

## Mass Casualty Transport (MCT)



**SFFD**

**EMS AND COMMUNITY PARAMEDICINE**

**FIRE COMMISSION REPORT  
OCTOBER 2022**

**DEPUTY CHIEF SANDY TONG**

# EMS DIVISION

## Assistant Deputy Chief Niels Tangherlini

### October 2022

#### OPERATIONS UPDATES

The EMS Division continues to respond to approximately 350 responses per day. This is almost identical to the previous month and a slight increase over August. However, looking back to one year ago, this call volume represents a 7% increase in volume over this time last year.

October was the first month where the EMS Division realized the full benefit of the 60 new FTEs and the first 3 of the expected ambulance fleet expansion. New personnel and equipment were leveraged to address two time periods where there are the greatest daily response challenges. In October there was a 70% drop in phantom medic events, which are times when a fire engine or QRV is available to respond, but a delay in ambulance availability. During October these were largely contributable to surge events whereby there is an unexpected rise in call volume.

The SFFD EMS Division responded to 84.5% of the requests for ambulances versus only 70.7% for October 2021. The balance of the ambulance requests was handled by private ambulance companies. The EMS Division has consistently handled more than 80% of the requests for ambulances since May 2022.

#### NOTABLE ACTIVITY

On Tuesday October 11, the EMS and CP Divisions conducted a town hall meeting at Station 49. Approximately 120 members attended. This event gave personnel from both Divisions to attend live at Station 49 or virtually. Chief Nicholson, along with Deputy Chief Tong were joined by ADCs Tangherlini and Pang in updating members from both divisions about all the changes occurring in both EMS and CP. Additionally, members had an opportunity to ask questions of command staff members. Lots of great information was shared and it was viewed as a great morale booster across both divisions.

#### RESEARCH UPDATES

All members of the EMS Division have been trained in the use of the Mind Rhythm device, which have been placed on every Department ambulance. Within days of starting, members of the EMS Division had already enrolled 5 patients in the study. As previously reported, the Department's paramedics are not making clinical decisions based on the device, as the current effort is blinded as part of gaining FDA approval. However, the EMS Division has started discussions with Mind Rhythm around being the first EMS provider to clinically deploy the device. This device will be a game changer in how certain stroke patients are treated.

#### NOTABLE INCIDENTS

- On October 24<sup>th</sup>, M95 responded to SRO with RS1 for 29 y/o female complaining of abdominal pain after taking fentanyl. Female was found on floor, awake and talking with crews. RS1 noted a blood trail leading through a couple of rooms and found a newborn baby hidden under blankets. Baby was warmed and stimulated, and a second ambulance (M72) was called for transport of baby. M95 transported the adult female.
- One of the most notable responses of October occurred on October 14 when EMS providers in Alameda County requested mutual aid for their efforts to care for victims of a fire in Oakland. The request came from the SF EMSA at approximately 0730 hours on October 14 and the buses arrived on scene by 0825 hours. The busses were staffed by members of the DOT who are trained as bus operators, Captain Nash Quinto as the RC, and two ambulance crews.

Members of the EMS Division worked with providers already on scene to determine what assistance was needed by dozens of elderly people evacuated from a fire at an assisted living building.

Between the two buses, 68 at-risk seniors were successfully evaluated and transported from the scene of the fire to an assisted living facility with the staff to provide ongoing support for these displaced persons. Alameda County EMS and the Oakland Fire Department were thankful for the prompt and professional response that they credit with preventing many of these people from needing additional medical care.

This response demonstrated the versatility and responsiveness of the EMS Division and underscored the Department's capability to address both local and regional needs.

