

Ventura County Public Health Emergency Medical Services Agency

2015 ANNUAL REPORT



VENTURA COUNTY
HEALTH CARE AGENCY



VENTURA COUNTY
PUBLIC HEALTH

VENTURA COUNTY EMERGENCY MEDICAL SERVICES AGENCY

A Division of Ventura County Public Health Department

A Department of Ventura County Health Care Agency

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Administration Message

The Ventura County EMS Agency is pleased to provide our 2015 Annual System Report, reviewing the operations and performance of the Ventura County EMS Agency and the EMS System.

2015 brought a number of new challenges and opportunities, including finalizing the relocation of the EMS Agency Administration into our new, larger facility, the January 2015 kickoff of the new Ventura County Health Care Coalition, the February 2015 Metrolink train derailment and multi-casualty incident, and countywide preparedness efforts in response to the Ebola threat, measles outbreak and “El Nino” severe weather events. Additionally, EMS implemented the PRESTO cardiac arrest survival study program, continued collaboration with the Fall Prevention Program, conducted the bi-annual ambulance contract review with the EMS Advisory Committee and continued participation in the air-Q® advanced airway trial study and two community paramedic pilot programs. As always, the EMS System expanded along with the needs of the community and we are confident in our system’s ability to continue to adapt and stand firm.

Maintaining our current capabilities and striving toward future success depends on the outstanding support we receive from the local system stakeholders and the leadership of the Ventura County Board of Supervisors, County Executive Office, Ventura County Health Care Agency Administration and the Public Health Department Administration.

Our goal is to maintain the highest quality care for those in need of emergency medical services in the county. Through our exceptionally coordinated network of public and private first responders, paramedics, EMT’s, nurses, doctors and other emergency professionals, who work together with a strong commitment to excellence in all aspects of patient care, we will continue to achieve this goal.

In 2016, we are welcoming Dr. Daniel Shepherd as our new EMS Medical Director. Dr. Salvucci has scaled back his time in Ventura County, but will continue as our Assistant EMS Medical Director, providing oversight on various projects and helping to mentor Dr. Shepherd. We are confident that 2016 will bring many challenges and opportunities to grow. With the collaboration of our partners, we look forward to another year of providing the best care, anywhere.



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 823,000. 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.

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 pre-hospital personnel excellence through training, certification, accreditation and continuing education program review.

In FY 15-16, Ventura County EMS Agency had an annual budget of \$4,337,203, 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. In FY 15-16, \$2,274,784 was dispersed from the Maddy Fund to settle the hospital and physician claims.

The EMS Agency is comprised of three divisions, Emergency Operations, Specialty Care Systems and Emergency Preparedness, and is staffed with 14 full time personnel, a half-time medical director and an assistant medical director. In addition to the medical directors, positions include EMS Administrator, Deputy Administrator, Trauma System Manager, Emergency Preparedness Manager, Specialty Systems Coordinator, Epidemiologist, two Program Administrators, three Community Services Coordinators, two Administrative Assistants and one Management Assistant.

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 2015 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.

County of Ventura Map

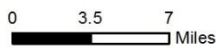


County of Ventura

Prepared by County of Ventura - IT Services Department - GIS Division
 State Plane Coordinate System California Zone V - NAD 27

This map was compiled from records and computations

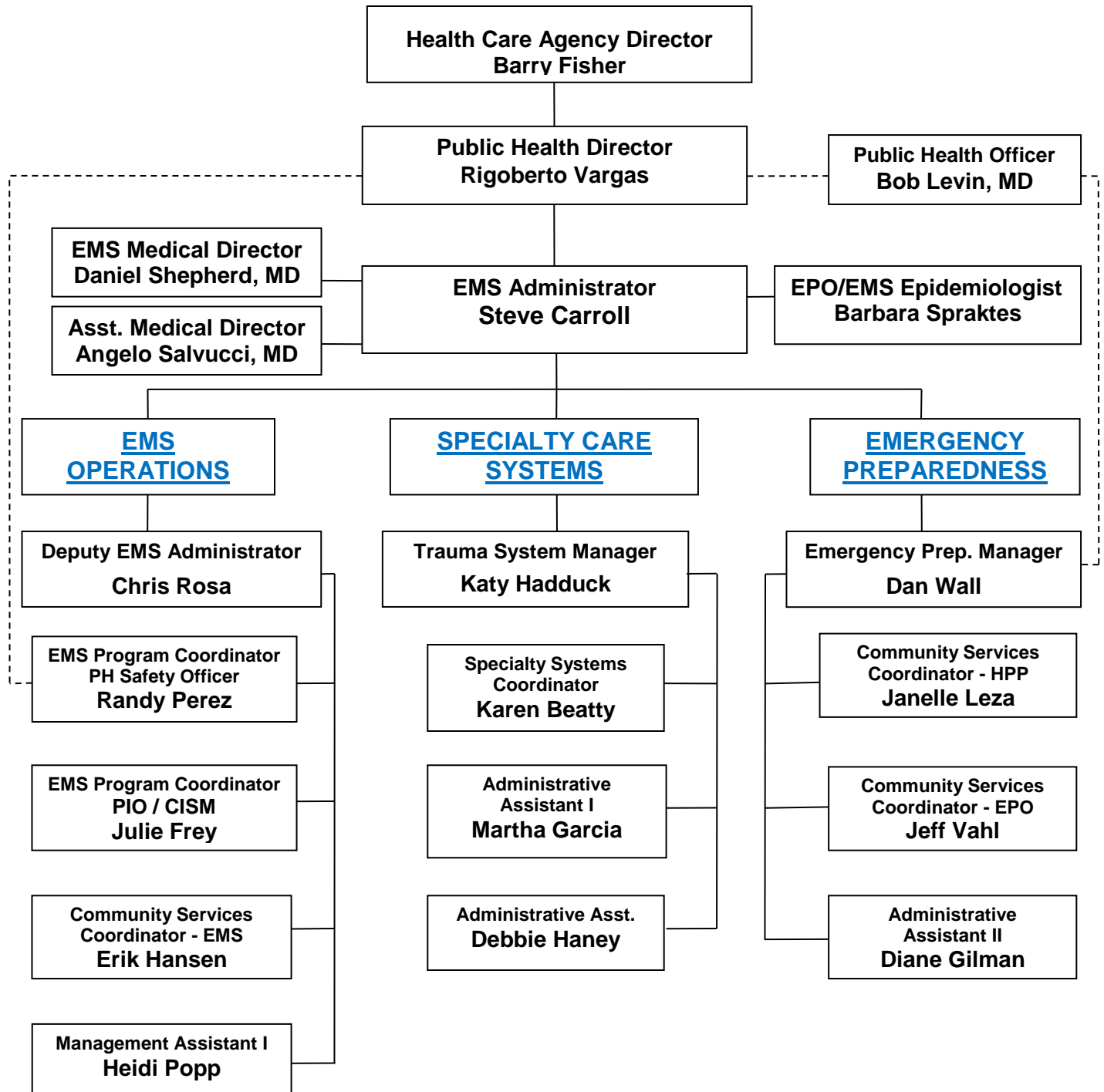
Published on: May 23, 2013



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WARNING: The information contained hereon was created by the Ventura County Geographic Information System (GIS), which is designed and operated solely for the convenience of the County and related contract entities. The County does not warrant the accuracy of this information, and no decision involving a risk of economic loss or physical injury should be made in reliance thereon.

