RIVERSIDE COUNTY
EMS
AGENCY

September 29, 2019

Dave Duncan, M.D.
EMS Authority Director
10901 Gold Center Drive, Suite 400
Rancho Cordova, CA 95670-6073

Dear Dr. Duncan,

Enclosed is Riverside County EMS Agency's (REMSA) 2019 Trauma Plan Update. This plan includes current updates and future goals for the trauma system in Riverside county. The trauma centers in Riverside county continue to evolve by incorporating research, education best practices into care of trauma patients. REMSA has raised the bar in trauma care by requiring all facilities to achieve American College of Surgeons verification. For the first time, we have three of four trauma centers verified, with one seeking to become a Level I trauma center.

Currently, Riverside analyzes trauma data to assist with protocol development and research projects with our neighboring county San Bernardino. These trauma systems mirror each other under the guidance and direction of the same Medical Director. One major success this past year was REMSA was approved for local optional scope of practice for two trial studies we participated in. We are excited to participate in more trial studies in the future.

In Riverside county we strive to provide optimal trauma care to all patients and visitors. REMSA looks forward to your review and comments of the 2019 Trauma Plan Update.

Sincerely,

Trevor Douville
EMS Administrator
Riverside County EMS Agency

Mailing Address: 4210 Riverwalk Parkway • Suite 300 • Riverside, CA 92505
Phone: (951) 358-5029 • Fax: (951) 358-5160 • TDD: (951) 358-5124 • www.rivcoems.org

RIVERSIDE COUNTY EMERGENCY MEDICAL SERVICES AGENCY

TRAUMA SYSTEM UPDATE 2019

Reza Vaezazizi, MD, REMSA Medical Director
Trevor Douville, EMS Administrator
Shanna Kissel, MSN, RN, Assistant Nurse Manager

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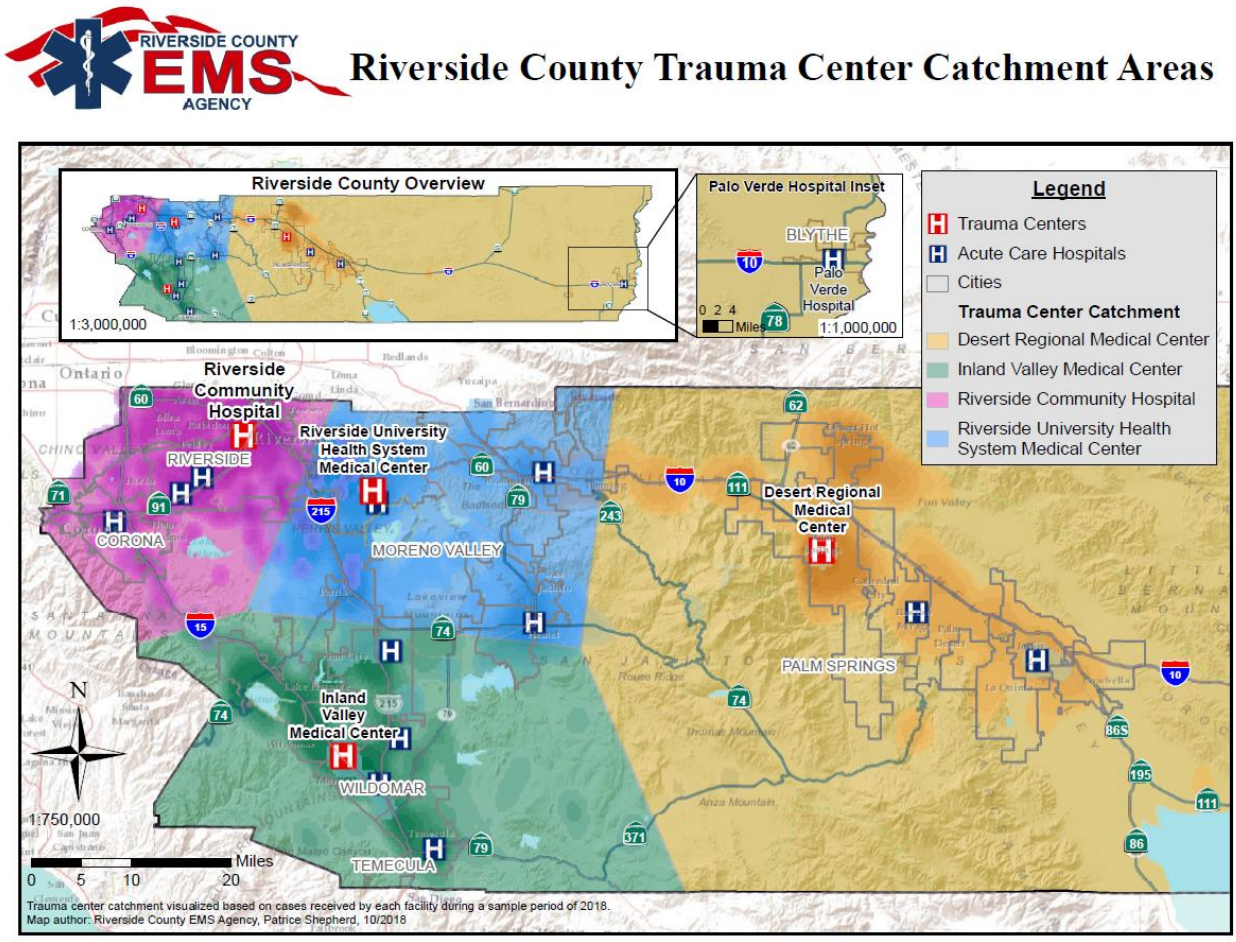
Trauma System Summary

The Riverside County EMS Agency (REMSA) Trauma Care System Plan was developed in compliance with Section 1798.160, et seq., Health and Safety Code. REMSA's organized system of the care for trauma patients has been in place since 1994 with approval by the California EMS Authority (EMSA) in 1995. The plan was last updated and approved by EMSA in 2018. This current Trauma Plan update reflects the 2018 data and information for Riverside County.

