



2022 EMS System Report

March 2023

Emergency Medical Services Regulatory Board

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Table 1 EMS Data Summary Figures

Table 1 displays topline summary figures of the state EMS system as a whole. There were a total of 730,666 documented responses with 605,450 (82.86%) being emergency response call types.

Metric	Count	% Of Total
Type of service requested		
*911 Response (Scene)	593,879	81.28%
*Intercept	3,420	<1%
Interfacility transport	102,095	13.97
Medical transport	22,417	3.07%
*Mutual aid	5,741	<1%
*Public assistance	2,410	<1%
Standby	3,849	<1%
Transfer to air ambulance from hospital	275	<1%
Total emergency records	605,450	82.86%
Total EMS responses	730,666	100%
EMS patients by gender		
Female	322,844	50.62%
Male	312,024	48.92%
Unknown (unable to determine)	2,917	<1%
EMS patients by age		
0-17 years	43,874	6.84%
18-64 years	311,937	48.61%
65+ years	285,840	44.55%
Reported pre-hospital cardiac arrests	14,307	2.3% of emergency records
Naloxone administration		
Number of naloxone doses administered (911)	8,319	
Number of 911 encounters with at least 1 dose of naloxone	5,708	

* Indicates type categorized as emergency records

Figure 1 Number of EMS Responses by Month CY2022

Figure 1 displays the total number of EMS responses by month for calendar year 2022 (CY2022). The months with the heaviest EMS response volume were in December and January.

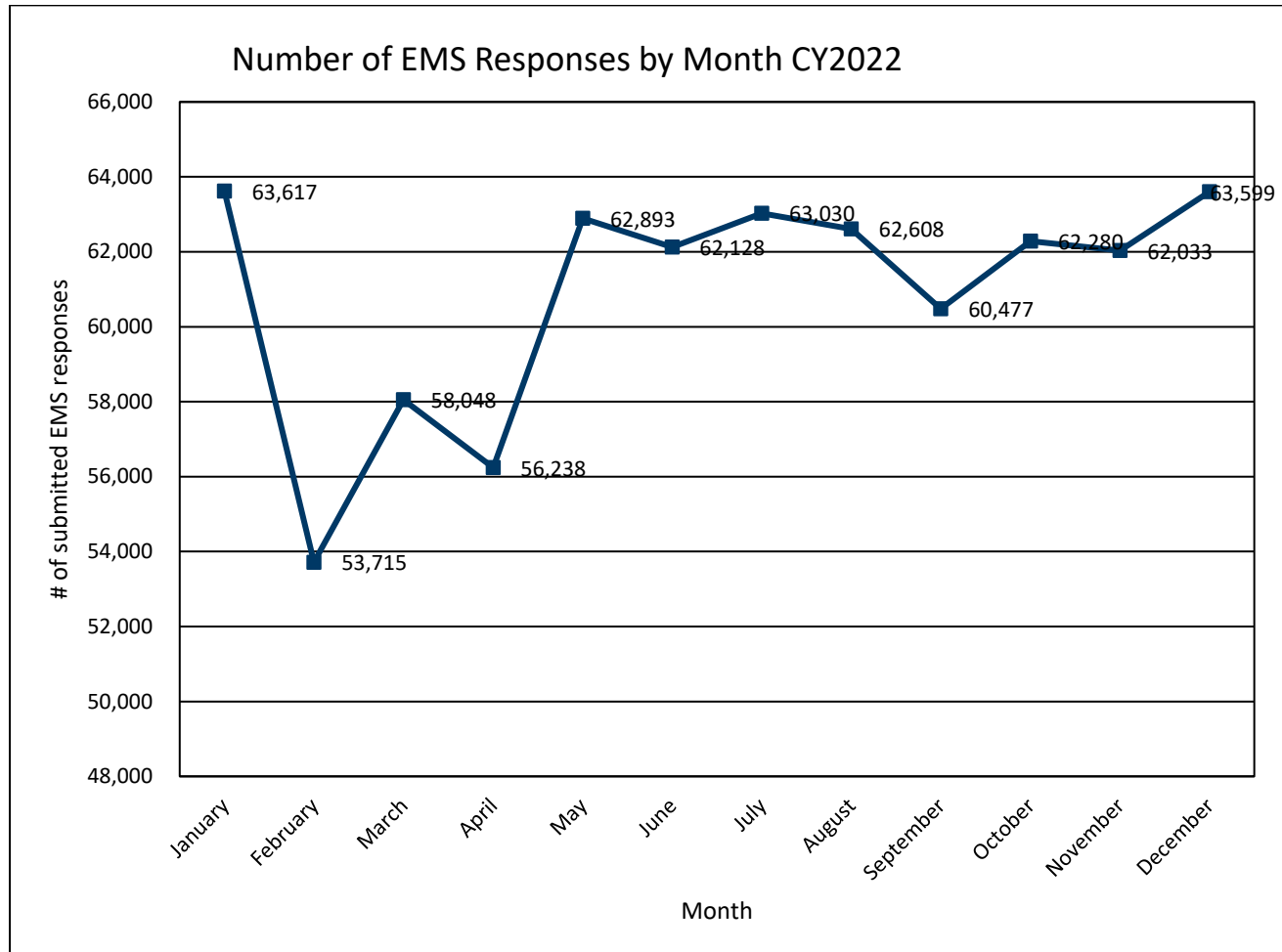


Table 2 Summary of Incident/Patient Disposition

Table 2 displays what the final disposition was for EMS responses in Minnesota in CY2022

Incident disposition	Number of EMS responses	% Of EMS responses
Assist unit	761	0.10%
Canceled on or after arrival at scene	21,439	2.93%
Canceled prior to arrival at scene	55,069	7.54%
Dead at scene – No resuscitation (with transport to morgue)	51	0.001%
Dead at scene – No resuscitation attempted (without transport)	2,913	0.40%
Dead at scene – Resuscitation attempted (without transport)	1,997	0.27%
Dead at scene – With resuscitation (with transport)	60	0.01%
EMS agency assist	588	0.08%
No patient found	4,004	0.55%
No Treatment/transport required	27,002	3.70%
Person refused evaluation, care, and transport	36,859	5.04%
Public assist	1,961	0.27%
Standby - No patient contacts	3,667	0.50%
Standby - With patient contact(s)	2,277	0.31%
Transport of body parts or organs only	207	0.03%
Transport refused by patient (AMA)	9,972	1.36%
Transported but refused care &/or evaluation	647	0.09%
Transported to landing zone/airport, care transferred	510	0.07%
Treated & transported by this EMS unit	524,810	71.83%
Treated and released (per protocol)	31,137	4.26%
Treated, referred to law enforcement	221	0.03%
Treated, transferred care to another EMS unit or agency	4,078	0.56%
Treated, transported by private vehicle	436	0.06%
Total incidents with disposition	730,666	100%

Figure 3 Age Distribution of Patient Contacts CY2022

Figure 3 displays the age demographic by percentage that presents to the EMS system for all responses. Patients aged 80 years and older had the most utilization of the EMS system (20%).

The Medicare eligible patient population, those 65 years of age or older, make up 46% of people using the EMS system. This is important to EMS agency administrators when the are evaluating their payor mix.

The Birth to nine-year demographic presented to the EMS system the least (3%). With minimal exposure to pediatric patients, it is important for EMS providers to remain proficient in pediatric patient management. The EMSRB encourages EMS agencies to participate in various trainings and activities offered by Minnesota Emergency Medical Services for Children (EMSC).

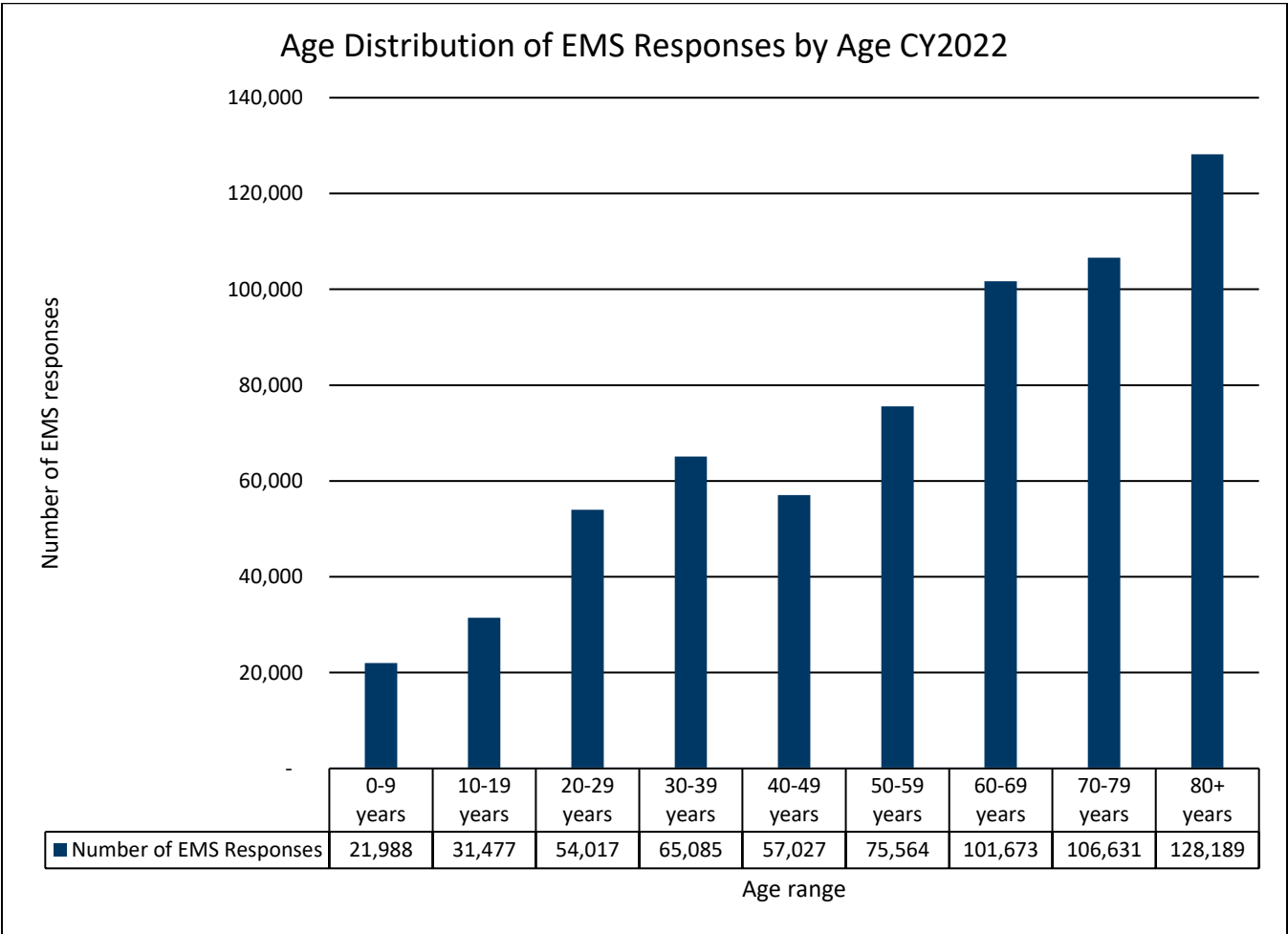


Figure 4 Responses by Day of Week CY2022

Figure 4 shows that the number of calls for service by day is consistent from day-to-day. Sunday has the lowest number of requests for service while Friday has the most. EMS leaders can utilize this data and local versions of this data to assist with resource deployment decisions.

