CALIFORNIA Health Care Almanac





DECEMBER 2023

California Emergency Departments

A Critical Source of Care

Executive Summary

California's emergency departments (EDs) provide a critical source of health care to people with acute medical conditions and those who have experienced trauma or injury. EDs are expected to treat all patients regardless of their ability to pay. They also provide an important entry point for inpatient hospital care. In 2021, 325 acute care hospitals in California operated a licensed ED. Between 2011 and 2021, the number of EDs remained relatively stable, while the number of individual treatment stations increased 21% from 7,168 to 8,667. In 2021 California's EDs handled 12.9 million visits, 7% more than in 2011.

California's Emergency Departments: A Critical Source of Care looks at the most recent data on supply, visits, and wait times, as well as trends from 2011 to 2021.

KEY FINDINGS INCLUDE:

- The number of ED treatment stations increased in all regions throughout the state between 2011 and 2021, even in those regions that experienced a decrease in emergency departments.
- In 2021, emergency department visits per 1,000 residents ranged from a low of 267 in Orange County to a high of 420 in the Northern and Sierra region.
- Medi-Cal was the expected payer for 41% of all ED visits in 2021, compared to 27% for private payers and 23% for Medicare.
- Of the 85% of ED visits that did not result in a hospital admission, one in five were for conditions severe enough to be life-threatening.
- In 2021, the median length of stay for California ED patients was nearly three hours. For those with psychiatric or mental health needs, the median stay was more than four hours.

California Emergency Departments

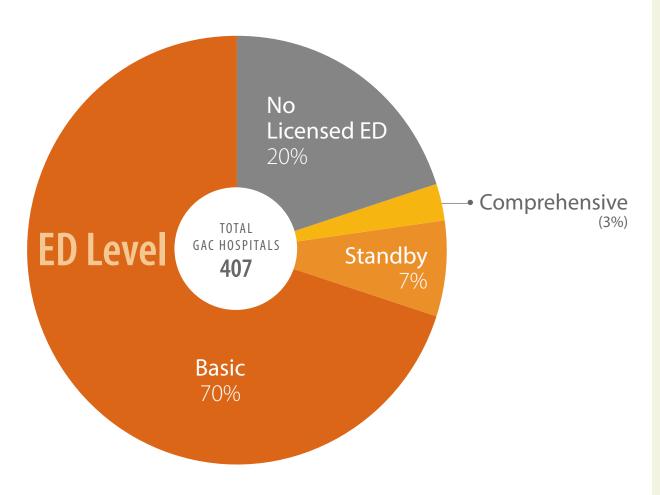
Executive Summary

CONTENTS

Supply	. 3
visits	. 9
Wait Times	24
Ambulance Diversion	25
Methodology	27
Appendix	28

General Acute Care Hospitals

by ED Level, California, 2021



California Emergency DepartmentsSupply

In 2021, 80% of California's general acute care hospitals operated a licensed emergency department (ED). EDs provide different levels of service, with the majority licensed at the basic level.

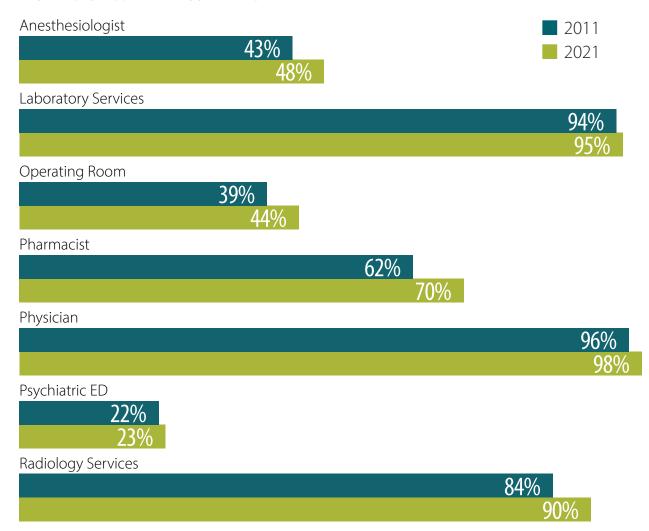
Notes: ED is emergency department. Standby EDs have an ED physician, at minimum, on call. Basic EDs have an ED physician on staff 24 hours a day, year-round. Comprehensive EDs have an ED physician on staff 24 hours a day, year-round, as well as other physician specialties (including thoracic surgeons, neurosurgeons, orthopedic surgeons, and pediatricians) available 24 hours a day, year-round. The hospital must also provide burn, acute dialysis, and cardiovascular surgery services. Figures may not sum due to rounding.

Source: 2021 Calendar Year Hospital Utilization Pivot Table, California Health and Human Services Agency, December 1, 2022.

Emergency Department Services, 24-Hour Availability

California, 2011 and 2021

PERCENTAGE OF EDs WITH 24-HOUR AVAILABILITY



Notes: ED is emergency department. Services for which licensed medical personnel are at the facility 24 hours a day are shown. Source: Hospital Annual Utilization Data (2011 and 2021), California Health and Human Services Agency.

California Emergency Departments Supply

Most emergency departments (EDs) have a physician, laboratory services, and radiology services available 24 hours a day. About one in four EDs (23%) have a psychiatric ED available 24 hours a day.

