	13	6	237

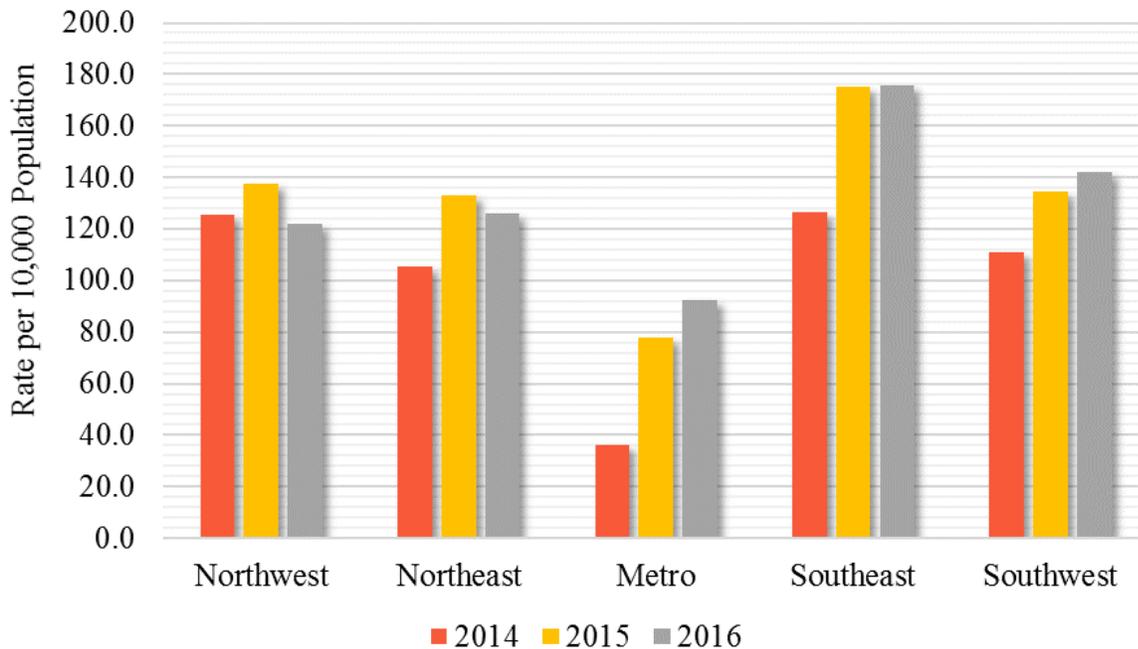
Note: 1 record had missing/unknown patient age.

Ambulatory Care Sensitive Conditions (ACSC)

In 2016, 42,241 visits to the emergency department were due to ACSC (an 18.0% increase in visits from 2015). ACSC are categorized into acute and chronic conditions. Acute conditions include dehydration, urinary tract infections, and bacterial pneumonia. Chronic conditions include diabetes (4 measures), chronic obstructive pulmonary disease, hypertension, heart failure, angina†, and asthma. The Agency for Healthcare Research & Quality (AHRQ) provides procedures for calculating these two measures at http://www.qualityindicators.ahrq.gov/Modules/PQI_TechSpec.aspx.

In 2016, the Southeast Region had the highest rate for acute ACSC and the Metro region had the lowest rate (Figure 5). Three regions had an increase in acute ACSC ED visit rates from 2015 to 2016; Metro, Southeast, and Southwest Regions. Of the three health conditions that contribute to acute ACSC, urinary tract infections had the highest ED visit rate in 2016 (76.8 per 10,000 population), followed by bacterial pneumonia (23.6 per 10,000 population). The rate for bacterial pneumonia decreased from 2015 to 2016, but the rate for urinary tract infections increased from 2015 to 2016.

Figure 5. Age adjusted* Acute ACSC ED Visit Rates by Health Region, NM, 2014-2016



† Angina is no longer a calculated prevention quality indicator measure for AHRQ’s updated version 6.0 specifications.

*All rates are age-adjusted to the U.S. 2000 standard population.

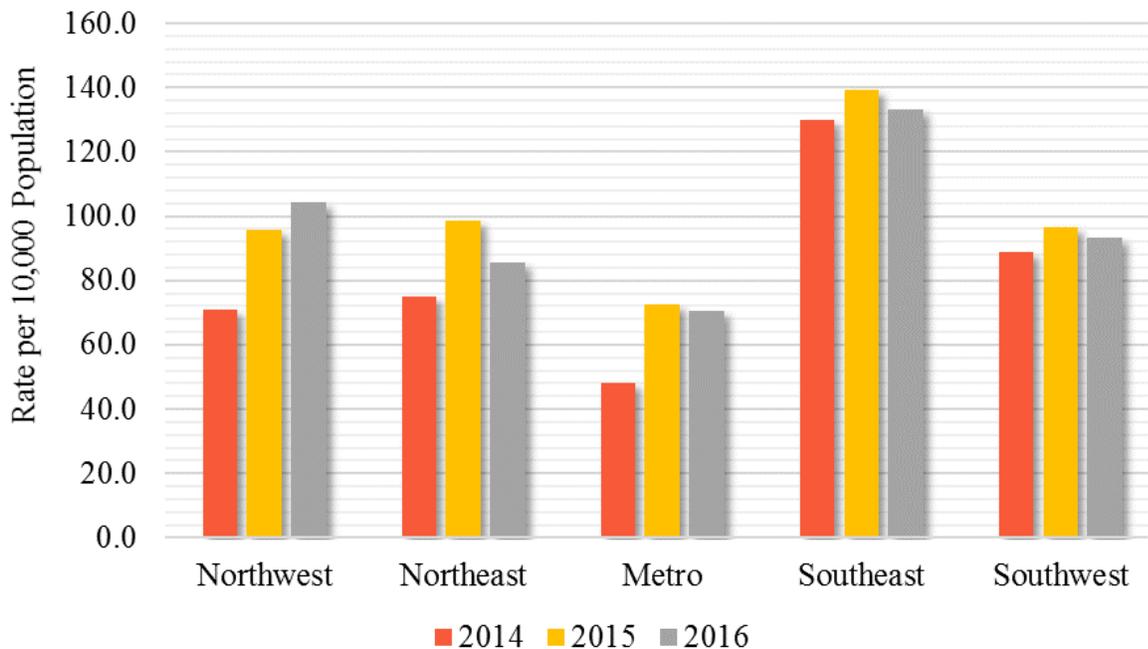


Quality Indicators

Ambulatory Care Sensitive Conditions (ACSC)