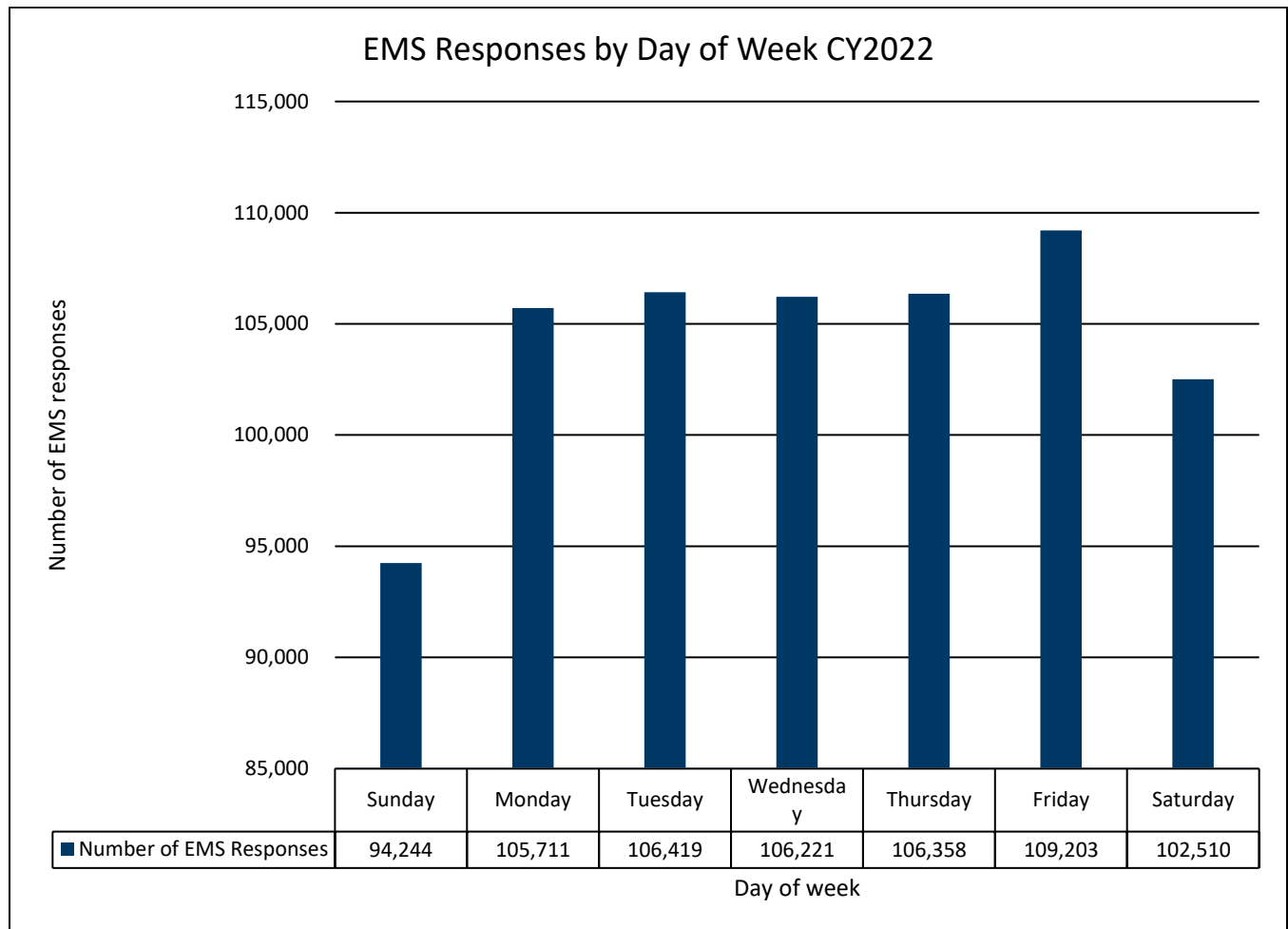


Figure 5 Responses by Hour of Day CY2022

Figure 5 shows the number of EMS responses by hour of day. The hour of day is displayed along with how many EMS calls for service were received during that time frame. There is a peak of requested responses in the 3 PM hour before beginning to drop off in the 9 PM hour.

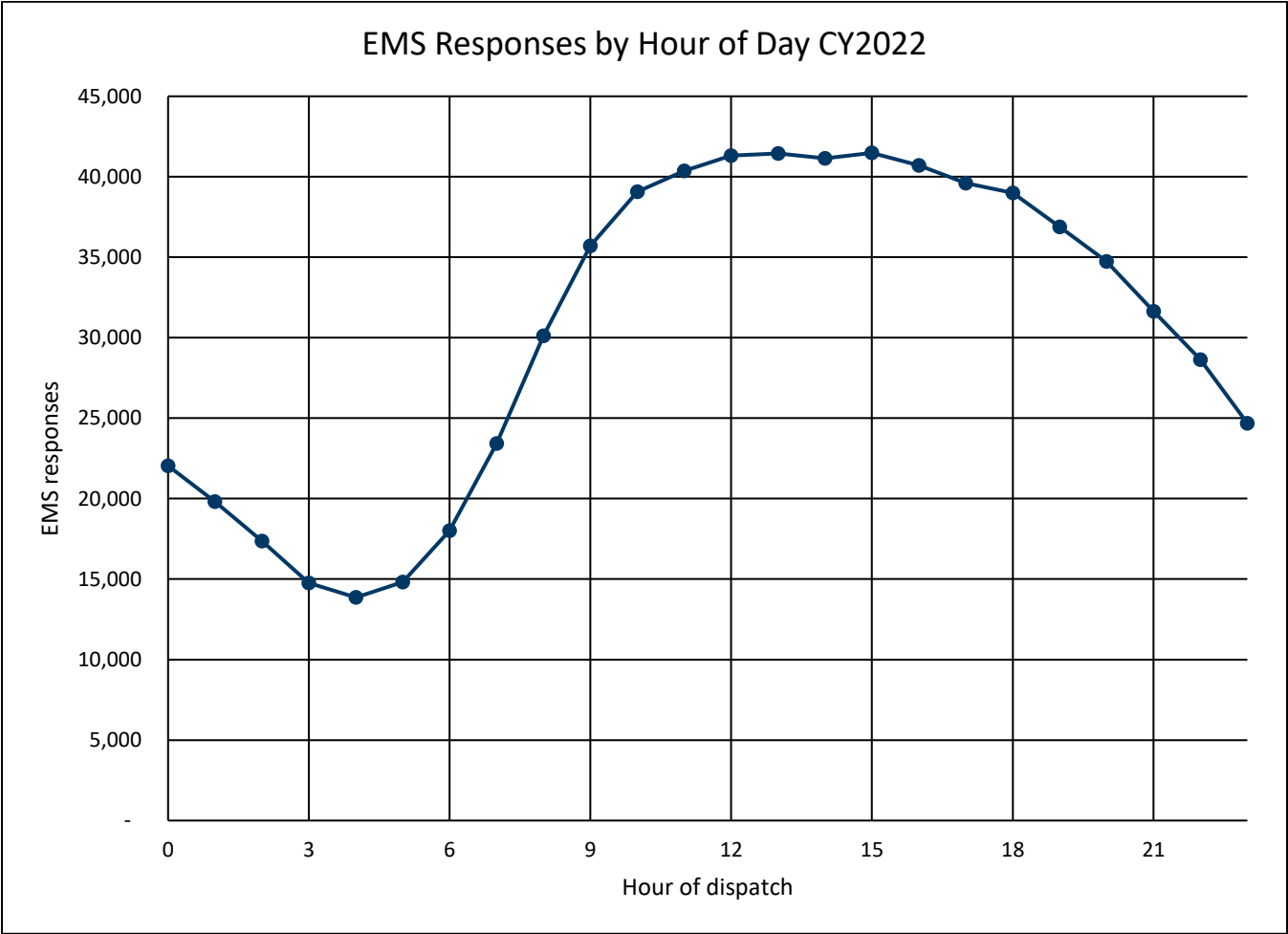


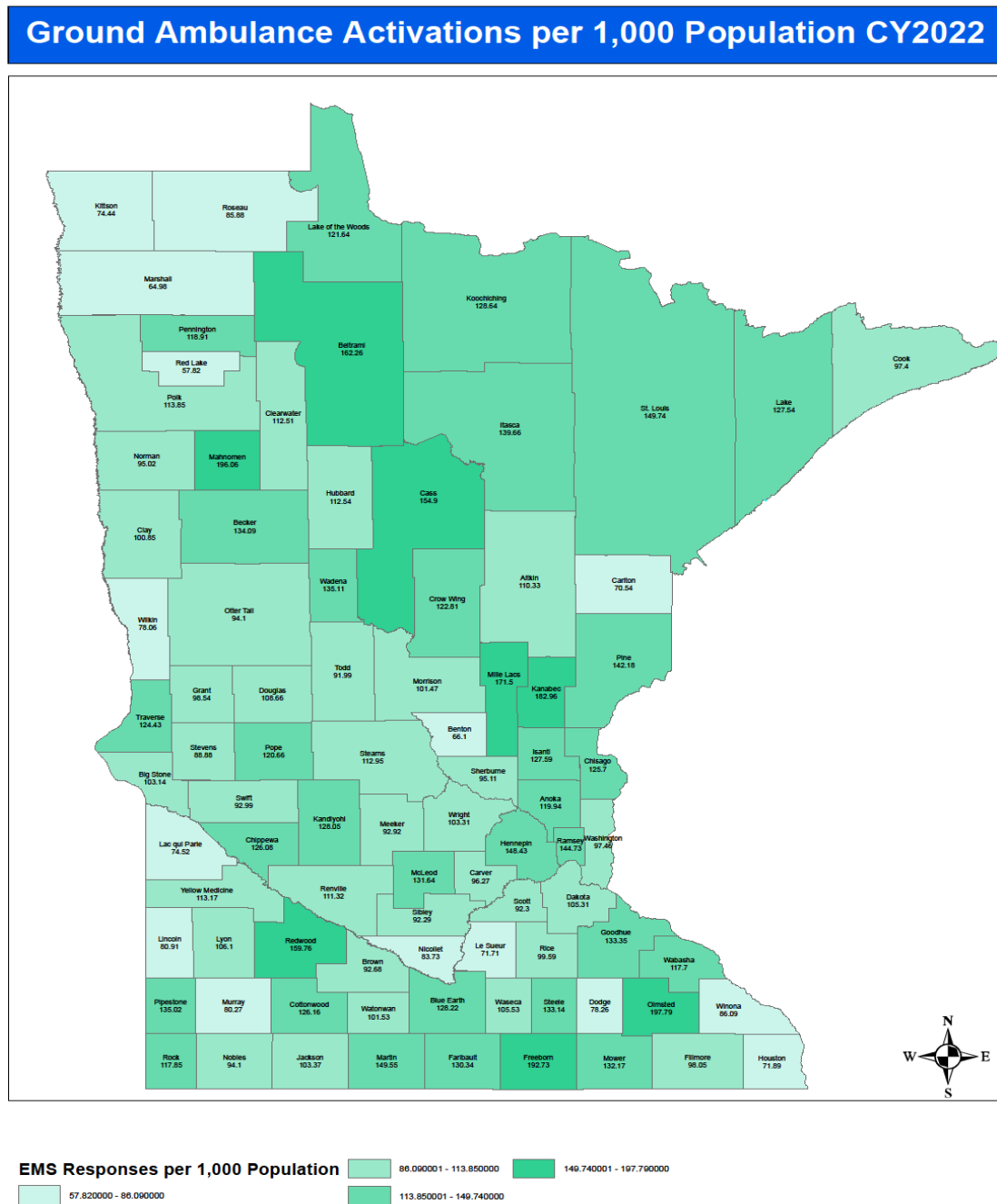
Table 3 EMS Responses by Day/Month CY2022

Table 3 displays the total number of EMS responses by day and month based on values provided in the date/time unit dispatched field. The top three busiest days, which all occurred in January, are bolded