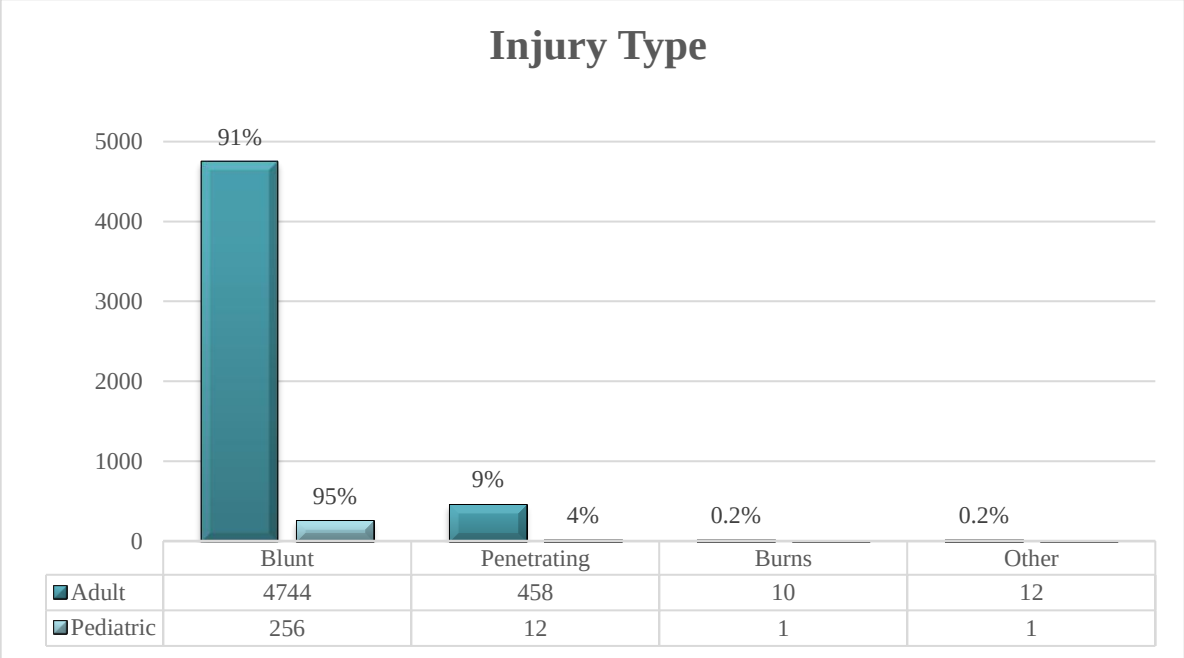
Riverside County's jurisdiction includes four Level II Trauma Centers--one of which is a Level II Pediatric Trauma Center (PTC). The PTC is geographically located towards the western region of the County and central to the majority of the County's population. All four trauma centers are distributed evenly, respective to each region's population density.

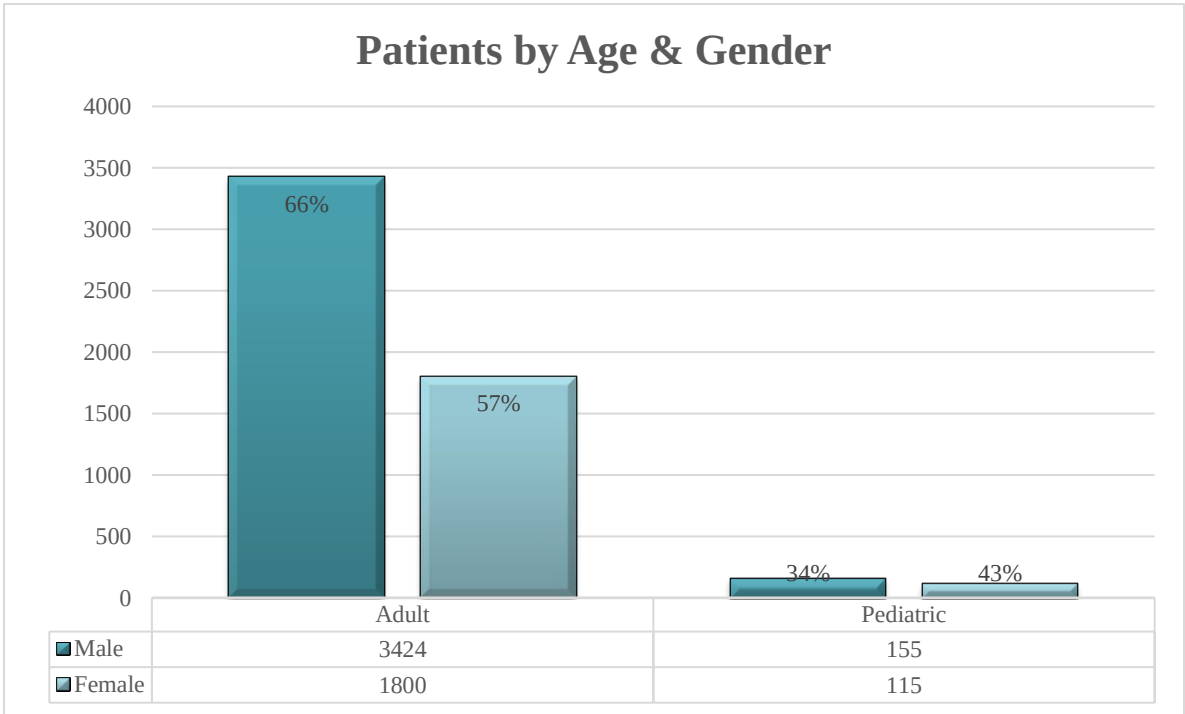
Catchment areas have remained the same, although population has increased throughout the County (see Trauma Center Population map below).

