



FY22 ANNUAL REPORT

Summary

- FY22 call volume 1695, an increase of 158 calls from FY21.
- At the beginning of the fiscal year we were experiencing an unprecedented staffing shortage. Over a 30 day period in July and August we had 5 employees resign or retire from EMS. We conducted a wage survey with other services in the area which showed our wages were not competitive. Also, our full time employees had worked 2491 hours of overtime beyond their normal 8 hours of OT per week in FY21 to cover the schedule. A plan was developed which the Board of Supervisors approved. The retention and recruiting plan included a \$3 increase in the base wage, \$0.15 per year longevity, and a \$3000.00 signing bonus. As of July 2022 we were nearly fully staffed with just one full time position open.
- An EMT class was held in Williamsburg in the fall/winter. This added a total of 6 new EMS providers in Iowa County and has drastically improved our First Responder Teams response rates. In the months since the EMT class our First Responder Teams response rates have averaged 84%. Prior to the EMT class their response rate was averaging 61%.
- A generator was installed at the Marengo Station with a grant from the Iowa County Community Foundation.
- COVID-19 transports continued throughout FY22. There were a total of 84 patients transported with known Covid or Covid like symptoms.
- We were well stocked with PPE for the year, however we are now seeing supply chain issues with routine medical supplies and medications. We have learned to adapt our policies and protocols to available supplies.
- A new Life Line Ambulance was ordered in December 2021. We are hopeful that it will arrive before December 2022.
- As part of Service Area 5 Healthcare Coalition (HCC) we volunteered to develop an EMS Advisory Council. Two services in the HCC were required to develop Advisory Councils to meet the EMS System Development Grant requirements.
- In April 2022 we were notified that we were selected for a Medicare Audit. This is still ongoing and has been very time consuming due to the extra chart review.
- We also implemented random drug and alcohol testing policy in FY22. The County Roads Department and Transportation Department already had a policy in place, and we felt it was a standard the EMS Department should have as well.

Challenges

- Managing our preparedness and response to infectious diseases. How we manage staffing issues with employees are sick.
- Recruiting and retention of both volunteer and paid EMS providers.
- Facilities and Staffing: As volumes increase we have to keep more supplies on hand and along with maintaining additional PPE, we have limited space for storage. Along the same line we have to make sure we have enough ambulances staffed to ensure a prompt response to calls for service.

FY22 Financial Summary

- Actual Expenses: \$1,812,028
- Actual Revenues: \$1,137,344
- Difference: \$674,684
- Budgeted Expenses: \$1,931,855
- Budgeted Revenues: \$1,000,777
- Difference: \$931,078

AMBULANCE PERSONNEL

FY21

Paramedic: 20
 Advanced EMT: 0
 EMT: 3
 Full Time: 14
 Part Time: 9
 Total: 23

FY22

Paramedic: 21
 Advanced EMT: 0
 EMT: 6
 Full Time: 16
 Part Time: 11
 Total: 27

AMBULANCE CALL VOLUME

	Transports/Billable		
	Dispatched Calls	Calls	Cancels/Refusals
FY21 Total	1537	1251	277
FY21 MO Avg.	128	104.25	23.08
FY22 Total	1695	1308	387
FY22 MO Avg.	141.25	109	32.25

AMBULANCE TIMES ANALYSIS

	Marengo	Williamsburg	Totals
Avg. Chute Time (Day)	Goal: 3 minutes		2 min. 52 s
Avg. Chute Time (Night)	Goal: 4 minutes		3 min. 30 s
Avg. Chute Time	2 min. 59 s	3 min. 11 s	3 min. 05 s
Avg. Response Time	11 min. 13 s	12 min. 36 s	11 min. 53 s
Avg. Scene Time	14 min. 58 s	16 min. 0 s	15 min. 28 s
Avg. Scene Time (Trauma)	15 min. 28 s	17 min. 05 s	16 min. 32 s
Avg. Transport Time	27 min. 38 s	30 min. 41 s	28 min. 16 s