Ventura County Emergency Medical Services Agency Organizational Chart 2016



EMS Agency Staff Responsibilities

Name	Title	Contact Info	Primary Responsibilities
Steve Carroll, Paramedic	EMS Administrator	Steve.carroll@ventura.org 805-981-5305	<ul style="list-style-type: none"> EMS System Delivery and Emergency Preparedness oversight Ambulance contract administration and compliance monitoring Certification, accreditation, authorization and discipline oversight Disaster Medical Health Operational Area Coordination Agency operations oversight and fiscal management
Daniel Shepherd, MD	EMS Medical Director	Daniel.shepherd@ventura.org 805-981-5304	<ul style="list-style-type: none"> EMS Medical direction and oversight, including development of local policies, procedures, protocols and treatment guidelines Medical direction and oversight of specialty care systems, QI program, system wide committees and various EMS projects
Angelo Salvucci, MD, FACEP	Assistant EMS Medical Director	Angelo.salvucci@ventura.org 805-981-5301	<ul style="list-style-type: none"> Medical direction and oversight, including maintaining various specialty care system programs and development and maintenance of local policies, procedures and protocols
Chris Rosa, MS, Paramedic	Deputy EMS Administrator	Chris.rosa@ventura.org 805-981-5308	<ul style="list-style-type: none"> Assist with oversight of day-to-day EMS System operations EMS data systems management Countywide MCI program management Oversight of prehospital education providers Disaster Medical Health Operational Area Coordination Designee
Katy Haddock, RN, BSN	Trauma System Manager	Katy.haddock@ventura.org 805-981-5311	<ul style="list-style-type: none"> Trauma and specialty care system oversight and management Represent Ventura County at local, State, and national committees Cardiac arrest database and statistical reporting CARES administrator for Ventura County
Daniel Wall, RN, MPPA	Emergency Preparedness Manager	Dan.wall@ventura.org 805-981-5307	<ul style="list-style-type: none"> Emergency Preparedness Office oversight Responsible for management of HPP, PHEP, Pan Flu Grants Facilitates medical/health disaster preparedness and training efforts Coordinates community preparedness initiatives
Barbara Spraktes	EPO/EMS Epidemiologist	Barbara.spraktes-wilkins@ventura.org 805-981-5279	<ul style="list-style-type: none"> Epidemiological support for Public Health, EPO and EMS Syndromic surveillance and outbreak response Liaison to medical/health partners for public health monitoring
Karen Beatty, RN, EMT	Specialty Care Coordinator	Karen.beatty@ventura.org 805-981-5309	<ul style="list-style-type: none"> Collection and monitoring of STEMI and Stroke data Oversight of Stroke, STEMI and QI programs Maintenance of policies for the QI, Stroke and STEMI systems
Julie Frey	EMS Program Administrator/ CISM Coordinator	Julie.frey@ventura.org 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@ventura.org 805-981-5310	<ul style="list-style-type: none"> Countywide AED Program Administrator Ventura County Public Health Department Safety Officer Countywide Sidewalk CPR Program Coordinator
Erik Hansen, EMT	EMS Community Services Coordinator	Erik.hansen@ventura.org 805-981-5322	<ul style="list-style-type: none"> Emergency preparedness and communications coordination Coordination of various EMS training programs Medical volunteer management and CAHAN Administration
Jeff Vahl, EMT	EPO Community Services Coordinator	Jeffrey.vahl@ventura.org 805-981-5261	<ul style="list-style-type: none"> Countywide medical/health logistics coordination HCA Department Operations Center coordination Disaster preparedness outreach
Janelle Leza, MPPA	Health Care Coalition Coordinator	Janelle.leza@ventura.org 805-981-5335	<ul style="list-style-type: none"> Ventura County Health Care Coalition Coordinator Health care facilities' emergency contacts database Coordinate preparedness outreach with partner agencies
Diane Gilman	EMS Administrative Assistant	Diane.gilman@ventura.org 805-981-5331	<ul style="list-style-type: none"> Fiscal accounting, processing and tracking EPO grant tracking Front office staff management Provide administrative support
Martha Garcia	EMS Administrative Assistant	MarthaL.garcia@ventura.org 805-981-5303	<ul style="list-style-type: none"> Certification, accreditation and authorizations of personnel Monitor and audit personnel training requirements Update and maintain databases Provide administrative support
Heidi Popp	EMS Management Assistant	Heidi.popp@ventura.org 805-981-5301	<ul style="list-style-type: none"> Certification, accreditation and authorization of personnel Maintain database for EMTs, Medics Medical Marijuana Identification Card program Provide administrative support

Certification/Accreditation/Authorization

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.

EMT ALS Assist – Local authorization level indicating that an EMT has met additional training requirements, and is now able to operate with a Level II Paramedic on a 911 ambulance that responds to medical emergencies. The ALS Assist training includes more in depth training on major medical emergencies such as Cardiac Arrest, and better prepares the EMT for working with a Paramedic in an emergency setting.

Paramedic Accreditation and Authorization

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.

Level I Paramedic – Local authorization level indicating Paramedic has met requirements for initial accreditation, but is not yet authorized to function as the only Paramedic at the scene of a medical emergency.

Level II Paramedic – Local authorization level indicating Paramedic has met requirements for continued accreditation, and is authorized to function as the only Paramedic at the scene of a medical emergency. Level II Paramedics can function alone on a Paramedic Support Vehicle, but may also function as the senior Paramedic working on a two (or more) person team comprised of other EMTs or Paramedics.

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.

Certification/Accreditation/Authorization Activity

VCEMS Certifications, Accreditations, and Authorizations Issued - 2015	
EMT Certifications	379
EMT Re-Certifications	744
Authorized EMT ALS Assist Active in the VCEMS System	106
Paramedic Accreditation	42
Paramedic Re-Accreditation	119
Authorized Level I Active in VCEMS System	39
Authorized Level II Active in VCEMS System	212
MICN Authorization	11
MICN Re-Authorization	71
Active MICNs in VCEMS System	153

EMS Education Programs

VCEMS Authorized Prehospital Training Programs - 2015	
EMT – Initial and Refresher	10
Paramedic Training Program	1

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

<http://www2.emsa.ca.gov/Training/TrainingMaster/GroupByTrainingMasterTable.aspx>



Ventura County Critical Incident Stress Management (CISM) Coalition

Throughout Ventura County and across the nation, emergency service personnel have become more aware of the stressors unique to their occupations. These stressors, to which the providers are routinely exposed, can manifest themselves in physical and/or psychological symptoms which the individuals may not be able to manage on their own.

In Ventura County we offer a countywide response team for all emergency agencies, hospitals and the medical examiner's office. This program is coordinated by the Ventura County Emergency Medical Services (EMS) Agency.

The CISM Coalition is dedicated to providing support services in the aftermath of any critical incident and working to reduce stress among emergency services personnel. This is accomplished through education, post incident support and appropriate referrals.

The CISM Coalition meets monthly to discuss the countywide coordination efforts, review defusing/debriefing activity, and continue disaster response planning efforts among participating agencies.

VCEMSA Special Event Medical Management



2015 brought with it a variety of special events, requiring medical coverage and command/general staffing within the Incident Command Structure. While there were several smaller events for which EMS provided medical coverage, the Naval Base Ventura County Air Show required several months of planning and numerous resources. Medical/health coverage for this event would not have been possible without the continuous support, through equipment and staffing, from our partner agencies from around the county. With an estimated 165,000 spectators over the two-day event, this event proved to be the largest in Ventura County's history.

As part of the medical/health coverage for the airshow, EMS deployed all staff and numerous resources to fill several key positions ranging from medical transportation to logistics and volunteer coordination. A field treatment site was established, as was a medical command post where all patient contacts were tracked and monitored. No major medical emergencies took place over the two day event, but we were able to identify some opportunities for improvement that will aid us in responding to and providing oversight of the next major event or emergency.

February 24, 2015 “Rice Incident” MetroLink Accident

On the morning of February 24, 2015, a Metrolink commuter train was traveling eastbound in the City of Oxnard when it struck a commercial vehicle towing a medium sized trailer. The commercial vehicle had mistakenly turned onto the tracks and was traveling westbound for a short distance before becoming stuck on the tracks. The commuter train struck the vehicle at approximately 60 MPH, causing the locomotive and four cars of the train to derail, three of which overturned onto their side. On board the train were 46 passengers and 3 crew.

A scene size up was performed by Oxnard Engine 65, and numerous patients were reported. An MCI/Level II “at least” was declared at 06:04:15. A medical communications officer (MEDCOMM) was assigned at the scene and base hospital contact was initiated with Ventura County Medical Center (VCMC) at ~06:08 (recording time) with a “heads up” call-in that lasted approximately 90 seconds and gave a high level overview of the incident, reporting potential for up to 30 patients. Based on this information, the Mobile Intensive Care Nurse (MICN) at VCMC activated an MCI in Reddinet, thereby alerting all hospitals of the incident and polled each emergency room for their bed availability.



In advance of receiving patients, many hospitals activated their internal Hospital Emergency Operations Centers (HEOC) and operated under the Hospital Incident Command System (HICS) throughout the MCI operations. 28 patients were transported from the scene via ground ambulance to local hospitals. 4 patients met immediate criteria, 12 met delayed, and 12 were categorized as minor. One patient later died of injuries sustained in the crash.

Although this incident can be considered a success in terms of patient care and incident management, there were some opportunities for improvement noted in the after action summary. Of these opportunities for improvement, the Ventura County EMS Agency and its numerous partner agencies have added new equipment and techniques to our MCI response protocols. These new items and management concepts will aid rescuers and incident managers in the triage, treatment, transport and tracking of MCI victims, regardless of size and/or complexity.



Community Paramedicine Pilot Programs Hospice / Tuberculosis



In 2014, the California Emergency Medical Services Authority (EMSA) approved Ventura County to take part in two unique pilot programs that allows paramedics to provide hospice support, as well as, follow-up treatment for tuberculosis patients.

Hospice

The provision of hospice care by paramedics is an innovative program designed to improve patient care for hospice patients in their home environment.

The Community Paramedic (CP) is dispatched to all 911 calls involving hospice patients. The CP will liaison between the patient, hospice team and the patients family/caregiver and provide the appropriate care/treatment until the hospice team arrives. In a majority of cases, the patient's wish to stay out of a hospital environment can be maintained.

Community Paramedics have responded to 200 hospice patients to date. Some of the 200 contacts are recurring patients. Overall, the transport rate has dropped 50%.

Tuberculosis (TB)

The purpose of this project is to improve the treatment for people with tuberculosis (TB), and thereby benefit the patient, their family, other contacts, and the community, by providing directly observed treatment to TB patients in the field, in support of the Ventura County Public Health Department's TB Specialty Clinic and the patients they serve.



This is being accomplished by improving patient compliance with directly observed treatment (DOT), increasing the percentage of patients who complete the full course of treatment for TB and identifying and treating side-effects and mal-absorption issues early, with physicians as needed.

Community Paramedics have assisted 56 patients in completing treatment, including one multi-drug resistant case. There are an average of 5 – 10 TB patients under the CP's care at any point in time.

Community CPR and Public Access Defibrillation



Sudden cardiac arrest is a leading cause of death in the U.S., striking people in all settings. From schools to homes to public places, approximately 326,200 people experience sudden cardiac arrest each year, often from undiscovered heart defects. The American Heart Association tells us that early CPR and rapid defibrillation are key elements in the Chain of Survival. When people properly use an AED and CPR on a victim within the first three to five minutes of a heart stopping, survival rates are as high as 60%.