Emergency Department Services, 24-Hour Availability by Region, California, 2021

NUMBER OF EMERGENCY DEPARTMENTS

	ANESTHESIOL- OGIST	LABORATORY SERVICES	OPERATING ROOM	PHARMACIST	PHYSICIAN	PSYCHIATRIC ED	RADIOLOGY SERVICES	ALL EDS
Central Coast	9	22	7	12	24	5	18	24
Greater Bay Area	34	60	28	49	62	20	57	63
Inland Empire	17	34	16	23	34	9	32	34
Los Angeles County	42	69	40	57	71	18	68	71
Northern and Sierra	4	28	5	12	35	3	23	38
Orange County	13	25	11	19	25	8	25	25
Sacramento Area	9	15	7	13	15	2	15	15
San Diego Area	14	19	14	16	19	6	18	19
San Joaquin Valley	14	36	15	27	35	5	35	36
California	156	308	143	228	320	76	291	325

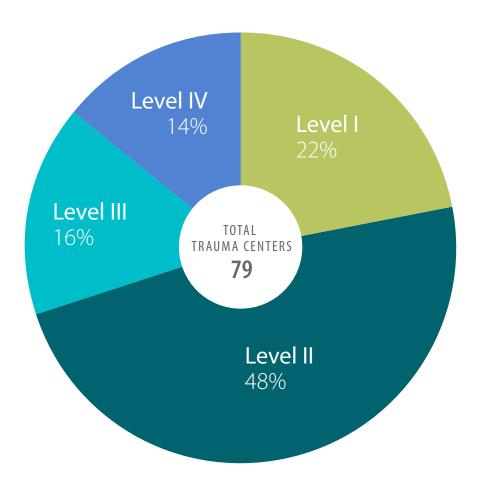
California Emergency Departments Supply

Most regions had physicians available 24 hours a day. However, there was significant variation in the 24-hour availability of anesthesiologists, pharmacists, and operating rooms across regions.

Notes: *ED* is emergency department. Services for which licensed medical personnel are at the facility 24 hours a day are shown. See appendix for a map of counties in each region. Source: *2021 Hospital Annual Utilization Data*, California Health and Human Services Agency.

General Acute Care Hospitals

by Trauma Center Level, California, 2021



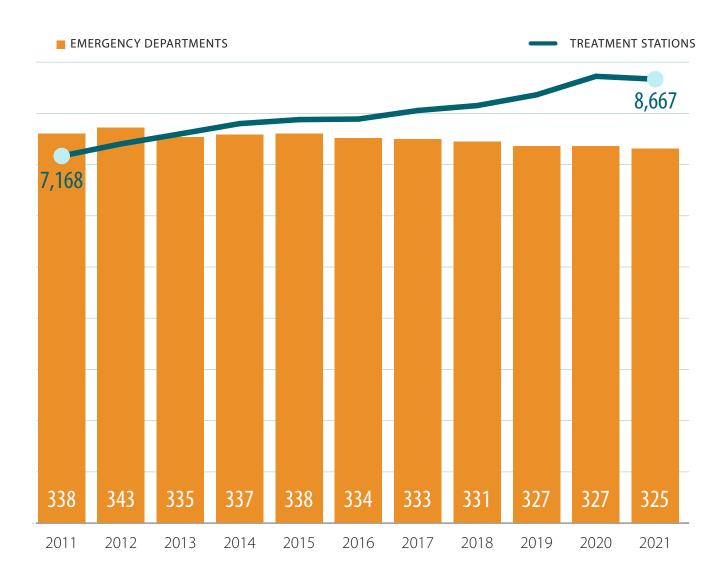
California Emergency DepartmentsSupply

Trauma centers treat patients with serious injuries, such as those sustained from car accidents and gunshots. Local emergency medical services agencies designate trauma center levels based on the equipment and resources available. Level I trauma centers provide the most complex care. In 2021, California had 79 trauma centers, of which 17 were Level I.

Notes: *Trauma centers* are designated by a local emergency medical services agency (EMSA) and include personnel, services, and equipment necessary for the care of trauma patients. General requirements include a trauma program medical director, a trauma nurse coordinator, a basic emergency department (minimum), a multidisciplinary trauma team, and specified service capabilities. EMSA has established four trauma center designations, with Level I equipped to provide the most complex care. Figures may not sum due to rounding. Sources: *2021 Calendar Year Hospital Utilization Pivot Table*, California Health and Human Services Agency, December 1, 2022; and California Emergency Medical Services Authority.

Emergency Departments and Treatment Stations

California, 2011 to 2021



California Emergency Departments Supply

While the number of emergency departments remained relatively stable, the number of treatment stations increased by 21% between 2011 and 2021.

Note: A *treatment station* is a specific place in an emergency department adequate to treat one patient at a time. Source: *Calendar Year Hospital Utilization Pivot Table* (2011–21), California Health and Human Services Agency.

Emergency Departments and Treatment Stations

by Region, California, 2011 and 2021

TREATMENT STATIONS **EMERGENCY DEPARTMENTS**

	2011	2021	CHANGE	2011	2021	CHANGE
Central Coast	24	24	0%	382	495	30%
Greater Bay Area	66	63	-5%	1,380	1,646	19%
Inland Empire	32	34	6%	800	1,034	29%
Los Angeles County	76	71	-7%	1,830	2,009	10%
Northern and Sierra	39	38	-3%	344	447	30%
Orange County	27	25	-8%	623	701	13%
Sacramento Area	16	15	-7%	444	545	23%
San Diego Area	20	19	-5%	561	808	44%
San Joaquin Valley	38	36	-6%	804	982	22%
California	338	325	-4%	7,168	8,667	21%

