

SFFD Toy Drive



SFFD

EMS AND COMMUNITY PARAMEDICINE

FIRE COMMISSION REPORT
NOVEMBER & DECEMBER 2022

DEPUTY CHIEF SANDY TONG

EMS DIVISION

Assistant Deputy Chief Niels Tangherlini

November and December 2022

OPERATIONS UPDATES

November 2022

The EMS Division continues to respond to approximately 350 calls per day. This has stayed consistent with both September and October. This call volume represents a 4% increase over the same period last year. The SFFD captured 84.5% of the market share, which represented a 2% increase over October and 3% over September. This means citizens can expect to receive transport by an SFFD ambulance nearly 85% of the time,

During the month of November, the LEMSA implemented a one-year pilot program whereby each of the 911 providers can put BLS (EMT staffed) ambulances into the system. The pilot allows for a maximum of 4 BLS providers in any 12-hour period. These units are to focus on low acuity responses but could transport more critical patients if accompanied by a paramedic from an ALS unit. The SFFD does not have any plans to staff BLS units currently.

Cohort 3 of the 9910-intern program has been working in the field throughout November. Each intern will have the opportunity to work for 500-hours serving alongside other members of the EMS Division. In addition to achieving the number of hours needed to qualify for employment with the SFFD, interns receive the kind of education that comes from working with experienced providers.

On Thanksgiving, members of the EMS Division, including Section Chief Kevin Chocker and Captain Andy Zanoft prepared and distributed Thanksgiving meals to members on-duty. Additionally, volunteers from the EMS Division joined SFFD Command Staff and personnel from other departments in distributing Thanksgiving meals to homebound seniors across San Francisco.

December 2022

The EMS Division averaged 354 responses per day in December. This is a very slight increase over November. Only one day in December saw a call volume just under 300 calls and there were three days during which the EMS Division responded to over 400 calls. During December the SFFD averaged just over 80% of market share. This was a 4% decline from November and is largely due to the BLS pilot project. Additional analysis will be required to determine if this program is impacting patient care and appropriate distribution of responses among the three ambulance providers.

Time on task for ambulance increased slightly in the month of December. Much of this increase is likely related to increased delays for crews at hospitals. Hospitals continue to struggle with both staffing shortages and the impact of increased respiratory illnesses.

On December 2nd, the EMS Division took delivery of two more Type 1 ambulances. Like the previous three units, these ambulances were built by Braun Northwest. One unit is mounted on a Ford F350 chassis and the other on a Ram 3500. The addition of these vehicles will assist, as the EMS Division added 4 new shifts with the addition of 60 new FTEs. These are the 4th and 5th units received of an expected 14-unit fleet expansion meant to accommodate the added personnel.

On December 23rd, the latest class of “bump-up” paramedics graduated. As a result, three EMTs returned to the field as paramedics. This will allow the EMS Division to staff additional dual medic as well as one and one ambulances.

The EMS Division finished out December by providing special event coverage for the City’s New Year’s Eve festivities, including the fireworks display at the Embarcadero. Attendance was low, most

likely due to stormy weather. Crews reported only one transport from the venue and overall call volume was light compared to previous NYEs.

On Saturday December 10th, members of the EMS Division and their families got a chance to meet with Santa Claus at the annual Station 49 Santa Breakfast. Continuing with the Holiday spirit, members of Station 49 joined members of the Community Paramedic Division in staffing the Local 798 Toy Program on Saturday December 17th. The two Divisions celebrated together at the first joint CP/EMS Holiday party on Sunday December 18th. On Christmas, members were provided with meals funded by Station 49 house dues and contributions, including a large prime rib provided by retired EMS Chief Sebastian Wong. As during previous holidays, crews were rotated into Station 49 to get a food break.

RESEARCH UPDATES

November 2022

November represented the first full month that the EMS Division was actively engaged in the Mind Rhythm study. As previously mentioned, this study is working to demonstrate the effectiveness of a diagnostic device that paramedics can use in determining the type of blood vessel involved in a stroke. During November, members of the EMS Division enrolled more patients than all other sites combined. This has supported early discussions about SFFD being the first EMS provider in the world to use the device clinically after it receives full FDA approval.

December 2022

The EMS Division's Research Subcommittee met on December 14th. During this meeting, members of the Subcommittee met with researchers and physicians representing the two major projects currently being conducted by the EMS Division. For both the Mind Rhythm and Pilotcardi studies researchers expressed their gratitude for the support and effort of members of both the EMS Division and the Subcommittee. In the case of Pilotcardi, at least two members of the Research Subcommittee are part of the team that will analyze and publish the results. Several of the physicians offered support in developing additional research projects with the EMS Division. Finally, members of the Subcommittee agreed to start a recruitment campaign among the new members of Station 49.

TECHNOLOGY UPDATES

November 2022

Since February 2020, the EMS Division has been collaborating with Code for America on developing a patient distribution app for non-critical patients being transported by SFFD. Code for America is a national non-profit whose goal is to develop free technology solutions for challenges faced by local governments. Local brigades of volunteers include coders, data specialist, product designers, and anyone interested in technology. November represented the first-time volunteers went on ride-alongs with ambulance crews to beta test any technological issues with the app.

The tests were viewed as successful, and we look forward to the next phase which would involve more crews and hospitals. Known as **Routed**, this app would assist all ambulances in San Francisco better distribute non-critical patients and improve communications between EMS crews and ED staff.

December 2022

The EMS Division continues to work with both Code for America and Peak Response on developing technological approaches to challenges that include first responder documentation, distribution of non-critical patients, and management of MCIs. In January, the EMS Division will continue its outreach to hospitals to enlist their involvement with the Routed app. The final hurdle to implementing much of this technology is to work with the Department's City Attorney in developing appropriate MOUs or contracts.

NOTABLE ACTIVITIES

November 2022

The following are some examples of the type of outstanding work performed by our EMS crews every day.

- Kudos from CPMC Van Ness for the quick action by one of our crews in rapidly identifying, treating, and transporting a patient suffering from a potential CVA.

VNC Campus IV Tenecteplase Feedback

VNC Campus ED Arrival on 11/2/2022

DOOR TO NEEDLE IN 31 minutes



Thank you from the Stroke Program



ED STAFF

ED MD: Dr. Thomas Peitz

ED RNs: Sara Shea, Kretzer, Rachel Buehler

Neurologist: Dr. Gajjar

Pharmacists: Miranda Ruenroeng, Cindy Wen

Nolan Hamblin, Paramedic

Clark Stern, EMT

Justice Yan

Accomplished

- Code stroke page: **12:18**
- Door to CT: **10 min**
- TNK ordered: **12:45**
- TNK administered: **12:52**
- TNK order to administration: **7 min**
- Reason for delay to thrombolytic: **Patient was not registered or weighed prior to CT scan & was Spanish Speaking**

Patient was a 48 year old male presenting with new onset of left-sided weakness. He walked into a resource medical clinic at approximately 11:30 a.m., & developed acute Left sided weakness at 11:45. History of HIV+, HTN, DM. Brought in by EMS with NIHSS 11, L leg and arm Flaccid on arrival. No neglect or facial droop. CTCTAP performed within 10 minutes of arrival. TNK administered IN CT SCANNER by RN. CTH/CTA/P: no infarct/mass/ICH/vasculopathy/perfusion defect. Pt tolerated TNK without side effects thus far and is recovering in ICU with NIHSS score of 5, & is moving all extremities. MRI is pending.