Hands Only “Sidewalk” CPR

Ventura County Emergency Medical Services (VCEMS), along with partner agencies host free Hands-Only “Sidewalk CPR” trainings at several locations throughout Ventura County, including local high schools, shopping malls and health fairs. CPR instructors demonstrate the Hands-Only CPR



technique in public places with the goal being to teach more people how to respond appropriately if they witness someone experiencing sudden cardiac arrest. Participants have the opportunity to learn the simple two-step technique, practice on mannequins and receive information on where they can go if they want to become fully CPR certified. In 2015, over 11,000 residents and visitors of Ventura County were trained in Hands Only CPR.



Ventura County Public Access Defibrillator Program

Ventura County EMS Agency administers the Ventura County Public Access Defibrillator (PAD) Program. This is a partnership between public and private organizations and businesses placing over 550 AEDs throughout Ventura County. Over 100 AEDs are placed in Government Buildings and 450 provided by public and private businesses and organizations for the protection of their patrons and community.

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). Except for Oxnard, 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.

Emergency Medical Dispatch (EMD) is a program designed to provide predetermined medical protocols/medical instructions to victims and bystanders before the arrival of first responders. It also allows dispatchers to send the correct resources to an emergency scene. EMD in Ventura County is handled by the Oxnard Police/Fire Communications Center for the City of Oxnard and by the Ventura County Fire Department Fire Communications Center for the rest of the county. *(In late 2016, the Ventura County FCC will also provide Fire, EMS and EMD dispatch services for the City of Oxnard.)*

Medical Priority Dispatch Systems ProQA Dispatch Software helps emergency dispatchers move smoothly through case entry and key questioning. It assists dispatchers in quickly identifying the appropriate Determinant Code for each case and clearly displays the response configuration. ProQA then guides dispatchers in providing all relevant Pre-Arrival Instructions, as well as important case completion information. In 2016/2017, all EMD Programs will utilize ProQA – Version 13 Medical Dispatch Protocols.

Examples of EMD questions and instructions:

ENTRY QUESTIONS

1. What's the **address** of the emergency?
2. What's the **phone number** you're calling from?
3. What's the **problem**, tell me **exactly** what happened?
 - Hanging _____
 - Underwater _____
 - a. **(Not obvious)** Are you **with the patient now**?
 - b. **(Not obvious)** How **many** (other) people are **hurt** (sick)?
 - Traffic/Transportation accident _____
 - Multiple victims _____
 - c. **(Choking)** Is s/he **still choking now**? (You go check and tell me what you find.)

19 HEART PROBLEMS / A.I.C.D.

KEY QUESTIONS

1. Is s/he **completely awake** (alert)?
2. Is s/he **breathing normally**?
3. Is s/he **changing color**?
4. Is s/he **clammy** (cold/sweats)?
5. Does s/he have a **history of heart problems**?
 - a. **(A.I.C.D.)** Did it **fire** (go off) in the last 30 minutes?

A AIRWAY / ARREST / CHOKING (UNCONSCIOUS) – INFANT < 1 YR

1 (Patient to Phone)	2 Check Airway
<ul style="list-style-type: none"> • Are you right by the baby now? Yes → 2 <p>(No) Get the baby as close to the phone as possible. Don't hang up. Do it now and tell me when it's done. (If I'm not here, stay on the line.)</p> <p style="text-align: right;">→ 2</p>	<p>Listen carefully.</p> <p>Lay the baby flat on her/his back on the ground and remove any pillows. Kneel next to the baby and look in the mouth for food or vomit.</p> <ul style="list-style-type: none"> • Is there anything in the mouth? <p style="text-align: right;">Yes → 13 No → 3</p>

POST-DISPATCH INSTRUCTIONS

- a. I'm sending the **paramedics** (ambulance) to help you now. **Stay on the line** and I'll tell you **exactly** what to do next.
- b. **(Patient medication requested)** Remind her/him to do what her/his **doctor has instructed** for these situations.
- c. **(Special equipment/instructions not yet used)** Advise her/him to **use that treatment now**.

Quality Assurance — ProQA helps each agency 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.

Emergency Medical Dispatch



Ventura County Fire Communications Center



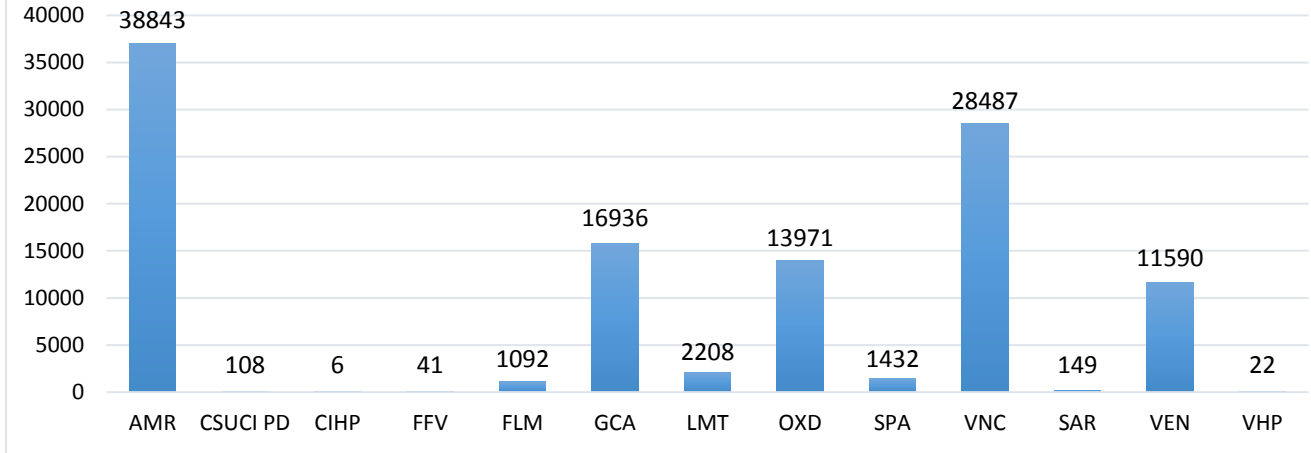
Oxnard Police/Fire Communications Center

Countywide Emergency Medical Dispatch Activity by Call Type

PROBLEM TYPE	2015 TOTAL INCIDENTS	PROBLEM TYPE	2015 TOTAL INCIDENTS
ABDOMINAL PAIN	1087	HEADACHE	227
ALERT1 / AIRCRAFT STANDBY	4	HEART PROBLEM	654
ALERT3 / AIRCRAFT DOWN	13	HEAT / COLD EXPOSURE	87
ALLERGIES / ENVENOMATION	339	HEMORRHAGE / LACERATION	1148
AMBULANCE ONLY	516	MEDICAL ALARM	1713
ANIMAL BITES / ATTACKS	116	MOTORCYCLE COLLISION	169
ASSAULT	1135	MUTUAL AID - MEDICAL	214
ASSIST OTHER AGENCY MEDICAL	45	NEAR DROWNING / DIVE / SCUBA	35
BACK PAIN	439	OBVIOUS OR EXPECTED DEATH	123
BEHAVIORAL EMERGENCY	1132	OVERDOSE / POISONING	1552
BREATHING PROBLEMS	4578	PENETRATING WOUNDS	8
BURNS / EXPLOSIONS	37	PREGNANCY RELATED EMERGENCY	167
CARDIAC / RESP ARREST	869	SICK PERSON	7000
CHEST PAIN	3121	STABBING	121
CHOKING	310	STEMI TRANSPORT	93
INHALATION EXPOSURE / HAZMAT	51	STROKE (CVA)	1031
CONVULSIONS / SEIZURES	2215	TRAFFIC COLLISION	5061
DIABETIC PROBLEMS	968	TECHNICAL RESCUE	31
ELECTROCUTION / LIGHTNING	5	TRAUMA TRANSFER	65
ENTRAPMENT NON VEHICLE	73	TRAUMATIC INJURIES	2557
EYE PROBLEMS / INJURIES	44	UNCONSCIOUS / FAINTING	4416
FALLS	7332	UNKNOWN PROBLEM	9675
GUNSHOT	123	WATER RESCUE	85
TOTAL 2015 RESPONSES - 60784			

Ventura County EMS System Volume

Medical Responses by Agency - 2015



AMR = American Medical Response

CSUCI PD = Cal State University Channel Islands PD

CIHP = Channel Islands Harbor Patrol

FFV = Naval Base Ventura County Fire Dept.

