

EMMCO West, Inc.
EMS System Assessment 2011-12

Inventory

PERSONNEL

Medical Command Authorization

Number of ALS personnel with medical command authorization functioning in EW

Year	Total
2011	287
2010	269
2009	270
2008	264
2007	268
2006	255
2005	280
2004	279
2003	279
2002	274
2001	318
2000	277
1999	315

ALS Personnel with Medical Command Authorization at more than one EW service

Year	Total
2011	28
2010	43
2009	40
2008	34
2007	41
2006	49
2005	44
2004	44
2003	43
2002	46
2001	57
2000	82
1999	80

Certified Personnel:	09-10	10-11	10-12
FR	194	202	182
EMT	2342	2198	2265
EMTP (see Below)	834	551	559
PHRN	119	94	99
HP	<u>20</u>	<u>17</u>	<u>17</u>
TOTAL	3509	3062	3122
EMS Instructors	100	112	95

Education:

Loss/Gain of EMS Personnel

EMT	2008	2009	2010	3 year net loss/gain
Clarion	1	-9	16	8
Crawford	-17	-30	-28	-75
Erie	3	12	-62	-47
Forest	-2	-2	-6	-10
Mercer	-23	11	-9	-21
Venango	-17	12	1	-4
Warren	-9	1	-16	-24

FR	2008	2009	2010	3 year net loss/gain
Clarion	3	-1	1	3
Crawford	-12	8	-2	-6
Erie	4	-13	-7	-16
Forest	0	0	-1	-1
Mercer	13	-2	-10	1
Venango	-3	0	-1	-4
Warren	11	-4	11	18

OPERATIONS

EMS Agencies

ALS Ground=19

Air= WCA, STAT, STAT Lifestar

BLS =49

QRS services recognized = 24

2 Rescue services at Operations Level??

1 Rescue service at First Responder Level??

1 Swiftwater Rescue service??

1 Rescue service at Basic Vehicle and Machinery

8 EPI Pen agencies

0 BLS CPAP agencies

Breakdown of vehicles:

ALS- Transport = 102
ALS- Squad = 18
BLS = 67
QRS = 37
Air = 5

Other Resources:

- Approximately 25 non-recognized fire departments providing QRS type services (many coming on board due to EMS Act)

Call Volume:

2003: 93912
2005: 98895
2006: 101,263
2007: 106,598
2008: 107,603
2009: 109,082
2010: 107,055

Call Percentage by Time of Day

Monday – Friday 8AM-4PM 40.2%
Monday – Friday 7AM-7PM 54.6%
Monday – Friday 76.1%

12 Lead Transmission

12 of 15 hospitals have the capability to receive 12 lead EKG transmissions
19 ALS services have the capability to transmit 12 lead EKG

SYSTEM PERFORMANCE

Arrive Time:

The following charts arrive times for like services in like sized municipalities. Arrive time is defined as the elapsed time between dispatch to arrive scene. The column headings show the time in minutes to arrive on scene and the row headings show the type of agency. For example in Populations of less than 100 persons/mi2, BLS agencies are arriving on scene between 9 and 13 minutes 33.8% of the time**.

Population of <100 mi2

	Time in Minutes	0 to 8	9 to 13	14 to 20	>20
ALS		38.1%	28.7%	21.9%	11.2%
BLS		25.4%	33.8%**	29.1%	11.7%
QRS		75.6%	15%	9.4%	0

Population 101-500 mi2

	Time in Minutes	0 to 8	9 to 13	14 to 20	>20
ALS		47%	26.2%	19.8%	6.9%
BLS		34.4%	42.1%	19.7%	3.7%
QRS		63.3%	16.7%	16.7%	3.3%

Population 501-1000 mi2

	Time in Minutes	0 to 8	9 to 13	14 to 20	>20
ALS		35.8%	27%	23.9%	13.3%
BLS		44.3%	30.4%	22.2%	3.1%
QRS		90%	10%	0	0

Population >1000 mi2

	0 to 8	9 to 13	14 to 20	>20
ALS	68.9%	20.6%	8%	2.5%
BLS	52.4%	31.3%	12.8%	3.5%
QRS	98.5%	1%	0.2%	0.4%

Suction Unit QI Project Status

Service participation as of July 2011 was only 38%.

