

# Cleveland EMS 2019 Response Statistics



Report produced by Timothy Sommerfelt for CARE 1975

All statistics derived from public records obtained by CARE 1975

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**Service Overview:**

Cleveland EMS (CEMS) is the primary provider of 911 medical treatment and transport for the City of Cleveland, Ohio. During 2019, Cleveland EMS staffed 25 ambulances during daytime hours and 21 at night. Occasionally, when extra personnel were available, 1-2 additional ambulances were staffed.

CEMS was assisted by the Cleveland Fire Department (CFD), which staffed 31 Basic Life Support (BLS) units and 5 ALS units. CFD units provided patient care prior to the arrival of CEMS and accompanied CEMS to the hospital if the patient was in critical condition. CEMS was also assisted by the Cleveland Clinic Foundation (CCF) Mobile Stroke Unit, which is a private ambulance designed to provide specialized treatment to stroke patients.

CEMS ALS Ambulances 2018	25 day / 21 night
CFD ALS Engine	5
CFD BLS Engine	18
CFD BLS Ladder	11
CFD BLS Rescue	2
<b>Total CFD</b>	<b>36</b>
CCF Mobile Stroke	1

**General Statistics:**

Total Emergency calls for 2019	114,278
No onscene time	4,693
Calls with a recorded on-scene time	104,892

**Goals:** Historically, Cleveland EMS attempts to meet the National Fire Protection Association (NFPA) standard 1710, which calls for a BLS resource to arrive within 6 minutes from receipt of call and an ALS resource to arrive within 10 minutes from receipt of call.

**Call Prioritization:** Cleveland EMS utilizes a priority dispatch system. Dispatchers assign each call a letter prefix from Alpha-Echo to grade the severity of each call.

Alpha	BLS minor injury/illness
Bravo	BLS patient cannot walk
Charlie	ALS resources needed
Delta	ALS life-threatening emergency
Echo	ALS Inadequate breathing
STBY/BOX	Assist CFD at a fire or CPD at a standoff
Other	Non-common dispatch designation

**In-service Disposition:** Upon completion of the call, CEMS medics assign an in-service disposition to each call. This uses the same grading scale rating calls from Alpha-Echo, but also incorporates when a patient refuses to go to the hospital and situations where the unit cannot locate a patient.

TRA	Transported Alpha- BLS minor injury/illness
TRB	Transported Bravo- BLS patient cannot walk
TRC	Transported Charlie- ALS resources needed
TRDM	Transported Delta Medical- ALS life-threatening medical
NOTS1	Transported Critical adult trauma
NOTS2	Transported Serious adult trauma
NOTS3	Transported Minor adult trauma
TRDT	Transported Pediatric trauma
TRET	Transported Traumatic Cardiac Arrest
TEM/TALS	Transported Echo Medical- Medical Cardiac Arrest
DOA/TREA	Dead On Arrival
REFUSAL	Patient refused transport
CCFMS	Patient transported by CCF mobile stroke unit
GOA/UTL	Patient is Gone on Arrival or Unable to be Located.
Other	CFD, CPD, or another agency handled.

**Response Times and In-service Disposition by Dispatch Priority**

<b>Overall 2019 statistics</b>				TRA	18,890	18%
<b>Calls with recorded onscene time</b>	<b>104,892</b>			TRB	21,472	20%
<b>Average response time</b>	<b>10:03</b>			TRC	26,845	26%
<b>Median response time</b>	<b>08:55</b>			TRDM	5,120	5%
under 20 minutes	101,411	97%		NOTS1	691	0.7%
under 15 minutes	94,761	90%		NOTS2	2252	2%
under 10 minutes	65,093	62%		NOTS3	2819	3%
under 8 minutes	40,047	38%		TRDT	187	0.2%
under 6 minutes	14,452	14%		TRET	57	0.05%
				TEM/TALS	558	0.5%
				<b>Total Transports</b>	<b>78,891</b>	<b>75%</b>
				DOA/TREA	937	0.9%
				REFUSAL	11,128	11%
				CCFMS	148	0.1%
				GOA/UTL	3,467	3%
				Other	10,321	10%

