



PREHOSPITAL MEDICAL ADVISORY COMMITTEE MEETING AGENDA (PMAC)

PMAC MEMBERS PER POLICY 8202:

Air Transport Provider Representative
11-Kent McCurdy

American Medical Response
5-Douglas Key

BLS Ambulance Service Representative
12-Vacant

Cathedral City Fire Department
5-Robert Williams

Corona Regional Medical Center
1-James Rhee, MD
4-Sharon Salle

County Fire Chiefs' Non-Transport ALS Provide
10-Vacant

County Fire Chiefs' Non-Transport BLS Provide
9-Phil Rawlings (Vice Chair)

Desert Regional Medical Center
1-Joel Stillings, D.O
4-Kristie Borba

Eisenhower Medical Center
1-Frank Domzalski, MD
4-Vacant

EMT / EMT-P Training Programs
6-Maggie Robles

EMT-at-Large
13 David Olivas

Paramedic-at-Large
14-Paul Duenas

Hemet Valley Medical Center
1-Todd Hanna, MD
4-Victoria Moor

Idyllwild Fire Protection District
5-Patrick Reitz

Inland Valley Regional Medical Center
1-Reza Vaezazizi, MD
4-Daniel Sitar

JFK Memorial Hospital
1-Troy Cashatt, MD
4- Andy Billings

Kaiser Permanente Riverside
1-Jonathan Dyreyes, MD
4-Carol Fuste

The Next Meeting of PMAC is on:
Monday, April 25, 2016
9:00 AM to 11:00 AM
The Towers of Riverwalk
4210 Riverwalk Parkway, Riverside
First Floor Conference Rooms

- 1. CALL TO ORDER & HOUSEKEEPING (3 Minutes)**
Brian MacGavin (Sergeant-at-Arms)
- 2. PLEDGE OF ALLEGIANCE (1 Minute)**
Brian MacGavin
- 3. ROUNDTABLE INTRODUCTIONS (5 Minutes)**
Dr. van Stralen, (PMAC Chairperson)
- 4. EMS RECOGNITIONS (5 Minutes)**
Bruce Barton & Dr. van Stralen
- 5. APPROVAL OF MINUTES (3 Minutes)**
January 25, 2016 Minutes—Dr. van Stralen (Attachment A)
- 6. Discussion Topics (60 Minutes)**
 - 6.1.** Equipment Standardization Program—Dr. van Stralen
 - 6.2.** Policy Change--Long Backboard Use—PLN Group (Attachment B)
 - 6.3.** Head Trauma Hypoventilation—Dr. van Stralen
 - 6.4.** Infant Resuscitation—Dr. van Stralen
 - 6.5.** CPAP and Pulmonary Hypertension—Dr. van Stralen
 - 6.6.** High Dose Oxygen Administration—Dr. van Stralen
 - 6.7.** Ground Level Fall Patients Refusing Transportation—Laura Wallin
 - 6.8.** EMSC—Misty Plumley
- 7. REPORTS**
The following items are for receive and file unless a member of PMAC requests for it to be discussed:
 - 7.1.** Training / Education—Misty Plumley (Attachment C)
 - 7.2.** Trauma System—Shanna Kissel (Attachment D)
 - 7.3.** CQILT—Laura Wallin (Attachment E)
 - 7.4.** Stroke System—Laura Wallin (Attachment F)
 - 7.5.** STEMI—Laura Wallin (Attachment G)
 - 7.6.** Data System—Scott Moffatt (Attachment H)
 - 7.7.** APOD—Patrice Shepherd (Attachment I)
- 8. ANNOUNCEMENTS (10 Minutes)**
 - 8.1.** Announcements—All
This is the time/place in which committee members and non-committee members can speak on items not on the agenda but within the purview of PMAC. Each announcement should be limited to two minutes unless

Loma Linda University MC Murrieta

1-Kevin Flaig, MD
4-Jennifer Orr

Menifee Valley Medical Center

1-Todd Hanna, MD
4-Janny Nelsen

Kaiser Permanente Moreno Valley

1-George Salameh, MD
4-Katherine Heichel-Casas

Palo Verde Hospital

1-David Sincavage, MD
4-Camelita Aquines

Parkview Community Hospital

1-Chad Clark, MD
4-Guillean Estrada

Rancho Springs Medical Center

1- Zeke Foster, MD
4-Marie Dempster

Riverside Community Hospital

1-Stephen Patterson, MD
4-Sabrina Yamashiro

Riverside County Fire Department

5-Scott Visyak
8-Tim Buckley

Riverside County Police Association

7-Sean Hadden

Riverside University System Medical Center

1-Melanie Randall, MD
4-Kay Schulz

San Geronio Memorial Medical Center

1-Richard Preci, MD
4-Trish Ritarita

Temecula Valley Hospital

1-Pranav Kachhi, MD
4-Jacquelyn Ramirez

Trauma Audit Comm. & Trauma Program Managers

2-Tito Gorski, MD
3-Shane McMurphy

Ex-officio Members

1-Cameron Kaiser, MD, Public Health Officer
2-Daved van Stralen, MD, REMSA Medical Director (Chair)
3-Bruce Barton, REMSA Director
4-Brian MacGavin, REMSA Assistant Director (Sergeant-at-Arms)
5-Jan Remm, Hospital Association of Southern California
6-Jeff Grange, MD, LLUMC
6-Phong Nguyen, MD, Redlands Community Hospital
6-Rodney Borger, MD, Arrowhead Regional Medical Center

***Members are requested to please sit at the table with name plates in order to identify members for an accurate count of votes

Please come prepared to discuss the agenda items. If you have any questions or comments, call or email Brian MacGavin at (951) 358-5029 / bmacgavin@rivcocha.org. PMAC Agendas with attachments are available at: www.rivcoems.org. Meeting minutes are audio recorded to facilitate dictation for minutes.

9. NEXT MEETING / ADJOURNMENT (1 Minute)

July 25, 2016—4210 Riverwalk Parkway First Floor Conference Rooms

Purpose of Discussion and Ground Rules:

Purpose: For EMS participants to articulate personal knowledge and experience while developing discussion skills

The Sergeant-at-Arms will display a yellow colored sign visible to the speaker indicating a two minute warning and a red colored sign indicates the speaker needs to stop talking. The Sergeant-at-Arms may have to remind participants of the ground rules.