Missed Call Project Status

The Quality Improvement Committee is conducting an assessment of missed calls in the region.

% Participating represents the percentage of services who are submitting missed call data by county. For example in Clarion County 100% of services are sent missed call data to EMMCO West in 2010 but only 83.3% in 2011.

% Missed (total region) percentage of missed calls by participating services by county (over half of the missed calls from participating services are occurring in Erie County)

Missed calls staffing represents calls missed due to lack of personnel

Missed calls units committed represents calls missed due to the service's available units being on other calls.

Missed calls vehicle OOS represents missed calls due to the EMS vehicle being out of service for something like repairs.

COUNTY	% 2010 PARTICIPATING	% 2011 PARTICIPATING	% Missed			MISSED CALLS VEHICLE OOS	MISSED CALLS OTHER
			Calls (total region)	MISSED CALLS STAFFING	MISSED CALLS UNIT COMMITTED		
Clarion	100.00%	83.3%	11.34%	26.86%	72.00%	1.71%	0
Crawford	76.92%	50%	13.61%	67.14%	32.38%	0.48%	0
Erie	53.33%	58.6%	55.28%	62.49%	35.05%	1.64%	0.82%
Forest	0.00%	0.00%	0.45%	57.14%	42.86%	0	0
Mercer	80.00%	60%	0.97%	20.00%	80%	0	0
Venango	100.00%	33.3%	4.86%	37.33%	62.67%	0	0
Warren	80.00%	55%	13.48%	70.67%	26.44%	1.44%	1.44%

% Volume (county) represents the percentage of calls (by county) all of the services participating. Since all services are participating in Clarion County, the % call volume represented is 100%

% Volume (region). If you were to total the number of calls from participating services for the region, this column represents what percentage of the total calls in the region are run in the county.

The following table compares the total missed call percentage to the percentage of call volume by county (Clarion county had 11.34% of the total REPORTED missed calls in the region but only runs 5.72% of the total EMS calls in the region)

COUNTY	% Missed Calls (total region)	% Total Regional Call Volume
Clarion	11.34%	5.72%
Crawford	13.61%	13.59%
Erie	55.28%	41.97%
Forest	0.45%	0.92%
Mercer	0.97%	21.91%
Venango	4.86%	10.67%
Warren	13.48%	5.22%

PREPAREDNESS

Equipment:

Support Vehicles, Trailers Other Specialty Equipment

- EMMCO West preparedness trailer
- MSEC trailer
- Hospital trailer system
- All strike teams (6) have 4 Millennium masks and level C suits (28 total)
- 6, 10 man tents with heaters
- Mobile communications unit (joint project NWPAERG)

Vehicles:

- 1 2002 Chevrolet 2500HD turbo diesel
- 1 2008 Chevrolet 3500HD turbo diesel

Strike Teams:

- 6 strike teams

INTEGRATION/PARTNERSHIPS

- PEHSC BOD (quarterly)
- PEHSC EMS Information Taskforce (chair) (4-6x/year)
- PEHSC Practical Evaluation taskforce and various other standing and dynamic PEHSC and DOH committees and taskforces (Regs). (monthly)
- EMMCO West Regional Medical Advisory Committee (quarterly)
- EMMCO West Communications Committee integrated into Region NWPAERG task force Communications Committee. (monthly)
- EMMCO West Transportation Committee (2-3x/year)
- EMMCO West QI Committee (quarterly)
- EMMCO West CISM Team (monthly)
- Participation at Volunteer EMS Alliance of Crawford County (monthly)
- NWPAERG (monthly+)
- SHIP (quarterly)
- Crawford Co. Active Aging Coalition (as requested)
- Erie Co. EMS Council (monthly)
- Clarion Co. EMS Council (bi-monthly)
- Warren Co. EMS Council (monthly)
- NWPA Career Link partnership (annually)
- Crawford Co. LEPC (5x/year)
- Crawford Co. Safe Kids (as requested)
- National Registry (as requested)