Day	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.
1	2,108	1,966	2,055	2,042	1,647	2,089	2,118	2,039	2,083	1,924	2,194	2,100
2	1,876	1,888	1,999	1,648	2,034	2,209	1,983	2,225	2,198	1,913	2,276	2,267
3	2,212	1,849	1,922	1,704	2,042	2,107	1,955	2,130	2,015	2,135	2,157	1,945
4	2,360	2,152	1,995	1,978	2,058	1,979	1,942	2,090	1,880	2,145	2,082	1,834
5	2,218	1,894	1,892	1,878	2,076	1,785	2,144	2,202	1,843	2,025	1,898	2,076
6	2,285	1,731	1,720	1,898	2,143	2,053	2,149	1,949	2,078	1,916	1,807	2,008
7	2,278	1,965	1,995	1,817	1,986	2,052	2,183	1,866	2,101	2,014	2,017	2,048
8	2,075	1,967	1,898	2,102	1,876	2,060	2,091	2,032	2,126	1,966	2,005	2,079
9	1,809	2,064	1,828	1,816	2,075	2,097	2,124	2,055	2,001	1,891	2,188	2,213
10	2,079	2,074	1,875	1,648	2,125	2,178	1,910	2,161	1,956	1,945	2,184	1,916
11	2,243	2,085	1,949	2,015	2,140	2,048	1,994	2,046	1,781	2,159	2,150	1,918
12	2,183	1,834	1,724	1,879	2,279	1,817	2,080	2,096	2,058	2,071	1,919	2,067
13	2,022	1,729	1,606	1,888	2,301	2,061	1,944	1,829	2,058	1,988	1,747	1,962
14	2,172	2,013	2,034	1,869	1,977	2,153	2,080	1,898	1,987	2,037	2,228	2,121
15	2,044	1,992	1,975	1,877	1,967	2,041	2,150	2,023	2,155	1,921	2,090	2,203
16	1,754	1,995	2,007	1,763	2,090	2,105	1,890	1,973	2,117	1,761	2,176	2,322
17	2,058	1,841	1,936	1,641	2,031	2,112	1,951	2,019	2,103	2,092	2,227	1,911
18	2,043	2,039	1,913	1,847	2,129	2,008	2,134	2,083	1,832	1,975	2,173	1,782
19	2,003	1,789	1,826	1,982	2,105	2,021	2,048	1,974	2,093	1,930	1,954	2,157
20	1,982	1,786	1,723	1,919	2,054	2,285	2,082	1,897	2,013	2,119	1,846	2,153
21	2,155	1,860	1,812	1,906	1,862	2,130	2,099	1,865	1,999	2,216	2,075	2,020
22	2,031	1,970	1,805	1,963	1,717	2,120	2,237	2,068	2,085	1,976	2,152	2,098
23	1,988	1,870	1,826	1,910	1,915	2,179	1,948	2,044	2,084	1,951	2,133	2,085
24	2,137	1,966	1,894	1,680	2,048	2,180	1,825	2,053	1,941	2,012	1,842	2,069
25	1,991	1,989	1,801	2,002	1,956	2,039	2,050	2,029	1,801	1,991	2,059	1,779
26	2,059	1,756	1,755	1,969	2,028	1,828	1,925	2,114	1,968	2,030	1,998	1,948
27	2,040	1,706	1,592	1,895	2,183	2,099	2,041	1,917	1,998	2,030	1,931	2,137
28	1,942	1,945	1,955	1,830	2,042	2,031	2,000	1,831	2,005	2,056	2,220	2,170
29	1,836		1,880	2,053	1,980	2,082	2,098	1,965	2,018	2,053	2,211	2,070
30	1,641		1,954	1,819	1,932	2,180	2,090	2,036	2,100	1,952	2,094	2,184
31	1,993		1,902		2,095		1,765	2,099		2,086		1,957

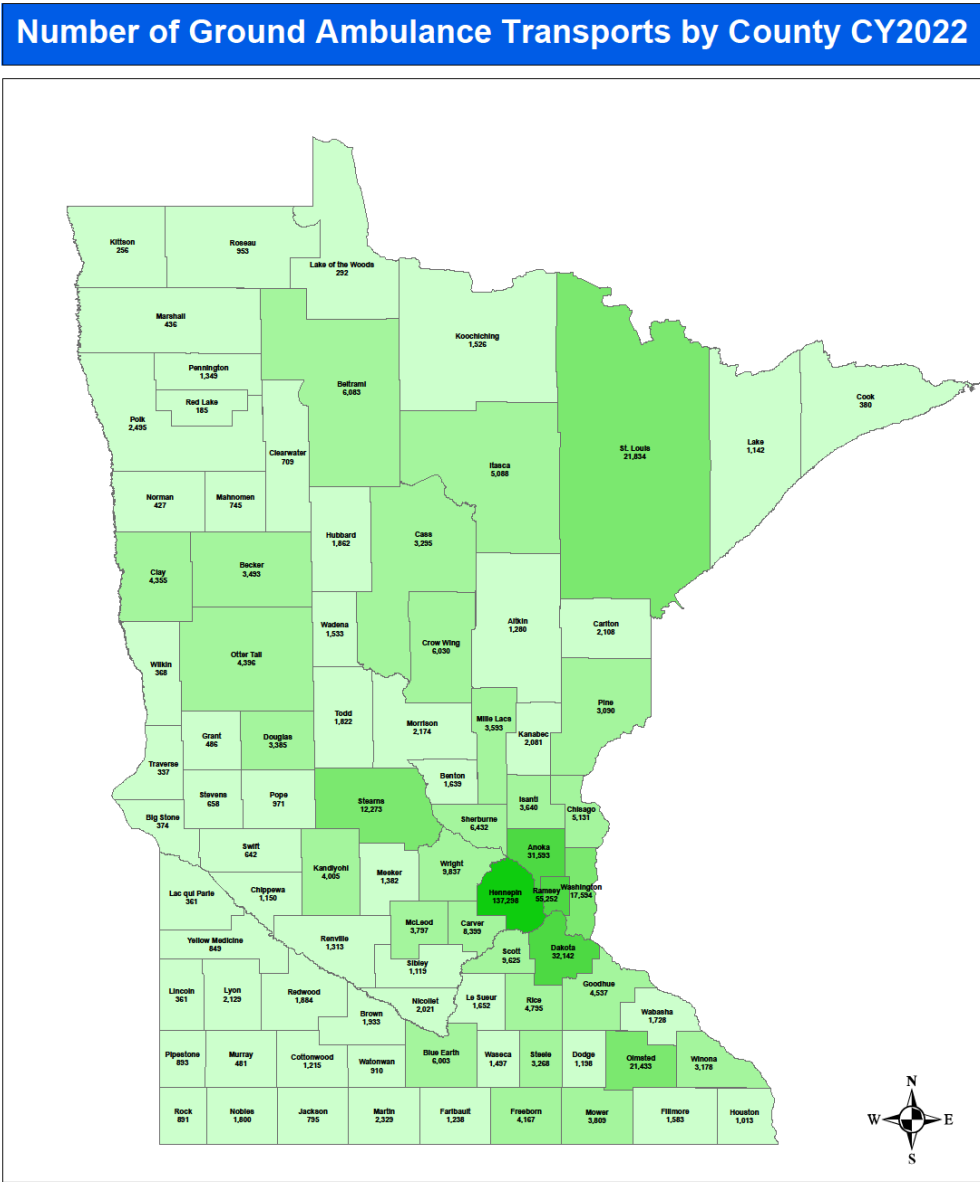
Map 1 Ground Ambulance Activations per 1,000 Population CY2022

Map 1 displays the rate of ground ambulance activations adjusted for reported county population from the U.S. Census Bureau.



Map 2 Number of Ground Ambulance Transports by County CY2022

Map 2 displays the total number of ground ambulance transports by county for CY2022. The county of the incident was determined using the incident county field from EMS patient care reports.



Prepared by DJF 02/10/2023
Source: MNSTAR

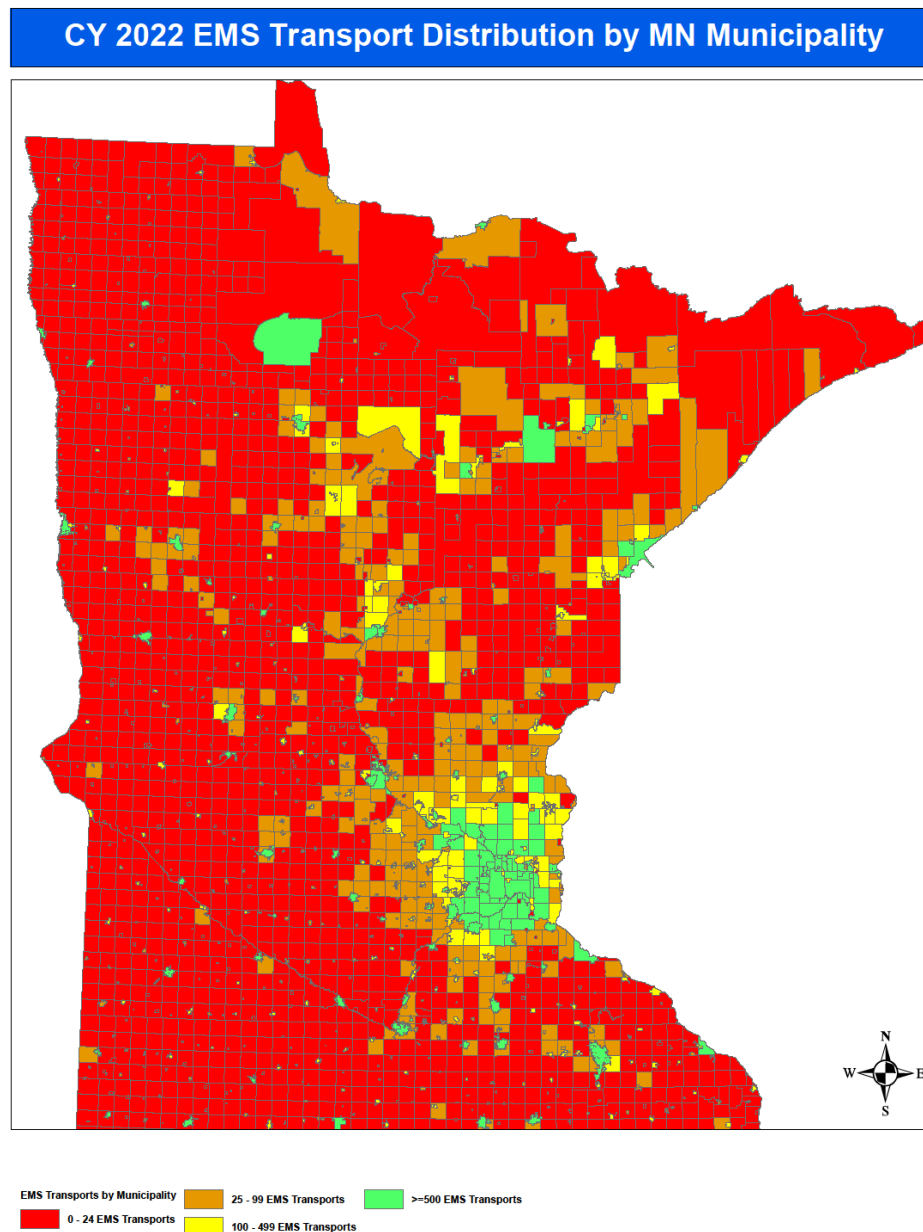
Table 4 Total EMS Incidents/Transports by Region and Organization Type CY2022

Table 4 provides a breakdown of incident and transport counts by both organizational type and region as reported in the EMS patient care reporting system. Regional assignment was based on the incident county identified in the patient care report.

2022 Total EMS Incidents/Transports by Region and Organization Type									
Region/Org Type	Fire Dept	Govt. Non-Fire	Hospital	Private, Non-Hospital	Tribal	Total Incidents	Incident % of Total	Total Transports	Regional Transport Percentage
Central	848	4,800	60,570	805	1,260	68,283	9.40%	48,465	70.98%
Metro	79,308	7,084	338,572	6,137	1,698	432,799	59.59%	307,683	71.09%
Northeast	10,942	5,966	21,960	5,912	86	44,866	6.18%	34,085	75.97%
Northwest	8	1,674	10,727	7,754	2,266	22,429	3.09%	17,115	76.31%
South Central	752	4,649	19,670	1,231	-	26,302	3.62%	19,566	74.39%
Southeast	3,836	11,056	53,903	5,262	-	74,057	10.20%	51,734	69.86%
Southwest	336	9,232	20,749	2,066	-	32,383	4.46%	24,887	76.85%
West Central	278	2,634	16,631	5,103	546	25,192	3.47%	19,011	75.46%
Total Incidents	96,308	47,095	542,782	34,270	5,856				
% Of Total Incidents	13.26%	6.48%	74.73%	4.72%	0.81%				
Total Transports	63,009	34,946	393,859	26,536	4,196				
Transport % by Org Type	65.42%	74.20%	72.56%	77.43%	71.65%				

Map 3 Number of Ground Transports by Minnesota Municipality CY2022

Using GIS mapping and linkage, the EMSRB was able to calculate the number of EMS transports originating from Minnesota municipalities. This was done by geocoding all addresses submitted to the PCR reporting system to latitude and longitude coordinates. 45.5% of all Minnesota cities reported less than 25 transports in CY2022, 72.4% of townships reported less than 25 transports. Using the GIS mapping ArcMap calculated that 78.2% of the state's square mileage belongs to a municipality that reported <25 EMS transports in CY 2022.



Prepared by DJF 01/23/2023
Source: Elite Patient Care Reporting, Biospatial

Figure 6 Age and Gender Distribution of EMS Naloxone Administrations (Emergency Records) CY2022

Figure 6 displays the percentage breakdowns of naloxone use by EMS providers by age groups and gender. It is restricted to emergency records only, which includes type of service request categories that are * in Table 1 of this report. Males in the 30–39-year-old age group had the highest rate of being administered naloxone. It should be noted that naloxone administration does not in and of itself constitute an overdose, as naloxone in some locations may routinely be administered as part of an unconscious unknown etiology clinical guideline.