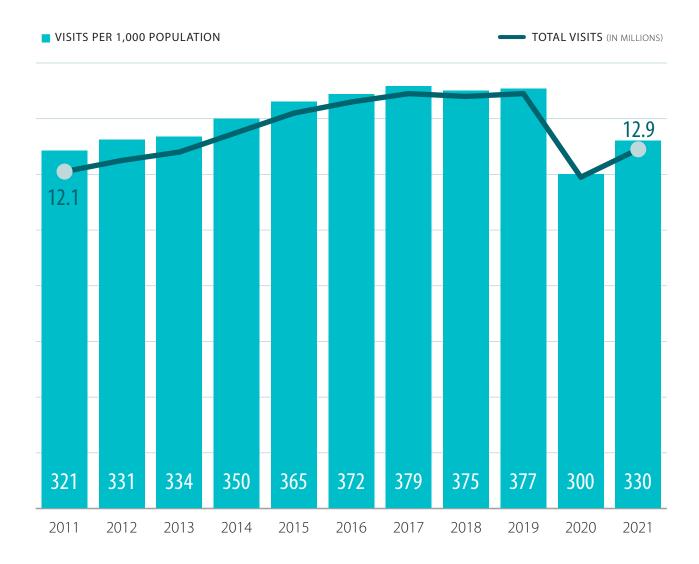
California Emergency Departments Supply

All regions in California experienced an increase in the number of available treatment stations between 2011 and 2021.

Notes: A treatment station is a specific place in an emergency department adequate to treat one patient at a time. See appendix for a map of counties in each region. Source: Calendar Year Hospital Utilization Pivot Table (2011 and 2021), California Health and Human Services Agency.

Emergency Department Visits

California, 2011 to 2021



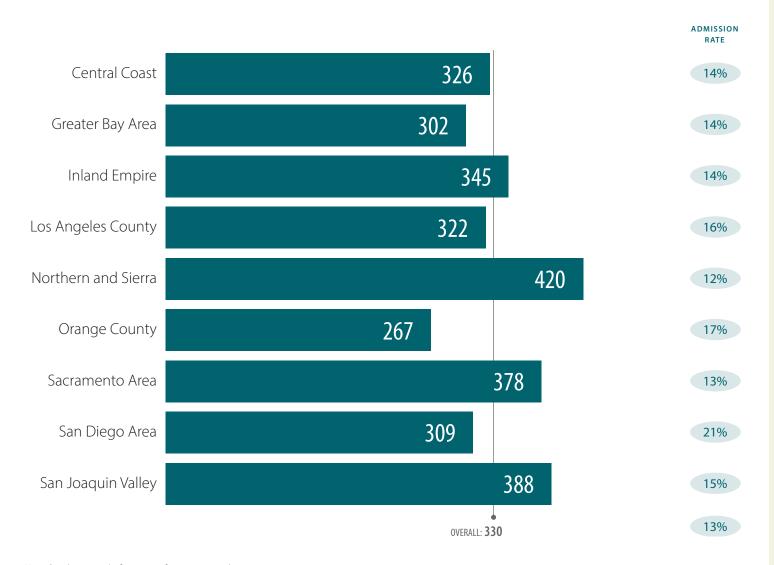
California Emergency DepartmentsVisits

Between 2011 and 2021, the number of emergency department visits increased by 7%, while the state's overall population increased by 4% (not shown). There was a notable drop in ED visits in 2020 during the COVID-19 pandemic, and in 2021, volume had not returned to prepandemic levels.

Sources: Author calculations based on Calendar Year Hospital Utilization Pivot Table (2011–21), California Health and Human Services Agency; Annual Estimates of the Resident Population for Counties in California: April 1, 2010 to July 1, 2019, US Census Bureau, March 2020; and Annual Estimates of the Resident Population for Counties: April 1, 2020 to July 1, 2022, US Census Bureau.

Emergency Department Visits per 1,000 Population

by Region, California, 2021



California Emergency Departments

Visits

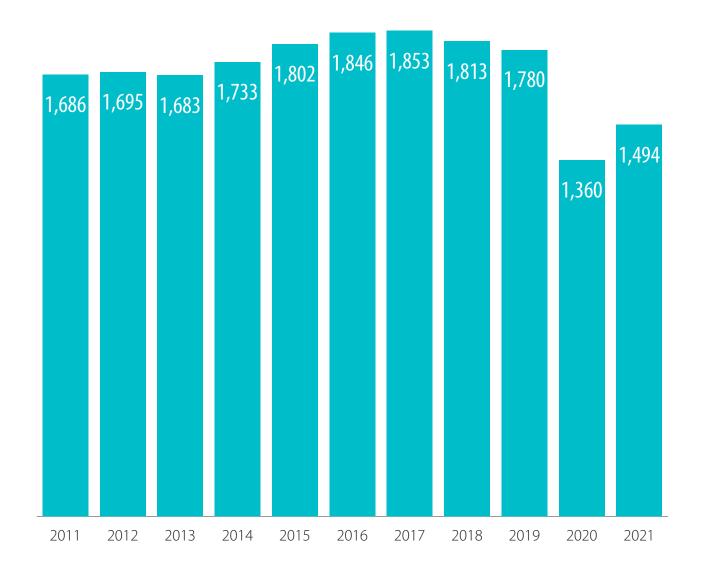
In 2021, emergency department visits per 1,000 residents ranged from a low of 267 in Orange County to a high of 420 in the Northern and Sierra region.

Note: See the appendix for a map of counties in each region.

Sources: Author calculations based on 2021 Calendar Year Hospital Utilization Pivot Table, California Health and Human Services Agency, December 1, 2022; and Annual Estimates of the Resident Population for Counties: April 1, 2020 to July 1, 2022, US Census Bureau, March 2020.

Emergency Department Visits per Treatment Station

California, 2011 to 2021



Note: A *treatment station* is a specific place in an emergency department adequate to treat one patient at a time.