- On November 8, 2022, QRV1, Medic 60, and RC1 responded to a call for a 30-year-old male who was in cardiac arrest. Patient received ACLS care from our crews on-scene and enroute to CPMC Van Ness where he ultimately had return of spontaneous circulation (ROSC). Per staff at CPMC Van Ness, the patient is recovering and will be transferred to another hospital of continued care.

December 2022

Everyday members of the EMS Division provide life-saving care and support to the citizens and visitors to the City and County of San Francisco. This may include restarting the heart of a cardiac arrest victim, relieving pain from a broken bone, or simply assuring someone with a kind word or warm blanket. Each of the 350 responses per day is notable in some way, but here are several examples of some of the care being provided by the EMS Division:

- On December 3rd crews responded to Ocean Beach where citizens performed CPR on a person pulled from the ocean. EMS crews found the patient to have a pulse and he was ultimately treated and released from the hospital several days later.
- On December 14th crews responded to an elderly male who had a syncopal episode. The care this citizen received was of such a high quality the individual felt compelled to reach out sending the following statement:

"Last night I experienced a sudden illness/medical condition while I was at Greens Restaurant in Fort Mason. This caused concern to the people I was with. Someone called 911 and a vehicle with EMTs (?) soon arrived. I was treated well, they showed appropriate concern and did their evaluations and assessments quickly, efficiently and professionally. My wife and I were very impressed, and I am

grateful. I believe their vehicle number was "83." Please pass on my thanks to the members of that team, to their supervisor and to your department."

- On December 18th crews treated a female patient extricated from a structure fire for smoke inhalation. After being treated in the burn-unit at St. Francis Hospital, the patient was discharged home.
- On December 20th crews treated a 1-year-old male with shortness of breath and an altered level of consciousness. The patient was transported code 3 to a hospital with a pediatric critical care unit where he was ultimately treated for several days in the ICU before returning to a normal mental status.
- On December 22nd, crews treated a bariatric patient (approximately 700 lbs) for cardiac arrest. Crews were able to obtain return of spontaneous circulation (ROSC) and safely transport the patient to San Francisco General Hospital. EMS crews were able to make use of the Department's specialized bariatric unit.

EMS ACTIVITIES

November 2022

9910 Interns – Cohort #3



Section Chief Kevin Chocker and Captain Andy Zanoff preparing to deep-fry a turkey as part of meals provided to on-duty members of the EMS Division.



Volunteers from Code for America meet with ambulance crews to prepare them to take part in a beta test of a patient distribution app known as Routed.



December 2022

Two new Type 1 ambulances



Santa Breakfast at Station 49

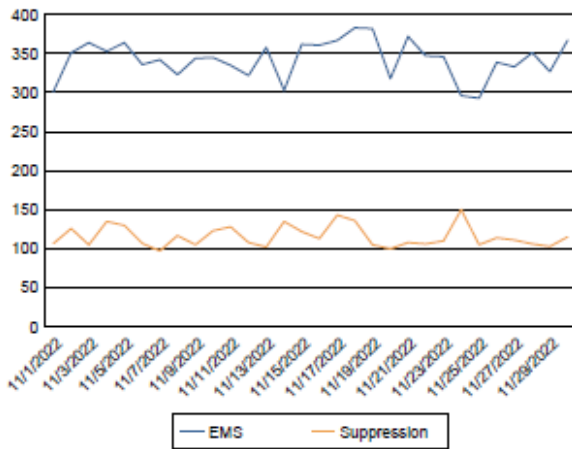


SFFD ACTIVITY SUMMARY – November 2022

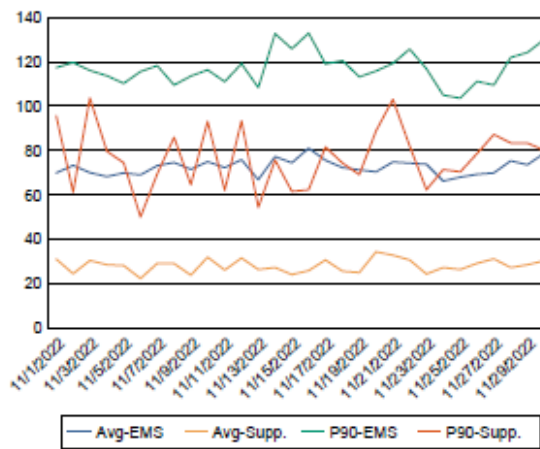
SFFD Activity Summary From 11/01/2022 To 11/30/2022

Call Date	EMS Calls	Suppression Calls	Total Calls	EMS Call Avg. (Min)	Transport Avg. (Min)	Suppression Avg. (Min)	EMS Suppression P90 (Min)	Suppression P90 (Min)
11/01/2022	302	107	409	69.92	91.00	30.99	117.38	95.65
11/02/2022	351	126	477	73.36	94.62	24.40	119.65	61.18
11/03/2022	364	105	469	70.05	92.77	30.33	116.16	103.74
11/04/2022	353	135	488	68.27	90.46	28.48	113.74	79.64
11/05/2022	364	130	494	69.90	88.07	28.09	110.37	74.44
11/06/2022	336	107	443	69.03	84.73	22.22	115.61	49.97
11/07/2022	342	97	439	73.15	94.44	29.06	118.28	69.52
11/08/2022	323	117	440	74.56	91.84	28.97	109.61	85.97
11/09/2022	344	105	449	71.57	89.32	23.79	113.67	64.55
11/10/2022	345	123	468	74.99	94.93	31.94	116.40	93.20
11/11/2022	335	128	463	72.31	89.88	26.05	111.15	62.07
11/12/2022	322	108	430	75.85	95.72	31.55	119.21	93.46
11/13/2022	358	102	460	66.86	87.37	26.35	108.41	54.37
11/14/2022	303	135	438	77.29	97.42	27.17	132.79	75.72
11/15/2022	362	122	484	74.42	99.75	24.11	125.88	61.52
11/16/2022	361	113	474	81.00	103.72	25.84	133.01	62.25
11/17/2022	367	143	510	75.57	95.67	30.68	119.12	81.58
11/18/2022	383	136	519	72.38	95.42	25.51	120.63	74.31
11/19/2022	382	105	487	71.27	93.11	24.93	113.28	69.18
11/20/2022	318	100	418	70.39	91.00	34.28	115.86	88.96
11/21/2022	372	108	480	74.90	90.83	32.81	119.36	103.04
11/22/2022	347	106	453	74.35	97.20	30.65	125.83	82.01
11/23/2022	346	110	456	73.79	93.14	24.35	116.96	62.35
11/24/2022	296	150	446	66.21	85.55	27.27	105.00	71.43
11/25/2022	293	105	398	67.97	88.35	26.29	103.57	70.37
11/26/2022	339	114	453	69.32	88.65	29.15	111.18	78.62
11/27/2022	333	111	444	69.95	88.76	31.18	109.59	87.25
11/28/2022	351	106	457	75.30	98.49	27.17	122.03	83.48
11/29/2022	327	103	430	73.54	99.61	28.42	124.31	83.35
11/30/2022	367	115	482	78.74	101.21	30.20	130.06	80.14