FLM = Fillmore Fire Department

GCA = Gold Coast Ambulance

LMT = Lifeline Medical Transport

OXD = Oxnard Fire Department

SPA = Santa Paula Fire Department

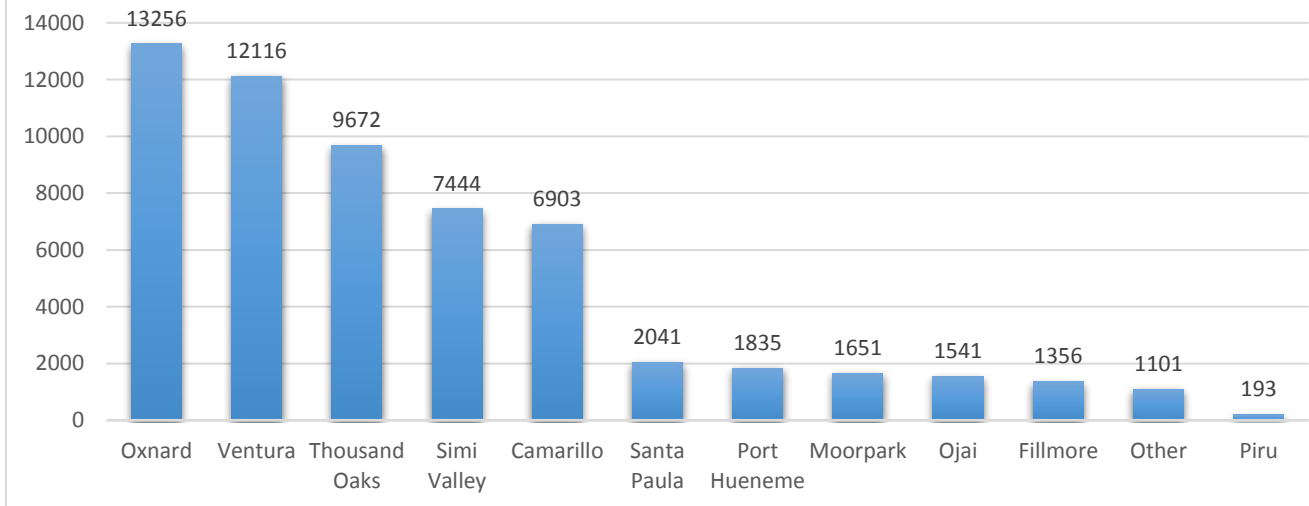
VNC = Ventura County Fire Protection District

SAR = Ventura County Sheriff's Air Unit / SAR

VEN = Ventura City Fire Department

VHP = Ventura Harbor Patrol

Patient Contacts by Community - 2015

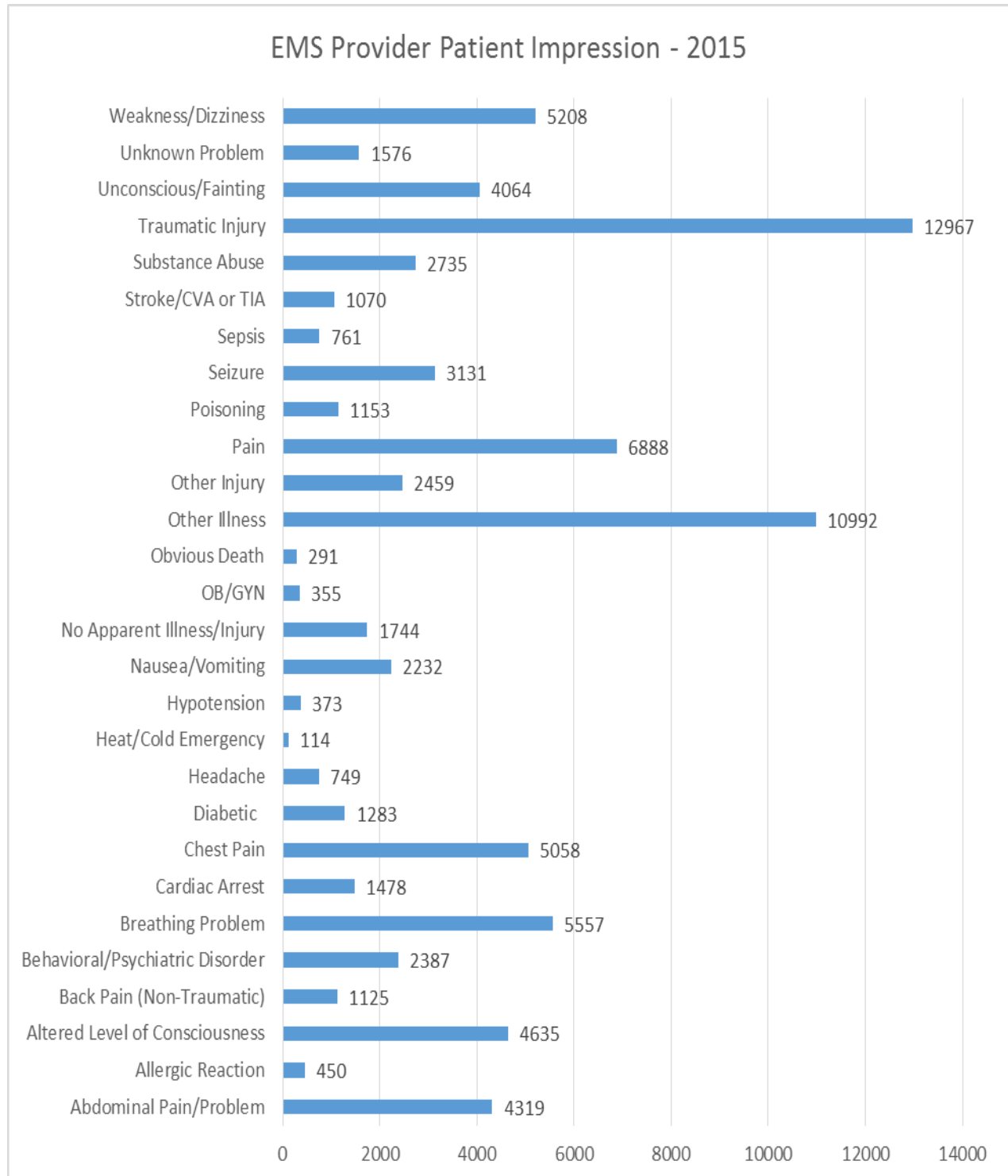


Patient contact numbers are collected through the ImageTrend system, based on Electronic Patient Care Reports posted within the Ventura County system.

*Other includes unincorporated communities, Naval Base Ventura County, and areas outside of the county where Ventura County units responded as part of medical mutual aid.

EMS Provider Primary Impression

The provider's primary impression is defined as the EMS personnel's impression of the patient's primary problem or most significant condition which led to the patient care management given (treatments, procedures or medications). This impression differs from the patient's chief complaint, which is the verbal complaint relayed to the prehospital providers by the patient or representative. The following graph indicates the number of patient conditions encountered by our Ventura County EMS providers in 2015.



Fire Agencies



Federal Fire Department – Ventura County

Covers all areas of Naval Base Ventura County, including San Nicholas Island, from four stations with BLS engines and BLS ambulances.

Fillmore City Fire Department

Covers the City of Fillmore from one station with ALS and BLS engines.



Oxnard Fire Department

Covers the City of Oxnard from eight stations with eight BLS engines and two BLS ladder trucks.



Santa Paula Fire Department

Covers the City of Santa Paula from two stations with two BLS engines.



Fire Agencies



Ventura City Fire Department

Covers the City of Ventura from six stations with six ALS engines and one ALS ladder truck.



Ventura County Fire Department

Covers the cities of Simi Valley, Moorpark, Thousand Oaks, Camarillo, Port Hueneme, Ojai, and all unincorporated areas of Ventura County from 32 stations. Ventura County Fire Department provides services with 11 ALS engines, 21 BLS engines, 3 BLS ladder trucks and 2 ALS squads.



Air Rescue



Ventura County Sheriff's Department 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 their contracted ambulance service zones with a daily staffing of 14-18 ALS ambulances and 2 ALS supervisors.



Gold Coast Ambulance

Covers the cities of Oxnard and Port Hueneme, and unincorporated areas within their contracted ambulance service zone with a daily staffing of 4-7 ALS ambulances, several BLS ambulances and one ALS supervisor.

Lifeline Medical Transport

Covers the city of Ojai, as well as the unincorporated areas of Oak View, Meiners Oaks and Casitas Springs with daily staffing of 3 ALS ambulances, several BLS ambulances and one ALS supervisor.



Law Enforcement



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.

Harbor Patrol

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



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 in order to provide our jurisdiction with the best possible prehospital emergency medical care.

In December 2004, the County entered into seven (7) agreements for continued provision of emergency ambulance service by its existing “grandfathered” providers, one for each of the seven Ventura County EMS service areas. One agreement is with Lifeline Medical Transport for Area 1; one with Gold Coast Ambulance Service for Area 6; and five are with American Medical Response (AMR) for Areas 2, 3, 4, 5 and 7.

The original term for each agreement was six (6) years, from January 1, 2005 through June 30, 2011, with review of contractor performance every two years per the Contractors Review Process outlined in the agreement. Contractor’s meeting or exceeding the minimum agreement requirements and expectations shall be entitled to a two-year extension of the term of this agreement. Reviews conducted in 2007, 2009, 2011, 2013 and 2015 resulted in approval of two-year extensions, with current agreements extending through 2021.

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

- Providing Uninterrupted 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 scheduled ambulance replacement
- Conducting public information and education

All emergency ambulances in Ventura County are dispatched through contract with the Ventura County Fire Communications Center using the TriTech 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. Compliance performance by exclusive operating zone is included in this report on subsequent pages. Response time criteria varies based on population density and call priority. Metropolitan/Urban areas require an ambulance response time of 8 minutes, 90% of the time for emergencies and 15 minutes, 90% of the time for non-emergencies. Suburban/Rural areas require an ambulance response time of 20 minutes, 90% of the time. Various low density and geographically remote areas are allowed an ambulance response time of 30 minutes, 90% of the time and highly remote "Wilderness" areas are contracted as ASAP zones and listed as 45 minute response zones in the data for reporting purposes only. Non-compliant responses, without an approved exemption, are assessed a financial penalty based on the contract guidelines. Area 4 is divided into four sub-zones for purposes of penalty assessment, however, contracted 90% requirement is based on total Area 4 compliance. In early 2015, there was one instance in Area 2 and two instances in Area 4, where the 90% requirement was not met, however, these were minor variances that did not represent a material breach according to the contract terms. All other areas were fully compliant with the 90% requirement in 2015.

