



Ventura County Public Health
Emergency Medical Services Agency



2024 ANNUAL REPORT



VENTURA COUNTY
PUBLIC HEALTH
A Department of Ventura County Health Care Agency



Ventura County Emergency Medical Services Agency

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EMS Advisory Committee

The EMS Advisory Committee is a panel comprised of five members designated by the Board of Supervisors and two members designated by VCEMS. The EMS Advisory Committee reviews the ambulance contractor performance at least every two years and provides other EMS system evaluation and oversight as needed.

William Gallaher	–	Representing District 1 Supervisor Matt LaVere
Heather Padilla	–	Representing District 2 Supervisor Jeff Gorell
Craig Stevens	–	Representing District 3 Supervisor Kelly Long
Steven Francis	–	Representing District 4 Supervisor Janice Parvin
Michael O'Malia	–	Representing District 5 Supervisor Vianey Lopez
Audra Strickland	–	EMS Agency Appointed Representative
Daniel Shepherd, MD	–	EMS Agency Appointed Representative



VENTURA COUNTY
PUBLIC HEALTH



VENTURA COUNTY
HEALTH CARE AGENCY

VENTURA COUNTY EMERGENCY MEDICAL SERVICES AGENCY

A Division of Ventura County Public Health Department

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Administration Message

Ventura County Emergency Medical Services Agency (VCEMS) is pleased to provide our 2024 Annual System Report, reviewing the operations and performance of VCEMS and the EMS System. Through a highly coordinated system of public-private partnerships, in 2024, our EMS system providers responded to over 82,000 emergency medical responses, resulting in over 53,000 ambulance transports.

2024 was a pivotal year for the VCEMS System, marked by strategic growth, enhanced transparency, and interagency collaboration. With the collective efforts of our EMS providers, hospitals, partner agencies, volunteers and community stakeholders, we maintain our commitment to high-quality patient care, while continuing work on the ambulance contract request for proposal process and preparing for future challenges.

Transparency and data-driven decision-making were major themes of 2024. As part of this process, VCEMS launched a public EMS Dashboard on our agency website, a user-friendly platform providing real-time and historical data on key system metrics, including system activity and call types, response performance, and patient demographics.



After extensive collaboration with local hospitals, VCEMS successfully finalized formal contracts with our designated Stroke and STEMI Receiving Centers. These partnerships ensure compliance with state and local standards and provide that patients with time-sensitive medical emergencies receive definitive care at the most appropriate facilities, reducing treatment delays and improving outcomes.


In November 2024, VCEMS participated in the multi-agency response to the fast-moving “Mountain Fire” in Camarillo, including activation of the Medical Health Operational Area Coordination (MHOAC) system to ensure medical resource coordination and the Ventura County Health Care Coalition to ensure communication and collaboration among our healthcare stakeholders. VCEMS, VCPH and Medical Reserve Corps personnel also responded quickly to support the establishment of a medical shelter.

National Emergency Medical Services Week 2024 was recognized on May 19 – 25, 2024, under the theme, “Honoring Our Past. Forging Our Future”. The struggles and triumphs from EMS’s earliest days, marked by the contributions of EMS pioneers, challenged the status quo and raised the bar in community-based emergency medical service delivery. As we honor the past, we also look forward to building on the successes and committing ourselves to forging a future for the next generation of EMS professionals.




In January of 2025, we said goodbye to another of our long-term and valued colleagues as Karen Beatty retired after 22 years of service to the County of Ventura, working both at VCMC ER and VCEMS. We celebrate her contributions to the health and well-being of our community and wish her well in her retirement. Thankfully, Karen has agreed to stay with us as a volunteer to assist with special projects and emergencies on a limited basis.

The coming year promises continued advancement for the EMS System. Ventura County EMS remains committed to protecting health, improving outcomes, and serving the public with integrity and excellence.


Steve Carroll, Paramedic
EMS Administrator


Daniel Shepherd, MD
EMS Medical Director


Angelo Salvucci, MD FACEP
Assistant EMS Medical Director

Executive Summary

Ventura County is a geographically diverse region covering over 2200 square miles with a population of over 850,000. With 10 incorporated cities, a number of unincorporated communities, 43 miles of coastline, two offshore islands, two military installations, a variety of lakes and a large area of national forest and state park land, Ventura County offers a distinct mix of urban cities, rural sectors and wilderness.



The Ventura County EMS System is comprised of various disciplines, including fire departments, law enforcement, ambulance services, hospitals, and other provider agencies. These agencies respond to provide lifesaving care to those in need 24 hours a day, seven days a week. From the dispatchers who talk with 9-1-1 callers and the responders who provide care in the field and transport patients, to the emergency room staff who receive the patients, the EMS Agency ensures the highest quality pre-hospital care for those in need of emergency medical services in Ventura County through an integrated and coordinated system of services.

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A division of the Health Care Agency Public Health Department, the EMS Agency monitors and evaluates the quality of advanced life support (ALS) and basic life support (BLS) emergency medical care provided to the residents of and visitors to Ventura County by authorized pre-hospital personnel, provider agencies, and hospitals. In this role, the EMS Agency:

- Serves as the lead agency for the emergency medical services system in the county and coordinates all system participants in its jurisdiction, encompassing both public and private sectors.
- Provides system guidance and direction through provider and community driven policy development aimed at establishing and maintaining standards for care.
- Monitors patient care through a comprehensive quality improvement program.
- Ensures medical disaster preparedness through the emergency planning process and coordinates response to local disasters and incidents with multiple casualties.
- Ensures prehospital personnel excellence through training, certification, accreditation and continuing education program review.

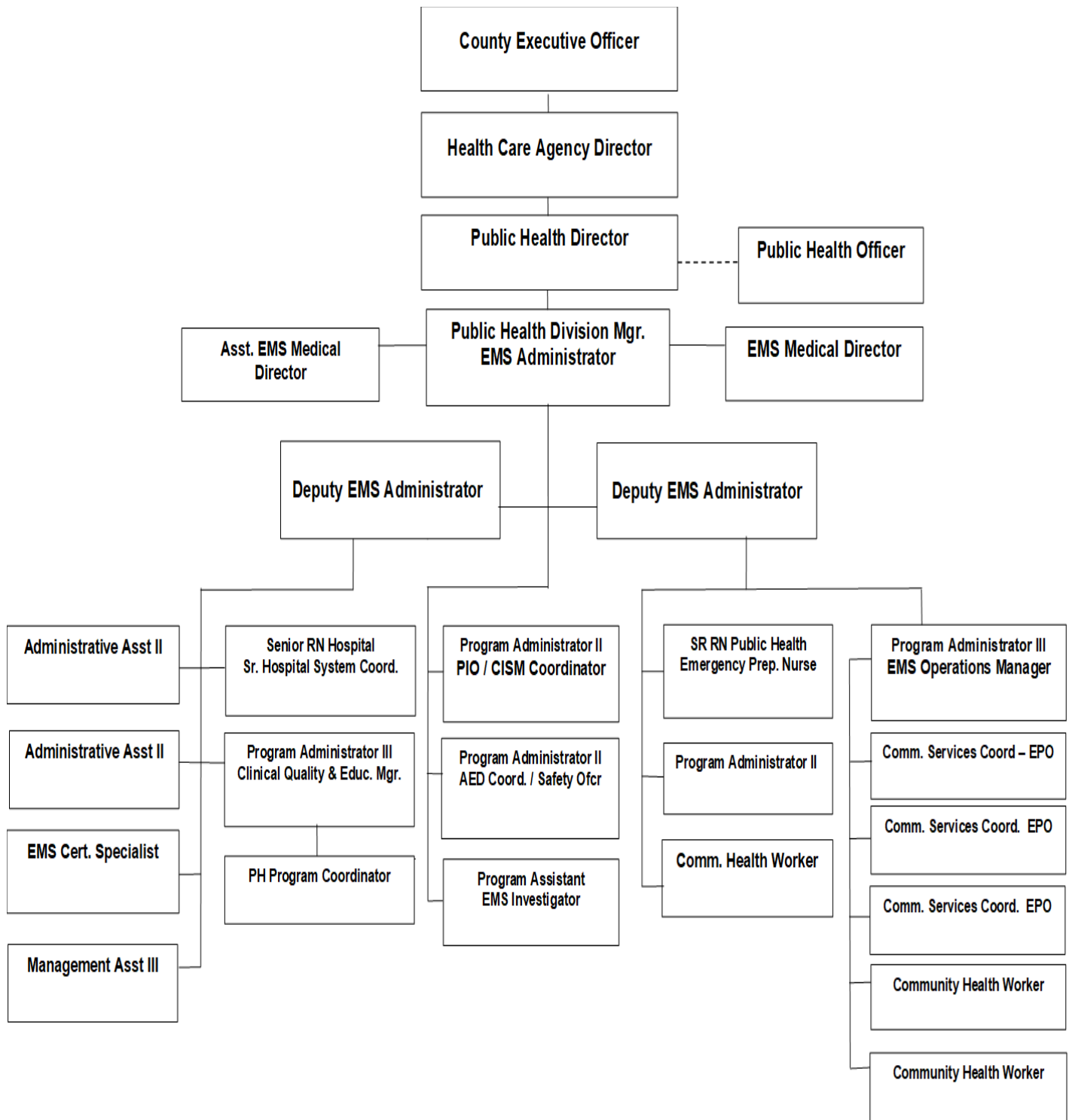
In FY 24-25, Ventura County EMS Agency had a budget of \$7,291,100, which includes a mix of service fees, provider charges and penalties, traffic fine collections, grant funding and county general funds. The EMS Agency also provides administration of the Maddy Fund, which reimburses physicians and emergency rooms for a portion of uncompensated care with traffic fine funding. \$1,062,502 was dispersed from the Maddy Fund in 2024 to settle the hospital and physician claims and for pediatric trauma funding.

The EMS Agency is staffed with 22 full-time personnel, a medical director and an assistant medical director. Positions include EMS Administrator, two Deputy Administrators, Senior Hospital Systems Coordinator, Clinical Quality Manager, four Program Administrators, Program Assistant, three Community Services Coordinators, EMS Logistics Specialist, two Administrative Assistants, Management Assistant III, EMS Certification Specialist and four Community Health Workers.

The EMS Agency is proud of its strong team of professionals that are called to action with every 9-1-1 call. This team is made up of people who care about serving the community while maintaining high standards in a demanding career. No matter the uniform, all team members strive for excellence each and every time they respond. Through a state-of-the-art communication system, ongoing training and modern equipment, Ventura County EMS providers can respond quickly and efficiently to the needs of the community.

The 2024 annual report is designed to provide an overview of the Ventura County EMS operations, specialty care and emergency preparedness programs, and provide updates on program activities and performance data.

Ventura County Emergency Medical Services Agency Organizational Chart 2024



EMS Agency Staff Responsibilities

Name	Title	Contact Info	Primary Responsibilities
Steve Carroll, Paramedic	Division Manager EMS Administrator	steve.carroll@venturacounty.gov 805-981-5305	<ul style="list-style-type: none"> EMS System Delivery and Emergency Preparedness oversight Ambulance contract administration and compliance monitoring Agency operations oversight, fiscal management and MHOAC
Daniel Shepherd, MD	EMS Medical Director	daniel.shepherd@venturacounty.gov 805-981-5304	<ul style="list-style-type: none"> Medical direction and oversight of EMS and specialty care systems, QI program, system wide committees & EMS projects Local policy, procedure and protocol development
Angelo Salvucci, MD,	Assistant EMS Medical Director	angelo.salvucci@venturacounty.gov 805-981-5301	<ul style="list-style-type: none"> Medical direction and oversight, including development and maintenance of local policies, procedures and protocols
Chris Rosa, Paramedic	Deputy EMS Administrator	chris.rosa@venturacounty.gov 805-981-5308	<ul style="list-style-type: none"> Assist with oversight of day-to-day EMS System operations Oversight of Emergency Preparedness and MHOAC designee Oversight of prehospital education providers and data systems
Adriane Gil-Stefansen, Paramedic	Deputy EMS Administrator	adriane.stefansen@venturacounty.gov 805-981-5307	<ul style="list-style-type: none"> Assist with oversight of day-to-day EMS System operations Oversight of Specialty Care Systems and QI programs Maintenance of policies for the QI, Stroke and STEMI systems
Karen Beatty, RN, EMT	Senior Hospital Systems Coordinator	karen.beatty@venturacounty.gov 805-981-5309	<ul style="list-style-type: none"> Trauma and hospital systems preparedness oversight Facilitates medical/health disaster preparedness and training Coordinates community preparedness initiatives
Kyle Culkin, MSN, RN, PHN	Senior Trauma & Preparedness Coordinator	kyle.culkin@venturacounty.gov (805) 981-5279	<ul style="list-style-type: none"> Provide CPR and skills training to all VCPH nursing staff Develop/update emergency preparedness plans and exercises Audit VCPH vaccine storage locations to maintain compliance
Andrew Casey, Paramedic	Clinical Quality Manager	andrew.casey@venturacounty.gov 805-981-5311	<ul style="list-style-type: none"> Collection and monitoring of EMS Program data Oversight of the Quality Improvement Program Education and Training Oversight and Policy Development
Julie Frey	EMS Program Administrator/ CISM Coord.	julie.frey@venturacounty.gov 805-981-5306	<ul style="list-style-type: none"> EMD and CISM Program Coordinator Community Paramedic Program Liaison Prehospital Services Committee Coordinator
Randy Perez, Paramedic	AED Program Administrator/ PH Safety Officer	randy.perez@venturacounty.gov 805-981-5310	<ul style="list-style-type: none"> Countywide AED Program Administrator Ventura County Public Health Department Safety Officer PSFA Naloxone, CPR and Stop the Bleed Program coordination
Traci Holt, EMT	MRC Program Administrator	traci.holt@venturacounty.gov 805-981-5294	<ul style="list-style-type: none"> Medical/health disaster preparedness coordination Medical Reserve Corps Coordination
Peter Grimm	EMS Investigator	peter.grimm@venturacounty.gov 805-204-9580	<ul style="list-style-type: none"> Investigates certification eligibility and coordinates discipline Monitors probation compliance and conducts program audits
Haley Ebert	Data Coordinator	haley.ebert@venturacounty.gov 805-981-5375	<ul style="list-style-type: none"> Assist EMS, CD and Epidemiology with data analysis Monitors and evaluates program activities and statistical data
Erik Hansen, EMT	EMS Operations Manager	erik.hansen@venturacounty.gov 805-981-5322	<ul style="list-style-type: none"> Emergency preparedness and Logistics management Medical volunteer, communications and CAHAN Administration
Jeff Vahl, EMT	Community Services Coord.	jeffrey.vahl@venturacounty.gov 805-981-5261	<ul style="list-style-type: none"> Medical/health logistics and disaster preparedness coordination HCA Department Operations Center coordination
Alphonso Rivera, EMT	Community Services Coord.	alphonso.rivera@venturacounty.gov 805-981-5267	<ul style="list-style-type: none"> Medical/health logistics and disaster preparedness coordination HCA Department Operations Center coordination
Eduardo Herrera	Comm. Services. Coordinator	eduardo.herrera@venturacounty.gov 805-981-5290	<ul style="list-style-type: none"> Medical/health logistics and disaster preparedness coordination HCA Department Operations Center coordination
Martha Garcia	EMS Admin. Assistant II	marthaL.garcia@venturacounty.gov 805-981-5303	<ul style="list-style-type: none"> Certification, accreditation and authorizations of personnel Monitor and audit personnel training requirements
Sherylyn Andaya	EMS Admin. Assistant II	sherylyn.andaya@venturacounty.gov 805-981-5301	<ul style="list-style-type: none"> Certification, accreditation and authorization of personnel Provide administrative support
Veronica Ayala	Management Assistant III	veronicaM.Ayala@venturacounty.gov 805-981-5301	<ul style="list-style-type: none"> Certification, accreditation and authorization of personnel Provide administrative support
Delfina Zermeno	EMS Certification Specialist	delfina.zermeno@venturacounty.gov 805-981-5301	<ul style="list-style-type: none"> Certification, accreditation and authorization of personnel Provide administrative support
Kristinna Swilling	Comm. Health Worker	kristinna.swilling@venturacounty.gov 805-981-5376	<ul style="list-style-type: none"> VCHCC and disaster preparedness coordination
Logan Sylvester	Comm. Health Worker	logan.sylvester@venturacounty.gov	<ul style="list-style-type: none"> Medical/health logistics and disaster preparedness coordination
Gregory Teran	Comm. Health Worker	gregory.teran@venturacounty.gov	<ul style="list-style-type: none"> Medical/health logistics and disaster preparedness coordination

Certification / Accreditation / Authorization

MICN Authorization



Mobile Intensive Care Nurse (MICN) – The MICN is a registered nurse authorized by the medical director of the Agency as qualified to communicate instructions to pre-hospital personnel according to EMS policy and procedures. In addition, MICNs are trained in certain aspects of multi-casualty incident management and act as destination coordinators during a declared MCI, regardless of incident size.

