



# **Jackson County**



## **Ambulance Service Provider Annual Report 2008**

***“Putting Patient Care First”***



# **MERCY FLIGHTS**

Non-Profit Air and Ground Ambulance Services  
[www.mercyflights.com](http://www.mercyflights.com)

## **Introduction:**

The Jackson County Ambulance Service Plan Chapter 107.5 (Section 7.2(a)) requires each ambulance provider to submit annually (by March of each year) adequate data demonstrating that each provider meets or exceeds State and County requirements. This report summarizes that information.

The Jackson County Health and Human Services Department is responsible for administrative oversight as well as support for the three providers. The Jackson County Emergency Medical Services (EMS) Supervising Physician is Paul Rostykus MD, MPH.

## **Executive Summary:**

Ashland Fire and Rescue, Mercy Flights, Inc. and Rogue River Rural Fire Protection District provide Advanced Life Support (paramedic), advanced equipment, and highly trained staff to each emergency medical call. Together, they can put a total of 28 ambulances and 145 direct patient care staff into the system of emergency medical response and transport.

In 2008 there were 23,263 emergency medical runs in Jackson County, resulting in 14,905 transports (64%). There was an average of 41 transports a day. The Mercy Flights helicopter had 558 standbys resulting in 160 transports (29%). All transporting agencies were able to respond to the scene of these calls within established response times (8 minutes for urban areas) over 91% of the time.

The 911 dispatch centers were able to dispatch emergency medical response to over 90+% of the calls in less than 90 seconds. The standard is 90% of all medical calls dispatched in under 2 minutes.

All three transporting agencies continue to try to meet increased demand while trying to adapt to the ongoing reductions in Medicare/Medicaid reimbursements for ambulance transports. Medicare/Medicaid transports are more than 60% of their transports. The agencies have adapted to this trend by fee increases for the remainder of their patients, cost savings, and with the two fire districts, general fund support. The providers utilize the annual Medicare CPI increase to their base fees to help offset rising costs.

All three agencies offer memberships to offset “out of pocket” costs. All honor each other’s memberships. Combined, they sold over 33,000 memberships. There were 4,704 members transported.

There has been a steady increase in transports over the last five years. There has been an average increase of over 630 transports/year or an annual increase of approximately 6% system wide.

**Areas and Providers<sup>1</sup>:**

<b>Ambulance Service Area</b>	<b>General Area</b>	<b>Provider</b>
<b>ASA I</b>	NW Jackson County (Rogue River)	Rogue River Rural F.P.D.
<b>ASA II</b>	Central, NE & SW Jackson County	Mercy Flights, Inc.
<b>ASA III</b>	SE Jackson County (Talent/Ashland)	Ashland Fire and Rescue

Please note the attached ASA map.

**Staffing<sup>2</sup>:**

- **Rogue River**

	<b>EMT-P</b>	<b>EMT-I</b>	<b>EMT-B</b>	<b>RN</b>	<b>First Responder</b>
<b>Full Time</b>	9	1	2	0	0
<b>Part Time</b>	0	0	0	0	0
<b>Volunteer</b>	2	0	5	0	0
<b>Total</b>	<b>11</b>	<b>1</b>	<b>7</b>	<b>0</b>	<b>0</b>

- **Mercy Flights Inc. (provides air ambulance services, as well)**

	<b>EMT-P</b>	<b>EMT-I</b>	<b>EMT-B</b>	<b>RN</b>	<b>First Responder</b>
<b>Full Time</b>	46	4	12	5	0
<b>Part Time</b>	15	7	2	3	0
<b>Volunteer</b>	0	3	1	0	8
<b>Total</b>	<b>61</b>	<b>14</b>	<b>15</b>	<b>8</b>	<b>8</b>

- **Ashland Fire and Rescue**

	<b>EMT-P</b>	<b>EMT-I</b>	<b>EMT-B</b>	<b>RN</b>	<b>First Responder</b>
<b>Full Time</b>	26	0	2	0	0
<b>Part Time</b>	0	0	0	0	0
<b>Volunteer</b>	0	0	0	0	0
<b>Total</b>	<b>26</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>

