



# Solano County Health and Social Services Department

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Public Health Services

Adult and Child Services  
Substance Abuse Services

Eligibility and Employment Services  
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**POLICY MEMORANDUM #5520**

**EFFECTIVE DATE: 04/27/94**

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**SUBJECT: COMMUNITY PERFORMANCE STANDARDS FOR AMBULANCE PROVIDERS WHEN RESPONDING TO EMERGENCY REQUESTS FOR MEDICAL SERVICES**

AUTHORITY: SOLANO COUNTY AMBULANCE ORDINANCE #1457; CALIFORNIA HEALTH & SAFETY CODE, DIVISION 2.5, 1797.204, 1797.220

**PURPOSE/POLICY:**

All ambulances responding to medical emergencies in Solano County must comply with the following community performance standards (excluding any period of time classified as a period of "unusual system overload.").

**I. DEFINITION**

- A. Emergency Call (Service): means the functions involved in responding to a request for an ambulance to transport or assist person(s) in apparent sudden need of medical attention. An emergency call is unplanned and non-scheduled and requires the dispatch of an ambulance immediately after the receipt of a request. The ambulance may respond in a "CODE 2" or "CODE 3" mode. Emergency calls are not limited to only the prehospital environment. Emergency calls shall be classified using the Priority Classification System as listed in Section II.
- B. Scheduled Call (Service): means the functions involved in responding to a planned request for an ambulance to transport person(s) needing medical transportation. The ambulance shall respond in a "CODE 1" mode. All requests for medical transport are considered an emergency call unless the party requesting ambulance services has made

the previous arrangement of scheduling the ambulance at least one (1) hour before the ambulance is actually dispatched..

- C. “CODE 3” Operation (CODE 3): is a term used to describe the use of red warning lamps and siren as permitted by the California Vehicle Code Section 21055 if the vehicle is being driven in response to an emergency call. “CODE 3” is justified only when initially responding to an emergency call or returning to a hospital with a patient(s) when speed in obtaining emergency medical care appears essential to save a life, prevent undue suffering or to prevent disability. “CODE 3” transportation of a stabilized patient is seldom necessary and often undesirable. Higher priority Code 3 emergency calls may be re-routed by the CMED if a higher medical priority is determined by the EMD(s) dispatching ambulances.
- D. “CODE 2” Operation s(CODE 2): is a term used to describe an immediate response of an ambulance without lamps and siren as permitted by Section 21055 of the California Vehicle Code. A “CODE 2” response is immediate, non-scheduled, and does not require use of red warning lamps and siren, but the ambulance is immediately responding to a request for medical services. Code 2 calls may be re-routed to another higher priority Code 3 emergency call if a higher medical priority is determined by the EMD(s) dispatching ambulances.
- E. “CODE 1” Operation (CODE 1): is a term used to describe the mode of ambulance response to a scheduled call. The ambulance responding is not responding immediately and the patient being transported is stable, not needing aggressive EMS intervention. Scheduled transfers shall be logged a “CODE 1” in medical records even if the ambulance service dispatcher requests the ambulance personnel to immediately respond at the designated or prescribed arranged transport time. EMTs, upon arrival of a scheduled call, who assess the patient(s) clinical status as needing aggressive EMS intervention, shall log their mode of response to a medical facility as “CODE2” or “CODE3” as appropriate. Code 1 calls may be re-routed to another higher priority Code 3/2 emergency call if a higher medical priority is determined by the EMD(s) dispatching ambulances.
  - 1. Urban Area: is a term used to describe the population density of a grid area used by the Solano County EMS Office to monitor ambulance response time performance. Urban areas are determined by successfully meeting one or all of the following characteristics:
    - a. The area is within the incorporated area of a city within Solano County.
    - b. The projected population density of the area within the grid is more than 100 people within the grid.
    - c. The area is declared as an Urban Area by the Health Officer or his/her designee after public review and input from the County EMCC.
  - 2. Rural Area: is a term used to describe the population density of a grid area used by the Solano County EMS Office to monitor ambulance response time performance.