TIMES COMPARED TO PREVIOUS YEARS

	Goal	FY20	FY21	FY22
Avg. Chute Time	3 min. day / 4 min. night	2 min. 37 s	3 min. 06 s	3 min. 05 s
Avg. Response Time	15 min.	11 min. 5 s	11 min. 53 s	11 min. 53 s
Avg. Scene Time	None	15 min. 15 s	16 min. 24 s	15 min. 28 s
Avg. Scene Time (Trauma)	15 min.	14 min. 46 s	18 min. 31 s	16 min. 32 s
Avg. Transport Time	None	29 min. 17 s	29 min. 01 s	28 min. 16 s

VOLUNTEER QRS PERSONNEL

	Paramedic	AEMT	EMT	EMR	Driver	Total
Amana			4	2	2	8
Ladora			1	0	0	1
Millersburg			2	3	0	5
North English	1		5	0	0	6
Victor	1		5	1	4	10
Williamsburg	1	0	3	2	0	6

	<u>FY22</u>	<u>FY21</u>	<u>FY20</u>	<u>FY19</u>	<u>FY18</u>	<u>FY17</u>	<u>FY16</u>	<u>FY15</u>
Total Volunteers:	36	32	37	36	40	39	47	51

QRS TIMES AND RESPONSES

	# of Responses	# of Requests	Response Rate %	Avg. Response Time
Amana	51	128	40%	13 min. 16 s.
Ladora	22	44	50%	14 min. 37 s.
Millersburg	42	50	84%	7 min. 12 s.
North English	132	153	86%	8 min. 22 s.
Victor	70	90	78%	10 min. 0 s.
Williamsburg	81	98	83%	10 min 03 s.
County-Wide	398	563	71%	9 min. 58 s.

VEHICLES

	Total Mileage	FY22 Mileage	FY22 Maintenance Costs	Lifetime Maintenance Costs	Lifetime per mile Maintenance costs
2020 Ford	52,226	29,463	\$3,007.87	\$3,119.70	\$0.06
2018 Ford	176,621	53,724	\$6,278.63	\$10,400.43	\$0.06
2016 Ford	169,690	9630	\$1,704.43	\$23,771.83	\$0.14
2013 Chevy	177,293	4192	\$405.51	\$16,700.31	\$0.09
2020 Explorer	6916	2332	\$58.30	\$98.19	\$0.01

MAJOR VEHICLE REPAIRS

2018 Ford

- Valve Spring, Catalytic Converter, Water Pump, and Front Wheel Bearings

2020 Ford

- New Transmission, Front Springs (both warranty)