<sup>1</sup> Map attached

<sup>2</sup> Information submitted indicates all staff carry current certification

### **Staffing Summary:**

The transport system carries Paramedics, Intermediates, Basics, First Responders and RN's. Of the total staff, 107 are full time. This is 15 more than in 2007. This number is supplemented by a relatively large number of EMTs from First Response agencies. In the total county EMS system there are approximately 129 Paramedics, 75 Intermediates, 137 Basics, 65 First Responders, and 8 Nurses.

### **Vehicles<sup>3</sup>:**

· **ASA I, Rogue River Rural Fire Protection District**

Type	License/Unit#	Year	Mileage	Level
III	E220155/7431	2001	198,796	ALS/BLS
III	E184097/7432	1994	80,113	ALS/BLS
III	E184096/7433	2006	9450	ALS/BLS

· **ASA II, Mercy Flights Inc.**

Type	License/Unit#	Year	Mileage	Level
III	1042/122	1994	111,000	ALS
III	1437/129	1998	201,000	ALS
III	1503/130	1999	204,000	ALS
III	1579/131	1999	177,338	ALS
III	1610/132	1999	185,813	ALS
III	1695/133	2000	179,245	ALS
III	1793/134	2000	179,344	ALS
III	2032/135	2002	168,986	ALS
III	1989/136	2002	164,820	ALS
III	2157/137	2003	34,093	ALS
III	2158/138	2003	35,686	ALS
III	2313/140	2004	126,338	ALS
II	2666/141	2006	70,529	ALS
III	2667/142	2006	66,075	ALS
III	1598/143	2006	47,542	ALS
III	1599/144	2006	47,368	ALS
III	3949/145	2007	48,526	ALS
III	2976/146	2007	16,221	ALS
III	2975/147	2007	13,895	ALS

<sup>3</sup> Ashland Fire and Rescue and Rogue River Rural Fire Protection District also equip fire engines with medical equipment and supplies.

· **ASA III, Ashland Fire and Rescue**

Type	License/Unit#	Year	Mileage	Level
III 4 x 4	E233465/8831	2006	53,932	ALS
III 4 x 4	E222273/8832	2008	4818	ALS
II 4 x 4	E211465/8833	2003	103,410	ALS
III 4 x 4	E198560/8834	1996	114,671	ALS
III 4 x 4	E195689/8835	1998	126,829	ALS
III 4 x 4	E186951/8836	1992	88,857	ALS

**Vehicle Summary:**

There are 28 ALS equipped, licensed ambulances available from the three transport agencies. In addition, most medical First Response agencies (fire districts/departments) have rescue vehicles and engines that are staffed and equipped to provide EMS response and care. These agencies currently have 5 transport capable ambulances.

**Unit Locations:**

ASA	Station	Location
<b>ASA I</b>	<b>Rogue River Rural Fire Protection District</b>	5474 North River Road, Gold Hill (Rogue River)
<b>ASA II</b>	<b>Mercy Flights, Inc.</b> Headquarters Station Barnett Station Hwy 62 Post Hwy 62 Station Providence Station Elm Post Prospect Station Butte Falls Station Riverside Post	2020 Milligan Way (Airport) 2109 E. Barnett Road, Medford Hwy 62 & Hwy 140 10558 Hwy 62 Suite A 1111 Crater Lake Avenue N. Pacific Hwy & W. Table Rock Road 19 First Street, Prospect 431½ Broad Street, Butte Falls Riverside and Barnett, Medford
<b>ASA III</b>	<b>Ashland Fire and Rescue</b> Station 1 Station 2	455 Siskiyou Boulevard, Ashland 1860 Ashland Street, Ashland