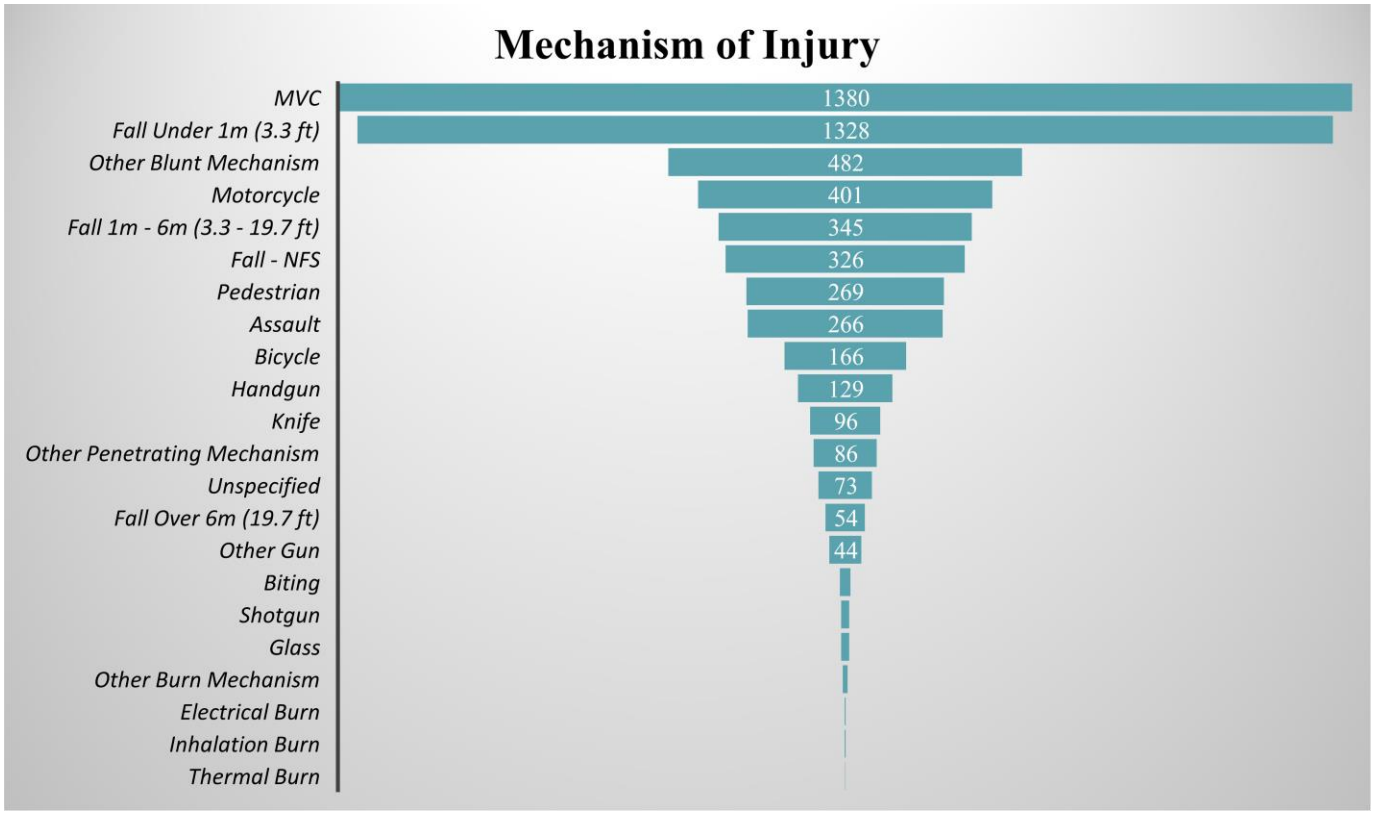
Currently, REMSA uses Digital Innovations *Collector*® Trauma Registry CV 5 as the data entry platform for the identified trauma patient. In 2020, REMSA will begin utilizing *ImageTrend*® patient registry for system collection of trauma patients.



2018 Riverside County Trauma Demographics

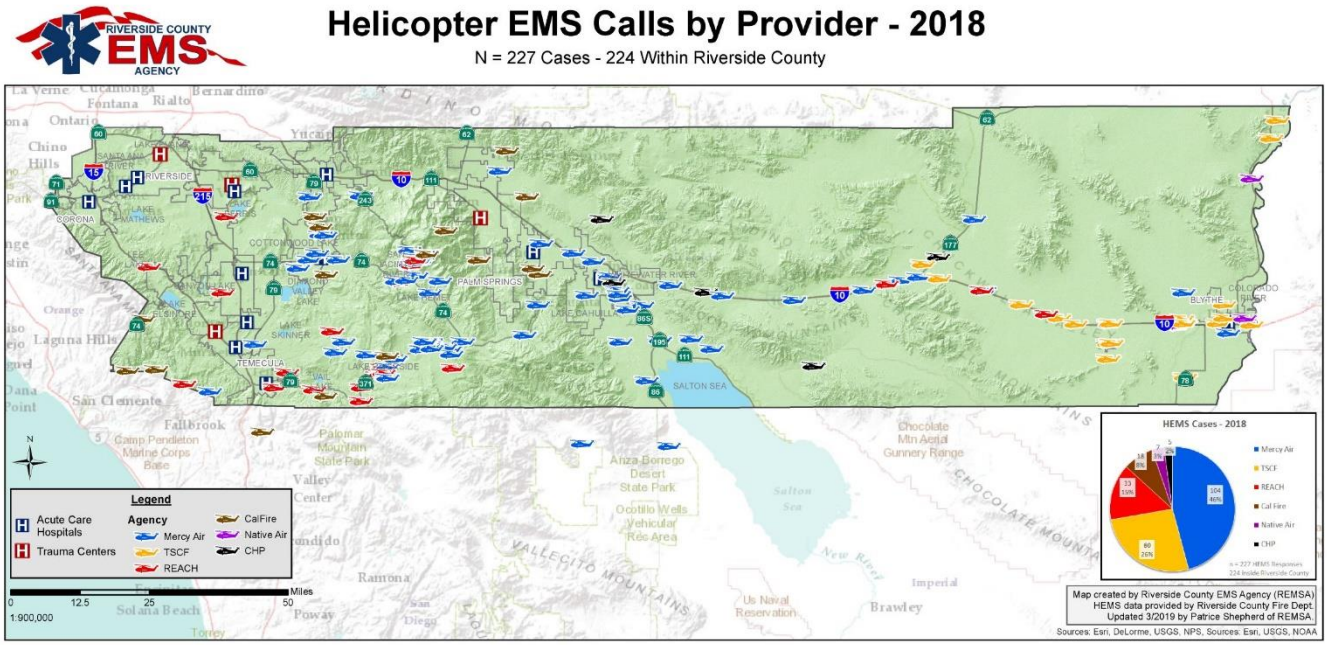






**Mechanism of Injury counts not listed above::*

Biting- 15 *Electrical Burn- 2*
Shotgun- 11 *Inhalation Burn- 2*
Glass- 11 *Thermal Burn- 1*
Other Burn mechanism- 7



Changes in Trauma System

- American College of Surgeons- Committee on Trauma (ACS-COT) Verifications
- Inter-county Agreements
- Trauma Patient Registry
- Policy Revisions and Additions
- Trauma System Outreach

American College of Surgeons- Committee on Trauma (ACS-COT) Verifications

One goal of the Riverside County Trauma Care System Plan is for all trauma centers to become ACS-verified by the end of 2020. Currently, there are four Level II-designated trauma centers; three of the four are Level II ACS-verified. ACS verification remains a contractual obligation, and compliance with the standards are performed during site surveys every three years. (Attachment A: Trauma Center Review Form)

A. Desert Regional Medical Center (DRMC) had a consultation visit April 2017 and plans to schedule a site verification in 2020.
B. Inland Valley Medical Center (IVMC) achieved ACS Level II verification November 2018. (Attachment B: IVMC ACS verification letter)
C. Riverside University Health System- Medical Center (RUHS- MC) received ACS Level II re-verification August 2017. Their future goal in 2020 is to become an ACS-verified Level I trauma center.
D. Riverside Community Hospital (RCH) achieved ACS Level II verification November 2018. (Attachment C: RCH ACS verification letter)

Inter-county Agreements

REMSA and Inland Counties Emergency Medical Agency (ICEMA) continue to have inter-county agreements regarding the acceptance of all specialty care patients, including trauma patients. Both counties collaborate in regional activities and meetings to assure that the care delivered is in the best interest of the patients. Any EMS issues, identified in association with the transports between the two counties, have multiple layers of review during system committee meetings and are presented at the Trauma Audit Committee (TAC) for adjudication. This agreement is reviewed and updated on an annual basis. (Attachment D: Inter- County agreements)

Trauma Patient Registry

Currently, REMSA and all trauma centers use the trauma registry, Digital Innovations (DI CV5). In 2020, Riverside EMS will be changing registries to *ImageTrend*® (IT) trauma patient registry. With this change, REMSA will be able to use patient-matching for EMS records, which allows the outcome of patients to be shared back with the prehospital providers. REMSA will continue to collect the majority of data elements in the trauma registry beyond the required National Trauma Data Bank (NTDB) fields. The data elements will continue to be reviewed and updated on an annual basis to align with NTDB, and the data dictionary is embedded in the registry elements. Additionally, REMSA will be utilizing the IT registry to house the patient data from the non-trauma centers that receive trauma patients and for those facilities that line the Orange County/Riverside County border. (REMSA policy #5303- *Prehospital Receiving Center Trauma Patient Registry form* can be found at www.remsa.us/policy/5303.pdf).