2013 Chevy

- New Brakes

NEW EQUIPMENT

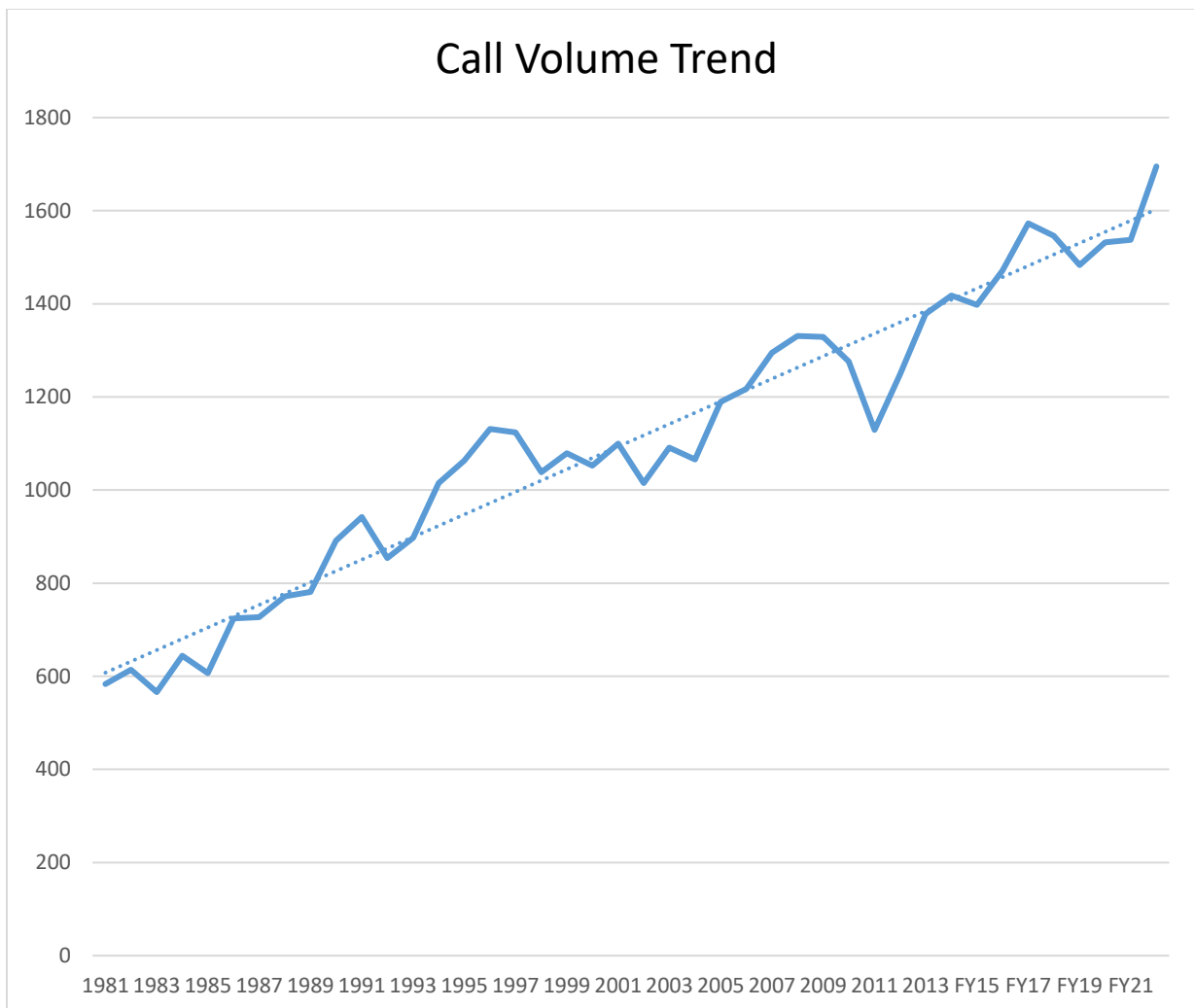
- Generator for Marengo Station
- Replaced computer in 2020 Ford

FY22 TRANSPORT (AMBULANCE) GOALS

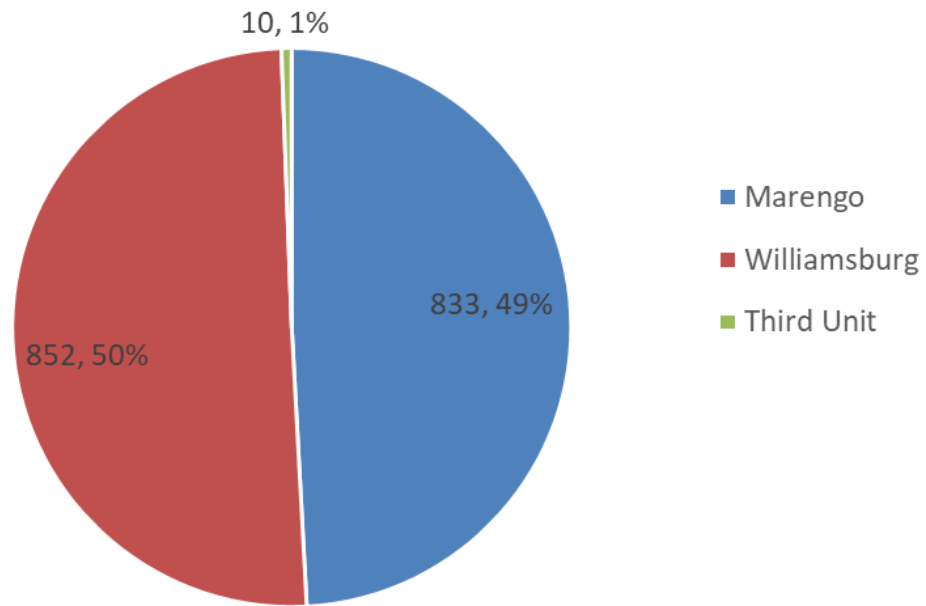
- Maintain patient satisfaction at 96% or greater measured by patient surveys: 98.08%.
- Maintain a chute time (page to out the door) of 3 minutes or less from 6:00AM to 6:00PM on 85% on all 911 Emergencies: 86.25%.
- Maintain a chute time (page to out the door) of 4 minutes or less from 6:00PM to 6:00AM on 85% on all 911 Emergencies: 84.58%.
- Documented Stroke Assessment on all suspected Stroke or TIA patients. 100%.

