# Fredericktown Community Joint Emergency Ambulance District

2020



Dear Community Members,

While 2020 began the same as any other year, it did not take long to start to transform into something the size and like we had ever seen before. With all the hype of COVID-19, Knox County agencies began preparing for the unknown and uncertainty in late February. Multiple times a week, the Knox County Emergency Operations Center was in operation to start planning the pandemic. The unknown about the virus caused panic and confusion among the community and many of the stakeholders. A lack of necessary personal protective equipment (PPE) caused concerns for all first responders.

Never before considered, medical protocols were discussed and implemented. Administrators had to make tough decisions and put unconventional ideas into motion, all while ensuring the safety of our responders, our loved ones, and the resident we serve. The idea of giving up tried and true treatments for ones that had never been performed by our members went flawlessly. Medical Direction was never more than a phone call away, and Dr. Wilson worked with us to ensure that treatments followed the ever-changing CDC recommendations.

In March, the EMS District had its second attempt at a levy, and it failed. Not citing COVID-19, but the uncertainty up to our original election day was crazy. Mail-in voting was now going to be a real thing for everyone, not just those who vote absentee. Unfortunately, at the end of the election, the EMS District fell short by less than 30 votes.

Members of our department and community came together and led by example. Our members never faltered once, from the first potential COVID patient to now, never did someone procrastinate to do their job to the best of their ability. Community members rallied to find materials for homemade masks to protect our members, ensuring that our staff had some protection against COVID.

Items that we once took for granted were backordered for months. The EOC worked to procure much-needed thermometers, hand sanitizer, and other essential products.

Stations, 911 Centers, restaurants, schools, and many more were locked down, not to be open to the public again for many months.

Slowly, supplies began to become available but not before taking the toll on some.

Soon, summertime was among us, and we thought there would be some light at the end of the tunnel. Children and adults played summer sports, swimming pools were open, and small gatherings took place.

School time was now among us, and the decision to go back full-time or some modified schedule was now the rage. How will we keep the kids safe? How will school sports be played? All these questions were up in the air.

\*Early footnote, Keeping political views out of this report is not easy.....

Many were criticized for what they did or did not do to help our country. No matter what one group did, they were wrong and vice versa. One big, divided nation is how we stand.

The EMS board decided again to try again for much needed additional funds. A Political Action Committee formed to help pass the EMS District's permanent levy, known as "Friends of Fredericktown EMS", led by Scott Huvler, Larry Schunke, Karen Moody, Dr. Bill Elder, Cale Grubb, Jason Whaley, and Rick Lanuzza. Along with other volunteers, the group worked tirelessly to raise funds so that signs, banners, social media, and mailers would be available to urge the public to support the EMS District. The group was successful. The community rallied behind the District and passed the levy by over 60%.

To say that COVID-19 did not affect us would not be truthful. Early on in 2020, before COVID, following our routine ambulance replacement schedule, we ordered a vehicle to replace our 2010 ambulance. COVID pushed the delivery date back and eleven months later, our truck arrived.

As the holidays neared, a record number of COVID cased infiltrated our community. The idea of thinking we knew who was sick and who was not, no longer worked. It did not matter anymore; we treated everyone as if they had COVID-19.

The number of exposures to our members is countless, but members rose to the occasion and performed their duties with honor. Half mask with P-100 cartridges has become the norm for all members on all runs. Modified lockdowns once again are taking over in the communities.

A surge in our healthcare system was evident right after Halloween. EMS and the hospital systems saw a spike in Knox County. Again, stringent planning and protocols were implemented, trying to slow the spread. Full hospitals, outbreaks at Long Term Care centers, isolated outbreaks in schools we now front and center.

The holiday season was now among us, but the holiday season would not be the same as years past due to recommendations and or health orders. Whether you believe that this stuff is real or not, many people were concerned with spreading the virus to loved ones.

The reality of the virus is this, the virus is all over the spectrum. The symptoms do not make sense; how it affects someone does not follow any particular pattern. What you have is not what your neighbor has and what treatments work for you do not work for you neighbor.

We think those who would fall victim to the virus remain strong, and those we believed to be strong ended up in intensive care units on ventilators and receiving lifesaving medications.

