

**EMMCO West, Inc.**  
**EMS System Assessment 2019 - 2020**

**Inventory**

***PERSONNEL***

**Certified Personnel:**

<b>FY</b>	<b>13-14</b>	<b>14-15</b>	<b>15-16</b>	<b>16-17</b>	<b>17-18</b>	<b>18-19**</b>
<b>EMR</b>	172	306	327	299	275	258
<b>EMT</b>	2259	1940	1871	1852	1736	1729
<b>AEMT</b>			6	7	9	18
<b>Paramedic</b>	573	473	344	392	379	375
<b>PHRN</b>	119	97	66	82	76	84
<b>PHPE</b>			4	4	4	1
<b>PHP</b>	19	29	12	12	6	4
<b>Total</b>	3142	2845	2620	2648	2485	2469
<b>Instructors</b>	98	87	88	92	101	117

**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 13-14 to present

<b>FY</b>	<b>13-14</b>	<b>14-15</b>	<b>15-16</b>	<b>16-17</b>	<b>17-18</b>	<b>18-19**</b>	<b>Net Gain/Loss</b>
<b>EMR</b>	-15	134	21	-28	-24	-17	92
<b>EMT</b>	-87	-319	-69	-19	-116	-7	-617
<b>AEMT</b>			6	1	2	+9	18
<b>Paramedic</b>	1	-100	-129	48*	-13	-4	-197
<b>PHRN</b>	7	-22	-31	16	-6	-5	-31
<b>PHPE</b>			4	0	0	-3	-1
<b>PHP</b>	4	10	-17	0	-6	-2	-11
<b>Total</b>	-90	-63	-222	18	-163	-16	-536
<b>Instructors</b>	1	-11	1	4	9	+16	20

\* Increase associated with dual certified EMS providers out-of-state

\*\*\* Active providers as of 12/4/2019

Certification Programs Held

	<u>YEAR</u>	<i>EMR</i>	<i>EMT</i>	<i>AEMT</i>	<i>Para</i>
<b>Clarion</b>	2014	1	1		0
	2015	1	1		0
	2016	1	1	0	0
	2017	0	1	0	0
	2018	0	1	0	0
	2019	0	4	0	0
<b>Crawford</b>	2014	2	3		0
	2015	1	2		0
	2016	1	1	0	0
	2017	0	1	0	0
	2018	0	2	0	0
	2019	0	1	0	0
<b>Erie</b>	2014	2	8		2
	2015	4	5		1
	2016	3	4	0	1
	2017	2	3	0	0
	2018	1	5	1	1
	2019	2	2	0	1
<b>Forest</b>	2014	0	0		0
	2015	0	0		0
	2016	0	0	0	0
	2017	0	0	0	0
	2018	0	0	0	0
	2019	0	0	0	0
<b>Mercer</b>	2014	1	1		0
	2015	0	2		0
	2016	1	2	1	0
	2017	1	1	1	0
	2018	0	3	1	0
	2019	0	3	2	1
<b>Venango</b>	2014	0	0		0
	2015	0	1		0
	2016	1	0	0	0
	2017	1	1	0	0
	2018	2	1	0	0
	2019	2	1	0	0
<b>Warren</b>	2014	0	0		0
	2015	1	1		0
	2016	0	1	0	0
	2017	2	1	0	0
	2018	1	1	0	0
	2019	1	1	0	0

### Certification Program Success Rates EMR & EMT

	2018	2019*
Initial Certification Classes	26	23
Student Applications	263	196
Average Students / class	10.1	8.5
Candidates for Certification Process	225	159
Completion %	86%	81%
Certified EMS Providers	124	90
Certification Rate	<b>55%</b>	<b>56%</b>
Remaining Eligible Candidates	90	69
Passed psychomotor	73	49
Attempted NREMT Cognitive	84	57