FY22 Community Events

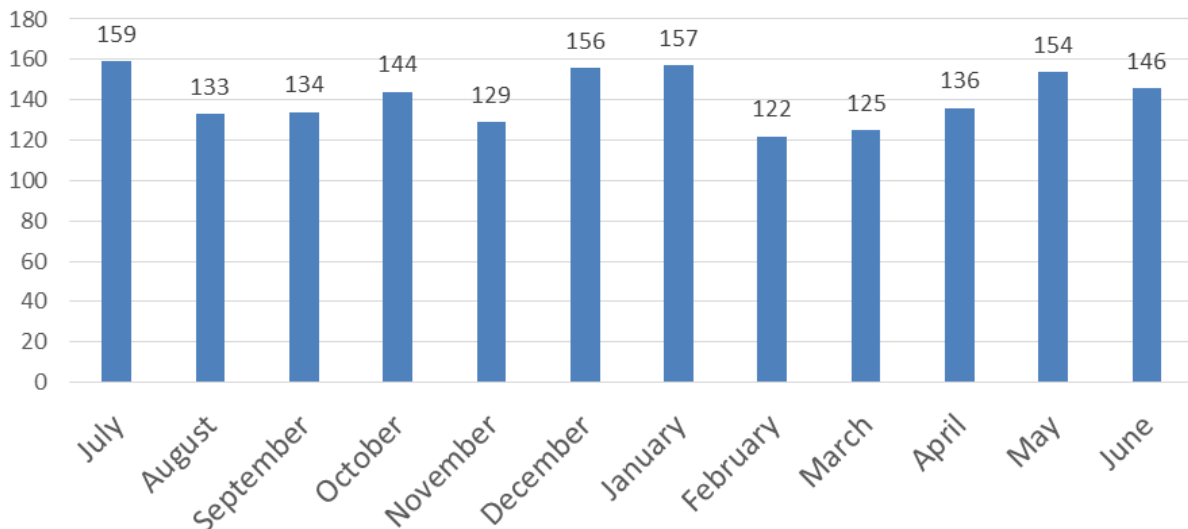
Description	Personnel Hours
Marengo July 3rd Celebration	17
Williamsburg July 4th Celebration	22
Iowa County Fair	96
Football Games	12
Tractor Pull	8
EV Cross Country Meet	6
CPR for IV Seniors	2
Kids Gateway Fishing Tournament	14
Rodeo	8
Total	185