In 2016, the Southeast Region had the highest rate for chronic ACSC and the Metro Region had the lowest rate (Figure 6). The Southeast Region had the highest ED visit rates for chronic ACSC for all three years from 2014-2016. Of the six health conditions that are defined under chronic ACSC, diabetes (30.9 per 10,000 population) had the highest ED visit rate in 2016, followed by hypertension (25.8 per 10,000 population).

Figure 6. Age adjusted* Chronic ACSC ED Visit Rates by Health Region, NM, 2014-2016



High rates of ACSC are an indication of a lack of access, availability, and/or quality of primary care services.¹ Multiple factors can contribute to onset of both acute and chronic ACSC; these include poor patient education, lack of patient compliance, lack of primary care providers, and poor disease management by primary care providers. In addition to healthcare factors, socioeconomic factors like income, sex, and geographic location of patient residence can impact the onset of ACSC.^{2,3}

¹ Saha, S., et al., Are preventable hospitalizations sensitive to changes in access to primary care? The case of the Oregon Health Plan. *Med Care*, 2007. 45(8): p. 712-9.

² Siegrist, R.B., Jr. and N.M. Kane, Exploring the relationship between inpatient hospital costs and quality of care. *Am J Manag Care*, 2003. 9 Spec No 1: p. SP43-9.

³ Sanchez, M., et al., Variations in Canadian rates of hospitalization for ambulatory care sensitive conditions. *Healthc Q*, 2008. 11(4): p. 20-2.

*All rates are age-adjusted to the U.S. 2000 standard population.



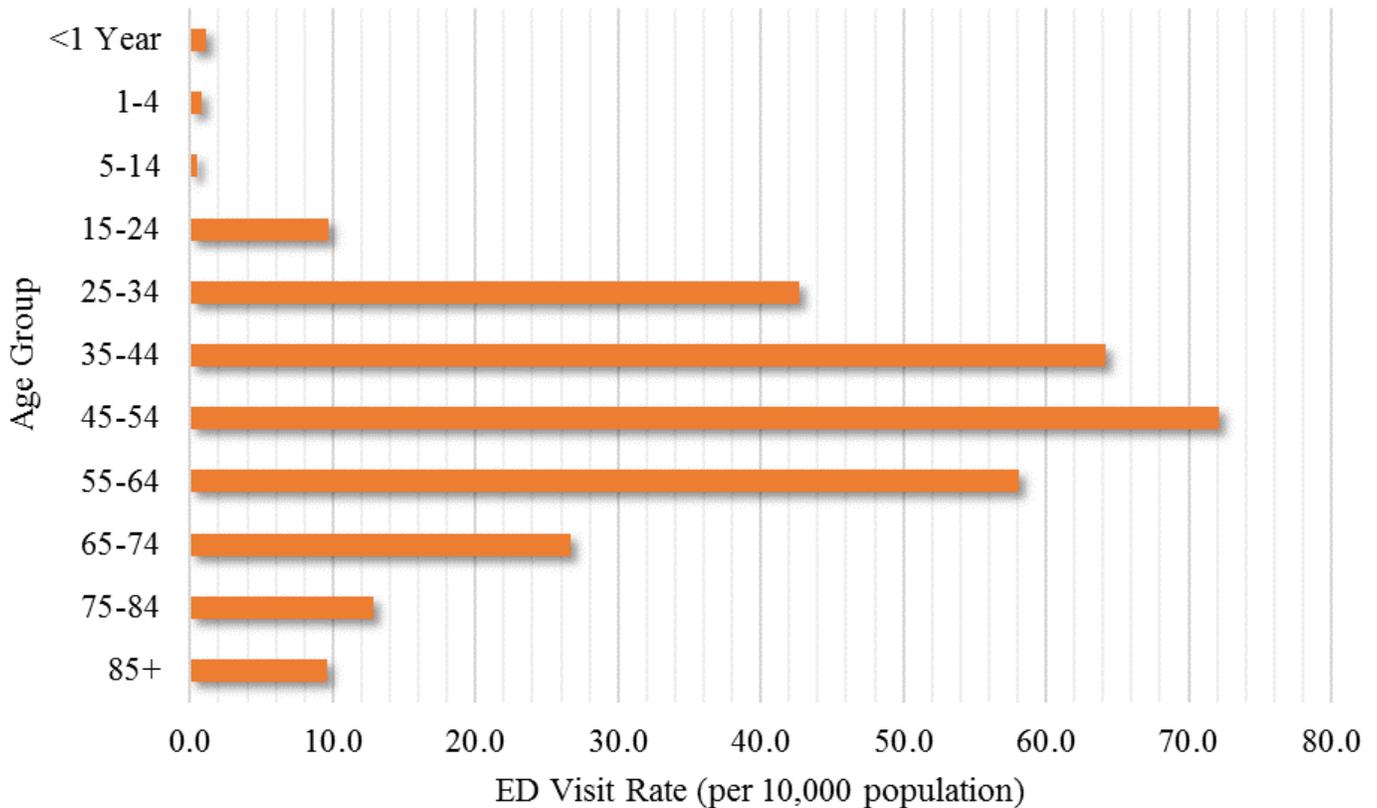
Infectious Disease

Hepatitis C Virus

Hepatitis C (HCV) is the most common blood borne disease in the United States. In New Mexico, an estimated 53,000 people, approximately 2.5% of the state’s population, have evidence of prior HCV infection. Of acute HCV infections, 75%–85% will develop a chronic HCV infection and 60%–70% of these people will develop chronic liver disease. Cirrhosis or liver cancer will develop in 1%–5% of patients with chronic liver disease¹.