Policy Revisions and Additions

All trauma patient treatment policies are routinely-updated with current standards of care and vetted through the regional TAC. REMSA works closely with ICEMA for treatment protocols as patients are transported across the county lines. The discussion for REMSA Policy #5301- *Trauma Triage Indicators and Destination* was initiated at the end of 2018, specifically for the Adult penetrating traumatic arrest. The conversation continued into 2019, and the policy will be final October 2019.

Tranexamic Acid (TXA) was approved by EMSA for local optional scope of practice June 2018. TXA was included in REMSA treatment policies July 2018. (REMSA policy #4301- *Shock due to Trauma* and policy #4302- *Traumatic Injuries* can be found at www.remsa.us/policy/). Publication for the TXA trial study REMSA participated in can be found at https://escholarship.org/uc/item/9f99j268.

In addition to the TXA trial study, REMSA participated in a Ketamine trial study for pain management in patients 15 years and older with acute traumatic injury or acute burn injury and a pain scale score of five or greater. This study took place over the course of four months, was approved for local optional scope of practice September 2018, and was placed into policy September 2018. Publication for this trial study is pending. Ketamine can be found in policy 4302 and 4303 (REMSA policy #4303- Burns can be found at www.remsa.us/policy/4303.pdf).

Trauma System Outreach

REMSA is a division of the County of Riverside Emergency Management Department (EMD). The Preparedness Division under EMD is working with the Injury Prevention Coordinators at two of the four trauma centers to provide public education with the *Stop the Bleed Campaign*. The goal, for the public education, is to offer these courses four times per year. The number of times these courses are offered will be evaluated and increased as needed.

Number and Designation Level of Trauma Centers

Hospital	Trauma Designation Level	Designation/ Verification
DRMC Palm Springs, CA	II	Adult
IVMC Wildomar, CA	II	ACS Level II Adult
RCH Riverside, CA	II	ACS Level II Adult
RUHS-MC Moreno Valley, CA	II	Pediatric Trauma Center (PTC) ACS Level II Adults
Arrowhead Regional Medical Center *San Bernardino County	II	ACS Level II Adults, Burn Center ICEMA designated trauma center
Loma Linda University Medical Center and Loma Linda University Children's Hospital *San Bernardino County	I	ACS Level I Adult and Pediatric, ICEMA designated trauma center

Scheduled changes: There are no scheduled changes to the Trauma centers at this time.

System changes: REMSA does not anticipate the need for any additional trauma centers at this time based-on trauma center data analysis and catchment areas.

RUHS-MC has expressed interest in becoming a Level I ACS Verified Trauma Center early Spring 2020. REMSA is continuing to work with the medical center to achieve this goal.

Trauma System Goals and Objectives

REMSA has developed the following goals and objectives for the Trauma System calendar year 2018-2019:

Goal #1: Participate in regional activities with ICEMA

Objectives to Achieve Goal	Measure (s)	Timeline	Status
Participate in TAC 4x/yr.	Bring trauma cases from Riverside county to TAC to peer review with ICEMA trauma centers and Pomona Valley Medical Center. Cases are peer reviewed across county borders as a regional effort to improve patient outcomes. *PI Indicators updated in 2018	November 28, 2018 February 20, 2019 May 15, 2019 August 21, 2019 November 20, 2019	Complete Complete Complete Complete Complete Pending

Goal #2: LEMSA to become more involved in Tactical Response to Violent Incidents

Objectives to Achieve Goal	Measure (s)	Timeline	Status
REMSA will be actively involved in countywide drills and exercises with stakeholders in the system	REMSA will participate in MCI/ Active shooter drills	-November 2018- Riverside City Joint Active shooter full scale exercise	Complete
		-November 2018- Statewide Medical and Health functional exercise	Complete
	REMSA will participate in Disaster Preparedness activities	- March 2018- Health care Coalition surge	Complete
		- October 2019- Full scale active shooter exercise	Pending

Goal #3: LEMSA participation in Trial Studies

Objectives to Achieve Goal	Measure (s)	Timeline	Status
REMSA to participate in multi-county trial studies	Complete CQI on all patients receiving TXA in the pre-hospital setting Complete CQI of patients enrolled in Ketamine trial study	June 1, 2018 report due to state EMSA Trial study began April 1, 2018	TXA LOSOP approved by EMSA. Completed Ketamine LOSOP approved by EMSA. Completed

Goal #4: ACS Verification of trauma centers system-wide

Objectives to Achieve Goal	Measure (s)	Timeline	Status
Hospital contracts were updated in 2017 to state they will achieve ACS Verification within contract term ending in 2020.	Provide support to those trauma centers that are not ACS verified. Perform evaluations in line with ACS site visits.	June 2020	As of January 2019, three of the four trauma centers are ACS Level II verified.

Goal #5: LEMSA to obtain Trauma center performance improvement plans from trauma centers

Objectives to Achieve Goal	Measure (s)	Timeline	Status
Receive will begin requesting annual trauma performance improvement plans from all four trauma centers.	All four Trauma centers will be responsible for sending the EMS Agency an internal trauma performance improvement plan for their individual trauma programs.	June 2020	Pending

Goal #6: REMSA to capture data and outcomes on trauma patients arriving to non-trauma centers in county and facilities out of the county/ state

Objectives to Achieve Goal	Measure (s)	Timeline	Status
Send non-trauma centers and out of county hospitals REMSA policy 5303- PRC Trauma patient registry form.	Send out quarterly to: Non-trauma centers x 13 Out of county facilities x 2 Out of state facilities x 1	January 2018 July 2018 November 2018	Complete Complete Pending

Goal #7: Publish Trauma Report

Objectives to Achieve Goal	Measure (s)	Timeline	Status
Publish five- year trauma report	Use trauma data from 2015- 2019 to publish countywide report	July 1, 2020	In progress

The following identifies the Pending goal-completion status from recent Trauma Plan Updates.

