



# **EMS Medical Director Report**

**Emergency Medical Care Committee**

**July 24, 2025**



# Topics

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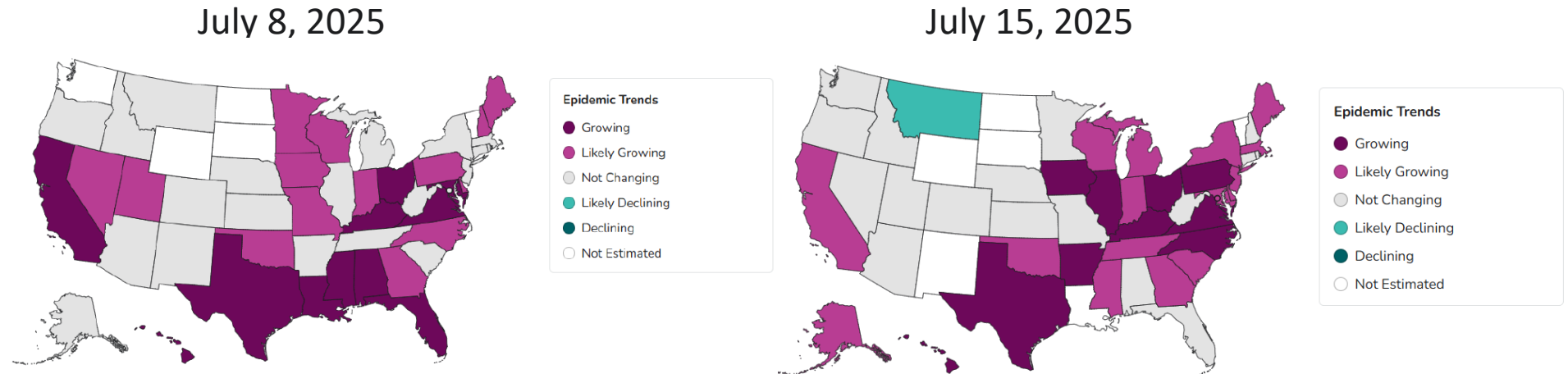
1. Emerging Threats – COVID
2. Prehospital Blood
3. Trauma System Dashboard
4. Opioid Epidemic Mitigation
5. Cardiac Resuscitation Initiative
  - A. Revive & Survive San Diego
  - B. ECPR Pilot Program



# 1. Emerging Threats

## Summer COVID Wave?

As of July 15, 2025, CDC estimates that COVID-19 infections are growing or likely growing in 27 states, declining or likely declining in 1 state, and not changing in 17 states.



# 1. Emerging Threats

## New COVID-19 Variant Detected in Brazil



### Stratus (XFG or XFG.3) “Frankenstein”

- WHO variant under monitoring (VUM)
- Descendent of Omicron variant
- More transmissible
- No evidence of more severe symptoms or higher hospitalization/mortality rates

### Stratus Symptoms

- **UNIQUE SYMPTOM: Hoarseness (including partial or complete loss of voice)**
- Sore throat, nausea, vomiting, diarrhea, dyspepsia

### Numerous Changes at Federal Level

- [What just happened? Kristen Panthagani, MD, PhD](#)
  - Summary of first 6-months (published July 21, 2025)
- Independent Academic Centers
  - CIDRAP [Vaccine Integrity Project](#) (Michael Osterholm, PhD, MPH)
  - Brown University SPH [The Pandemic Center](#) ([Tracking Report](#))



## 2. Prehospital Blood



### July 21 MAC Meeting Special Presentation

- Expert speakers
- Interactive discussion
- >50 attendees from diverse cross-section of EMS system partners



# DISTINGUISHED GUEST SPEAKERS

## National Perspective



**JON KROHMER, MD**

## Trauma Physician Perspective



**JOHN HOLCOMB, MD,  
FACS, COL (RET)**

## EM / EMS Physician Perspective



**MATTHEW ANGELIDIS, MD**



# INVITED PARTICIPANTS

## Trauma Medical Directors

- Walter Biffl, Scripps Memorial Hospital La Jolla
- Diane Wintz, Sharp Memorial Hospital
- John Steele, Palomar Medical Center Escondido
- Ignacio Romero, Rady Children's Hospital
- Laura Haines, UCSD Medical Center Hillcrest
- Vishal Bansal, Scripps Mercy Hospital San Diego