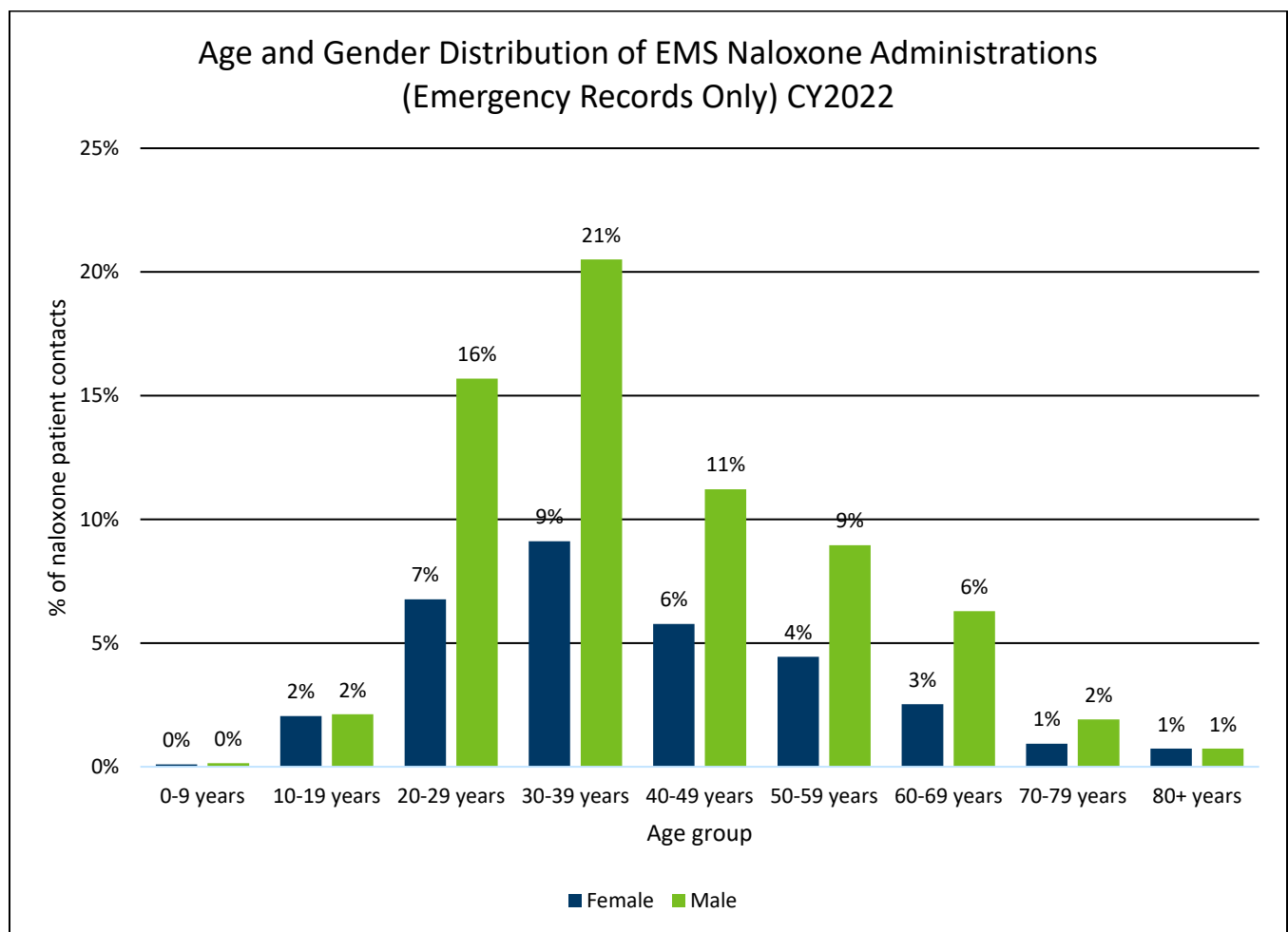


Figure 7 Top 10 Complaints Reported by Dispatch Resulting in EMS Naloxone Administration (Emergency Records) CY2022

Figure 7 displays the top 10 complaints reported by dispatch that ultimately resulted in naloxone administration. Overdose was number one with unconscious/fainting being number two.

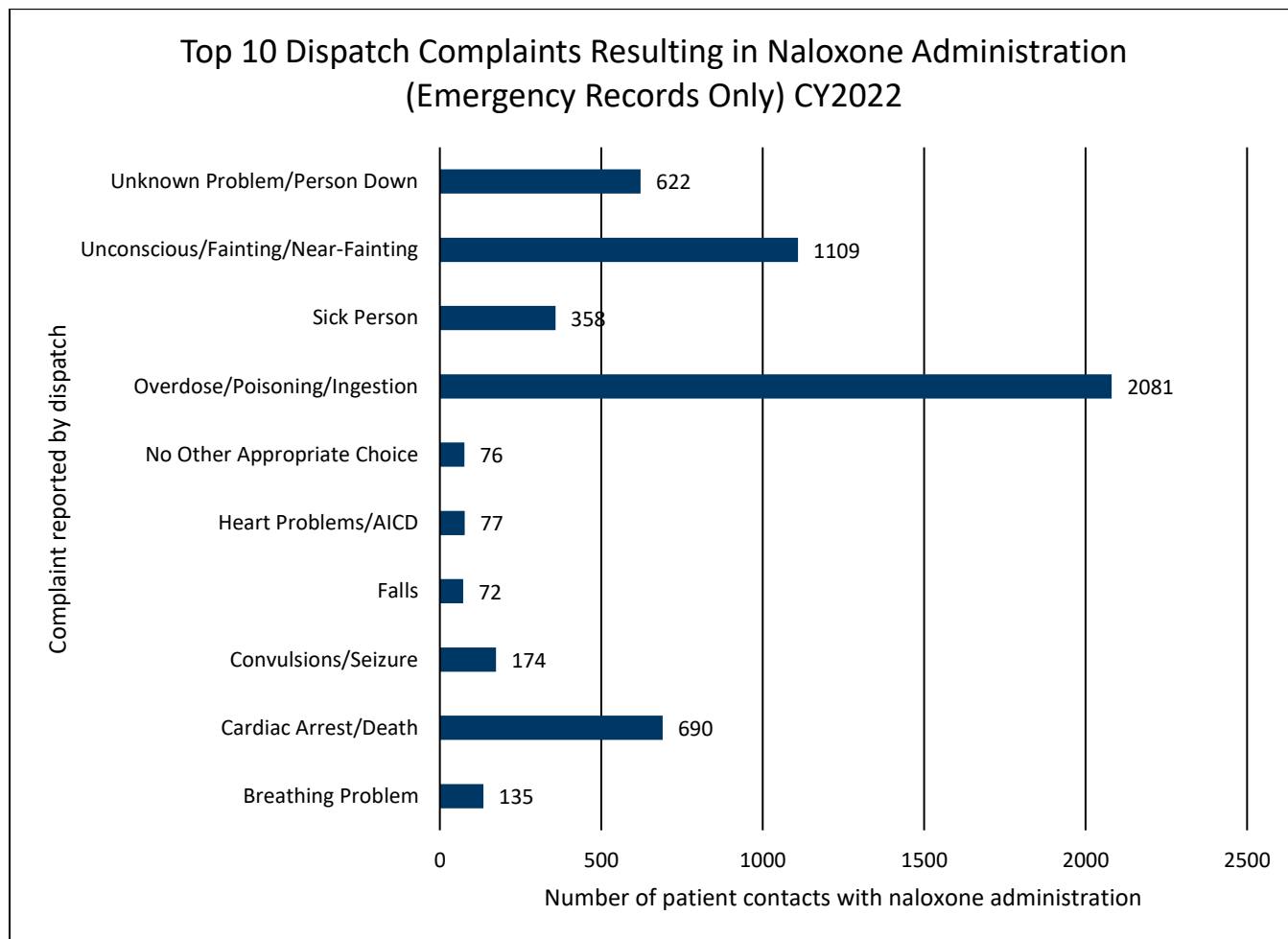
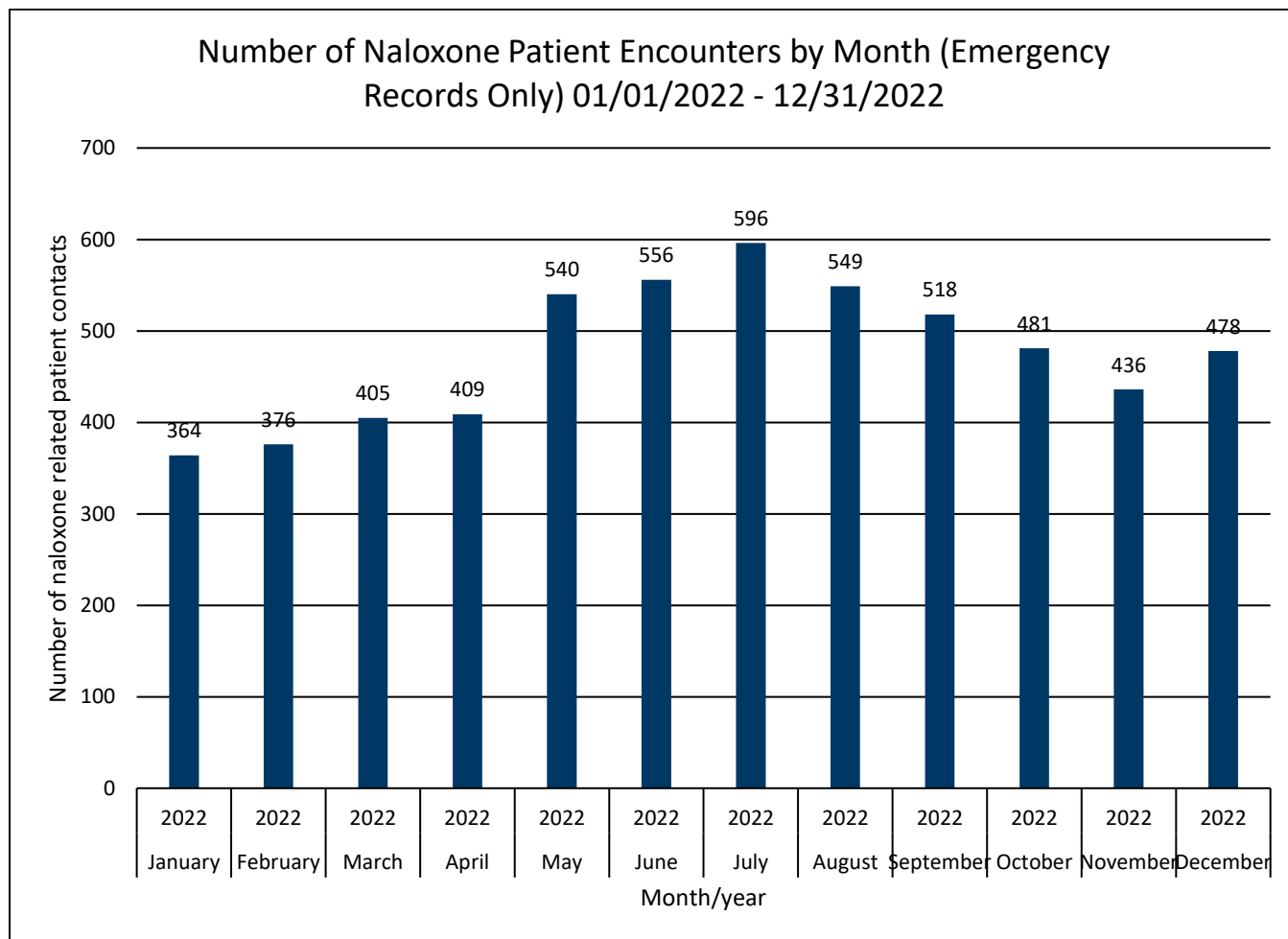


Figure 8 Naloxone Patient Encounters by Month (Emergency Records) CY2022

Figure 8 displays by month the number of patients that EMS administered at least one dose of naloxone to. July, June, and May were the top three months for patient encounters resulting in naloxone administration, whereas January, February, and March were the lowest.



