

Hybrid #3 Graduation



Photo by Sam Menchaca, A/Lt.

SFFD

EMS AND COMMUNITY PARAMEDICINE

**FIRE COMMISSION REPORT
SEPTEMBER 2022**

DEPUTY CHIEF SANDY TONG

EMS DIVISION

Assistant Deputy Chief Niels Tangherlini

September 2022

OPERATIONS UPDATES

Station 49 welcomed 25 new members – 3 H3L2 Paramedics and 22 H3L1 EMTs. Graduation was held on Friday, September 30th at SFFD Headquarters Commission Room. Family and friends gathered in the lobby area afterwards to enjoy a catered reception by the SF Fire Credit Union.

During September, the EMS Division saw greater fluctuations in daily call volume with 4 days just under 300 calls and three days over 400 calls. This represents a 1.76% increase in call volume over August. Again, the Department is seeing overall EMS call volume trend upwards, which has been the case for the last two decades. Time on task remains just over 60 minutes per call.

RESEARCH UPDATES

Like world class medical schools and hospitals, the EMS Division seeks opportunities to participate in clinical research. Clinical research not only contributes to greater understanding of prehospital medicine but improves the knowledge and skill of our providers. Currently the EMS Division is actively participating in two clinical research and one pilot project.

The EMS Division is one of five services nationally participating in the Mind Rhythm study. This study is working to demonstrate the effectiveness of a diagnostic device that paramedics can place on a stroke victim that will aid in determining if a patient is experiencing a large versus small-vessel stroke. This cutting-edge technology will dramatically improve the outcomes for certain stroke victims. Currently, members of the EMS Division are being trained on how to participate in the study, which will officially launch in October.

The EMS Division's Research Subcommittee is tasked with finding new research opportunities for the Department, introducing providers to research, and building infrastructure that will facilitate participation in research projects. Currently, members of the Subcommittee have partnered with several UCSF physicians to launch the Pilotcardi Study. This project is examining occult overdoses as a cause of cardiac arrest. The initial study, currently in progress, will lead to other research and ultimately improvements in the way crews handle certain critical patients. Additionally, new partnerships and opportunities are being developed for members of the EMS Division.

Finally, the Department's medical director, along with the CQI office, have been monitoring the effectiveness of the Department's video laryngoscope pilot project. This pilot project has been ongoing for more than a year and has the EMS Division's field RCs utilizing video laryngoscopes to perform field intubations. Video laryngoscope has become the industry standard for in-hospital airway care and is proving highly effective for the prehospital environment as well. Typically, RCs are having close to 90% first-pass success with this device, which ensures patients are receiving the highest standard in airway care.

NOTABLE INCIDENTS

Everyday our EMS crews make a difference in the lives of the people we serve and in September there were several cases where the difference was lifesaving. The following are highlights of some of those cases.

Case 1:

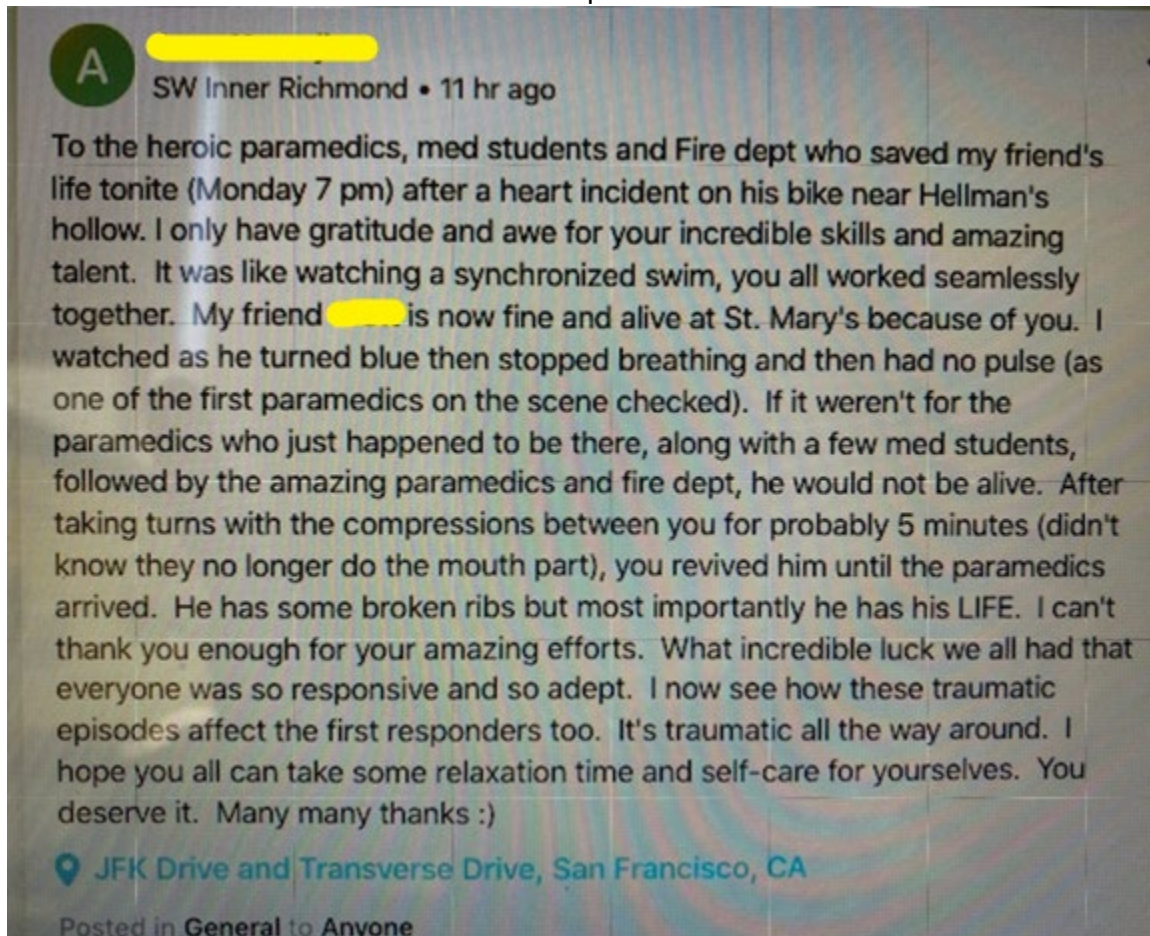
Kudos for the incredible work of our crew (PM Patterson and EMT Alvarado) from the staff at CPMC Van Ness. SFFD ambulance transported a 67-year-old male who went to bed at 10pm and woke up at 12am with slurred speech, left-sided facial droop and weakness. Our crew was able to rapidly identify this person having a stroke and he was transported as a code 3 stroke alert. Because the ER was already alerted to a possible stroke patient, they were able to get him to CT where it was determined he was a candidate for tPA treatment. Per the hospital, in the morning, the patient felt normal. The crew provided excellent care during rapid transport to the hospital and are credited with saving this person's life.

Case 2:

In late September, E03, M63 and RC1 were dispatched for a cardiac arrest to 1750 The Embarcadero North. A 50-year-old male was waiting to board the Alcatraz Ferry when he collapsed. An off-duty ICU nurse, who happened to be in line, along with a staff member of Alcatraz City Cruises began performing CPR. They deployed an AED available at the site and administered one shock. When our crews arrived, the patient had achieved ROSC (Return of Spontaneous Circulation) and was promptly transported to CPMC Van Ness. Upon follow up, RC1 (Captain Avila) found the patient was awake, alert, and oriented in the emergency room. The help of bystanders doing early CPR and early defibrillation, and the quick transport from our crews resulted in a good outcome for the patient. The patient was on vacation with his wife from Illinois and appreciated the good work from our crews. This scenario was a perfect example of EMS functioning the way it was intended.

Case 3:

Heartfelt thanks for EMS crews who saved a person's life.



Case 4:

Also in late September, E51, M74, and RC2 responded to the Golden Gate Bridge for a reported cardiac arrest. The Bridge Patrol first received a call for a person down. Minutes later members of the Bridge Patrol and CHP located a man lying next to a bicycle in the East Parking lot. Officers started CPR and utilized a nearby AED. When SFFD personnel arrived, the patient had received both CPR and 3 shocks. As a result, the patient had ROSC in the field and received extensive post arrest care from our crews on scene and enroute to the hospital. This incredible team effort saved this person's life. The patient is stable and doing very well at the hospital. This case clearly demonstrates the chain of survival and highlights interagency cooperation that occurs daily in San Francisco.

Airport Disaster Drill

Each year the Airport Division conducts an annual disaster drill. This year's drill on September 28th was an MCI (Multi-Casualty Incident) with a scenario involving a fire and multiple patients. Three ambulances and one RC from the City responded to participate. Volunteers played the role of patients. Each received moulage and a patient script. Our crews assessed, treated and transported victims.



Rescue Captain Tony Molloy responded as RC4. Interestingly, Captain Molloy was one of the responders to the Asiana disaster and brought great insight to this exercise.