Trauma System Goals 2013	Goal met (Y/N)	Status as of 2015 update	2016 Trauma Plan update status	2017 Trauma Plan Update status	2018 Trauma Plan Update status
Grow into ACS verification	No	1. IVMC upgraded to a Level II trauma center 2. ACS site visits planned for DRMC, IVMC, and RCH in 2016.	In process. 25% met- RUHS-MC is the only verified Level II trauma center at this time	In progress. One ACS Verified Level II trauma center. Three trauma centers with ACS Verification visits in 2019.	75% complete. Three ACS Level II verified trauma centers. All to be verified by 2020.
Trauma System Goals 2016	Goal met (Y/N)	Status as of 2017 update			
Participate in Regional activities with ICEMA	Partial	3.1 Not met- implementation of new trauma database		**Pending**	**Pending- estimated January 2020**

Changes to Implementation Schedule

No scheduled changes to report

System Performance Improvement

Trauma Audit Committee (TAC):

Both Riverside and San Bernardino Counties participate in a regional quarterly Trauma Audit Committee, which includes Trauma Program Medical Directors, Trauma Program Directors, and Trauma Performance Improvement Nurses. A change that took place in 2018 was the addition of Pomona Valley Hospital Medical Center (Level II trauma center in Los Angeles EMS Agency's jurisdiction) to the audit committee. Some trauma patients originating in ICEMA's catchment area are transported to Pomona Valley; cases presented at TAC by Pomona Valley will be these. With the eight trauma centers, hospitals are on a rotation for chart exchange to peer review on the hospital level. System performance indicators are evaluated and updated on an annual basis (see Attachment). To provide loop closure for the trauma centers, the LEMSAs currently will send closure letters from the TAC committee with the adjudication. (Attachment E: Trauma Audit Committee peer review).

Other Issues

No relevant issues currently.

Attachments

Attachment A: Trauma Center Review Form

Riverside EMS Agency Compliance tool- 2018							
	TRAUMA CENTER STANDARDS	**Level**	**Compliance**		Comments		
	E = Essential (Title 22), D = Desired (Title 22), R=REMSA required	**II**	**yes**	**no**			
1	**Institution/ Organization:**						
2	The Joint Commission (TJC) Accreditation	E					
3	Licensed hospital in the State of California	E					
4	Basic or comprehensive emergency services with special permits	E					
5	1. A minimum of 1200 trauma program hospital admissions, or 2. A minimum of 240 trauma patients per year whose Injury Severity Score (ISS) is >15, or 3. An average of 35 trauma patients (with an ISS of >15) per trauma program surgeon per year						
6	A trauma research program						
7	An Accreditation Council on Graduate Medical Education (ACGME) approved surgical residency program						
8	**Trauma Program Medical Director:**	E					
9	Board Certified Surgeon	E					
10	Qualified Surgical Specialist (*Level IV may be a non-surgical qualified specialist)						
11	Must maintain trauma- related extramural continuing medical education as per the most recent ACS recommendations	R					
12	Current ATLS certification	R					
13	Responsibilities include but not limited to:						
14	Recommending trauma team physician privileges	E					
15	Working with nursing and administration to support needs of trauma patients	E					
16	Developing trauma treatment protocols	E					
17	Determining appropriate equipment and supplies	E					
18	Ensuring development of policies/procedures for domestic violence, elder/child abuse/neglect	E					

19	Having authority and accountability for QI peer review process	E			
20	Correcting deficiencies in trauma care or excluding from trauma call those team members who no longer meet standards	E			
21	Coordinating with local and State EMS agencies (level IV with local EMS agency only)	E			
22	Coordinating pediatric trauma care with other hospitals and professional services	E			
23	Assisting with the coordination of budgetary processes for trauma program	E			
24	Identifying representatives from neurosurgery, orthopaedic surgery, emergency medicine, pediatrics and other appropriate disciplines to assist in identifying physicians from their disciplines who are qualified to be members of the trauma program	E			
25	Using the expertise of representatives from neurosurgery, orthopaedics, emergency medicine, pediatrics and other appropriate disciplines	E			
26	**Trauma Program Manager**	E			
27	Qualifications are:				
28	Registered Nurse	E			
29	Dedicated FTE; Current in TNCC or ATCN; Completes 16 hr. of trauma education/yr.	R			
30	Provide evidence of educational preparation and clinical experience in the care of adult and/or pediatric trauma patient and administrative ability	E			
31	Responsibilities include but not limited to:				
32	Organizing services and systems necessary for multidisciplinary approach to the care of the injured patient	E			
33	Coordinating day-to-day clinical process and performance improvement of nursing and ancillary personnel	E			
34	Collaborating with trauma program medical director to carry out educational, clinical, research, administrative and outreach activities of the trauma program	E			
35	**Trauma Service**	E			
36	Implementation of requirements as specified under Title 22 Chapter 7 and provide for coordination with the local EMS agency	E			
37	**Trauma Team**				

38	A multidisciplinary team responsible for the initial resuscitation and management of the trauma patient	E					
39	Emergency Department/Trauma Team Nursing Staff						
40	Registered Nurse	R					
41	Expertise in adult and pediatric trauma care	E					
42	Maintains TNCC or ATCN	R					
43	6 hr./yr. of trauma nursing education	R					
44	ENPC (optional) or PALS	R					
45	Responsibilities include but not limited to:						
46	Capability of providing *immediate* initial resuscitation/management of the trauma patient	E					
47	Capability of providing *prompt* assessment, resuscitation and stabilization to trauma patients						
48	Ability to provide treatment or arrange for transportation to higher level trauma center	E					
49	**Trauma Data/Registry**						
50	Trauma registrar FTE requirements as per the most current ACS recommendations	R					
51	**Surgical Department (s), Division (s), Service (s), Sections (s)**						
52	Which include at least the following surgical specialties which are staffed by qualified specialists:						
53	General	E					
54	Neurologic (*May be provided through transfer agreement)	E					
55	Obstetric/Gynecologic	E					
56	Ophthalmologic	E					
57	Oral or maxillofacial or head and neck	E					
58	Orthopaedic	E					
59	Plastic	E					
60	Urologic	E					
61	**Non-surgical Department (s), Division (s), Service (s), Section (s):**						
62	Which include at least the following non-surgical specialties which are staffed by qualified specialists:						
63	Anesthesiology	E					
64	Internal Medicine	E					
65	Pathology	E					
66	Psychiatry	E					