Map 4 Naloxone Patient Contact by County (Emergency Records) CY2022

Map 4 displays by county the number of 911 EMS patient encounters with documented naloxone in administration in CY2022. All values with counts less than 20 have been suppressed to protect patient privacy. Counties in grey on the map below had no records matching the criteria

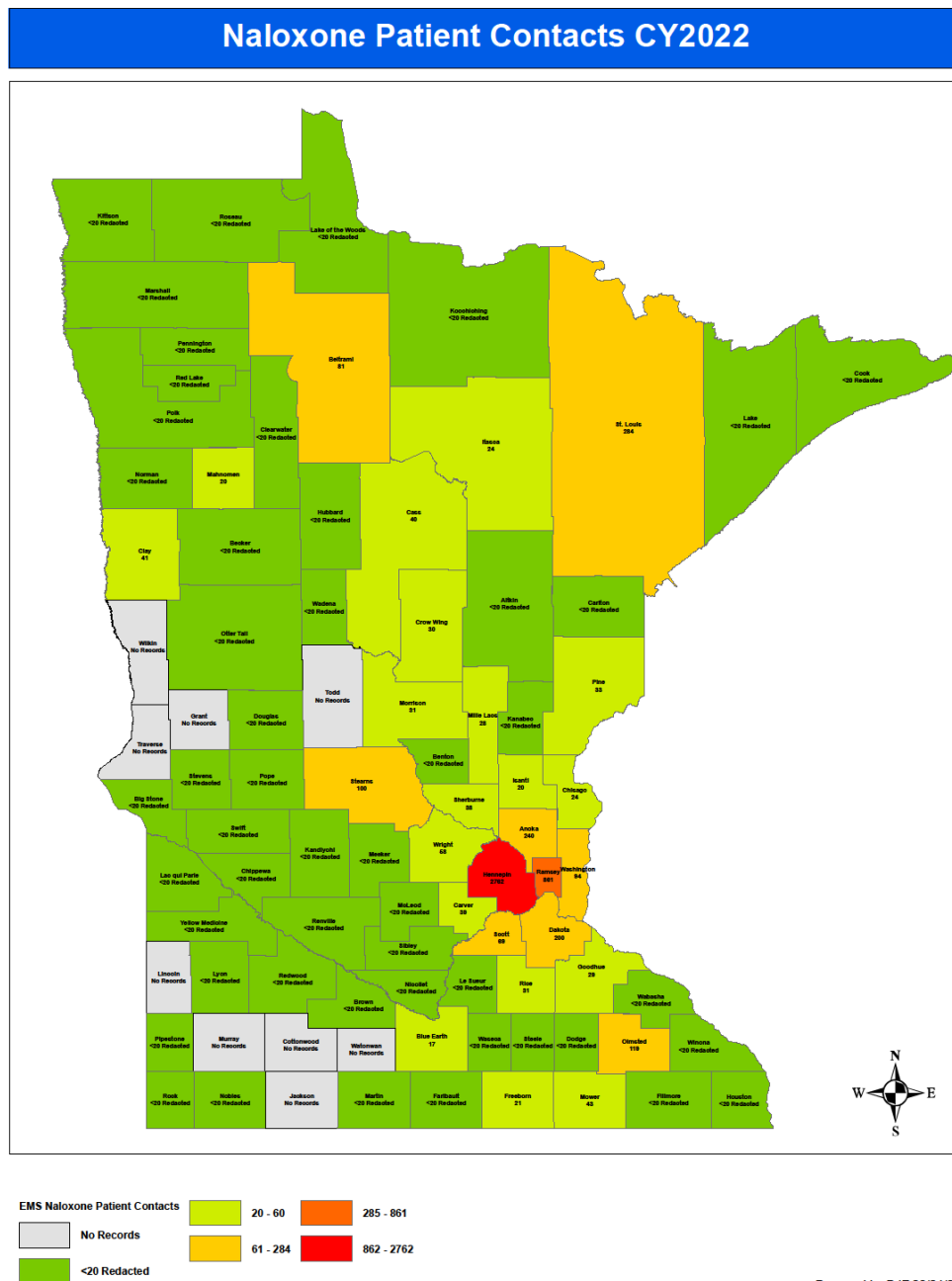


Table 5 Naloxone Patient Contact by Day and Hour of Dispatch (Emergency Records) CY2022

Table 5 displays the hour of dispatch and day of week during which EMS administered naloxone. Values of less than 20 have been suppressed to protect patient privacy. The most frequent day and time for naloxone administration by EMS is in the Friday evening hours between 20:00 and 23:00 hours.

Hour	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
0:00	43	28	38	35	32	37	43
1:00	41	<20	<20	<20	28	40	47
2:00	31	24	21	25	<20	27	37
3:00	24	<20	<20	<20	21	25	<20
4:00	25	<20	<20	<20	<20	21	<20
5:00	<20	<20	<20	<20	<20	<20	20
6:00	<20	<20	<20	<20	<20	22	24
7:00	<20	<20	<20	<20	<20	<20	21
8:00	20	21	31	28	<20	20	25
9:00	<20	22	26	25	25	34	27
10:00	26	23	30	29	23	36	29
11:00	27	21	34	33	46	40	32
12:00	27	39	23	29	37	27	41
13:00	44	27	36	43	33	48	42
14:00	29	29	51	41	37	34	35
15:00	46	37	44	39	43	47	40
16:00	56	42	42	46	45	47	34
17:00	52	48	49	41	46	47	53
18:00	52	52	59	39	45	53	56
19:00	36	57	44	36	63	46	44
20:00	46	56	47	59	55	64	51
21:00	46	51	46	60	41	48	51
22:00	45	44	37	33	55	68	40
23:00	41	32	43	23	40	44	41

Figure 9 2022 Clinical Advisory Performance Measure Report

In 2022, the EMSRB in consultation with the Medical Director Standing Advisory Committee (MDSAC) established nine (9) clinical advisory performance measures. Figure 9 displays the statewide performance for ground ambulances for each measure.

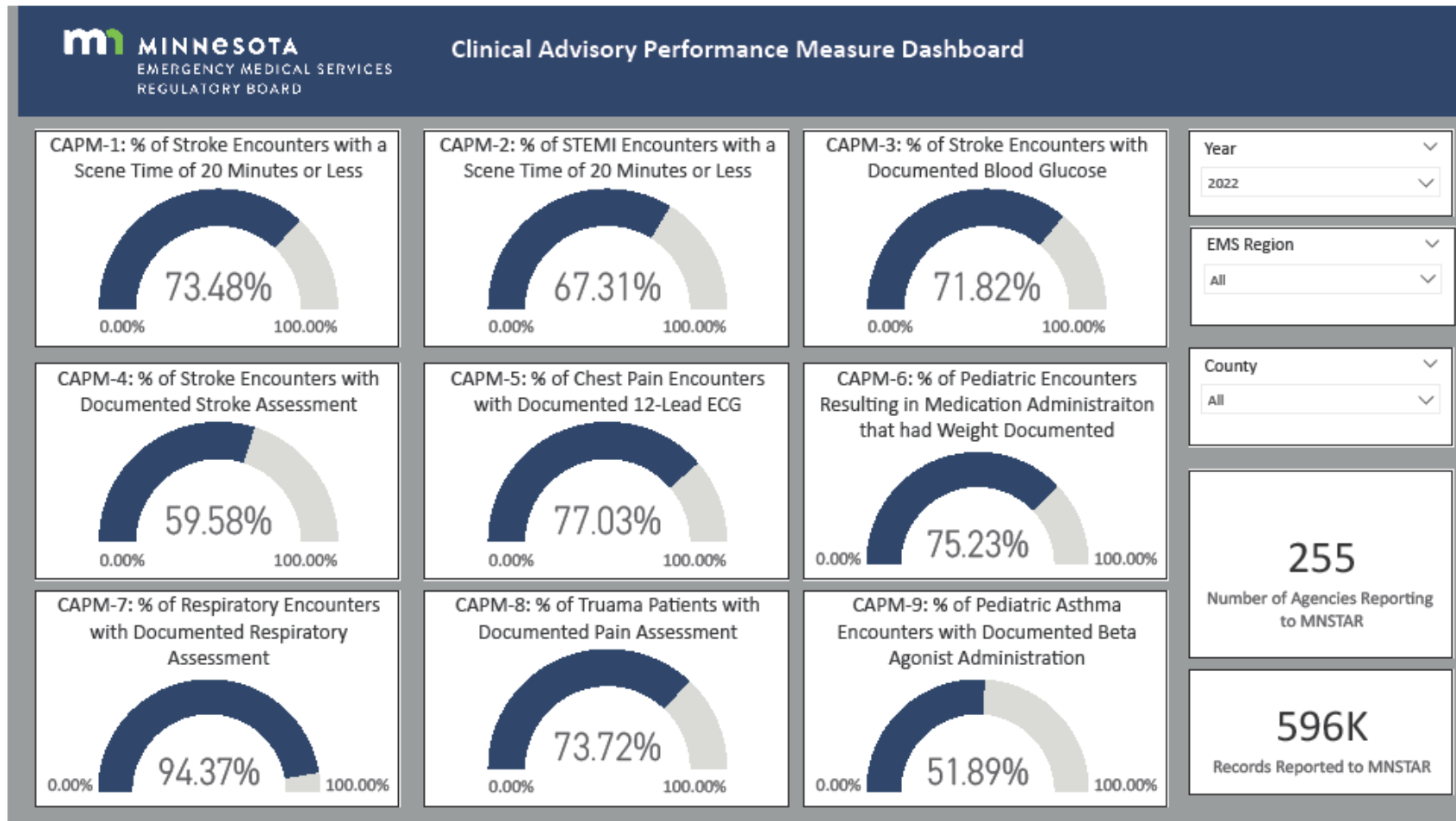


Table 6 Response Timetable by County Based on Documented Public Safety Answering Point Time CY2022

Table 6 displays time intervals for median, average, and 90th percentile by Minnesota County for 911 ground ambulance responses. This was calculated using the interval between the call received by PSAP (911 center) time and the time that the ambulance arrived on scene. The validity rate was calculated by dividing the number of responses with a PSAP time by the total number of ground ambulance responses. Counties that had a validity rate of less than 30% do not have their time data displayed, as there is insufficient data to make it reliable.

County	Responses with Valid PSAP Time Documented	Number of 911 Ground Ambulance Responses	PSAP Time Validity Rate	Median PSAP to Scene Time	Average PSAP to Scene Time	90th Percentile PSAP to Scene Time
Aitkin	835	1,481	56.38%	6	9.43	20.8
Anoka	29,154	29,758	97.97%	9	10.82	18
Becker	182	3,169	5.74%			
Beltrami	36	5,763	0.62%			
Benton	93	2,262	4.11%			
Big Stone	9	344	2.62%			
Blue Earth	32	5,982	0.53%			
Brown	996	1,434	69.46%	6	10.47	15
Carlton	279	1,842	15.15%			
Carver	6,468	6,477	99.86%	8	8.95	15
Cass	2,598	4,242	61.24%	15	16.42	28
Chippewa	29	1,089	2.66%			
Chisago	103	4,614	2.23%			
Clay	5,069	5,388	94.08%	8	9.57	16
Clearwater	203	661	30.71%			
Cook	108	416	25.96%			
Cottonwood	578	944	61.23%	8	8.81	12
Crow Wing	5,477	6,508	84.16%	10	12.17	20
Dakota	20,560	35,715	57.57%	7	8.31	13
Dodge	1,070	1,525	70.16%	13	14.25	21
Douglas	19	3,032	0.63%			
Faribault	19	1,472	1.29%			
Fillmore	10	1,986	0.50%			

Freeborn	18	3,339	0.54%			
Goodhue	173	4,542	3.81%			
Grant	14	435	3.22%			
Hennepin	131,272	144,008	91.16%	8	9.64	15
Houston	2	1,312	0.15%			
Hubbard	1,795	1,845	97.29%	10	12.40	22
Isanti	2,958	3,363	87.96%	10	13.02	20
Itasca	668	4,848	13.78%			
Jackson	65	677	9.60%			
Kanabec	26	1,607	1.62%			
Kandiyohi	2,784	3,553	78.36%	7	10.30	16
Kittson	2	311	0.64%			
Koochiching	24	1,164	2.06%			
Lac qui Parle	9	435	2.07%			
Lake	3	1,035	0.29%			
Lake of the Woods	8	349	2.29%			
Le Sueur	1,236	1,695	72.92%	10	12.08	19
Lincoln	29	367	7.90%			
Lyon	31	1,854	1.67%			
Mahnomen	155	903	17.17%			
Marshall	60	544	11.03%			
Martin	3	2,069	0.14%			
McLeod	2,684	2,856	93.98%	8	9.98	17
Meeker	85	1,610	5.28%			
Mille Lacs	1,872	3,264	57.35%	10	11.52	19
Morrison	23	2,573	0.89%			
Mower	22	3,668	0.60%			
Murray	61	556	10.97%			
Nicollet	988	2,148	46.00%	6	8.53	14
Nobles	1,239	1,329	93.23%	7	8.75	16
Norman	6	443	1.35%			
Olmsted	4	18,217	0.02%			
Otter Tail	1,863	3,973	46.89%	8	10.13	21.4