Source: Author calculations based on *Calendar Year Hospital Utilization Pivot Table* (2011–21), California Health and Human Services Agency.

California Emergency Departments

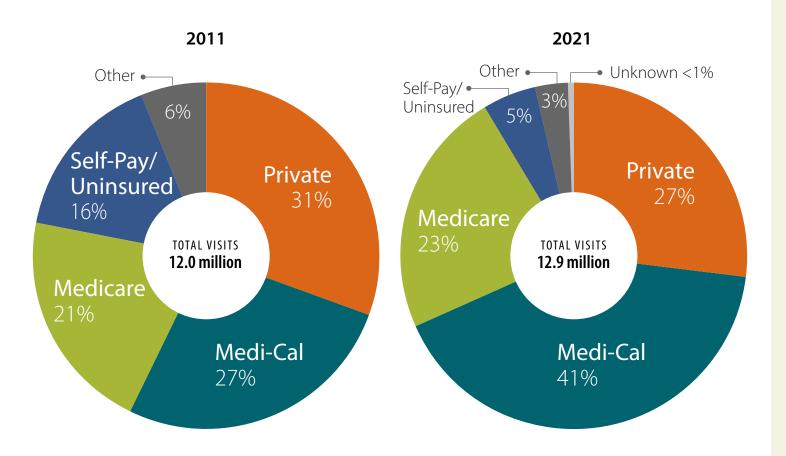
Visits

In 2021, there were 1,494 visits per treatment station, or about four visits per treatment station per day. While the number of treatment stations increased in 2020, the number of emergency department visits declined.

11

Emergency Department Visits, by Expected Payer

California, 2011 and 2021



California Emergency DepartmentsVisits

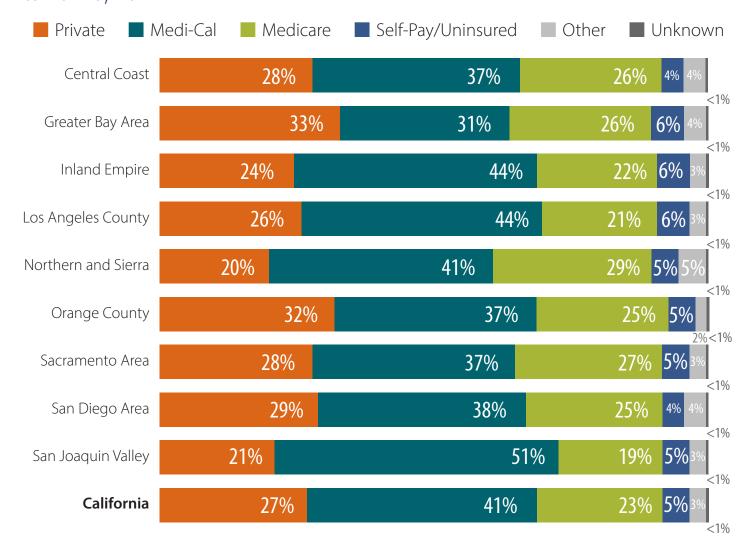
In 2021, Medi-Cal was the expected payer for 41% of emergency department visits, up from 27% in 2011. During this period, Medi-Cal enrollment nearly doubled, increasing from 7.6 million to 14.6 million (not shown).*

Notes: Self-pay/uninsured includes self-pay, county indigent programs, and other indigent programs. Other includes other nonfederal programs, Champus (Tricare), disability, other federal programs, Title V, Veterans Affairs plans, workers compensation, and other. Unknown includes invalid, blank, or unknown payer. Figures may not sum due to rounding.

Sources: Hospital Emergency Department - Characteristics by Facility (Pivot Profile) (2011 and 2021), California Health and Human Services Agency (CalHHS)

^{* &}quot;Month of Eligibility, Aid Category by County," Medi-Cal Certified Eligibility, CalHHS.

Emergency Department Visits, by Expected Payer and Region California, 2021



California Emergency DepartmentsVisits

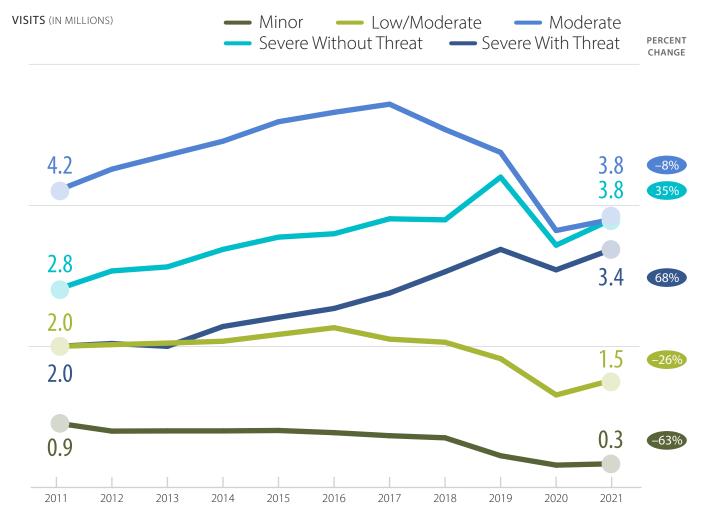
The payer mix of emergency department (ED) visits varied by region. Medi-Cal was the expected payer for half of all ED visits in San Joaquin Valley.

Notes: Self-pay/uninsured includes self-pay, county indigent programs, and other indigent programs. Other includes other nonfederal programs, Champus (Tricare), disability, other federal programs, Title V, Veterans Affairs plans, workers compensation, and other. Unknown includes invalid, blank, or unknown payer. Figures may not sum due to rounding. See appendix for a map of counties in each region.