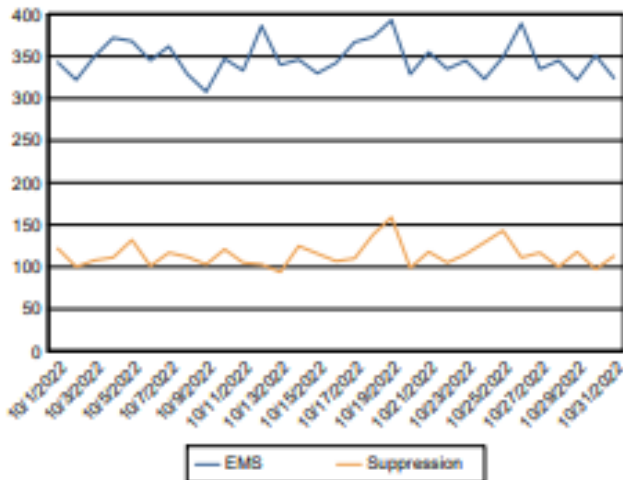


# SFFD ACTIVITY SUMMARY – October 2022

## SFFD Activity Summary From 10/01/2022 To 10/31/2022

Call Date	EMS Calls	Suppression Calls	Total Calls	EMS Call Avg. (Min)	Transport Avg. (Min)	Suppression Avg. (Min)	EMS P90 (Min)	Suppression P90 (Min)
10/01/2022	343	122	465	72.03	91.82	23.66	113.51	61.34
10/02/2022	322	100	422	69.99	89.81	32.55	112.84	98.40
10/03/2022	350	108	458	71.90	93.62	30.18	114.74	81.02
10/04/2022	372	111	483	76.35	96.59	27.45	122.03	78.15
10/05/2022	368	132	500	70.73	94.06	30.17	113.42	70.84
10/06/2022	345	101	446	69.23	89.56	28.63	112.14	71.79
10/07/2022	362	117	479	69.94	93.22	25.42	112.67	55.72
10/08/2022	329	112	441	66.58	87.14	27.39	106.39	71.37
10/09/2022	308	103	411	65.41	86.38	33.00	106.22	64.11
10/10/2022	347	121	468	70.56	91.35	27.20	111.73	75.38
10/11/2022	333	105	438	70.85	89.56	21.52	114.30	42.20
10/12/2022	386	103	489	68.07	90.01	30.71	109.81	89.10
10/13/2022	340	94	434	69.88	92.31	28.55	113.42	87.29
10/14/2022	346	125	471	69.74	92.31	29.75	115.95	79.77
10/15/2022	330	116	446	70.34	85.70	31.63	107.18	79.98
10/16/2022	342	107	449	70.61	87.21	25.70	110.32	63.17
10/17/2022	367	110	477	71.14	93.93	27.05	121.10	72.67
10/18/2022	373	138	511	74.02	96.23	30.07	121.28	82.82
10/19/2022	393	159	552	70.91	91.36	25.70	117.90	62.82
10/20/2022	329	99	428	66.72	89.07	28.07	111.60	70.39
10/21/2022	355	118	473	70.42	95.21	29.37	115.78	80.07
10/22/2022	335	105	440	66.12	90.66	29.75	110.07	87.25
10/23/2022	345	115	460	67.76	88.46	28.07	111.72	71.27
10/24/2022	323	129	452	69.80	91.09	28.35	114.24	76.05
10/25/2022	349	143	492	71.12	91.47	22.77	112.51	64.84
10/26/2022	389	111	500	72.09	89.77	27.77	110.87	84.78
10/27/2022	335	117	452	67.42	91.61	29.70	112.60	90.68
10/28/2022	345	100	445	68.95	91.42	29.22	113.59	85.95
10/29/2022	322	118	440	67.87	88.49	28.43	111.61	76.37
10/30/2022	351	97	448	69.79	89.58	25.54	108.25	58.90
10/31/2022	324	113	437	76.17	95.55	31.61	122.07	87.36