<b>Calls coded as ECHO</b>				TRA	502	8%
<b>Calls with recorded onscene time</b>	<b>6,296</b>	6%		TRB	639	10%
<b>Average response time</b>	<b>08:33</b>			TRC	2475	39%
<b>Median response time</b>	<b>07:59</b>			TRDM	771	12%
under 20 minutes	6253	99%		NOTS1	10	0.2%
under 15 minutes	6038	96%		NOTS2	18	0.2%
under 10 minutes	4670	74%		NOTS3	9	0.1%
under 8 minutes	3162	50%		TRDT	3	0.05%
under 6 minutes	1319	21%		TRET	6	0.1%
				TEM/TALS	345	5%
				<b>Total Transports</b>	<b>4778</b>	<b>76%</b>
				DOA/TREA	750	12%
				REFUSAL	410	7%
				GOA/UTL	64	1%
				Other	294	5%

<b>Calls coded as Delta</b>				TRA	3,385	11%
<b>Calls with recorded onscene time</b>	<b>31,632</b>	30%		TRB	4,906	16%
<b>Average response time</b>	<b>09:10</b>			TRC	10,699	34%
<b>Median response time</b>	<b>08:27</b>			TRDM	2,514	8%
under 20 minutes	31,203	99%		NOTS1	554	2%
under 15 minutes	29,664	94%		NOTS2	1113	4%
under 10 minutes	21,420	68%		NOTS3	841	3%
under 8 minutes	13,833	44%		TRDT	49	0.2%
under 6 minutes	5,046	16%		TRET	109	0.3%
				TEM/TALS	183	0.6%
				<b>Total Transports</b>	<b>24,353</b>	<b>77%</b>
				DOA/TREA	130	0.4%
				REFUSAL	3,199	10%
				GOA/UTL	1,290	4%
				Other	2,660	8%



<b>Delta + Echo combined</b>				TRA	3,887	10%
<b>Calls with recorded onscene time</b>	<b>37,928</b>	36%		TRB	5,545	15%
<b>Average response time</b>	<b>9:04</b>			TRC	13,174	35%
<b>Median response time</b>	<b>8:22</b>			TRDM	3,284	9%
under 20 minutes	37,456	99%		NOTS1	564	1%
under 15 minutes	35,702	94%		NOTS2	1,131	3%
under 10 minutes	26,090	69%		NOTS3	850	2%
under 8 minutes	16,995	45%		TRDT	112	0.3%
under 6 minutes	6,365	17%		TRET	55	0.1%
				TEM/TALS	528	1%
				<b>Total Transports</b>	<b>29,130</b>	<b>77%</b>
				DOA/TREA	880	2%
				REFUSAL	3,609	10%
				GOA/UTL	1,354	4%
				Other	2,955	8%

<b>Calls coded as Charlie</b>				TRA	4,736	20%
<b>Calls with recorded onscene time</b>	<b>23,456</b>	22%		TRB	5,261	22%
<b>Average response time</b>	<b>09:59</b>			TRC	8,441	36%
<b>Median response time</b>	<b>09:08</b>			TRDM	1,206	5%
under 20 minutes	22,886	98%		NOTS1	12	0.05%
under 15 minutes	21,341	91%		NOTS2	51	0.2%
under 10 minutes	14,249	61%		NOTS3	64	0.2%
under 8 minutes	8,227	35%		TRDT	6	0.02%
under 6 minutes	2,618	11%		TRET	0	0%
				TEM/TALS	22	0.1%
				<b>Total Transports</b>	<b>19,799</b>	<b>84%</b>
				DOA/TREA	3	0.01%
				REFUSAL	1,732	7%
				GOA/UTL	483	2%
				Other	1,439	6%



<b>Calls coded as Bravo</b>				TRA	3,858	19%
<b>Calls with recorded onscene time</b>	<b>20,495</b>	19%		TRB	4,005	17%
<b>Average response time</b>	<b>10:24</b>			TRC	1,546	8%
<b>Median response time</b>	<b>09:21</b>			TRDM	248	1%
under 20 minutes	19,682	96%		NOTS1	92	0.4%
under 15 minutes	18,094	88%		NOTS2	843	4%
under 10 minutes	11,691	57%		NOTS3	1,425	7%
under 8 minutes	6,874	34%		TRDT	51	0.3%
under 6 minutes	2,346	11%		TRET	1	0%
				TEM/TALS	2	0%
				<b>Total Transports</b>	<b>12,071</b>	<b>59%</b>
				DOA/TREA	42	0.02%
				REFUSAL	3,605	18%
				GOA/UTL	1,332	7%
				Other	3,349	16%