All participants should ensure the following ground rules are observed:

- 1) Adhering to the time limits
- 2) No criticisms or offering advice
- 3) No interruptions—only one person speaks at a time
- 4) Explanations are accepted, not excuses
- 5) Ask or explain with “what, how or when” but not “why”
- 6) Speak from personal knowledge and experience; use anecdotes
- 7) Claims to supporting information, e.g., books, articles, etcetera must be available for review before the meeting

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TOPIC	DISCUSSION	ACTION
1. CALL TO ORDER		Brian MacGavin commenced the meeting at 9:00 AM. And presented housekeeping items.
2. PLEDGE OF ALLEGIANCE		Bruce Barton commenced the Pledge of Allegiance.
3. ROUNDTABLE INTRODUCTIONS		Self-introductions were facilitated by Brian MacGavin.
4. EMS RECOGNITIONS Dr. van Stralen and Laura Wallin	Performance excellence recognition certificates were presented to: Corona Fire Department Employees: EMTs Daniel Fagan, Jess Remp, Trevor Walsh and paramedic Michael Waters. AMR Employees: Paramedic Jereme Frizzell, and EMT Michael Slagle. Corona Regional Medical Center Employees: James Rhee, MD, and Mary Paluch, RN.	Information only.
5. APPROVAL OF MINUTES		November 9, 2015 PMAC meeting minutes were approved without changes.
6. UNFINISHED / NEW BUSINESS	Brett Offutt's nomination to EMCC was approved by the Board of Supervisors.	Information only.
7. REPORTS & DISCUSSION		
7.1 Training / Education Shanna Kissel	The 2016 Protocol and Policy update training started on January 13, 2016. The curriculum can be viewed at our web site: http://remsa.us/documents/programs/education/ .	Information only.
7.2 Trauma System Shanna Kissel	<p>The TXA trial study started on June 1, 2015 and will run through December 2016. Fifty-nine patients received TXA appropriately. Ten patients should have received TXA and four patients should not have received TXA. There will be a Regional TXA meeting on January 26, 2016 to review the first six months of the TXA trial study.</p> <p>There were 227 HEMS 9-1-1 transports for 2015; this excludes Tristate Careflight's December data.</p> <p>For the first three quarters of 2015 there were 5,179 trauma activations reported by the four trauma centers.</p>	Information only.
7.3 CQILT Laura Wallin	CQILT will continue to monitor the same indicators used in 2015 for 2016. Laura explained the indicators and the compliance	Information only.

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	for the submissions. Fourth quarter's data is due on January 31, 2016. She encouraged early submission and registration on remsa.us	
7.4 Stroke System Laura Wallin	The last stroke system meeting was on November 9, 2015. All Riverside County stroke centers are now primary stroke centers. The only change is Parkview Community Hospital is now a primary stroke center. Desert Regional Medical Center and Eisenhower Medical Center are recognized as Interventional Stroke Centers within Riverside County. The next stroke meeting will be on February 4, from 1:00 PM – 3:00 PM, in the Vineyard Room.	Information only.
7.5 STEMI System Laura Wallin	For the first three quarters of 2015 two hundred sixty confirmed STEMI patients were transported and there was a 95 percent survival rate. Laura reviewed the details of the report provided.	Information only.
8. BREAK	There was no break	
9. REPORTS & DISCUSSION CONTINUED		
9.1 Data System Scott Moffatt	<p>All EMS system personnel need to ensure they are in ImageTrend's License Management System (LMS) for credentialing. Contact Dana Diaz at REMSA for assistance.</p> <p>Scott advised that he needs EMS providers to give him feedback on any needed ePCR changes.</p> <p>AB 1129 was introduced on February 27, 2015. This bill requires emergency medical care providers to submit data to a local EMS agency using an electronic health record system compliant with the current versions of the California Emergency Medical Services Information System (CEMSIS) and the National Emergency Medical Services Information System (NEMSIS). This includes those data elements required by Local EMS Agencies (LEMSAs). AB 1129 allows LEMSAs to mandate a specific ePCR platform for EMS provider organizations already required through agreements as of January 1, 2016.</p> <p>Representatives from our EMS system will be</p>	Information only.

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	working with the State's EMS System Data Advisory Group towards a statewide data dictionary to be used by all LEMSAs.	
9.2 Ambulance Patient Offload Delay Report Patrice Shepherd	<p>Offload delay hours have declined for the last few months of 2015 possibly due to the redirect program. Riverside Community and Parkview Community Hospitals have made great improvements on their compliance. We will be removing 2011 APOD data from the reports in order to be able to add data from 2015 & 2016.</p> <p>Jam Remm encouraged hospitals to use FirstWatch's Transfer of Care (TOC) function. Hospitals using the TOC function find it to be useful.</p> <p>Scott cautioned that we ensure the time stamps for the TOC are consistent with the NEMSIS data dictionary.</p> <p>Doug Key mentioned that we are starting to see an increase in APODs for the last part of January 2016.</p> <p>Bruce asked Georgia to make a note that he ask the Regional APOD group for guidance on language for the redirect document--what should be done when several adjacent hospitals are on redirect at the same time.</p> <p>Doug Key also asked that the APOD Regional Group provide guidance for call centers putting hospitals in another county on redirect.</p>	Information only.
9.3 EMSC Dr. van Stralen	Should we start preparing our EMSC program or wait for the State requirements? How do we coordinate all of the injury prevention programs in Riverside County? Bruce suggested bringing this to EMCC for discussion and the possible formation of an ad hoc group. He also mentioned there may be a connection to the County's Population Health Care Initiative.	Information only.
9.4 Mask Ventilation Training Dr. van Stralen	Dr. van Stralen has trained Corona Fire Department and AMR personnel on bag valve hand ventilation techniques. There is interest in bringing this program to CEFED next year.	Information only.