Some light appeared in Knox County near the end of December, just in time for Christmas. Knox County First Responders were among the first to receive the new COVID-19 vaccine developed over the past ten months. All EMS members we offered the vaccine; six members stepped up, took the vaccine to do their part in controlling COVID-19. As mentioned earlier, political, and religious views are all over the spectrum, and some felt that this was not the time for them to get vaccinated. Some have changed their minds, and others will not. Together, this department has fought this battle and will continue to fight the good fight together. Our members have grown closer, have spent countless hours together, and have shared many stories while cleaning with bleach wipes. The old saying goes, "What doesn't kill us, will make us stronger.... and now smells of bleach!"

I believe in all my heart; there will be the days when we can look back at this and tell our children and grandchildren about the pandemic of 2020.

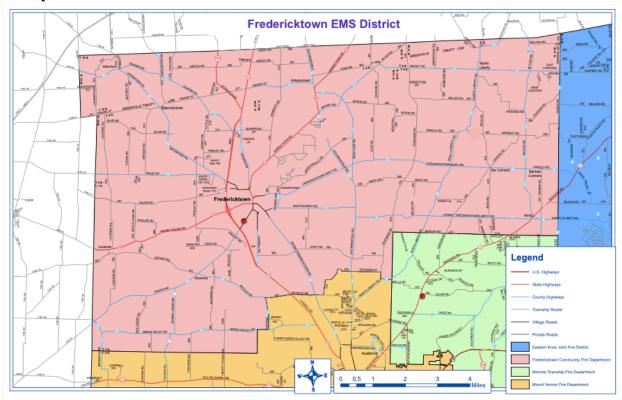
Lastly, I would like to thank all the men and women of this department, the Clerk and the EMS Board for their dedication to the community and department. We could not accomplish what we do without each and every one of you.

Thank you,

Chief Rick Lanuzza

### **Executive Summary**

The Fredericktown Community Joint Emergency Ambulance District, aka Fredericktown EMS, is a stand alone emergency medical service provider, located in northwestern Knox County, Ohio. The area served is 118 square miles and has a population of approximately 9,700 residents. The ambulance district consists of six entities: Berlin, Middlebury, Pike, Wayne, and the northern half of Morris Townships and the Village of Fredericktown. Fredericktown EMS also provides service through a contractual agreement to a portion of Perry Township, Richland County.



The joint ambulance district is a progressive organization that provides advanced life support level (paramedic) response and transport service. In 2020, the district responded to 932 incidents and completed 961 reports/patient encounters, which is averages a 3 percent increase annually since 2006. The district utilizes a combination of career, part-time and volunteer staffing model. The combination staffing includes a career EMS Chief, four career Paramedics, and 27 members who serve in either a part-time or volunteer status. The district maintains one ALS paramedic unit daily, which consists of two personnel. The EMS Chief works a standard 40-hour work week but is available for recall to emergency incidents after hours. Emergency Medical Services

Before the inception of the EMS District, the Village of Fredericktown provided emergency medical care utilizing volunteer members. Fredericktown EMS provided services to the same geographical area as the current EMS district.

On August 28, 1978, the Board of Directors for the new Fredericktown Community Joint Emergency Ambulance District held their first organizational meeting to place an operating levy on the November 1978 ballot. Today the district is governed by a six-member board, with one member from each entity chosen by the Board of Township Trustees that they represent, and one member appointed by the mayor of the village. The formation of the joint ambulance district occurred under ORC 505.71.

### **Medical Direction**

The members of Fredericktown EMS practice under the medical license of Aaron Wilson, DO. Dr. Wilson is a 2004 graduate of the Lake Erie College of Osteopathic Medicine, and is Board Certified in Family Medicine. Dr. Wilson honorably served in the United States Army, both overseas as a Battalion Surgeon and stateside specializing in Family Medicine. Dr. Wilsons resides in Fredericktown with his wife and children.