In 2016, 7,242 New Mexico residents visited an emergency department with a diagnosis of HCV. People between 45 – 54 years of age had more emergency department visits with a diagnosis of HCV than any other age group (Figure 7). The primary risk factor for HCV infection in New Mexico is injection drug use (IDU).

Figure 7. Rate* of HCV ED Visits by Age Group, NM, 2016



¹ Centers for Disease Control and Prevention (CDC) 2017. Hepatitis C FAQs for Health Professionals. Available at <https://www.cdc.gov/hepatitis/hcv/cfaq.htm>

*Age-Adjusted to standard U.S. 2000 Population.

Injuries in Children

In 2016, 48,250 injury-related emergency department visits occurred among children aged 0 to 17 years, and the vast majority (96.5 %) of those visits resulted in children being treated and discharged to home. The injury-related ED visit rate among children treated and discharged to home was 941.2 per 10,000 persons (Table 6). The rate was higher for males than for females overall and for each age group (0-4 years, 5-12 years, and 13-17 years). Males accounted for 55.9% of the injury-related ED visits and 44.1% of the visits were among females.

Table 6. Number and rate* of injury-related ED visits among children discharged to home and aged 0 to 17 years, NM, 2016

Age Group	Male		Female		All	
	Number	Rate	Number	Rate	Number	Rate
0-4 Years	7,211	1,072.5	5,806	894.5	13,017	985.1
5-12 Years	10,358	910.0	8,146	743.0	18,504	828.1
13-17 Years	8,446	1,188.2	6,579	969.4	15,025	1,081.4
Total	26,015	1,031.8	20,531	847.0	46,546	941.2

* Rate per 10,000 Population

- Unintentional injuries accounted for 89.9% of the injury-related ED visits among 0-17 year olds.
- Self-harm (0.8%), assault (2.0%), undetermined intent (0.02%), and unknown intent (7.5%) account for the other 10% of injury-related ED visits.
- Leading causes of unintentional injury-related ED visits among children in 2016 were falls, struck by, or against an object, unspecified injuries, motor vehicle traffic incidents, bites/stings and cut/pierce injuries. The four leading causes of injury-related ED visits among both males and females were the same as the four leading causes among all children.