Pennington	1,085	1,090	99.54%	6	8.29	15
Pine	20	3,372	0.59%			
Pipestone	-	834	0.00%			
Polk	1,479	2,874	51.46%	10	10.14	14
Pope	978	997	98.09%	7	8.35	15
Ramsey	60,429	60,799	99.39%	6	7.19	12
Red Lake	22	227	9.69%			
Redwood	961	1,608	59.76%	8	11.57	21
Renville	208	1,105	18.82%			
Rice	2,593	4,478	57.91%	8	10.29	17
Rock	655	668	98.05%	11	13.00	22
Roseau	268	1,086	24.68%			
Scott	7,970	9,628	82.78%	9	10.74	16
Sherburne	4,866	7,365	66.07%	11	11.30	18
Sibley	552	935	59.04%	8	9.30	17
St. Louis	2,049	23,353	8.77%			
Stearns	535	13,827	3.87%			
Steele	65	3,472	1.87%			
Stevens	486	505	96.24%	9	10.28	17
Swift	38	664	5.72%			
Todd	551	1,657	33.25%			
Traverse	117	258	45.35%	8	10.44	19
Wabasha	5	1,675	0.30%			
Wadena	106	1,411	7.51%			
Waseca	1,179	1,379	85.50%	8	10.60	19
Washington	16,944	20,085	84.36%	8	8.99	14
Watonwan	2	661	0.30%			
Wilkin	39	272	14.34%			
Winona	13	3,601	0.36%			
Wright	8,332	9,741	85.54%	11	12.83	21
Yellow Medicine	182	776	23.45%			
No County Identified	1,512	2,447	61.79%	12	14.57	25
Statewide	338,350	529,846	63.86%	8	9.61	16

Table 7 Response Timetable by County Based on Documented Received by Dispatch Center Time CY2022

Table 7 displays time intervals for median, average, and 90th percentile by Minnesota County for 911 ground ambulance responses. This was calculated using the interval between the call received by the dispatch center, which depending on jurisdiction may or may not be the same as the PSAP time from table 6 and the time that the ambulance arrived on scene. The validity rate was calculated by dividing the number of responses with a dispatch center time by the total number of ground ambulance responses. Counties that had a validity rate of less than 30% do not have their time data displayed, as there is insufficient data to make it reliable and valid.

County	Responses with Valid Dispatch Center Notified Time	Number of 911 Ground Ambulance Responses	Dispatch Center Time Validity Rate	Median Dispatch Center Notified to Scene Time	Average Dispatch Center Notified to Scene Time	90th Percentile Dispatch Center Notified to Scene Time
Aitkin	822	1,481	55.50%	7	10.14	21
Anoka	28,794	29,758	96.76%	9	10.93	18
Becker	200	3,169	6.31%			
Beltrami	166	5,763	2.88%			
Benton	2,246	2,262	99.29%	9	11.21	21
Big Stone	22	344	6.40%			
Blue Earth	5,411	5,982	90.45%	8	11.47	17
Brown	1,005	1,434	70.08%	6	10.51	15
Carlton	320	1,842	17.37%			
Carver	6,414	6,477	99.03%	8	8.95	15
Cass	2,727	4,242	64.29%	14	15.35	27
Chippewa	45	1,089	4.13%			
Chisago	4,505	4,614	97.64%	11	12.94	21
Clay	30	5,388	0.56%			
Clearwater	2	661	0.30%			
Cook	108	416	25.96%			
Cottonwood	631	944	66.84%	8	9.06	12.6
Crow Wing	5,478	6,508	84.17%	9	11.61	19
Dakota	35,231	35,715	98.64%	8	8.58	13
Dodge	1,207	1,525	79.15%	13	14.18	21

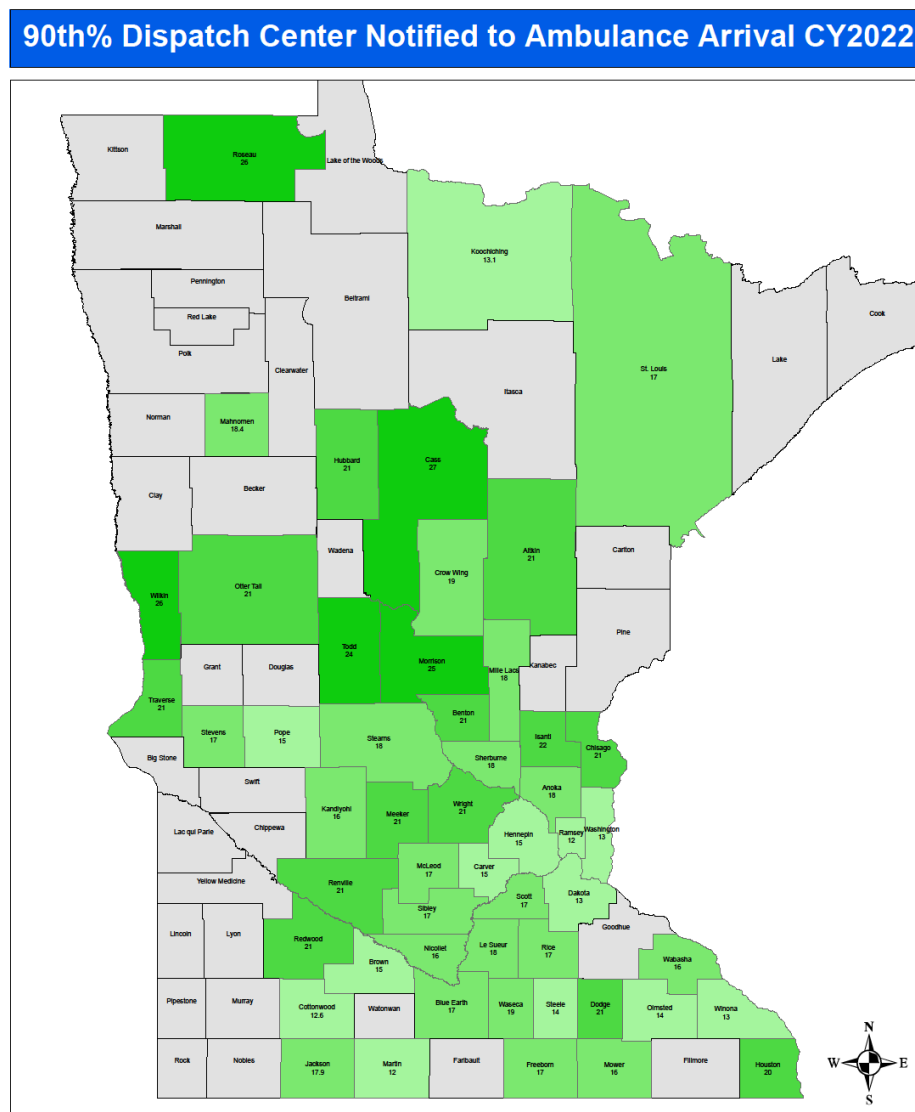
Douglas	340	3,032	11.21%			
Faribault	139	1,472	9.44%			
Fillmore	138	1,986	6.95%			
Freeborn	3,215	3,339	96.29%	7	13.37	17
Goodhue	518	4,542	11.40%			
Grant	17	435	3.91%			
Hennepin	125,542	144,008	87.18%	8	9.49	15
Houston	758	1,312	57.77%	11	12.48	20
Hubbard	1,791	1,845	97.07%	10	11.58	21
Isanti	3,249	3,363	96.61%	11	14.13	22
Itasca	700	4,848	14.44%			
Jackson	252	677	37.22%	11	12.03	17.9
Kanabec	31	1,607	1.93%			
Kandiyohi	2,801	3,553	78.83%	7	10.23	16
Kittson	10	311	3.22%			
Koochiching	465	1,164	39.95%	6	8.37	13.1
Lac qui Parle	33	435	7.59%			
Lake	13	1,035	1.26%			
Lake of the Woods	18	349	5.16%			
Le Sueur	1,266	1,695	74.69%	10	11.42	18
Lincoln	47	367	12.81%			
Lyon	48	1,854	2.59%			
Mahnomen	363	903	40.20%	8	9.51	18.4
Marshall	46	544	8.46%			
Martin	1,459	2,069	70.52%	5	12.32	12
McLeod	2,667	2,856	93.38%	8	9.99	17
Meeker	1,310	1,610	81.37%	9	14.04	21
Mille Lacs	1,919	3,264	58.79%	9	11.15	18
Morrison	2,381	2,573	92.54%	9	13.48	25
Mower	3,022	3,668	82.39%	7	10.89	16
Murray	87	556	15.65%			
Nicollet	2,094	2,148	97.49%	8	9.50	16
Nobles	4	1,329	0.30%			

Norman	6	443	1.35%			
Olmsted	17,688	18,217	97.10%	8	9.55	14
Otter Tail	2,331	3,973	58.67%	8	10.01	21
Pennington	2	1,090	0.18%			
Pine	67	3,372	1.99%			
Pipestone	93	834	11.15%			
Polk	501	2,874	17.43%			
Pope	980	997	98.29%	7	8.22	15
Ramsey	60,119	60,799	98.88%	6	7.38	12
Red Lake	14	227	6.17%			
Redwood	982	1,608	61.07%	8	11.53	21
Renville	408	1,105	36.92%	13	14.66	21
Rice	4,420	4,478	98.70%	8	10.36	17
Rock	2	668	0.30%			
Roseau	410	1,086	37.75%	11	12.80	26
Scott	8,092	9,628	84.05%	9	10.94	17
Sherburne	7,316	7,365	99.33%	10	11.02	18
Sibley	543	935	58.07%	8	9.30	17
St. Louis	16,155	23,353	69.18%	8	10.15	17
Stearns	12,679	13,827	91.70%	8	10.61	18
Steele	3,124	3,472	89.98%	7	9.02	14
Stevens	502	505	99.41%	9	10.22	17
Swift	52	664	7.83%			
Todd	642	1,657	38.74%	10	14.56	24
Traverse	120	258	46.51%	8	10.80	21
Wabasha	1,009	1,675	60.24%	6	8.37	16
Wadena	84	1,411	5.95%			
Waseca	1,196	1,379	86.73%	8	10.16	19
Washington	19,944	20,085	99.30%	7	8.43	13
Watsonwan	44	661	6.66%			
Wilkin	100	272	36.76%	14	15.20	26
Winona	2,910	3,601	80.81%	7	8.33	13
Wright	8,465	9,741	86.90%	11	13.04	21

Yellow Medicine	40	776	5.15%			
No County Identified	2,012	2,447	82.22%	11	12.42	21
Statewide	425,159	529,846	80.24%	8	9.73	16

Map 5 90th Percentile Dispatch Center Notified to Ambulance Arrival [Ground Ambulances Only] (Emergency Records) CY2022

Map 5 displays the 90th percent time from dispatch center notified to ambulance on scene interval by county for CY2022. Counties, that had less than a 30% validity rate in table 7 have had their values suppressed.



90th% Dispatch Center Notified to Ambulance Arrival

0.01-15	19.01-22
15.01-19	22.01-27
Insufficient Data	

Prepared by DJF 02/05/2023
Source: MNSTAR

Table 8 Response Timetable by County Based on Documented Time Unit Notified by Dispatch CY2022

Table 8 displays time intervals for median, average, and 90th percentile by Minnesota County for 911 ground ambulance responses. This was calculated using the interval between the time that the unit was notified by dispatch and the time that the ambulance arrived on scene. Also included are the number of records that have a valid dispatch center time documented. All submitted records had a date/time that the unit was notified by dispatch, so all counties have a validity rate of 100%.