### Funding

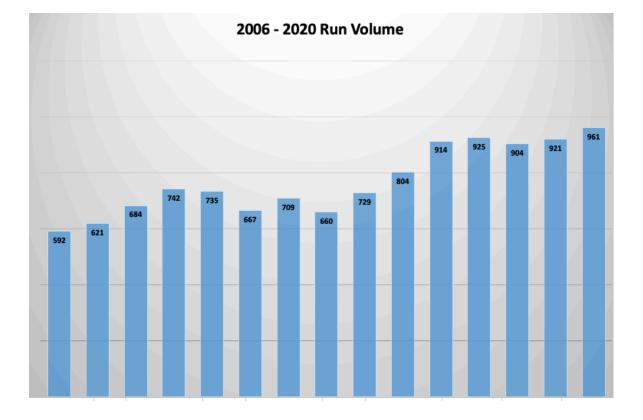
Voter-approved EMS levies of millage against real property within the district boundaries are the method of funding permitted by the Ohio Revised Code. Fredericktown EMS had existing millage for operations totaling 2.0 mills, which generated approximately \$447,249 in 2020.

The district also utilizes an EMS billing policy for ambulance transports and contracts with a third- party vendor, MedBill Resources, for billing and collection of fees. EMS billing generated approximately \$218,000 in 2020.

### Conclusion

Fredericktown EMS is a progressive emergency medical service agency that provides primary emergency medical services to over 9,700 residents of the district and mutual aid to surrounding agencies. Basic Life Support and Advanced Life Support services provided by our members utilizing state of the art trucks and equipment, all funded through tax levies, EMS billing, grants and private donations for the betterment of the community.

	2006 - Present	Run Volume +/-	
Year	Run Volume	Volume +/-	% of Change
1992	352	Not included	in % of change
1996	473	Not included	in % of change
2003	567	Not included	in % of change
2006	592		
2007	621	29	5.00%
2008	684	63	10.00%
2009	742	58	8.00%
2010	735	-7	-1.00%
2011	667	-68	-10.00%
2012	709	42	6.00%
2013	660	-49	-7.00%
2014	729	69	9.00%
2015	804	75	9.00%
2016	914	110	12.00%
2017	925	11	1.20%
2018	904	-21	-2.00%
2019	921	17	2.00%
2020	961	40	5.00%
Averages	771	26	3.37%



#### 2020 Fredericktown EMS Runs by Township

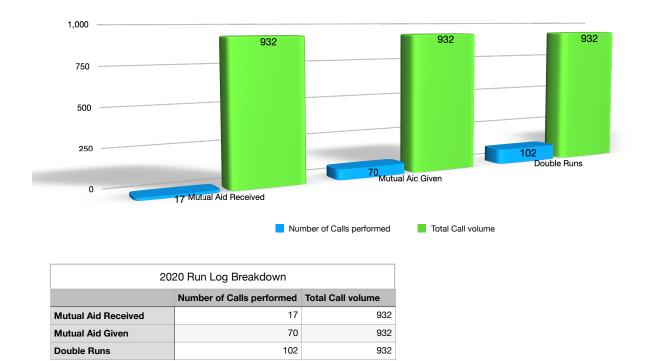
Runs by Township	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Total Runs	%
Berlin	16	13	10	12	5	7	16	8	15	14	12	14	142	14.75%
Fredericktown	30	35	29	25	30	32	33	19	41	51	52	48	425	44.13%
Pike	12	11	6	6	10	11	11	12	9	16	9	7	120	12.46%
Wayne	3	3	3	3	7	6	7	10	7	10	7	8	74	7.68%
Middlebury	3	5	11	6	5	8	5	4	6	7	8	13	81	8.41%
Morris	7	1	5	4	2	6	6	7	1	2	6	3	50	5.19%
Perry	0	1	0	0	0	1	0	0	0	0	0	0	2	0.21%
Out of Territory	8	11	4	4	4	9	2	11	2	1	5	8	69	7.17%
												101		100.000/
Monthly Runs	79	80	68	60	63	80	80	71	81	101	99	101	963	100.00%
KCH transports	44	28	31	27	35	34	44	45	53	54	58	60	513	53%
MCM transports	5	7	5	1	4	5	4	1	3	6	7	2	50	5%
Other	0	0	0	1	0	1	0	0	0	1	0	0	3	0%
										Total tra	ansports		566	59%

Last updated 01/01/2021@ 0900

This chart is a breakdown of reports (each patient gets a report, so multiple patients = multiple reports, but only one run number) per township, per month. A total number of reports and a percentage of the total number of reports.

Also, the total number of transports to local hospitals is included. The number of transports to Mansfield has doubled from 2019.