Calls By Date



Call Length (Average and P90)

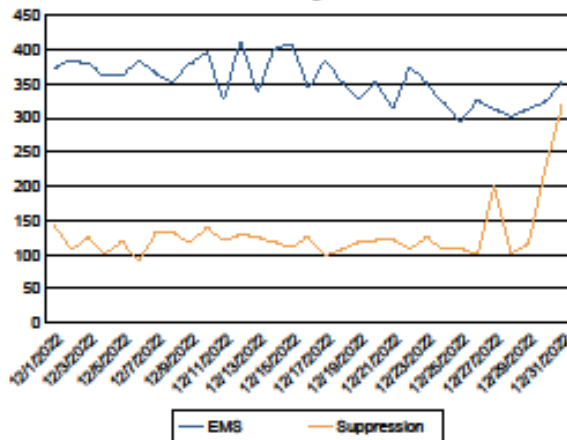


SFFD ACTIVITY SUMMARY – December 2022

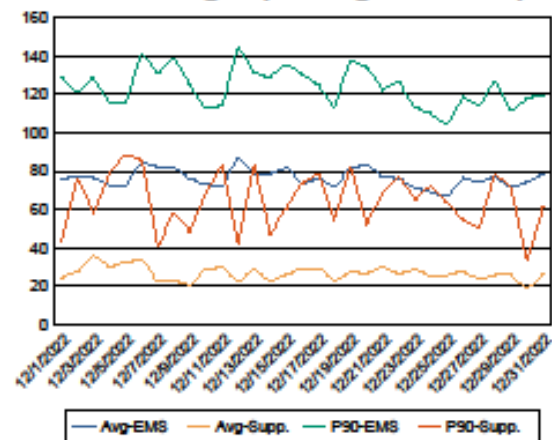
SFFD Activity Summary From 12/01/2022 To 12/31/2022

Call Date	EMS Calls	Suppression Calls	Total Calls	EMS Call Avg. (Min)	Transport Avg. (Min)	Suppression Avg. (Min)	EMS P90 (Min)	Suppression P90 (Min)
12/01/2022	373	144	517	75.78	96.99	24.18	129.29	42.83
12/02/2022	384	108	492	77.50	100.30	27.48	121.56	76.40
12/03/2022	378	126	504	76.58	101.23	35.64	129.17	57.34
12/04/2022	381	103	484	72.79	93.13	29.88	116.28	78.56
12/05/2022	362	119	481	72.88	93.02	32.34	115.91	88.44
12/06/2022	382	93	475	84.11	106.58	33.56	140.73	85.73
12/07/2022	365	133	498	82.29	100.37	22.29	130.95	40.95
12/08/2022	353	133	486	81.55	107.14	22.71	138.79	57.75
12/09/2022	378	118	496	76.08	98.31	20.63	124.96	48.24
12/10/2022	395	141	536	73.02	93.74	28.53	112.95	68.00
12/11/2022	327	121	448	71.89	93.64	29.74	114.23	82.67
12/12/2022	410	129	539	87.04	110.28	22.30	144.50	42.23
12/13/2022	339	126	465	78.17	104.45	28.34	131.17	82.71
12/14/2022	400	118	518	78.54	101.95	22.70	129.04	47.05
12/15/2022	408	111	519	81.36	105.70	25.86	135.67	60.63
12/16/2022	344	127	471	73.73	98.18	29.11	130.20	73.53
12/17/2022	382	99	481	75.83	96.41	29.03	125.03	78.41
12/18/2022	353	108	461	72.12	91.18	23.15	113.76	54.29
12/19/2022	328	119	447	81.52	103.75	27.36	137.99	82.14
12/20/2022	353	121	474	83.58	105.49	26.63	134.14	52.08
12/21/2022	315	122	437	76.68	99.27	29.69	122.37	67.85
12/22/2022	373	109	482	76.26	102.54	26.33	126.69	76.92
12/23/2022	351	126	477	71.30	91.92	28.48	113.43	64.85
12/24/2022	322	109	431	69.04	86.07	25.50	110.34	72.04
12/25/2022	296	109	405	66.89	83.04	25.64	104.54	63.25
12/26/2022	326	101	427	76.51	94.78	27.76	119.04	54.78
12/27/2022	313	201	514	74.45	94.05	23.78	114.76	50.58
12/28/2022	303	103	406	77.44	97.71	25.78	126.71	78.27
12/29/2022	313	115	428	71.60	90.24	25.75	111.62	70.32
12/30/2022	324	225	549	74.39	91.35	18.82	118.27	33.78
12/31/2022	353	318	671	78.39	92.43	26.58	119.54	61.44

Calls By Date



Call Length (Average and P90)