Source: 2021 Hospital Emergency Department - Characteristics by Facility (Pivot Profile), California Health and Human Services Agency, September 1, 2022.

Emergency Department Visits, by Acuity Level

California, 2011 to 2021



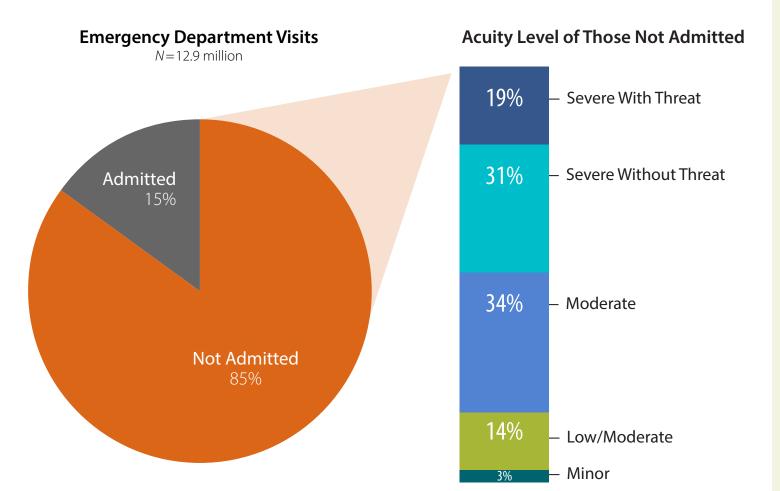
Notes: Emergency department visits are categorized based on type of history/examination and medical decisionmaking required. Minor visits require a problem-focused history/examination and straightforward decisionmaking. Low/moderate visits require expanded problem-focused history/examination and low-complexity decisionmaking. Moderate visits require expanded problem-focused history/examination and moderate-complexity decisionmaking. Severe without threat visits require a detailed history/examination and moderate complexity decisionmaking. Severe with threat visits require a comprehensive history/examination and high-complexity decisionmaking. Excludes 64,256 visits with unknown/unreported severity.

Source: Calendar Year Hospital Utilization Pivot Table (2011–21), California Health and Human Services Agency.

California Emergency DepartmentsVisits

All emergency department visits are classified by acuity level, from "minor" to "severe with threat." The number of visits classified as "severe with threat" increased 68% between 2011 to 2021.

Emergency Department Visits, by Admit Status and Acuity Level of Those Not Admitted, California, 2021



California Emergency Departments

The majority of emergency department visits did not result in a hospital admission. One in five visits for patients not admitted were for conditions severe enough to be lifethreatening, and an additional one in three visits were for severe conditions without threat (e.g., an elderly patient who fell and was unable to walk).

Notes: Emergency department visits are categorized based on type of history/examination and medical decisionmaking required. Minor visits require a problem-focused history/examination and straightforward decisionmaking. Low/moderate visits require expanded problem-focused history/examination and low-complexity decisionmaking. Moderate visits require expanded problem-focused history/examination and moderate-complexity decisionmaking. Severe without threat visits require a detailed history/examination and moderate-complexity decisionmaking. Severe with threat visits require a comprehensive history/examination and high-complexity decisionmaking. Excludes 64,256 visits with unknown/unreported severity. Figures may not sum due to rounding.

Source: 2021 Calendar Year Hospital Utilization Pivot Table, California Health and Human Services Agency, December 1, 2022.

Emergency Department Visits, by Primary Diagnosis California, 2021

Injury and Poisoning

18.6%

Symptoms, Signs, and III-Defined Conditions and Factors Influencing Health Status

15.9%

Diseases of the Circulatory System

8.8%

Infectious and Parasitic Diseases

7.5%

Diseases of the Digestive System

7.4%

Diseases of the Musculoskeletal System and Connective Tissue

6.5%

Diseases of the Genitourinary System

6.1%

Diseases of the Respiratory System

5.8%

Mental Illness

4.9%

Diseases of the Nervous System and Sense Organs

4 1%

Diseases of the Skin and Subcutaneous Tissue

3.3%

Complications of Pregnancy, Childbirth, and the Puerperium

2.9%

Factors Influencing Health Status

2.6%

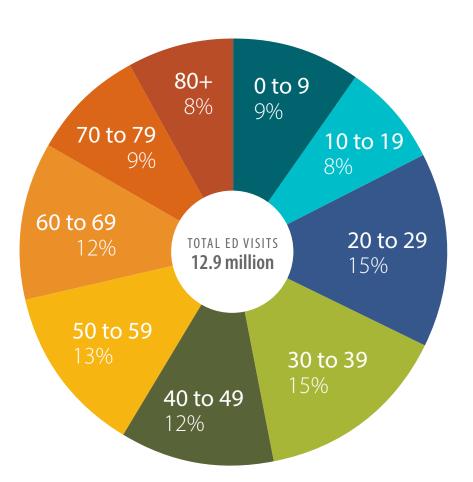
Notes: All categories are based on Clinical Classifications Software Refined groupings using ICD-10 codes. *Factors influencing health status* visits include "personal/family history of disease; resistance to antimicrobial drugs; organ transplant status." Not shown: endocrine diseases (2.0%), ear diseases (1.3%), eye diseases (0.9%), neoplasms (0.7%), blood disorders (0.6%), perinatal disorders (0.2%), congenital anomalies (0.0%), and unknown/blank/invalid/masked (0.1%).