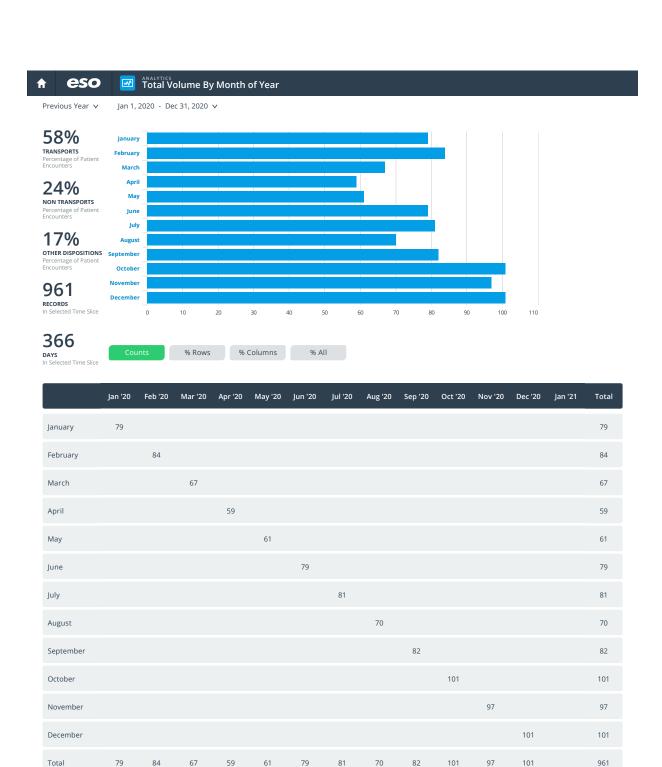
### 2020 Run Log Breakdown



This graph represents the number of calls in which we required mutual aid assistance, the number of times that we gave mutual aid, and lastly the number of times we had one medic out on a call and had a second call in progress

Call vo	olume by	Shift						Monday, 9:18:05	, Januar AM	y 4, 202	1		3
					EM	IS Calls	by Shift						
Shift	2020- 12-01	2020- 02-01	2020- 03-01	2020- 04-01	2020- 11-01	2020- 01-01	2020- 05-01	2020- 06-01	2020- 07-01	2020- 08-01	2020- 09-01	2020- 10-01	Total
3 Unit (Red)	37	32	21	26	29	28	27	32	36	28	32	32	360
2 Unit (Blue)	34	22	20	17	35	26	19	24	26	18	26	40	307
1 Unit (Green)	30	30	26	16	33	25	15	23	19	24	24	29	294
Total	101	84	67	59	97	79	61	79	81	70	82	101	961

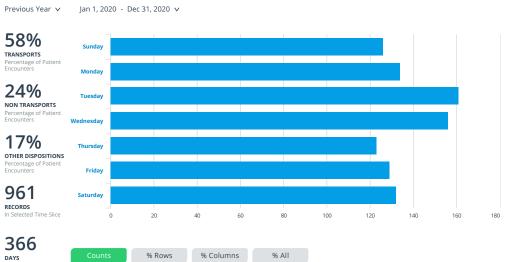
Crews work a 24/48 schedule; therefore, they are known as 1 Unit (Green), 2 Unit (Blue) and 3 Unit (Red). Three of the fulltime members is assigned a specific unit day and the fourth fulltime member works every Tuesday & Thursday, therefore, he contributes to all of the numbers for the shifts.



October and December of 2020 were tied for the second busiest months ever recorded by Fredericktown EMS, each having 101 reports generated. May of 2018 is the busiest month ever recorded, with 103 reports

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DAYS In Selected Time Slice

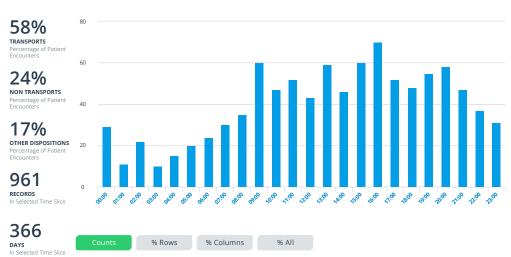
Counts

	Jan '20	Feb '20	Mar '20	Apr '20	May '20	Jun '20	Jul '20	Aug '20	Sep '20	Oct '20	Nov '20	Dec '20	Jan '21	Total
Sunday	13	13	7	5	7	10	7	12	10	12	17	13		126
Monday	5	13	12	16	8	14	10	14	7	9	11	15		134
Tuesday	13	17	7	10	10	13	8	11	15	16	20	21		161
Wednesday	14	11	14	11	5	13	17	7	19	11	15	19		156
Thursday	19	4	6	5	10	8	16	4	10	13	13	15		123
Friday	11	13	9	5	7	8	10	12	14	23	7	10		129
Saturday	4	13	12	7	14	13	13	10	7	17	14	8		132
Total	79	84	67	59	61	79	81	70	82	101	97	101		961