2015 Response Time Compliance

All Exclusive Operating Areas (EOA)

	LMT 1	AMR 2	AMR 3	AMR 4	AMR 5	GCA 6	AMR 7	Average
JAN	96.32%	89.44%	92.37%	88.72%	91.07%	95.95%	93.98%	91.92%
FEB	96.43%	90.18%	90.41%	88.97%	90.72%	95.10%	93.26%	91.44%
MAR	95.18%	92.28%	93.07%	93.20%	90.89%	93.92%	93.73%	92.85%
APR	93.84%	91.75%	92.45%	90.63%	92.96%	94.75%	92.70%	92.54%
MAY	93.84%	92.16%	90.88%	90.74%	92.11%	94.62%	93.91%	92.40%
JUN	97.32%	91.09%	93.87%	92.23%	90.57%	93.79%	93.40%	92.49%
JUL	94.90%	92.22%	93.43%	90.36%	92.18%	95.54%	93.19%	92.82%
AUG	94.90%	90.67%	90.27%	90.69%	92.06%	94.46%	94.27%	92.07%
SEP	92.99%	90.39%	90.50%	92.67%	92.17%	93.05%	93.18%	91.99%
OCT	95.65%	96.20%	93.54%	93.67%	93.22%	95.26%	94.54%	94.41%
NOV	94.57%	93.73%	94.16%	91.10%	92.43%	94.85%	95.67%	93.66%
DEC	95.27%	91.07%	90.22%	90.03%	90.89%	95.18%	94.25%	91.94%
Average	95.10%	91.77%	92.10%	91.08%	91.77%	94.71%	93.84%	92.54%

EOA Providers

AMR = American Medical Response
GCA = Gold Coast Ambulance
LMT = LifeLine Medical Transport

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

Area 4 Sub-Zones

MP = Moorpark
NP = Newbury Park
OP = Oak Park
TO = Thousand Oaks

Lifeline Medical Transport Exclusive Operating Area 1 Compliance

Comprised of the City of Ojai and the unincorporated areas of the Ojai Valley including Upper Ojai, Meiners Oaks, Miramonte, Oak View, Casitas Springs and the Hwy. 33 and Hwy. 150 corridors.

2015		EOA1				
		08:00	15:00	20:00	30:00	45:00
Total Volume	1,851	1,418	279	103	7	44
At-Scene Time Not Documented	2	2	0	0	0	0
Compliant - Time Extension	17	17	0	0	0	0
Compliant - No Map	0	0	0	0	0	0
Gross Exceptions	194	175	16	3	0	0
Exemptions Requested	134	116	15	3	0	0
Exemptions Approved	103	86	14	3	0	0
Chargeable Late Responses	91	89	2	0	0	0
Compliance	95.10%	93.72%	99.28%	100.00%	100.00%	100.00%

American Medical Response Exclusive Operating Area 2 Compliance

Comprised of the Cities of Santa Paula and Fillmore and the unincorporated areas of the Santa Clara Valley including Piru, South Mountain, Bardsdale, and the Hwy. 126 corridor.

2015		EOA2				
		08:00	15:00	20:00	30:00	45:00
Total Volume	3,401	2,471	464	398	23	45
At-Scene Time Not Documented	10	9	1	0	0	0
Compliant - Time Extension	107	107	0	0	0	0
Gross Exceptions	398	356	21	21	0	0
Exemptions Requested	142	123	9	10	0	0
Exemptions Approved	117	100	9	8	0	0
Chargeable Late Responses	281	256	12	13	0	0
Compliance	91.77%	89.64%	97.41%	96.73%	100.00%	100.00%

American Medical Response Exclusive Operating Area 3 Compliance

Comprised of the City of Simi Valley and the surrounding unincorporated areas.

2015		EOA3				
		08:00	15:00	20:00	30:00	45:00
Total Volume	6,791	5,727	969	95	0	0
At-Scene Time Not Documented	34	33	1	0	0	0
Compliant - Time Extension	179	179	0	0	0	0
Gross Exceptions	837	795	40	2	0	0
Exemptions Requested	344	315	27	2	0	0
Exemptions Approved	298	270	26	2	0	0
Chargeable Late Responses	539	525	14	0	0	0
Compliance	92.10%	90.83%	98.56%	100.00%	0.00%	0.00%

American Medical Response Exclusive Operating Area 4 Compliance

Comprised of the Cities of Thousand Oaks and Moorpark and the unincorporated areas of the Conejo Valley including Newbury Park, Oak Park, Westlake, North Ranch and Lake Sherwood.

2015		EOA4				
		08:00	15:00	20:00	30:00	45:00
Total Volume	10,898	8911	1694	251	0	42
At-Scene Time Not Documented	36	30	6	0	0	0
Compliant - Time Extension	590	590	0	0	0	0
Gross Exceptions	1,168	1099	64	5	0	0
Exemptions Requested	241	221	17	3	0	0
Exemptions Approved	218	199	16	3	0	0
Chargeable Late Responses	950	900	48	2	0	0
Compliance	91.08%	89.91%	97.16%	99.20%	100.00%	100.00%

American Medical Response Exclusive Operating Area 5 Compliance

Comprised of the City of Camarillo and the surrounding unincorporated areas including Somis, Santa Rosa Valley and the California State University Channel Islands.

2015		EOA5				
		08:00	15:00	20:00	30:00	45:00
Total Volume	6,362	5,235	894	218	0	15
At-Scene Time Not Documented	14	11	2	1	0	0
Compliant - Time Extension	225	225	0	0	0	0
Gross Exceptions	791	757	28	6	0	0
Exemptions Requested	282	263	15	4	0	0
Exemptions Approved	267	250	15	2	0	0
Chargeable Late Responses	524	507	13	4	0	0
Compliance	91.77%	90.32%	98.55%	98.17%	0.00%	100.00%

Gold Coast Ambulance Exclusive Operating Area 6 Compliance

Comprised of the Cities of Oxnard and Port Hueneme and the surrounding unincorporated areas including El Rio, Nyeland Acres, Silver Strand, Naval Base Ventura County, Point Mugu and Malibu.

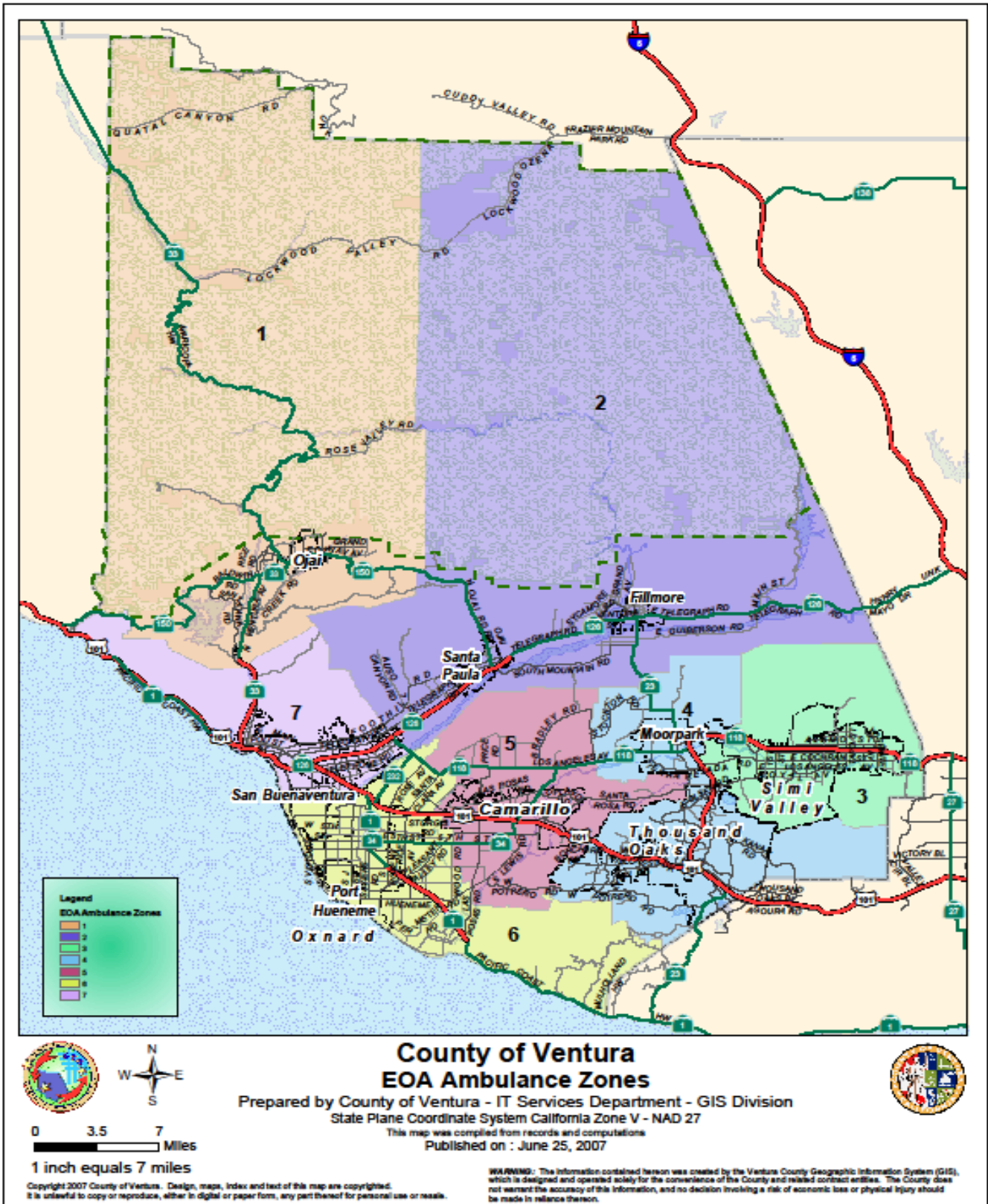
2015		EOA6				
		08:00	15:00	20:00	30:00	45:00
Total Volume	15,772	14,084	1,248	351	46	43
At-Scene Time Not Documented	35	31	4	0	0	0
Compliant - Time Extension	45	45	0	0	0	0
Gross Exceptions	1,475	1,423	43	6	3	0
Exemptions Requested	652	630	17	3	2	0
Exemptions Approved	609	588	16	3	2	0
Chargeable Late Responses	866	835	27	3	1	0
Compliance	94.71%	94.07%	97.84%	99.15%	97.83%	100.00%

American Medical Response Exclusive Operating Area 7 Compliance

Comprised of the City of Ventura and the surrounding unincorporated areas
Including Saticoy, Montalvo, Rincon and La Conchita.