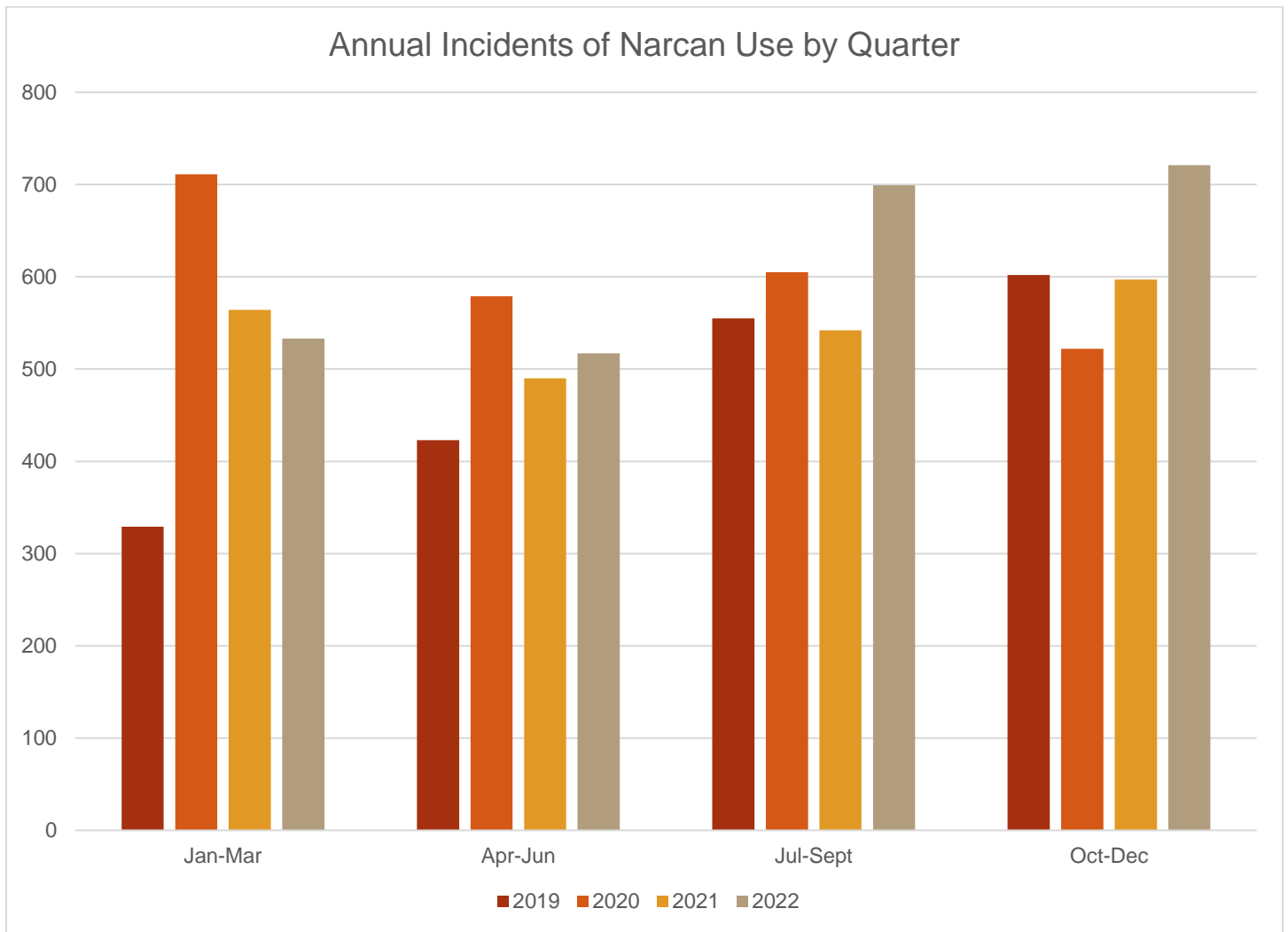


INDIVIDUALS EXPERIENCING HOMELESSNESS – Incident Distribution
November and December 2022

San Francisco Fire Department
Incident Distribution - Individuals Experiencing Homelessness (Last 6 Months)

		No		Yes		Total
EMS8	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	27	51%	26	49%	53
	2022/12	70	50%	70	50%	140
	2023/01	4	36%	7	64%	11
Fire Incidents	2022/07			83		83
	2022/08			76		76
	2022/09			65		65
	2022/10			58		58
	2022/11			93		93
	2022/12			65		65
	2023/01			2		2
Medical Incidents	2022/07	5,568	76%	1,789	24%	7,357
	2022/08	5,695	76%	1,790	24%	7,485
	2022/09	5,651	77%	1,686	23%	7,337
	2022/10	5,968	77%	1,760	23%	7,728
	2022/11	5,750	78%	1,622	22%	7,372
	2022/12	6,038	79%	1,649	21%	7,687
	2023/01	407	78%	112	22%	519

NARCAN ADMINISTRATION



	Jan-Mar	Apr-Jun	Jul-Sept	Oct-Dec	Annual Total
2019	329	423	555	602	1909
2020	711	579	605	522	2417
2021	564	490	542	597	2193
2022	533	517	699	721	2470

COMMUNITY PARAMEDICINE DIVISION

Assistant Deputy Chief Simon Pang
November 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 th team added May 28, 2022 (EMD on June 22, 2022)
Street Overdose Response Team	Overdose response	August 2, 2021	2 nd team added June 27, 2022
Street Wellness Response Team	Persons requiring a wellbeing check	January 24, 2022	2 nd -5 th team added June 27, 2022

COMMUNITY PARAMEDICINE HIGHLIGHTS

- **Mayor Breed & Bloomberg Associates:** On November 16th Mayor Breed and several members of Bloomberg Philanthropies and Bloomberg Center for Public Innovation joined Assistant Deputy Chief Pang to shadow and observe Community Paramedicine Division teams at work. Mayor Breed voiced her support for our programming and shared her understanding of the challenges we face daily.
- **U.S. Interagency Council on Homelessness:** On November 15th representatives from this federal agency rode along with CP5 (supervising community paramedic captain), Captain Brandon Chatham. The council represents 19 federal agencies which have created the Federal Strategic Plan to Prevent and End Homelessness. Members observed community paramedicine teams, as well as Healthy Streets Operation Center (HSOC) operations. Their interest in our programming highlights the nationally recognized intersection between the 911 safety net and homelessness.
- **DataSF DataScience Cohort 5:** Our application was accepted for DataSF's DataScience cohort 5. DataSF, a City agency whose mission is to improve the City's understanding, utilization, and sharing of data, hosts a yearly application process where select applicants receive additional analytics and applied statistics support for a specific program. Our accepted application was specifically for the EMS-6 program. Over the next 4 months Section Chief of Administration Michael Mason, Data & Policy Analyst Lt. Oxford, and members of the EMS-6 team will work closely with DataSF data scientists to analyze client 911-utilization data with the goals of better understanding client characteristics, utilization frequency changes in response to community paramedicine interventions, and equitable service delivery and resource assignment. We look forward to sharing the results of this project when completed.
- **Crisis Communication Training:** Section Chief of Operations April Sloan attended a week-long basic crisis communication training seminar in Anaheim. This training will inform our work and policy development. While not necessarily causal, recent changes in the Police Department's use of force and disengagement policies have coincided with increased calls for service to our Department for individuals who are barricaded, have a history of violence, or are extremely agitated. We are continuing to work with Department and City leadership to ensure these incidents are resolved safely for the patients, our Department members, and the community.
- **SWRT added to Overdose Incidents:** Recognizing the continued need to increase engagement rates of overdose survivors, Street Wellness Response Team units are responding as an additional resource for overdose survivors when the Street Overdose

Response Team (SORT) is unavailable. All Division members received additional training on best practices to support this vulnerable population.