## Trauma Program Managers

- Anthony Chiatello, Scripps Memorial Hospital La Jolla
- Jennifer Hites, Sharp Memorial Hospital
- Zachary Heinemann, Palomar Medical Center Escondido
- Matthew Derkrikorian, Rady Children's Hospital
- Angela Kilty, UCSD Medical Center Hillcrest
- Katy Goss, Scripps Mercy Hospital San Diego

## San Diego County Leadership

- Jeff Collins, Director
- Kristi Koenig, Medical Director
- Andrew Parr, EMS Administrator
- David Duncan, LEMSA Medical Consultant
- Jennifer Tuteur, Chief Medical Officer
- Sayone Thihalolipavan, Public Health Officer

## EMS Agency Medical Directors

- Christopher Kahn, San Diego Fire-Rescue
- Joelle Donofrio-Odmann, San Diego Fire-Rescue
- Gary Vilke, North Zone
- Brad Schwartz, Central Zone
- Scott Kunkel, Coronado Fire Department



# INVITED PARTICIPANTS

## **California Paramedic Association Committee Chair**

- Don Sullivan, American Medical Response

## **Ambulance Association of San Diego County Chair**

- Claudia Rempel, Premier Ambulance

## **Air Ambulances**

- Christian Sloane, Medical Director, Mercy Air

## **San Diego County Fire Chiefs Association – EMS Section Chair**

- Jonathan Jordan, Lakeside Fire Protection District

## **Base Hospital Medical Directors**

- Eric Barroso, Scripps Memorial Hospital La Jolla
- Saul Levine, Sharp Memorial Hospital
- Veer Vithalani, Palomar Medical Center Escondido
- Jennifer Farah, UCSD Medical Center Hillcrest
- Chad Bernhardt, Scripps Mercy Hospital San Diego
- Steve Weinstein, Sharp Grossmont Hospital
- Ryan Luevanos, Tri-City Medical Center

## **Base Hospital Nurse Coordinators Chair**

- Brian Covell, Scripps Mercy Hospital San Diego

## **Hospital Association of San Diego & Imperial Counties**

- Caryn Sumek, Vice President

## **Los Angeles County**

- Nichole Bosson, Medical Director, Los Angeles County EMS Agency
- Marianne Gausche-Hill, Executive Director, Lundquist Institute

