EMS Response Time Standards

Purpose
Quality pre-hospital emergency care is directly related to high performance life support agencies with unified EMS response standards. The purpose of this protocol is to establish unified and consistent EMS response expectations for the Oakland County Life Support Agencies.

GLOSSARY OF TERMS

90% Fractile Value: The value or measurement at which 90% of all events occur. This is typically used in time measurements to better standardize performance across systems.

Automatic Aid: assistance provided by one agency to another that the dispatch center, without a command officer’s input, can send or request equipment based on the information from the call to the public safety answering center. The intent of automatic aid is for day-to-day, pre-arranged, protocol driven, pre-hospital care deployment.

Cold Response: A normal traffic speed response (no lights and sirens) to or from an EMS event. For example, “cold” response may include Alpha, Omega, and occasionally a Charlie or Bravo response level.

Hot Response: A lights and sirens, emergent response to or from an EMS event. For example, “hot” response may be an Echo, Delta, and occasionally a Charlie or Bravo response level.

Mutual Aid: assistance provided by one agency to another and in return the other agency can expect help when needed; requires an agency’s command officers to make a specific request for assistance from a neighboring jurisdiction.

Response Time Measurement: Response time is measured from Unit Notified by Dispatch to Unit Arrived on Scene.

DEFINITION OF EMS TIMES

PSAP Call Date/Time: The date/time the phone rings (911 call to public safety answering point or other designated entity) requesting EMS services.

Dispatch Notified Date/Time: The date/time dispatch was notified by the 911 call taker (if a separate entity).

Unit Notified By Dispatch Date/Time: The date/time the responding unit was notified by dispatch.
Unit En Route Date/Time: The date/time the unit responded; that is, the time the vehicle started moving.

Unit Arrived on Scene Date/Time: The date/time the responding unit arrived on the scene; that is, the time the vehicle stopped moving.

Arrival at Patient Date/Time: The date/time the responding unit arrived at the patient’s side.

Transfer of Patient Care Date/Time: This is the time the patient was transferred from one EMS agency to another EMS agency for care.

Unit Left Scene Date/Time: This is the time the responding unit left the scene (started moving).

Patient Arrived at Destination Date/Time: This is the date/time the responding unit arrived with the patient at the destination or transfer point.

Arrival Time of Transport Unit: The time that the transporting unit has arrived on scene; that is, the time the vehicle stopped moving.

Unit Back in Service Date/Time: This is the date/time the unit is back in service and available for response (finished with the call, but not necessarily back in the home location).

Unit Back at Home Date/Time: The date/time the responding unit was back in their service area. In agencies that utilized Agency Status Management, home location means the service area as assigned through their agency status management protocol.

EMS RESPONSE OPERATIONS

Tiered Response Configurations
The Oakland County EMS System has two types of response structures.

Single tier - one agency provides response and transport at one level of care. It is expected that a single tier system meet the Primary Unit Response Time Requirement.

Primary Response Unit: a MDHHS licensed vehicle that is dispatched as part of an initial EMS response in a single tier deployment.

Multi-tier - EMS systems with multiple organizations providing varying levels of response or care. It is expected that life support agencies with multi-tiered response configurations meet the Primary Unit and Transport Unit Response Time Requirements.

First Response Unit: a MDHHS licensed vehicle that is dispatched in a multi-tiered response to provide initial patient care.
Transport Unit: a BLS or ALS MDHHS licensed vehicle that is dispatched in a multi tiered response to provide transportation to the hospital. Examples of Multi-tiered response configurations include:

<table>
<thead>
<tr>
<th>Primary First Response Unit</th>
<th>Transport Response Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Primary Unit Response Time Requirement</em></td>
<td><em>Transport Unit Response Time Requirement</em></td>
</tr>
<tr>
<td>MFR</td>
<td>ALS/BLS transport</td>
</tr>
<tr>
<td>BLS</td>
<td>ALS/BLS transport</td>
</tr>
<tr>
<td>ALS</td>
<td>ALS/BLS transport</td>
</tr>
</tbody>
</table>

Scene Arrival
The time of arrival on scene for “hot” responses for both single and multi-tier systems is considered the arrival of a licensed EMS Unit.

Individual licensed EMS responders responding with an unlicensed vehicle or personal operating vehicles (POV) should report their on-scene time to dispatch. However, the MCA is only collecting the response time of licensed EMS units.