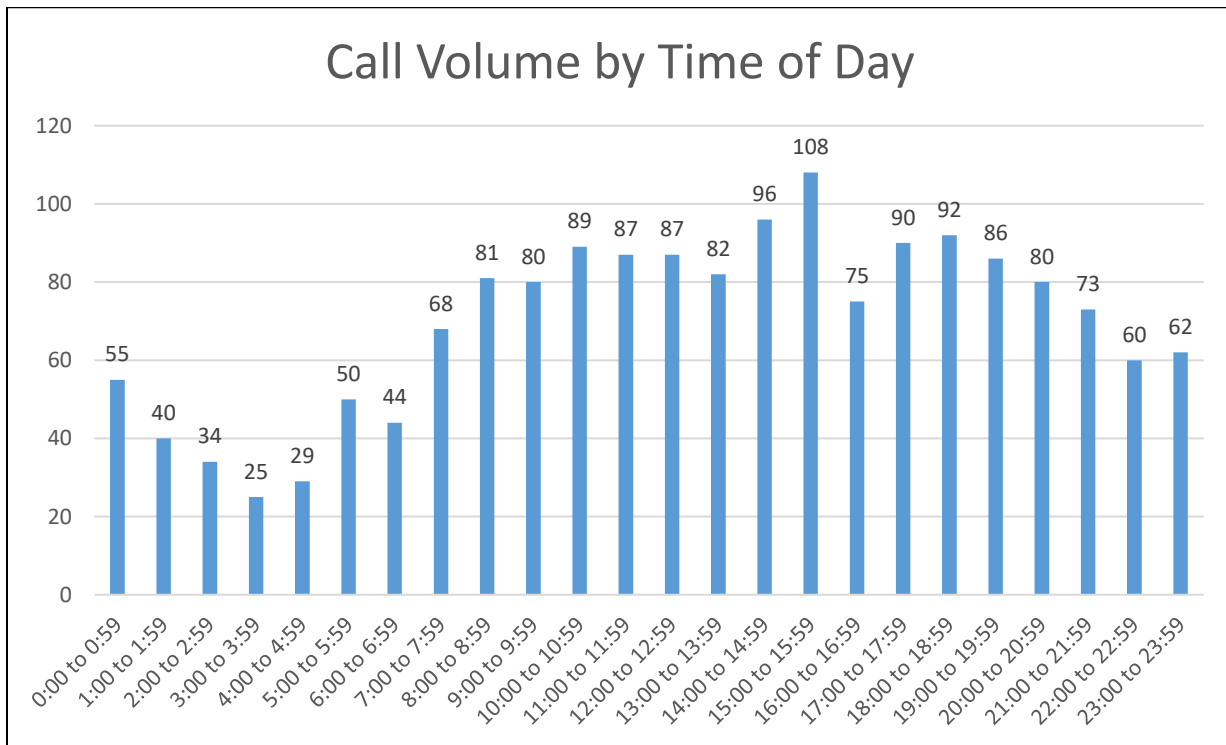
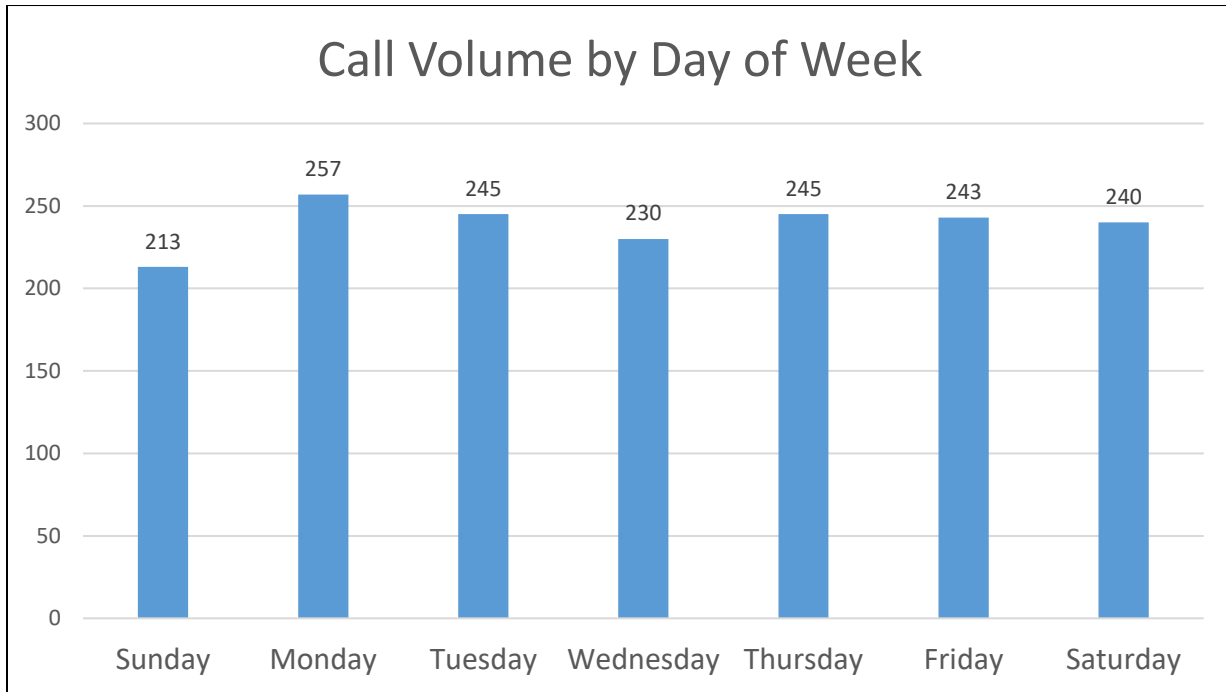