VCEMS MICN Authorizations - 2024	
MICN Authorization	34
MICN Re-Authorization	76
Number of Active MICNs in VCEMS System	154

EMT Certification



Emergency Medical Technician (EMT) - The EMT provides basic assessment and treatment to patients that access the Ventura County EMS System. The EMT is trained in basic life support skills including patient assessment and treatment of minor medical conditions and injuries. Once an EMT is certified by a Local EMS Agency, he/she is authorized to operate as an EMT anywhere in the State of California.

VCEMS EMT Certifications - 2024	
EMT Certifications	508
EMT Re-Certifications	559
Number of Certified EMT's in VCEMS System	2503

Certification / Accreditation / Authorization

Paramedic Accreditation

Paramedic – The paramedic provides advanced emergency medical care for patients who access the Ventura County EMS system. The paramedic is highly trained in various aspects of patient care and assessment, and is continuously evaluated to ensure knowledge of skills and treatment modalities remains current. The paramedic operates under clearly defined medical control guidelines and protocol established by the VCEMS Medical Director.

VCEMS Paramedic Accreditations - 2024

Number of Accredited Paramedics in VCEMS System	316
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Hospital, EMS and Medical Reserve Corps personnel conducted “Stop the Bleed” training sessions for Junior Lifeguards at the Ventura State Beach in the Summer of 2024.

EMS Education Programs

VCEMS Authorized Prehospital Training Programs - 2024

EMT – Initial and Refresher	5
Paramedic Training Program	2

Additional information regarding CE Provider Programs, EMT, and Paramedic Training Programs can be found online at the California EMS Authority Education Database:

[Training Programs \(ca.gov\)](https://www.cems.ca.gov/training-programs)

Logistics Support / Warehouse Operations

EMS logistics team is vital in facilitating medical countermeasures and disaster medical response efforts. This team coordinates the rapid deployment of essential supplies such as pharmaceuticals, personal protective equipment, and medical equipment, to address public health emergencies and disasters. By managing inventory, distribution, and transportation, the team ensures timely delivery of resources to healthcare facilities, programs within the local health department, and emergency response agencies throughout the county. Their efforts enhance Ventura County preparedness and response capabilities, safeguarding communities during crisis like pandemics, natural disasters, or bioterrorism events.



EMS Logistics

- Medical Countermeasures Receipt, Staging and Storage
- County-wide medical/health incident support
- Immunization program support / distribution of Influenza and T-Dap vaccinations
- Ventura County Laboratory renovation support
- Public Health community outreach support
- Public Health Emergency Preparedness disaster supply maintenance.
- Hospital Preparedness Program inventory control
- Distribution of COVID testing kits to hospitals and healthcare entities
- Personal Protective Equipment (PPE) distribution – hospitals, first responders, and other medical entities/providers

Coordination & Training

The VCEMS Training Cadre worked closely with leaders from various organizations to conduct training exercises and increase emergency preparedness capabilities. The Training Cadre focused on Health Department mission areas and Countywide workforce development initiatives including:

- Emergency Service Unit Deployment Exercise
- High Risk Ambulance Deployment Exercise
- Stop the Bleed Training
- CPR Training
- Public Health Emergency Preparedness Training (PHEP-T)



Public Health Emergency Preparedness & Nurse Skills Training

Ventura County Public Health Emergency Preparedness Program trains Public Health Nurses (PHNs) to be ready for disaster response. Training focuses on critical skills PHNs will utilize during emergencies. Nurses must show proficiency in the use of personal protective equipment emergency response equipment to manage infectious diseases and hazardous exposures. They are trained to skillfully



perform patient assessments, triage, and care of the sick and injured. During sheltering operations nurses focus on stabilizing acute conditions, managing chronic illness, and addressing substance abuse through targeted screening and referrals. PHNs also are proficient in using Incident Command System (ICS) documentation which ensures accurate tracking of care, resources, and response activities which enhances coordination and communication during disasters.



Stop the Bleed Training

The Ventura County Public Health Emergency Medical Services Agency is committed to working with community partners and stakeholders to prepare the community to respond effectively to life-threatening emergencies. The EMS Agency provides training for county employees and community members in life-saving techniques for traumatic injuries, to ensure they have the skills to act quickly in critical situations. In addition, the agency has strategically pre-deployed public access bleeding control kits in various county government buildings equipped with tourniquets, pressure dressings, emergency trauma dressings, and wound-packing gauze so that individuals can take immediate action to save lives.



This united and coordinated effort was initiated in collaboration with the Ventura County Fire Department and the Ventura County Sheriff's Office. The EMS Agency partners with transport providers, fire departments, acute care hospitals, and other stakeholders throughout the county to enhance emergency preparedness and ensure a seamless response when seconds matter most. Ventura County Medical Center, Los Robles Hospital Medical Center, and the Ventura County Medical Reserve Corps Volunteers have been instrumental in providing Stop the Bleed community outreach. Through these collaborations, EMS is strengthening the chain of survival for those experiencing life-threatening bleeding emergencies.

Severe bleeding is the leading cause of preventable death in traumatic injuries. A study published in the National Institutes of Health found that about 40% of trauma-related deaths worldwide are due to uncontrolled bleeding or its complications.



Stop the Bleed is one of the nation's largest public health campaigns designed to encourage bystanders to become trained, equipped, and empowered to help in a bleeding emergency before professional help arrives. The goal is to save lives by training people across the country to stop traumatic bleeding. No matter how rapid the arrival of professional emergency responders, bystanders will almost always be first on the scene. A person who is bleeding can die from blood loss within five minutes. Therefore, it is important to stop blood loss quickly. Those nearest to someone with life-threatening injuries are best positioned to provide lifesaving first care.



Ventura County Medical Reserve Corps



The Ventura County Medical Reserve Corps (MRC) Unit 0959 is a group of unpaid volunteers sponsored by the Ventura County Emergency Medical Services Agency that includes physicians, physician assistants, nurse practitioners, registered nurses, paramedics, emergency medical technicians, non-medical professionals, and retired law enforcement and fire personnel. These volunteers support various programs within the County of Ventura agencies, area hospitals and first responder agencies.



We were honored to have the Ventura County Board of Supervisors recognize the Medical Reserve Corps during Volunteer Appreciation Week in April.

In 2024, special programs included the HOPE Summer Explorer Program at the Ventura County Medical Center, serving as hospital docents and mentors for students aspiring to have medical careers. Our team was also involved in medical shelter staffing and F.A.S.T. support during the Mountain Fire response, as well as participating in the Ventura County Homeless Count. Additionally, they assisted with vaccination efforts at various TDaP and Influenza Points of Dispensing (PODs), contributed to the Backpack Medicine Healthcare for the Homeless Program, and provided Peer Support Training. They facilitated Transcendental Meditation (TM) for First Responders and participated in the County's 150th Anniversary by offering health screenings with Public Health.

MRC volunteers engaged in several community outreach events, demonstrating life-saving techniques such as STOP THE BLEED and Sidewalk CPR. They also contributed to emergency preparedness, food distribution efforts (PODs), first aid support, and education on careers in emergency medical services. Events included Junior Lifeguards with the VCMC Trauma Team, the Government Center's Bring Your Kid

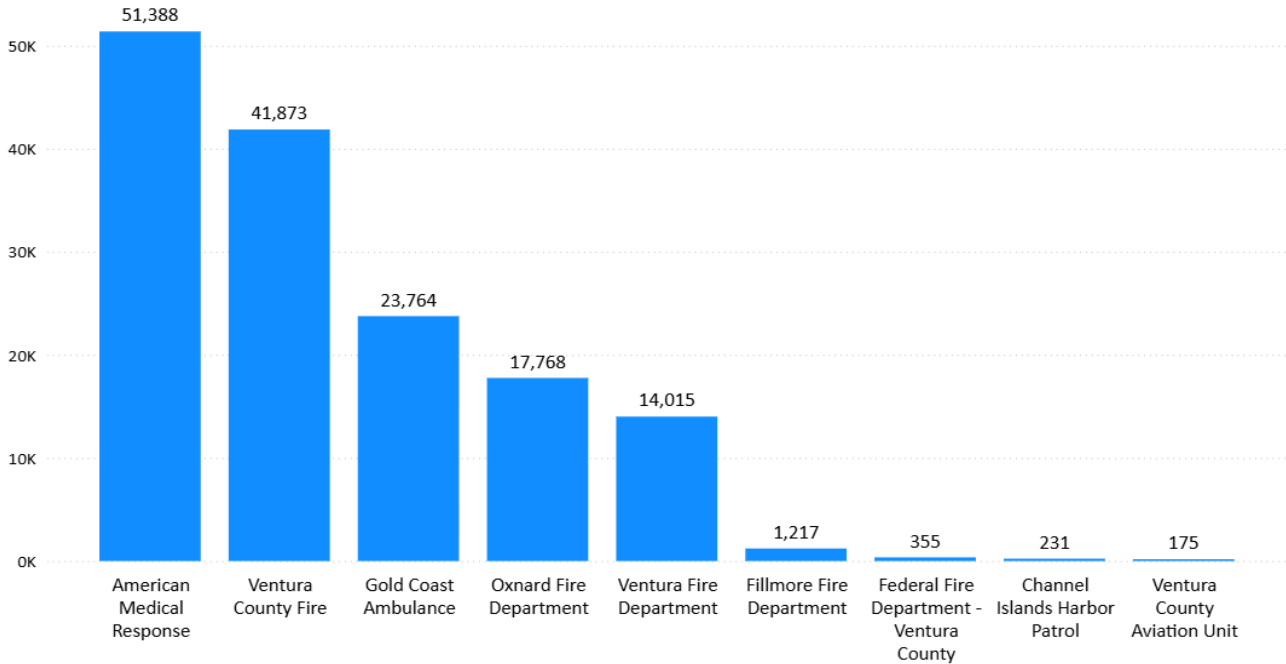


to Work Day, the MS Bike Ride (where they managed seven first aid stations), the Ronald McDonald Walk, Aut2Run, Food Share's pop-up distribution events, the Be Prepared Safety Fair with Jacqui Irwin, the Wings Over Camarillo Air Show, the Ventura PRIDE Festival, and Underwood Farm's Public Safety Weekend.

Throughout the year, these volunteers maintained their skills through ongoing training and participated in county-wide exercises. In 2024, the MRC took part in Public Health's Annual Nursing Skills Days and the Mass Surge Response Pediatric Exercise, along with multiple certification sessions for the Functional Assessment Services Team (F.A.S.T.), refresher courses in CPR and STOP THE BLEED, PPE training, HazMat, and Multi-Casualty Incident (MCI) exercises. Special lectures attended included "Leadership & Resiliency: Extreme Ownership for the 21st Century Responder," the Great Shake Out, Civilian Response to Active Assailants, the Human Trafficking Symposium, and the Fall Prevention Forum.

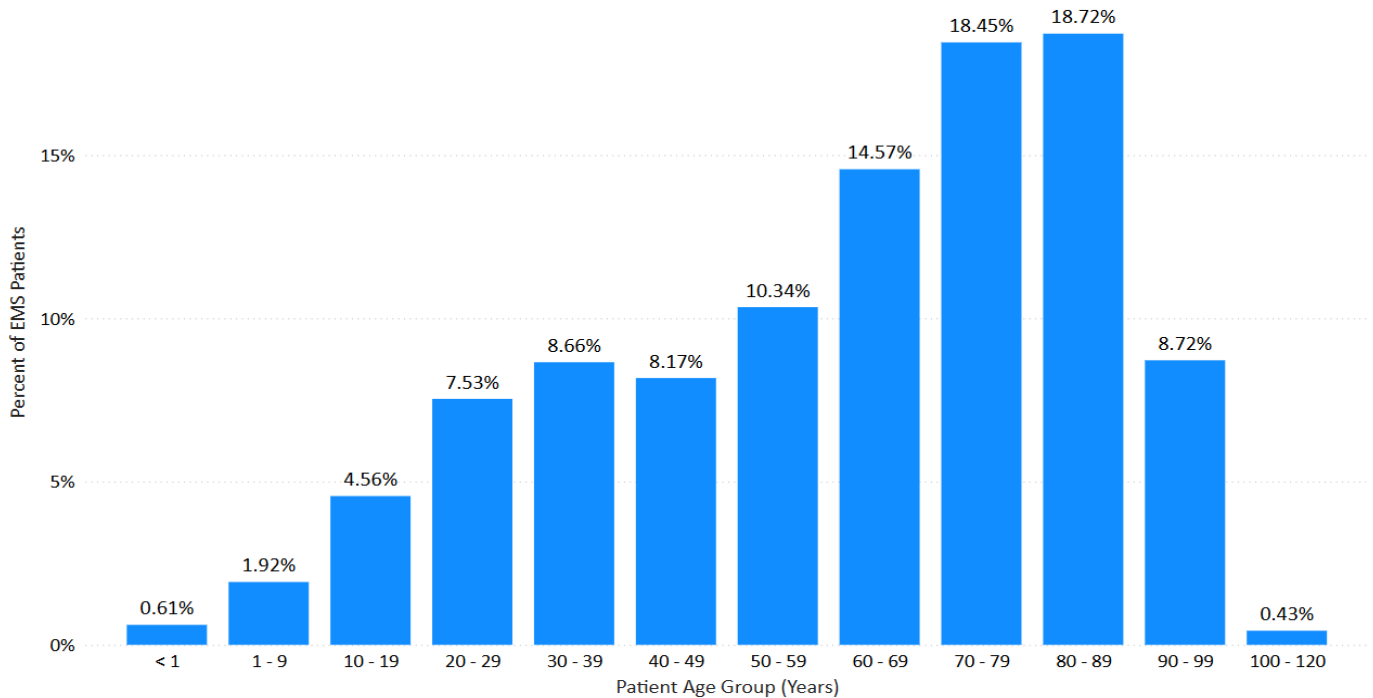
Ventura County 911 System Call Volume

Number of 911 medical incidents in 2024 shown by the agencies that arrived on scene of each incident per CAD data.