67	Radiology	E					
68	Emergency Medicine, immediately available	E					
69	**Qualified Surgical Specialist (s):** available as follows:						
70	General Surgeon:	E					
71	Capable of evaluating and treating adult and pediatric trauma patients shall be immediately available for trauma team activation and promptly available for consultation	E					
72	Other Qualified Surgical Specialists on-call and *promptly* available:						
73	Neurologic (*Level III - May be provided through written transfer agreement)	E					
74	Obstetric/Gynecologic	E					
75	Ophthalmologic	E					
76	Oral or maxillofacial or head and neck	E					
77	Orthopaedic	E					
78	Plastic	E					
79	Reimplantation/microsurgery capability (may be provided through written transfer agreement)	E					
80	Urologic	E					
81	Residency Coverage:						
82	Surgical Specialists' requirements may be fulfilled by supervised senior residents	E					
83	Senior Resident shall:						
84	Be capable of assessing emergent situations in their respective specialty, and	E					
85	Be able to provide overall control and surgical leadership including surgical care if needed	E					
86	A staff trauma surgeon/surgeon with experience in trauma care shall be on-call and *promptly* available	E					
87	A staff trauma surgeon/surgeon with experience in trauma care shall be advised of all trauma patient admissions, participate in major therapeutic decisions, and be present in the ED for major resuscitations and in the OR for all trauma operative procedures	E					
88	Trauma Team Activation: Tiered activations are monitored and reviewed through the Performance Improvement (PI) process for accuracy of under/over triage. "Immediate response" is defined as 15 mins, 80% of the time; "Promptly" is defined as 30 mins, 80% of the time	R					

89	Surgical Consultations:						
90	Available for consultation or consultation and transfer agreements for adult and pediatric trauma patients **(in-house or through written agreements)** **REMSA note: EMTALA supersedes "written agreements" for higher level of care from the ED.*						
91	Burn Care	E					
92	Cardiothoracic - On-Call and *Promptly available*						
93	Cardiothoracic	E					
94	Pediatric - On-Call and *Promptly available*						
95	Pediatrics	E					
96	Reimplantation/microsurgery	E					
97	Spinal cord injury	E					
98	**Qualified Non-Surgical Specialist (Applies to all specialties)**						
99	*Residency Coverage*						
100	Emergency Medicine and Anesthesiology Specialists' requirements may be fulfilled by supervised senior residents.	E					
101	Senior Resident must be capable of assessing emergent situations in their respective specialty and initiating treatment	E					
102	Supervising physician with experience in trauma care shall be on-call and promptly available	E					
103	Supervising qualified specialists shall be advised of all trauma patient admissions, participate in major therapeutic decisions, and be present in the ED for major resuscitations (Anesthesiologists will be in the OR for all trauma operative procedure)	E					
104	Emergency Medicine:						
105	In-house and *Immediately Available*	E					
106	Board certified or recognized qualified specialists in emergency medicine	E					
107	ATLS Certification: Required for emergency medicine physicians boarded in other specialties	E					
108	Anesthesiology						
109	In-house 24 hours/day and *Immediately Available*						
110	On-call and *promptly available* with a mechanism to ensure presence in the OR when the patient arrives.	E					

111	Senior Resident or CRNA in-house supervised by Staff Anesthesiologist are *promptly* available at all times and present for all operations	E					
112	Radiology						
113	On Call and *Promptly Available*	E					
114	Other Non-Surgical Specialists Available for consultation:						
115	Cardiology	E					
116	Gastroenterology	E					
117	Hematology	E					
118	Infectious Diseases	E					
119	Internal Medicine	E					
120	Nephrology	E					
121	Neurology	E					
122	Pathology	E					
123	Pulmonary Medicine	E					
124	**Service Capabilities:**						
125	Radiological Service						
126	Radiological technician *immediately available* and capable of performing plain film and computed tomography	E					
127	Shall have a radiological technician *promptly available*						
128	Angiography and ultrasound services shall be *promptly* available	E					
129	Clinical Laboratory Service						
130	Comprehensive blood bank or access to community central blood bank	E					
131	Clinical laboratory services *immediately* available	E					
132	Clinical laboratory services *promptly* available						
133	Surgical Services						
134	Shall have an operating suite available or being utilized for trauma patients and has:	E					
135	A surgical service that has at least the following: (1) operating staff who are immediately available unless operating on trauma patients and back-up personnel who are *promptly* available.						
136	Operating staff, *promptly* available, and back-up staff who are promptly available unless operating on trauma patients. *Back up staff not required	E					

137	Appropriate surgical equipment and supplies as determined by the trauma program medical director	E					
138	Appropriate surgical equipment and supplies requirements which have been approved by the local EMS agency						
139	Cardiopulmonary bypass equipment						
140	Operating microscope						
141	**Basic or comprehensive emergency services with special permits**						
142	Designate an emergency physician to be member of trauma team	E					
143	Provide emergency services to adult and pediatric patients	E					
144	Personnel knowledgeable in the treatment of adult and pediatric trauma	E					
145	Designated trauma resuscitation area physically separated from other patient care areas and of adequate size to accommodate multi-system injured patient and equipment	R					
146	Appropriate equipment and supplies for adult and pediatric patients as approved by the director of emergency medicine in collaboration with the trauma program medical director	E					
147	Key controlled elevator, where necessary for immediate access between trauma resuscitation area and helipad, OR or radiology	R					
148	**In addition to the special permit licensing services, Trauma Centers shall have the following approved supplemental services:**						
149	Intensive Care Service						
150	Special permit licensing ICU service	E					
151	Qualified specialist in-house 24 hours/day *and immediately* available to care for the trauma ICU patient						
152	Qualified specialist *promptly* available to care for trauma patients in the ICU	E					
153	RN's caring for trauma patients must have completed TNCC, ATCN, TCAR (or REMSA approved course can substitute for TCAR) and have 6 hrs./2yr of trauma nursing education	R					
154	Qualified specialist may be a resident with 2 years of training who is supervised by staff intensivist or attending surgeon who participates in all critical decision making	E					
155	Qualified specialist (above) shall be a member of the trauma team	E					

156	Appropriate equipment and supplies determined by physician responsible for intensive care service and the trauma program medical director.	E					
157	Burn Center - in house or transfer agreement	E					
158	Physical Therapy Service:						
159	Personnel trained in physical therapy	E					
160	Equipped for acute care of critically injured patient	E					
161	Rehabilitation Center:						
162	Rehabilitation services shall be in-house or may be provided by written transfer agreement with a rehabilitation center	E					
163	Personnel trained in rehabilitation care	E					
164	Equipped for acute care of critically injured patient	E					
165	Respiratory Care Service:	E					
166	Personnel trained in respiratory therapy	E					
167	Equipped for acute care of critically injured patient	E					
168	Acute Hemodialysis Capability	E					
169	Occupational Therapy Service:	E					
170	Personnel trained in Occupational therapy	E					
171	Equipped for acute care of critically injured patient	E					
172	Speech Therapy Service	E					
173	Personnel trained in speech therapy	E					
174	Equipped for acute care of critically injured patient	E					
175	Social Service	E					
176	**Trauma Centers shall have the following services and programs (special license or permit not required)**						
177	Pediatric Service providing in-house pediatric trauma care shall have:						
178	PICU approved by CCS or a written transfer agreement with an approved PICU	E					
179	Hospitals without a PICU shall establish and utilize written criteria for consultation and transfer of pediatric patients needing intensive care	E					
180	A multidisciplinary team to manage child abuse and neglect	E					
181	Acute spinal cord injury - This service may be provided through in-house or written transfer agreement	E					
182	Organ Donor Protocol as described in Div.7, Ch. 3.5 of CHSC	E					