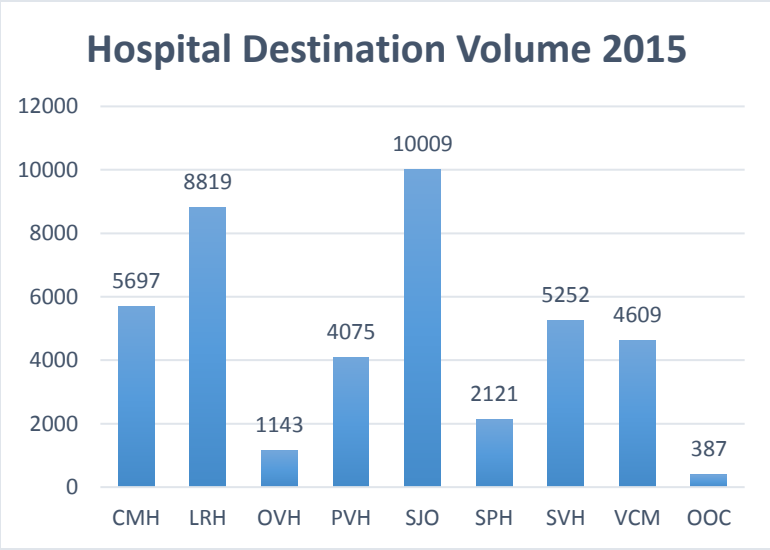
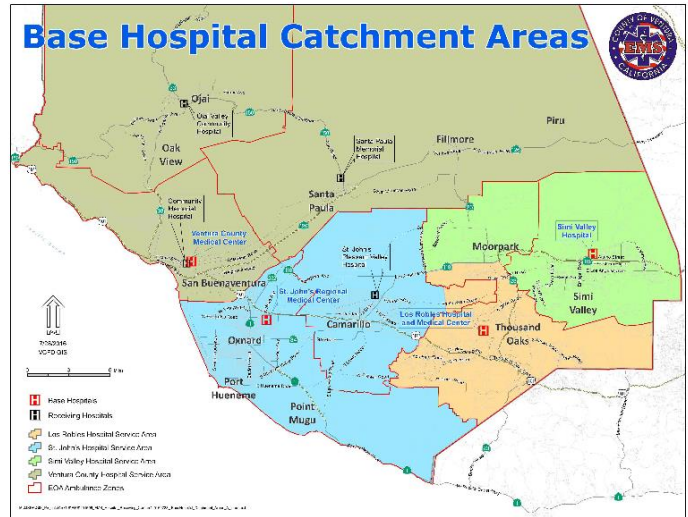
2015		EOA7				
		08:00	15:00	20:00	30:00	45:00
Total Volume	10,753	9,287	1,285	146	23	12
At-Scene Time Not Documented	28	25	3	0	0	0
Compliant - Time Extension	1,300	1,300	0	0	0	0
Gross Exceptions	1,063	981	74	7	1	0
Exemptions Requested	432	384	41	6	1	0
Exemptions Approved	400	354	39	6	1	0
Chargeable Late Responses	663	627	35	1	0	0
Compliance	93.84%	93.25%	97.28%	99.32%	100.00%	100.00%





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.



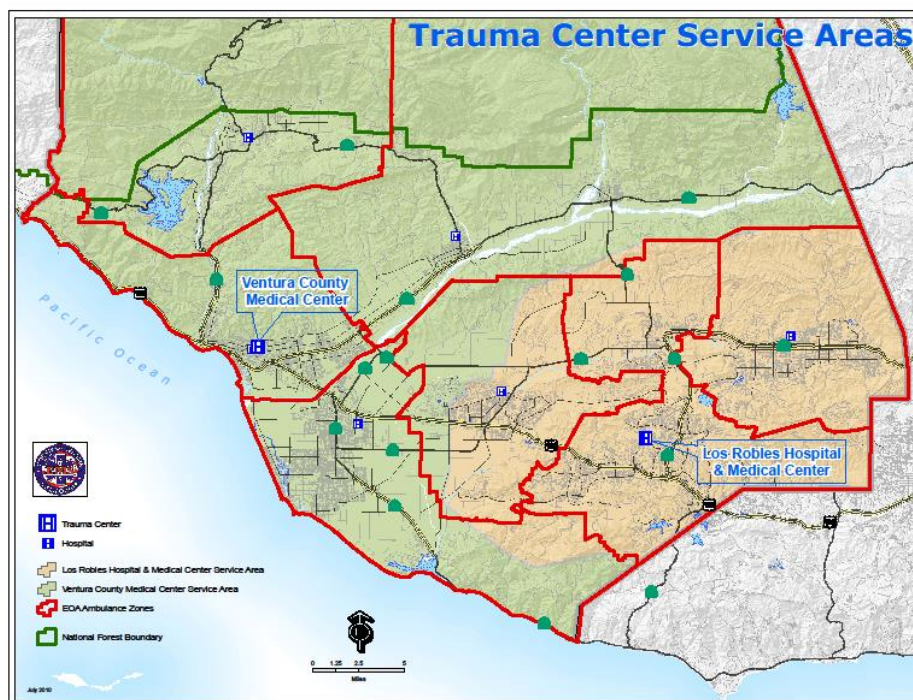
HOSPITAL CAPABILITIES	Receiving Hospital	Base Hospital	Level II Trauma Center	Acute Stroke Center	STEMI Receiving Center	Labor & Delivery
CMH	X			X	X	X
LRHMC	X	X	X	X	X	X
OVCH	X					
PVH	X			X		
SPH	X			X		X
SVH	X	X		X	2016	X
SJRMCC	X	X		X	X	X
VCMC	X	X	X	X		X

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 Hospital & 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.