EMS-6

Operational period: 11/01/22 - 11/30/22

Total encounters: 149

Average encounters per day: 5

Average connection rate to resource: 32.0%

Utilization changes of top 20 utilizers engaged by EMS-6 from month before the operational period to current: **-46%**

Encounter Type	Current
Outreach	58
Consult	67
911 - EMS6 special call	6
Case Conference	11
911 - EMS6 self-assigned	4
911 - System	3
Total	149

Resource	Referrals Offered	Connections Made	Connection Rate
Psychiatric Services	8	5	62.5%
Clinic	4	2	50.0%
Sobering Center	7	3	42.9%
Shelter - Short Term	13	4	30.8%
Social Services	5	1	20.0%
Substance/Dual Diagnosis Treatment	6	1	16.7%
Shelter - Long Term	4	0	0.0%
Homeless Outreach Team	1	0	0.0%
Homeward Bound	1	0	0.0%
Joe Healy Detox	1	0	0.0%
Hummingbird	0	0	0.0%
Navigation Center - Pathway to Housing	0	0	0.0%
Navigation Center - Time Limited	0	0	0.0%
	50	16	32.0%

EMS-6 Successes

- EMS-6 Client:** A long-time EMS-6 client and one of the City's historically highest utilizers has been stabilized for over a month. This individual has a history of severe alcohol use disorder and a seizure disorder. He attempted numerous treatment options unsuccessfully, including sober living environments. In the nearly five years between January 2018 and December 2022 he had 457 SFFD ambulance transports. With the support of EMS-6, he entered the Managed Alcohol Program (MAP) in early October. While he initially struggled to comply with program rules, since 11/1, he's had zero 911 activations. We will continue to support MAP staff and this client and are pleased with his stabilization and decreased 911-utilization.

SCRT

Operational period 11/1/22 - 11/30/22

Total Calls for Service: 667

Average Response Times: 17.6 minutes

Average on Scene Times: 45.6 minutes

Disposition All Calls for Service

Non-ambulance transport to non-ED resource	94	14.1%
Ambulance transport to ED	100	15.0%
Remained in the community	230	34.4%
Unable to Locate	193	28.9%
Walked Away	50	7.5%
Total	667	100%

Disposition Engaged Individuals Only

Non-ambulance transport to non-ED resource	94	22.2%
Ambulance transport to ED	100	23.6%
Remained in community	230	54.2%
Total	324	100%

5150

Grave disability	9	39.1%
Self-harm	10	43.5%
Harm to others	4	17.4%
Total	23	100%

Police Presence on Scene

		Percent of total calls for service (667)
PD On Scene Prior to Arrival	21	3.2%
PD requested by SCRT	6	0.9%
SCRT requested by PD	41	6.1%
PD arrived without request	7	1.0%
Total Incidents with PD present on scene	75	11.2%

Assistance provided by Police

		Percent of total calls for service (667)
Immediate danger to personnel or public	5	0.7%
Assist with Restraints	2	0.3%
Scene Management	13	2.0%
Total	20	3.0%

SCRT Successes:

- The Bayview Police Station requested Street Crisis Response for a client who was requesting shelter. On SCRT arrival, the client was found to be talking to herself and experiencing auditory hallucinations. The client requested to speak to her mother, and the team facilitated a phone call, connecting the two family members who had not been in verbal communication for over a year. A real-time photo sent to her mother provided great relief. Mom replied: "I haven't seen them in 2 years, thank you so much!" SCRT transported the woman to Hummingbird and client entered the facility but left a short while later. After learning of the premature exit, CP5 (supervising CP captain) collaborated with EMS-6 and discovered the woman's recent arrival in San Francisco; she already had four (4) CP Division contacts in 2 weeks. Within 2 days the client presented to Mission Police Station, and in part due to coordination with EMS-6 members the client's family travelled from the Central Valley to reestablish contact and return home with her. The client's family has informed us that she is currently detoxing from methamphetamines and beginning to stabilize from untreated mental illness.

SORT

Operational period: 11/1/22 – 11/30/22

Calls for Service: 121

Total Encounters: 102

Total Encounters with a Confirmed Overdose: 56

Buprenorphine Starts: 11

Clients who Accepted Harm Reduction Supplies: 61

Clients who accepted Narcan Rescue Kit: 62

SORT Challenges:

- **Buprenorphine Pilot:** The Department's implementation of a state-approved buprenorphine pilot program has been delayed. California Poison Control had initially agreed to provide a component of clinical oversight but is now unable to provide that function. Dr. Lacocque has been instrumental in building the framework for this program, and we hope now to partner with San Francisco General Hospital's base physicians to fill this clinical oversight role.

SWRT

Operational period: 11/1/22 – 11/30/22

Total calls for service: 633

Call Origin:

On View	388	54.1%
911	329	45.9%
Total	633	100%

Disposition all calls for service:

Non-ambulance transport to non-ED resource	78	12.3%
Ambulance transport to ED	105	16.6%
Remained in community	394	62.3%
Unable to Locate	31	4.9%
Walked Away	25	3.9%
Total	633	100%

Disposition Engaged Individuals Only

Non-ambulance transport to non-ED resource	78	13.5%
Ambulance transport to ED	105	18.2%
Remained in community	394	68.3%
Total	577	100%

Destination of Non-Emergency Transport

Shelter	14	18%
Mental Health Facility	32	41%
Community Clinic	12	15%
Sobering Center	5	6%
Treatment Program	0	0%
Other Destination (Case management, ride home, food kitchen, etc)	15	19%
Total	78	100%

SWRT Successes:

- **Senior Re-homed to Skilled Nursing:** A SWRT unit was activated when an apartment manager encountered a former elderly resident appearing confused in their lobby. After extensive engagement, the community paramedic determined the individual was a resident of a north-bay skilled nursing facility and had left a local hospital after a planned procedure, but before reconnecting with their return transport. The elderly individual with a history of dementia had apparently returned to their prior apartment building. The original local hospital was not accepting ambulance transport and the client was transported to a different hospital for medical clearance. An EMS-6 captain accompanied the client and assisted with coordinating an out-of-county private ambulance transport. This was a complex incident requiring coordination across Division teams and medical providers.