Dispatched Calls by Unit FY22

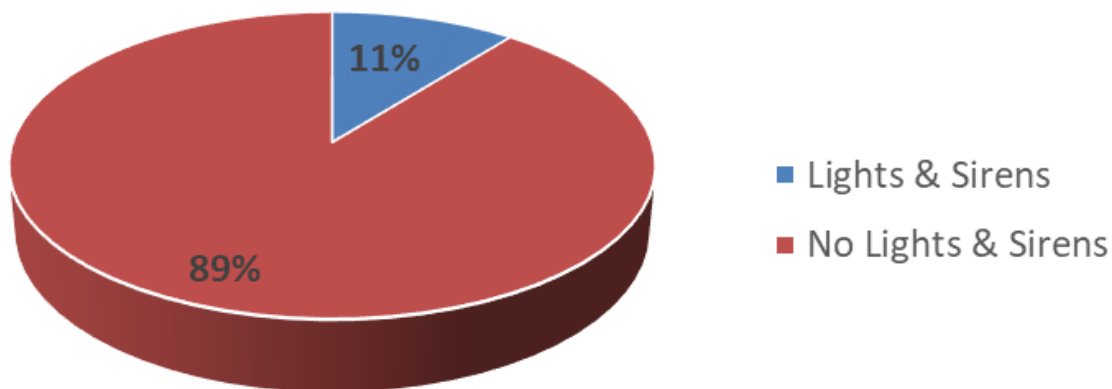


FY22 Monthly Call Volume

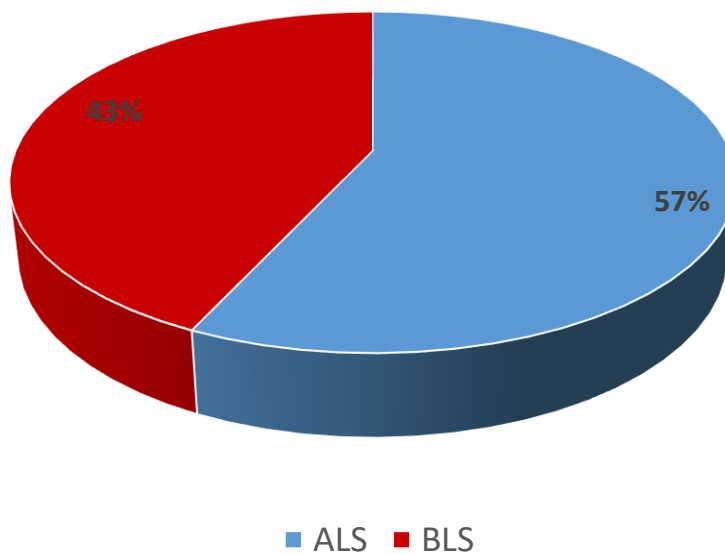




Transport Priority



Advanced Life Support vs. Basic Life Support



Disposition Type Breakdown

Assist, Agency	1	0.1%
Assist, Public	15	0.9%
Assist, Unit	2	0.1%
Cancelled (No Patient Contact)	32	1.9%
Cancelled (Prior to Arrival at Scene)	64	3.7%
Cancelled on Scene/No Patient Found	8	0.5%
Patient Dead on Scene - No Resuscitation Attempted (With Transport)	1	0.1%
Patient Dead on Scene - No Resuscitation Attempted (Without Transport)	14	0.8%
Patient Dead on Scene - Resuscitation Attempted (Without Transport)	5	0.3%
Patient Evaluated, No Treatment/Transport Required	77	4.5%
Patient Refused Evaluation/Care (Without Transport)	97	5.7%
Patient Treated, Released (AMA)	56	3.3%
Patient Treated, Released (per protocol)	13	0.8%
Patient Treated, Transferred Care to Another EMS Professional	0	0.0%
Patient Treated, Transported by Law Enforcement	5	0.3%
Patient Treated, Transported by Private Vehicle	9	0.5%
Standby - Public Safety, Fire, or EMS Operational Support Provided	7	0.4%
Transported Lights/Siren	137	8.0%
Transported Lights/Siren, Downgraded	0	0.0%
Transported No Lights/Siren	1,170	68.2%
Transported No Lights/Siren, Upgraded	2	0.1%
Total	1715	100.0%