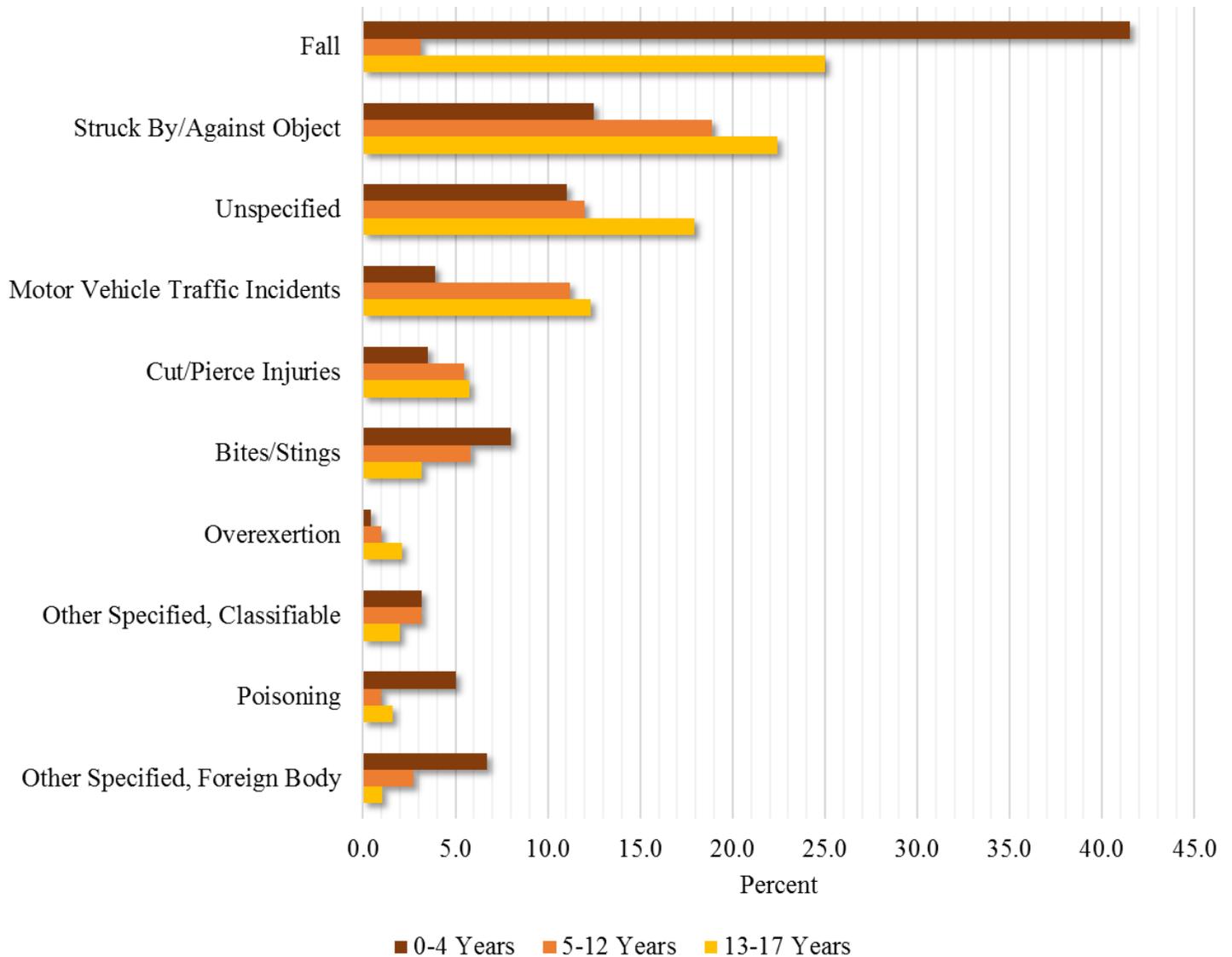


Maternal and Child Health

Injuries in Children

Most child injuries follow predictable patterns and can fortunately be prevented using evidence-based strategies. Strategies include using safety gates to prevent falls on stairs, having impact absorbing surfaces on playgrounds and using age appropriate restraints while riding in a motor vehicle.

Figure 8. Leading causes of unintentional injury-related ED visits among children by age group, NM 2016





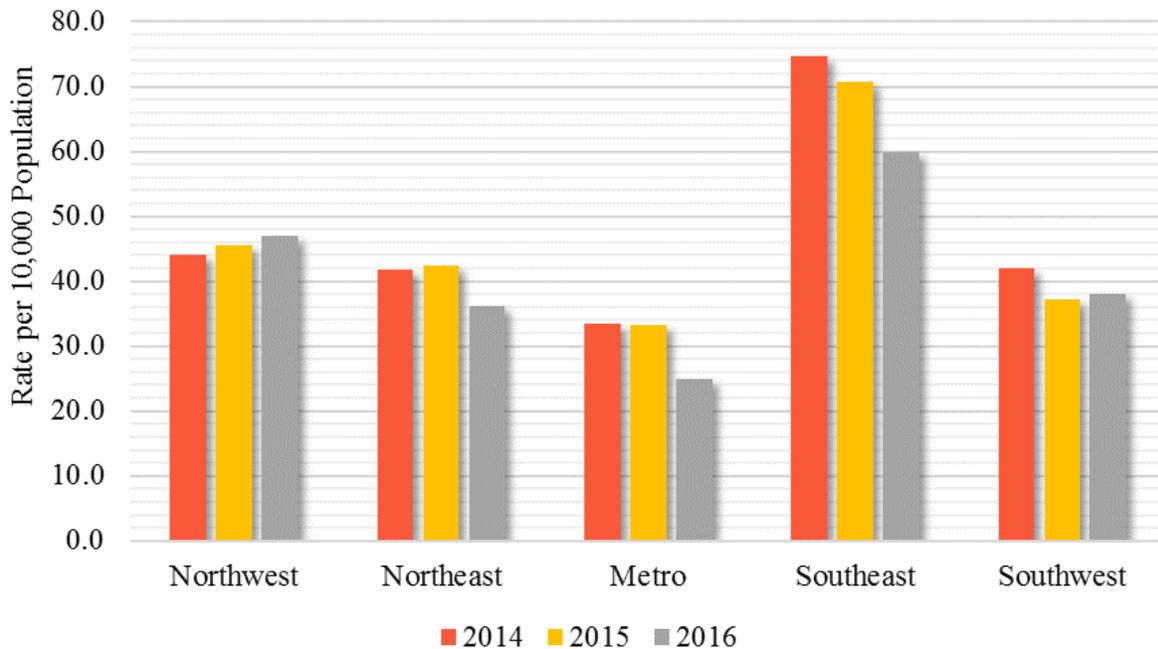
Chronic Disease & Environmental Health Related Visits

Asthma ED Visits

Asthma is one of the common chronic diseases in New Mexico, with an estimated 156,782 adults currently having the disease. Asthma symptoms include coughing, wheezing, shortness of breath, and chest tightness.¹ Asthma symptoms can occur or worsen by triggers (e.g. flu, stress, and cold air), irritants (e.g. cigarette smoke, smog, and dust), and/or allergens (e.g. pollen, mold, or dust mites).² People with asthma are more likely to miss school or work, report feelings of depression, and experience an overall reduced quality of life. Asthma is also costly, with expenses from routine checkups, emergency department visits, hospitalizations, and medications putting a significant burden on families, the health care sector, and the economy. Though it cannot be cured, asthma can be controlled through quality health care, appropriate medications, and good self-management skills. When asthma is controlled, people with the disease have few, if any, symptoms, and can live normal and productive lives.

In 2016, 3,293 males and 4,217 females were admitted to the ED with asthma as a primary diagnosis. The highest rate of asthma ED visits was in the Southeast Region (59.9 visits per 10,000 population) and the lowest rate was in the Metro Region (24.9 visits per 10,000 population). From 2014 to 2016, the Southeast Region has had the highest asthma ED visit rates in the state. Although the Southeast Region has had the highest asthma ED visit rates, the region has seen a 19.7% decrease in the last three years. Both the Northwest and Southwest Regions have seen an increase in asthma ED rates from 2015 to 2016.