#### A CSO analytics Total Volume By Hour of Day

Previous Year 🗸

Jan 1, 2020 - Dec 31, 2020 🗸

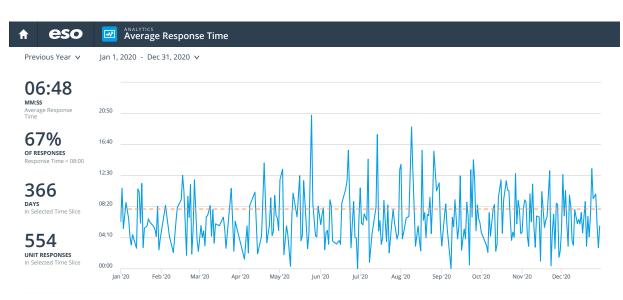


May '20 Jan '20 Total Feb '20 Mar '20 Apr '20 Jun '20 Jul '20 Aug '20 Sep '20 Oct '20 Nov '20 Dec '20 00:00 01:00 02:00 03:00 04:00 05:00 06:00 З 07:00 08:00 09:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 

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	Jan '20	Feb '20	Mar '20	Apr '20	May '20	Jun '20	Jul '20	Aug '20	Sep '20	Oct '20	Nov '20	Dec '20	Jan '21	Total
17:00	5	6	2	3	3	6	7	3	4	2	7	4		52
18:00	1	3	6	1		4	5	4	6	9	4	5		48
19:00	1	9	1	4	3	4	8	7	4	6	5	3		55
20:00	5	4	1	3	3	6	6	3	4	7	7	9		58
21:00	7	4	3	4	3	6	5	1	3	3	5	3		47
22:00	3	1	2	1		9	3	7	1	4	2	4		37
23:00	6	1		1	3	1	2	3	5	5	3	1		31
Total	79	84	67	59	61	79	81	70	82	101	97	101		961

This report shows the volume distribution of calls for a system for over 24 hours. The base reports count all run types.



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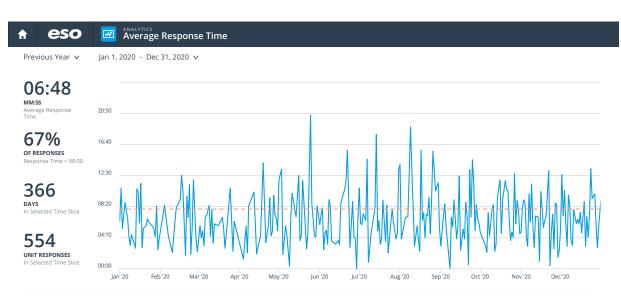
Counts	% Rov	ws	% Columns	%	All									
	Jan '20	Feb '20	Mar '20	Apr '20	May '20	Jun '20	Jul '20	Aug '20	Sep '20	Oct '20	Nov '20	Dec '20	Jan '21	Total
00:00 - 04:59	18	16	16	9	16	22	20	14	24	24	26	22		227
05:00 - 07:59	15	5	11	9	8	6	9	14	15	16	16	18		142
08:00 - 08:59	3	4	1	1	3	4	3	3	2	2	4	4		34
09:00 - 09:59	4	2	1		3	1	4	1	4	6	5	2		33
10:00 - 11:59	3	2	2	2	2	4	4	2	4	3	6	7		41
12:00 - 14:59	4	4	2	3	3	1	3	7	4	4	6	7		48
15:00 - 16:59	1	1				3	3	2		1	2	1		14
17:00 - 17:59		1			1					1				3
18:00 - 19:59							1	1	2	2		1		7
20:00 - 29:59					2			1	1	1				5
30:00 - 59:59														
Total	48	35	33	24	38	41	47	45	56	60	65	62		554
Exceptions														0

Response time is the elapsed period from dispatch timestamp to the on-scene timestamp.



