

EMMCO West, Inc.
EMS System Assessment 2017

Inventory

PERSONNEL

Certified Personnel:

FY	10-11	11-12	12-13	13-14	14-15	15-16
EMR	202	190	187	172	306	327
EMT	2198	2278	2346	2259	1940	1871
AEMT						6
Paramedic	551	561	572	573	473	344
PHRN	94	108	112	119	97	66
PHPE						4
PHP	17	15	15	19	29	12
Total	3062	3152	3232	3142	2845	2620
Instructors	112	98	97	98	87	88

Net Gain/Loss: The following chart shows the number of personnel gained or lost from fiscal year to fiscal year and the net gain or loss from FY 10-11 to present

FY	11-12	12-13	13-14	14-15	15-16	Net Gain/Loss
EMR	-12	-3	-15	134	21	125
EMT	80	68	-87	-319	-69	-327
AEMT					6	6
Paramedic	10	11	1	-100	-129	-207
PHRN	14	4	7	-22	-31	-28
PHPE					4	4
PHP	-2	0	4	10	-17	-5
Total	94	80	-90	-63	-222	-432
Instructors	-14	-1	1	-11	1	-24

(Certification Programs Held)

	<u>YEAR</u>	<i>EMR</i>	<i>EMT</i>	<i>AEMT</i>	<i>Para</i>
Clarion	2013	2	1		0
	2014	1	1		0
	2015	1	1		0
	2016	1	1	0	0
Crawford	2013	0	1		0
	2014	2	3		0
	2015	1	2		0
	2016	1	1	0	0
Erie	2013	7	1		3
	2014	2	8		2
	2015	4	5		1
	2016	3	4	0	1
Forest	2013	0	0		0
	2014	0	0		0
	2015	0	0		0
	2016	0	0	0	0
Mercer	2013	1	1		1
	2014	1	1		0
	2015	0	2		0
	2016	1	2	1	0
Venango	2013	0	0		0
	2014	0	0		0
	2015	0	1		0
	2016	1	0	0	0
Warren	2013	0	0		0
	2014	0	0		0
	2015	1	1		0
	2016	0	1	0	0

Certification Program Success Rates EMR & EMT (still a number of candidates in the testing process for 2016)

	2012	2013	2014	2015	2016
Classes	18	14	19	22	16
Candidates	312	142	280	356	240
Complete Program	238 (76.3%)	100(70.42%)	189 (67.5%)	272(76.4%)	168(70%)
Pass Initial Practical	124 (52.1%)	26 (26%)	75 (39.68%)	97 (35.6%)	56(33.3%)
Pass Subsequent Practical	105 (41.1%)	54 (54%)	107 (56.61%)	140 (51.4%)	88(52.3%)
Total Pass Practical	229 (93.2%)	80 (80%)	182 (96.3%)	237(87.1%)	155(85.7%)
Pass Written 1 st Attempt	183 (79.9%)	58 (72.5%)	76 (41.76%)	84 (35.4%)	51(35.4%)
Pass Written 2 nd Attempt	14 (6.1%)	6 (7.5%)	11	17 (7.1%)	5(3.2%)
Pass Written 3 rd Attempt	2 (0.9%)	0	3	5 (2%)	0
Pass Subsequent Written	4 (1.7%)	1 (1.25%)	4	0	0
Personnel Certified*	203 (85.3%)	65 (65%)	94 49.73%*)	106(38.9%)	56(33%)

* % of those completing program

2016 Pass Rate by Level: # passed/# completing program (with this and above table, some individuals may still be in the testing process)

EMR	EMT	AEMT	Paramedic
32.1%	34.5%	25%	61.5%

2016 Pearson View Testing Sites: Erie, PA & Clarion, PA. 82.3% of population are within 1 hour drive of testing sites

OPERATIONS

EMS Agencies

ALS Ground	22
Air Ambulance	1 + 1 licensed in another region
BLS	48
QRS	55 (strictly QRS)
Rescue agencies at Vehicle and Machinery Operations Level	2
Rescue agencies at Vehicle and Machinery Basic Level	3
Rescue agencies at Vehicle and Machinery Advanced Level	1
Swiftwater Rescue agencies Level 3a	2
Swiftwater Rescue agencies Level 4a	0
BLS EPI Pen agencies	30
BLS CPAP agencies	25
Naloxone agencies (licensed)	17
EMSC agencies	2

Breakdown of Vehicles:

Air	6
ALS Transport	106
ALS Squad	13
ALS Squad Reserve	0
BLS	74
QRS	88 (just QRS vehicles not an ambulance)
QRS Container	12

PCR Records Submitted by Year: Project

2005	2007	2009	2011	2012	2013	2014	2015	2016*
98,895	106,598	109,082	111,125	115,306	117,759	116,326	114,912	102,000

* Estimated.

SYSTEM PERFORMANCE

Mobilization Times: Defined as time from dispatch to en-route.

Source: PCR Data

Inclusion Criteria: Type of Service Requested is 911 Response(Scene) or Intercept

Exclusion Criteria: non-ground EMS agencies

Corrections: 0.5% of top and bottom values removed for entry error elimination.