2015 Ventura County Trauma Destinations

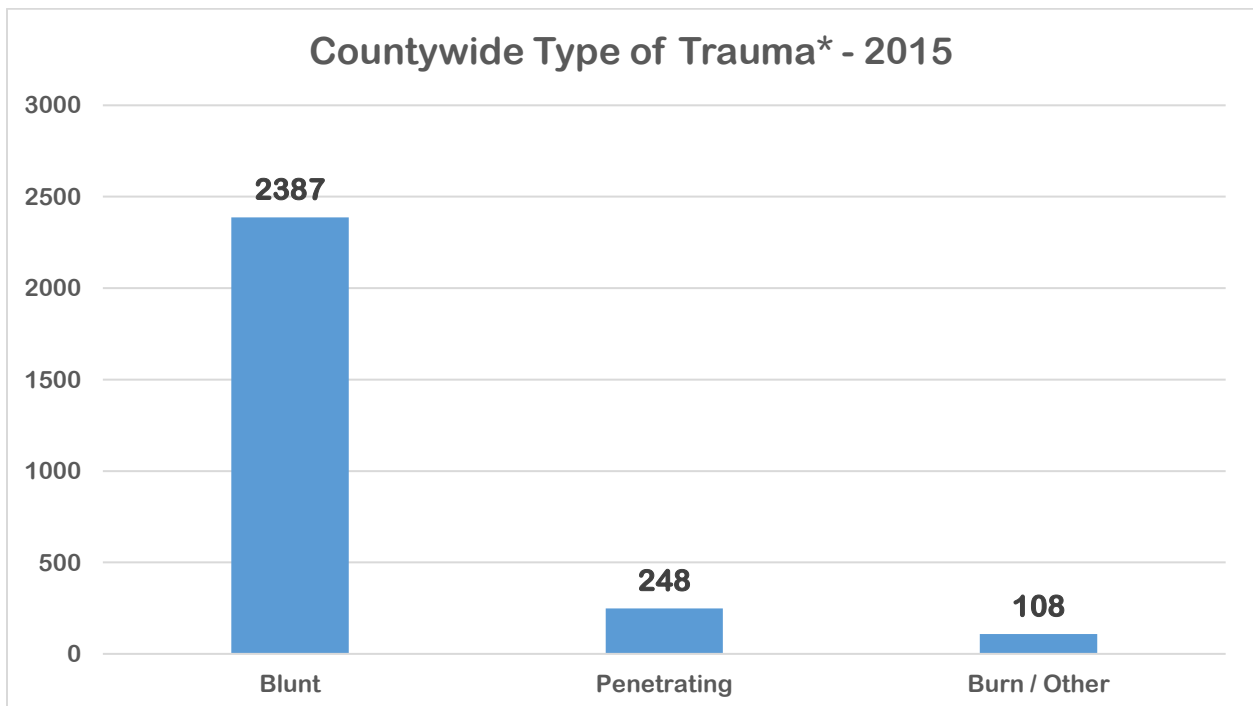
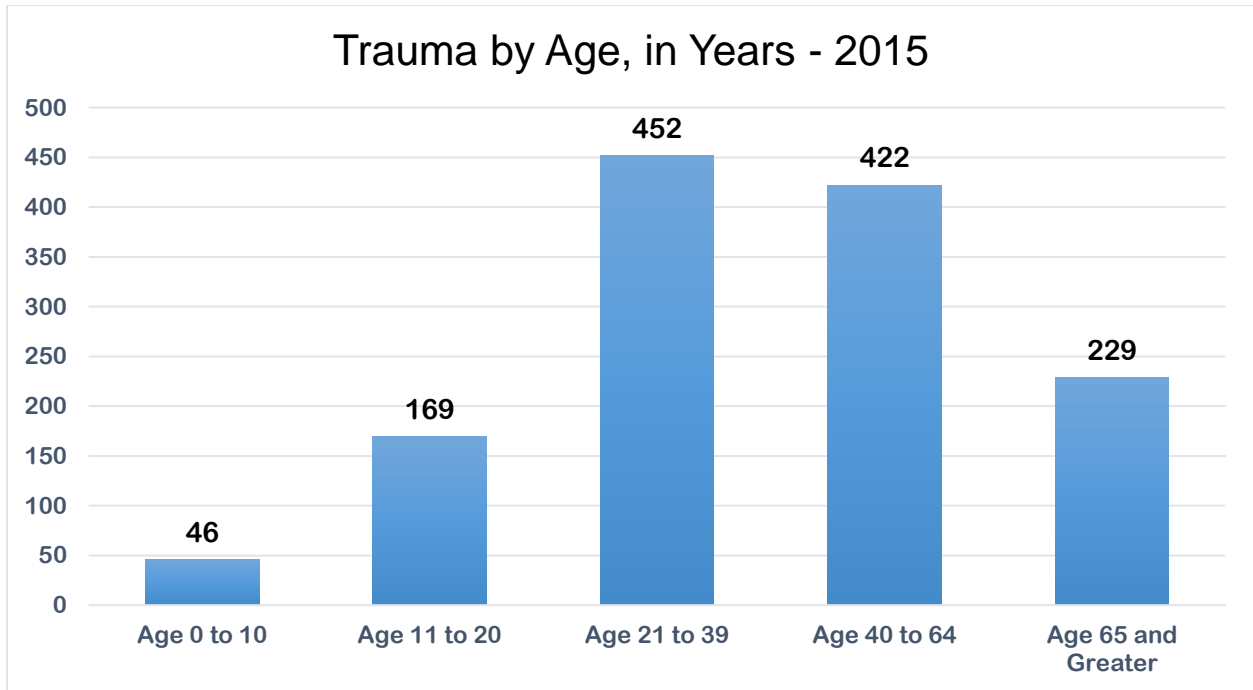
	Ventura County Medical Center	Los Robles Hospital	Non-Trauma Center Hospitals	Out of County Trauma Centers	Out of County Non-Trauma Center Hospitals	Total
Step 1	226	115	10	2	0	353
Step 2	163	50	5	2	0	220
Step 3	299	195	43	16	0	553
Step 4	366	627	1478	4	8	2475
TOTAL	1054	987	1536	24	8	3609

Ventura County established, and provides leadership for, two active committees that provide system oversight, policy review, and peer education.

The Tri-County Trauma Audit Committee (TAC) is a confidential, closed committee consisting of trauma surgeons, program managers and prehospital coordinators from three Level II, and two Level III 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 filter criteria may be discussed and reviewed. Representatives from all five trauma centers present cases for confidential peer review, and bring an important perspective to Ventura County's trauma system and 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.

Ventura County Trauma System Statistics



*Utilizing VCEMS trauma registry data



Cardiac Arrest Management (CAM)

Cardiac Arrest Management (CAM) represents eight years of hard work from all of 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 not breathing and does not have a pulse. We have improved our bystander CPR rates by expanding our community education of “hands only” CPR. Conejo Valley Unified School district helped support our efforts by providing training for all 9th grade and 12th grade students in “hands only” CPR. The CARES national benchmark for bystander CPR is 37.4%. Ventura County data shows an increase in bystander CPR from 39% in 2013 to 48.6% in 2015.

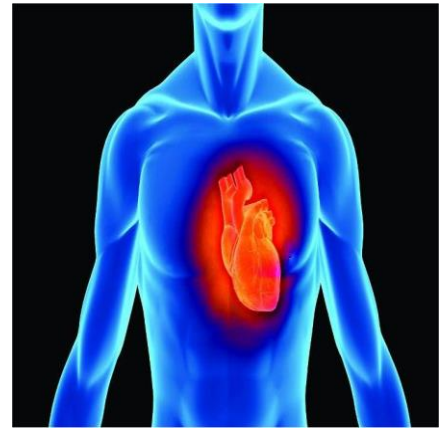
Performance Data for 2015

Presumed Cardiac Etiology: Resuscitation attempted	420
Bystander CPR Provided	48.60%
Survival to Hospital Discharge	11.20%
<i>CARES National Benchmark for survival to Hospital Discharge</i>	10.1%
Bystander Witnessed, Shockable 1st Rhythm: Resuscitation attempted	66
Bystander CPR Provided	68.20%
Survival to Hospital Discharge	40.90%

STEMI System

Most deadly type of heart attack

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 which have specialized equipment and personnel to treat these deadly heart attacks. The Ventura County STEMI System began in 2007 with 3 STEMI receiving hospitals. Paramedics use field transmission of 12-Lead ECGs and “STEMI Alerts” to provide early notification of cardiac intervention teams. The goal for the patient who is having a STEMI is to receive a procedure called Percutaneous Cardiac Intervention, which quickly restores blood flow to the heart. When a patient is identified as having a STEMI in a non-STEMI hospital, we have systems in place for a rapid transport to a STEMI receiving hospital within 30 minutes. 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. In 2015, Ventura County STEMI System received the Gold Level recognition from the American Heart Association’s Mission Lifeline program. The Mission Lifeline Program recognizes Systems of Care that meet the following performance measures: First Medical Contact to Intervention in less than 90 minutes 75% of the time, and 12-Lead ECGs obtained on patients having chest pain 75% of the time. In 2016, Simi Valley Hospital will be designated as an STEMI Receiving Center. Below are other performance measures we track and assess for improvement.



Performance Data for 2015

Criteria	County Performance Data
Total number of EMS STEMI Patients who received Percutaneous Cardiac Intervention	98
911 call to Percutaneous Cardiac Intervention	82 Min (Goal < 90 min)
Positive EMS STEMI 12-Lead to Percutaneous Cardiac Intervention	70 Min (Goal < 90 min)
Arrival at STEMI hospital to Percutaneous Cardiac Intervention	50 Min (Goal < 90 min)

Stroke System



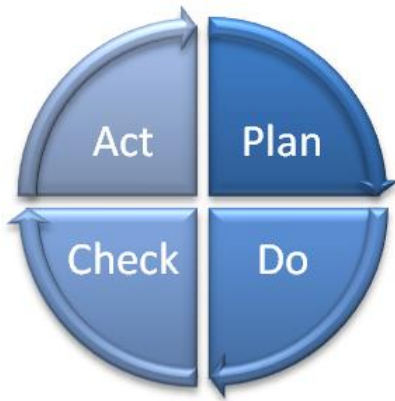
Fifth-leading cause of death nationally,
and the leading cause of permanent disability

In 2015, Ventura County had 1420 diagnosed strokes, which were treated at one of seven facilities designated as Primary Stroke Centers. This certification recognizes that a hospital has achieved a high level of compliance with national standards in stroke care, and is able to meet the unique and specialized needs of stroke patients. These facilities participate in the American Heart Association “Get with the Guidelines” stroke Registry. We are able to evaluate specific measurements of quality of care and report Core Measures to the State. Paramedics are trained to evaluate patients using the Cincinnati Stroke Scale and provide early notification by calling in a “stroke alert” to the hospital so resources can be mobilized to provide immediate treatment of a possible stroke patient upon arrival. The primary objective of a stroke system is to coordinate care between the emergency medical system and hospitals so patients possibly suffering from a stroke will receive care within 3 to 4 ½ hours of their first symptoms. Ventura County EMS Agency developed a unique identifier which allows us to track a patient’s care from the 911 call through their hospital stay. One of the intervals we track is the time dispatch is notified to the time a neurologist receives the brain image report. In 2015 our median time was 62 minutes. Our on-scene time is 11.5 minutes, well below the 15 minute goal. We also monitor the time of arrival at the hospital to the time the clot-busting medication t-PA (Tissue Plasminogen Activator) is administered. The benchmark goal is within 60 minutes, and in 2015 our median time is 62 minutes.

Performance Data for 2015

Criteria	County Performance Data
Total Stroke Patients	1420
Total number of Ischemic Strokes	867 (61%)
Total Ischemic Stroke Patients who arrived by ambulance	431 (50%)
Total Ischemic Stroke patients who self-transported	371 (43%)
Total Ischemic Stroke patients who arrived by Interfacility transport	65 (7%)
Percentage of Ischemic Stroke Patients treated with IV tPA	5% (national average 1-7%)
Percentage of patients treated with IV tPA within 60 min.	63% (national average 50%)

Quality Improvement Program



The Ventura County EMS Quality Improvement Program uses patient care data from our stakeholders to evaluate system performance. Hospitals submit data through the Outcome Sciences Registry for our Stroke Program, Cardiac Arrest Registry to Enhance Survival (CARES) for our Sudden Cardiac Arrest Program, ImageTrend Trauma Registry for our Trauma System, and an internal secure system for our STEMI Program data. Countywide EMS providers use the ImageTrend electronic patient

care record system (e-PCR) and dispatch data is collected through the County Fire Department TriTech Computer Aided Dispatch system and Medical Priority Dispatch System (MPDS). Data is collected from our pre-hospital agencies and hospitals in order to follow a patient from a 911 call to activities done in the hospital.