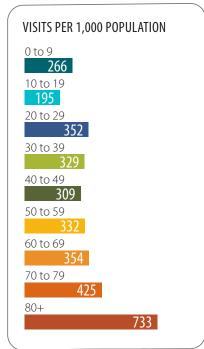
Source: 2021 Hospital Emergency Department - Characteristics by Facility (Pivot Profile), California Health and Human Services Agency, September 1, 2022.

California Emergency DepartmentsVisits

Injuries and poisonings accounted for nearly one in five emergency department visits in 2021.

Emergency Department Visits, by Age California, 2021





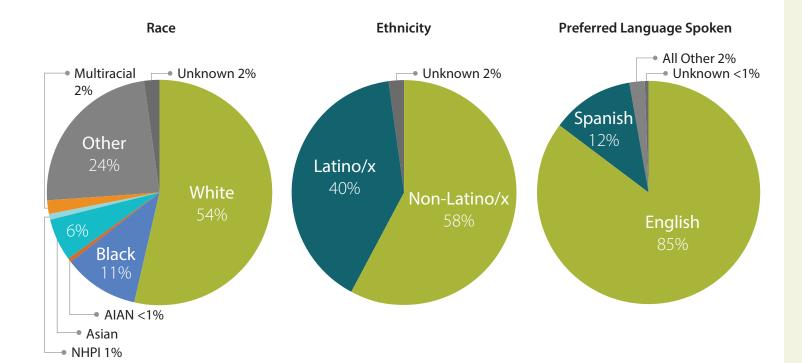
Notes: The age was unknown for 1,402 visits. Figures may not sum due to rounding. Visits per 1,000 population were calculated by the author.

Sources: 2021 Hospital Emergency Department - Characteristics by Facility (Pivot Profile), California Health and Human Services Agency, September 1, 2022; and Sex by Age, US Census Bureau, June 2020.

California Emergency DepartmentsVisits

The number of emergency department visits per population was higher for Californians age 80 and older than for other age groups.

Emergency Department Visits, by Race, Ethnicity, and Preferred Language Spoken, California, 2021



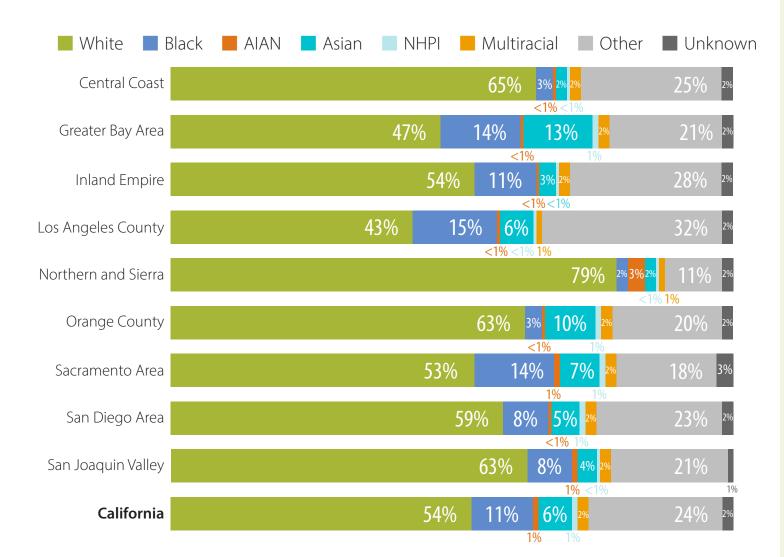
California Emergency DepartmentsVisits

About 15% of patients visiting the emergency department (ED) prefer a language other than English.

Notes: AIAN is American Indian and Alaska Native. NHPI is Native Hawaiian and Other Pacific Islander. Source uses Black or African American, and Hispanic or Latino. Figures may not sum due to rounding.

Source: 2021 Emergency Department - Characteristics by Facility (Pivot Profile), California Health and Human Services Agency, September 1, 2022.

Emergency Department Visits, by Race and Region, California, 2021



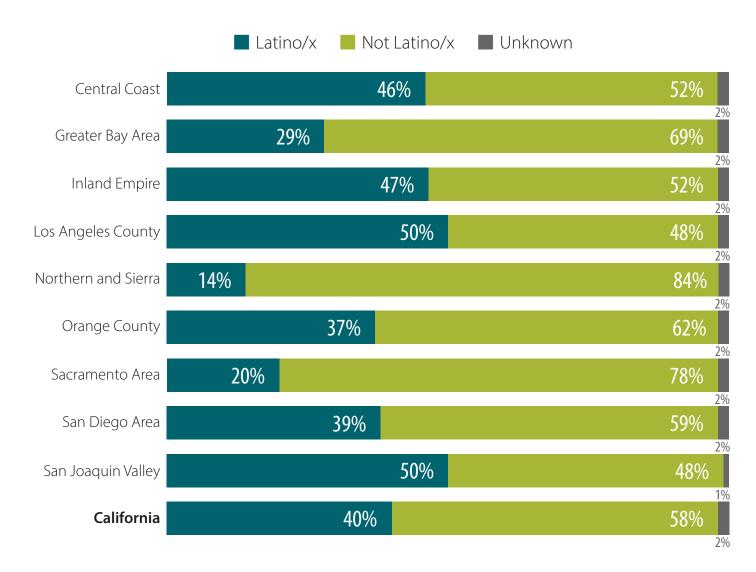
California Emergency DepartmentsVisits

Emergency department visits for different racial groups varied by region.

Notes: AIAN is American Indian and Alaska Native. NHPI is Native Hawaiian and Other Pacific Islander. Source uses Black or African American. Figures may not sum due to rounding. See appendix for a map of counties in each region.

Source: 2021 Hospital Emergency Department - Characteristics by Facility (Pivot Profile), California Health and Human Services Agency, September 1, 2022.