Ventura County 911 System Patients

Patient age in years shown in 10-year groups as the percent of all EMS incidents in calendar year 2024.



Emergency Medical Dispatch



The County of Ventura has 9 primary Public Safety Answering Points (PSAP), including California Highway Patrol (CHP), California State University Channel Islands (CSUCI), Naval Base Ventura County (NBVC), Oxnard Police Department (OPD), Port Hueneme Police Department (PHPD), Santa Paula Police Department (SPPD), Simi Valley Police Department (SVPD), Ventura City Police Department (VPD) and Ventura County Sheriff's Office (VCSO). When a primary PSAP receives a call for a medical or fire emergency, the call is transferred to the secondary PSAP at the Ventura County Fire Communications Center (FCC), where fire and ambulance resources are coordinated. All Fire and EMS resources in Ventura

County are dispatched by FCC. This regionalized operation results in increased coordination and communication among response partners, reduced duplication, and closest unit response to emergencies regardless of geographic jurisdiction. FCC is the only Emergency Medical Dispatch (EMD) provider in Ventura County. EMD is a program designed to provide predetermined medical protocols/medical instructions to victims and bystanders before the arrival of first responders. EMD trained personnel use Medical Priority Dispatch Systems ProQA Dispatch Software to help emergency dispatchers move smoothly through case entry and key questioning.

Quality Assurance - ProQA helps FCC maintain a consistently high level of service by improving call taker compliance to the International Association of Emergency Dispatcher (IAED) Protocols. ProQA automatically presents questions and instructions in the proper order. It automatically skips questions and instructions that are not appropriate for the specific circumstances of each case. This automation frees call takers to focus their attention on providing quality service. ProQA also saves every action taken by the call taker so that the information can be exported for use in Quality Assurance (QA) program software. Ventura County Fire Department has contracted with Priority Dispatch to review high risk calls and random sample calls from each dispatcher for quality assurance.

Ventura County Fire Communications Center



Emergency Medical Dispatch

Countywide Emergency Medical Dispatch Activity by Call Type

PROBLEM TYPE	2024 TOTAL INCIDENTS	PROBLEM TYPE	2024 TOTAL INCIDENTS
ABDOMINAL PAIN	2,160	INHALATION EXPOSURE / HAZMAT	134
AIRCRAFT EMERGENCY	22	LIFT ASSIST	982
ALLERGIES / ENVENOMATION	558	MASS CASUALTY INCIDENT	1
ANIMAL BITES / ATTACKS	177	MEDICAL ALARM	1,498
ASSAULT	1,896	MOTORCYCLE COLLISION	118
BACK PAIN	885	OBVIOUS OR EXPECTED DEATH	200
BEHAVIORAL EMERGENCY	1,826	OVERDOSE / POISONING	1,964
BREATHING PROBLEMS	6,962	PENETRATING WOUNDS	7
BURNS / EXPLOSIONS	26	PREGNANCY RELATED EMERGENCY	167
CARDIAC / RESP ARREST	1,008	RESCUE RELATED	116
CHEST PAIN	4,782	SICK PERSON	12,325
CHOKING	452	STABBING	127
CONVULSIONS / SEIZURES	3,018	STEMI TRANSFER	70
DIABETIC PROBLEMS	1,148	STROKE (CVA)	2,127
DROWNING	25	STROKE TRANSFER	44
ELECTROCUTION / LIGHTNING	12	TRAFFIC COLLISION	5,540
EYE PROBLEMS / INJURIES	73	TRAIN RELATED INCIDENT	7
FALLS	13,921	TRAUMA TRANSFER	60
GUNSHOT	134	TRAUMATIC INJURIES	2,094
HEADACHE	472	UNCONSCIOUS / FAINTING	5,882
HEART PROBLEM	1,196	UNKNOWN PROBLEM	5,245
HEAT / COLD EXPOSURE	117	WATER RESCUE RELATED	46
HEMORRHAGE / LACERATION	2,273	OTHER	745
TOTAL 2024 MEDICAL RELATED INCIDENTS - 82,642			

Fire Departments



Federal Fire Department – Ventura County

Covers all areas of Naval Base Ventura County, including San Nicholas Island, from four stations.



Fillmore Fire Department

Covers the City of Fillmore from one station.



Oxnard Fire Department

Covers the City of Oxnard from eight stations.



Ventura City Fire Department

Covers the City of Ventura from six stations.



Ventura County Fire Department

Covers the cities of Simi Valley, Moorpark, Thousand Oaks, Camarillo, Port Hueneme, Ojai, Santa Paula and all unincorporated areas of Ventura County from 33 stations.

Air Rescue



Ventura County Aviation Unit

Covers all areas of the county, including remote wilderness within the Los Padres National Forest and Santa Monica Mountains National Recreation Area.

Ambulance Providers

American Medical Response

Covers the cities of Simi Valley, Moorpark, Thousand Oaks, Camarillo, Ventura, Santa Paula, Fillmore, and unincorporated areas within exclusive operating areas 2, 3, 4, 5 and 7.



Gold Coast Ambulance

Covers the city of Ojai, as well as the unincorporated areas of Oak View, Meiners Oaks and Casitas Springs designated and exclusive operating area 1 and covers the cities of Oxnard and Port Hueneme, and the surrounding unincorporated areas designated as exclusive operating area 6.



All Town Ambulance

All Town Ambulance provides non-emergency basic life-support ambulance service countywide.



MedTrans Ambulance

MedTrans Ambulance provides non-emergency basic life-support ambulance service countywide.



Law Enforcement / Harbor Patrol

California State University, Channel Islands

Covers first responder emergency medical services for the campus of the State University, as well as the communities immediately surrounding the campus.



Channel Islands Harbor Patrol

Covers the Channel Islands Harbor, as well as the ocean area surrounding the harbor.



Ventura Harbor Patrol

Covers the Ventura Harbor, as well as the communities immediately surrounding the harbor and the ocean area surrounding the harbor.



Ambulance Contract Administration and Oversight



On July 1, 2024, the County entered into a one-year extension of its agreement with the existing “grandfathered” providers for the provision of emergency ambulance service in the seven Ventura County EMS exclusive operating areas (EOA). The agreement also provides the option for one additional one-year extension, which was exercised in early 2025, taking the agreements to June 30, 2026. Gold Coast Ambulance Service serves Area 1 and Area 6; and American Medical Response (AMR) serves Areas 2, 3, 4, 5 and 7.

Through “performance-based” ambulance service agreements, the Ventura County Emergency Medical Services Agency conducts comprehensive monitoring and evaluation of the EMS System to ensure compliance with standards, policies and procedures to provide our jurisdiction with the best possible prehospital emergency medical care.

The ambulance agreements outline the services to be performed by the contracted providers including, but not limited to:

- Providing emergency ambulance service on a continuous 24/7 basis
- Collecting data utilizing the VCEMS electronic patient care record system
- Ensuring compliance with response time standards
- Participation in the Continuous Quality Improvement Program
- Providing staffing consistent with VCEMS policies and procedures
- Conducting required staff training and education
- Providing comprehensive fleet maintenance and ambulance replacement
- Conducting public information and education

EOA Zones

- 1 = Ojai/Oak View
- 2 = Santa Paula/Fillmore/Piru
- 3 = Simi Valley
- 4 = Thousand Oaks/Moorpark
- 5 = Camarillo
- 6 = Oxnard/Port Hueneme
- 7 = Ventura

All emergency ambulances in Ventura County are dispatched through contract with the Ventura County Fire Communications Center using the Central Square Computer Aided Dispatch system. Ambulances are deployed countywide based on established System Status Management plans and all are equipped with modern mobile dispatch computers and automatic vehicle location systems. All emergency ambulances are equipped with mobile and portable radios programmed to the County’s uniform channel listing, which allows all first responders and ambulance personnel to communicate on common radio frequencies.



Ambulance Contract Administration and Oversight

Response Time Performance Standards

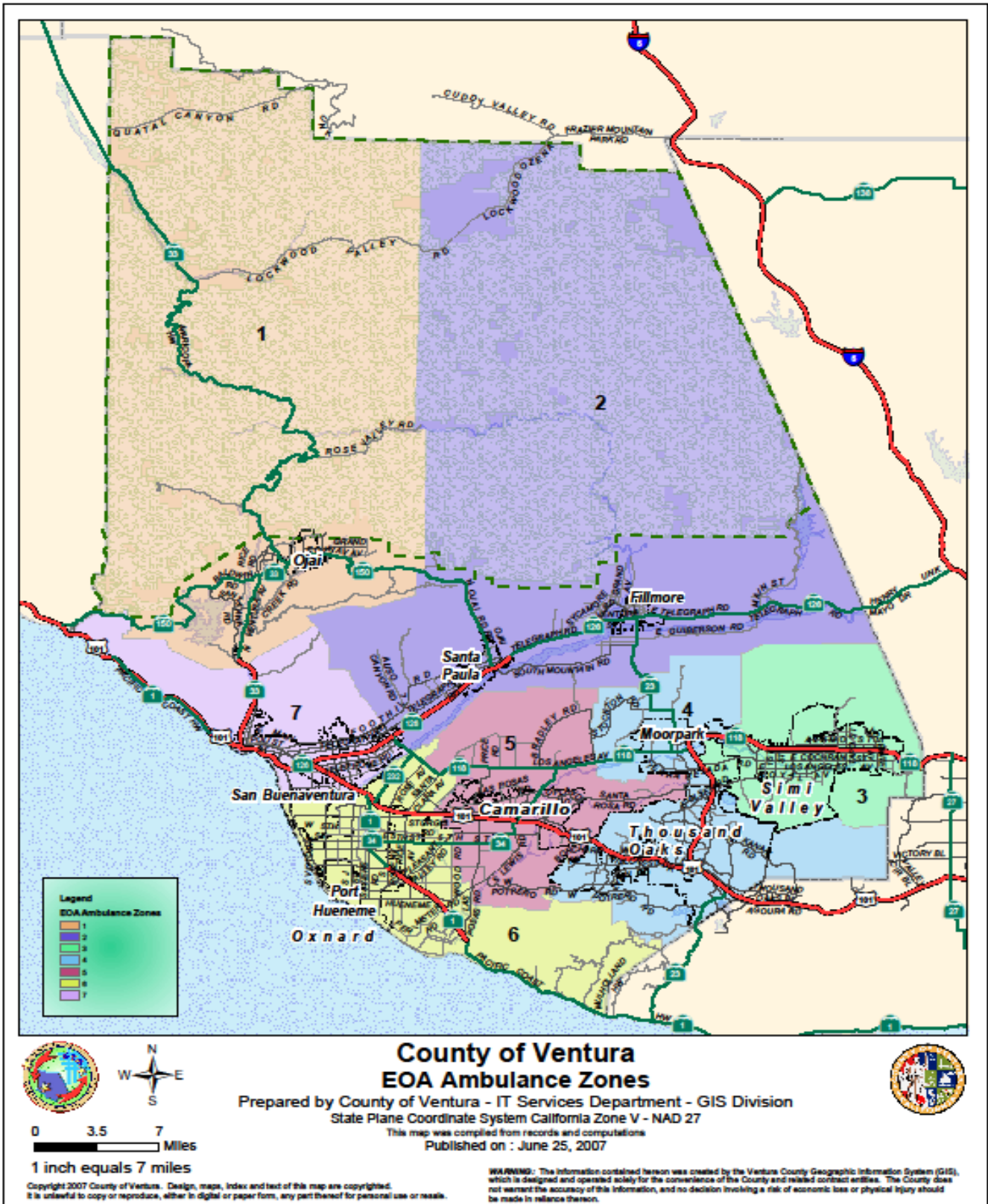
Ambulance response time compliance is monitored through the FirstWatch Online Compliance Utility program. Contract performance standard is 90% monthly compliance in each ambulance zone. Response time criteria is measured monthly, and requirements vary based on population density and call priority. Metropolitan/Urban areas require an ambulance response time of 8 minutes for emergencies and 15 minutes for non-emergencies. Suburban/Rural areas require an ambulance response time of 20 minutes. Certain low density and geographically remote areas are allowed an ambulance response time of 30 minutes and highly remote “Wilderness” areas are contracted as “ASAP” zones. Non-compliant responses, without an approved exemption, are assessed a financial penalty based on contract guidelines. In 2024, all areas were compliant with the 90% monthly requirements.

The FirstWatch system was updated in July 2021 to provide additional capability. The updated system now shows pre-exemption compliance data known as “raw compliance” and allows for the ambulance provider to provide a corrected arrival time for responses that were verified “on-scene” through GPS by the ambulance automatic vehicle location device. Monthly compliance reporting is available at [EMS System Performance \(vchca.org\)](https://www.vchca.org/EMS-System-Performance).