Rural areas are determined by successfully meeting one or all of the following characteristics:

- a. The area may or may not be within the incorporated area of a city within Solano County.
  - b. The projected population density of the area within the grid is 25 – 99 people within the grid.
  - c. The area is declared a Rural Area by the Health Officer or his/her designee after public review and input from the EMCC.
- H. Remote Area: is a term used to describe the population density of a grid area used by the Solano County EMS Office to monitor ambulance response time performance. Remote areas are determined by successfully meeting one or all of the following characteristics:
1. The area is in the unincorporated area of Solano County (or other border regions of counties, Solano Ambulances routinely responding outside the County).
  2. The projected population density of the area within the grid is less than 25 people within the grid.
  3. The area is declared a Remote Area by the Health Officer or his/her designee after public review and input from the EMCC.
- I. Ambulance Response Time: The mathematical time interval (measured in minutes) from when a request for an emergency call is made known to the dispatcher of an ambulance service (or Central Medical Emergency Dispatch [CMED]) until the arrival of the ambulance at the scene of a medical emergency and the EMT's exit from the ambulance.
- J. EMS System Response Time: The mathematical time interval (measured in minutes) from when a primary Public Safety Answering Point (PSAP) initially receives a request for EMS Services until the arrival of the ambulances at the scene of a medical emergency and the EMTs exit from the ambulance.
- K. Ambulance Dispatch Interval: The mathematical time interval (measured in seconds) from when a request for an emergency call is received by the dispatcher of the ambulance service (or CMED) until the ambulance unit is enroute and responding to the call.
- L. Unusual System Overload: A situation which could not have been predicted based upon past call volume data where over 66.6% (2/3) of the ambulances scheduled for that hour in a Zone within the current system status plan are assigned to an emergency call. An Unusual System Overload may include any of the following:
1. A declared disaster or Multi-Casualty Incident (MCI) in Solano County or in a neighboring jurisdiction which has requested assistance from the County.
  2. A major fire in an ambulance zone where the prime ambulance service provider is a Fire Department.

**II. EMERGENCY CALL PRIORITY CLASSIFICATION SYSTEM:**

Priority Level	Application	Code Out	Min Unit Capab.	Disp of 1 <sup>st</sup> Responders	Base Rate Charged To patient
1	An EMS call for a presumed life threatening emergency. This type of call shall be determined by an EMD using approved medical protocols where the EMD determines that there is a high priority that the caller(s) needing EMS services has (or will have) airway, respiratory or cardiac dysfunction and EMT-P intervention is needed. Pre-arrival instructions are clinically indicated and may positively impact the individual(s) requesting services. (Example: An emergency call in which an EMD can confirm acute respiratory distress and/or unconsciousness).	3	ALS	Yes	EMT-P (ALS)
2	An EMS call for a presumed non-life threatening emergency. This type of call shall be determined by an EMD using approved medical protocols where the EMD determines that a patient's status is unstable and may result into cardio-respiratory failure and/or the EMD is unable to ascertain the clinical status of the patient. EMT-P intervention is required, and pre-arrival instructions may/may not be indicated in this type of call. (Example: A 9-1-1- call in which an EMD determines that the patient is not in severe respiratory distress but is exhibiting signs/symptoms of a heart attack (AMI).	3	ALS	Yes/No dependent upon Medical Protocols the EMD uses.	EMT-P (ALS)
3	An EMS call for a presumed non-life threatening, but emergent condition. This priority requires an immediate dispatch for reasons other than a threat to life or limb (including lack of information from the caller). This type of call includes any nonscheduled request where the patient's intended destination is an acute care facility. The response shall be made by the closest available ALS ambulance. Specifically these calls cannot be "stacked" or "held" and are classified by an EMD as an emergency case possibly needing EMT-P services. (Example: A 9-1-1-call in which the patient is conscious and in no respiratory distress but exhibits need for an immediate EMS response; e.g., fractured hip, pulseless extremity, painful injury, etc).	3	ALS	No	EMT-P (ALS)
4.	An EMS call, non-scheduled response for a presumed life threatening emergency at a medical facility where a patient is under the direct care of a MD wishing immediate transport to another medical facility that has a higher level of care. This type of call shall be determined by an EMD using approved medical protocols in which the EMD determines that time for transport is of the essences, and where the sending MD may or may not have arranged appropriate medical staffing for the transport unit. Pre-arrival instructions are not clinically indicated but the EMD may provide advice regarding the proper ambulance to send. (Example: Obstetric emergency being transferred to a perinatal center).	3	ALS	No; (MD may or may not elect to send other medical staff with the patient being transported.	EMT-P (ALS)
5	An EMS call, non-emergency and unscheduled (request for transport services occurred with one hour of the unit being dispatched) for a presumed non-life threatening call at a medical facility where a patient is under the direct care of a MD arranging transport to another medical facility. This type of call shall be determined by an EMD using approved medical protocols in which the EMD determines the sending MD is appropriately requesting a BLS unit, the patient is determined to be stable, and that response time of the responding unit shall not negatively impact the patient. The closest ambulance need not be dispatched for this type of call, and that the requestor may utilize a specific type of ambulance service because the ambulance response has been predetermined by a pre-existing agreement or relationship with the service. The EMD handling this type of call may dispatch a unit in the priority 1, 2 or 3 mode if the requestor cannot comply with Policy 5540 or the EMD determines the patient is unstable. (Example: Nursing home staff requesting transport for a stable patient needing to be seen in an emergency department).	2	BLS or ALS	No	EMT-I (BLS)
6	Code 2 non-emergency response for a scheduled ambulance transport which is to be picked up outside of the County of Solano (Example: self-explanatory)	2	BLS or ALS	No	EMT-I (BLS)
7	Special event ambulance standby (Example: self-explanatory).	NA	ALS or BLS	No	N/A
8	Special ambulance transport in which specialized medical staffing will assume all patient responsibilities and medical equipment has been prearranged (e.g., NICU				