## **Military Medicine**

- Brian Ferguson, LCDR, Navy and Marine Corps

## **Jehovah's Witness Hospital Liaison Committee**

- Doug Levine

## **San Diego Blood Bank**

- Mark Edmunds, Chief Medical Officer

## **County of San Diego EMS Team**

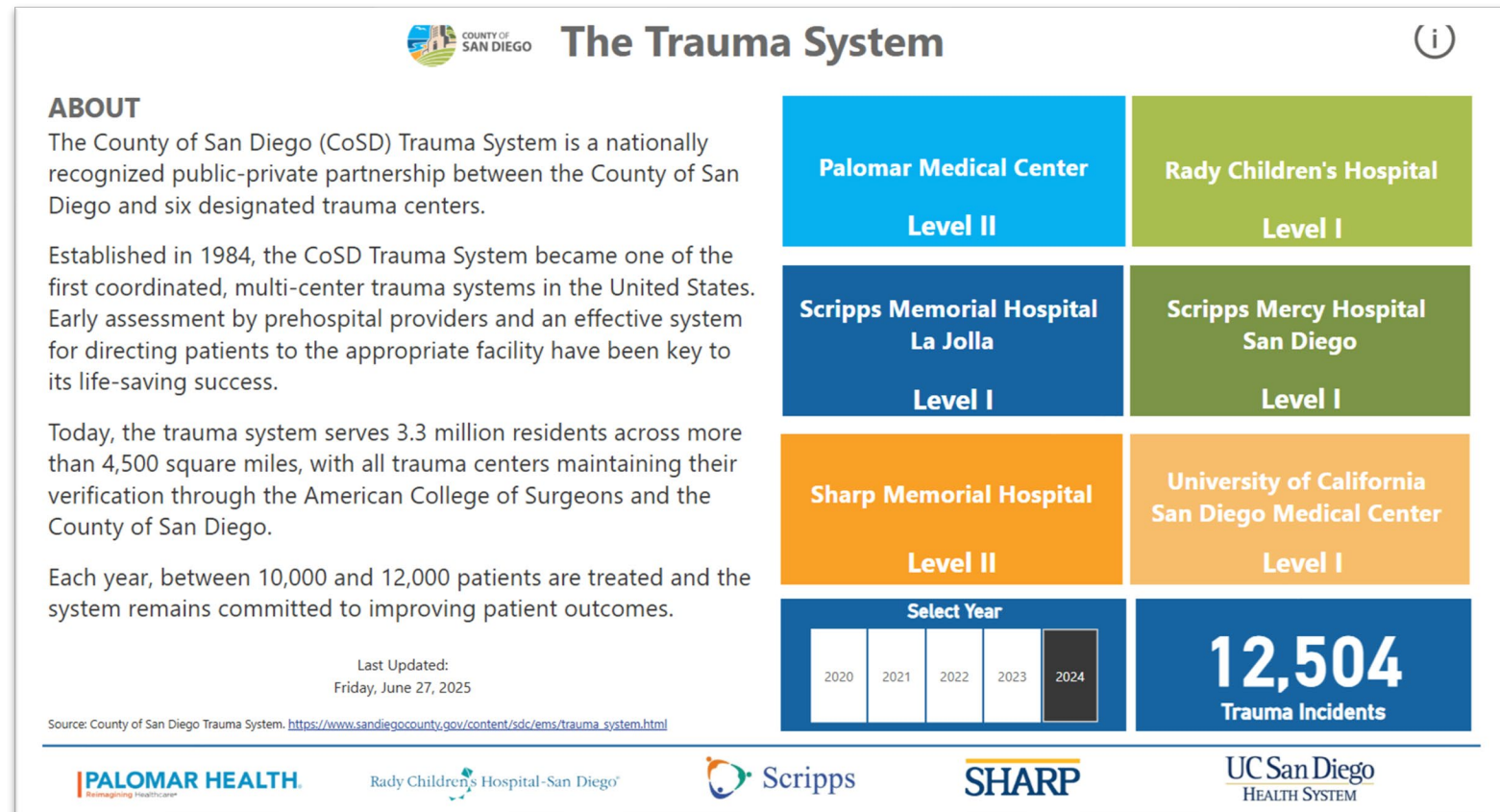
## **Selected Additional Subject Matter Experts**



# 3. Trauma System Dashboard

## *Now Live!*

### County of San Diego Trauma System




# 4. Opioid Epidemic Mitigation

## Prehospital Buprenorphine

- Pilot program under “Local Optional Scope of Practice” (LOSOP) authorization from State EMS Authority
- Few buprenorphine administrations
- EMS Medical Director’s Advisory Committee
  - Dr. Gene Hern





COUNTY OF SAN DIEGO  
EMERGENCY MEDICAL SERVICES

EMS MEDICAL DIRECTOR’S ADVISORY COMMITTEE

Evidence-Based Medicine (EBM) Presentation

July 15, 2025

12:00-12:55 pm

Beyond Narcan. Treating Opioid Use Disorder in the Field

Dr. Gene Hern

**Join by Computer**


<https://sdcounty-ca-gov.zoom.us/j/86319041050?pwd=PHB82qKSCXaliBRf5sWxVVOmE8TEHR.1>

Join by phone	Meeting ID	Passcode
1-669-444-9171	863 1904 1050	954382

Dr. Gene Hern received his MS in Medical Ethics from UC Berkeley in 1994 and his MD from UCSF in 1996. He has received the Emergency Medicine residency director of the year award, the Michael Wainscott Program Director Award by CORD, and the Distinguished Service Award from CalACEP.

In 2023 he was honored as the California EMS director of the year. He works as EMS medical director for both public and private EMS Agencies in California. As a researcher, he has published 53 peer reviewed articles on topics as varied as racial differences in pre-hospital opiate use to illegal residency interview questions to the creation of Overdose Receiving Centers.

He also has authored or co-authored 13 book chapters. His current research centers on the EMS treatment of Opioid Use Disorder and 911 paramedic-initiated buprenorphine.