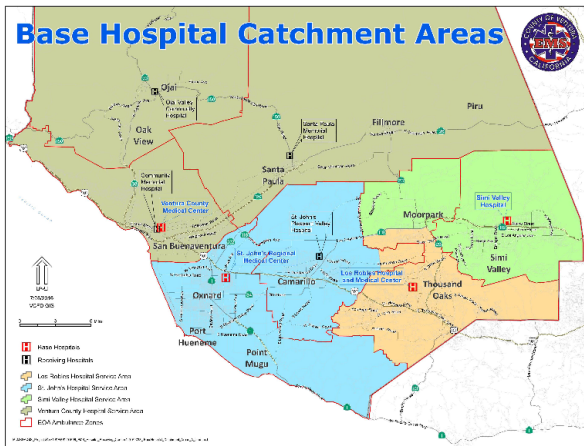
2024 Annual Response Time Compliance Report																
Reporting Period 01/01/2024 - 12/31/2024																
Zone	Total Incidents	On Time	Late	Do Not Count	Cancelled Enroute Compliant	Adjusted Total Incidents	Adjusted Late	Raw Compliance	Time Corrections Approved (Compliant)	Time Corrections Approved (Late)	Raw Compliance with Time Correction	Exemptions Requested	Exemptions Approved	Compliance Calculated Incidents	Compliance Calculated Late	Contracted Response Time Compliance
EOA 1	2497	219	2716	2	196	2518	219	91.30%	32	0	92.57%	80	77	2441	110	95.49%
EOA 2	4395	299	4694	45	355	4294	293	93.18%	68	0	94.76%	52	52	4242	173	95.92%
EOA 3	9807	804	10611	58	775	9778	796	91.86%	146	1	93.34%	181	179	9599	472	95.08%
EOA 4	15749	1434	17183	94	996	16093	1419	91.18%	297	0	93.03%	120	116	15977	1006	93.70%
EOA 5	7884	954	8838	60	502	8276	943	88.61%	190	0	90.90%	166	164	8112	589	92.74%
EOA 6	20274	1599	21873	12	1309	20552	1588	92.27%	182	0	93.16%	665	661	19891	745	96.25%
EOA 7	13977	1622	15599	4	1366	14229	1619	88.62%	213	1	90.11%	320	317	13912	1090	92.17%

2024 Monthly Response Time Compliance Report								
	GCA 1	AMR 2	AMR 3	AMR 4	AMR 5	GCA 6	AMR 7	Average
JAN	94.21%	95.91%	95.14%	92.94%	94.60%	97.17%	91.33%	94.47%
FEB	94.18%	95.61%	95.24%	92.53%	93.53%	96.34%	93.19%	94.37%
MAR	98.92%	94.41%	95.84%	94.74%	92.16%	95.63%	92.12%	94.83%
APR	95.96%	96.50%	94.84%	94.13%	93.14%	97.06%	91.18%	94.69%
MAY	95.73%	96.03%	95.69%	94.42%	92.45%	96.07%	92.79%	94.74%
JUN	96.50%	94.96%	95.86%	93.50%	91.53%	96.71%	91.45%	94.36%
JUL	92.89%	96.01%	96.22%	93.47%	92.44%	95.63%	91.15%	93.97%
AUG	97.06%	96.45%	94.41%	93.51%	91.87%	96.32%	91.69%	94.47%
SEP	95.59%	96.38%	95.20%	94.84%	92.19%	96.39%	92.55%	94.73%
OCT	95.29%	96.45%	94.85%	94.52%	93.24%	95.99%	92.96%	94.76%
NOV	94.68%	95.95%	92.95%	93.45%	93.60%	96.50%	92.64%	94.25%
DEC	94.97%	96.37%	94.96%	92.46%	92.24%	95.36%	93.02%	94.20%
Average	95.50%	95.92%	95.10%	93.71%	92.75%	96.26%	92.17%	94.49%

17 Ventura County Emergency Medical Services Agency
Ambulance Service Areas



Ventura County Base and Receiving Hospitals



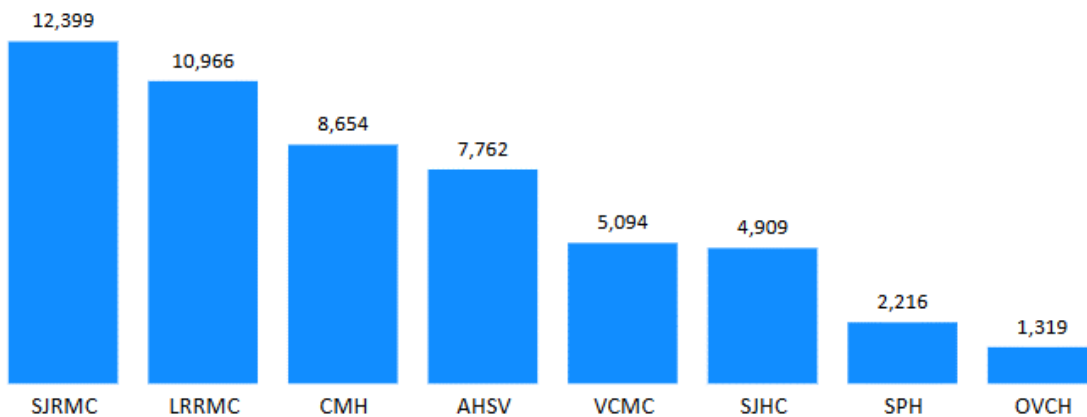
There are eight acute care hospitals in Ventura County, all of whom have emergency departments and receive ambulances with patients involved in prehospital incidents. Four of these hospitals are designated as Base Hospitals, providing oversight and direction to the county’s prehospital providers.

Hospitals who provide specialty care services are recognized by EMS policy, and patients who triage into specialty criteria are preferentially directed to the closest, most appropriate hospital for care. A patient who arrives at a hospital by private vehicle

may be rapidly assessed, and if any specialty criteria is met, an ambulance may be summoned immediately to transfer the patient to a specialty hospital. Ventura County boasts one of the best systems in the nation for rapid assessment and re-triage to specialty care.

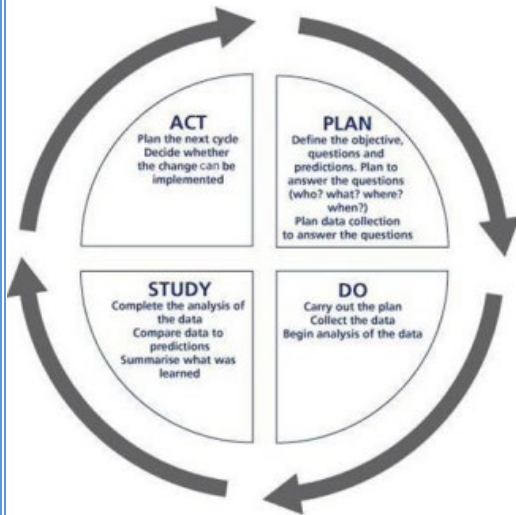
911 System Incidents Resulting in Patient Transport

Visualization reflects the number of 911 EMS incidents which resulted in one or more patient(s) being transported to each respective facility. Interfacility transfers, incidents which did not result in one or more patient transports, and incidents where the only resulting patient transports were to an out of county facility, are excluded.



HOSPITAL CAPABILITIES	Receiving Hospital	Base Hospital	Level II Trauma Center	Acute Stroke Center	Thrombectomy Capable Acute Stroke Center	STEMI Receiving Center	Labor & Delivery
CMH	X			X		X	X
LRRMC	X	X	X	X	X	X	X
OVCH	Standby						
SJHC	X			X			
SPH	Standby						X
AHSV	X	X		X		X	
SJRM	X	X		X	X	X	X
VCMC	X	X	X	X			X

QUALITY IMPROVEMENT PROGRAM

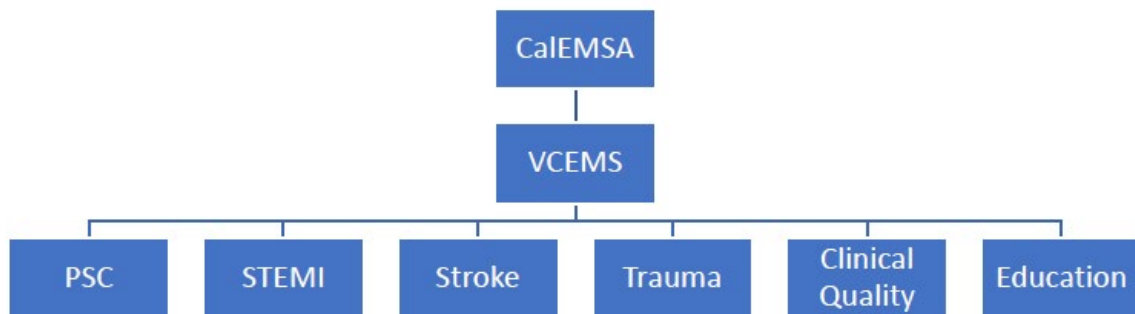


VCEMS Quality Improvement Program Purpose: The Ventura County EMS Quality Improvement Plan is intended to be an inclusive, multidisciplinary document that focuses on identification of system-wide opportunities for improvement. Continuous Quality Improvement (CQI) refers to methods of data evaluation that consider factors such as structure, process, and outcome. Improvement efforts focus on identification of the root causes of problems, interventions to reduce or eliminate these causes, and the development of steps to correct inadequate or faulty processes. The focus of the CQI Program is not disciplinary in nature, but rather to use the analysis of high-quality data for ongoing educational efforts.

Ventura County QI Committees: Specific specialties within the Ventura County EMS System have their own focused QI Committees to address quality improvement activities that are unique to their functions. These committees include the STEMI Committee, the Stroke Committee and the Trauma Committee which consists of the Trauma Operational Review Committee (TORC) and the Trauma Audit Committee (TAC). Each of these committees is comprised of stakeholders with responsibility for and expertise in the specialty area. In addition, prehospital members of the system wide CQI Committee attend these specialty care committee meetings to provide continuity and consistency.

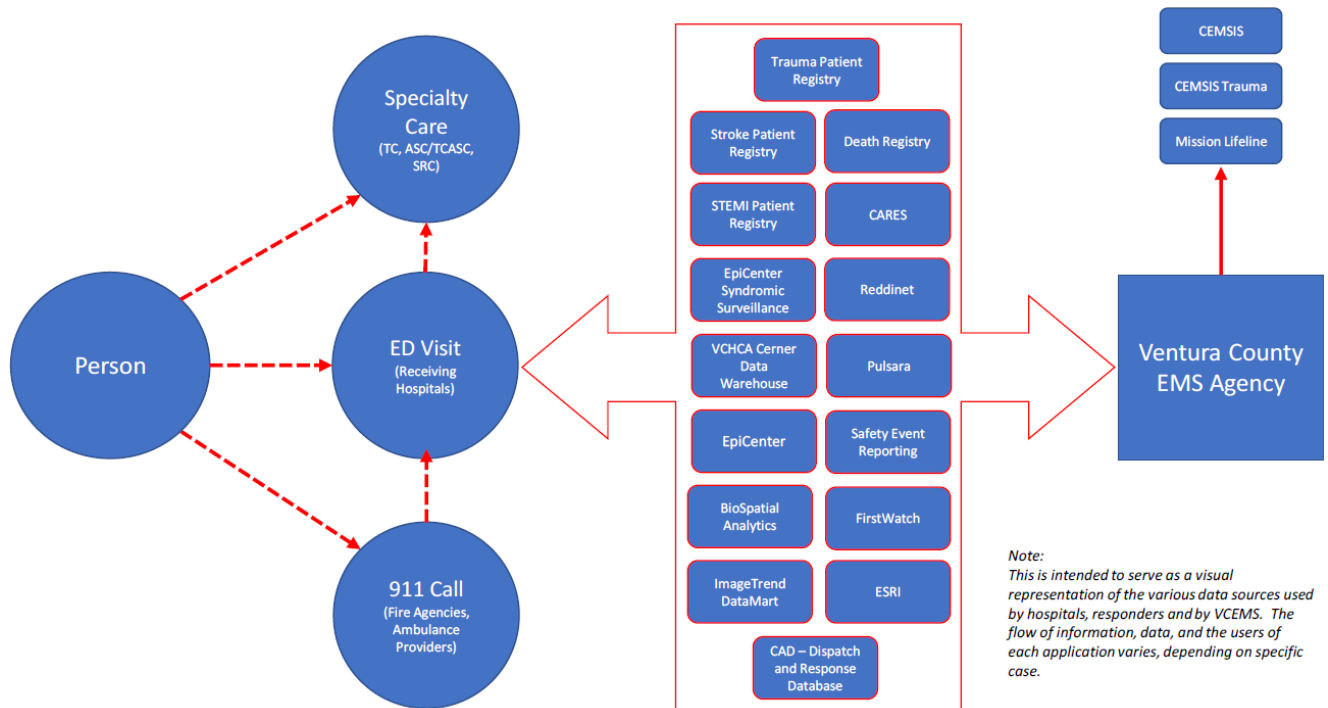
These committees provide leadership for the clinical oversight and quality management of pre-hospital patient care in the county. The committees also discuss current trends and research in EMS care that has an impact on pre-hospital care as well as to review information developed through the use of clinical indicators. Continuous quality improvement is achieved through assessment of clinical care, research, evidence-based implementation of initiatives, monitoring the outcomes of the changes implemented, and the ongoing study of EMS practice for continued progress. The committees strive to use a multidisciplinary approach for issue resolution and to promote county-wide standardization of the quality improvement process with an emphasis on education.

VC EMS System Quality Improvement Framework



QUALITY IMPROVEMENT PROGRAM

Data Sources: Prehospital patient care is documented through a single system-wide electronic patient care reporting system utilizing the ImageTrend Elite platform. This framework provides consistency in documentation and helps to ensure a certain degree of uniformity in patient care information that is collected, in accordance with the National EMS Information System (NEMSIS) and the California EMS Information System (CEMSIS). Additionally, specialty care centers are required to input data into data registries that are maintained at a system level.



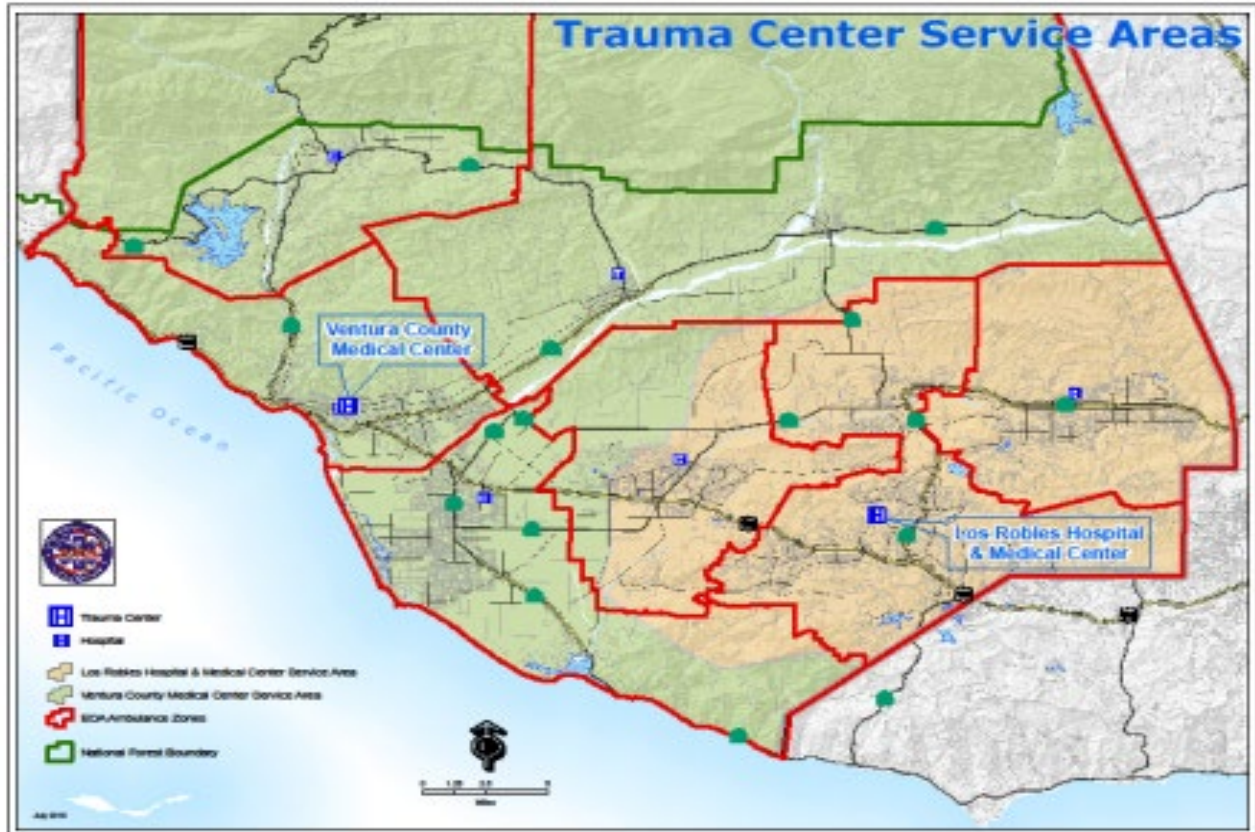
Safety Events

We continue to use an on-line reporting tool (using a link or QR code) to report any systemwide *Safety Event*. A *Safety Event* is defined as any circumstance, error, or action, which causes an actual or potential risk to the safety of provider(s), patient(s), or the community. These reports are collected and monitored for educational opportunities and assist with the quality improvement process. The *Just Culture* approach is utilized when conducting a *Safety Event* review. This approach evaluates the way systems are designed as well as provider behaviors that may have an impact on the occurrence of a *Safety Event*.