Community Paramedicine

December 2022

Community Paramedicine Division Highlights

- **University of California Berkeley Data Science Interns:** Undergraduate data science students completed an internship project analyzing community paramedicine and EMS call volume from dispatch (CAD) data. Among other insights, their analysis suggests that when community paramedicine units are dispatched to an emergency incident (community paramedicine units are dispatched to unknown medicals, behavioral health crises, and overdoses):
 1. It is four-times more likely to be diverted away from an ambulance transport and,
 2. Unable to Locate (‘‘UTLs’’) significantly decrease.
- **NYU Policing Project Researchers:** In coordination with the Mayor’s Office, Professor Barry Friedman (New York University), Professor Jessica Gillooly (Suffolk University), and Kate Kinsey (Policing Project Chief of Staff) had observational ride alongs with multiple community paramedicine programs. In partnership with San Francisco and four other cities, this team is conducting research, developing sustainable policy frameworks, and promoting the use of data to better understand community needs (safetyreimagined.org). The other cities are Chicago, Minneapolis, Denver, and Tucson.
- **Community Paramedic Workshop Hosted by California Emergency Medical Service Agency:** Staff from the State EMS regulatory agency (CA EMSA) hosted multiple EMS providers for a day-long workshop in Berkeley. Assistant Deputy Chief Pang, Section Chief Mason, and Dr. Graterol attended. Regulatory staff conducted presentations and held question and answer sessions regarding the newly implemented community paramedicine regulations. Chief Pang was invited to give a presentation to the large group of providers, which included representatives from numerous Northern California fire departments and EMS providers.
- **Adult Probation Department Facility Tour & Resource Coordination:** Community Paramedic Division leadership met with representatives from the City’s Adult Probation Department and toured their transitional housing site, the Minna Project (75 beds total). Coordination efforts are underway to allow for our justice-involved clients direct access to one of their additional facilities, the Billie Holiday Navigation Center (30 beds).

EMS-6

Operational period: 12/1/2022 – 12/31/2022

Total encounters: 275

Average encounters per day: 8.74

Average connection rate to resource: 47.2%

Utilization changes of top 20 utilizers engaged by EMS-6 from month before the operational period to current: -52%

Encounter Type	Current
Outreach	114
Consult	109
911 - EMS6 special call	21
Case Conference	20
911 - EMS6 self-assigned	10
911 - System	1
Total	275

Resource	Referrals Offered	Connections Made	Connection Rate
Substance/Dual Diagnosis Treatment	4	4	100.0%
Social Services	9	6	66.7%
Sobering Center	11	7	63.6%
Psychiatric Services	9	4	44.4%
Shelter - Short Term	10	3	30.0%
Clinic	5	1	20.0%
Joe Healy Detox	3	0	0.0%
Homeless Outreach Team	1	0	0.0%
Homeward Bound	1	0	0.0%
Hummingbird	0	0	0.0%
Navigation Center - Pathway to Housing	0	0	0.0%
Navigation Center - Time Limited	0	0	0.0%
Shelter - Long Term	0	0	0.0%
	53	25	47.2%

EMS-6 Successes

- Unhoused Immigrant Family Sheltered:** At 8:00 PM, EMS-6 was activated by a medic unit who had responded to a 911 call from a women-only shelter. On arrival, EMS-6 Captain Mahoney found a family of six: 2 adults and 4 children (15 years old, 9 years old, 8 months, 4 months). Additionally, Division members were challenged with a significant language barrier.

The mother had a medical issue that required assessment at an emergency room and was transported by ambulance. The family expressed a strong desire to remain together, and a SWRT unit was activated to engage and transport the remaining family hospital waiting room as emergency shelter options were evaluated.

Community Paramedicine Division leadership were notified. Despite contacting multiple City agencies, no shelter could be made available. The hospital wished to discharge the individual and ask the family to depart the waiting room into 40-degree weather. The community paramedic on the SWRT unit, with support of Chief Sloan, paid out of pocket to shelter the family in a local hotel for the evening. They will be reimbursed with monies from the Jordan Broome Fund.

The following day the family was assessed by the Department of Homelessness and Supportive Housing (HSH) and placed in a family shelter. They have been connected with the Office of Immigration and Civil Affairs.

SCRT

Operational period 12/1/2022 – 12/31/2022

Total Calls for Service: 626

Average Response Times: 18.42

Average on Scene Times: 49.52

Disposition All Calls for Service

Non-ambulance transport to non-ED resource	118	18.85%
Ambulance transport to ED	110	17.57%
Remained in the community	208	33.23%
Unable to Locate	147	23.48%
Walked Away	43	6.87%
Total	626	100.00%

Disposition Engaged Individuals Only

Non-ambulance transport to non-ED resource	118	27.06%
Ambulance transport to ED	110	25.23%
Remained in community	208	47.71%
Total	436	100.00%

5150

Grave disability	7
Self-harm	15
Harm to others	4
Total	23

Police Presence on Scene

		Percent of total calls for service (626)
PD On Scene Prior to Arrival	19	3.04%
PD requested by SCRT	7	1.12%
SCRT requested by PD	35	5.59%
PD arrived without request	3	0.48%
Total Incidents with PD present on scene	64	10.22%

Assistance provided by Police

		Percent of total calls for service (626)
Immediate danger to personnel or public	4	0.64%
Assist with Restraints	9	1.44%
Scene Management	9	1.44%
Total	22	3.51%

SCRT Successes:

- **Unhoused Family Connected to Care & Shelter:** Community Paramedic Captain Patrick Renshaw (CP5) was special called for assistance by members of Engine 7. The members of Engine 7 were approached by a mother with a three-year-old daughter, both of whom had arrived by bus earlier in the day from another state.

CP5 activated SCRT-2 to assist with translation. The mother reported the family fled domestic violence in Peru, had crossed the border in Texas, were detained by ICE for 11 days, and taken a bus to San Francisco where they believed they may have been able to stay in an apartment, but were turned away. Additionally, the mother reported her daughter was autistic and had been out of prescribed medication for almost two weeks.

CP5 called nearly a dozen family shelters but was initially unable to secure placement. After continued advocacy a family shelter placement was located. The family was accompanied by the SCRT clinician and transported by taxi to San Francisco General Pediatric Urgent Care where the child received updated vaccinations and a medication refill. CP5 Renshaw continued to coordinate care, and arranged for transport to the family shelter, where a warm hand-off occurred.

SORT

Operational period: 12/1/2022 – 12/31/2022

Calls for Service: 52

Total Encounters: 50

Total Encounters with a Confirmed Overdose: 35

Buprenorphine Starts: 1

Clients who Accepted Harm Reduction Supplies: 26

Clients who accepted Narcan Rescue Kit: 30

SORT Successes:

- Individual with Multiple Overdoses Connected to Treatment & Housing:** An unhoused, 22-year-old male with 14 combined EMS & CP Division contacts in 2022 and 2 EMS contacts in 2021 was successfully started on Medication Assisted Treatment (MAT) in the form of buprenorphine, placed in a shelter with on-site case management, and has successfully been referred for placement in a permanent housing site. This individual had multiple contacts with SORT members after experiencing several non-fatal overdoses. SORT collaborated with DPH's POET (Post Overdose Engagement Team), Street Medicine, and hospital staff. This case is demonstrative of the substantial amount of care coordination and continued active engagement that individuals may require to change their health and social trajectories.
- Buprenorphine:** Plans for our buprenorphine pilot have expanded to include EMS Division paramedics. A training module is being developed with the goal of both the Community Paramedicine Division and the EMS Division to be equipped with buprenorphine beginning April 1st, 2023. We are partnering with Zuckerberg San Francisco General Hospital to utilize their base hospital physicians as medical control for this pilot.