Counts	% Rov	vs	% Columns	%	5 All									
	Jan '20	Feb '20	Mar '20	Apr '20	May '20	Jun '20	Jul '20	Aug '20	Sep '20	Oct '20	Nov '20	Dec '20	Jan '21	Total
00:00 - 00:29	25.4%	39.7%	27.9%	13.5%	28.3%	37.7%	28.2%	19.7%	14.1%	15.3%	23.7%	18.8%		24%
00:30 - 00:59	17.9%	23.3%	18%	17.3%	26.4%	17.4%	15.4%	6.6%	3.8%	6.1%	4.3%	3.1%		12.2%
01:00 - 01:29	19.4%	12.3%	19.7%	26.9%	5.7%	15.9%	11.5%	18%	19.2%	21.4%	16.1%	24%		17.7%
01:30 - 01:59	14.9%	9.6%	14.8%	17.3%	20.8%	13%	15.4%	21.3%	25.6%	17.3%	9.7%	16.7%		16.2%
02:00 - 02:59	16.4%	8.2%	11.5%	21.2%	15.1%	14.5%	19.2%	23%	20.5%	21.4%	29%	24%		19.2%
03:00 - 04:59	3%	4.1%	6.6%	3.8%	1.9%		5.1%	6.6%	7.7%	13.3%	12.9%	8.3%		6.7%
04:00 - 04:59	1.5%	1.4%	1.6%			1.4%	3.8%	1.6%	2.6%		2.2%	1%		1.5%
05:00 - 09:59	1.5%	1.4%			1.9%		1.3%	3.3%	6.4%	5.1%	2.2%	4.2%		2.5%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%		100%
Exceptions														0.6%

This report calculates the system average chute time over a defined time slice for 911 Response. Chute time is the elapsed period from dispatch timestamp to the enroute timestamp.



### mar 20 Mar and Mar

Counts	% Rov	vs	% Columns	94	All									
	Jan '20	Feb '20	Mar '20	Apr '20	May '20	Jun '20	Jul '20	Aug '20	Sep '20	Oct '20	Nov '20	Dec '20	Jan '21	Total
00:00 - 04:59	18	16	16	9	16	22	20	14	24	24	26	22		227
05:00 - 07:59	15	5	11	9	8	6	9	14	15	16	16	18		142
08:00 - 08:59	3	4	1	1	3	4	3	3	2	2	4	4		34
09:00 - 09:59	4	2	1		3	1	4	1	4	6	5	2		33
10:00 - 11:59	3	2	2	2	2	4	4	2	4	3	6	7		41
12:00 - 14:59	4	4	2	3	3	1	3	7	4	4	6	7		48
15:00 - 16:59	1	1				3	3	2		1	2	1		14
17:00 - 17:59		1			1					1				3
18:00 - 19:59							1	1	2	2		1		7
20:00 - 29:59					2			1	1	1				5
30:00 - 59:59														
Total	48	35	33	24	38	41	47	45	56	60	65	62		554
Exceptions														0

Response time is the elapsed period from dispatch timestamp to the on scene timestamp.

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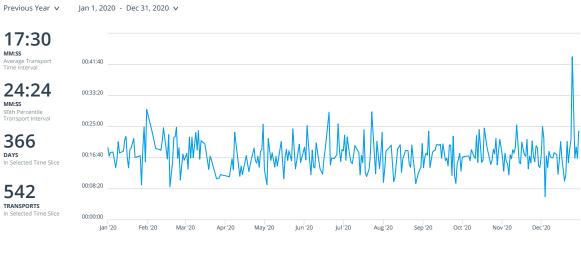


Counts	% Rov	VS	% Columns	%	All									
	Jan '20	Feb '20	Mar '20	Apr '20	May '20	Jun '20	Jul '20	Aug '20	Sep '20	Oct '20	Nov '20	Dec '20	Jan '21	Total
00:00 - 09:59	8	3	4	4	6	5	14	11	15	12	12	12		106
10:00 - 14:59	15	10	8	6	9	11	11	13	12	14	13	9		131
15:00 - 19:59	12	8	9	9	9	8	9	10	11	9	24	14		132
20:00 - 29:59	9	10	13	3	10	13	8	9	13	17	10	22		137
30:00 - 39:59	4	3	1	5	5	3	3	2	3	5	2	3		39
40:00 - 49:59	1						3		1	1	2	2		10
50:00 - 59:59				2				1	1					4
60:00 - 2:59:59			1							1				2
Total	49	34	36	29	39	40	48	46	56	59	63	62		561
Exceptions														1

Scene time is the elapsed period from on scene timestamp to the depart scene timestamp.