Learning Management System

We utilize the Prodigy Learning Management System to distribute training, education, and the VCEMS biannual EMS Updates.

VENTURA COUNTY TRAUMA SYSTEM



Ventura County's trauma system was initiated in July 2010, and since then, has provided specialty trauma care to thousands of patients with traumatic injuries. The County's system of prehospital triage, rapid transport, and emergency department care has resulted in lives saved and reduction in disabilities associated with trauma.

Through prehospital triage and rapid emergency department assessment, patients with life-or-limb threatening injuries are rapidly identified and triaged to the closest, most appropriate trauma center. Patients who self-refer to a non-trauma center hospital may be rapidly triaged by the emergency department physician and immediately transferred to a trauma center by 911 ambulance.

There are two Level II Trauma Centers in the County, both of whom are County-designated and accredited by the American College of Surgeons (ACS): Los Robles Regional Medical Center and Ventura County Medical Center. Trauma Center catchment areas are assigned according to drive time from an incident to the trauma center. With the population centers and division of trauma destinations, most trauma patients from a 911 incident arrive at a trauma center within fifteen minutes after an ambulance departs the scene.

VENTURA COUNTY TRAUMA SYSTEM

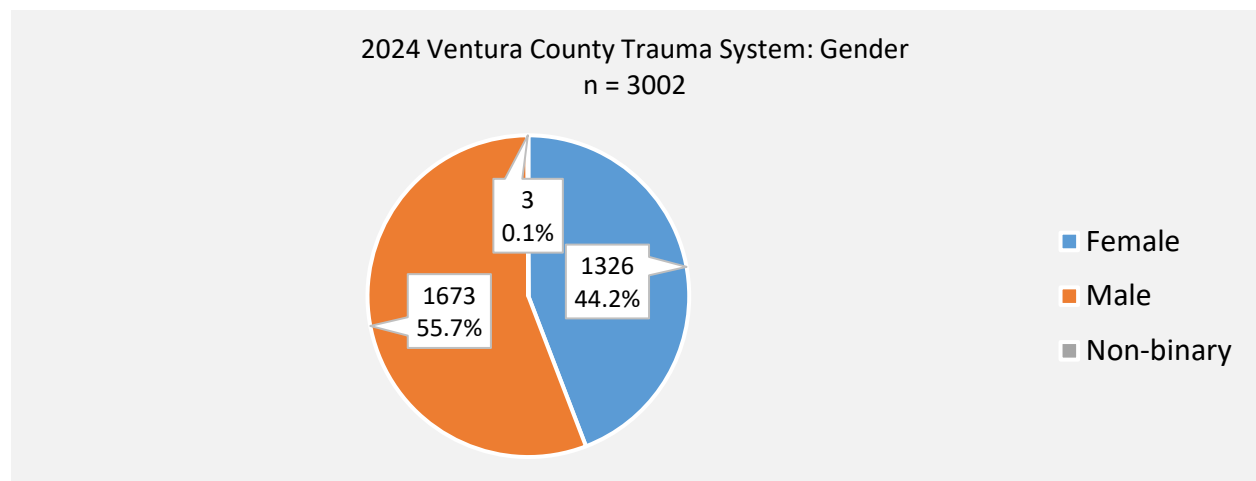
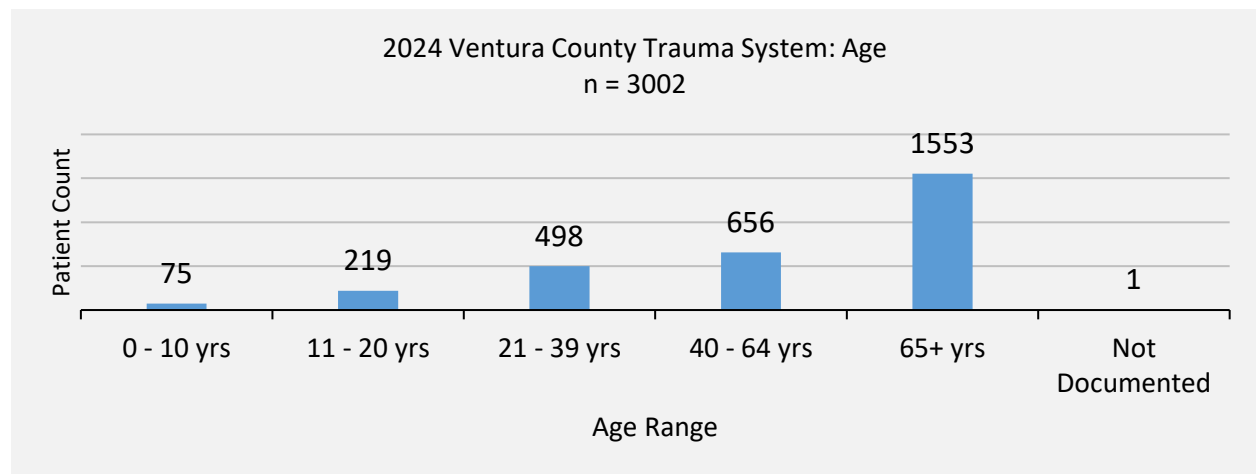
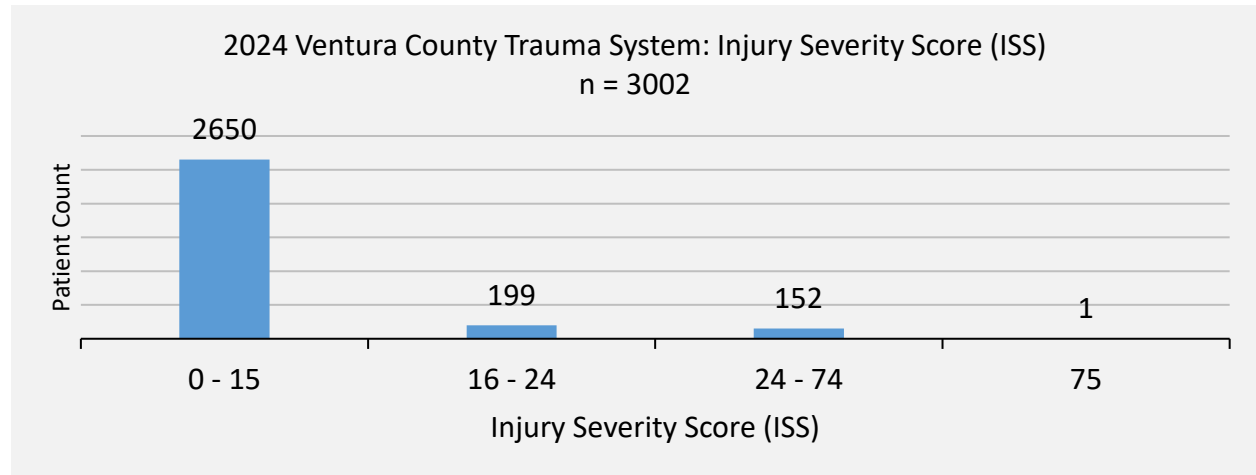
Trauma Catchment Base Hospital	-Trauma Center		
Destination	Step 1 TOTAL 450	Step 2 TOTAL 488	Step 3 TOTAL 586
VCMC Trauma Catchment Calls	262	339	363
Community Memorial Hospital	0	1	0
-Henry Mayo Newhall Memorial Hospital	1	4	9
-Los Robles Hospital and Medical Center	0	0	2
-Santa Barbara Cottage Hospital	0	2	2
Santa Paula Hospital	0	1	1
St. John's Regional Medical Center	3	1	6
St. John's Camarillo	1	0	0
-Ventura County Medical Center	257	330	342
Ojai Hospital	0	0	1
LRHMC Trauma Catchment Calls	188	154	225
Adventist Health Simi Valley	3	0	5
-Henry Mayo Newhall Memorial Hospital	0	0	0
-Los Robles Hospital and Medical Center	180	151	216
-Northridge Medical Center	0	1	3
-Providence Holy Cross	4	2	1
St. John's Hospital Camarillo	0	0	0
-Ventura County Medical Center	1	0	0

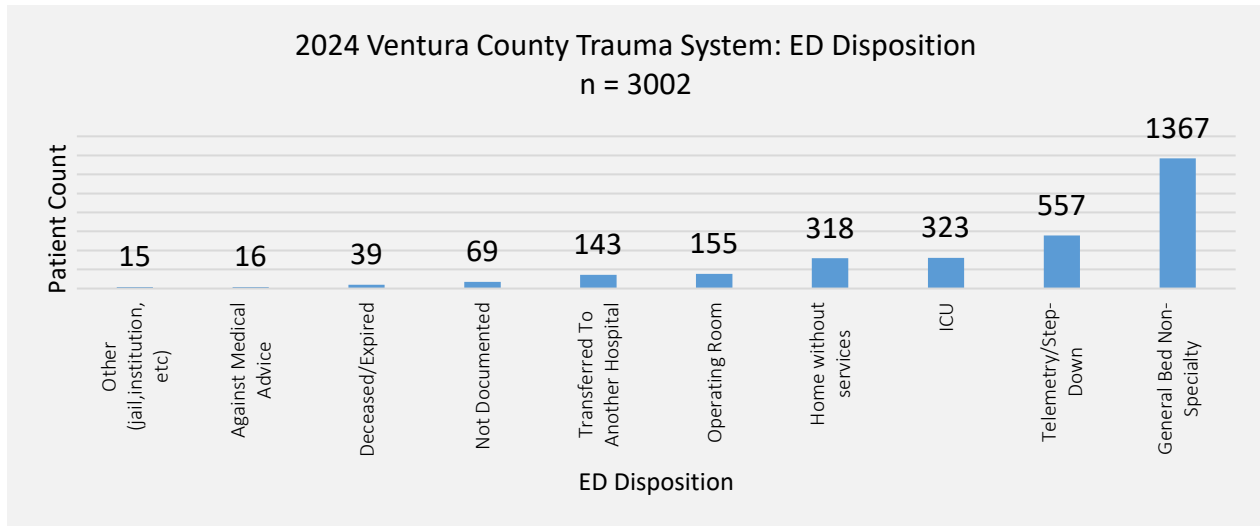
2024 Step 1-3 by Hospital	N
Adventist Health Simi Valley	8
Community Memorial Hospital	1
-Henry Mayo Newhall Memorial Hospital	14
-Los Robles Hospital and Medical Center	549
-Northridge Medical Center	4
Ojai Hospital	1
-Providence Holy Cross	7
-Santa Barbara Cottage Hospital	4
Santa Paula Hospital	2
St. John's Hospital Camarillo	1
St. John's Regional Medical Center	10
-Ventura County Medical Center	930
TOTAL	1531

2024 Step 4 by Hospital	N
Adventist Health Simi Valley	753
Community Memorial Hospital	674
-Henry Mayo Newhall Memorial Hospital	13
-Los Robles Hospital and Medical Center	1258
-Northridge Medical Center	2
-Providence Holy Cross	1
-Santa Barbara Cottage Hospital	0
Kaiser WH	1
LAC USC Medical Center	0
Ojai Valley Hospital	192
Santa Paula Hospital	115
St. John's Hospital Camarillo	570
St. John's Regional Medical Center	907
West Hills Hospital	0
-Ventura County Medical Center	767
TOTAL	5,253

VENTURA COUNTY TRAUMA SYSTEM

The **Injury Severity Score (ISS)** is an established medical score to assess trauma severity. It correlates with mortality, morbidity, and hospitalization time after trauma, and is used to define the term “major trauma.” A major trauma is an ISS of greater than or equal to 16.





Trauma Committees

The Tri-County Trauma Audit Committee (TAC) is a confidential, closed committee consisting of trauma surgeons, program managers and prehospital coordinators from trauma centers located in Ventura, Santa Barbara, and San Luis Obispo Counties. The committee provides a collaborative forum in which trauma cases that meet specific audit criteria are presented for peer review, bringing an important perspective to regional trauma care.

The Trauma Operational Review Committee (TORC) is a confidential, closed committee consisting of representatives from the local EMS agency, first responder and transport provider agencies, non-trauma hospitals and trauma centers in Ventura County. The committee provides a collaborative forum in which system issues surrounding trauma care may be brought for discussion and improvement, such as prehospital destination determinations and interfacility transfers for trauma care.

Fall Prevention Program (Human Services Agency: Area Agency on Aging) is a community-



based partnership consisting of healthcare professionals, emergency services, older-adult service providers and community advocates with a goal of reducing falls and their devastating consequences on older adults

in Ventura County. VCEMS gathers data on patients that have fallen or have the potential to fall through answering fall specific questions embedded in the Imagetrend Elite documentation system. EMS also leaves educational material about fall prevention with the patient. A Fall Prevention Symposium was held in-person on September 27, 2024 with approximately 400 attendees. The event included prevention presentations by local physicians, physical therapists, social workers, and other experts in elderly trauma prevention.