SWRT

Operational period: 12/1/2022 – 12/31/2022

Total calls for service: 473

Call Origin:

On View	235	50%
911	238	50%
Total	473	100%

Disposition all calls for service:

Non-ambulance transport to non-ED resource	95	20%
Ambulance transport to ED	98	21%
Remained in community	239	51%
Unable to Locate	22	4%

Walked Away	19	4%
Total	473	100%

Disposition Engaged Individuals Only

Non-ambulance transport to non-ED resource	95	22%
Ambulance transport to ED	98	23%
Remained in community	239	55%
Total	432	100%

Destination of Non-Emergency Transport

Shelter	34	36%
Mental Health Facility	3	3%
Community Clinic	8	8%
Sobering Center	31	33%
Treatment Program	0	0%
Other Destination (Case management, ride home, food kitchen, etc)	19	20%
Total	95	100%

San Francisco Fire Department
EMS and CP Divisions

Acronyms/Abbreviations/Terms

5250	14-day hold placed after a 5150	<i>CP</i>
800B	Police code for “report of mentally disturbed person”, B priority (non-violent, no weapon)	<i>CP</i>
910B	Police code for “check on wellbeing”, B priority (non-violent, no weapon)	<i>CP</i>
AB1544	CA State Assembly Bill 1544 codifies Community Paramedicine into the CA Health & Safety Code	<i>CP</i>
ABC's	Airway, Breathing, Circulation	<i>Training</i>
ACLS	Advanced Cardiac Life Support	<i>Training</i>
ADU	Acute Diversion Unit	<i>CP</i>
AED	Automatic External Defibrillator	<i>Training</i>
ALS	Advanced Life Support	<i>MCI/Training</i>
AMA	Against Medical Advice	<i>Operations</i>
Amb	Ambulance	<i>Operations</i>
AMS	Altered Mental Status	<i>Training</i>
AOS	Arrived on Scene	<i>Operations</i>
AOT	Assisted Outpatient Treatment (Laura's Law)	<i>CP</i>
APS	Adult Protective Services	<i>CP</i>
ASA	Aspirin	<i>Training</i>
AUD	Alcohol Use Disorder	<i>CP</i>
BLS	Basic Life Support	<i>MCI/Training</i>
BP	Blood Pressure	<i>Training</i>
BVM	Bag Valve Mask	<i>Training</i>
CaCl	Calcium Chloride	<i>Training</i>
CAL-MAT	California Medical Assistance Team	<i>MCI</i>
CCP	Casualty Collection Point	<i>Active Shooter</i>
CCP Leader	Casualty Collection Leader	<i>Active Shooter</i>
CDMIN	California Disaster Medical Network	<i>MCI</i>
CDPH	California Department of Public Health	<i>MCI</i>
CECC	Central Emergency Communication Center	<i>Operations</i>
CHF	Congestive Heart Failure	<i>Training</i>
CIT	Crisis Intervention Team (SFPD)	<i>CP</i>
CIWA	Clinical Institute Withdrawal Assessment	<i>CP</i>
CM	Case Manager	<i>CP</i>
COPD	Chronic Obstructive Pulmonary Disease	<i>Training</i>
CP	Community Paramedic	<i>CP</i>
COWS	Clinical Opioid Withdrawal Scale	<i>CP</i>
CP1	ADC CP Division	<i>CP</i>
CP2	Section Chief of Operations, CP Division	<i>CP</i>
CP3	Section Chief of Administration, CP Division	<i>CP</i>
CP5	Field Community Paramedic Rescue Captain	<i>CP</i>
CPR	Cardio-Pulmonary Resuscitation	<i>Training</i>
CQI	Continuous Quality Improvement	<i>Operations</i>

C-Spine	Cervical Spine	<i>Training</i>
D₁₀W	Dextrose 10% in water	<i>Training</i>
D₂₅W	Dextrose 25% in water	<i>Training</i>
D₅₀W	Dextrose 50% in water	<i>Training</i>
DEM	Department of Emergency Management	<i>MCI</i>
DKA	Diabetic Ketoacidosis	<i>Training</i>
DMAT	Disaster Medical Assistance Team	<i>MCI</i>
DMORT	Disaster Mortuary Team	<i>MCI</i>
DNR	Do Not Resuscitate	<i>Training</i>
DOA	Dead on Arrival	<i>Operations</i>
DOC	Department Operations Center	<i>MCI</i>
DPH	Department of Public Health	<i>MCI</i>
DPH-OCC	Department of Public Health Office of Care Coordination	<i>CP</i>
DUCC	Dore Urgent Care Clinic – a behavioral health clinic	<i>CP</i>
DX	Diagnosis	<i>Operations</i>
ECG	Electro-Cardiogram	<i>Training</i>
ED	Emergency Department	<i>Training</i>
EDCM	Emergency Department Case Management	<i>CP</i>
EDIE	Emergency Department Information Exchange	<i>CP</i>
EMS	Emergency Medical Services	<i>MCI/Training</i>
EMS1	Assistant Deputy Chief, EMS Division	<i>Operations</i>
EMS2	Section Chief, EMS Operations	<i>Operations</i>
EMS6	Responds to frequent 911 users	<i>Operations</i>
EMS6A	Field Unit Call Sign (Alpha)	<i>CP</i>
EMS6B	Field Unit Call Sign (Bravo)	<i>CP</i>
EMS6C	Field Unit Call Sign (Charlie)	<i>CP</i>
EMS6D	Field Unit Call Sign (Delta)	<i>CP</i>
EMSA	Emergency Medical Services Agency	<i>Operations</i>
EMT	Emergency Medical Technician	<i>Operations</i>
EOC	Emergency Operations Center	<i>MCI</i>
EOP	Emergency Operations Plan	<i>MCI</i>
Epi	Epinephrine	<i>Training</i>
ESF	Emergency Support Function	<i>MCI</i>
ET3	A new reimbursement/billing framework designed to reimburse providers for non-ED transports or treat in place scenarios	<i>CP</i>
ETT	Endotracheal Tube	<i>Training</i>
FEMA	Federal Emergency Management Agency	<i>MCI</i>
FF/PM	Firefighter Paramedic	<i>Operations</i>
G	Gram	<i>Training</i>
GCS	Glasgow Coma Scale	<i>Training</i>
GYN	Gynecological	<i>Training</i>
HazMat	Hazardous Materials Incident	<i>Training</i>
HICT	High Intensity Care Team	<i>CP</i>
HIPAA	Health Insurance Portability and Accountability Act of 1996 (regulations protecting the privacy and security of certain health information)	<i>CP</i>
HOT	Homeless Outreach Team	<i>CP</i>
HR360	Health Right 360 (a community-based organization)	<i>CP</i>
HSOC	Healthy Streets Operation Center (Mayor's response task force for unhoused)	<i>CP</i>