Transport Destination Summary

Destination Name	Total patients transported	Total transferred from CMH
BELLE PLAINE NURSING & REHAB	3	3
BROOKHAVEN	1	1
COLONIAL MANOR OF AMANA	1	
COMPASS MEMORIAL HOSPITAL	365	
ENGLISH VALLEY CARE CENTER	1	1
GRINNELL REGIONAL MEDICAL CENTER	7	1
HIGHLAND RIDGE	9	5
IOWA LUTHERAN HOSPITAL	1	1
KEOKUK COUNTY HEALTH CENTER	2	
KEYSTONE CARE CENTER	1	1
MERCY HOSPITAL - IOWA CITY	183	13
MERCY MEDICAL CENTER - CEDAR RAPIDS	56	1
MERCY ONE - DES MOINES	1	1
MERCY ONE - WATERLOO	1	
PATIENT'S HOME	3	2
ROSE HAVEN NURSING HOME	20	18
ST. LUKES	138	57
UNIVERSITY OF IOWA HOSPITALS & CLINICS	487	101
VA HOSPITAL - IOWA CITY	28	6
Totals	1308	208

PRIMARY IMPRESSION BREAKDOWN		
Generalized Weakness	107	6.7%
No Complaints or Injury/Illness Noted	99	6.2%
Chest Pain / Discomfort	73	4.6%
Abdominal Pain	65	4.1%
Shortness of breath	64	4.0%
Altered Mental Status	48	3.0%
Behavioral/psychiatric episode	48	3.0%
Pain (Non-Traumatic)	48	3.0%
Injury of Hip	45	2.8%
Injury	41	2.6%
Injury of Head	38	2.4%
Stroke	38	2.4%
Syncope / Fainting	35	2.2%
Acute Respiratory Distress (Dyspnea)	34	2.1%
Cardiac arrhythmia/dysrhythmia	32	2.0%
Back Pain	30	1.9%
Nausea	27	1.7%
Seizures	27	1.7%
Injury of Face	24	1.5%
Anxiety reaction/Emotional upset	21	1.3%
Injury of Lower Leg	21	1.3%
Acute abdomen	19	1.2%
Fever	19	1.2%
COVID-19 - Confirmed by testing	17	1.1%
Injury of Shoulder or Upper Arm	17	1.1%
Alcohol use	16	1.0%
Confusion/Delirium	16	1.0%
Laceration/Abrasion/Hematoma (minor surface trauma)	16	1.0%
Sepsis/Septicemia	16	1.0%

PRIMARY IMPRESSION BREAKDOWN		
Vomiting	15	0.9%
Dizziness	14	0.9%
Injury of Wrist, Hand, or Fingers	14	0.9%
Cardiac arrest	13	0.8%
Diabetic Hypoglycemia	13	0.8%
Injury of Neck	13	0.8%
Chest Pain, Other (Non-Cardiac)	12	0.8%
Diabetic Hyperglycemia	12	0.8%
Headache	12	0.8%
Hypotension	12	0.8%
Urinary Tract Infection (UTI)	12	0.8%
Chronic Obstructive Pulmonary Disease (COPD)	11	0.7%
Obvious Death	11	0.7%
Suicidal Ideation	10	0.6%
Gastrointestinal hemorrhage	9	0.6%
Hypertension	9	0.6%
Pneumonia	9	0.6%
Hemorrhage	8	0.5%
Injury of Lower Back	8	0.5%
Injury of Thorax (Upper Chest)	8	0.5%
Renal Failure	8	0.5%
Suicide attempt	8	0.5%
Alcohol dependence with withdrawal	7	0.4%
Congestive heart failure (CHF)	7	0.4%
Dehydration	7	0.4%
Injury of Thigh (Upper Leg)	7	0.4%
Overdose - Unspecified	7	0.4%
Allergic Reaction	6	0.4%
COVID-19 - Exposure to confirmed patient	6	0.4%