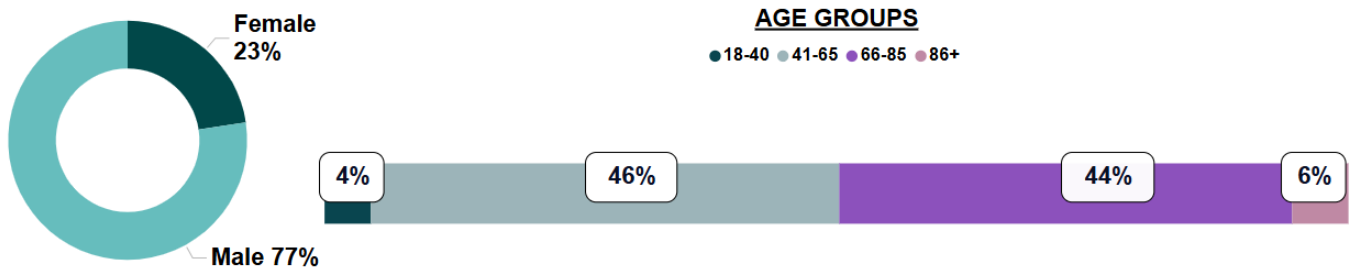
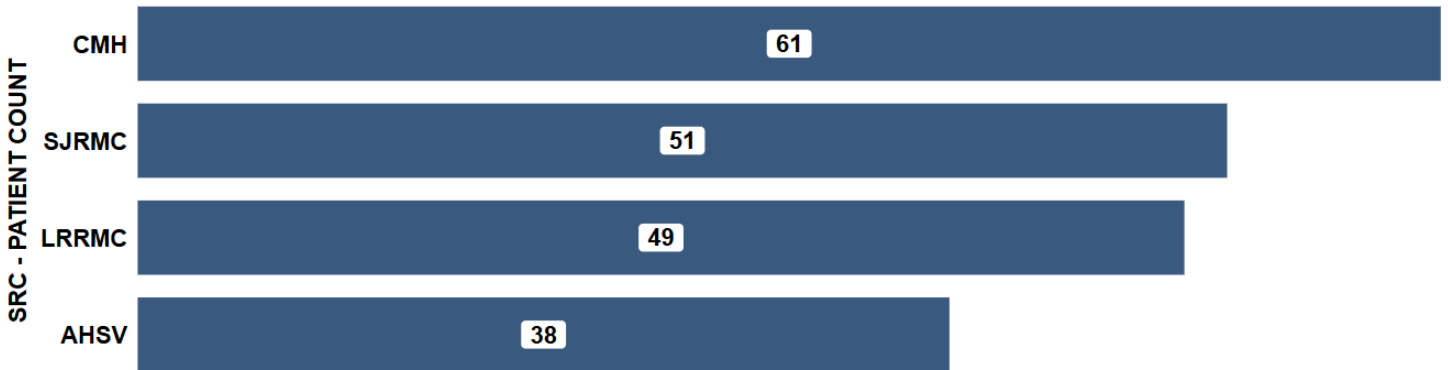
VCEMS STEMI SYSTEM



Patients suffering from an ST Elevation Myocardial Infarction (STEMI) have the best chance of survival when they receive rapid assessment and transport to a receiving hospital with specialized equipment and personnel to treat these deadly heart attacks. The Ventura County STEMI System began in 2007 and currently has four STEMI Receiving Centers (SRC). STEMI system performance is based on standards developed by the American College of Cardiology, the American Heart Association, and the California Department of Public Health. For 2024 patient care metrics, Ventura County provider agencies received AHA *Mission: Lifeline EMS* recognition which represents the 9th year in a row where Ventura County providers have received an award.

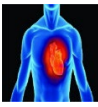


2024 PATIENT DATA



Does NOT include Cardiac Arrests

VCEMS STEMI SYSTEM



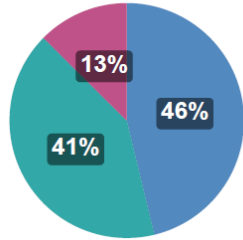
Patients arrive at the SRC by EMS, Walk-In, or by Transfer from a STEMI Referral Hospital (SRH). One of the key measures is early recognition that the patient is having a STEMI. This is accomplished by quickly performing a 12-Lead ECG.

TIME TO OBTAIN 1ST ECG

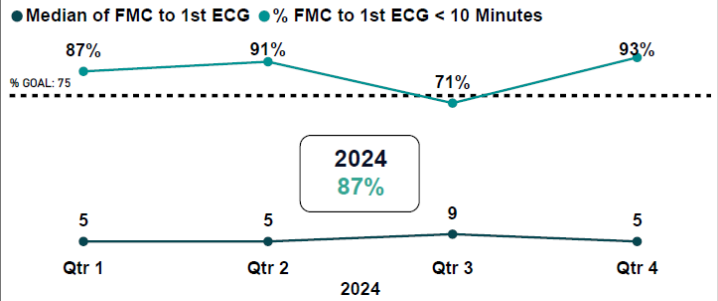
FMC = First Medical Contact

HOW PATIENTS ARRIVED AT THE SRC

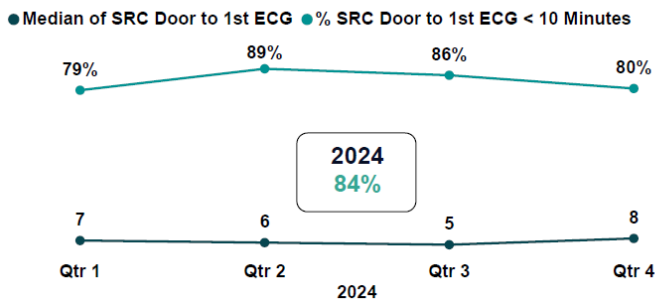
- EMS
- Walk-in
- Transfer



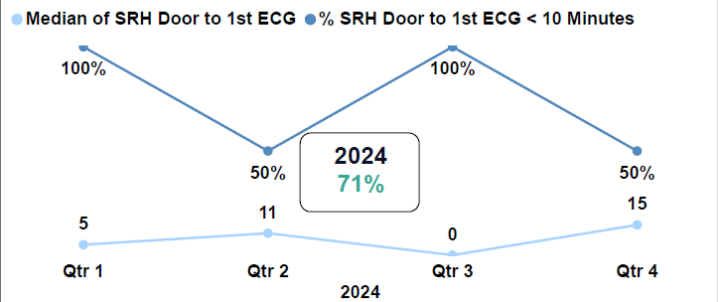
EMS



SRC WALK-IN



SRH WALK-IN

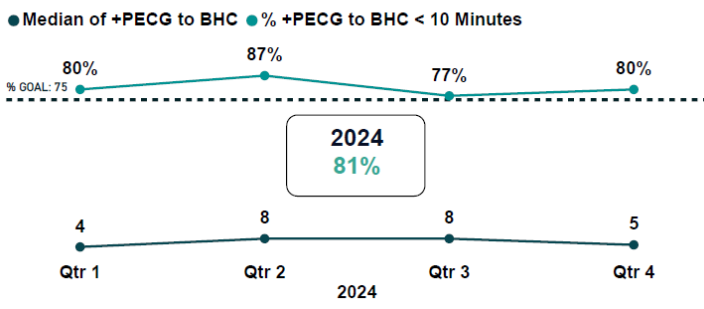


After EMS has identified that the patient is having a STEMI, another key component to the STEMI System is early SRC notification. This is accomplished through a phone call referred to as a Base Hospital Contact. The early notification allows the specialized cardiac team at the SRC to prepare the cardiac catheterization lab prior to patient arrival.

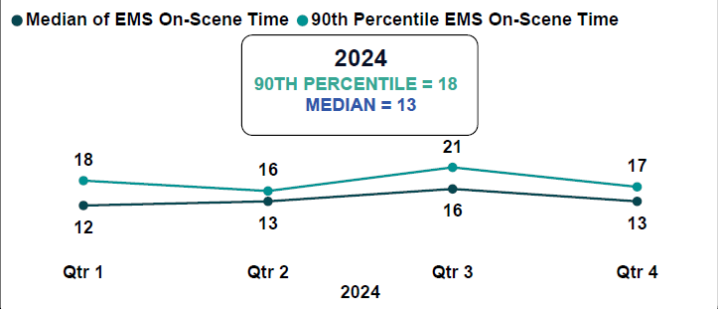
EMS TIMES

+PECG = PREHOSPITAL ECG
BHC = BASE HOSPITAL CONTACT

+PECG TO BHC



ON-SCENE TIME



When the patient is a Walk-In to an SRH, the patient requires transfer to the SRC. The transfer process goes through the 911 system in order to have the closest ambulance respond and transfer the patient expeditiously to the SRC.

TRANSFER TIMES

DIDO = DOOR-IN TO DOOR-OUT

2024 DIDO in 30 Minutes
43%

2024 DIDO in 45 Minutes
74%

MEDIAN OF DIDO



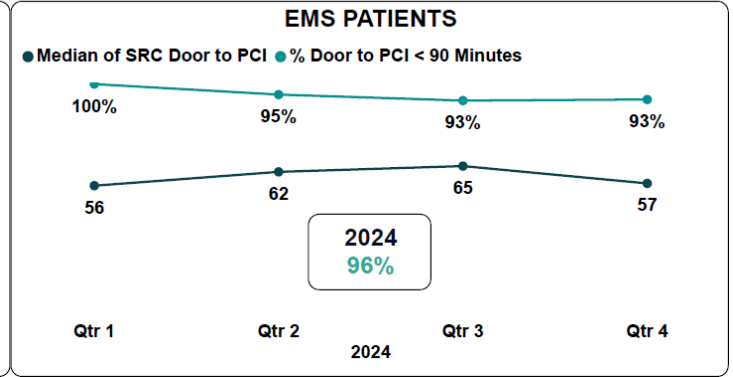
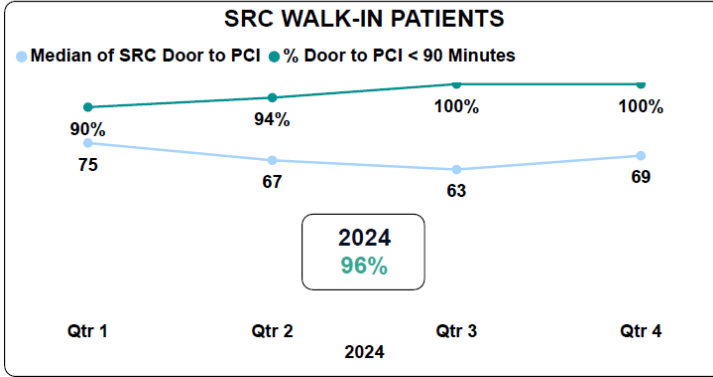
VCEMS STEMI SYSTEM



Once a STEMI is recognized, the goal is for the patient to receive timely Percutaneous Cardiac Intervention (PCI). PCI is a procedure that helps to restore blood flow to the heart. It is performed in a specialized catheterization lab (cath lab) located at the SRC.

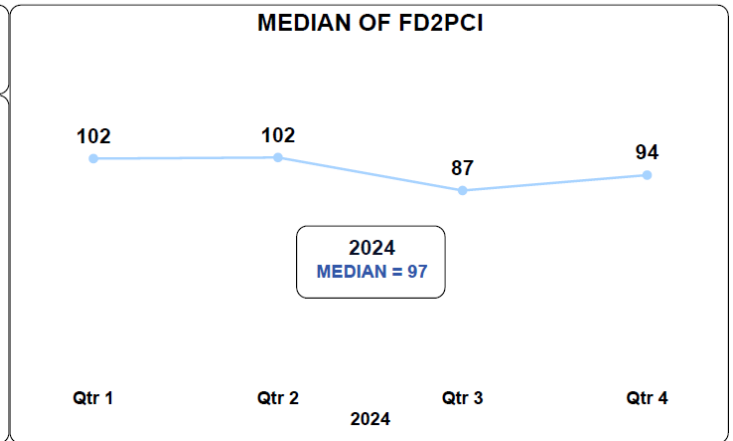
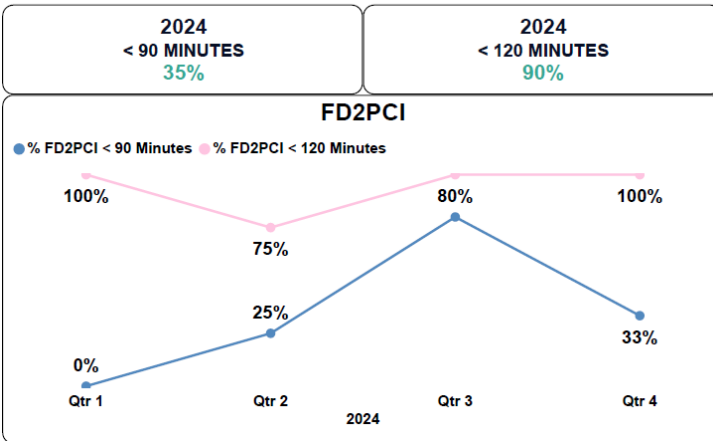
PCI DATA

PCI = PERCUTANEOUS CARDIAC INTERVENTION



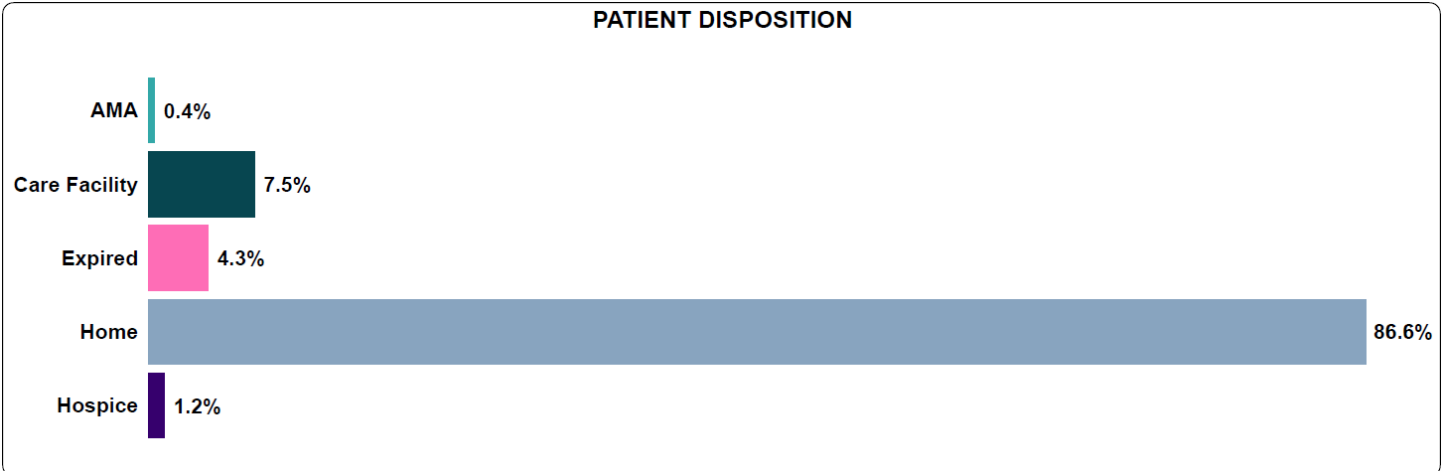
TRANSFERRED SRH WALK-IN PATIENTS

FD2PCI = FIRST DOOR TO PCI



The ultimate STEMI System goal is that our patients return home after their care.