**Calls By Date**



**Call Length (Average and P90)**



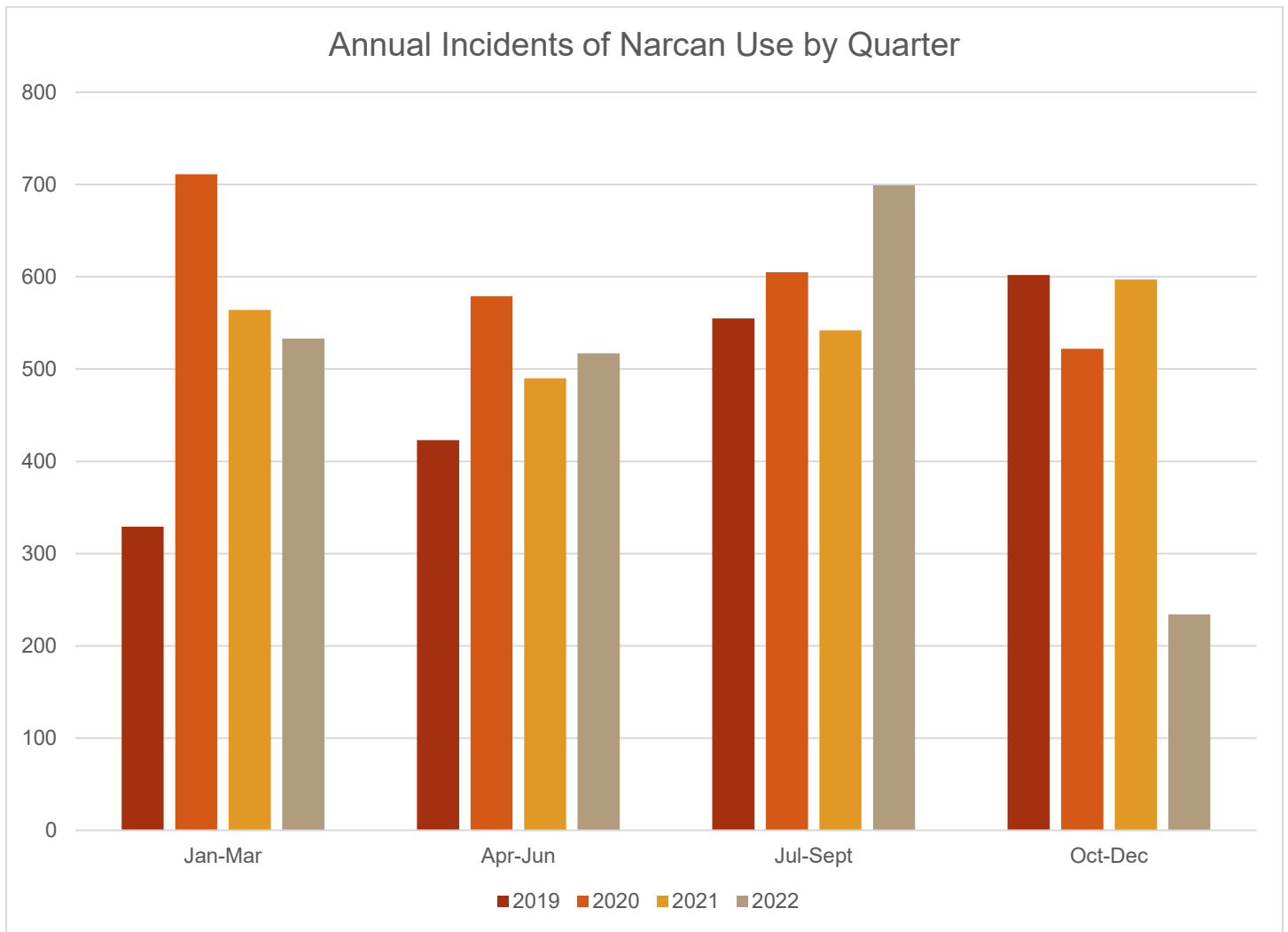
## INDIVIDUALS EXPERIENCING HOMELESSNESS – Incident Distribution

### San Francisco Fire Department

### Incident Distribution - Individuals Experiencing Homelessness (Last 6 Months)

		No		Yes		Total
EMS6	2022/05	100	39%	154	61%	254
	2022/06	69	37%	120	63%	189
	2022/07	95	49%	99	51%	194
	2022/08	68	44%	85	56%	153
	2022/09	89	48%	95	52%	184
	2022/10	34	42%	47	58%	81
	2022/11					
Fire Incidents	2022/05			74		74
	2022/06			94		94
	2022/07			82		82
	2022/08			76		76
	2022/09			63		63
	2022/10			48		48
Medical Incidents	2022/05	5,563	78%	1,574	22%	7,137
	2022/06	5,376	78%	1,508	22%	6,884
	2022/07	5,520	76%	1,699	24%	7,219
	2022/08	5,545	77%	1,661	23%	7,206
	2022/09	5,588	78%	1,592	22%	7,180
	2022/10	5,885	78%	1,670	22%	7,555
	2022/11	23	88%	3	12%	26

# NARCAN ADMINISTRATION



	Jan-Mar	Apr-Jun	Jul-Sept	Oct-Dec	Annual Total
<b>2019</b>	329	423	555	602	1909
<b>2020</b>	711	579	605	522	2417
<b>2021</b>	564	490	542	597	2193
<b>2022</b>	533	517	699	234	1983

# COMMUNITY PARAMEDICINE DIVISION

Assistant Deputy Chief Simon Pang

October 2022

## PROGRAM OVERVIEW AND TIMELINE

Program	Vulnerable population	Launch date	Full Implementation
EMS-6	Frequent 911 users	January 31, 2016	
Street Crisis Response Team	Community members in behavioral crisis	November 30, 2020	7 <sup>th</sup> team added May 28, 2022 (EMD on June 22, 2022)
Street Overdose Response Team	Overdose response	August 2, 2021	2 <sup>nd</sup> team added June 27, 2022
Street Wellness Response Team	Persons requiring a wellbeing check	January 24, 2022	2 <sup>nd</sup> -5 <sup>th</sup> team added June 27, 2022