#### ♠ eso Average Transport Time

Previous Year  $\,\,\mathbf{v}$ 



Counts	% Rov	vs	% Columns	%	All									
	Jan '20	Feb '20	Mar '20	Apr '20	May '20	Jun '20	Jul '20	Aug '20	Sep '20	Oct '20	Nov '20	Dec '20	Jan '21	Total
00:00 - 04:59					1									1
05:00 - 07:59		1						2				1		4
08:00 - 08:59							1				2			3
09:00 - 09:59	2				1			1	3		1	2		10
10:00 - 11:59	3	2	4	3	2	2	2	8	5	5	2	2		40
12:00 - 14:59	8	4	5	7	10	8	13	7	10	9	14	11		106
15:00 - 16:59	10	3	6	4	7	11	5	10	12	14	13	14		109
17:00 - 17:59	3	6	3	4	1	4	5	2	5	12	4	3		52
18:00 - 19:59	9	9	7	3	9	6	9	8	4	4	11	7		86
20:00 - 29:59	12	7	8	3	6	7	8	6	16	14	15	17		119
30:00 - 1:59:59	1	2			1		4		1		1	2		12
Total	48	34	33	24	38	38	47	44	56	58	63	59		542

The transport interval is the time interval from "unit left scene" to "patient arrived at the destination."

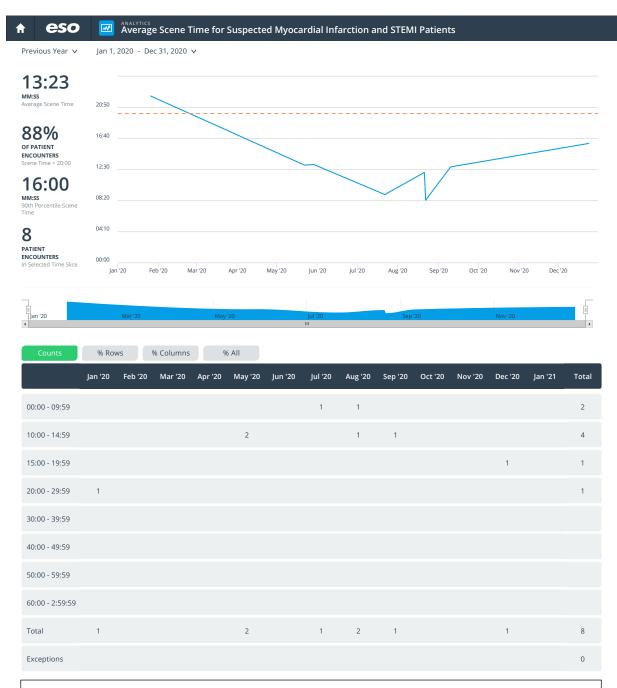
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#### ♠ eso AVERAGE Total Call Time - Dispatched to Call Closed Jan 1, 2020 - Dec 31, 2020 🗸 Previous Year $\,\,\mathbf{v}$ 52:07 MM:SS Average Total Call Time 02:13:20 62% OF PATIENT ENCOUNTERS Total Call Time < 61:30 01:40:00 366 01:06:40 DAYS In Selected Time Slice 00:33:20 883 PATIENTS In Selected Time Slice 00:00:00 Jan '20 Feb '20 Mar '20 Apr '20 May '20 Jun '20 Jul '20 Aug '20 Sep '20 Oct '20 Nov '20 Dec '20

### Brack and had had been the test of the second and the second and the second and the second and had a second and the second and