PATIENT DISPOSITION



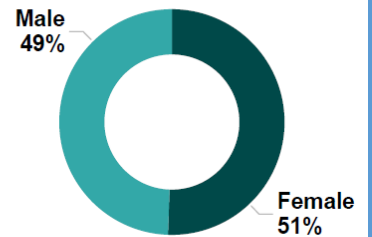
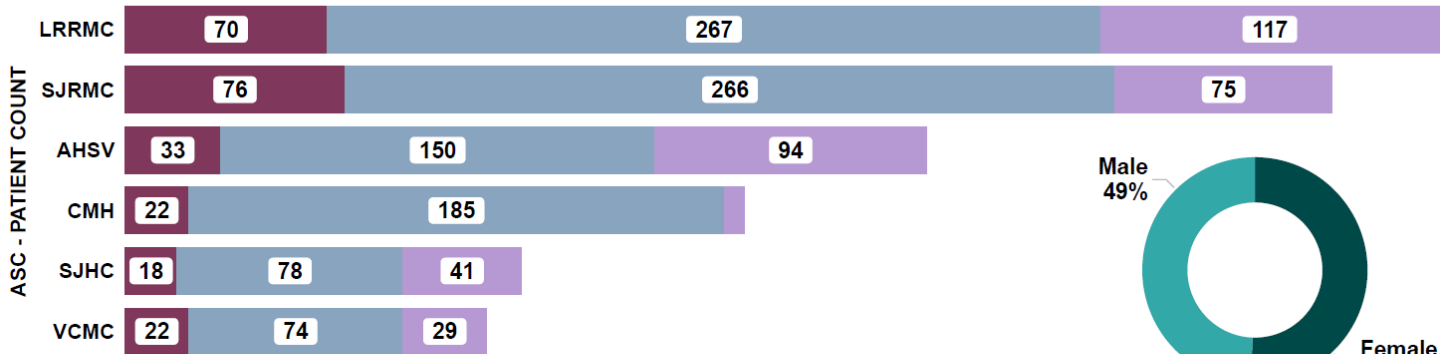
VCEMS STROKE SYSTEM



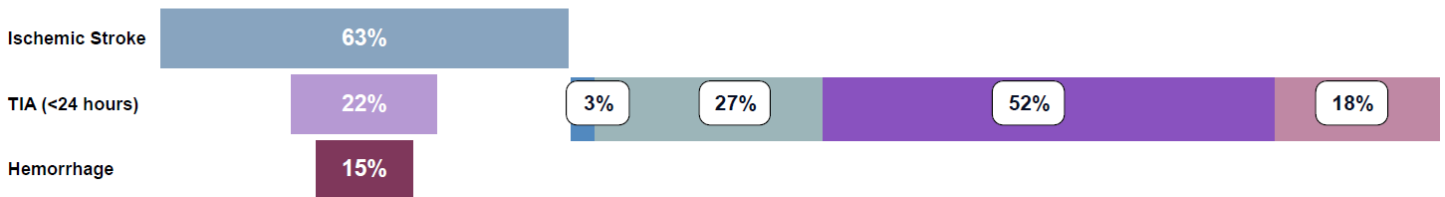
The Ventura County Stroke System is comprised of both pre-hospital providers (Paramedics and EMTs) and Acute Stroke Centers (ASC) who specialize in the treatment of strokes. Including one Comprehensive Stroke Center (CSC) and 2 Thrombectomy Capable Acute Stroke Centers (TCASC). Stroke is a leading cause of serious long-term disability and a leading cause of death for Americans.

2024 PATIENT DATA

● Hemorrhage ● Ischemic Stroke ● TIA (<24 hours)

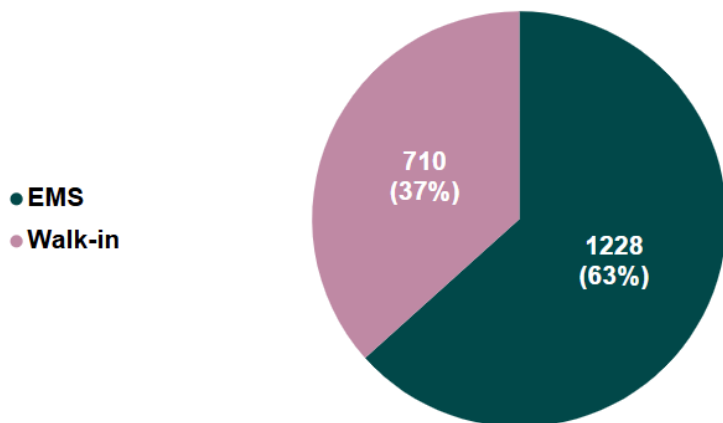


% BREAKDOWN OF TYPE

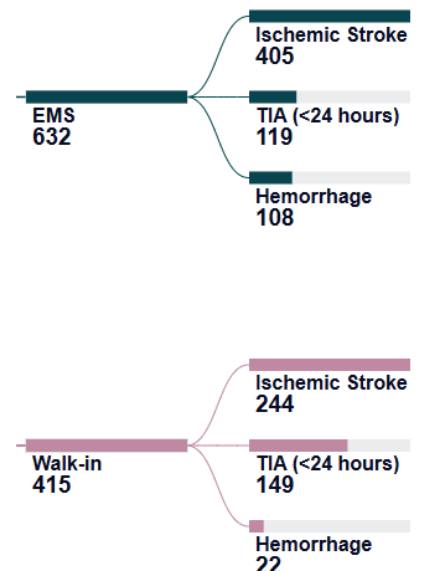


The primary objective of the stroke system is to coordinate timely care of patients who have a stroke. Patients are categorized as “Stroke Alerts” or “LVO Alerts” based on results from 2 prehospital screening scales: The Cincinnati Prehospital Stroke Scale and The Ventura LVO Score (VES). When one of these Alerts is identified in the field, EMS provides early notification to the hospital which allows time to mobilize needed resources prior to the patient’s arrival.

HOW STROKE ALERTS ARRIVED AT THE ASC OR TCASC



STROKE ALERTS DIAGNOSED WITH STROKE

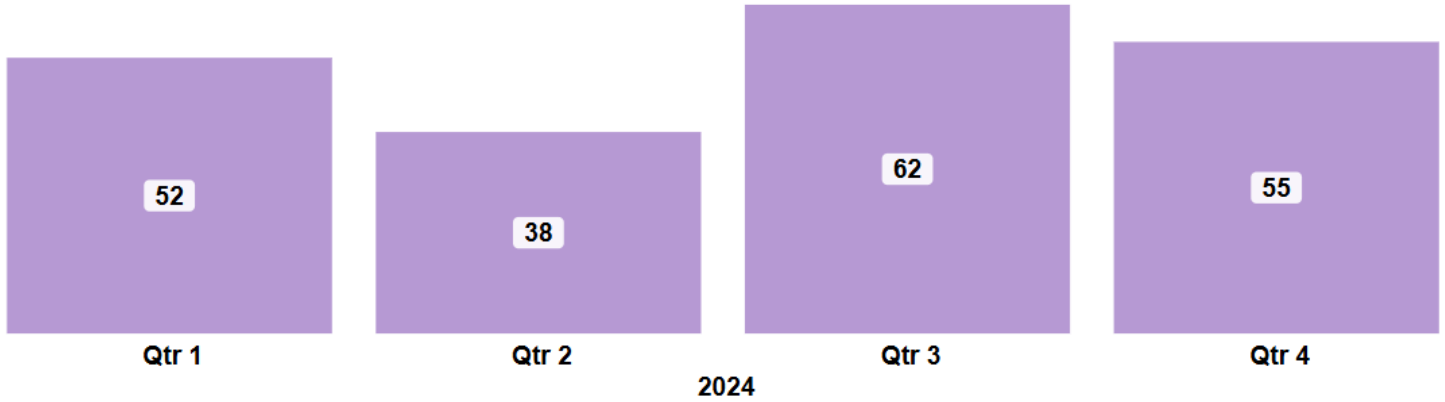


VCEMS STROKE SYSTEM



Since 2017 Ventura County has been using the VES to help identify patients who may have a Large Vessel Occlusion (LVO) and direct them to one of the TCASCs for possible intervention.

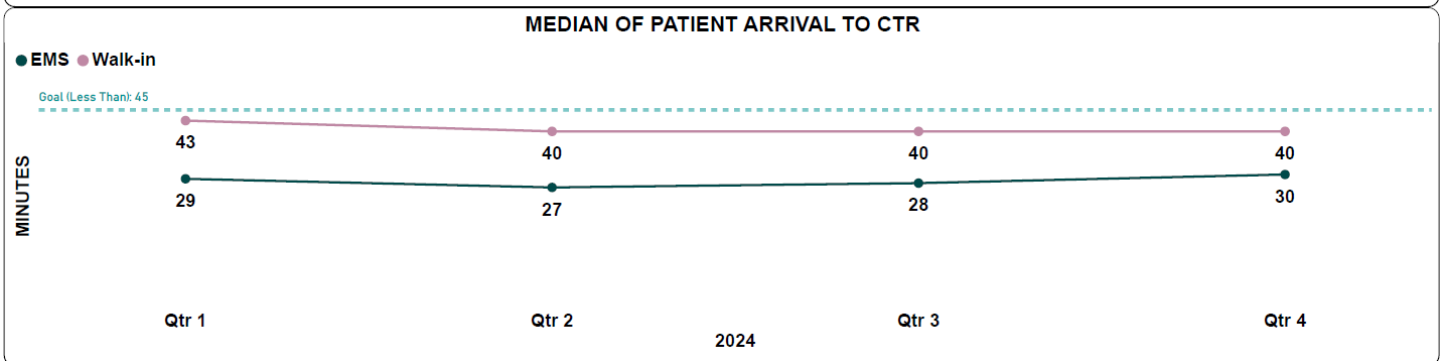
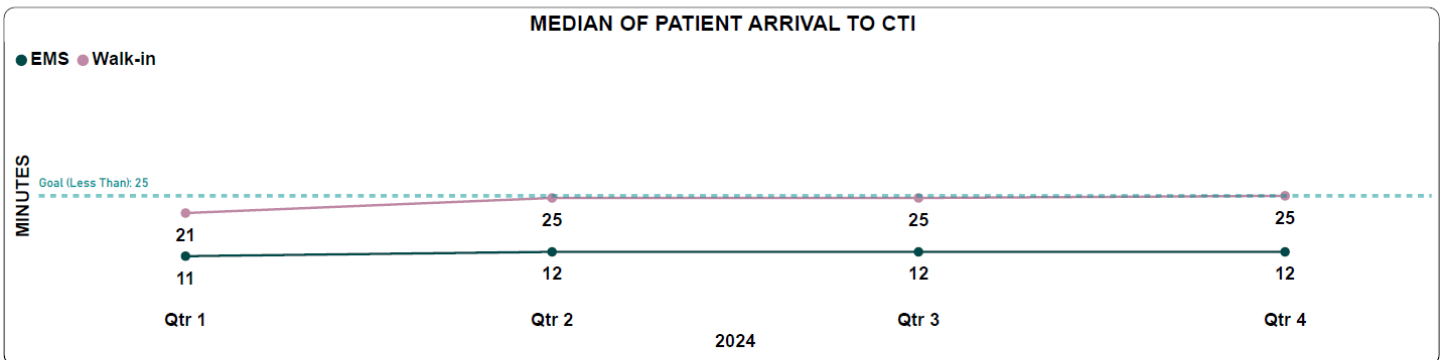
NUMBER OF LVO ALERT PATIENTS TRANSPORTED DIRECTLY TO A TCASC



With these specialized alerts, patients are often brought directly to the Computed Tomography (CT) Scanner when they arrive. CT Scans help to aid in the identification of patients eligible for time sensitive treatments/interventions. Two important time intervals for CT Scan metrics are the CT Initiated (CTI) and the CT Reported (CTR) times. CTI is the time the patient has their CT Scan begin. CTR is the time when the results of the CT Scan are read by the physician.

CT TIMES

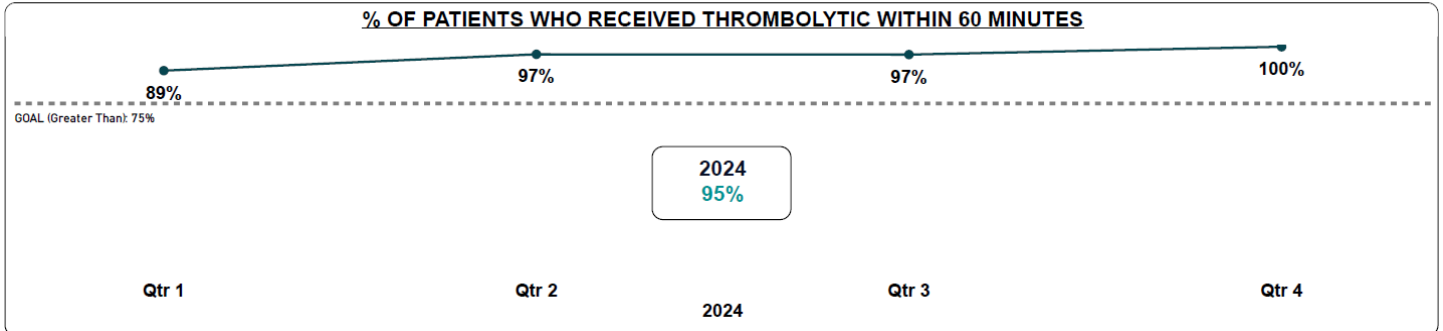
CTI = CT INITIATED
CTR = CT REPORTED





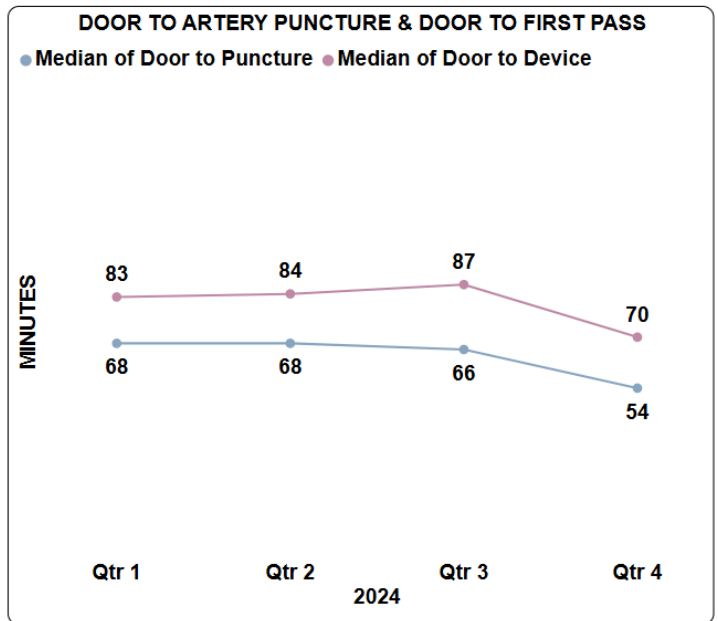
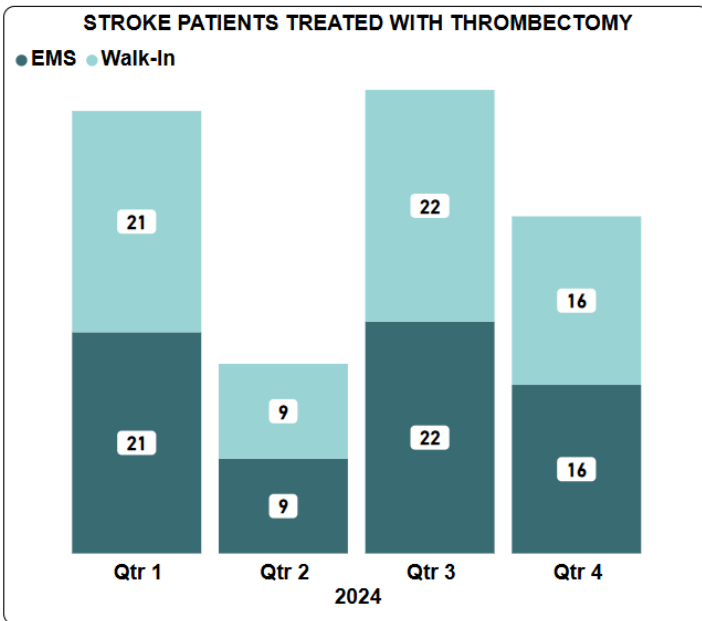
Treatment for strokes is time sensitive. If identified within specific time parameters, there is potential to treat with medication administration (thrombolytic) and/or mechanical thrombectomy (clot removal for LVOs). Early treatment can minimize damage to the brain and help reduce disability.