## COMMUNITY PARAMEDICINE HIGHLIGHTS

- Efforts to inform the department and public of the work being done in community paramedicine are under way:
  - In October, Chief Tong and Chief Pang began meeting with division and battalion chiefs to present to them the work of Community Paramedicine and EMS, to answer questions, and to solicit feedback. Two meetings, one with Chief Baker, the other with Chief Yee, were held. More meetings will be scheduled for the month of November.
  - There was a townhall meeting on October 11 with over 100 participants to discuss the current and future state of EMS and Community Paramedicine, to answer questions and solicit feedback. In attendance were Chief Nicholson and all EMS and Community Paramedicine chief officers.
  - On October 12, at the request of Mayor Breed, Chief Nicholson delivered a presentation about efforts and outcomes of the Department's Community Paramedicine team to the heads of the various city departments. The presentation was well received.
- Over the course of three weeks in October, Chiefs April Sloan and Michael Mason, conducted three hour in-person refresher training to all the community paramedics. The work of community paramedicine and the City's efforts to improve the delivery of care in the streets is dynamic, and our members were greatly appreciative of the opportunity to sharpen their knowledge of operational procedures, protocols and policy, city resources, documentation and data collection expectations, a review of outcomes of our work, and more.
- A team of professors from San Jose State University have obtained a 50K grant from the National Science Foundation to conduct research on the work we are doing. This grant is to provide an opportunity to develop a detailed research question, and recipients of this grant can apply for a larger, multi-year grant. We are working collaboratively with the research team and hope to benefit from knowledge learned. The goal of the initial research is two-fold:
  - Improve our understanding of how our interventions impact our clients' long-term health outcomes
  - Better our knowledge of the "moral hazards" we experience as providers in a challenging field where our clients—and by extension ourselves—may experience trauma due to lack of resources and system failures.

- Three undergraduate data science students from UC Berkeley are working with A/Lt. Nick Oxford, MPH and Jesus Mora, our department’s IT Director, to conduct an analysis of the effects of community paramedicine to 911 call outcomes. These are unpaid internships for which they receive course credit. Initial analysis shows statistically significant improvements on call outcomes when SCRT and SWRT co-respond to a call with ambulances and engine companies.
  - An example is the “XR” code, which is when a police unit requests an ambulance to evaluate an individual. Data shows that when SCRT and SWRT respond, more calls are located and ambulance transports to an ER decrease. Furthermore, more of these incidents result in a “Patient Declines (*ambulance*) Transport,” which is a necessary step before a community paramedic can transport to an appropriate, non-ED destination. Calls with disposition “Patient Declines Transport” are documented by the community paramedic, which allows the ambulance to return to service more rapidly. The result is that ambulances are returned to service more rapidly, unnecessary transports that contribute to ER overcrowding are lessened, and people are brought to more appropriate care.
- Two 5150 holds were placed by community paramedic captains. In accordance with our policy, these holds were reviewed by our continuous quality improvement team, which includes Dr. Joseph Graterol, the Community Paramedic Medical Director, and providers from the Behavioral Health Services of the Department of Public Health. Both holds were deemed appropriately placed and safely transported to the hospital.

## EMS-6

Operational period: 10/01/22 - 10/30/22

Total encounters: 246

Average encounters per day: 8

Average connection rate to resource: 31.7%

Utilization changes of top 20 utilizers engaged by EMS-6 from month before the operational period to current: **-40%**

Encounter Type	Current
Outreach	110
Consult	90
911 - EMS6 special call	15
Case Conference	15
911 - EMS6 self-assigned	12
911 - System	4
<b>Total</b>	<b>246</b>

Resource	Referrals Offered	Connections Made	Connection Rate
Sobering Center	10	5	50.0%
Social Services	13	6	46.2%
Substance/Dual Diagnosis Treatment	9	4	44.4%
Clinic	3	1	33.3%
Homeless Outreach Team	3	1	33.3%
Psychiatric Services	7	2	28.6%
Shelter - Short Term	5	1	20.0%
Joe Healy Detox	5	0	0.0%



Homeward Bound	4	0	0.0%
Shelter - Long Term	3	0	0.0%
Navigation Center - Time Limited	1	0	0.0%
Hummingbird	0	0	0.0%
Navigation Center - Pathway to Housing	0	0	0.0%
	63	20	31.7%

### EMS-6 Challenges

- Many members on long term health leave impacted our staffing and output, resulting in a decrease in engagements for October.