Counts	% Rov	ws	% Columns	%	5 All									
	Jan '20	Feb '20	Mar '20	Apr '20	May '20	Jun '20	Jul '20	Aug '20	Sep '20	Oct '20	Nov '20	Dec '20	Jan '21	Total
00:00 - 05:59	2	2	1		2	3		1	1	2		2		16
06:00 - 10:59		3	1	1	2	3	1		1	1	2	1		16
11:00 - 20:59	8	11	9	8	5	12	13	1	3	10	9	7		96
21:00 - 30:59	2	9	7	6	2	6	7	5	5	10	8	14		81
31:00 - 01:00:59	27	26	24	21	21	23	35	26	35	34	40	24		336
01:01:00 - 01:30:59	25	17	18	14	19	19	18	27	28	33	31	38		287
01:31:00 - 02:59:59	4	4	1	2	3	3	4	2	5	9	3	11		51
Total	68	72	61	52	54	69	78	62	78	99	93	97		883
Exceptions														1

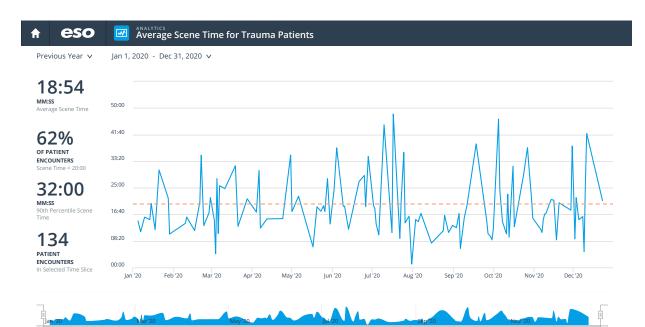
## The report calculates a total call time by subtracting period from call closed time to the call received time.



ST Elevation MI is a time sensitive condition requiring rapid assessment and transport to definitive care. Time from first medical contact to reperfusion should be closely monitored to improve outcomes. EMS scene time is a critical component in the overall time to treatment. This report enables you to identify patients with suspected MI and monitor EMS scene time for this entity.



A Stroke is a time sensitive condition requiring rapid assessment and transport to definitive care. Time from first medical contact to reperfusion should be closely monitored to improve outcomes. EMS scene time is a critical component in the overall time to treatment. This report enables you to identify patients with suspected Stroke and monitor EMS scene time for this entity.



Counts	% Rov	ws	% Columns	%	All									
	Jan '20	Feb '20	Mar '20	Apr '20	May '20	Jun '20	Jul '20	Aug '20	Sep '20	Oct '20	Nov '20	Dec '20	Jan '21	Total
00:00 - 09:59	1	1	1		1		2	1	3	1	3	2		16
10:00 - 14:59	5	4	3	1	2	2	4	6	3	5	3			38
15:00 - 19:59	3	1		3	5	2	4	2	3	1	3	2		29
20:00 - 29:59	2	5	4		2	5	2	1		4	4	4		33
30:00 - 39:59	1	1	1	2		2	1		1	3	1			13
40:00 - 49:59							2		1	1		1		5
50:00 - 59:59														
60:00 - 2:59:59														
Total	12	12	9	6	10	11	15	10	11	15	14	9		134
Exceptions														1

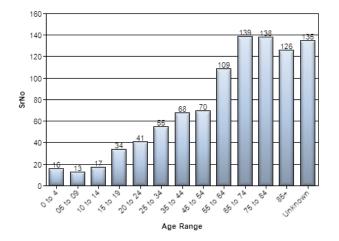
This report is designed to monitor scene times for trauma patients. Trauma is a time sensitive condition requiring rapid assessment and intervention. Trauma systems should monitor EMS scene times as part of an ongoing quality improvement program. This report will enable you to study trauma scene times and review delays that have been documented by the EMS crew.

Dispatched	Time
between	

2020-01-01

and 2021-01-01

Age Range	Total	
0 to 4	16	
05 to 09	13	
10 to 14	17	
15 to 19	34	
20 to 24	41	
25 to 34	55	
35 to 44	68	
45 to 54	70	
55 to 64	109	
65 to 74	139	
75 to 84	138	
85+	126	
Unknown	135	
	961	



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### 2020 Mileage & Maintenance

Truck	Number of runs	Number of transports	Transport mileage	Total mileage	Maintenance costs
2010	286	154	1,569	5,102	\$2,862.52
2015	582	357	3,767.3	11,022	\$3,652.55
2020	84	52	515.3	1,689	\$0.00
CH 441	7	0	0	0	0
POV	7	0	0	0	0
TOTAL	963	563	5,851.6	20,553	\$6,515.07