STROKE TREATMENT - THROMBOLYTIC



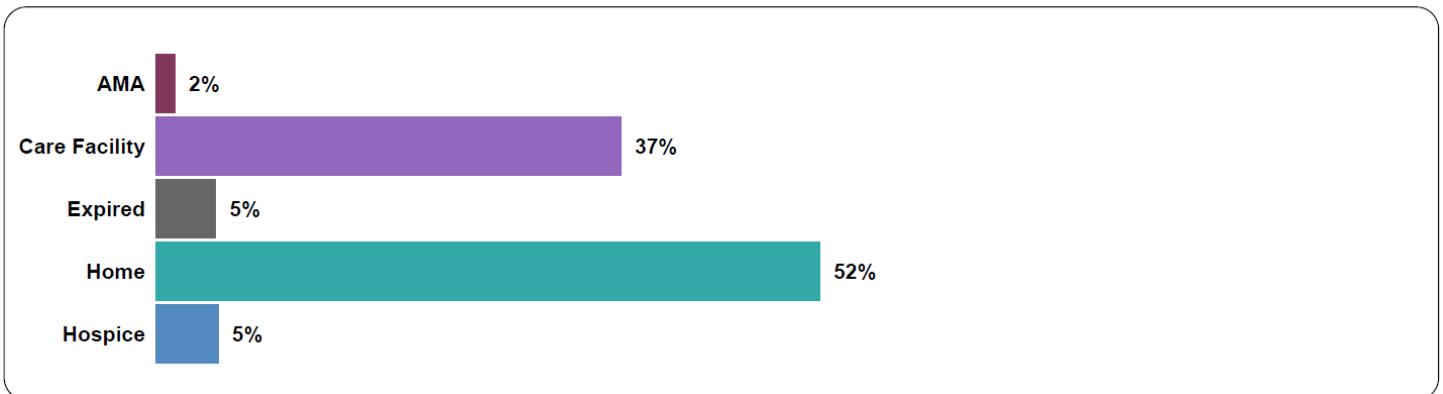
STROKE TREATMENT - THROMBECTOMY

Puncture = Puncture of the artery for treatment
First Pass = Deployment of clot retrieval device



Where patients are discharged from the hospital is often based on their ongoing needs for rehabilitation and recovery. Most patients can return home after their stroke.

DISPOSITION



Cardiac Arrest Management (CAM)



Cardiac Arrest Management (CAM) represents seventeen years of hard work from all our EMS Stakeholders. We have tracked our cardiac arrest statistics since 2007 and joined the national Cardiac Arrest Registry to Enhance Survival (CARES) Program in 2008, making a commitment to improve our survival rates. By using the “pit crew” technique combined with the latest resuscitation science, a prescribed set of actions were developed. Each first responder is trained with a job to do and understands their position’s responsibility when arriving on scene of a patient who is in cardiac arrest. For **all presumed cardiac etiology**, we saw an increase to 10% in 2024 from 6.9% in 2023, for patients discharged from the hospital with a cerebral perfusion category (CPC) of a 1 or 2. CPC 1 or 2 means they left the hospital with little to no brain/neurological deficit after surviving a cardiac arrest. For **Utstein** patients, we saw an increase to 35.8% in 2024 from 26.2% in 2023, for patients discharged from the hospital that survived their cardiac arrest regardless of their CPC status. **Utstein** patients are a category of cardiac arrest patients who had a witnessed cardiac arrest and were found in a shockable rhythm. We continue to utilize the “Pulse Point” application for our cardiac arrest response, which alerts bystanders when there is a cardiac arrest in their vicinity.

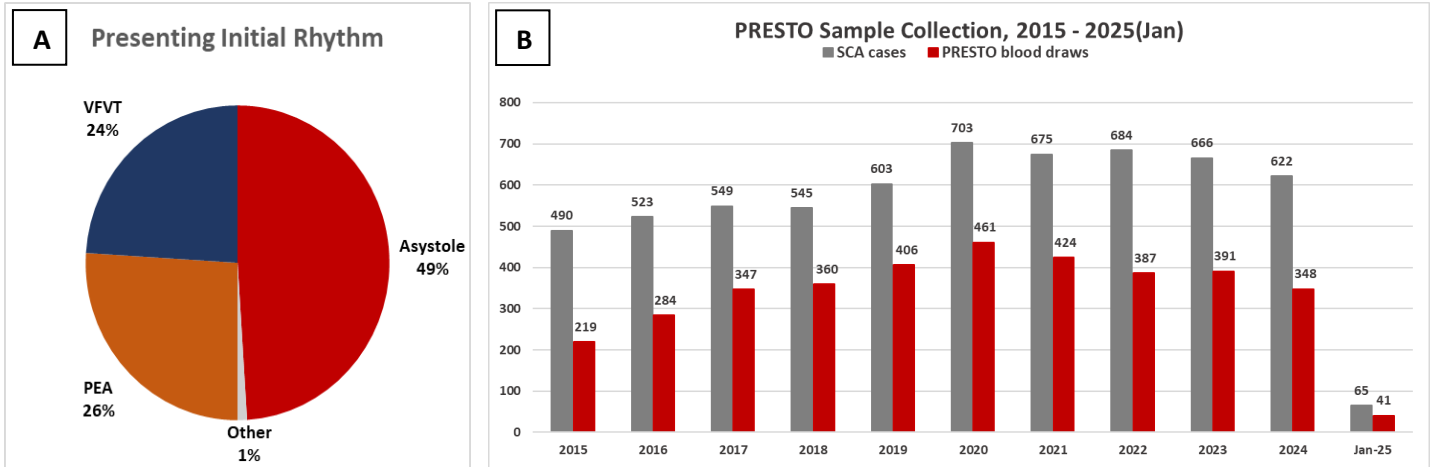
Performance Data

ALL PRESUMED CARDIAC	2021	2022	2023	2024
Presumed Cardiac Etiology	462	431	478	488
Bystander CPR Provided	53.3%	54.9%	54.7%	50.1%
Survival to Hospital Discharge	9.1%	13.0%	8.4%	11.5%
CARES National Benchmark for survival to Hospital Discharge	8.1%	8.5%	9.2%	9.5%
Survival to Hospital Discharge for CPC 1 or 2	8.4%	10.7%	6.9%	10%
CARES National Benchmark for survival to Hospital Discharge CPC 1 or 2	6.4%	6.8%	7.4%	7.5%
UTSTEIN				
Bystander Witnessed, Shockable Rhythm	72	67	61	67
% of presumed cardiac arrests that are Utstein cases	15.6%	15.5%	12.8%	13.7%
Bystander CPR Provided	79.2%	67.2%	78.7%	58.2%
Survival to Hospital Discharge	33.3%	43.3%	26.2%	35.8%
CARES National Benchmark for survival to Hospital Discharge	29.2%	30.9%	32.7%	29.4%

P.R.E.S.T.O. Study Update

The **PRE**diction of **S**udden death in **m**u**l**Ti-ethnic **c**Om**m**unities **S**tudy represents ten plus years of hard work from all our EMS Stakeholders. We have tracked all Ventura County residents who suffered cardiac arrest and had resuscitation attempted since Feb 1, 2015. For each such case a blood sample is drawn by paramedics as specified in the protocol. This serves as the basis for the research conducted by the PRESTO group to improve the prediction of cardiac arrest by analysis of pre-hospital records, lifetime clinical history, and blood samples.

Performance Data for Feb 1, 2015-Jan 31, 2025



Bystander CPR: 49%
Response time: 6.5 ± 2.9 min
Response time > 5 min: 70%
Sustained ROSC: 36%
STHD: 12%

Figure A summarizes main findings of resuscitation outcomes since Feb 2015 among Ventura County residents who suffered a cardiac arrest related to heart disease. Overall, these results are significantly better than the national average. **Figure B** shows yearly trends in sample collection for the PRESTO study among overall cardiac arrest cases over the past ten years. There is a steady annual increase in rates of sample collection from

2015 until 2020, reflecting the outstanding efforts of EMS partners in supporting our study. However, the collection rates declined during the COVID-19 pandemic and have not recovered. We remain hopeful to see an increase in the collection rates.

New PRESTO Research Findings have been published: At least 19 peer-reviewed scientific papers were published from the PRESTO Study. The highest impact paper was published in the Lancet Digital Health and reported novel findings regarding sex-specific warning symptoms that predict imminent cardiac arrest. Click this link for press release and picture of Ventura EMS leadership ([PRESTO PRESS RELEASE](#)) which was disseminated by >200 news outlets worldwide, including BBC radio news. Other scientific papers published novel findings regarding 1) Determinants of survival in sudden cardiac arrest 2) Cardiac arrest during the COVID pandemic 3) sudden cardiac arrest during sports activity in the elderly 4) unique biomarkers and ECG-based artificial intelligence that are specific for predicting cardiac arrest 5) mechanisms and management of pulseless electrical activity and ventricular fibrillation. Several other papers are currently in progress, under review or awaiting publication.

Ventura County Health Care Coalition



The Ventura County Health Care Coalition (VCHCC) experienced a year of dynamic engagement and steadfast commitment in 2024. We extend our sincere gratitude to Justis Hamilton who helped provide stability following the departure of Janelle Hahn. She continues vital work within the county.

This year saw the VCHCC's officers continue to foster exceptional collaboration. Our membership has not only retained its core but has also seen healthy growth. Thank you to Chair Kristen Shorts (Adventist Health Simi Valley), Co-Secretary Cody Cassiano (St. John's Hospital), Co-Secretary Susan Noone (Vitalant), Members-At-Large Greg Barnes (Los Robles Hospital) and Carlo Oleta (Maywood Acres)

Revitalized Engagement: Meetings & Training

Our April 2024 VCHCC Meeting was hosted at *St. John's Regional Medical Center*. This meeting featured an informative session with *guest speaker Matt Wilkins from Tri-Counties Regional Center (TCRC)*, who presented on **DAFN (Disabilities and Access and Functional Needs) Population Considerations**. This crucial topic deepened our understanding of the needs of vulnerable populations during emergencies and reinforced our commitment to inclusive preparedness. The October 2024 VCHCC Meeting at *Clinicas Del Camino Real in Moorpark* further underscored our commitment to practical preparedness, featuring an insightful **Emergency Plans and Preparedness Panel** that shared best practices and lessons learned.



Medical Response & Surge Exercise (MRSE)

The *Medical Response & Surge Exercise (MRSE)* conducted in May 2024 provided a crucial opportunity to test and refine our collective response capabilities for possible *chemically exposed surge incidents*. Building on previous exercises, this MRSE allowed our members to engage in realistic scenarios, identify areas for improvement, and strengthen inter-agency communication

Ventura County Health Care Coalition

and coordination. **Surging over 200+ patients countywide**, the exercise focused on enhancing our ability to manage a significant medical event, ensuring that our healthcare system can effectively respond to large-scale emergencies.

Hazard and Vulnerability Assessment (HVA)

The annual Hazard and Vulnerability Assessment (HVA) allowed the VCHCC to evaluate potential threats to Ventura County. This year's assessment reinforced our focus on a broad spectrum of hazards. The *Top 5 Risks identified in the 2024 HVA* were: **Earthquake, Wildfire, Pandemic/Epidemic, Cyber Attack, and Electrical Failure**

Real-World Activations and Federal Partnership

2024 was not without its real-world tests, demonstrating the VCHCC's readiness and responsiveness. *In February 2024, the coalition actively participated in the county's response to significant storms and flooding, coupled with high waves, which impacted coastal and low-lying areas.* Later in the year, *in November 2024, the VCHCC was again activated in response to the Mountain Fire, a significant wildfire event.* These real-world activations underscore the critical role the VCHCC plays in safeguarding community health during crises.



A significant highlight of the year was the September 2024 visit of federal partner, **Captain Kevin Sheehan from ASPR (Administration for Strategic Preparedness and Response)**. This visit provided an invaluable opportunity for direct engagement with federal leadership, allowing us to share our local challenges and successes, and to gain insights into national preparedness strategies and resources.

Looking Ahead: 2025 and Beyond

As we look ahead to 2025, the VCHCC is poised for continued innovation and impact. Our objectives include adding significant updates to our website, enhancing our organizational structure, developing new emergency plans, and implementing advanced communication tools. We are committed to leveraging technology and fostering deep collaboration across all sectors. By continuously adapting, sharing knowledge, and anticipating emerging threats, the VCHCC remains steadfast in its commitment to safeguarding the health and well-being of Ventura County.



Highway 150 Road Closure



Severe winter storms in February of 2024 caused a catastrophic landslide closing Highway 150 above Santa Paula. The Upper Ojai community was isolated resulting in significantly increased paramedic response times. Gold Coast Ambulance stepped in to provide 24/7 paramedic ambulance service to the Upper Ojai area during the extended road closure. Special thanks to GCA for quickly coordinating the extra coverage and to the Upper Ojai Search and Rescue Team for providing temporary quarters for the ambulance personnel.

Halloween Fun 2024!!



Annual Ventura County Public Health 2024 Halloween event.
The EMS Agency team won the "Best Group Costume" award.

Ventura County Emergency Medical Services Agency

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