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|--|--|---|----------|
| COUNTY OF VENTURA<br>HEALTH CARE AGENCY                      |  | EMERGENCY MEDICAL SERVICES<br>POLICIES AND PROCEDURES |          |
| Policy Title:<br>Emergency Medical Dispatch System Standards |  | Policy Number<br>910                                  |          |
| APPROVED:<br>Administration:                                 | <i>Barry R. Fisher</i><br>Barry R. Fisher, EMT-P | Date  | 10-19-05 |
| APPROVED:<br>Medical Director:                               | <i>Angelo Salvucci</i><br>Angelo Salvucci, M.D.  | Date  | 10-19-05 |
| Origination Date:  | October 1994                                     | Effective Date: December 1, 2005                      |          |
| Date Revised:  | September 8, 2005                                |   |          |
| Review Date:   | May, 2007  |   |          |

- I. PURPOSE: To establish standardized procedures for caller interrogation prioritized dispatch and pre-arrival instructions to be used by approved Emergency Medical Dispatch (EMD) programs within Ventura County.
- II. AUTHORITY: Health and Safety Code, Division 2.5, Section 1797.204.
- II. POLICY
  - A. Each Public Safety Answering Point (PSAP) will develop a plan to provide Emergency Medical Dispatch (EMD) to callers requiring medical assistance. This plan will be submitted to Ventura County Emergency Medical Services (VC EMS) for approval within 6 months of the implementation date of this policy. The EMD Plan will address, at a minimum, all of the following:
    1. Providing emergency medical service response on a continuous twenty-four (24) hour per day basis;
    2. Ensuring the EMD call answering point maintains direct access to the calling party;
    3. Mechanism to make available VCEMS EMD Cards to all dispatchers for use on all medical calls;
    4. Identification of a person to be responsible for the emergency response and information resources;
    5. An established quantitative coding system for quality assurance and statistical analysis;
    6. A written description of the communications system configuration for the service area including telephone and radio service resources; and
    7. A record-keeping system, including report forms or a computer data management system to permit evaluation of patient care records to ensure EMD compliance with the EMD protocols, evaluation of protocol effectiveness, and timeliness of interview questions and dispatch.
  - B. PSAPs will either provide EMD or transfer EMS calls immediately to a PSAP that provides EMD. A statement outlining the agreement between PSAPs will be sent to VC EMS. A

PSAP that transfers EMS calls to another PSAP for EMD services shall be responsible for securing an agreement for the provision of those services.

- C. Requests for medical assistance will be medically prioritized, based upon the procedures in this policy; appropriate resources will be assigned to the incident; and pre-arrival telephone medical instructions will be provided, unless precluded by emergency situations. Inability to schedule trained and accredited personnel does not constitute an emergency situation. Documentation of times when EMD is not provided will be submitted to VCEMS with the other data required.
- D. The medical dispatch protocols are specifically developed for use by medical dispatchers who have been trained and certified by the EMS Medical Director. The use of these protocols by other personnel is not authorized.
- E. The Ventura County Emergency Medical Dispatch / Priority Dispatch (PD) Protocols shall be the only approved protocols utilized by EMD agencies within Ventura County.
- F. The local EMS agency may deny, suspend, or revoke the approval of an EMD agency for failure to comply with medical control, medical accountability, and quality improvement of the EMD program.

### III. DEFINITIONS

- A. Emergency Medical Dispatch (EMD) is a program consisting of caller interrogation, prioritized dispatch, and pre-arrival instructions.
- B. EMD Caller Interrogation is a process by which the dispatcher questions calling party to determine appropriate dispatch priority and pre-arrival instructions.
- C. Priority Dispatch is a process by which the EMS Dispatcher determines, through structured caller interrogation, the most appropriate response priority for EMS units.
- D. EMD Priority I Response is an EMS response to a patient whose medical condition, as determined by EMD protocol, requires an emergency response.
- E. EMD Priority II Response is an EMS response to a patient whose medical condition, as determined by EMD protocol, requires a prompt but not emergency, response.
- F. EMD Pre-arrival Instructions are medical care instructions given to the caller after dispatch of EMS Units.
- G. EMD Priority Notification Interval is the interval of time between the first ring at an EMD PSAP to the start of notification to the responding unit.