**Transports:**

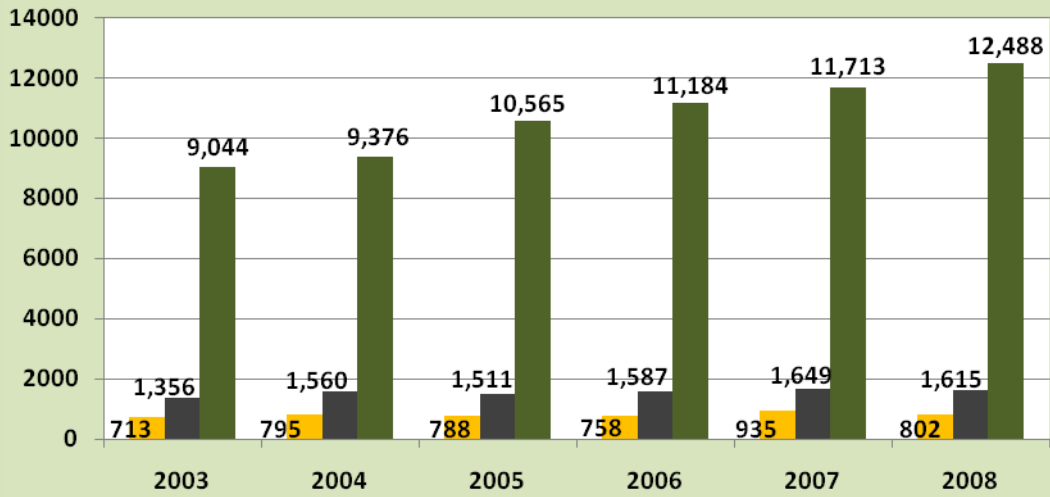
	<b>ASA I Rogue River</b>	<b>ASA II Mercy Flights</b>	<b>ASA III Ashland</b>	<b>Total</b>
<b>Medical Runs</b>	1,682	18,637	2,944	<b>23,263</b>
<b>ALS Transports</b>	787	11,892	1,209	<b>13,888</b>
<b>BLS Transports</b>	15	436	185	<b>636</b>
<b>Avg. Miles/Transport (Urban) ALS/BLS</b>	11.08 (Suburban)	6.64	4.38	
<b>Another Agency/Your ASA</b>	122	1	4	<b>127</b>
<b>Your Agency/Another ASA</b>	83	22	1	<b>106</b>
<b>Scheduled Transports</b>		Included in totals	221	<b>221</b>
<b>Member Transports</b>		4,410	294	<b>4,704</b>
<b>% Transport/Medical Run</b>	48%	66%	55%	
<b>Helicopter (standbys)</b>		558		
<b>Helicopter (transports)</b>		160		
<b>Total Transports</b>	<b>802</b>	<b>12,488</b>	<b>1,615</b>	<b>14,905</b>

**Transports Summary:**

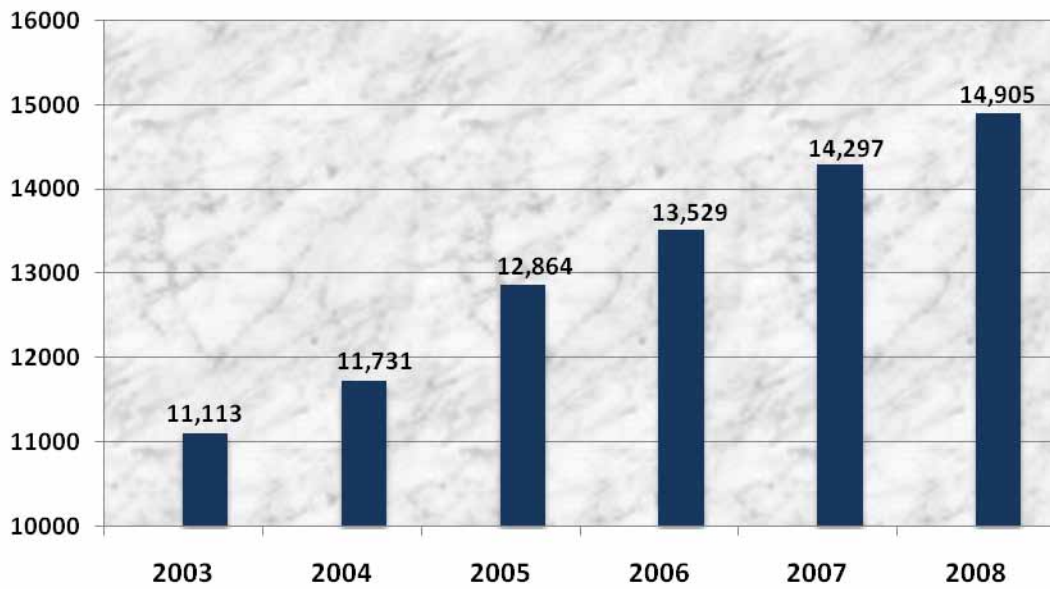
There were 23,263 medical runs in 2008, resulting in 14,905 transports (64%). 93% of the transports were ALS (Advanced Life Support) transports. This is about the same percentage as 2007. There were 160 helicopter transports from 558 standby calls (29%). There was an increase of 1730 medical runs (8%) and 421 transports (3.1%) over 2007. The providers respond to an average of 64 medical runs/day and transport an average of 41 patients/day.