HTN	Hypertension	<i>Training</i>
I&Q Site	Isolation and Quarantine Site (COVID)	<i>CP</i>
IC	Incident Commander	<i>Active Shooter</i>
ICM	Intensive Case Management	<i>CP</i>
ICS	Incident Command System	<i>MCI</i>
ICU	Intensive Care Unit	<i>Operations</i>
IM	Intramuscular	<i>Training</i>
IN	Intranasal	<i>Training</i>
IO	Intraosseous	<i>Training</i>
IV	Intravenous	<i>Training</i>
IVP	IV Push	<i>Training</i>
J	Joule (electrical measurement)	<i>Training</i>
JEOC	Joint Emergency Operations Center	<i>MCI</i>
kg	Kilogram	<i>Training</i>
LEMSA	Local Emergency Medical Services Agency	<i>Operations</i>
LOC	Level of Consciousness	<i>Training</i>
lpm	Liter Per Minute	<i>Training</i>
Lt49	Lieutenant, Station 49	<i>Operations</i>
LUCAS	Lund University Cardiopulmonary Assist System (mechanical chest compression device)	<i>Operations</i>
MAD	Mucosa Atomizer Device	<i>Training</i>
MAP	Managed Alcohol Program	<i>CP</i>
MAT	Medication-Assisted Treatment	<i>CP</i>
max	Maximum	<i>Training</i>
mcg	Microgram	<i>Training</i>
MCI	Multi-Casualty Incident	<i>MCI</i>
ME	Medical Examiner	<i>Operations</i>
meds	Medications	<i>Training</i>
mEq	Milliequivalent	<i>Training</i>
mg	Milligram	<i>Training</i>
MGS	Medical Group Supervisor	<i>MCI</i>
MHOAC	Medical/Health Operational Area Coordinator	<i>MCI</i>
min.	Minute	<i>Training</i>
MI	Myocardial Infarction	<i>Training</i>
ml	Milliliter	<i>Training</i>
MMRT	Mobile Medical Response Team	<i>CP</i>
MOU	Memorandum of Understanding	<i>Operations</i>
MVA	Motor Vehicle Accident	<i>Operations</i>
NDMS	National Disaster Medical System	<i>MCI</i>
NIMS	National Incident Management System	<i>MCI</i>
NPA	Nasopharyngeal Airway	<i>Training</i>
NPO	Nothing per mouth	<i>Training</i>
NS	Normal Saline	<i>Training</i>
NTG	Nitroglycerin	<i>Training</i>
NTI	Nasal Tracheal Intubation	<i>Training</i>
OA	Operational Area	<i>MCI</i>
OB	Obstetrical	<i>Training</i>
OES	Office of Emergency Services	<i>MCI</i>
OPA	Oropharyngeal Airway	<i>Training</i>
OTC	Over the Counter	<i>Training</i>

OTI	Oral Tracheal Intubation	<i>Training</i>
ODU	Opioid Use Disorder	<i>CP</i>
PACC	Post-Acute Community Conservatorship	<i>CP</i>
PALS	Pediatric Advanced Life Support	<i>Training</i>
PDC	Patient Distribution Center	<i>MCI</i>
PDT	Patient Declines Transport	<i>Operations</i>
PEA	Pulseless Electrical Activity	<i>Training</i>
PERRLA	Pupils equal, round, and reactive to light and accommodation	<i>Training</i>
PGO	Public Guardian Office	<i>CP</i>
PHI	Protected Health Information	<i>CP</i>
PM	Paramedic	<i>Operations</i>
PO	By Mouth	<i>Training</i>
POV	Privately Owned Vehicle	<i>Operations</i>
prn	As Needed	<i>Training</i>
PSH	Permanent Supportive Housing	<i>CP</i>
PT	Patient	<i>Operations</i>
PTA	Prior to Arrival	<i>Operations</i>
QRS	Parts of Cardiac Contraction Complex	<i>Training</i>
RAMS	Richmond Area Multi-Services (a community-based organization)	<i>CP</i>
R/O	Rule Out	<i>Training</i>
RC	Rescue Captain	<i>Operations</i>
RC1	Rescue Captain Field Unit 1	<i>Operations</i>
RC2	Rescue Captain Field Unit 2	<i>Operations</i>
RC3	Rescue Captain Field Unit 3	<i>Operations</i>
RC4	Rescue Captain Field Unit 4	<i>Operations</i>
RC49	Rescue Captain, Station 49	<i>Operations</i>
RC5	Rescue Captain Field Unit 5	<i>Operations</i>
RDMHC	Regional Disaster Medical/Health Coordinator	<i>MCI</i>
RDMHS	Regional Disaster Medical/Health Specialist	<i>MCI</i>
RGS	Rescue Group Supervisor	<i>Active Shooter</i>
RIS	Rapid Intoxication Scale	<i>CP</i>
RMM	Rescue Medical Manager	<i>Active Shooter</i>
ROI	Release of Information	<i>CP</i>
RTF	Rescue Task Force	<i>Active Shooter</i>
SBP	Systolic Blood Pressure	<i>Training</i>
SCRT	Street Crisis Response Team	<i>CP</i>
SEMS	Standardized Emergency Management System	<i>MCI</i>
SFFD	San Francisco Fire Department	<i>MCI</i>
SFPD	San Francisco Police Department	<i>MCI</i>
SGA	Supraglottic Airway (airway device)	<i>Operations</i>
SIP Site	Shelter in Place Site (COVID)	<i>CP</i>
SL	Sublingual	<i>Training</i>
SORT	Street Overdose Response Team	<i>CP</i>
SP	Shared Priority	<i>CP</i>
SPA	Service Provider Agreement	<i>Operations</i>
SQ	Subcutaneous	<i>Training</i>
START	Simple Triage and Rapid Treatment	<i>Operations</i>

SUD	Substance Abuse Disorder	<i>CP</i>
SVT	Supraventricular Tachycardia	<i>Training</i>
SW	Social Worker	<i>CP</i>
SWRT	Street Wellness Response Team	<i>CP</i>
TEMS	Tactical Emergency Services Team	<i>Active Shooter</i>
Title 22	The section of the California Health & Safety Code which pertains to Emergency Medical Services	<i>CP</i>
TKO	To Keep Open	<i>Training</i>
TWUCC	Tom Waddell Urgent Care Clinic Golden Gate Ave	<i>CP</i>
Tx	Treatment	<i>Operations</i>
UOA	Upon Our Arrival	<i>Operations</i>
UTL	Unable to Locate	<i>Operations</i>
V-Fib	Ventricular Fibrillation	<i>Training</i>
V-Tach	Ventricular Tachycardia	<i>Training</i>
WPIC	Whole Person Integrated Care	<i>CP</i>