Figure 9. Age-Adjusted Asthma ED Visit Rates* by Health Region, NM, 2014-2016



¹National Heart, Lung, and Blood Institute. <https://www.nhlbi.nih.gov/health/health-topics/topics/asthma>

²<http://www.aafa.org/page/asthma-triggers-causes.aspx>

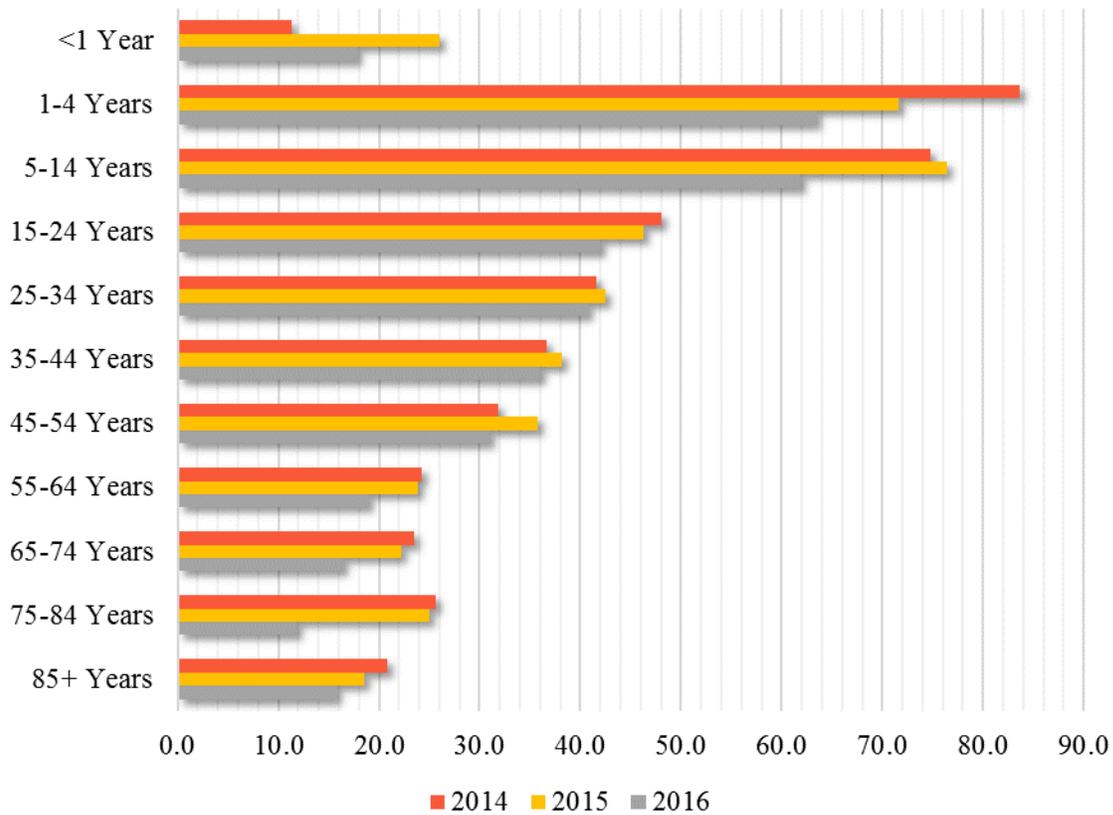


Chronic Disease & Environmental Health Related Visits

Asthma ED Visits

In 2016, the highest asthma ED visit rates were among patients' aged 1-4 years (63.4 visits per 10,000 population) and 5-14 years (61.8 visits per 10,000 population). The lowest asthma ED visit rate was among patients' aged 75-84 years (11.8 visits per 10,000 population). This trend has been the same since 2014 with the younger age groups having the highest asthma ED visit rates. In all age groups, asthma ED visit rates have decreased from 2015 to 2016.

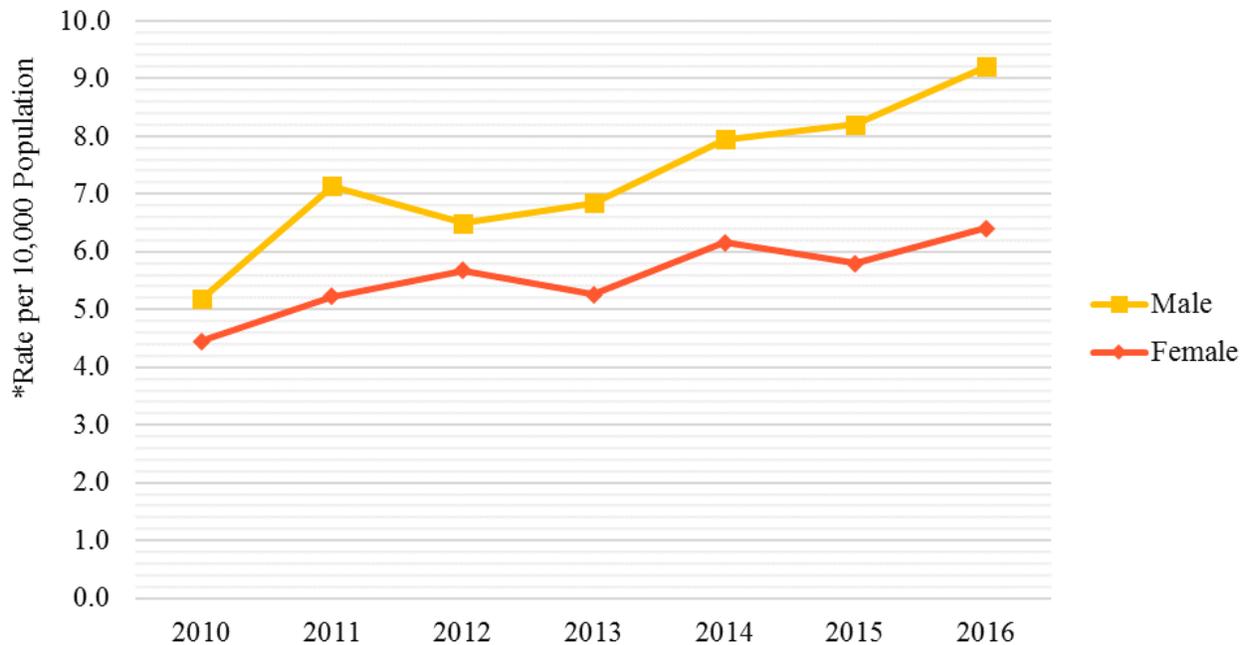
Figure 10. Asthma ED Visit Rates by Age Group, NM, 2014-2016



Opioid Overdose Emergency Department Visits

In New Mexico, the rates of emergency department visits related to opioid (prescription or illicit) overdose increased between 2010 and 2016, for both men (from 5.2 to 9.2 visits per 10,000 population) and women (from 4.5 to 6.4 visits per 10,000 population). Overall, the rate for New Mexico increased by 62.5% between 2010 and 2016 (from 4.8 to 7.8 visits per 10,000 population).