## Jackson County Emergency Medical Transports

Rogue River AFR Mercy Flights



## Emergency Medical Transports Combined



**2008 Rates:**

	<b>ASA I Rogue River</b>	<b>ASA II Mercy Flights</b>	<b>ASA III Ashland</b>
<b>ALS (base)</b>	\$977.55	\$857	\$856.93
<b>BLS (base)</b>	\$772	\$857	\$615.92
<b>Mileage</b>	\$12.35	\$12.85	\$10
<b>Treat/Release (ALS/BLS)</b>	\$257	\$267	\$250

**All three providers will have annual base rate fee increases based on the Medicare CPI to help keep pace with the cost of health care inflation.**

**2009 Rates:**

	<b>ALS Base Rate</b>	<b>BLS Base Rate</b>	<b>Treat and Release</b>	<b>Mileage</b>
<b>AMR (Grants Pass)</b>	\$960	\$626	N/A	\$7.80/mi.
<b>Mercy Flights</b>	\$900	\$900	\$900/\$280	\$13.49/mi.
<b>Ashland Fire &amp; Rescue</b>	\$899.78	\$646.72	\$280	\$10.00/mi.
<b>Rogue River Fire District</b>	\$1017.63	\$771.75	\$250	\$12.35/mi

**All have or have proposed annual rate increases based on the Medicare CPI. 2008 (for 2009) CPI= 5.0%**

**Memberships/Subscriptions:**

	<b>ASA I Rogue River</b>	<b>ASA II Mercy Flights</b>	<b>ASA III Ashland</b>
<b>Type</b>	FireMed	Mercy Flights	FireMed
<b>Cost/Family</b>	\$40 (\$25 Mercy Air)	\$70 (combined)	\$52
<b>Number of Members</b>	1,164	31,080	1,450

**Membership Summary:**

Ashland Fire and Rogue River offer FireMed memberships that are good in many areas of the state where it is offered. Rogue River also offers air memberships to their members through a reciprocal agreement with Mercy Flights. Mercy Flights offers their own membership program that can involve ground ambulance and/or air/helicopter coverage. Their subscription service usually accepts insurance payment as payment in full and is designed to reduce, if not eliminate, out of pocket expenses.

	<b>Rogue River</b>	<b>Mercy Flights</b>	<b>AFR</b>	<b>Total</b>
Memberships	1,164	31,080	800	33,044
Membership Transports	Do not track	4,410	294	4,704







## **ASSET Report April 2009**

Southern Oregon's ASSET (Acute ST Segment Elevation Taskforce) remains in the forefront of STEMI (ST Elevation Myocardial Infarction) programs throughout the nation and provides a great example of the coordination and cooperation which exists among the EMS agencies in the Jackson County Ambulance Service Areas (ASAs).