#### IV. PROCEDURES

- A. EMD Call Entry. Upon the receipt of a request for medical assistance, the EMS Dispatcher shall obtain the following minimum call information: nature of the problem, location / address, and callback number.
- B. EMD Call Assessment. Utilizing the VCEMS approved EMD / PD Cards, the EMS Dispatcher will assess the severity of the patient's condition, prioritize the medical response, determine the necessary resources, and determine the need for and, as appropriate, provide pre-arrival telephone medical instructions.
- C. EMD Questions. EMD questions are designed to identify the priority and/or the need for pre-arrival instructions. The EMD Dispatcher shall limit medical questioning to these dispatch questions. Once a dispatch priority is determined and the dispatch is made the dispatcher shall move to treatment questions.
  - 1. If a call is dispatched CE1, CE2, or CE3, the dispatcher should complete call entry questioning, if possible. If no priority determinant is identified in call entry, the dispatcher will proceed to Dispatch Questions.
  - 2. If all dispatch questions are asked and no priority determinant is identified, the EMD Dispatcher will notify the responding agencies that a call initially dispatched as Priority I is now determined to be a Priority II response.
- D. EMD Dispatch Upgrades. The EMD Dispatcher will notify the responding agencies of information indicating that a call initially dispatched as Priority II is now determined to be a Priority I response. This would include new information received from a reporting party or on scene EMS personnel.
- E. EMD Dispatch Downgrades. The EMD Dispatcher will notify all responding agencies of information indicating that a call initially dispatched as Priority I is now determined to be a Priority II response. This would include new information received from a reporting party or on scene EMS personnel. The responding agency(ies) may determine whether to downgrade the response.
- F. Dispatch Intervals
  - 1. Definition of Intervals
    - a. For 9-1-1 calls:
      - (1) Primary PSAP: Starts at the 1<sup>st</sup> ring and ends at the beginning of the transfer of the call to the secondary PSAP.
      - (2) Secondary and Combined PSAPs: Starts at the 1<sup>st</sup> ring and ends when BOTH the dispatch of the fire department and the notification of ambulance company have begun.
    - b. For 7 Digit Calls

- (1) Primary PSAP: Starts at the CAD entry and ends at the beginning of transfer of the call to the secondary PSAP.
  - (2) Secondary and Combined PSAPs: Starts at the CAD entry and ends when BOTH dispatch of the fire department and the notification of ambulance company have begun.
  - (3) Ambulance Company: Starts at the CAD entry and ends when BOTH beginning of dispatch of ambulance AND beginning of notification of fire department have begun.
2. PSAPs and Ambulance Company Dispatch Centers will process 90% of emergency calls, according to the definitions above, within the time interval (measured in seconds) specified below:

|   | 9-1-1 or 7 Digit Emergency Calls |                       |                        | 7 Digit Emergency Calls |
|---|----------------------------------|-----------------------|------------------------|-------------------------|
|   | Primary PSAP (VCSO, SVPD)        | Secondary PSAP(VCFPD) | Combined PSAP (OPD/FD) | Ambulance Company       |
| Those calls that are identified as Priority I from the Call Entry Card. | 30                               | 120                   | 150                    | 150                     |
| Those calls identified as Priority I after the Call Entry Card.         | 30                               | 150                   | 180                    | 180                     |
| Priority II Calls   | 30                               | 180                   | 210                    | 210                     |

3. All late dispatches will be reviewed by the EMD Program CQI Coordinator to determine if the delays in dispatch were reasonably preventable. The CQI Coordinator will submit a monthly summary to VCEMS.

G. Notification of EMD to Responding Units.

1. The ambulance response agency will acknowledge the dispatch either by a telephone call from the ambulance company dispatch center to the EMD PSAP or by the responding unit on the radio frequency assigned by the EMD PSAP within 1.5 minutes of the dispatch. If the ambulance dispatch center does not acknowledge the dispatch notification within 1.5 minutes, the EMT PSAP will confirm the en route status of the ambulance unit on the EMD PSAP assigned frequency. If there is still no acknowledgement, the EMD PSAP will telephone the ambulance dispatch center.
2. Information updates will be relayed to the ambulance dispatch center.
3. If a unit that is responding to a Priority II call is redirected to a Priority I call, the redirecting agency will notify the other responding agencies.