\*Incomplete testing process

### Continuing Education

	2018	2019*
Courses by title	348	551
Total Classes	796	1501
Distinct Student Total	11,958	24,933
Continuing Education By Endorsement	562	1,115

\*Incomplete data set

### Certification History Report - Initial Certification

	2018	2019*
EMSVO	+100	+122
EMSVO QRS	13	1
EMS Instructor	+9	+10
EMR	<b>24</b>	<b>16</b>
EMT	50	93
AEMT	5	7
PARAMEDIC	16	4
PHRN	2	1
PHPE	0	0
PHP	0	0
MC PHYSICIANS	4	5
AGENCY MEDICAL DIRECTORS	0	0
MC FACILITY Med Director	0	0
Regional Medical Director	0	0
Administrative Access	10	12

\*Incomplete data set

Note. The data identified within these charts have limitations due to variations between national and state databases.

Certification History Report - Certification by Endorsement Applications

	2018	2019*
EMT	33	20
AEMT	1	2
Paramedic	9	16
PHRN	1	

Certification History Report - EMS Certification Reinstatements

	2018	2019*
EMR	4	1
EMT	4	6
AEMT	0	0
Paramedic	1	1
PHRN	0	0

Certification History Report - EMS Certification Reregistration

	2018	2019*
EMSVO	645	673
EMSVO QRS	0	27
EMS Instructor	35	70
EMR	94	466
EMT	532	17
AEMT	2	309
PARAMEDIC	170	58
PHRN	31	0
PHPE	1	4
PHP	1	28
MC PHYSICIANS	4	34
AGENCY MEDICAL DIRECTORS	1	There are no term limits
MC FACILITY Med Director	0	0
Regional Medical Director	0	0
Administrative Access	0	0

\*Incomplete data set

## **OPERATIONS**

### **EMS Agencies (as of Dec 1, 2019)**

ALS Ground	20
Air Ambulance	0
BLS	46
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	0
Swiftwater Rescue agencies Level 3a	4
Swiftwater Rescue agencies Level 4a	0
BLS EPI Pen agencies	33
BLS CPAP agencies	26
Naloxone agencies (licensed)	20 ** number does not include QRS as there is no tracking mechanism in the portal
EMSC agencies	2

### **Breakdown of Vehicles:**

Air	0
ALS Transport	119
ALS Squad	11
CCT	4
BLS	55
QRS	103(just QRS vehicles not an ambulance)
QRS Container	22

**PCR Records Submitted by Year: Project**

2011	2012	2013	2014	2015	2016*	2017*	2018*	2019
111,125	115,306	117,759	116,326	114,912	102,000	118,649	101,223	104,519

Estimated.

**EMS Providers Identified on at Least (1) PCR  
01/01/19 – 12/18/19**

Total EMS Personnel - **2,469 (EMS Registry)**

Total PCRs- **106,334**

Number of providers actively running calls: **1191 (49%)**

Breakdown by level

EMR: 89

EMT: 782

AEMT: 9

PARA: 268

PHRN: 40

PHPE: 1

PHP: 2

\* Totals do not include EMS personnel associated with QRS agencies and/or work with an EMS entity in an administrative-educational-dispatcher capacity and would not show up on a PCR, but are “active members” of the EMS system.

## **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	3 minutes
Median	2 minutes
Mode	1 minute
90th Percentile	8 minutes

**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	6 minutes
Median	6 minutes
Mode	4 minutes
90th Percentile	13 minutes

**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	7.17 minutes
Median	6.09 minutes
Mode	1.34 minutes
90th Percentile	15.34 minutes

**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-naso-tracheal, 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	65.03%
Capnography	27.14%

**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 2017 but only 83% participated in 2011 and 2012

COUNTY	2012	2013	2014	2015	2016	2017	2018	2019
Clarion	83%	67%	50%	60%	67%	100%	100%	100%
Crawford	42%	42%	58%	64%	34%	100%	100%	100%
Erie	43%	53%	66%	73%	67%	31%	100%	100%
Forest	0%	0%	0%	100%	0%	100%	0%	100%
Mercer	40%	60%	60%	40%	80%	50%	50%	25%
Venango	67%	50%	33%	60%	50%	50%	50%	50%
Warren	50%	30%	20%	40%	70%	100%	100%	100%