County	Number of EMS Responses	Responses with Valid Unit Notified Time	Unit Notified Validity Rate	Median Unit Notified to Scene Time	Average Unit Notified to Scene Time	90th Percentile Unit Dispatched to Scene Time
Aitkin	1,481	1,481	100.00%	12	12.71	24
Anoka	29,758	29,758	100.00%	8	9.26	16
Becker	3,169	3,169	100.00%	7	9.73	21
Beltrami	5,763	5,763	100.00%	7	9.38	17
Benton	2,262	2,262	100.00%	9	10.61	20
Big Stone	344	344	100.00%	11	13.77	24.5
Blue Earth	5,982	5,982	100.00%	7	8.75	16
Brown	1,434	1,434	100.00%	6	7.86	14
Carlton	1,842	1,842	100.00%	8	9.79	19
Carver	6,477	6,477	100.00%	7	7.91	14
Cass	4,242	4,242	100.00%	12	13.16	25
Chippewa	1,089	1,089	100.00%	9	10.85	18
Chisago	4,614	4,614	100.00%	10	11.51	19.6
Clay	5,388	5,388	100.00%	7	9.04	16
Clearwater	661	661	100.00%	9	11.75	25
Cook	416	416	100.00%	14	18.33	34.1
Cottonwood	944	944	100.00%	8	9.01	14
Crow Wing	6,508	6,508	100.00%	9	10.24	19
Dakota	35,715	35,715	100.00%	7	7.44	12
Dodge	1,525	1,525	100.00%	10.5	10.95	17

Douglas	3,032	3,032	100.00%	7	9.55	17
Faribault	1,472	1,472	100.00%	8	10.47	18
Fillmore	1,986	1,986	100.00%	10	11.49	18.1
Freeborn	3,339	3,339	100.00%	6	7.68	14
Goodhue	4,542	4,542	100.00%	7	8.70	16
Grant	435	435	100.00%	12	13.75	23.4
Hennepin	144,008	144,008	100.00%	7	7.62	13
Houston	1,312	1,312	100.00%	10	11.17	18
Hubbard	1,845	1,845	100.00%	9	10.81	20
Isanti	3,363	3,363	100.00%	10	11.54	20
Itasca	4,848	4,848	100.00%	9	11.89	22
Jackson	677	677	100.00%	9	10.29	17
Kanabec	1,607	1,607	100.00%	8	9.88	18
Kandiyohi	3,553	3,553	100.00%	7	8.33	15
Kittson	311	311	100.00%	13	16.96	30.9
Koochiching	1,164	1,164	100.00%	7	15.10	28
Lac qui Parle	435	435	100.00%	9	16.22	30
Lake	1,035	1,035	100.00%	8	12.58	28
Lake of the Woods	349	349	100.00%	17	21.63	44
Le Sueur	1,695	1,695	100.00%	9	10.06	17
Lincoln	367	367	100.00%	11	13.66	21
Lyon	1,854	1,854	100.00%	6	7.87	15
Mahnomen	903	903	100.00%	9	11.24	22
Marshall	544	544	100.00%	10	14.21	28.9
Martin	2,069	2,069	100.00%	6	9.62	17
McLeod	2,856	2,856	100.00%	7	8.39	16
Meeker	1,610	1,610	100.00%	9	10.45	18
Mille Lacs	3,264	3,264	100.00%	10	11.54	20
Morrison	2,573	2,573	100.00%	8	11.06	23
Mower	3,668	3,668	100.00%	6	8.11	15
Murray	556	556	100.00%	10	12.32	21
Nicollet	2,148	2,148	100.00%	8	8.29	14
Nobles	1,329	1,329	100.00%	7	9.05	17

Norman	443	443	100.00%	17	16.27	26
Olmsted	18,217	18,217	100.00%	7	7.62	13
Otter Tail	3,973	3,973	100.00%	9	11.15	22
Pennington	1,090	1,090	100.00%	5	7.38	13
Pine	3,372	3,372	100.00%	11	12.69	23
Pipestone	834	834	100.00%	9	9.84	16
Polk	2,874	2,874	100.00%	8	10.00	17.6
Pope	997	997	100.00%	7	8.43	15
Ramsey	60,799	60,799	100.00%	5	6.24	10
Red Lake	227	227	100.00%	9	12.72	25
Redwood	1,608	1,608	100.00%	8	10.21	19
Renville	1,105	1,105	100.00%	12	13.24	20
Rice	4,478	4,478	100.00%	7	8.93	16
Rock	668	668	100.00%	10	11.12	20
Roseau	1,086	1,086	100.00%	9	13.46	27
Scott	9,628	9,628	100.00%	8	8.86	15
Sherburne	7,365	7,365	100.00%	9	10.03	17
Sibley	935	935	100.00%	7	8.53	16
St. Louis	23,353	23,353	100.00%	8	9.56	17
Stearns	13,827	13,827	100.00%	8	9.44	18
Steele	3,472	3,472	100.00%	6	7.73	13
Stevens	505	505	100.00%	8.5	10.18	17
Swift	664	664	100.00%	10	12.03	20
Todd	1,657	1,657	100.00%	9	11.33	21
Traverse	258	258	100.00%	7	10.21	19
Wabasha	1,675	1,675	100.00%	6	8.78	18
Wadena	1,411	1,411	100.00%	7	9.96	20
Waseca	1,379	1,379	100.00%	7	9.20	18
Washington	20,085	20,085	100.00%	6	6.90	12
Watsonwan	661	661	100.00%	9	12.72	22
Wilkin	272	272	100.00%	10.5	13.27	25.1
Winona	3,601	3,601	100.00%	7	8.20	15
Wright	9,741	9,741	100.00%	10	11.40	20

Yellow Medicine	776	776	100.00%	7	8.77	16
No County Identified	2,447	2,447	100.00%	10	11.31	19
Statewide	529,846	529,846	100.00%	7	8.51	15

Figure 10 Percent Distribution of Unit Notified to Scene Time in Minutes Emergency Records, Ground Ambulances CY 2022

Figure 9 displays the percentage of emergency record type calls that are responded to in each minute of elapsed time. 74.81% of emergency calls for service received a response time of 10 minutes or less. Response time is measured from the time that the unit was notified by dispatch to the time that the unit arrived on scene. Table 8 provides detailed county level information for the data displayed here.

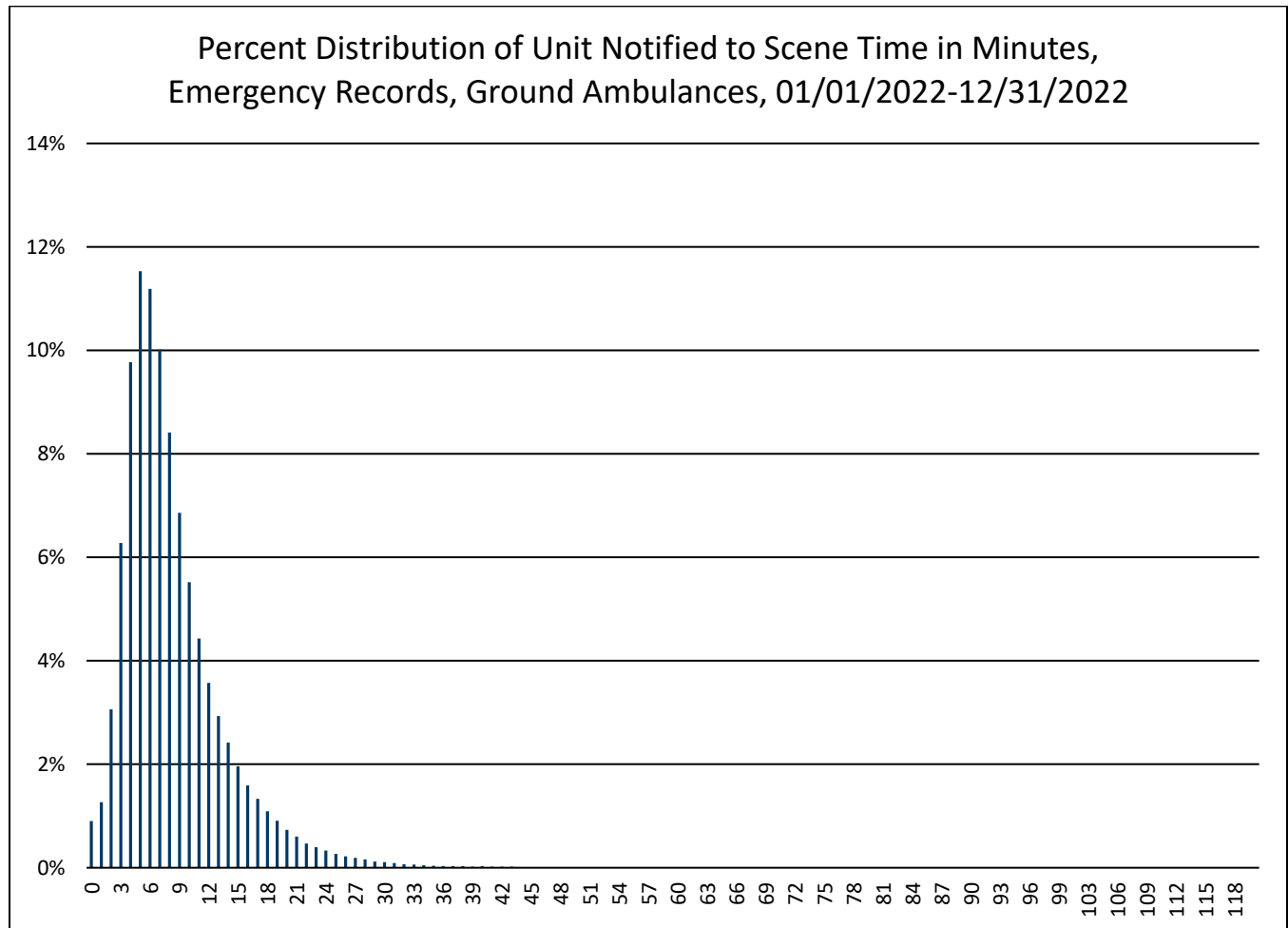


Table 9 Mobilization Time [Ground Ambulances] (Emergency Records) CY2022

Table 9 displays time intervals for median, average, and 90th percentile by Minnesota County for 911 ground ambulance responses. Mobilization time is calculated as the difference between the time that the unit was notified by dispatch, to the time that the unit reported being en route.

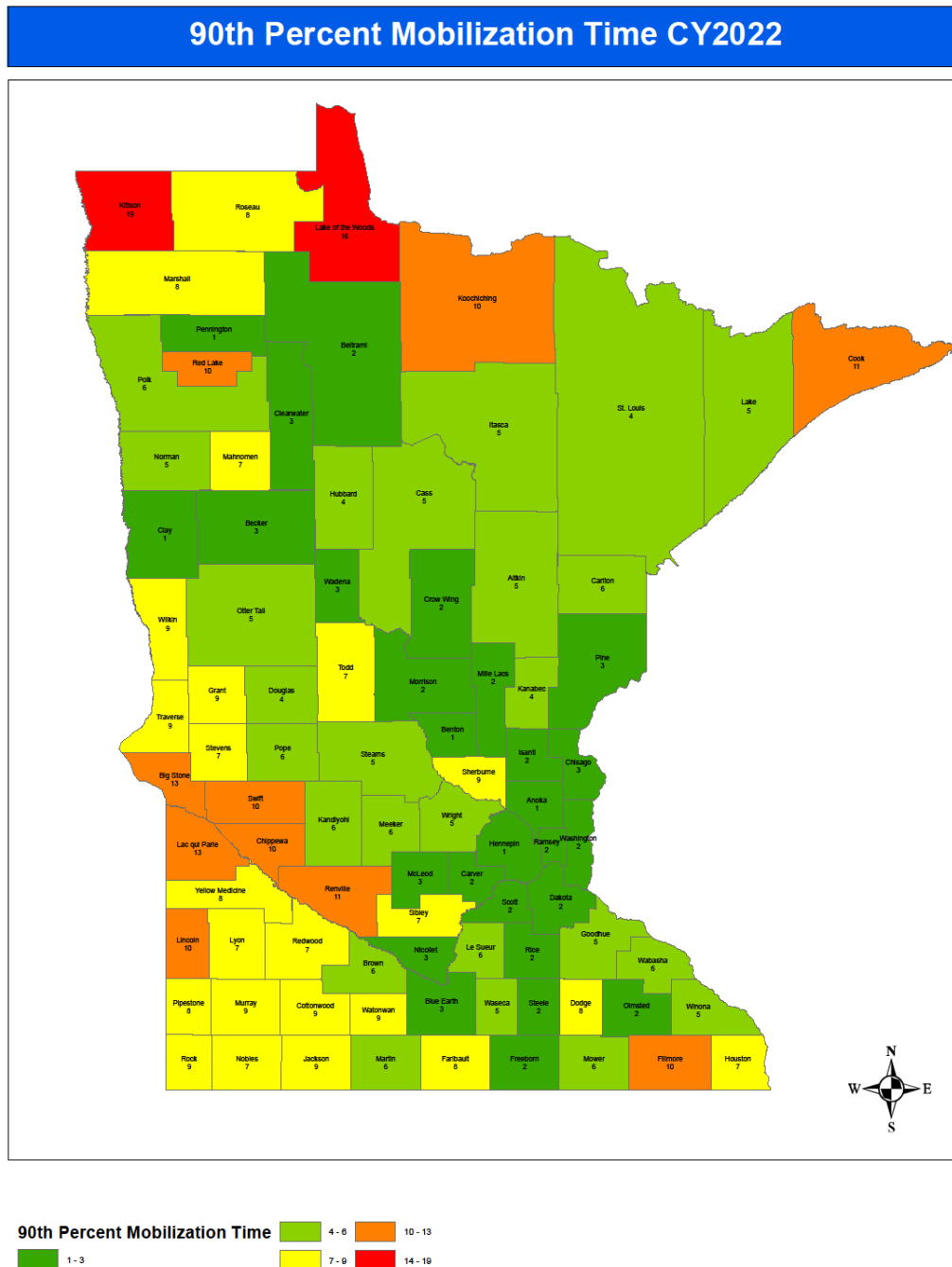
County	Median Mobilization Time	Average Mobilization Time	90th Percentile Mobilization Time
Aitkin	1	2.25	5
Anoka	0	0.65	1
Becker	0	1.10	3
Beltrami	1	1.26	2
Benton	0	0.57	1
Big Stone	6	7.30	13
Blue Earth	1	1.39	3
Brown	2	2.84	6
Carlton	2	2.68	6
Carver	1	0.93	2
Cass	1	2.11	5
Chippewa	5	5.38	10
Chisago	1	1.18	3
Clay	0	0.67	1
Clearwater	0	1.15	3
Cook	4	5.47	11
Cottonwood	6	5.74	9
Crow Wing	1	1.01	2
Dakota	1	0.94	2
Dodge	3	4.02	8
Douglas	1	1.89	4
Faribault	4	4.91	8
Fillmore	5	5.65	10
Freeborn	1	0.89	2
Goodhue	2	2.52	5
Grant	5	5.52	9