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	Contact Shanna if your organization is interested in learning this technique.	
10.00 ANNOUNCEMENTS & SERVICE RECOGNITIONS		
10.1 Service Recognitions Laura Wallin	Service recognitions were presented to Sabrina Yamashiro, MICN instructor for 15 years and Art Durbin EMS Coordinator for Murrieta Fire Department.	Information only.
10.2 Announcements	<p>Dr. van Stralen discussed REMSA's "without a Plan" conference on March 1, 2016 and gave a brief outline on the speaker lineup and their presentations.</p> <p>Dr. van Stralen announced an airway management joint training opportunity with Special Operations twice a year starting in July 2016. Contact Shanna Kissel if your organization is interested.</p> <p>The LMS program for credentialing was implemented on October 1, 2015. However, the processing of applications is not instantaneous. The verification process of online submissions usually requires two to three days. EMS personnel are required to submit their application for renewing their credential 30-days before its expiration. This allows for additional processing should there be any issues.</p> <p>The EMS Strategic Plan Objective 2.3 requires establishing an equipment standardized program. The equipment standardization program will continue as a PMAC agenda item.</p> <p>The March Air Show Major Accident Response Exercise will be on February 18, 2016. Anyone interested in attending should contact Shanna.</p> <p>Laura Wallin has been promoted to REMSA's Specialty Care CQI Coordinator Nurse.</p>	Information only.
11. NEXT MEETING/ADJOURNMENT		April 25, 2016

FOR CONSIDERATION BY PMAC

DATE: April 12 2016
TO: PMAC
FROM: PLN Group
SUBJECT: Protocol/Policy Change For Use of Long Back Boards

The long backboard (LBB) is an extrication tool used to transfer patients to a transport stretcher; it is not intended or appropriate for achieving spinal stabilization. Application of the LBB for purposes other than extrication necessitates prudent judgement on the part of healthcare providers to ensure the benefits outweigh the risks. Patients on LBB should be taken off as soon as it is safe and practicable.

Patients who have received cervical spine clearance by an advanced healthcare provider or physician do not need to be placed on a LBB for transport to another facility.

REQUESTED ACTION: For PMAC to discuss the above, for requesting a policy change, and provide a recommendation to REMSA

References:

Emergency Nurse's Association. Translation Into Practice, June 2015
Massachusetts State EMS policy manual, 2015
San Joaquin County EMS Cervical Stabilization Policy 2013
Morrissey, J. Research Suggests a Change in Pre-hospital Spinal Immobilization. JEMS 2013
NAEMSP Position Statement. EMS Spinal Precautions and the Use of The Long Backboard. 2012

Attachment: ENA position on Long Backboard Use of Spinal Motion Restriction

Long Backboard Use for Spinal Motion Restriction

Clinical Significance	Long backboards (LBB) continue to be applied for spinal motion restriction (SMR) in trauma patients despite a lack of substantiated benefits. Judicious use of the LBB necessitates that healthcare providers ensure the benefits of application outweigh the potential risks.
Populations	Applies to the adult population.

Translation Into Practice:	
Long Backboard Use for Spinal Motion Restriction	<p><u>Recommended Clinical Practice</u></p> <p>The LBB is an extrication tool, whose purpose is to facilitate transfer of a patient to a transport stretcher/cart and is not intended or appropriate for achieving SMR.^{2,5,6,8-12} [Level A Recommendation]</p> <p>Judicious application of the LBB for purposes other than extrication necessitates that healthcare providers ensure the benefits outweigh the potential risks.^{3,5-8,10-12} [Level A Recommendation]</p> <p>If an LBB is applied, patients should be removed as soon as it is safe and practicable. This reduces complications, minimizes negative events, and prevents adverse patient outcomes.^{3,6-8,10-13} [Level A Recommendation]</p> <p>It is recommended that individual healthcare facilities develop their own policies, procedures, and guidelines to determine who should remove patients from the LBB and the technique(s) used to do it.^{6,8,10} [Level B Recommendation]</p> <p>Patients being transferred to another facility who have received cervical spine clearance by an advanced practice healthcare provider or physician do not need to be reapplied to an LBB for transport or while awaiting transfer.^{3,6-8,10-12} [Level A Recommendation]</p> <p>It is recommended that all trauma patients receive a spinal assessment whether or not an LBB is used;^{3,4,6-10,12,13,16} spinal motion restriction (SMR) is not indicated in all trauma patients.^{2-11,14,16} [Level A Recommendation]</p> <p>Spinal motion restriction in penetrating trauma patients is associated with higher mortality, is unnecessary, potentially hazardous, and not recommended.²⁻¹¹ [Level A Recommendation]</p> <p>Spinal motion restriction should be considered for patients in the following circumstances:^{3-6,8-10}</p> <ul style="list-style-type: none"> • Blunt trauma and altered level of consciousness • Spinal deformity, pain, or tenderness • Focal neurological deficit • High energy mechanism of injury together with: <ul style="list-style-type: none"> – Alcohol and/or drug intoxication – Distracting, painful injury or communication barrier <p>[Level A Recommendation]</p>

Long Backboard Use for Spinal Motion Restriction

Supporting Rationale:

Historically, the long backboard (LBB) was presumed to provide spinal immobilization and stabilization in trauma patients. In fact, prehospital management of trauma patients included application of the LBB as the standard of practice.¹⁻⁵ However, the benefits of LBBs have been widely questioned.²⁻¹² Despite this, it is estimated that millions of patients still receive spinal immobilization each year in the United States, most of whom show no evidence of spinal injuries.⁷

The use of the LBB to immobilize the spine continues despite the lack of supporting scientific evidence.²⁻¹² While the LBB is a useful extrication tool, its application is not without risks.^{3,5-8,10-12} Long backboard use has been shown to cause and lead to the following:^{7,8,11,14,15}

- Agitation and anxiety
- Altered physical examination
- Delay in treatment
- Increased cranial pressure
- Pain
- Pressure sores
- Respiratory compromise
- Unnecessary radiographs

Use of the LBB requires judicious consideration of the risks of further complications. Evidence has shown that removal as soon as practicable reduces the probability of complications, adverse outcomes, and negative events.^{3,6-8,10-13}

Guidelines for LBB removal may vary depending on staffing, equipment, training, and education. It is recommended that individual healthcare facilities use multidisciplinary teams focusing on the best clinical evidence to develop their own policies, procedures, and guidelines specifying which individuals and what technique(s) would be most effective in safely removing patients from the LBB.^{6,8,10}

It is advocated that qualified staff receive the appropriate education, training, and frequent competency evaluations to ensure safe practice and care.^{6,8,10}

There is overwhelming support for the view that all trauma patients should receive a spinal assessment whether or not an LBB has been implemented. This is because SMR is not indicated in every trauma patient.^{2-14,16} In fact, in penetrating trauma cases, SMR is associated with higher mortality and is universally not recommended.^{2-11,16}

Injury prevention measures such as legislation, education, car safety, evidence-based treatment guidelines, and establishment of regional trauma centers, along with medical advances have contributed to increased life expectancies of patients with cervical spinal injuries (CSI) and spinal cord injuries (SCI).¹⁶