H. Data Collection.

1. Each EMD PSAP will maintain tape recordings and/or written call records of EMD calls per applicable statutes. Records will be made available to the EMS Agency as needed.
2. Definitions of Data Points
  - a. First Ring. This is the time of the first ring of the 9-1-1 call (or 7-digit if available) at the primary PSAP, secondary PSAP, or combined PSAP.
  - b. Reporting Party Phone Number. This is the telephone number, including area code, of reporting party as identified on 9-1-1 screen and passed to next dispatch center as call moves forward. This would include the callback number, if available, for cell phone calls obtained by CHP.
  - c. Location of Incident. This is the address (or best approximation) where patient was found, or, if no patient, address to which unit responded.
  - d. Geo Code of Incident. This is the Thomas Brothers page and grid, GeoLock code, latitude-longitude identifier, or other codes by which incidents are grouped.
  - e. PSAP Incident Number. This is the number assigned by the PSAP to an incident.
  - f. PSAP Identifier. The ambulance company will document the dispatching PSAP with a one letter identifier which will precede the incident number in the documentation. The identifiers are as follows:

|   |       |   |        |
|---|-------|---|--------|
| C | VCFPD | X | Oxnard |
|---|-------|---|--------|
  - g. Date and Time of Call Pickup. This is the time that a dispatcher answers a call.
  - h. Date and Time of Dispatch of First Unit. This is the time of start of notification to the responding unit.
  - i. Time of Notification of Ambulance Company. This is the time the ambulance dispatch center is notified by the PSAP. The EMD PSAP will determine, with consultation of the ambulance dispatch center, what method of notification is used.
  - j. Time First Responding Unit is En Route. This is the time that the wheels of the responding unit begin turning.
  - k. Time the First Responding Unit is On Scene. This is the time that a responding agency's first responding unit stops physical motion at the scene (last place that the unit or vehicle stops prior to assessing the patient) or at a designated staging area.

- I. EMD PSAP/Ambulance Company Priority I Determinant Criterion. This is the code which identifies the single criterion that determined the level of the response as Priority I, e.g., CE4 indicates that the response was determined by the answer to Call Entry Card, Question 4; SE3 Seizure, Priority I response identified in response to dispatch question 3.
3. The PSAP Incident Number must be passed on to the Ambulance Dispatch Center.
  4. All EMD PSAPs shall electronically submit the following Data Points to VCEMS according to VCEMS Policy 1000.

| Ventura County EMD Dispatch Center Monthly Reporting Data Elements |       |              |                |               |                           |
|--|-------|--------------|----------------|---------------|---------------------------|
| Data Collection Elements   | VCEMS | Primary PSAP | Secondary PSAP | Combined PSAP | Ambulance Dispatch Center |
| First Ring of 9-1-1 Call   | X     |              |                |               |                           |
| Reporting Party Phone Number (ANI)                                 | X     | X            | X              | X             | X                         |
| Location of Incident   | X     | X            | X              | X             | X                         |
| Geo Code of Incident   |       | X            | X              | X             | X                         |
| PSAP Incident Number   |       | X            | X              | X             | X                         |
| PSAP Identifier  |       |              |                |               | X                         |
| Date and Time of Call Pick up (911)                                | X     | X            |                | X             |                           |
| Date and Time of CAD Entry (7 digit)                               |       | X            | X              | X             | X                         |
| Time of Dispatch of First Unit                                     |       |              | X              | X             | X                         |
| Time of Notification of Ambulance Co.                              |       |              | X              | X             | X                         |
| Time First Responding Unit Is En Route                             |       |              | X              | X             | X                         |
| Time First Responding Unit Is On Scene                             |       |              | X              | X             | X                         |
| Priority Determinant Code Criterion                                |       |              | X              | X             | X                         |

5. All times will be submitted as HHMMSS with leading zeroes, as needed, e.g., 002059 = 20 minutes, 59 seconds after midnight. Midnight is to be expressed as 000000, one second past midnight is 000001.
- I. EMD Center Continuous Quality Improvement (CQI)
    1. Each EMD center shall have a quality improvement program that includes, at a minimum, all of the following:
      - a. Personnel assigned as Call-Taker will utilize protocols approved by the VCEMS Medical Director and provide timely, appropriate dispatch.
      - b. EMD Center and dispatcher performance will be evaluated through case review, dispatch time records and applicable provider field records.
      - c. Each EMD PSAP will have a CQI Coordinator. The CQI Coordinator may be an MD, RN or EMT-P. An EMT-P acting as a CQI Coordinator shall have at least five years working experience as a paramedic and shall have successfully completed EMD training.