183	**Outreach Program to include:**						
184	Telephone and on-site physician consultations with physicians in the community and outlying areas	E					
185	Trauma prevention for general public	E					
186	**Continuing Education** in Trauma Care for:						
187	Provide ongoing education requirements as per the most current ACS recommendations for:	E					
188	Staff physicians	E					
189	Staff nurses	E					
190	Staff allied health personnel	E					
191	EMS personnel	E					
192	Other community physicians and health care personnel	E					
193	**Quality Improvement:**						
194	Must have a quality improvement process in place which includes structure, process and outcome evaluations	E					
195	Must have improvement process in place to identify root causes of problems	E					
196	Must have interventions to reduce or eliminate the causes	E					
197	Must take steps/actions to correct the problems identified	E					
198	*In addition, the process shall include:*						
199	A detailed audit of all trauma -related deaths, major complications and transfers (including interfacility transfer)	E					
200	A multidisciplinary trauma peer review committee that includes all members of the trauma team	E					
201	Participation in the trauma data management system	E					
202	Participation in the local EMS agency trauma evaluation committee	E					
203	A written system in place for patients, parents of minor children who are patients, legal guardians of children who are patients, and/or primary caretakers of children who are patients to provide input and feedback to hospital staff regarding the care provided to the child	E					
204	**Interfacility transfer of trauma patients:**						
205	Patients may be transferred between and from trauma centers providing that: (REMSA note: EMTALA supersedes Title 22 for higher level of care and the need for written transfer agreements; however,						

	repatriation agreements should be in writing.)						
206	Transfers shall be medically prudent as determined by the trauma physician of record	E					
207	Shall be in accordance with the local EMS Agency interfacility transfer policies	E					
208	Hospitals shall have written transfer agreements exists with receiving trauma centers	E					
209	Hospital shall develop written criteria for consultation and transfer of patients needing a higher level of care	E					
210	Hospitals which have repatriated trauma patients from a designated trauma center will provide the trauma center with all required information for the trauma registry, as specified by local EMS policy	E					
211	Hospitals receiving trauma patients shall participate in system and trauma center quality improvement activities for those trauma patients they have transferred	E					

Attachment B: IVMC ACS Level II verification letter

THE COMMITTEE ON TRAUMA

VRC VERIFICATION REVIEW CONSULTATION
for excellence in trauma centers

December 19, 2018

Bradley Neet
Chief Executive Officer
Inland Valley Medical Center
36485 Inland Valley Drive
Wildomar, CA 92592

Dear Mr. Neet,

The Committee on Trauma would like to extend its congratulations to the Inland Valley Medical Center on its verification as a Level II trauma center for a period of one year through November 6, 2019. The Verification Review Committee (VRC), a subcommittee of the Committee on Trauma of the American College of Surgeons, has very carefully reviewed the enclosed verification report written by Drs. Matthew Wall (lead reviewer) and Gail Tominaga after the visit of November 5 and 6, 2018. The VRC agrees with the report as it is written.

To extend the verification period an additional two years, the hospital must submit documentation that reflects the following:

- All emergency medicine physicians who are board certified or eligible in emergency medicine have successfully completed ATLS at least once.
- A formal call schedule is in place that ensures a backup consultant on-call is available when the on-call orthopaedic surgeon is unable to respond promptly. This must be demonstrated over the course of a 6-month period.

The documentation must be received prior to November 6, 2019, and may be submitted electronically.

The Committee on Trauma's certificate of verification will arrive under separate cover within the next several weeks.

Effective January 1, 2017, centers that are required to have a Focused by mail-in will be invoiced for the additional work. This fee is listed on our website at: https://www.facs.org/quality-programs/trauma/vrc/fees.

Thank you for your continued participation and support of the Verification, Review, & Consultation Program of the Committee on Trauma of the American College of Surgeons. As always, we will be glad to answer any questions you may have and look forward to working with your trauma center in the future.

Sincerely,

Daniel Margulies, MD, FACS
Chair, Verification Review Committee

William Marx, DO, FACS
Vice-Chair, Verification Review Committee

cc: Tito Gorski, MD, FACS
Lana Bordenkecher, RN, CCRN
Riverside County EMS Agency

AMERICAN COLLEGE OF SURGEONS
Inspiring Quality:
Highest Standards, Better Outcomes
100 years

Attachment C: RCH ACS Level II verification letter

THE COMMITTEE ON TRAUMA

VRC VERIFICATION REVIEW CONSULTATION
for excellence in trauma centers

December 13, 2018

Patrick Brilliant
Chief Executive Officer
Riverside Community Hospital
4445 Magnolia Avenue
Riverside, CA 92501

Dear Mr. Brilliant:

The Committee on Trauma would like to extend its congratulations to Riverside Community Hospital on its verification as a Level II trauma center for a period of 3 years, expiring on November 9, 2021. The Verification Review Committee (VRC), a subcommittee of the Committee on Trauma of the American College of Surgeons, has very carefully reviewed the enclosed verification report written by Drs. Michael McGonigal (lead reviewer) and Mark Stevens after the visit of November 8 and 9, 2018.

The Committee on Trauma's certificate of verification will arrive under separate cover within the next several weeks.

Thank you for your continued participation and support of the Verification, Review, & Consultation Program of the Committee on Trauma of the American College of Surgeons. As always, we will be glad to answer any questions you may have and look forward to working with your trauma center in the future.

Sincerely,

Daniel Margulies, MD, FACS
Chair, Verification Review Committee

William Marx, DO, FACS
Vice-Chair, Verification Review Committee

cc: David Plurad, MD, FACS
Dina Elias, RN
Riverside County Emergency Medical Services Agency

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Highest Standards, Better Outcomes
100 years

Attachment D: REMSA and ICEMA inter-county agreement

RIVERSIDE COUNTY EMS AGENCY

August 14, 2019

Tom Lynch
Executive Director
Inland Counties Emergency Medical Services Agency
1425 South "D" Street
San Bernardino, CA 92415-0060

Dear Tom,

Riverside County would like to continue collaborating with San Bernardino County in accepting all specialty care patients (Trauma, Stroke, and STEMI) from the field. Riverside County EMS continues to remain committed to providing optimal patient care and outcomes for all of these patients. Reciprocal acceptance of specialty care patients from the field between both Riverside and San Bernardino Counties continues to be effective and a critical component between both systems.