Appropriately applied SMR is acceptable for patients in the circumstances in the bulleted list above (blunt trauma and altered level of consciousness, etc.).^{3,4,6-10,12,13,16} However, when clinical assessment for the presence of qualifying SMR injuries cannot be adequately performed, for example, because of communication barriers, it is acceptable to apply SMR in this patient population.^{3,4,6-10,12,13,16}

Long Backboard Use for Spinal Motion Restriction

References

- Domeier, R. M. (1999). Indications for prehospital spinal immobilization. *Prehospital Emergency Care*, 3(3), 251–253. Retrieved from <http://www.naemsp.org/Documents/Position%20Papers/POSITION%20IndicationsforSpinalImmobilization.pdf>
- Oteir, A. O., Smith, K., Stoelwinder, J. U., Middleton, J., & Jennings, P. A. (2015). Should suspected cervical spinal cord injury be immobilised? A systematic review. *Injury*, 46(4), 528–535. doi:10.1016/j.injury.2014.12.032
- National Association of EMS Physicians and American College of Surgeons Committee on Trauma. (2013). Position statement: EMS spinal precautions and the use of the long backboard. *Prehospital Emergency Care*, 17(3), 392–393. doi:10.3109/10903127.2013.773115
- Aresti, N. A., Grewal, I. S., & Montgomery, A. S. (2014). The Initial management of spinal injuries. *Orthopaedics and Trauma*, 28(2), 63–69. doi:10.1016/j.mporth.2014.02.004
- Connor, D., Greaves, I., Porter, K., & Bloch, M. (2013). Pre-hospital spinal immobilization: An Initial consensus statement. *Emergency Medicine Journal*, 30(12), 1067–1069. doi:10.1136/emermed-2013-203207
- Alson, R., & Copeland, D. (2014). *Long backboard use for spinal motion restriction of the trauma patient*. Retrieved from the International Trauma Life Support website: <https://www.itrauma.org/wp-content/uploads/2014/05/SMR-Resource-Documents-FINAL.pdf>
- Morrissey, J. F., Kusel, E. R., & Sporer, K. A. (2014). Spinal motion restriction: An educational and implementation program to redefine prehospital spinal assessment and care. *Prehospital Emergency Care*, 18(3), 429–432. doi:10.3109/10903127.2013.869643
- White, C. C., Domeier, R. M., Millin, M. G., & Standards and Clinical Practice Committee, National Association of EMS Physicians. (2014). EMS spinal precautions and the use of the long backboard – resource document to the position statement of the National Association of EMS Physicians and the American College of Surgeons Committee on Trauma. *Prehospital Emergency Care*, 18(2), 306–314. doi:10.3109/10903127.2014.884197
- Canadian Agency for Drugs and Technologies in Health. (2013). *The use of spine boards in the pre-hospital setting for the stabilization of patients following trauma: A review of the clinical evidence and guidelines*. Retrieved from <https://www.cadth.ca/use-spine-boards-pre-hospital-setting-stabilization-patients-following-trauma-review-clinical>
- Theodore, N., Hadley, M. N., Aarabi, B., Dhall, S. S., Gelb, D. E., Daniel, E., ... Walters, B. C. (2013). Prehospital cervical spinal immobilization after trauma. *Neurosurgery*, 72(2), 22–34. doi:10.1227/NEU.0b013e318276edb1
- Hauswald, M. (2013). A re-conceptualisation of acute spinal care. *Emergency Medicine Journal*, 30(9), 720–723. doi:10.1136/emermed-2012-201847
- Moss, R., Porter, K., & Greaves, I. (2013). Minimal patient handling: A faculty of prehospital care consensus statement. *Emergency Medicine Journal*, 30(12), 1065–1066. doi:10.1136/emermed-2013-203205
- Emergency Nurses Association, (2014). *TNCC™: Trauma nursing core course provider manual* (7th ed.). Des Plaines, IL: Author.
- Rose, M. K., Rosal, L. M., Gonzalez, R. P., Rostas, J. W., Baker, J. A., Simmons, J. D., ... Brevard, S. B. (2012). Clinical clearance of the cervical spine in patients with distracting injuries: It is time to dispel the myth. *Journal of Trauma and Acute Care Surgery*, 73(2), 498–502.
- Ay, D., Aktaş, C., Yeşilyurt, S., Sarıkaya, S., Cetin, A., & Ozdoğan, E. S. (2011). Effects of spinal immobilization devices on pulmonary function in healthy volunteer individuals. *Turkish Journal of Trauma & Emergency Surgery*, 17(2), 103–107. doi:10.5505/tjtes.2011.53333
- Sundström, T., Asbjørnsen, H., Sunde, G. A., & Wester, K. (2014). Prehospital use of cervical collars in trauma patients: A critical review. *Journal of Neurotrauma*, 31(6), 531–540. doi:10.1089/neu.2013.3094

Key for Level of Evidence Recommendation

	Level A (High) Recommendation: Based on consistent and good quality of evidence; has relevance and applicability to emergency nursing practice.		Not Recommended: Based upon current evidence.
	Level B (Moderate) Recommendation: There are some minor inconsistencies in quality evidence; has relevance and applicability to emergency nursing practice.	I/E:	Insufficient evidence upon which to make a recommendation.
	Level C (Weak) Recommendation: There is limited or low-quality patient-oriented evidence; has relevance and applicability to emergency nursing practice.	N/E:	No evidence upon which to make a recommendation.

Disclaimer

This document, including the information and recommendations set forth herein (i) reflects ENA's current position with respect to the subject matter discussed herein based on current knowledge at the time of publication; (ii) is only current as of the publication date; (iii) is subject to change without notice as new information and advances emerge; and (iv) does not necessarily represent each individual member's personal opinion. The information and recommendations discussed herein are not codified into law or regulations. Variations in practice and practitioner's best nursing judgment may warrant an approach that differs from the recommendations herein. ENA does not approve or endorse any specific sources of information referenced. ENA assumes no liability for any injury and/or damage to persons or property arising from the use of the information in this document.

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Authored by the 2014 Trauma Committee

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FOR CONSIDERATION BY PMAC

DATE: April 12, 2016
TO: PMAC
FROM: Misty Plumley, EMS Specialist
SUBJECT: 2016 Protocol/Policy Training Update

Protocol and Policy Update training wrapped up on March 31, 2016. Thank you to all of our providers and their training efforts. We combined online and classroom based training strategies for the 2016 Protocol Update. Those modules will now be integrated into accreditation and reclassification procedures.