- d. The CQI Coordinator will be a member of the VC EMD Review Committee and will assist in providing data used for countywide EMS System analysis.
  - e. The EMD CQI Coordinator shall review a minimum of three randomly selected medical calls per call taker per month. One hundred percent (100%) of the tapes of cardiac arrests, choking and childbirth calls will be reviewed. A monthly summary of these calls shall be provided to the EMS Agency CQI Coordinator within 30 days following the reporting month.
  - f. EMD Case Review
    - 1) Evaluation of Call Entry Interrogation should include correctly asked location verification, callback verification, chief complaint, number of patients (when appropriate), age, gender, level of consciousness, breathing, and shock signs. Threshold of 95% compliance.
    - 2) Appropriate selection of Call Type card, with 90% compliance.
    - 3) Appropriate selection of Priority Determinant Criterion, with 90% compliance.
    - 4) Appropriate Pre-Arrival Instructions, with 90% compliance.
  - g. The EMD CQI Coordinator shall review all 9-1-1 calls where the priority determination process exceeds the time frames defined in this policy. Exceptions are for delays caused by: language barriers, when law enforcement agency remains on line to obtain additional information following call transfer, third party caller, or other problems with the reporting party's speech or age. A monthly summary report will be submitted to the VCEMS CQI Coordinator within 30 days following the reporting month.
  - h. An EMD PSAP will establish a process to receive and address dispatcher and EMS responder agency questions and issues regarding priority determination and pre-arrival instructions. A summary of the issues will be submitted monthly to the VCEMS CQI Coordinator.
  - i. Events meeting conditions in VCEMS Policy 150 will be forwarded to the VCEMS Medical Director according to the Unusual Occurrence policy.
2. APPENDIX A provides a summary of data to be submitted to VCEMS by EMD/PD PSAPs.
- J. EMS Agency
- 1. The VCEMS Agency will receive and review the PSAP Center plans. The plans will be approved when it is determined that they are complete and comply with local policies and procedures.

2. VCEMS will evaluate an EMD Center's medical operations on an ongoing basis for compliance with VCEMS policies, procedures, and practice.
  - a. VCEMS will validate, on a continuous basis, VC EMD policies, protocols and practices to ensure that they are appropriate and effective.
  - b. A VCEMS representative may observe operations at an EMD PSAP or request EMD related records at any time. Requests for EMD related records will be made to the EMD CQI Coordinator.
3. VCEMS will receive and evaluate data from the PSAP Centers.
  - a. VCEMS will compile all data from county dispatch centers providing EMD for quarterly review by the EMD Review Committee. Committee meetings will be scheduled within one month of the scheduled date that EMD PSAP data is due.
  - b. EMD PSAPs may obtain electronic data submitted for their Center that is stored by the EMS Agency.
    - 1) EMD PSAPs will be granted administrative access to data when PSAP data is submitted electronically to the database.
    - 2) If administrative access is not available to the PSAP, the EMD CQI Coordinator can obtain this data by submitting a written request to the VCEMS Administrator.
  - c. VCEMS will receive summary numbers for EMD PSAP Center Case Review activity and will aggregate the information for Call Entry Interrogation, appropriate selection of Call Type Card, appropriate selection of Priority Determinant Criterion, and use of appropriate Pre-Arrival Instructions for analysis of county-wide system performance.
4. EMS Agency CQI
  - a. VCEMS will establish an EMD Review Committee that will meet, at a minimum, quarterly. The VCEMS CQI Coordinator will chair the committee. All EMD PSAPs will be represented on the committee. The VCEMS Medical Director will attend all meetings and has final authority for medical decisions relating to EMD policies, procedures and practices.
  - b. VCEMS will receive and review EMD Center monthly summary reports and analyze quarterly on a system-wide basis.
  - c. Receive and review a listing from all EMD centers of Priority II dispatches with the Priority Determinant.
  - d. Implement EMD card revision processes and/or additional training, as needed.