	transports, Spinal Team Transports, Cardiac Cath Surgery Transports). (Example: self-explanatory).	2 or 3	BLS or ALS	No	EMT-1 (BLS)
9	An immediate request for ambulance transport services where an EMD is able to determine by using call prioritization medical algorithm that EMT-P services are not needed and that a Basic Life Support ambulance can effectively and appropriately manage the patient's medical needs. This type of call may be received from a 9-1-1-Primary PSAP, Public Safety Officer on scene, medical facility, or a member of the general public requesting immediate ambulance transport services. The EMD shall advise the requesting party of the determination that an EMT-P ambulance is not necessary and a less expensive BLS unit shall respond (Example: Kaiser triage nurse requesting immediate transfer of a patient to an emergency department).	2	BLS	No	EMT-1 (BLS)

**III. AMBULANCE RESPONSE TIME STANDARDS**

- A. Only emergency calls shall be reviewed by the EMS Agency to assure compliance with community performance standards.
- B. Thomas Brothers Map coordinates shall be used as grids for determination as to whether ambulance response time standards are consistent with community performance standards (see Attachment 2)
- C. The following is the Ambulance Response Time Standard for "CODE 3" emergency calls in the Solano County EMS System:
  - 1. Nine (9) minutes for areas designated as Urban Areas. Until Performance Contracts of the current Ambulance Service Providers are signed with the Board of Supervisors, Ambulance Services shall insure that no less than 90% of the Code 3 calls in an urban area are consistent with the nine (9) minute Response Time Standard. By July 1, 1994, 93% of the emergency calls shall comply with the nine (9) minute Response Time Standard. By December 1, 1994, 94% of the EMS calls shall comply with the nine (9) minute Response Time Standard. By December 31, 1994, 95% of the emergency calls shall comply with the nine (9) minute Response Time Standard.
  - 2. Fifteen (15) minutes for areas designated as Rural Areas. Until Performance Contracts of the current Ambulance Services Providers are signed with the Board of Supervisors, Ambulance Services shall insure that no less than 90% of the Code 3 calls in a rural area consistent with the fifteen (15) minute Response Time Standard (excluding emergency calls in which the EMS Office has determined that there is good cause for the performance failure). By December 31, 1993, 92% of all Code 3 calls shall comply with the fifteen (15) minute response time standard. By July 1, 1994, 93% of the emergency calls shall comply with the fifteen (15) minute response time standard. By December 1, 1994, 94% of the EMS calls shall comply with the fifteen (15) minute response time standard. By December 31, 1994, 95% of the emergency calls shall comply with the fifteen (15) minute response time standard.
  - 3. Twenty (20) minutes for areas designated as Remote Areas.

**IV. AMBULANCE STAFFING AND CAPABILITY STANDARDS**

ALS ambulances, exclusively, shall respond to all CODE 2 and/or CODE 3 emergency calls which are classified as Priority 1, 2, 3 or 4.

Exemptions to this standard are restricted to the following cases:

- A. BLS ambulances may be dispatched to an emergency call when the EMAD/CMED is using a “call prioritization” system approved by the Health Officer or his/her designee which allows BLS units to respond to appropriately classified emergencies.
- B. Dispatch of BLS units to Priority 1 – 4 emergency calls may occur during periods of “Unusual System Overload” or if a medical disaster has been declared.
- C. Emergency Hospital Inter-facility Transfers where hospital staff accompanies the patient and assumes total patient care during the transfer.
- D. Transfer calls in which an EMD, using approved call priorities and standards, determines an EMT-P ambulance is not an appropriate use of medical resources (e.g., Priority 9 requests for immediate ambulance transport services).