In 2015, we identified the need for standardization among our hospitals and the EMS system of “time last known well” for our “Stroke Alert” patients. The “time last known well” for our Stroke patients was changed to 6 hours for EMS patients along with the 7 Primary Stroke Centers (PSC), with the exception of one PSC which remains at 8 hours.

The American Heart Association presented our EMS Agency, along with 10 other first responder agencies, the 2015 Mission Lifeline Gold Level Award for outstanding performance in STEMI data measures. By reviewing our Sudden Cardiac Arrest data, we are able to maintain our survival rate percentages above the CARES national benchmark.

We participate in Ventura County’s Fall Prevention program by gathering data on patients that have fallen or have a potential to fall and are *not* transported by EMS to the hospital. We answer a set of questions that are sent to the fall prevention coordinator along with leaving educational material about fall prevention at the home. We meet quarterly to discuss the data and areas of improvement. The Fall Prevention Committee had two community outreach symposiums in 2015 with great response. We have seen a decrease in secondary falls during 2015.

Ventura County EMS continues to require all paramedics to attend 4 airway lab stations over a two year period along with one paramedic skills day annually. The paramedic skills lab sessions include education stations covering certain low frequency, high risk procedures. In addition, various critical procedures, such as advanced airway, transcutaneous pacing, and intraosseous infusion are monitored regularly through the FirstWatch data surveillance software.

Ventura County’s two Trauma Centers also actively participate in data collection, which helps to identify severity index scores on EMS patients. We can analyze this data and use it for injury prevention education in the community. Data measures are patient focused and implementation for improvement is timely and sustainable through the collaboration of our key stakeholders.

Public Health Emergency Preparedness Program (PHEP) Hospital Preparedness Program (HPP)



In response to the attacks of September 11, 2001 and the subsequent anthrax attacks later that year, public health and medical leaders became concerned about the low level of preparedness for bioterrorist attacks on the United States.

In early 2002, the Hospital Preparedness Program (HPP) and Public Health Emergency Preparedness Program (PHEP) were created with funding provided to address gaps in medical and health preparedness. The early program was focused on building capacity by emphasizing activities such as: identifying hospital bed surge capacity, mass casualty, risk communications, and training providers. The current program has shifted focus to emphasize an all hazards, capabilities-based approach.

Ventura County has participated in the preparedness program since its inception. The Health Care Agency emergency preparedness related activities have strove to support all of the countywide disaster related training needs and concerns. The latest evolution in preparedness has come in the form of the newly developed Health Care Coalition.

Master the Disaster 2015

In February 2015, Ventura County Emergency Medical Services Agency held the 5th annual "Master the Disaster" preparedness seminar. The topics covered included: "Surviving an Earthquake: The Napa Experience," "Perspectives on Preparedness: FEMA," and "Protecting the Health of the Traveling Public: CDC." This event was attended by 450 first responders and medical facility staff.

Current events within the response sector require careful analysis to improve outcomes. This Annual training symposium aims to do just that. The number of incidents that have occurred each year continue to allow for the analysis of outcomes and the result is improved outcomes locally should an event occur on our doorstep.

The presentation on the Napa earthquake allowed local response entities to learn from the lessons of our colleagues to help prevent negative outcomes locally should an earthquake occur in Ventura County. Federal Emergency Management Agency program staff described the requirements that any one jurisdiction will need to negotiate in an actual declared incident. Centers for Disease Control staff presented a program designed to protect the traveling public on international cruise ships docking in US ports.

Speakers included Lois Husted, Bruce Lee, Todd Pelletier, Jesse Allured, Kelly Coleman, and Craig Johnson (Napa), Farley Howell (Acting Deputy Administrator, FEMA Region IX), and Andrew Garrett (CDC VSP).

Ventura County Medical Reserve Corps



Our local Medical Reserve Corps unit boasts 80+ medical volunteers under the direction of EMS staff and the Ventura County Medical Reserve Corps Council. The Medical Reserve Corps (MRC) is a network in the U.S. of community-based units initiated and established by local organizations to meet the public health needs of their communities. It is sponsored by the Office of the Assistant Secretary for Preparedness and Response (ASPR). The MRC consists of medical and non-medical volunteers who contribute to local health initiatives, such as activities meeting the Surgeon General's priorities for public health, and supplement existing response capabilities in time of emergency. The MRC provides the structure necessary to pre-identify, credential, train, and activate medical and public health volunteers.



California Health Alert Network (CAHAN)



The California Health Alert Network (CAHAN) is the State of California's web-based information and communications system available on a 24/7/365 basis for distribution of health alerts, dissemination of prevention guidelines, coordination of disease investigation efforts, preparedness planning, and other initiatives that strengthen state and local preparedness. CAHAN participants have the ability to receive alerts and notifications via e-mail, fax, and phone (cellular and landline).

- Rapid and secure communications system among state and local health agencies, health care providers, emergency management officials, and other emergency response partners
- Dissemination of announcements from local, state or federal public health authorities to inform health and medical service personnel of likely or imminent dangers to the health of their community
- Secure collaborative environment to develop and share information for emergency preparedness planning and response

If you are affiliated with a healthcare facility in the Ventura area and would like to sign up for CAHAN please contact the EMS office at 805-981-5301.



Ventura County Health Care Coalition

Ventura County Health Care Coalition (VCHCC) was initiated on January 9, 2015 by a Kickoff Event with over 100 attendees from a variety of medical and health disciplines. The purpose of VCHCC is to be a collaborative network of healthcare organizations and their respective public and private sector response partners within the Operational Area. Throughout 2015, VCHCC grew and sustained a membership-base via its mission to support medical and healthcare entities to prepare for, respond to, mitigate, and recover from disasters by promoting integration, information sharing, and resource support in the Ventura County Operational Area and California Medical/Health Mutual Aid Region I. By the end of 2015, VCHCC had installed a governing board, participated in outreach events, and provided the medical and health community with prudent, disaster preparedness information and resources.

2015 Emergency Preparedness Exercise

On November 19th, 2015 the Ventura County EMS Agency (EMS), in conjunction with other state and regional stakeholders, took part in a functional mass chemoprophylaxis exercise that tested our dispensing capabilities in response to the release of a biological agent. The point of dispensing plans call for the ability to distribute simulated medications to the population.

This exercise was designed in concert with the Ventura County Emergency Plans. This exercise was not based upon known or implied terrorist capabilities but merely intended to provide a catalyst for the local health departments to exercise and evaluate their mass prophylaxis plans. The exercise was held on conjunction with a statewide effort to test the medical materiel management and distribution plans: including the ability to acquire, maintain (e.g., cold chain storage or other storage protocol), transport, distribute, and track medical materiel (e.g., pharmaceuticals, gloves, masks, and ventilators) during an incident and to recover and account for unused medical materiel, as necessary, after an incident.



Ventura County Emergency Medical Services Agency

Prehospital Services Committee

The purpose of this committee shall be to provide input to the VC Emergency Medical Services (EMS) Medical Director and VC EMS administration on matters pertaining to emergency medical services, including, but not limited to, dispatch, first responders, ambulance services, communications, medical equipment, training, personnel, facilities, and disaster medical response. Membership is composed of two representatives, as appointed by the organization administrator from each of the following organizations:

Type of Organization	Member	Member
Base Hospitals	PCC	PLP
Receiving Hospitals	ED Manager	ED Physician
First Responders	Administrative	Field (provider of "hands-on" care)
Ambulance Companies	Administrative	Field (provider of "hands-on" care)
Emergency Medical Dispatch Agency	Emergency Medical Dispatch Coordinator (1 representative selected by EMD Agency coordinators)	
Air Units	Administrative	Field (provider of "hands-on" care)
Paramedic Training Programs	Director (1 representative from each program.)	

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.

Nancy Merman	–	Representing District 1 Supervisor Steve Bennett
Diane Starzak	–	Representing District 2 Supervisor Linda Parks
Bob Taylor	–	Representing District 3 Supervisor Kathy Long
Ray Blackwell	–	Representing District 4 Supervisor Peter Foy
Joe Milligan	–	Representing District 5 Supervisor John Zaragoza
Audra Strickland	–	EMS Agency Appointed Representative
Angelo Salvucci, MD	–	EMS Agency Appointed Representative

Ventura County Emergency Medical Services Agency

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Daniel Shepherd, MD, EMS Medical Director

Angelo Salvucci, MD, Asst. EMS Medical Director

Chris Rosa, Deputy EMS Administrator

Katy Haddock, Trauma System Manager

Dan Wall, Emergency Preparedness Manager

Karen Beatty, Specialty Systems Coordinator

Julie Frey, EMS Program Coordinator

Randy Perez, EMS Program Coordinator

Barbara Spraktes, EMS/EPO Epidemiologist

Janelle Leza, Health Care Coalition Coordinator

Diane Gilman, Administrative Assistant II

Erik Hansen, Community Services Coordinator

Martha Garcia, Administrative Assistant I

Jeff Vahl, Community Services Coordinator

Heidi Popp, Management Assistant I

Debbie Haney, Administrative Assistant

Photo Credits

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Ventura County EMS Agency

Stakeholder Agencies



VENTURA COUNTY EMERGENCY MEDICAL SERVICES AGENCY
A Division of Ventura County Public Health Department
A Department of Ventura County Health Care Agency