<b>Calls coded as Alpha</b>				TRA	6,221	30%
<b>Calls with recorded onscene time</b>	<b>20,462</b>	20%		TRB	6,510	32%
<b>Average response time</b>	<b>12:05</b>			TRC	3,529	17%
<b>Median response time</b>	<b>9:42</b>			TRDM	361	2%
under 20 minutes	18,852	92%		NOTS1	16	0.1%
under 15 minutes	17,128	84%		NOTS2	183	0.9%
under 10 minutes	10,841	53%		NOTS3	438	2%
under 8 minutes	6,096	30%		TRDT	15	0.1%
under 6 minutes	1,828	9%		TRET	1	0,01%
				TEM/TALS	4	0.02%
				<b>Total Transports</b>	<b>17,278</b>	<b>84%</b>
				DOA/TREA	5	0.02%
				REFUSAL	1,917	9%
				GOA/UTL	276	1%
				Other	986	5%



<b>Coded as StandbyF, Box, or Still</b>				TRA	13	0.8%
<b>Calls with recorded onscene time</b>	<b>1,732</b>	2%		TRB	29	1.7%
<b>Average response time</b>	<b>7:07</b>			TRC	26	1.5%
<b>Median response time</b>	<b>6:32</b>			TRDM	4	0.2%
under 20 minutes	1,723	99%		NOTS1	5	0.3%
under 15 minutes	1,691	98%		NOTS2	8	0.5%
under 10 minutes	1,479	85%		NOTS3	10	0.6%
under 8 minutes	1,189	69%		TRDT	1	0.06%
under 6 minutes	706	41%		TRET	0	0
				TEM/TALS	0	0
				<b>Total Transports</b>	<b>96</b>	<b>6%</b>
				DOA/TREA	4	0.2%
				REFUSAL	58	3%
				GOA/UTL	1	0.06%
				Other	1,573	91%

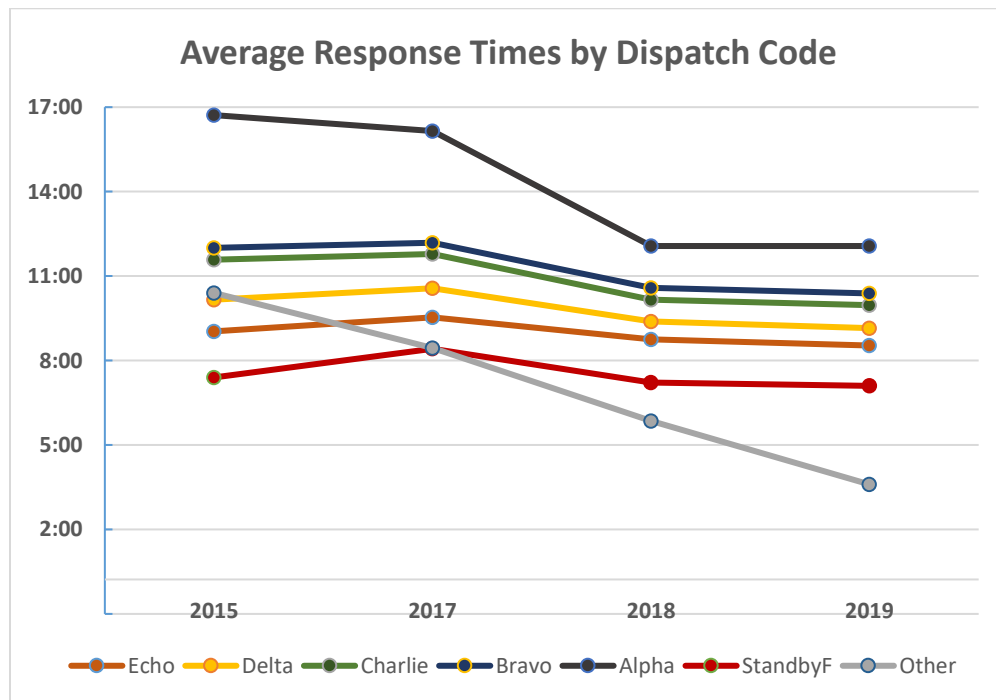
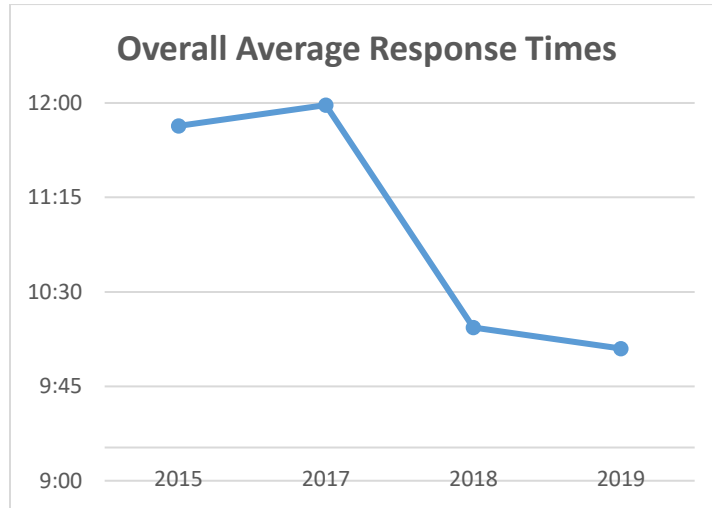
<b>Other/non-common dispatch prefix</b>				TRA	152	19%
<b>Calls with recorded onscene time</b>	<b>820</b>	0.6%		TRB	95	12%
<b>Average response time</b>	<b>3:37</b>			TRC	114	14%
<b>Median response time</b>	<b>1:08</b>			TRDM	15	2%
under 20 minutes	812	99%		NOTS1	2	0.2%
under 15 minutes	805	98%		NOTS2	36	4%
under 10 minutes	744	91%		NOTS3	32	4%
under 8 minutes	667	81%		TRDT	2	0.2%
under 6 minutes	590	72%		TRET	0	0%
				TEM/TALS	2	0.2%
				<b>Total Transports</b>	<b>420</b>	<b>55%</b>
				DOA/TREA	3	0.4%
				REFUSAL	188	23%
				GOA/UTL	21	3%
				Other	158	19%