### STREET CRISIS RESPONSE TEAM (SCRT)

Operational period 10/1/22 - 10/31/22

Total Calls for Service: 688

Average Response Times: 18.4 minutes

Average on Scene Times: 45.2 minutes

### Disposition All Calls for Service

Non-ambulance transport to non-ED resource	96	13.90%
Ambulance transport to ED	95	13.80%
Remained in the community	220	32.00%
Unable to Locate	198	28.80%
Walked Away	64	9.30%
Information Exchange	15	2.20%
Total	688	100%

### Disposition Engaged Individuals Only

Non-ambulance transport to non-ED resource	96	22.5%
Ambulance transport to ED	95	22.3%
Remained in community	235	55.2%
Total	426	100%

### 5150

Grave disability	10	32.3%
Self-harm	17	54.8%
Harm to others	4	12.9%
Total	31	100%

### Police Presence on Scene

		Percent of total calls for service (688)
PD On Scene Prior to Arrival	26	3.8%
PD requested by SCRT	17	2.5%
SCRT requested by PD	34	4.9%
PD arrived without request	6	0.9%
Total Incidents with PD present on scene	83	12.1%

## Assistance provided by Police

		Percent of total calls for service (688)
Immediate danger to personnel or public	1	0.1%
Assist with Restraints	6	0.9%
Scene Management	20	2.9%
Total	27	3.9%

## STREET OVERDOSE RESPONSE TEAM (SORT)

Operational period: 10/1/22 – 10/31/22

Calls for Service: 192

Total Encounters: 136

Total Encounters with a Confirmed Overdose: 84

Buprenorphine Starts: 9

Clients who Accepted Harm Reduction Supplies: 78

Clients who accepted Project FRIEND Narcan: 81

### SORT Challenges:

- We are continuing the dialogue with leadership of Poison Control to determine the timeline for our community paramedics to administer buprenorphine, a medication used for the treatment of opioid addiction and that has the benefit of reducing the risk of subsequent overdose for 48 hours after administration. Poison Control has agreed to serve as the 24/7 medical control for the State approved pilot program, and operations cannot begin until they have trained their pharmacists. **Update:** The Department is developing a Memorandum of Understanding with Poison Control that outlines a onetime donation of \$10K to Poison Control to offset their cost of training their pharmacists.
- In the month of October saw increases in calls for service, encounters with people with confirmed overdoses, and the number of people that received buprenorphine. To continue this improvement, the Street Wellness Response Team will begin responding as an additional resource to overdoses. This will increase the daily number of community paramedic units responding to overdoses from two to seven, which will increase the capture rate of confirmed overdoses. Additionally, the two Street Overdose Response Teams will be utilized to provide additional support along the continuum of care for individuals suffering from opioid use disorder and experiencing overdoses. For example, presently SORT's engagement with an overdose survivor may end with a drop-off at an ER and a referral to next day follow-up. Going forward SORT would be tasked with more lengthy immediate support of individuals by connecting and transporting them to drug treatment centers or shelter, as well as improving their chance of success by assisting them with such things as obtaining medication and resource navigation.

## STREET WELLNESS RESPONSE TEAM (SWRT)

Operational period: 10/1/22 – 10/31/22

Total calls for service: 698

### Call Origin:

On View	526	70.4%
911	221	29.6%
Total	747	100%

**Disposition all calls for service:**

Non-ambulance transport to non-ED resource	102	14.6%
Ambulance transport to ED	45	6.4%
Remained in community	497	71.2%
Unable to Locate	40	5.8%
Walked Away	13	1.9%
Other	1	0.1%
Total	698	100%

**Disposition Engaged Individuals Only**

Non-ambulance transport to non-ED resource	102	15.8%
Ambulance transport to ED	45	7.0%
Remained in community	497	77%
Other	1	0.2%
Total	645	100%

**Destination of Non-Emergency Transport**

Shelter	20	19.6%
Mental Health Facility	3	2.9%
Community Clinic	14	13.7%
Sobering Center	49	48%
Treatment Program	1	0.98%
Other Destination (Case management, ride home, food kitchen, etc.)	15	14.7%
Total	102	100%