GEOGRAPHIC SERVICE AREA DESIGNATION CRITERIA

<table>
<thead>
<tr>
<th>GSA Designation</th>
<th>Demographics</th>
<th>Primary Unit Emergency Response Time Requirement*</th>
<th>Transport Unit Emergency Response Time Requirement*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban area</td>
<td>&gt;1000 people/sq mi</td>
<td>6 mins 0 secs</td>
<td>10 mins 0 secs</td>
</tr>
<tr>
<td>Suburban area</td>
<td>500–1000 people/sq mi</td>
<td>6 mins 0 secs</td>
<td>10 mins 0 secs</td>
</tr>
<tr>
<td>Rural area</td>
<td>&lt;500 people/sq mi</td>
<td>8 mins 0 secs</td>
<td>14 mins 0 secs</td>
</tr>
</tbody>
</table>

• 90% of the time, fractile.

GEOGRAPHIC SERVICE AREA

1. LSAs authorized to operate within the OCMCA will have a defined geographic service area (GSA) within the OCMCA.
2. The minimum service area defined for any Advanced Life Support (ALS), Basic Life Support (BLS), or Medical First Response (MFR) agency will be a municipality jurisdiction. Municipality jurisdictions will be designated by the township, village, city, or county governmental body authorized to designate public safety contracts whether subsidized or unsubsidized.
3. LSAs shall provide the OCMCA with written verification of all geographic service area agreements.

5. The LSA will maintain 24 hour, 7 day per week availability and respond or assure a response to all requests for emergency assistance occurring in their designated geographic service area.

6. LSAs providing ancillary non-emergent and/or inter-facility transport services shall provide sufficient coverage through extra staffing and vehicles to maintain emergency availability.

7. When a LSA is responding outside of its designated GSA to a non-emergency run (e.g. nursing home, urgent care, physicians office, private residence, etc.) for a patient with a potentially life threatening condition, EMS personnel, the LSA or the LSA dispatcher must activate the LSA responsible for that geographic service area.

**EMS EMERGENCY “HOT” RESPONSE TIME REQUIREMENTS**

**Urban And Suburban Geographic Service Areas**

When providing Single Tiered emergency response for an urban and suburban geographic service area, assure a response time not to exceed six (6) minutes, 90% of the time, from receipt of call (unit notified time) to time of arrival on scene for the Life Support Agency’s Primary Response Unit, when responding to emergency (“hot”) calls.

When providing Multi Tiered emergency response for an urban and suburban geographic service area, assure a response time not to exceed six (6) minutes, 90% of the time, from receipt of call (unit notified time) to time of arrival on scene for the Life Support Agency’s First Response Unit, when responding to emergency (“hot”) calls. Additionally, assure a response time not to exceed ten (10) minutes, 90% of the time, from receipt of call (unit notified time), to time of arrival on scene for the Life Support Agency’s Transport Response Unit, when responding to emergency (“hot”) calls.

**Rural Geographic Service Areas**

When providing Single Tiered emergency response for an urban and suburban geographic service area, assure a response time not to exceed eight (8) minutes, 90% of the time, from receipt of call (unit notified time) to time of arrival on scene for the Life Support Agency’s Primary Response Unit, when responding to emergency (“hot”) calls.

When providing Multi Tiered emergency response for an urban and suburban geographic service area, assure a response time not to exceed eight (8) minutes, 90% of the time, from receipt of call (unit notified time) to time of arrival on scene for the Life Support Agency’s First Response Unit, when responding to emergency (“hot”) calls. Additionally, assure a response time not to exceed fourteen (14) minutes, 90% of the time, from receipt of call (unit notified time), to time
of arrival on scene for the Life Support Agency’s Transport Response Unit, when responding to emergency (“hot”) calls.

Response Time Exceptions

1. Severe weather conditions that would provide reason to believe that attempting to comply with the response time performance would be hazardous to the responders or others, or where the road or other weather conditions would not allow safe driving.
2. During disaster situations within the primary service area or neighboring communities.
3. Response time compliance should not include Automatic or Mutual Aid Responses.

Compliance

The OCMCA will address individual compliance issues in accordance with the PSRO Due Process and Disciplinary Procedures Protocol (6-22.3).
Anatomy of EMS Response

Total EMS Call Time

Response Time

Scene Time

Transport Time

Transport Unit Arrival Time

en Route Time

PSAP Time

911 Call - PSAP

Dispatch Notified

Unit Notified

Unit En Route

Arrival at Pt

Unit on Scene

Unit Left Scene

Arrival at Dest.

Back in Service

Back at Home

Back in Service Time

*M unit on Scene may be a transport unit in a single tiered EMS response structure*