Training curriculum available at: <http://remsa.us/documents/programs/education/>. Training curriculum will remain viewable for resource and reference.

Our next training initiative will be directed towards ImageTrend Elite implementation. These training initiatives will be agency specific, as well as collaborative as we move system-wide with our new ePCR system.

ACTION: Informational only, no action required.

FOR CONSIDERATION BY PMAC

DATE: April 12, 2016
TO: PMAC
FROM: Shanna Kissel, REMSA Trauma Nurse Coordinator
SUBJECT: Trauma System

1. TXA Study Update- June 1, 2015- April 25, 2016
83 Patients received TXA within criteria
13 Missed opportunities for TXA
7 Patients received TXA out of inclusion criteria
- Alameda and Napa County are joining in on the trial study
- March 2017 Riverside county trial study results to go to the Commission. We will continue to collect pre-hospital data until this time.
2. 2015 Total trauma numbers:
REMSA #'s (ALL trauma activations, admits, transfers, deaths): 6409
State trauma #'s (Admits, EMS transfers, Deaths): 4203
3. CA State ACS Survey occurred in March 2016. The American College of Surgeons evaluated the state of CA trauma system and will be giving recommendations for improvement in trauma care statewide. These recommendations will be discussed at the EMSA Trauma Summit in June 2016, in San Francisco.
4. 2015 HEMS call volume: 230 Medical (5 providers)

ACTION: PMAC should be prepared to receive the information and provide feedback to REMSA.

FOR CONSIDERATION BY PMAC

DATE: April 12, 2016
TO: PMAC
FROM: Laura Wallin, RN IV, CEN, EMS Specialty Center Coordinator
SUBJECT: CQILT

CQILT is scheduled to meet on April 14, 2016. Recently, REMSA submitted Core Measure data to the State EMS Authority. This data indicated that pain of 7 or greater on a 1 – 10 scale is being undertreated. Additionally, adults and pediatrics complaining of shortness of breath are being undertreated with bronchodilator breathing treatments. An update on the discussions that took place on these issues at CQILT will be provided verbally at PMAC.

A handout will be available showing the 2015 data collection for Riverside County by quarter, along with compliance by base hospitals and providers.

ACTION: PMAC should be prepared to receive the information and provide feedback to the EMS Agency.

FOR CONSIDERATION BY PMAC

DATE: April 12, 2016
TO: PMAC
FROM: Laura Wallin, RN, CEN, Specialty Programs Coordinator
SUBJECT: Stroke System

The Riverside County Stroke System Committee met on April 21, 2016. The 2015 Stroke System Report is available as a handout at the PMAC meeting.

ACTION: PMAC should be prepared to receive the information and provide feedback to the EMS Agency.

FOR CONSIDERATION BY PMAC

DATE: April 12, 2016
TO: PMAC
FROM: Laura Wallin, RN, CEN, Specialty Programs Coordinator
SUBJECT: STEMI System

The STEMI System Committee is scheduled to meet on April 21, 2015. The 2015 STEMI System report will be available as a handout at the April PMAC meeting.

ACTION: PMAC should be prepared to receive the information and provide feedback to the EMS Agency.

FOR CONSIDERATION BY PMAC

DATE: April 12, 2016

TO: PMAC

FROM: Scott Moffatt, EMS Specialist

SUBJECT: EMS Data System

As you are aware, the implementation of Riverside County's contract with ImageTrend is progressing: the License Management System is in use, ImageTrend Elite is being configured, at least one provider CAD has been integrated, and associated work is in progress.

While you have become accustomed to contacting me with your data system needs my responsibilities have been reduced to the setup of the ePCR, ImageTrend Elite. For other data system needs please contact the appropriate EMS Agency employee:

- Trevor Douville, Senior EMS Specialist
 - Supervising the ImageTrend implementation
- Misty Plumley, EMS Specialist
 - Elite implementation
- Patrice Shepard, Research Specialist
 - License Management System implementation and coordination
- Misty Heyden, Administrative Services Assistant
 - As assigned
- Dana Diaz, Office Assistant II
 - License Management System maintenance

ACTION: Contact the appropriate EMS Agency employee for your various ImageTrend related data system needs.

FOR CONSIDERATION BY PMAC

DATE: April 12, 2016

TO: PMAC

FROM: Patrice Shepherd/Misty Heyden, REMSA

SUBJECT: Ambulance Patient Offload Delay Report

ATTACHMENT: Ambulance Patient Offload Delay Report (the following five pages)

The current Ambulance Patient Offload Delay Report contains data through the end of March 2016. Data by month for the last three months is available for each hospital on the last page of the report. As the report continues to be refined and improved, some graphs and data analysis methods may change.

ACTION: PMAC should be prepared to receive the information and provide feedback to the EMS Agency.