Mean	2.26 minutes
Median	2.7
Mode	1
90 th Percentile	5

Arrive Times: Defined as time from dispatch to arrival on scene.

Source: PCR Data

Inclusion Criteria: Type of Service Requested is 911 Response(Scene) or Intercept

Exclusion Criteria: non-ground EMS agencies

Corrections: 0.5% of top and bottom values removed for entry error elimination.

Mean	7.15 minutes
Median	9
Mode	4
90 th Percentile	14

12 Lead: Defined as procedure time of 12 Lead performed minus the time unit arrived on scene in minutes.

Source: PCR Data

Inclusion Criteria: Type of Service Requested is 911 Response(Scene) or Intercept

Exclusion Criteria: non-ground EMS agencies

Corrections: 0.5% of top and bottom values removed for entry error elimination.

Mean	20.84
Median	15
Mode	8
90 th Percentile	18.32

Aspirin Administration: Defined as the percentage of patients who received aspirin who met the following criteria: 911 response or intercept, Ground EMS Agency Units only, patients with chest pain/discomfort aged 30 years or older.

Capnography Performed: Defined as the percentage of patients whose advanced airway is confirmed and monitored with capnography who met the following criteria: 911 response or intercept, Ground EMS Agency Units only, patients with Airway-oro-tracheal, Airway-nasotracheal, Airway-King LT or airway intubation of existing Tracheostomy Stoma

Source: PCR Data

Inclusion Criteria: Type of Service Requested is 911 Response(Scene) or Intercept

Exclusion Criteria: non-ground EMS agencies

Aspirin	58.93
Capnography	86.34

Missed Call Project Status

The Quality Improvement Committee is conducting an assessment of all missed calls in the region (any call to which the agency would have normally responded regardless of the reason).

- % participating represents the percentage of agencies who are submitting missed call data by county. For example, in Clarion County 100% of agencies sent missed call data to EMMCO West in 2010 but only 83% participated in 2011 and 2012

County	% Participating						
	2010	2011	2012	2013	2014	2015	2016
Clarion	100%	83%	83%	67%	50%	60%	67%
Crawford	76%	50%	42%	42%	58%	64%	34%
Erie	53%	58%	43%	53%	66%	73%	67%
Forest	0%	0%	0%	0%	0%	100%	0%
Mercer	80%	60%	40%	60%	60%	40%	80%
Venango	100%	33%	67%	50%	33%	60%	50%
Warren	80%	55%	50%	30%	20%	40%	70%

PREPAREDNESS

Equipment:

Support Vehicles, Trailers Other Specialty Equipment

- MMSS - Trailer (with equipment)
- Cell on Wheels (COW) partnership with NWPAERG
- Motorola HT1250 Radios, 403-470, 1-4W
- MSEC 18 - Medical Surge Equipment Cache
- Honda Generator
- Canberra MRAD113 Mini Radiac; Pocket Radiological Monitor
- Victoreen 190 Radiation Detector
- Radio, Portable - Kenwood, TK372GK1 SK, UHF w/ accessories
- Radio, Portable - 800mhz
- Millennium Masks
- Level C Personal Protective Equipment Suits
- 10 Man Tents with Heaters
- Radio, Base - 800 Mhz
- Base Station Radio - 400 Mhz
- Radio, VTAC - 800 Mhz - VEHICLE MOUNTED
- GPS, handheld
- Trailer, MCI - Car mate CM 816C-CT
- Radio, VTAC - 800 Mhz - PORTABLE
- Portable Comm-Pac (Wi-Fi)
- Portable Misting Fans
- Crowd Control Stanchions
- Patient Tracking Scanners
- Portable Ventilator
- Life Jacket (USCG Type II)
- Life Jacket (USCG Type III)
- Life Jacket (USCG Type V)
- Life Jacket (USCG Inflatable vest)
- 70kw Trailer Generator
- HC Global DB Handheld Radio
- Typhoon Fans
- 175,000 btu Propane Heaters
- Technical Rescue Helmets
- Water Rescue Throwbags
- N-95 Respirators
- Toe behind electric light tower
- Power washer – heater
- EMS strike team support trailer system

Preparedness Vehicles:

- 1 2008 Chevrolet 3500HD turbo diesel
- 1 2014 Ford 3500 turbo diesel

Strike Teams:

- 4 Strike Teams

INTEGRATION/PARTNERSHIPS

- EMMCO West Regional Medical Advisory Committee (quarterly)
- EMMCO West Communications Committee integrated into Region NWPAERG task force Communications Committee.
- EMMCO West QI Committee (quarterly)
- EMMCO West CISM Team (bi-monthly)
- Participation at Volunteer EMS Alliance of Crawford County (monthly)
- NWPAERG (quarterly+)
- NWPAERG Health and Medical Subcommittee (Bi-monthly)
- Crawford Co. Active Aging Coalition (as requested)
- Clarion Co. EMS Council (quarterly)
- Warren Co. EMS Council (semi-monthly)
- Crawford Co. LEPC (5x/year)
- Crawford Co. Safe Kids (as requested)
- Crawford Co. Active Aging (as requested)
- Erie County CERT (as requested)
- Erie Regional Medical Reserve Corp (as requested)