Figure 11. Rate* of Opioid Overdoses Related ED Visits by Sex, NM, 2010-2016



*Age-Adjusted to standard U.S. 2000 Population.

Table 7. Rate* of Opioid Overdoses Related ED Visits by Age and Sex, NM, 2016

Age Group	Male	Female	Overall
0-4 Years	1.6	2.3	2.0
5-14 Years	0.4	0.4	0.4
15-24 Years	9.5	8.4	9.0
25-34 Years	23.0	12.0	17.7
35-44 Years	14.3	8.6	11.5
45-54 Years	9.3	6.5	7.9
55-64 Years	5.2	6.0	5.6
65-74 Years	4.4	5.7	5.1
75-84 Years	4.4	4.0	4.2
85+ Years	4.0	2.4	3.0
Total*	9.2	6.4	7.8

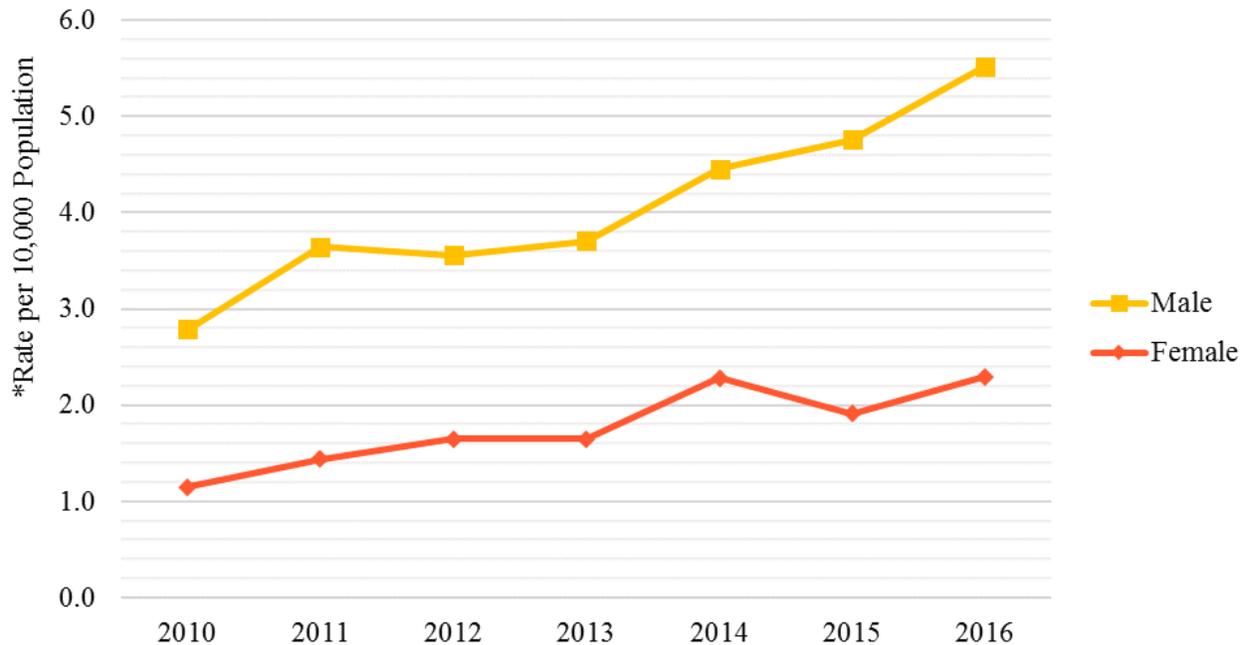
In 2016, the rate of opioid overdose related ED visits was higher for those in the 25-34 year age group, for both men and women (23.0 visits per 10,000 population among men and 12.0 visits per 10,000 population among women). The 35-44 year age group had the second highest rates among men and women, 14.3 visits and 8.6 visits per 10,000 population, respectively.

*Total Rates (per 10,000 population) are age-adjusted. Age-Specific Rates (per 10,000 population) are crude rates.

Heroin Overdose Emergency Department Visits

In New Mexico, the rates of emergency department visits related to heroin overdose increased between 2010 and 2016, for both men (from 2.8 to 5.5 visits per 10,000 population) and women (from 1.1 to 2.3 visits per 10,000 population). Overall, the rate for New Mexico increased by 95.0% between 2010 and 2016 (from 2.0 to 3.9 visits per 10,000 population).

Figure 12. Rate* of Heroin Overdoses Related ED Visits by Sex, NM, 2010-2016



*Age-Adjusted to standard U.S. 2000 Population.

