

EMMCO West, Inc.
EMS System Assessment 2012-13

Inventory

PERSONNEL

Medical Command Authorization

Number of ALS personnel with medical command authorization functioning in EW

Year	Total
2012	315
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
2012	41
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	11-12
FR	194	202	182	190
EMT	2342	2198	2265	2278
EMTP (see Below)	834	551	559	561
PHRN	119	94	99	108
HP	20	17	17	15
<i>TOTAL</i>	<i>3509</i>	<i>3062</i>	<i>3122</i>	<i>3152</i>
EMS Instructors	100	112	95	98

Education:

Loss/Gain of EMS Personnel

EMT	2008	2009	2010	2011	4 year net loss/gain	
<i>Clarion</i>	1	-9	16	37		41
<i>Crawford</i>	-17	-30	-28	41		-34
<i>Erie</i>	3	12	-62	60		13
<i>Forest</i>	-2	-2	-6	-1		-11
<i>Mercer</i>	-23	11	-9	-1		-22
<i>Venango</i>	-17	12	1	24		20
<i>Warren</i>	-9	1	-16	11		-13

FR	2008	2009	2010	2011	4 year net loss/gain	
<i>Clarion</i>	3	-1	1	6		9
<i>Crawford</i>	-12	8	-2	0		-6
<i>Erie</i>	4	-13	-7	0		-16
<i>Forest</i>	0	0	-1	0		-1
<i>Mercer</i>	13	-2	-10	0		1
<i>Venango</i>	-3	0	-1	0		-4
<i>Warren</i>	11	-4	11	0		18

OPERATIONS

EMS Agencies

ALS Ground=19

Air= WCA, STAT, STAT Lifestar

BLS =51

QRS services recognized = 35

Rescue services at Vehicle and Machinery Operations Level 2

Swiftwater Rescue service Level 3a = 1

BLS EPI Pen agencies = 24

BLS CPAP agencies = 15

August 22, 2012

Breakdown of vehicles:

ALS- Transport = 102

ALS- Squad = 18

BLS = 67

QRS = 37

Air = 5

Other Resources:

- Approximately 20 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

2011: 111,125

Call Percentage by Time of Day

Monday – Friday 8AM-4PM 41.5% (40.2% previous year)

Monday – Friday 7AM-7PM 54.2% (54.6% previous year)

Monday – Friday 74.6% (76.1% previous year)

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 34.0% of the time**.

Population of <100 mi²

	Time in Minutes	0 to 8	9 to 13	14 to 20	>20
ALS		44.1%	26.5%	19.4%	10.0%
BLS		26.7%	34.0%**	28.3%	11.0%
QRS		75.4%	17.4%	5.2%	2.1%

Population 101-500 mi²

	Time in Minutes	0 to 8	9 to 13	14 to 20	>20
ALS		45.2%	27.0%	20.0%	7.9%
BLS		34.4%	42.6%	19.8%	3.2%
QRS		81.4%	12.4%	4.1%	2.1%

Population 501-1000 mi²

	Time in Minutes	0 to 8	9 to 13	14 to 20	>20
ALS		41.1 %	28.3%	19.6%	11.0%
BLS		41.9%	34.1%	19.0%	5.1%
QRS		86.7%	13.3%	0%	0%

Population >1000 mi²

	0 to 8	9 to 13	14 to 20	>20
ALS	65.7%	22.5%	8.7%	3.1%
BLS	49.5%	31.6%	15.0%	4.0%
QRS	98.1%	1.1%	0.3%	0.5%

Suction Unit QI Project Status

Due to success of project, services no longer have to submit self checks to EMMCO West but must demonstrate at least a monthly check of suction units at licensure. Services whose suction unit fails a spot or scheduled inspection must submit reports to EMMCO West for 6 months.

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 sent missed call data to EMMCO West in 2010 but only 83% participated in 2011 and 2012
- % Missed (total region) percentage of missed calls by participating services by county (almost 60% of the missed call data from participating services are occurring from 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 other represents missed calls due to other reasons like the EMS vehicle being out of service or missed call due to communications failures.

COUNTY	% participating			% Missed Calls (total region)	MISSED CALLS STAFFING	MISSED CALLS UNIT COMMITTED	MISSED CALLS OTHER
	2010	2011	2012				
Clarion	100%	83%	83%	13.11%	21.74%	78.26%	0
Crawford	76%	50%	50%	12.35%	68.46%	31.54%	0
Erie	53%	58%	53%	58.31%	66.61%	30.94%	2.44%
Forest	0%	0%	0%	0.38%	50%	50%	0
Mercer	80%	60%	60%	1.14%	50%	50%	0
Venango	100%	33%	67%	6.27%	6.06%	93.94%	0
Warren	80%	55%	50%	8.45%	70.79%	29.21%	0

The following table compares the total missed call percentage to the percentage of call volume by county (Clarion county had 13.11% of the total REPORTED missed calls in the region but only runs 6.18% of the total EMS calls in the region)

COUNTY	% Missed Calls (total region)	% Total Regional Call Volume
Clarion	13.11%	6.18%
Crawford	12.35%	13.55%
Erie	58.31%	43.49%
Forest	0.38%	1.08%
Mercer	1.14%	20.68%
Venango	6.27%	10.49%
Warren	8.45%	4.53%

this color represents an increase

PREPAREDNESS

Equipment:

Support Vehicles, Trailers Other Specialty Equipment

- EMMCO West preparedness trailer
- MSEC trailer
- MMSS 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
- 1 2011 Honda CRV

Strike Teams:

- 5 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 (bi-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. In some cases, 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.
2. Past recruitment/retention efforts seem to be ineffective.
3. Agencies do not take advantage of EMSOF dollars earmarked for recruitment and retention efforts.
4. Staff involvement related to problems with education seems to be increasing
5. There have been requests for additional management training.

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.
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. However, there has been an increase in contractual staffing and other collaboration efforts.
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 Crawford 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. Agencies may benefit from collaborating to create a BLS Squad.
6. Participation in QI projects needs improvement.
7. Many 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. Funding restrictions makes it difficult to assure the ability to move all trailer assets.

INTEGRATION/PARTNERSHIPS

1. More interaction is needed with elected officials and municipal leaders.
2. Office staff needs to increase interaction with providers.

Goals and Tasks

PERSONNEL

Recruit and retain personnel through regional and service level programming

- Renew the EMS Leaders of Tomorrow program at conference.

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.
- Develop regional “app” or mobile site for smart phones.

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

- 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

Promote CPR initiatives:

- Promote high performance CPR at the service level
- Conduct 2-3 hands free CPR campaigns at various sporting events

PREPAREDNESS

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

INTEGRATION/PARTNERSHIPS

- Consider alternatives to some outreach initiatives