PRIMARY IMPRESSION BREAKDOWN		
Injury of Ankle	6	0.4%
Non-ST elevation myocardial infarction (NSTEMI)	6	0.4%
Pelvic and Perineal Pain	6	0.4%
ST elevation myocardial infarction (STEMI)	6	0.4%
Burn	5	0.3%
Epistaxis	5	0.3%
Hypertensive crisis	5	0.3%
Injury of Elbow	5	0.3%
Patient assist only	5	0.3%
Respiratory disorder	5	0.3%
Respiratory Failure	5	0.3%
Asthma	4	0.3%
Cancer	4	0.3%
Cellulitis	4	0.3%
Fatigue	4	0.3%
Injury of Forearm	4	0.3%
Intestinal obstruction	4	0.3%
Kidney stones	4	0.3%
Need for continuous medical supervision	4	0.3%
Overdose - Alcohol	4	0.3%
Palpitations	4	0.3%
Poisoning / Drug Ingestion	4	0.3%
COVID-19 - Suspected - no known exposure	3	0.2%
Diarrhea	3	0.2%
Febrile Seizures	3	0.2%
Heat Exhaustion	3	0.2%
Malaise	3	0.2%
Orthostatic Hypotension	3	0.2%
Septic Shock	3	0.2%

PRIMARY IMPRESSION BREAKDOWN		
Skin infection	3	0.2%
Visual Disturbance	3	0.2%
Acute appendicitis	2	0.1%
Concussion	2	0.1%
Ear problem	2	0.1%
Edema	2	0.1%
Esophageal obstruction	2	0.1%
Eye Injury	2	0.1%
Hypothermia	2	0.1%
Influenza	2	0.1%
Injury of Abdomen	2	0.1%
Injury of Foot	2	0.1%
Injury of Pelvis	2	0.1%
Metabolic disorder	2	0.1%
Other stimulant related disorders	2	0.1%
Overdose - Other opioids	2	0.1%
Pneumothorax	2	0.1%
Pregnancy related conditions	2	0.1%
Preterm labor without delivery	2	0.1%
Pulmonary Edema, Acute	2	0.1%
Seizures with status epilepticus	2	0.1%
Spontaneous abortion (Miscarriage)	2	0.1%
Transient Cerebral Ischemic Attack (TIA)	2	0.1%
Vaginal Hemorrhage	2	0.1%
Acute Bronchospasm	1	0.1%
Amputation of limb	1	0.1%
Angina pectoris	1	0.1%
Cardiogenic shock	1	0.1%
Chemical burn	1	0.1%

PRIMARY IMPRESSION BREAKDOWN		
Chest pain on breathing	1	0.1%
Cough	1	0.1%
Eye Pain	1	0.1%
Gastro-esophageal reflux disease (GERD)	1	0.1%
Heatstroke and Sunstroke	1	0.1%
Hemothorax (Traumatic)	1	0.1%
Hyperkalemia	1	0.1%
Infectious Disease	1	0.1%
Injury of Ear	1	0.1%
Labor and delivery, uncomplicated	1	0.1%
Mental disorder	1	0.1%
Metabolic Shock	1	0.1%
Migraine	1	0.1%
Opioid related disorders	1	0.1%
Overdose - Acetaminophen	1	0.1%
Overdose - Amphetamine	1	0.1%
Overdose - Benzodiazepine	1	0.1%
Overdose - Methadone	1	0.1%
Pitting Edema	1	0.1%
Pregnancy with contractions	1	0.1%
Pulmonary Embolism	1	0.1%
Respiratory Arrest	1	0.1%
Respiratory Shock	1	0.1%
Smoke Inhalation	1	0.1%
Substance abuse	1	0.1%
Suffocation or Asphyxia	1	0.1%
Tracheostomy problem	1	0.1%

Medication Breakdown

Medication	Doses	% of Total
Fentanyl	182	27.20%
Zofran	146	21.82%
Nitro Spray	86	12.86%
Aspirin	51	7.62%
Duoneb	37	5.53%
Epinephrine 1:10	30	4.48%
Ketorolac	16	2.39%
Narcan	14	2.09%
Dextrose 50%	13	1.94%
Oral Glucose	11	1.64%
Valium	11	1.64%
Atropine	10	1.49%
Toradol	10	1.49%
Albuterol	6	0.90%
Solu-Medrol	6	0.90%
Other - Medication	5	0.75%
Epinephrine 1:1	4	0.60%
Ketamine	4	0.60%
Midazolam	4	0.60%
Nitro Infusion	4	0.60%
Levophed	3	0.45%
Diazepam	2	0.30%
Epinephrine Infusion	2	0.30%
Glucagon	2	0.30%
Heparin Infusion	2	0.30%
Lopressor	2	0.30%
Nitrostat	2	0.30%
Versed	2	0.30%
Adenosine	1	0.15%
Benadryl	1	0.15%

Call Volume by Zip Code Summary