ASSET, spearheaded by Dr. Brian Gross, Medford cardiologist, has put together a first rate STEMI program where patients with chest pain and EKGs showing a specific type of heart attack (STEMI), best treated by cardiac catheterization and stent placement to open blocked arteries to the heart, are evaluated by EMTs and taken by ambulance directly to the cardiac cath lab at Rogue Valley Medical Center for cardiologist treatment. This program, in effect in both Jackson and Josephine Counties, requires that 4 transporting agencies (ambulance services), 2 EKG-equipped first responding EMS agencies (soon to be more), 2 groups of cardiologists, and 4 hospitals work together to provide excellent patient care. Our ASSET program has been the subject of 3 papers published in national medical journals and 2 presentations at national medical conferences.

So what does all this mean for our patients? Lower mortality (death) rate and shorter times before definitive treatment for heart attacks.

The mortality rate for all patients treated through ASSET over the last 6 years has been 3.8%. For patients seen by EMTs and taken directly to the cath lab the death rate has been lower at 2.8%. For comparison, before the introduction of ASSET, the mortality rate for similar heart attacks was 11.8% nationally and 8.6% locally. ASSET has reduced the risk of death for heart attack patients by over half. Even comparing STEMI programs elsewhere we are doing a great job. A large Canadian city reported a higher mortality rate of 5%, and they did not include the sickest patients. Furthermore, with a more complex system, involving multiple agencies, and longer transport distances our mortality rates are lower.

The American Heart Association (AHA) has set a door-to-balloon (D2B) time goal of 90 minutes from when the patient enters the hospital until the blocked heart artery is opened. Patients with heart attacks treated through ASSET are meeting this goal about 90% of the time, which has been increasing over the years as we learn to improve our systems. ASSET patients transported from the field directly to the cath lab are meeting this goal 90% as well. More important is the E2B time, from when the patient is first seen by an EMT and gets an EKG until the artery is opened. Over half (50%) of the ASSET patients transported by ambulance from home have their blocked artery opened within 90 minutes, which includes the time it takes for the EMTs to evaluate the patient and get the patient to the hospital in the ambulance (averaging 40 minutes) before getting into the hospital cath lab for cardiologist treatment.

Not only do ASSET patients have a lower mortality rate, but the time of a blocked heart muscle is being significantly shortened which reduces the risk of permanent heart damage – “time is muscle”.

ASSET provides state-of-the-art heart attack care which has been described as “the most complex, multi-disciplinary, and time-sensitive therapeutic intervention in the world of medicine today. The Process is measured in Minutes. The Outcomes are measured in Mortality. Teamwork and smooth Transitions are essential.” ASSET continues to review patient data to improve care for victims of heart attacks in Jackson County.

## **Summary of Events and Issues**

### **EMS Committee**

**Dr. Paul Rostykus, MD MPH–Chair**

- Standing Order Updates
  - Ø Fentanyl added to EMT-Intermediate protocols
  - Ø CPAP added to EMT-I & Paramedics; required for all transporting units
  - Ø Changes to STEMI protocols focusing on shortening E2B (EMS intervention to balloon) times
  - Ø Induced hypothermia pre-hospital protocols
  - Ø Update of EZ-IO protocols
  - Ø ET-CO<sub>2</sub> capnometry
  - Ø Revise Age of Consent (15 years)
  - Ø Inter-hospital Transfer Order form
  - Ø Revision of MCI protocols
  - Ø Hemostatic agents/dressings were evaluated
- Statewide EMS web based data collection through utilization of NEMSIS compliant software to collect, manage, and transmit key data to this system. The system is not used universally in the County at this time.
- Development and utilization of a uniform Inter-hospital Transfer Order form.
- Revision of the 911 center pre-arrival emergency medical dispatch instructions.
- Evaluation of “in field” STEMI ECG transmission systems.
- Evaluation of Jackson County EMS participation in research trials regarding GIP (glucose-insulin-potassium) for diabetic patients.
- Standardization of terminology concerning Code 3/Lights & Siren responses.
- Review of a process to provide hospital feedback to EMS agencies on STEMI (ST elevated Myocardial Infarction) patient outcomes.
- Review of the 2007 ASA year-end report.
- TASER barb removal protocols.
- Planning for the Spring 2009 Cascadia Peril exercise.
- Discussion of the regional care model for STEMI, stroke, and other categories.
- Reviewing the location of public access AEDs (automatic external defibrillators) and putting that information into a GIS database used by 911 centers to inform callers there may be an AED close by that could be used on a person having a heart attack.
- Review of hospital diversion policies.