Emergency Department Visits, by Ethnicity and Region California, 2021



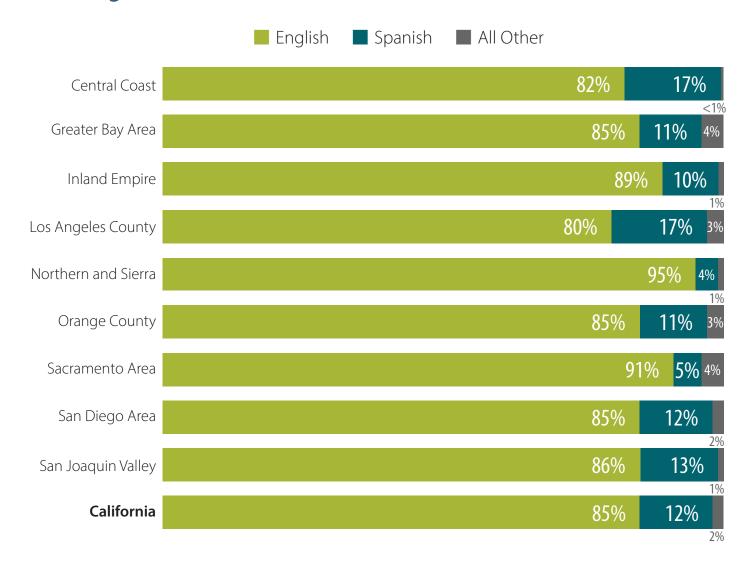
California Emergency DepartmentsVisits

In California, 40% of patients who visited the emergency department were Latino/x.

Notes: Source uses *Hispanic or Latino*. Figures may not sum due to rounding. See appendix for a map of counties in each region.

Source: 2021 Hospital Emergency Department - Characteristics by Facility (Pivot Profile), California Health and Human Services Agency, September 1, 2022.

Emergency Department Visits, by Preferred Language Spoken and Region, California, 2021



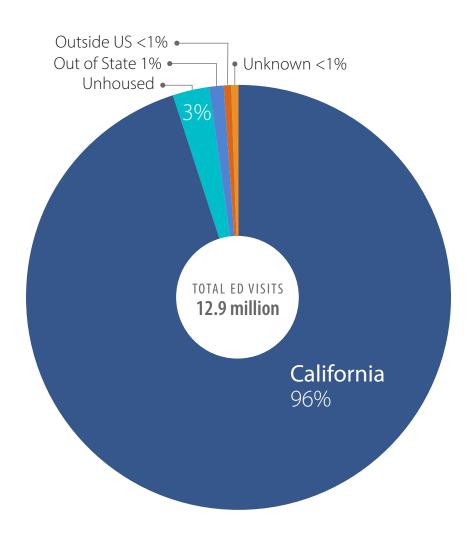
California Emergency DepartmentsVisits

In Los Angeles County and the Central Coast region, Spanish was the preferred spoken language of 17% of patients who had an emergency department visit.

Notes: Preferred language unknown for 28,142 emergency department visits (less than 1% in each region). Figures may not sum due to rounding. See appendix for a map of counties in each region.

Source: 2021 Hospital Emergency Department - Characteristics by Facility (Pivot Profile), California Health and Human Services Agency, September 1, 2022.

Emergency Department Visits, by Residence California, 2021



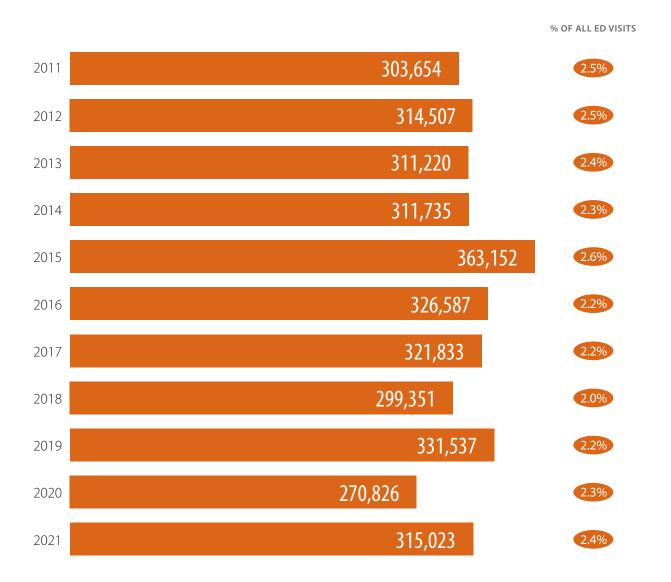
Notes: *Unknown* includes invalid, blank, or unknown residence. Source uses *homeless*. Figures may not sum due to rounding.

Source: 2021 Hospital Emergency Department - Characteristics by Facility (Pivot Profile), California Health and Human Services Agency, September 1, 2022.

California Emergency DepartmentsVisits

The vast majority of emergency department (ED) visits were made by Californians in 2021. Patients experiencing homelessness accounted for 3% of all California ED visits.