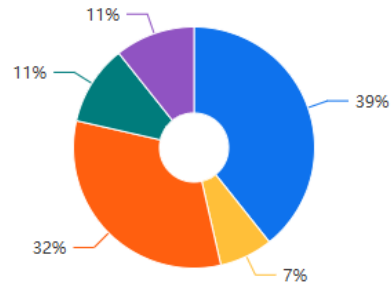


# 4. Opioid Epidemic Mitigation

## Prehospital Buprenorphine Poll Results → Memo

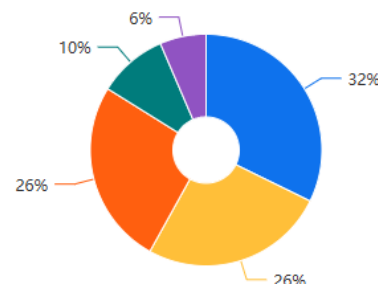
Prehospital buprenorphine should be available in San Diego County

**46% (June)**



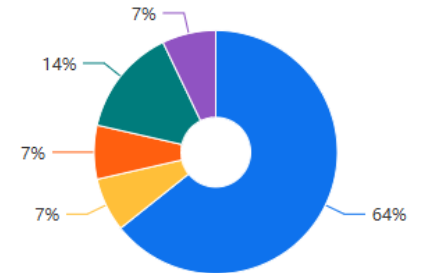
Strongly Agree 4 3 2 Strongly Disagree

**58% (July pre)**



Strongly Agree 4 3 2 Strongly Disagree

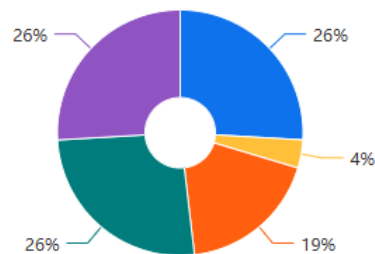
**71% (July post)**



Strongly Agree 4 3 2 Strongly Disagree

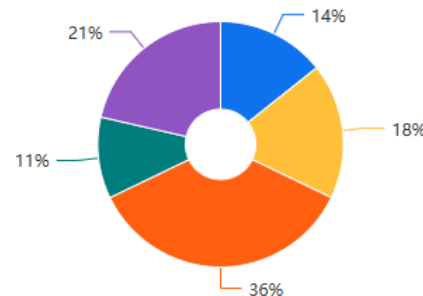
My agency/organization would like to participate in a prehospital buprenorphine program

**30% (June)**



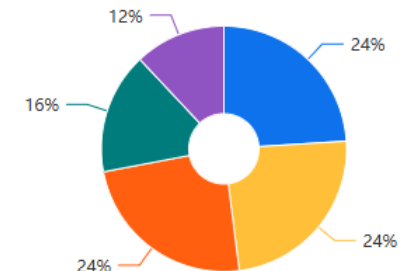
Strongly Agree 4 3 2 Strongly Disagree

**32% (July pre)**



Strongly Agree 4 3 2 Strongly Disagree

**48% (July post)**



Strongly Agree 4 3 2 Strongly Disagree



# 5A. Cardiac Resuscitation Initiatives

## Revive & Survive San Diego

Partnership between County of  
San Diego EMS and UC San Diego SPH

Goal: One Million

**557,348 trained**

since January 2024

[revivesurvive.ucsd.edu](https://revivesurvive.ucsd.edu)



**UC San Diego**

HERBERT WERTHEIM  
SCHOOL OF PUBLIC HEALTH AND  
HUMAN LONGEVITY SCIENCE





# 5B. Cardiac Resuscitation Initiatives

## Extracorporeal Cardiopulmonary Resuscitation (ECPR) Pilot Program

### Two-year anniversary, July 1, 2025



## Implementation of a Regional Emergency Physician-Initiated Extracorporeal Cardiopulmonary Resuscitation System



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RESEARCH LETTER

### Implementation of a Regional Emergency Physician-Initiated Extracorporeal Cardiopulmonary Resuscitation System

0196-0644/\$-see front matter  
Copyright © 2025 by the American College of Emergency Physicians. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

#### INTRODUCTION

Emerging research suggests that extracorporeal cardiopulmonary resuscitation (ECPR) improves outcomes for select patients with out-of-hospital cardiac arrest (OHCA). The optimal implementation of ECPR for OHCA remains unclear, as current models utilize different specialists (cardiologists, intensivists, surgeons) and locations (out-of-hospital, emergency department, cardiac catheterization laboratory) for initiation.<sup>1,2</sup>

San Diego County is unique in its 14 years of experience using emergency physicians as ECPR initiators and cannulators. A single hospital demonstrated favorable outcomes, leading to the expansion into 2 additional local hospitals.<sup>3,4</sup> Physician training included an initial 1- to 2-day course, plus intermittent ongoing education, resulting in a total cannulator pool of more than 100 physicians. This created a strong foundation for introducing a broader regional process.

We report the first-year data on a regional emergency physician-initiated ECPR program for OHCA in San Diego County.