## **Quality Assurance Committee Highlights**

### **QA Committee**

**Brian Graunke BS EMT-P Chair**

- No specific quality of care complaints submitted to the committee or HHS.
- Focus on gathering performance data to assess system performance relative to established or developed benchmarks. This started with selecting a small group of data sets/interventions and requesting this data be submitted to the EMS Office for entry into a spreadsheet for assessment by the Supervising Physician and the QA Committee.
- Ongoing problem of insufficient data, data gathering not a priority and difficulty having the time to enter the data.
- There was continued work on Quality Assurance of the emergency medical dispatch process by both 911 centers. Both centers provide ongoing training and quality assurance processes. Both centers exceed plan requirements of all EMS calls dispatched within two minutes 90% of the time. The centers have set a standard of dispatching all EMS calls within 90 seconds, 90% of the time. Both centers meet this standard.
- 911-training for dispatchers- review ~3% of calls.
- Waiting for electronic data entry and same software or interface to be able to extract this data from existing data management systems. Various agencies utilize different data collection system software packages. The State is in the process of requiring electronic data submission, which will take time and resources. Little data collection and management may occur at QA.

## Exercises

### **Ashland - Chemical Spill**

The City of Ashland, SOU, Ashland School District, and Ashland Community Hospital met at SOU to participate in a table top exercise (TTX) on December 3, 2008. Approximately 40 people played a part in a scenario involving a chemical spill on the SOU campus with victims down on scene as well as walk-ins to the hospital. The objectives included each agency working their disaster plans and Incident Management Teams (IMT) as well as using a unified command system to improve working with each other in a major incident impacting public safety.

SOU tested their mass communication system by alerting students, staff and faculty; ACH also did a functional piece at the hospital by setting up the decontamination tent and discussing traffic control and related issues. The city discussed road blocks, evacuation procedures and other safety concerns.

It was the lead story on the 6 o'clock news, KTVL Channel 12.

### **Hospital and Community Exercises - Beth DePew**

All Jackson County Hospitals in concert with Medford Fire and Ashland Fire & Rescue conducted a series of tabletop, functional, and full-scale exercises in 2008. These particular exercises focused on fire within the hospital floors.

The fire department in Medford was able to practice their high-rise firefighting skills while Ashland Fire and Rescue was able to practice their ability to assist the hospital in evacuation. These exercises were unique for both the hospitals and the fire departments in that, both horizontal and vertical evacuations were completed. Hospital patients were evacuated to the parking lots where patient assessments were completed.

In all, a total of nine exercises were completed to accomplish the ultimate full-scale events.

### **ARMS Activation**

#### **October 9, 2008**

ARMS (Ambulance Resource Management System) is an automated tracking and dispatching system to centralize dispatching of ambulances in the event of a multiple casualty incident (MCI) or another event would stress the system.

ARMS is activated if there are two or more mutual aid requests, if an agency command staff requests it or upon activation by a Mercy Flights Supervisor.

Upon activation, simultaneous pages go out to all EMS agency command staff. All transport units are requested to switch to Mercy Flights primary radio frequency. All available units then may be dispatched or posted to maintain optional coverage of the event and for response to routine calls.

The goal is to provide a coordinated dispatch of ambulances to the highest priority call with what resources are available.

The exercise on October 9<sup>th</sup> was unique in that there were no EMS calls during that period- something not seen prior to or after the exercise. Due to the lack of calls, a simulated MCI was utilized to challenge the system.

# Ambulance Service Areas