Thank you for your ongoing partnership between REMSA and ICEMA.

Sincerely,

Trevor Douville
Director
EMS Administrator
Emergency Management Department

M ailing Address: 4210 Riverwalk Parkway • Suite 300 • Riverside, CA 92505
Phone: (951) 358-5029 • Fax: (951) 358-5160 • TDD: (951) 358-5124 • www.rivcoems.org

Inland Counties Emergency Medical Agency
1425 South D Street, San Bernardino, CA 92415-0060 ▪ (909) 388-5823 ▪ Fax (909) 388-5825 ▪ www.icema.net

Serving San Bernardino, Inyo, and Mono Counties
Tom Lynch, EMS Administrator
Reza Vaezazizi, MD, Medical Director

September 19, 2019

RECEIVED
SEP 25 2019
REMSA

Trevor Douville, Director
Riverside County Emergency Medical Services Agency
4210 Riverwalk Parkway, Suite 300
Riverside, CA 92505

Dear Mr. Douville:

ICEMA would also like to continue collaborating with Riverside County in accepting all specialty care patients (Trauma, Stroke and STEMI) from the field. ICEMA remains committed to providing optimal patient care and outcomes for all of these patients. Reciprocal acceptance of specialty care patients from the field between San Bernardino and Riverside Counties continues to be effective and critical component between both systems.

Thank you for your ongoing partnership between ICEMA and REMSA.

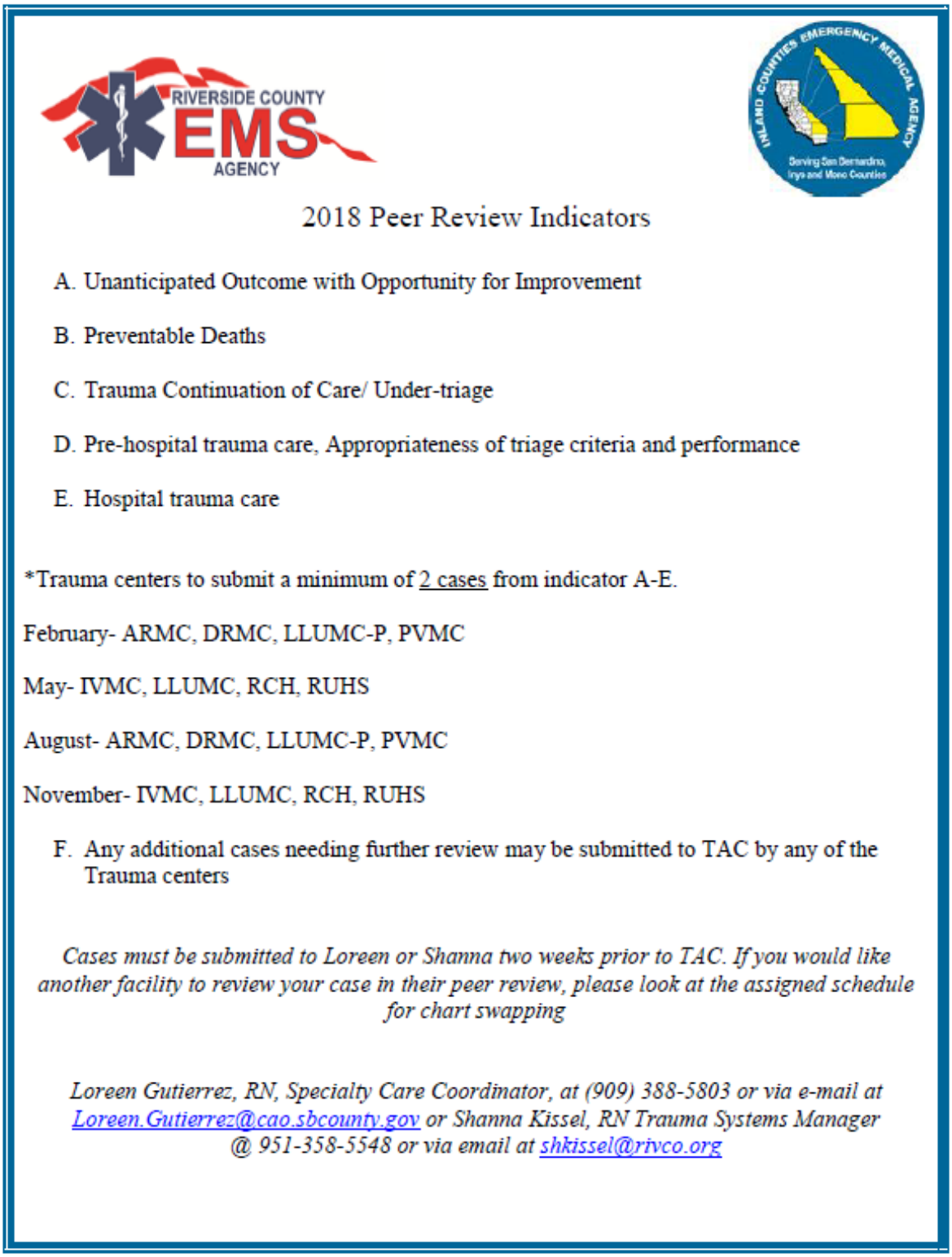
Sincerely,

Tom Lynch
EMS Administrator

TL/jlm

c: File Copy

Attachment E: Trauma Audit Committee peer review



RIVERSIDE COUNTY EMS AGENCY

INLAND COUNTIES EMERGENCY MEDICAL AGENCY
Serving San Bernardino, Inyo and Mono Counties

2018 Peer Review Indicators

A. Unanticipated Outcome with Opportunity for Improvement

B. Preventable Deaths

C. Trauma Continuation of Care/ Under-triage

D. Pre-hospital trauma care, Appropriateness of triage criteria and performance

E. Hospital trauma care

*Trauma centers to submit a minimum of 2 cases from indicator A-E.

February- ARMC, DRMC, LLUMC-P, PVMC

May- IVMC, LLUMC, RCH, RUHS

August- ARMC, DRMC, LLUMC-P, PVMC

November- IVMC, LLUMC, RCH, RUHS

F. Any additional cases needing further review may be submitted to TAC by any of the Trauma centers

Cases must be submitted to Loreen or Shanna two weeks prior to TAC. If you would like another facility to review your case in their peer review, please look at the assigned schedule for chart swapping

Loreen Gutierrez, RN, Specialty Care Coordinator, at (909) 388-5803 or via e-mail at Loreen.Gutierrez@cao.sbcounty.gov or Shanna Kissel, RN Trauma Systems Manager @ 951-358-5548 or via email at shkissel@rivco.org

Attachment F: References

Committee on Trauma, American College of Surgeons. (2014). Resources for Optimal Care of the Injured Patient.

Riverside County EMS Agency 2018 Policy Manual. Retrieved from www.remsa.us/policy/2018.

End of document