#### METHODS

Investigators conducted a prospective observational cohort study to evaluate the outcomes of implementing a county-led regional ECPR system. Between July 1, 2023, and June 30, 2024, paramedics screened all OHCA patients for eligibility. Patients were identified as “ECPR alerts” if the following criteria were met after a second defibrillation attempt: witnessed arrest, initiation of cardiopulmonary resuscitation within 5 minutes of arrest, age between 18 and 70 years old, mechanical chest compression device available, and estimated time from cardiac arrest to ECPR receiving center of less than 45 minutes. Paramedics transported qualified “ECPR alerts” to

arrest patients were transported to the closest emergency department.

On arrival at the ECPR receiving center, emergency physicians performed ECPR based on validation of out-of-hospital criteria and an in-hospital eligibility assessment (point-of-care lactate, pH, and comorbidities).

The primary and secondary outcomes were the time from emergency medical services (EMS) dispatch to ECMO flow and neurologically intact survivorship, defined as a cerebral performance category score of 1 or 2 at hospital discharge. Each hospital’s ECMO specialist, who was not blinded to ECPR status, assessed the neurologic outcome.

The institutional review boards of each participating institution approved this study (2406804 and 24-8399).

#### RESULTS

During the study period, paramedics deemed 89 patients out-of-hospital “ECPR alerts” (Figure), with 21 out of 89 (25% [95% confidence interval (CI) 16 to 33]) of these out-of-hospital alerts surviving neurologically intact.

For patients who received ECPR, the time interval from cardiac arrest to initiation of ECMO flow was 61 minutes (interquartile range, 50 to 69 minutes). Survival to discharge was 8 of 22 (36% [95% CI 20 to 57]), and neurologically intact survivorship was 7 of 22 (32% [95% CI 16 to 53]) (Table).

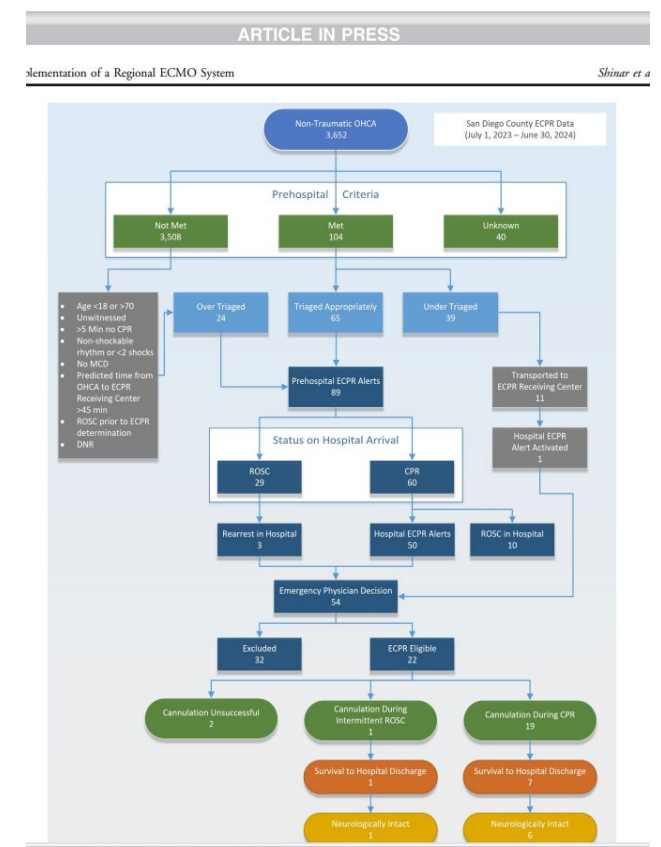
Thirty-one different physicians cannulated the 22 ECPR patients (2 cannulations per patient). The 2 expansion hospitals performed 8 of 22 (36%) cases and had neurologically intact survivorship in 3 of 8 patients (38% [95% CI 14 to 69]).

Cannulation failure occurred in 2 patients. One was due to inadvertent venovenous cannula placement, and the other was due to an inability to commence ECMO flow post initiation.

#### DISCUSSION

Limitations include an inability to fully assess cannulation complications. ECPR in our system usually involves 2 physicians cannulating and 1 physician making decisions on eligibility. As cannulation and eligibility determination are contemporaneous, a cannulation complication in a patient excluded from ECPR is challenging to identify.

Our first year data showed favorable EMS dispatch to ECMO flow time intervals and neurologically intact survivorship. Historical data of patients with similar ECPR



# Questions?