Attachment: APOD Report



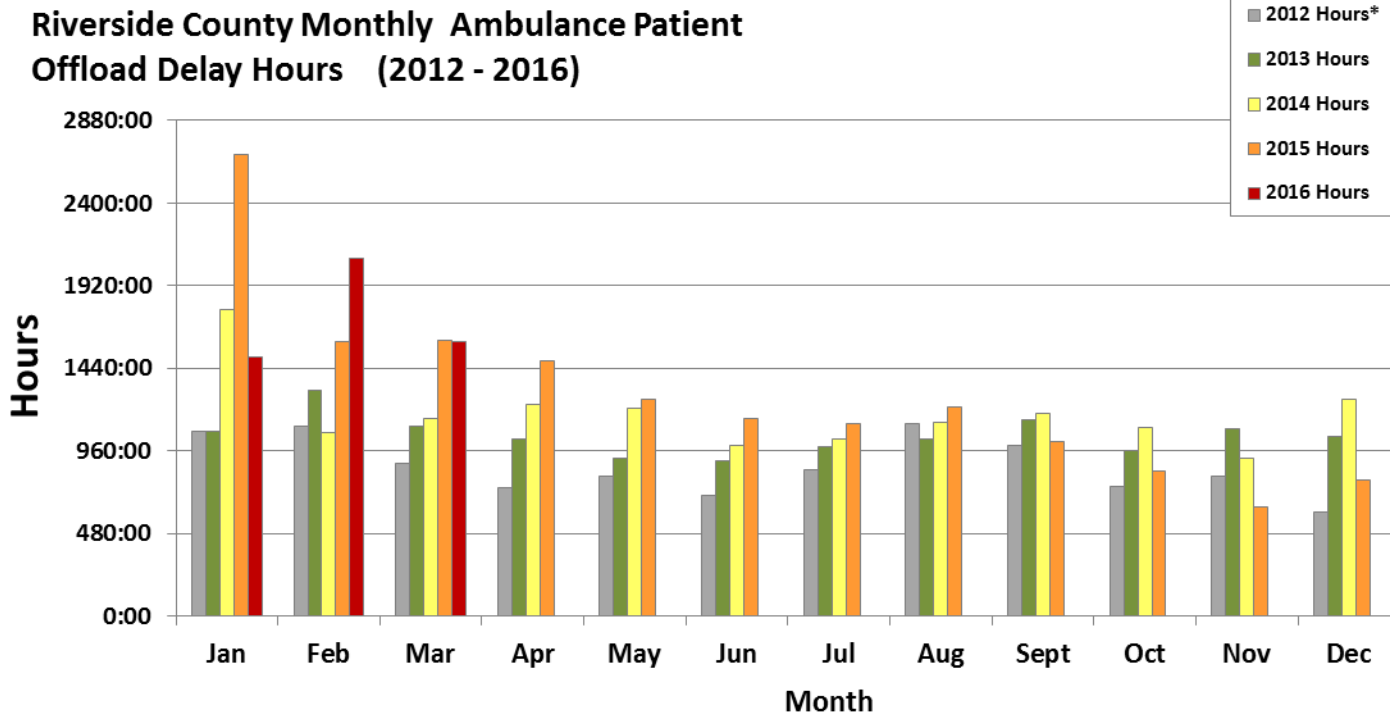
AMBULANCE PATIENT OFFLOAD DELAYS

April 12, 2016

RIVERSIDE COUNTY AMBULANCE PATIENT OFFLOAD DELAYS

HISTORICAL COMPARISON

Data provided illustrates total ambulance patient offload delay time (hh:mm) by month for 2012-2016 (present month) from hospitals within Riverside County. To qualify for this chart, the duration of offload delay must be greater than 30 minutes (2013 and forward) and only the time period after the first 30 minutes is summed. Prior to 2013, offload delay data used a 25-minute standard.



Total Annual Hours* and Ambulance Patient Offload Delays by hospital, 2012 to 2015

Hospital	2012		2013		2014		2015	
	Total Hours*	Offload Delays	Total Hours*	Offload Delays	Total Hours*	Offload Delays	Total Hours*	Offload Delays
RCH	2198:41:11	3953	2712:32:25	5978	2984:29:25	7488	2773:05:19	6613
Kaiser	151:16:22	472	196:02:59	496	201:38:58	748	338:51:33	1048
Parkview	1881:03:47	2833	1171:41:25	2037	1694:56:01	2887	1408:38:48	2361
RCRMC	892:20:22	2276	1107:06:11	2375	1007:19:37	2547	1051:28:27	2819
Corona	1694:56:09	2803	1717:47:56	2522	1845:33:25	2912	2652:21:07	3227
Moreno Valley	268:19:32	809	420:59:39	888	545:55:06	1259	451:34:23	1147
Menifee	322:28:21	791	725:38:26	1158	733:35:51	1383	824:27:25	1332
LLUMC- Murrieta	265:40:04	675	888:15:15	1411	963:34:24	1756	946:18:08	1732
Inland Valley	949:05:59	2134	643:33:09	1307	432:21:44	1112	714:29:18	1709
Rancho Springs	136:57:10	417	137:27:11	326	76:31:30	247	79:13:52	255
Temecula Valley			10:07:03	28	139:03:35	446	411:05:43	1090
Hemet	1081:16:55	2720	2535:17:35	4151	3112:04:15	5387	3153:42:33	5013
San Gorgonio	222:07:47	595	127:45:02	298	157:47:22	483	374:17:20	1072
Eisenhower	64:56:15	320	54:56:39	241	24:15:55	149	39:07:26	205
Desert	233:06:47	788	68:47:04	347	40:12:27	213	50:21:13	315
JFK	81:16:43	337	58:37:55	252	79:52:57	337	116:46:03	387
Totals	10,443:33:24	21,923	12,576:35:54	23,815	14,039:12:32	29,354	15,385:48:38	30,325

*Total Hours do not include the first 25 minutes of each offload delay (2012), or the first 30 minutes (2013- present)

AMBULANCE PATIENT OFFLOAD DELAYS AND OVERALL COMPLIANCE

This data includes 2015 and 2016 Ambulance Patient Offload Delays, hours of delay, total time the ambulances and patients were delayed, ALS transports received by each hospital, compliance, and average delay time per occurrence. "Delay Hours" include any time after the initial 30 minutes in the ED have passed; "Total Delay Time" sums both the delay and the initial 30 minutes. "Compliance" represents the percentage of ALS ambulance transports that were not held on Offload Delay.

Ambulance Patient Offload Delay Data, 2016 YTD – Transports and Occurrences - ALS Units Only

Hospital	Offload Delay Hours	Total Delay Time*	Total ALS Transports	Offload Delay Occurrences	Compliance%**	Avg Delay/Occurrence*
RCH	767:31:42	1522:31:42	4940	1510	69.4%	1:00:30
Kaiser	290:04:39	502:34:39	1643	425	74.1%	1:10:57
Parkview	605:19:36	943:19:36	1762	676	61.6%	1:23:44
RCRMC	352:04:08	751:04:08	3957	798	79.8%	0:56:28
Corona	563:59:39	863:29:39	1795	599	66.6%	1:26:30
Moreno Valley	124:49:58	260:19:58	993	271	72.7%	0:57:38
Menifee	212:28:53	363:58:53	1294	303	76.6%	1:12:05
LLUMC –Murrieta	346:51:50	626:51:50	1498	560	62.6%	1:07:10
Inland Valley	476:31:30	822:31:30	2591	692	73.3%	1:11:19
Rancho Springs	104:42:09	212:42:09	1433	216	84.9%	0:59:05
Temecula Valley	115:11:55	266:11:55	1411	302	78.6%	0:52:53
Hemet	809:43:33	1477:43:33	3761	1336	64.5%	1:06:22
San Geronio	232:09:36	451:39:36	1831	439	76.0%	1:01:44
Eisenhower	9:25:18	41:25:18	1211	64	94.7%	0:38:50
Desert	121:53:16	302:23:16	3041	361	88.1%	0:50:16
JFK	45:43:51	105:43:51	953	120	87.4%	0:52:52
Totals	5178:31:33	9514:31:33	34,114	8,672	74.6%	1:05:50

* Includes the first 30 minutes of each Offload Delay.