Identified/Perceived Inter-Regional Problems***PERSONNEL***

1. Fewer ALS personnel are active
2. More EMS personnel are expiring than training programs are graduating. Statistics also show that 26% of personnel are not active thus it can be expected that the net loss is actually worse.
3. Past recruitment/retention efforts seem to be ineffective.
4. Agencies do not take advantage of EMSOF dollars earmarked for recruitment and retention efforts.
5. Staff involvement related to problems with education seems to be increasing

6. The Bureau of EMS is promoting health and fitness in EMS.

OPERATIONS

1. There are many fire departments which will need to be licensed as EMS agencies with the implementation of the new EMS Act. They may be in need of equipment and will most likely need PCR software.
2. Call volumes historically increase while personnel and other resources are diminishing.
3. Services continue to miss calls and have not notified the PSAP that they are unable to staff.
4. Erie County, despite low participation rates is still responsible for over 50% of the total available missed call data. Other counties such as Clarion and Warren also have significant staffing problems.
5. QRS arrive time data is excellent. It is possible that some areas of the region would be better served by QRS than BLS. Historically QRS mobilization times have also been very good.
6. Participation in QI projects needs improvement.
7. BLS agencies are not taking advantages of programs such as EPI Pens and CPAP.

PREPAREDNESS

1. Logistics (packing, weight) make it difficult to drill with hospital trailers often.
2. Current trailer configuration makes it difficult to access equipment that may be needed for an unmet need (heating/AC units).

INTEGRATION/PARTNERSHIPS

1. AVL is not currently available region-wide
2. More interaction is needed with elected officials and municipal leaders.
3. Office staff needs to increase interaction with providers.

Goals and Tasks

PERSONNEL

Recruit and retain personnel through regional and service level programming

- Conduct regional recruitment and retention workshop. (\$1500)
- Coordinate health and wellness activities such as “How Low Can You Go” (\$3000)
- Leadership courses pending additional funding.

Assess quality of EMS education and provide education accordingly.

- Conduct module IV evaluations.
- Conduct scheduled and unscheduled site visits that create opportunities for time with administrators, instructors, and students.
- Conduct exit evaluations of students.

- Conduct evaluator reliability evaluations and enrichment programming pending funding.
- Conduct instructor enrichment programming pending funding.

Evaluate gaps in training, assist with funding and work with training institutes to fill voids.

- Implement a better mechanism for tracking providers passing exams.
- Continue to monitor certifications vs expirations.

OPERATIONS

Increase provider awareness of statutory/regulatory and other law/regulation applicable to EMS.

- Pending progress in Regulations, conduct educational programming.

Improve clinical capabilities which enhance STEMI care

- Provide additional 12 Lead education in coordination with the AHA Mission Lifeline, throughout the region. (\$1500)

Provide tools to assist agencies with quality improvement initiatives and increase participation

- Purchase additional suction unit testing gages for QRS agencies now becoming licensed (\$700)
- Implement incentive programming for services who meet certain quality improvement benchmarks. Provide additional education as necessary. (\$2000)

Increase participation in EPI pen and BLS CPAP programs

- Request 80/20 funding for EPI pens and BLS CPAP

PREPAREDNESS

- Continue to work with DOH and partners to explore alternative trailer configurations.
- Conduct regional communications assessment, pending funding
- Expand AVL pending funding

INTEGRATION/PARTNERSHIPS

- Consider alternatives to some outreach initiatives