- e. Receive and review monthly reports of delayed dispatches and analyze on a system-wide basis.
  - f. Receive and review Priority II dispatches with Priority I condition found on arrival when notified directly by field and/or EMD personnel or through summary reports from EMD PSAP Centers.
  - g. Receive, review, and respond to concerns submitted by EMD and/or EMS personnel relating to EMD procedures, by direct notification to VCEMS or through summary reports of dispatch and EMS field provider issues and questions received.
  - h. The VCEMS Medical Director will review dispatcher tapes at random.
5. EMD Cards
- a. VCEMS will audit select EMD cards on a periodic basis. Based on audit results, VCEMS will implement EMD card revision processes and/or additional training, as needed.
  - b. Receive and respond to requests for evaluation of EMD card content, utilizing the following procedure:
    - 1) All requests for the revisions of an EMD/PD card shall be submitted in writing to the VCEMS CQI Coordinator accompanied by the "Proposed Change(s) to Ventura County EMD Card(s)" form.
    - 2) The EMD Review Committee will evaluate the need for revision, and if in agreement, recommend the change to the EMS Medical Director for his approval.
    - 3) If the suggested revision is approved, the revised card will be sent to each PSAP's CQI Coordinator and PSAP Manager by the EMS Agency, with written notification of the change.
    - 4) If the suggested revision is not approved, the EMS Medical Director or designee will explain the rationale to requesting PSAP in writing. If needed, additional training will be conducted for clarification of EMD card issues.
6. EMD Continuing Education
- VCEMS will provide one-hour of EMD Continuing Education (CE) on a quarterly basis.

APPENDIX A

Summary of Data to be Submitted to VCEMS by EMD/PD PSAPs

| Frequency of Submission | Description of Data Set   |
|-------------------------|---|
| Monthly                 | Compliance with time intervals described in 910.IV.F.2 (% of calls completed within time interval designations)   |
| Monthly                 | Data elements defined in 910.IV.H.4 according to the definitions in 910.IV.H.2  |
| Monthly                 | <p>The following minimum data set for evaluation of call taker activity, per 910.IV.I.1.f:</p> <p>The percentages shall be submitted separately for the 3 calls/calltaker/month and the special calls, and in aggregate for the total calls evaluated.</p> <p>Is the following information correctly asked 95% of the time?</p> <ul style="list-style-type: none"> <li>• Location Verification</li> <li>• Callback Verification</li> <li>• Chief Complaint</li> <li>• Number of Patients (when appropriate)</li> <li>• Age</li> <li>• Gender</li> <li>• Level of Consciousness</li> <li>• Breathing</li> <li>• Shock Signs</li> </ul> <p>Do the following actions take place 90% of the time?</p> <ul style="list-style-type: none"> <li>• Appropriate Selection of Call Type Card</li> <li>• Appropriate Selection of Priority Determinant Criterion</li> <li>• Appropriate Pre-Arrival Instructions - (Reasonably appropriate = [C]orrect or [M]inor deviation. Not appropriate = M[O]derate deviation/omission or [A]dlib &gt; 50% of script)</li> </ul> |
| Monthly                 | Documentation of times when EMD is not provided will be submitted to VCEMS with the other data required (910.II.C)  |
| Monthly                 | Summary of all late dispatches reviewed by the EMD Program CQI Coordinator to determine if the delays in dispatch were reasonably preventable. (910.IV.F.3)   |
| Monthly                 | A summary report of dispatcher and EMS responder agency questions and issues regarding priority determination and pre-arrival instructions. (910.IV.I.1.h)  |

Appendix B

**Ventura County**  
**Emergency Medical Services Agency**  
**DISPATCH FIELD FEEDBACK FORM**



Reported by: \_\_\_\_\_ Agency: \_\_\_\_\_

Date: \_\_\_\_\_ Time: \_\_\_\_\_ Incident # \_\_\_\_\_

Dispatchers: \_\_\_\_\_ and \_\_\_\_\_

Responders: \_\_\_\_\_ and \_\_\_\_\_

Problem encountered or commendation: \_\_\_\_\_

—

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EMD or MPDS Protocol referred to: \_\_\_\_\_ # \_\_\_\_\_

Operating Procedure referred to: \_\_\_\_\_ # \_\_\_\_\_

**For Quality Improvement Use Only**

Received at Quality Improvement Unit (Date): \_\_\_\_\_ By: \_\_\_\_\_

Findings: \_\_\_\_\_

Plan of Action: \_\_\_\_\_

This form was created in accordance with VC EMS Policy 910.IV.1.h., which establishes a process to receive and address dispatcher and EMS responder agency questions and issues regarding priority determination and pre-arrival instructions. It also serves as a tool to commend dispatchers on EMD case performance.

**Please submit this form to Ventura County EMS Agency, 2220 E. Gonzales Rd. #130, Oxnard, CA 93036. FAX # 805-981-5300**

Case Review Completed (Date): \_\_\_\_\_ Compliance %: \_\_\_\_\_

Correct Response Code \_\_\_\_\_ Reported to: \_\_\_\_\_ at: \_\_\_\_\_

EMD-Q's signature: \_\_\_\_\_ Date: \_\_\_\_\_