## ***PREPAREDNESS***

### **Equipment:**

#### Support Vehicles, Trailers Other Specialty Equipment

- MMSS - Trailers (with equipment) (3)
- Cell on Wheels (COW) partnership with NWPAERG
- Motorola HT1250 Radios, 403-470, 1-4W
- MSEC 18 - Medical Surge Equipment Cache
- Honda Generators (3) portable "red" generators
- Canberra MRAD113 Mini Radiac; Pocket Radiological Monitor
- Victoreen 190 Radiation Detector
- Radio, Portables - Kenwood, TK372GK1 SK, UHF w/ accessories
- Radio, Portables - 800mhz
- Millennium Masks
- Level C Personal Protective Equipment Suits
- 10 Man Tents
- Radio, Base - 800 Mhz
- Base Station Radio - 400 Mhz
- Radio, VTAC - 800 Mhz - VEHICLE MOUNTED
- Trailer, MCI - Car mate CM 816C-CT
- Trailer, EMS Strike Team Support Services
- Radio, VTAC - 800 Mhz - PORTABLE
- Portable Comm-Pac (Wi-Fi)
- Portable Misting Fans
- Crowd Control Stanchions
- Portable Ventilators
- Life Jacket (USCG Type II, III, V, Inflatable vest)
- 70kw Trailer Generator
- Heavy Duty Trailer Mover System
- HC Global DB Handheld Radios
- Typhoon Fans, floor fans
- 175,000 btu Propane Heaters
- Technical Rescue Helmets
- Water Rescue Throw bags
- N-95 Respirators
- 8 kw Electric light tower, (3) light stands
- Power washer – heater
- Traffic safety cones and first aid signs
- Warehouse storage container system (rental)
- P-25 Portable Radio (Erie County System)
- EMS Strike Team Uniforms and Supplies

**Preparedness Vehicles:**

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

**Strike Teams:**

- 3 Strike Teams (EmergyCare, Community Ambulance Service, Clarion Hospital EMS)

***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)
- Volunteer EMS Alliance of Crawford County (Bi-monthly)
- NWPAERG (quarterly+) taskforce meetings
- NWPAERG Health and Medical Subcommittee (Bi-monthly)
- Warren Co. EMS Council (semi-monthly)
- Crawford county's multidisciplinary 5 – 10 year county-wide EMS system  
Involving elected officials and EMS agency officials
- Participation in disaster drills and exercises throughout the region
- PIE Events and prom promise programs
- NWPA Healthcare Coalition

## **Identified/Perceived Inter-Regional Trends**

### ***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 to five 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 are not taking advantage of EMSOF dollars earmarked for recruitment and retention efforts.
5. EMS Personnel may benefit from better health behaviors, nutrition and exercise.
6. 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. EMS agencies are experiencing acute personnel shortages. EMS agencies have closed and there are EMS agencies on the verge of ceasing operations.
2. More and more BLS EMS agencies are becoming dual licensed as a BLS EMS agency and QRS.
3. Increase in licensing container QRS agencies than QRS vehicles.
4. Three counties, (Crawford, Erie, Warren), have had their county-wide staffing plans approved. All three counties have implemented their plans. Issues exist with the quality improvement efforts with overseeing the plans. Little or no oversight is occurring.
5. BLS agencies are slow to take advantage of programs such as EPI Pens, Naloxone, Glucose monitoring, and CPAP.

### ***PREPAREDNESS***

1. All preparedness assets are now housed within buildings. Preparedness equipment and readiness status are being maintained.
2. EMMCO West continues to participate in NWPAERG and NWPA Healthcare Coalition meetings and activities.