Table 8. Rate* of Heroin Overdoses ED Visits by Age and Sex, NM, 2016

Age Group	Male	Female	Overall
0-4 Years	0.0	0.0	0.0
5-14 Years	0.0	0.1	0.0
15-24 Years	5.5	4.2	4.8
25-34 Years	17.6	6.1	12.0
35-44 Years	9.7	3.7	6.7
45-54 Years	4.2	1.4	2.8
55-64 Years	2.2	0.7	1.4
65-74 Years	0.3	0.4	0.5
75-84 Years	0.0	0.0	0.0
85+ Years	0.0	0.0	0.0
Total*	5.5	2.3	3.9

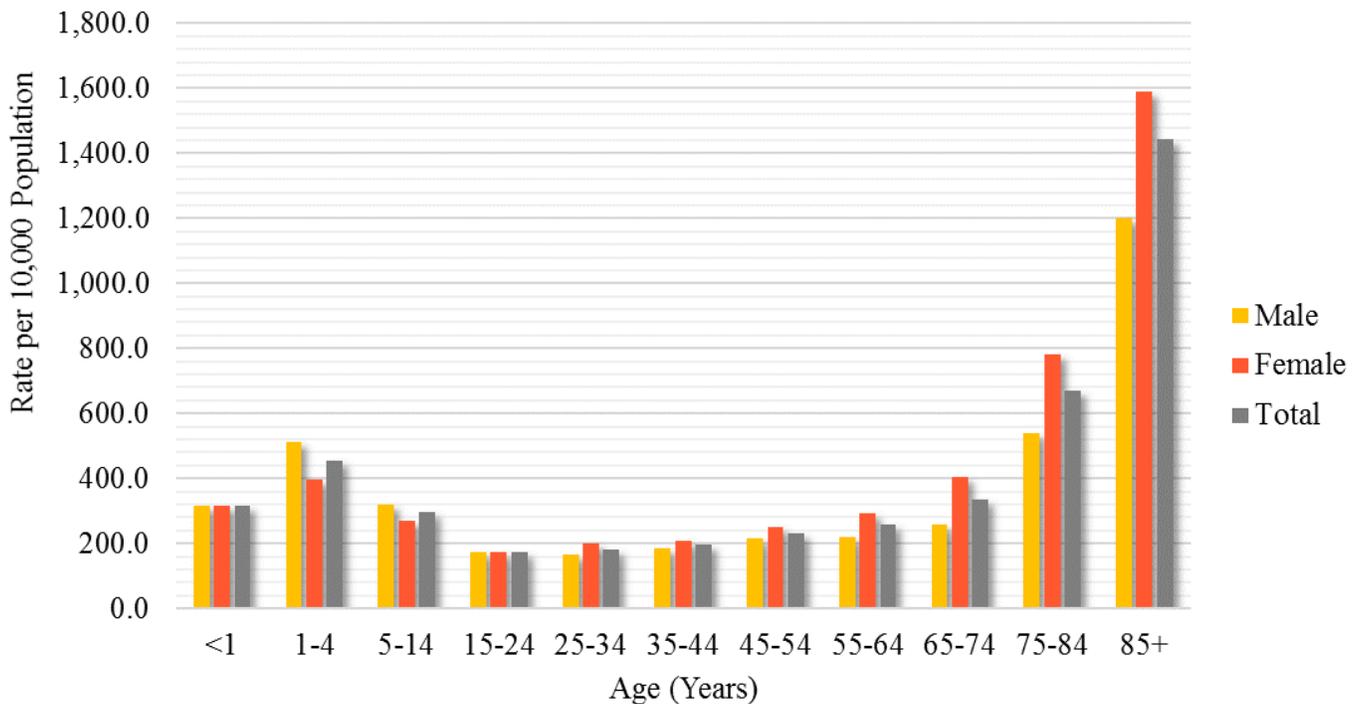
In 2016, the rate of heroin overdose related ED visits was higher for those in the 25-34 year age group, for both men and women (17.6 visits per 10,000 population among men and 6.1 visits per 10,000 population among women). The 35-44 year age group had the second highest rates among men and women, 9.7 visits and 3.7 visits per 10,000 population, respectively. Rates of heroin overdose ED visits were higher among men compared to women for all age groups; 97.0% higher in the 25-34 year age group and 89.6% and 100.0% higher for the age groups of 35-44 years and 45-64 years, respectively.

*Total Rates (per 10,000 population) are age-adjusted. Age-Specific Rates (per 10,000 population) are crude rates.

Fall-Related Injuries

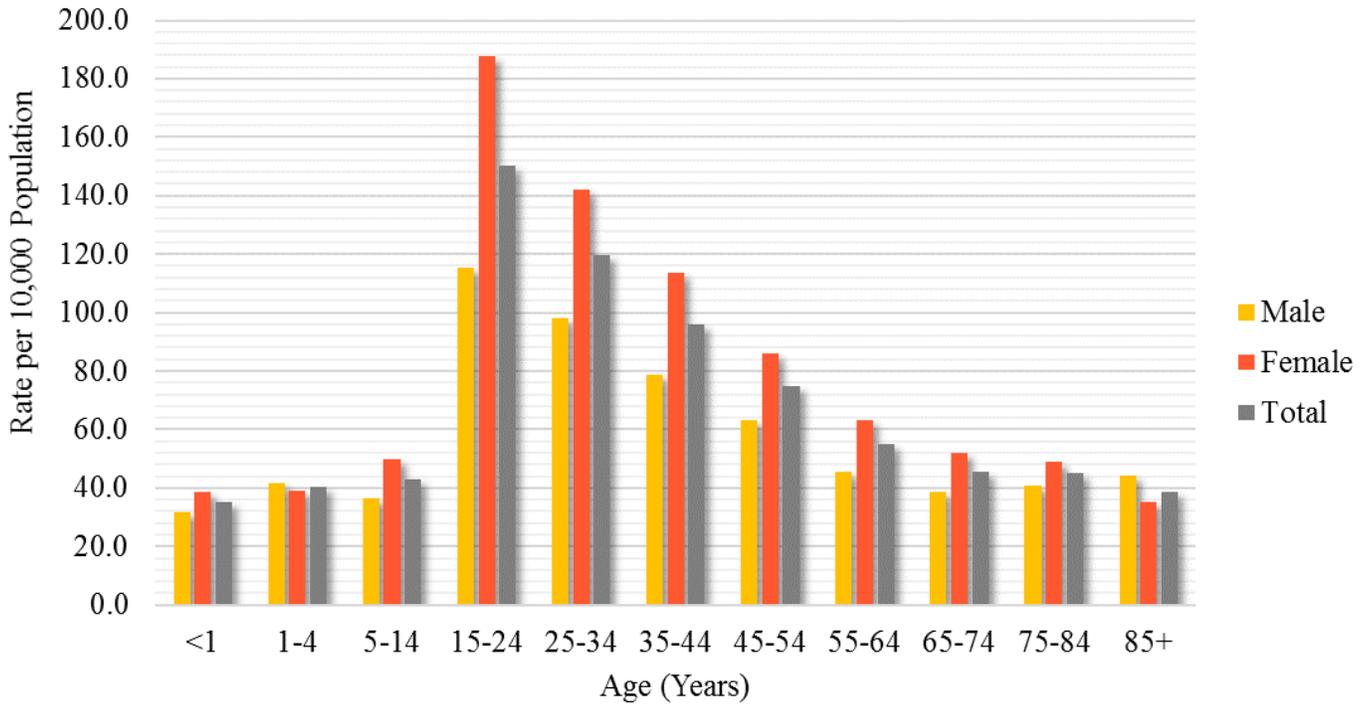
In 2016, there were 61,428 fall-related emergency department visits among New Mexico residents. This is an 9.2% increase in fall-related ED visits compared to 2015 numbers. Females accounted for 55.3% of the fall-related ED visits. Persons aged ≥ 85 years had the highest fall-related injury ED visit rate, followed by those aged 75-84 years. Persons aged 1 to 4 years had the third highest fall-related ED visit rate. Males had a higher fall-related ED visit rate compared to females among those 0 to 24 years while females had a higher fall-related ED visit rate compared to males among persons aged ≥ 25 years.