** Compliance % represents the percentage of ALS ambulance transports not on Offload Delay (data includes only 9-1-1 contractual provider).

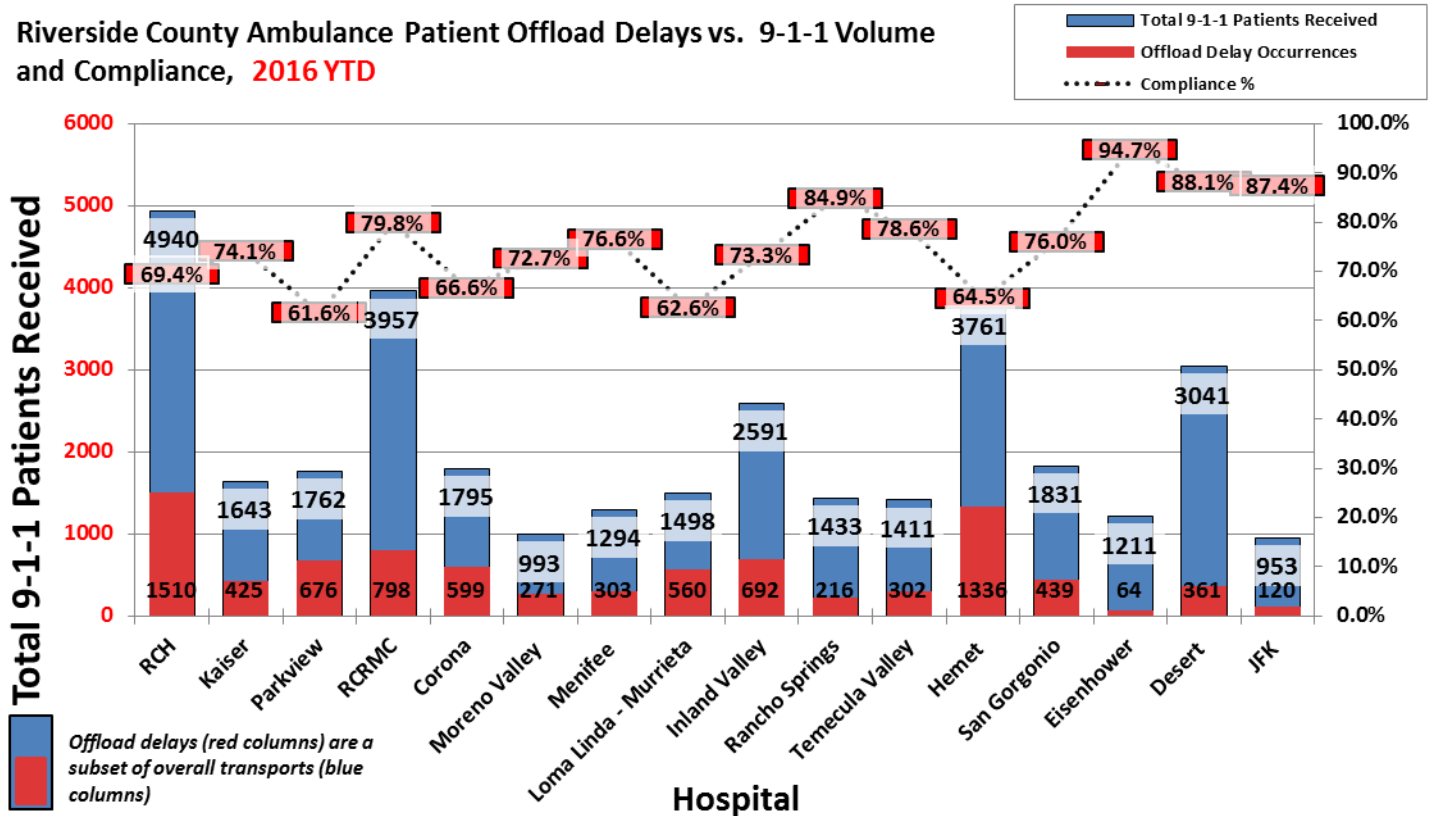
Ambulance Patient Offload Delay Data, 2015 – Transports and Occurrences - ALS Units Only

Hospital	Offload Delay Hours	Total Delay Time*	Total ALS Transports	Offload Delay Occurrences	Compliance%**	Avg Delay/Occurrence*
RCH	2773:05:19	6079:35:19	18111	6613	63.5%	0:55:10
Kaiser	338:51:33	862:51:33	6060	1048	82.7%	0:49:24
Parkview	1408:38:48	2589:08:48	6161	2361	61.7%	1:05:48
RCRMC	1051:28:27	2460:58:27	14341	2819	80.3%	0:52:23
Corona	2652:21:07	4265:51:07	6968	3227	53.7%	1:19:19
Moreno Valley	451:34:23	1025:04:23	3500	1147	67.2%	0:53:37
Menifee	824:27:25	1490:27:25	4594	1332	71.0%	1:07:08
LLUMC –Murrieta	946:18:08	1812:18:08	5717	1732	69.7%	1:02:47
Inland Valley	714:29:18	1568:59:18	9929	1709	82.8%	0:55:05
Rancho Springs	79:13:52	206:43:52	4571	255	94.4%	0:48:39
Temecula Valley	411:05:43	956:05:43	4952	1090	78.0%	0:52:38
Hemet	3153:42:33	5660:12:33	14614	5013	65.7%	1:07:45
San Geronio	374:17:20	910:17:20	6970	1072	84.6%	0:50:57
Eisenhower	39:07:26	141:37:26	4775	205	95.7%	0:41:27
Desert	50:21:13	207:51:13	10124	315	96.9%	0:39:35
JFK	116:46:03	310:16:03	3498	387	88.9%	0:48:06
Totals	15,385:48:38	30,548:18:38	124,885	30,325	75.7%	1:00:27