### ***INTEGRATION/PARTNERSHIPS***

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

## **Goals and Tasks**

### **PERSONNEL**

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

- Continue to recognize EMS providers and EMS agencies at the annual EMS Appreciation Dinner
- EMS scholarships and examination reimbursements are available for regional EMS agencies. EMSOF Cat III Prehospital Provider Equipment and Cat VIII EMS system Development funding is used support new ALS & BLS personnel in their initial certification programs and all initial certification levels for examination reimbursements.
- Assess the rationale of EMS providers not completing state examination process, once they have successfully completed the state practical examination.

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. Form an educational advisory group to assist identify weaknesses and solutions to improve in the regional EMS educational system.

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

- Continue to provide continuing education programming with focus on basic practical skills. Integrate hands-on sessions at the annual educational symposium
- Provide additional educational programming opportunities through the annual educational symposium and satellite educational sessions. Financial support provided through EMSOF, tuition, and corporate sponsorships.

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

- Assisting with the development of program material for the EMS registry system.

## **OPERATIONS**

EMMCO West continues to be the primary liaison for coordination of the cloud PCR project between the vendor and primary users of the system.

- Provide customer service support to vendors, regional councils, and EMS agencies related to the operational interface aspects of the statewide PCR data bridge
- Provide support to regional EMS agencies through the distribution of electronic and paper data system reports
- Review EMS system performance parameters developed through the EMMCO West regional QI committee

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.
- EMMCO West board of directors will be meeting with county, regional, and state elected officials to identify issues and solutions to the EMS system crisis.
- Review SR 6 report and work with EMS system stakeholders to implement systemic solutions within the region
- Work with individual EMS agencies to identify solutions to recruitment and retention of personnel and resources
- Continue to support the dual licensing of EMS agencies as a BLS and QRS EMS agency.

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 EMS recognition event. Event financed through corporate sponsorships.
- 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

- Oversee the regional CARES initiative that partners ALS EMS agencies with BLS EMS agencies. Goal is to improve the submission of rural – suburban cardiac arrest data.
- Assist regional EMS agencies with the entry of CARES data
- Collaborate with BEMS, CARES, and Cloud PCR vendor to integrate a seamless CARES data entry portal using the data from the statewide data bridge
- Promote high performance CPR at the service level
- Conduct hands only CPR campaigns and promotions for EMS agencies
- Recognize EMS agencies – personnel that had cardiac arrest saves

### ***PREPAREDNESS***

- Maintain regional EMS strike team preparedness readiness.
- Utilize EMS strike team support members to assist with the maintenance of the preparedness assets.
- Conduct meetings with regional EMS strike teams leaders and personnel
- Maintain and update, as necessary, the Trauma Hal simulation manikins, per the manufacturer recommendations
- Communicate and coordinate regional program activities with the three Trauma Hal locations (Clarion Hospital, Sharon Regional Medical Center, and EmergyCare)
- Utilize the Trauma Hal simulation manikins to improve preparedness and prehospital education of EMS and healthcare personnel throughout the region
- Coordinate with regional and state preparedness leaders to organize tabletop, functional, and full scale EMS strike team exercises
- Assess and augment the regional EMS communication systems

### ***INTEGRATION/PARTNERSHIPS***

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

- Identify other opportunities to provide hands only CPR training.
- Educate regional communication centers on the use of hands only CPR and assertive over the phone instructions for cardiac arrest management

Continue to support the regional CISM team and education through EMMCO West funded support.

- Promote CISM and Self Care practices for EMS personnel
- Provide support of regional CISM team and out-of-state CISM team partnership with the Chautauqua CISM team
- Provide education in group and peer CISM training
- Continue affiliation with the international CISM organization
- Conduct regional education opportunities related to CISM and PTSD

Identify opportunities for greater outreach to elected officials. Consider conducting a meet and greet opportunity between EMS and elected officials.

Continue to support the regional safety initiatives for EMS providers and agencies