Identified/Perceived Inter-Regional Problems

PERSONNEL

1. EMS personnel are continuing to expire at a greater rate than training programs are generating EMS graduates.
2. Several counties have only had one EMS certification program in the last three years.
3. EMS students enrolled in initial BLS certification programs are not following through the entire state certification process. Students are passing the state practical exam, but not completing the NREMT written examination.
4. Agencies have historically not taken advantage of EMSOF dollars earmarked for recruitment and retention efforts.
5. EMS Personnel may benefit from better health behaviors, nutrition and exercise.
6. It is believed that EMS personnel are not being properly prepared to assume management or supervisory roles in EMS agencies.

OPERATIONS

1. Call volumes historically increase while personnel and other resources are diminishing.
2. Three counties, (Crawford, Erie, Warren), have had their county-wide staffing plans approved. Crawford and Erie have implemented their plans. Warren County's plan goes operational Jan. 1, 2017.
3. Participation in QI projects needs significant improvement.
4. Many BLS agencies continue to not take advantages of programs such as EPI Pens, Naloxone and CPAP.
5. PCR completion and submission continues to be problematic for some agencies.
6. Data elements, identified as needed for QI projects, are often found to not be part of the PA dataset. Planning should drive QI, QI should drive selection of data elements and analysis of data should drive revisiting planning. This should occur at the state level.

PREPAREDNESS

1. All preparedness assets are now housed within buildings. The addition of two federal grant funded buildings have been erected and now all preparedness assets are housed inside.
2. EMMCO West staff have been providing as needed maintenance of preparedness equipment assets and buildings.
3. Preparedness equipment and readiness are to be administered by the regional preparedness coordinator out of EMSI.
4. EMMCO West continues to participate in NWPAERG meetings and activities.

INTEGRATION/PARTNERSHIPS

1. More interaction is needed with elected officials and municipal leaders.
2. It would be desirable to increase personal interaction with EMS personnel.

Goals and Tasks

PERSONNEL

Partner with agencies to promote and improve recruitment and retention of personnel

- Visit EMS agencies during EMS week.
- Continue to recognize various providers, agencies and newly certified personnel at EMS Appreciation Dinner. Seek funding partners.
- Continue EMS training scholarships and examination reimbursement. Use EMSOF Cat III and Cat VIII funding to support new BLS personnel in their initial certification programs and all initial certification levels for examination reimbursements.

Assess health, wellness and physical capabilities of EMS personnel.

- Partner with health facilities and other agencies to identify health, wellness and physical assessment tools
- Identify opportunities to make health, wellness and physical assessment tools
- Identify motivations for EMS providers to participate in health, wellness and physical assessment tools as well as other healthy lifestyle choices.

Assess quality of EMS education and provide education accordingly.

- Conduct scheduled and unscheduled site visits that create opportunities for time with administrators, instructors, and students.
- Conduct evaluator education programming as needed.
- Conduct instructor and instructor enrichment programming as needed.

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

- Continue to monitor providers attempting/passing exams and make improvements in the process as identified.
- Continue to monitor certifications vs expirations.
- Pursue alternative/non-traditional forms of educational programming
- Meet with educational institutes and agencies to proactively plan strategically placed education programs

Promote a diversified continuing education program that emphasizes quality patient care practices.

- Continue to provide continuing education programming with focus on basic practical skills.
- Provide additional educational programming opportunities through the annual educational symposium and satellite educational sessions.

Assist BEMS, as requested, on the development of EMS continuing education programming and educational support.

OPERATIONS

Implement a statewide PCR cloud based program to collect and manage PCR data. Project to be operational by July 1, 2017. EMMCO West will be the primary liaison for coordination of the project between the vendor and primary users of the system.

Assist and educate EMS Agencies and personnel in the EMS System Act and Regulations

- Provide technical assistance to EMS Agencies via various methods for all inquiries related to the EMS System Act and Regulations.
- Work with additional counties to assist with response planning.
- Work with existing counties with approved response plans to assist with QI issues when applicable or when requested.

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

- Continue incentive programming for services who meet certain quality improvement benchmarks and recognize them at an annual event.
- Conduct standardized and regular performance audits consistent with NHTS and/or statewide performance initiatives.
- Work with BEMS and other EMS councils to develop a reliable and efficient data collection process and standard reporting mechanism.

Continue to improve the region's out of hospital cardiac arrest survival rates through educational and operational initiatives

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

PREPAREDNESS

- Improve regional EMS strike team preparedness readiness through offering education and regular meetings.

INTEGRATION/PARTNERSHIPS

Promote the EMS system throughout the region by participating in community outreach initiatives.

- Identify other opportunities to provide hands only CPR training.
- Identify opportunities for greater outreach to elected officials.