Emergency Department Visits from Patients Who Left Without Being Seen, California, 2011 to 2021



California Emergency DepartmentsVisits

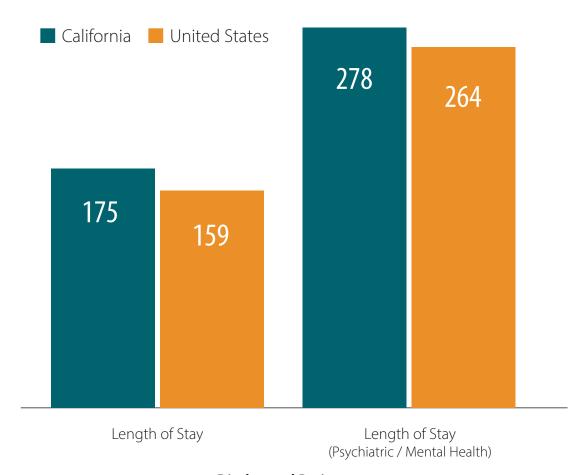
In 2021, 315,023 patients registered in the emergency department (ED) but left before being treated by an emergency physician, a 4% increase from 2011. Patients who leave the ED without being seen may be seriously ill and may be at higher risk for poor health outcomes.

Source: Calendar Year Hospital Utilization Pivot Table (2011–21), California Health and Human Services Agency.

Emergency Department Wait Times

California vs. United States, 2021

MEDIAN TIME (IN MINUTES)



Discharged Patients

Note: Length of stay is the time patients spend in the emergency department before leaving from the visit.

Sources: "Timely and Effective Care - State" (April 1, 2021–March 31, 2022), Centers for Medicare & Medicaid Services (CMS); and "Timely and Effective Care - National" (April 1, 2021–March 31, 2022), CMS.

California Emergency Departments

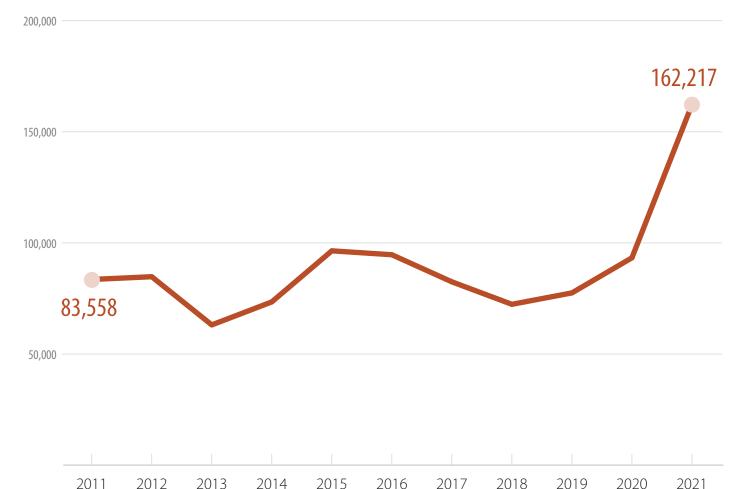
Wait Times

In 2021, the median length of stay for patients before leaving from the visit was 16 minutes higher in California than nationwide. The length of stay for patients with psychiatric / mental health needs was more than four hours.

Ambulance Diversion Hours

California, 2011 to 2021

TOTAL NUMBER OF HOURS EDs CLOSED TO AMBULANCES



Note: *ED* is emergency department.

Source: Calendar Year Hospital Utilization Pivot Table (2011–21), California Health and Human Services Agency.

California Emergency Departments

Ambulance Diversion

Ambulance diversion occurs when a hospital redirects ambulances to nearby hospitals. Emergency department (ED) overcrowding is the most common reason ambulances are diverted. Ambulance diversion can have many negative consequences, from increasing ambulance turnaround time, to reducing quality of care, to negatively impacting ED capacity at nearby hospitals. Diversion hours in California almost doubled between 2011 and 2021.

Ambulance Diversion Hours, by Region California, 2011 and 2021

TOTAL NUMBER OF HOURS EDS CLOSED TO AMBULANCES

	2011	2021	CHANGE
Central Coast	1,658	33,117	1,897%
Greater Bay Area	6,956	13,627	96%
Inland Empire	29	969	3,241%
Los Angeles County	59,306	87,252	47%
Northern and Sierra	0	70	N/A
Orange County	5,203	11,480	121%
Sacramento Area	70	918	1,211%
San Diego Area	8,749	14,483	66%
San Joaquin Valley	1,587	298	-81%
California	83,558	162,214	94%

California Emergency Departments

Ambulance Diversion

Counties set local policies regarding ambulance diversion. Between 2011 and 2021, all regions except for the San Joaquin Valley experienced large increases in ambulance diversion hours. While the Inland Empire had the largest percentage increase, the Central Coast had the largest absolute increase in ambulance diversion hours.

Notes: *ED* is emergency department. See appendix for a map of counties in each region.

Source: *Calendar Year Hospital Utilization Pivot Table* (2011 and 2021), California Health and Human Services Agency.

Methodology

The analyses in this report rely primarily on data obtained from reports submitted by licensed hospitals to California's Department of Health Care Access and Information, which conducts annual standardized surveys required from all hospitals in California. These include patient discharge data, emergency department (ED) data, and hospital annual utilization data. Data were used to evaluate ED capacity and utilization trends in California hospitals from 2011 to 2021. For the utilization data, all general acute care hospitals with an ED (standby, basic, and comprehensive) that were operational at any time in the year during the study period were included.

California Emergency Departments

ABOUT THIS SERIES

The California Health Care Almanac is an online clearinghouse for data and analysis examining the state's health care system. It focuses on issues of quality, affordability, insurance coverage and the uninsured, and the financial health of the system with the goal of supporting thoughtful planning and effective decisionmaking. Learn more at www.chcf.org/almanac.

AUTHOR

Renee Y. Hsia, MD, MSc, is professor of emergency medicine and health policy at the University of California, San Francisco.

FOR MORE INFORMATION

www.chcf.org



California Health Care Foundation 1438 Webster Street, Suite 400 Oakland, CA 94612 510.238.1040

Appendix: California Counties Included in Regions

California Emergency Departments