Hennepin	0	0.49	1
Houston	2	3.30	7
Hubbard	1	1.79	4
Isanti	1	1.00	2
Itasca	2	2.62	5
Jackson	5	5.35	9
Kanabec	2	2.25	4
Kandiyohi	2	2.75	6
Kittson	7	9.28	19
Koochiching	2	5.10	10.2
Lac qui Parle	5	7.11	13
Lake	3	3.50	5
Lake of the Woods	6	9.33	15.7
Le Sueur	3	3.03	6
Lincoln	5	6.00	10
Lyon	2	2.91	7
Mahnomen	4	4.28	7
Marshall	4	4.66	8
Martin	1	2.08	6
McLeod	1	1.56	3
Meeker	1	1.68	6
Mille Lacs	1	1.24	2
Morrison	1	1.02	2
Mower	1	1.84	6
Murray	5	6.04	9
Nicollet	1	1.31	2.7
Nobles	3	3.98	7
Norman	3	2.92	5
Olmsted	1	0.87	2
Otter Tail	2	2.35	5
Pennington	0	0.56	1
Pine	2	1.58	3
Pipestone	5	4.96	8

Polk	2	2.87	6
Pope	2	2.37	6
Ramsey	1	1.26	2
Red Lake	5	5.68	10
Redwood	3	3.80	7
Renville	6	6.32	11
Rice	1	0.95	2
Rock	3	3.90	9
Roseau	3	4.72	8
Scott	1	0.92	2
Sherburne	1	2.09	9
Sibley	3	3.27	7
St. Louis	1	1.61	4
Stearns	0	1.20	5
Steele	1	1.12	2
Stevens	3	3.94	7
Swift	6	6.65	10
Todd	4	3.73	7
Traverse	4	4.93	9
Wabasha	2	2.73	6
Wadena	1	1.07	3
Waseca	1	2.17	5
Washington	0	0.61	2
Watonwan	5	5.51	9
Wilkin	3	4.49	9
Winona	1	1.87	5
Wright	1	1.93	5
Yellow Medicine	4	4.24	8
No County Identified	1	1.67	4
Statewide	1	1.27	3

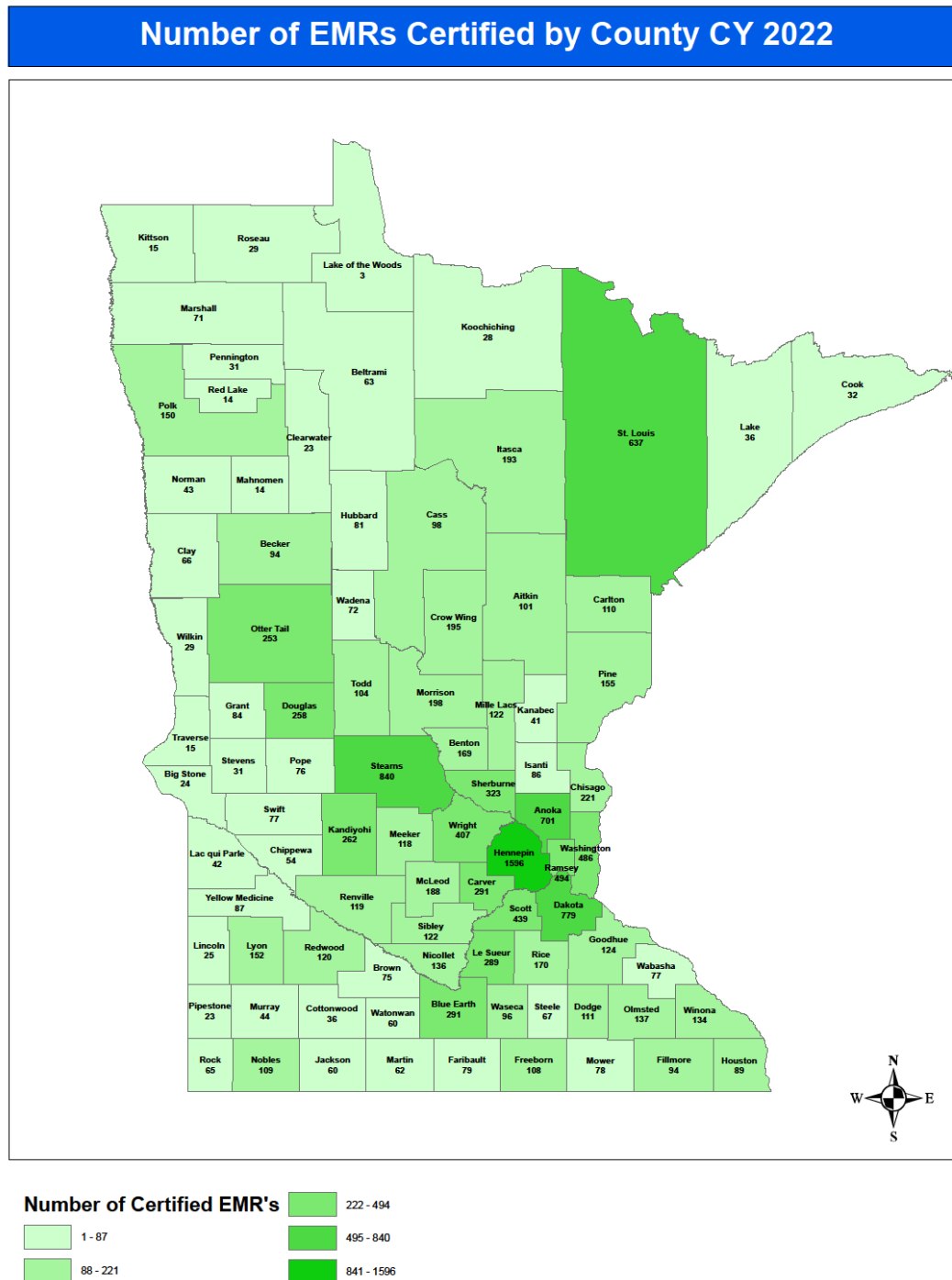
Map 7 90th Percent Mobilization Time [Ground Ambulances] (Emergency Records)

Map 7 displays for emergency response call types only, the 90th percent mobilization time interval for ground ambulances by county for CY2022.



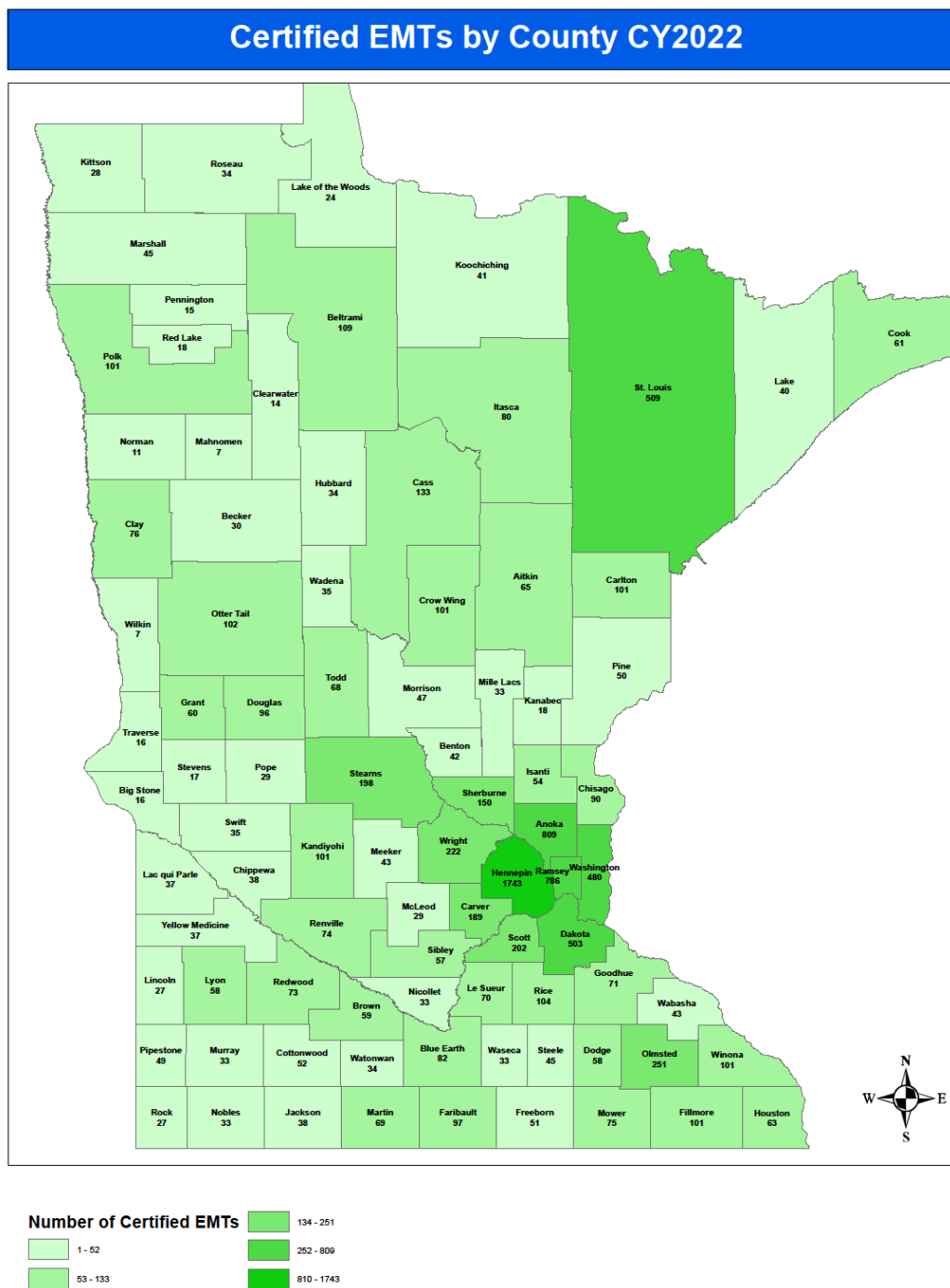
Map 8 Number of EMRs Certified by County CY2022

Map 8 displays by Minnesota County the number of certified EMR's as of the end of CY2022.



Map 9 Number of EMTs Certified by County CY2022

Map 9 displays the number of certified EMTs by Minnesota county at the end of CY2022.



Map 10 Number of EMS Provider Expirations During CY2022 All Certification Levels

Map 10 displays the number of credentialed EMS providers at all levels (EMR, EMT, AEMT, Paramedic) that allowed their credential to expire during CY2022