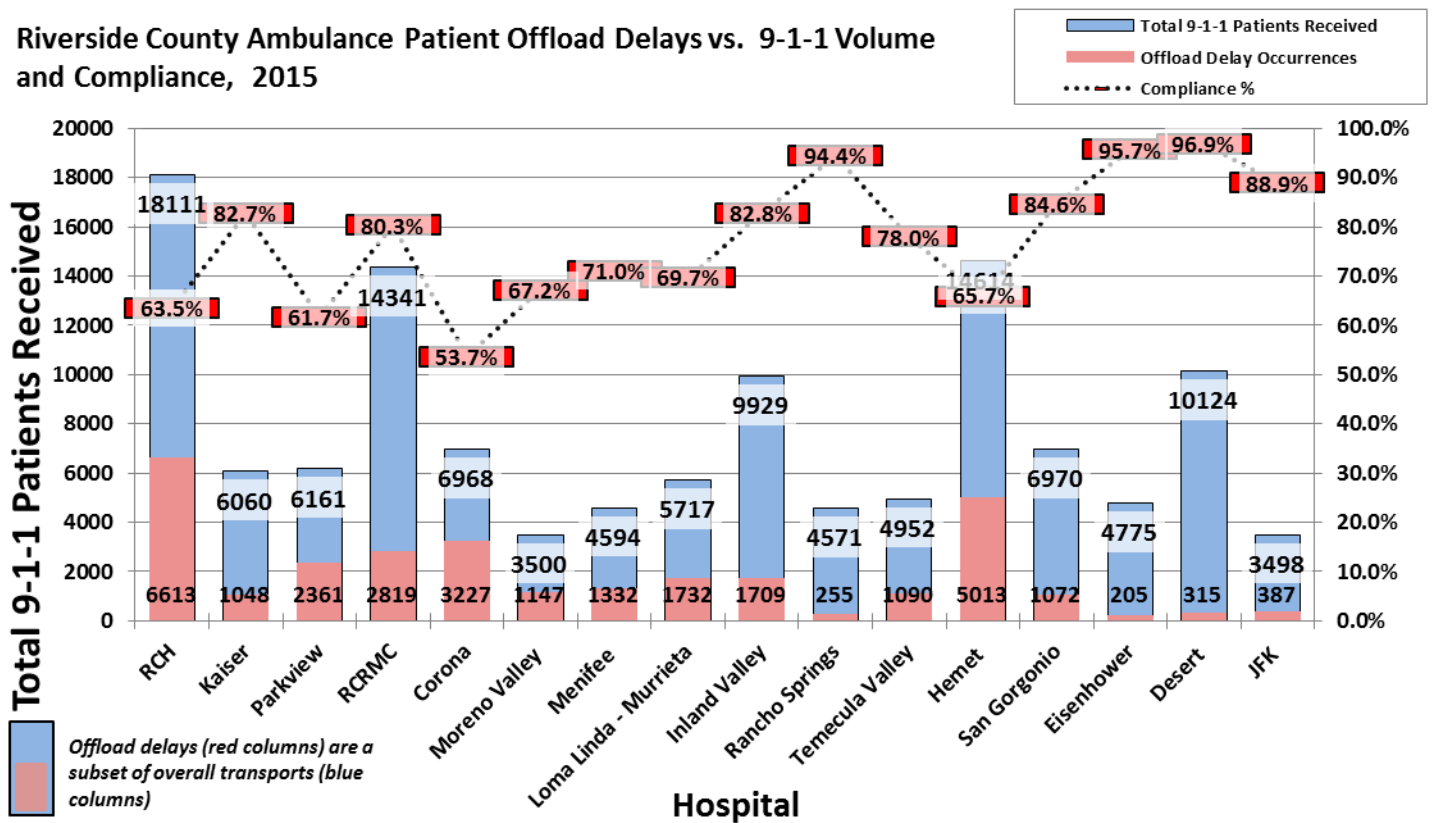
* Includes the first 30 minutes of each Offload Delay.

** Compliance % represents the percentage of ALS Ambulance transports not on Offload Delay (data includes only 9-1-1 contractual provider).

Riverside County Ambulance Patient Offload Delays vs. 9-1-1 Volume and Compliance, 2016 YTD



Riverside County Ambulance Patient Offload Delays vs. 9-1-1 Volume and Compliance, 2015



Ambulance Patient Offload Delays by Month: Offload Delay Time and Occurrences by hospital* - Jan. - Mar. 2016

Hospital	Jan. '16 Delay Hours	ALS 9-1-1 Trans.	Jan. '16 Offload Delays	Feb. '16 Delay Hours	ALS 9-1-1 Trans.	Feb. '16 Offload Delays	Mar. '16 Delay Hours	ALS 9-1-1 Trans.	Mar. '16 Offload Delays
RCH	184:37:43	1673	448	297:05:45	1623	536	285:48:14	1644	526
Kaiser	64:36:55	528	107	152:01:16	582	191	73:26:28	533	127
Parkview	104:26:32	594	198	290:40:52	609	266	210:12:12	559	212
RCRMC	121:36:27	1307	256	119:45:48	1270	260	110:41:53	1380	282
Corona	192:48:04	590	216	279:25:42	564	244	91:45:53	641	139
Moreno Val.	31:43:21	324	67	53:37:28	345	113	39:29:09	324	91
Menifee	110:20:25	414	126	55:42:57	433	94	46:25:31	447	83
LLUMC –	103:00:01	455	158	122:49:49	515	217	121:02:00	528	185
Inland Valley	120:44:12	817	162	195:19:08	857	276	160:28:10	917	254
Rancho Spgs.	13:13:51	425	43	70:27:51	511	107	21:00:27	497	66
Temecula	35:50:07	458	91	49:30:23	476	122	29:51:25	477	89
Hemet	306:13:29	1297	444	231:05:49	1231	429	272:24:15	1233	463
San Gorgonio	83:39:25	614	164	83:19:17	598	136	65:10:54	619	139
Eisenhower	2:39:49	396	16	4:56:37	417	30	1:48:52	398	18
Desert	18:00:43	985	63	62:30:32	1047	169	41:22:01	1009	129
JFK	15:08:23	302	35	10:09:46	317	35	20:25:42	334	50
Totals	1508:39:27	11,179	2584	2078:29:00	11,395	3,225	1591:23:06	11,540	2,853

*Monthly Delay Time does not include the first 30 minutes of each Offload Delay occurrence.

Data for this report was provided by American Medical Response (AMR) to the Riverside County EMS Agency for review and analysis. The data represents only AMR 9-1-1 ALS resources and does not include any other ambulance companies or BLS-level service.