#### **V. AMBULANCE DISPATCH INTERVAL STANDARDS**

The following is the Ambulance Dispatch Interval Standard for emergency calls in Solano County:

120 Seconds for all “CODE 2” and “CODE 3” emergency calls.

#### **VI. NOTIFICATION OF PERFORMANCE FAILURES**

- A. Daily Review: Ambulance services management should daily review its service compliance with the Standards of Sections II and III listed above.
- B. Daily Review & Submission of Unusual Occurrence Form: The ambulance service review of each performance failure should be submitted to the EMS Office within 72 hours of each incident. The following performance failures shall be submitted to the EMS Office no later than three (3) working days from the date of the incident:
  - 1. Any CODE 3 calls in which response time exceeded the standard for population density.
  - 2. Any CODE 3 response where the unit originated outside its normal zone of responsibility.
  - 3. Any BLS unit dispatched to a CODE 3 call.
  - 4. Any CODE 1 call in which the ambulance responded back to a receiving facility CODE 3 or CODE 2, or any code we call in which the transport team elected to change the destination because of the patient’s deteriorating status.
  - 5. Any emergency call where an accident or mechanical failure of the ambulance occurred while enroute.
  - 6. Any call in which a mechanical failure occurred while transporting a patient.
  - 7. Any emergency call in which the unit responding took more than 120 seconds to go enroute.

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Requests for Medical Service

Policy: 5520  
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8. Any call where a citizen complaint or normal Q. A. follow-up, submitted to the EMS Office, results in a reported Unusual Occurrence.
- C. EMS Evaluation: EMS Staff shall evaluate each Unusual Occurrence and determine whether there is good cause for the performance failure based upon the analysis submitted by the ambulance service. Calls that are evaluated as significant performance failures without good cause shall be assigned a fiscal penalty. Performance failures shall be reviewed by the Compliance Sub-Committee for final resolution and disposition.

**VII. DETERMINATION OF GRID RESPONSE TIME CHARACTERISTICS**

- A. Basic Grid Unit – Thomas Brother’s Map coordinate grids shall be the basic elemental unit for an ambulance response zone.
- B. Grid Classification – Each Thomas Brother’s Map Grid shall be classified as an urban, rural or remote area (see Attachment 2).
- C. Grid Classification Change – Grid Classification may be changed dependent upon call volume, rates, and changes in population demographics associated with the grid. EMS Staff, ambulance service providers and/or general public may address in the public forum of the EMCC a reclassification of a grid. It is the responsibility of the Health Officer or his/her designee to make the final determination of an EMS System Grid if consensus cannot be achieved by the EMCC.

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SUBJECT: Community Performance Standards for Ambulance Service Providers when Responding to Emergency Requests for Medical Service

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**SOLANO COUNTY EMS OFFICE – UNUSUAL OCCURRENCE REPORT  
Ambulance Dispatch Failure Initial Investigation Summary**

Ambulance Service: \_\_\_\_\_

Date/Time of Incident: \_\_\_\_\_ PCR # \_\_\_\_\_

Date of the Report/Investigation: \_\_\_\_\_ PSAP Dispatch # \_\_\_\_\_

Location of Call/Occurrence: \_\_\_\_\_ Map Coordinates: \_\_\_\_\_

Incident Category: (Check ALL that apply)

- Code 3 call with > 9 min response in an urban area
- Code 3 call with > 15 min response in a rural area
- Code 3 call with > 20 min response in a remote area
- Code 3 response out of normal operating zone
- BLS unit dispatched on a Code 3 call
- Accident/Mechanical Failure Enroute to an Emergency Call
- Accident/Mechanical Failure while transporting a patient
- Emergency call with unit responding taking > 120 sec to go enroute.
- Other \_\_\_\_\_

**Snapshot status of all other ALS units in the zone at the time of incident:**

**Assessment of Probably Cause** Code # \_\_\_\_\_ (see EMS Code List)

**Effect on Patient/Affected Party** (Note: how and by whom confirmed; enter not applicable or unknown as appropriate).

**Corrective Actions Taken** (note when, by whom and how/if documented; enter not applicable or unknown as appropriate).

**Further Actions Planned** (note when, by whom and how; enter not applicable or unknown as appropriate).

Report initiated by (Name) \_\_\_\_\_ Title: \_\_\_\_\_

Investigator Recommendations:  Closure  Further Follow-up by EMS Date of Submission: \_\_\_\_\_

**TO BE COMPLETED BY THE SOLANO EMS OFFICE**

Date Received at EMS Office: \_\_\_\_\_ Log Number: \_\_\_\_\_

QA Incident Category:  Category 1  Category 2  Category 3

EMS Agency Follow-up

- Accept investigator findings and recommendations (incident closed) Signature: \_\_\_\_\_
- Initiate further EMS Agency Action
- Refer to EMCC Contract Compliance Sub-Committee Date: \_\_\_\_\_

**CONFIDENTIAL (NOT part of the patient medical record)**