Figure 13. Fall-Related ED Visit Rate by Age and Sex, NM, 2016



*Except for age-specific rates, all rates are age-adjusted to the U.S. 2000 standard population.

Motor Vehicle Traffic-Related Injuries



A total of 16,760 motor vehicle traffic-related emergency department visits occurred among residents in New Mexico in 2016. This is a 8.4% decrease from 2015 traffic-related ED visits. Females accounted for 58.6% of the motor vehicle traffic-related ED visits. Persons aged 15-24 years had the highest rates of motor vehicle traffic-related injury ED visits (150.1 ED visits per 10,000 population). Females had a higher motor vehicle traffic-related ED visit rate for all age groups except for persons aged <1 years, 1-4 years, and aged 85+ years.

Figure 14. Motor Vehicle Traffic-Related ED Visit Rate by Age and Sex, NM, 2016

*Except for age-specific rates, all rates are age-adjusted to the U.S. 2000 standard population.

Appendix



ICD-9-CM & ICD-10-CM Codes by Section

Category of First Listed Diagnosis	Diagnosis Codes (ICD-9-CM Codes)	Diagnosis Codes (ICD-10-CM Codes)
Infectious and Parasitic Diseases	001-139	A00-B99
Neoplasms	140-239	C00-D49
Endocrine, Nutritional and Metabolic Diseases, and Immunity Disorders	240-279	E00-E89
Diseases of the Blood and Blood-Forming Organs	280-289	D50-D89
Mental Disorders	290-319	F01-F99
Diseases of the Nervous System and Sense Organs	320-389	G00-G99
Diseases of the Eye and Adnexa	360-379	H00-H59
Diseases of the Ear and Mastoid Process	380-389	H60-H95
Diseases of the Circulatory System	390-459	I00-I99
Diseases of the Respiratory System	460-519	J00-J99
Diseases of the Digestive System	520-579	K00-K95
Diseases of the Genitourinary System	580-629	N00-N99
Complications of Pregnancy, Childbirth, and Puerperium	630-677	O00-O9A
Diseases of the Skin and Subcutaneous Tissue	680-709	L00-L99
Diseases of the Musculoskeletal System and Connective Tissue	710-739	M00-M99
Congenital Anomalies	740-759	Q00-Q99
Certain Conditions Originating in the Perinatal Period	760-779	P00-P96
Symptoms, Signs, and Ill-Defined Conditions	780-799	R00-R99
Injury and Poisoning	800-999	S00-T88
Supplementary Classifications	V01-V91	Z00-Z99
Ungroupable Diagnoses		



ICD-9-CM & ICD-10-CM Codes by Section

1. **Quality Indicators (Ambulatory Care Sensitive Conditions)**
ICD-9-CM: Coding specifications can be found here:
http://www.qualityindicators.ahrq.gov/Modules/PQI_TechSpec_ICD09_v60.aspx
ICD-10-CM: Coding specifications can be found here:
http://www.qualityindicators.ahrq.gov/Modules/PQI_TechSpec_ICD10_v60.aspx
2. **Infectious Disease (Hepatitis C and Overdose)**
ICD-10-CM: Hepatitis C: B17.10, B17.11, B18.2, B19.20, B19.21, K73, Z86.19
3. **Maternal and Child Health (Injuries in Children)**
ICD-10-CM: Principal diagnosis code: S00-S99, T07-T34, T36-T50 T51-T65, T66-T77, T79
External cause codes in any diagnoses field: V00-V99, W00-X58, X71-X83, X92-Y08, Y21-Y33, Y35-Y38, T15-T19, T36-T50, T51-T65, T71, T73, T74, T76, T1491, T750, T752, T753
4. **Chronic Disease & Environmental Health Related Visits (Asthma)**
ICD-10-CM: J45
5. **Injury (Opioid Overdose)**
ICD-10-CM: T40.0X [1-4], T40.1X [1-4], T40.2X [1-4], T40.3X [1-4], T40.4X [1-4]
6. **Injury (Heroin Overdose)**
ICD-10-CM: T40.1X [1-5]
7. **Injury (Falls)**
ICD-10-CM: W00-W19
8. **Injury (Motor Vehicle Accidents)**
ICD-10-CM: V40-V59

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