**Day Shift (25 ambulances) vs Night Shift (21 ambulances)**

<b>Calls received 07:00-18:59</b>	<b>59,208</b>	<b>56%</b>	<b>Calls received 19:00-06:59</b>	<b>45,684</b>	<b>44%</b>
<b>Average response time</b>	<b>9:58</b>			<b>10:09</b>	
<b>Median response time</b>	<b>8:51</b>			<b>9:00</b>	
under 20 minutes	57,294	97%		44,117	97%
under 15 minutes	53,634	91%		41,127	90%
under 10 minutes	37,174	63%		27,919	61%
under 8 minutes	23,192	39%		16,855	37%
under 6 minutes	8,459	14%		5,957	13%

## Year-to-Year Comparison

Note that 2016 is not listed. In 2016 Cleveland hosted the Republican National Convention, the CAVS championship parade and the World Series. These events necessitated several weeks of atypical EMS responses that made for unreliable statistics.



Average Response Times

	Overall	Echo	Delta	Charlie	Bravo	Alpha	StandbyF	Other
<b>2015</b>	11:49	9:03	10:11	11:36	12:01	16:44	7:25	10:25
<b>2017</b>	11:59	9:33	10:35	11:48	12:12	16:10	8:26	8:28
<b>2018</b>	10:13	8:46	9:24	10:11	10:36	12:05	7:14	5:52
<b>2019</b>	10:03	8:33	9:10	9:59	10:24	12:05	7:07	3:37



## Unit by Unit Comparison

Unit	2019 calls	average response time
M1	5,565	9:09
M2**	262	8:58
M3**	92	8:39
M4	5,172	9:41
M6	3,748	10:17
M7	5,677	9:36
M10	5,515	10:11
M11	4,645	10:50
M13*	2,205	10:36
M17	5,145	10:04
M20	4,358	9:59
M21*	2,042	9:10
M22	5,445	9:59
M23	4,890	9:30
M24	4,324	10:57
M26	4,688	10:48
M28*	2,148	10:08
M30	4,913	9:58
M31	4,140	10:31
M33	4,339	10:09
M36	4,823	10:17
M38*	1,959	9:45
M39	3,208	9:55
M40	3,731	10:34
M41	5,263	9:56
M42	3,591	9:59
M43	2,891	9:22
ALS/MOB units**	113	4:33

\*Daytime only Unit \*\*Units were not staffed for the entire year.

### Methods and Limitations:

These statistics were compiled from a public records request filed by CARE 1975 for the actual call times for every single EMS run for the calendar year 2019. A Microsoft Excel spreadsheet was created, and the data was reviewed to remove events without a documented onscene time and calls that duplicated the same information. This is probably the reason that the run totals in this paper are different than those released in the City of Cleveland budget books and on the Cleveland EMS Twitter feed. Lastly, it appears that through a computer glitch when multiple ambulances respond to the same scene, as in the case of a traffic accident with multiple patients, only the response time of the first-arriving ambulance is recorded. As multi-unit calls represent a small amount of CEMS responses, however, this is unlikely to alter trends.