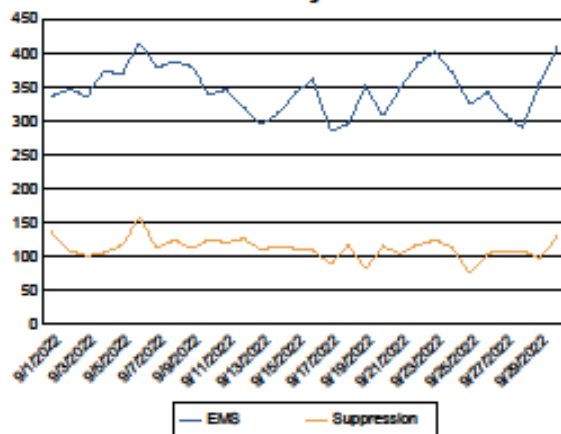


SFFD ACTIVITY SUMMARY

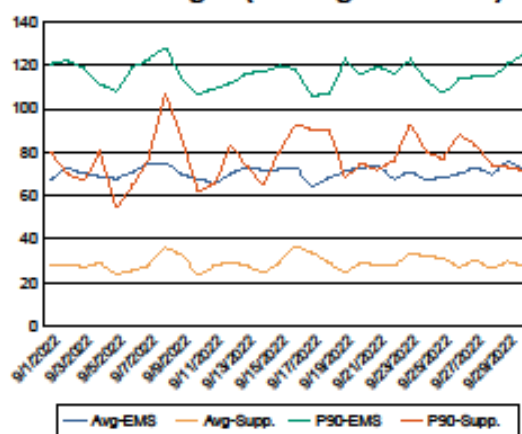
SFFD Activity Summary From 09/01/2022 To 09/30/2022

Call Date	EMS Calls	Suppression Calls	Total Calls	EMS Call Avg. (Min)	Transport Avg. (Min)	Suppression Avg. (Min)	EMS P90 (Min)	Suppression P90 (Min)
09/01/2022	336	137	473	67.06	96.13	27.85	120.64	80.27
09/02/2022	346	109	455	72.58	97.55	28.37	122.13	70.25
09/03/2022	336	102	438	70.16	94.11	27.15	119.17	66.75
09/04/2022	373	106	479	68.49	90.14	28.91	111.23	80.51
09/05/2022	368	118	486	67.82	89.49	23.98	108.14	54.52
09/06/2022	413	156	569	70.63	96.15	25.47	119.27	65.08
09/07/2022	378	114	492	74.78	97.66	27.80	122.71	77.47
09/08/2022	386	125	511	74.90	99.76	35.82	127.89	106.25
09/09/2022	380	113	493	69.48	94.00	32.65	114.51	86.10
09/10/2022	339	125	464	67.79	89.59	23.37	106.64	62.26
09/11/2022	346	121	467	65.42	87.88	27.74	109.34	65.30
09/12/2022	319	127	446	70.15	90.16	29.37	111.83	82.81
09/13/2022	295	111	406	72.72	95.04	27.53	116.21	73.50
09/14/2022	312	115	427	71.74	92.31	24.71	117.02	65.39
09/15/2022	343	112	455	72.04	96.25	28.98	119.75	80.08
09/16/2022	362	110	472	72.59	95.87	36.36	118.16	92.70
09/17/2022	285	90	375	64.08	84.31	33.40	105.89	90.01
09/18/2022	296	118	414	68.35	86.58	29.09	106.58	90.32
09/19/2022	352	84	436	71.29	97.46	24.88	122.82	68.60
09/20/2022	308	116	424	72.81	94.52	29.46	116.02	74.69
09/21/2022	350	105	455	73.77	96.92	27.54	119.43	71.95
09/22/2022	385	118	503	67.85	93.41	27.46	116.53	75.77
09/23/2022	401	124	525	70.93	100.05	33.04	122.83	92.39
09/24/2022	372	115	487	67.53	91.18	32.27	113.34	79.65
09/25/2022	325	77	402	68.05	87.49	31.06	107.29	76.77
09/26/2022	343	105	448	70.04	91.77	27.08	113.94	87.53
09/27/2022	310	109	419	72.87	93.22	30.21	114.75	83.13
09/28/2022	291	109	400	69.87	91.23	26.47	114.47	73.44
09/29/2022	355	99	454	75.52	98.15	29.54	120.98	73.05
09/30/2022	408	130	538	71.99	96.30	27.45	125.47	71.47

Calls By Date



Call Length (Average and P90)

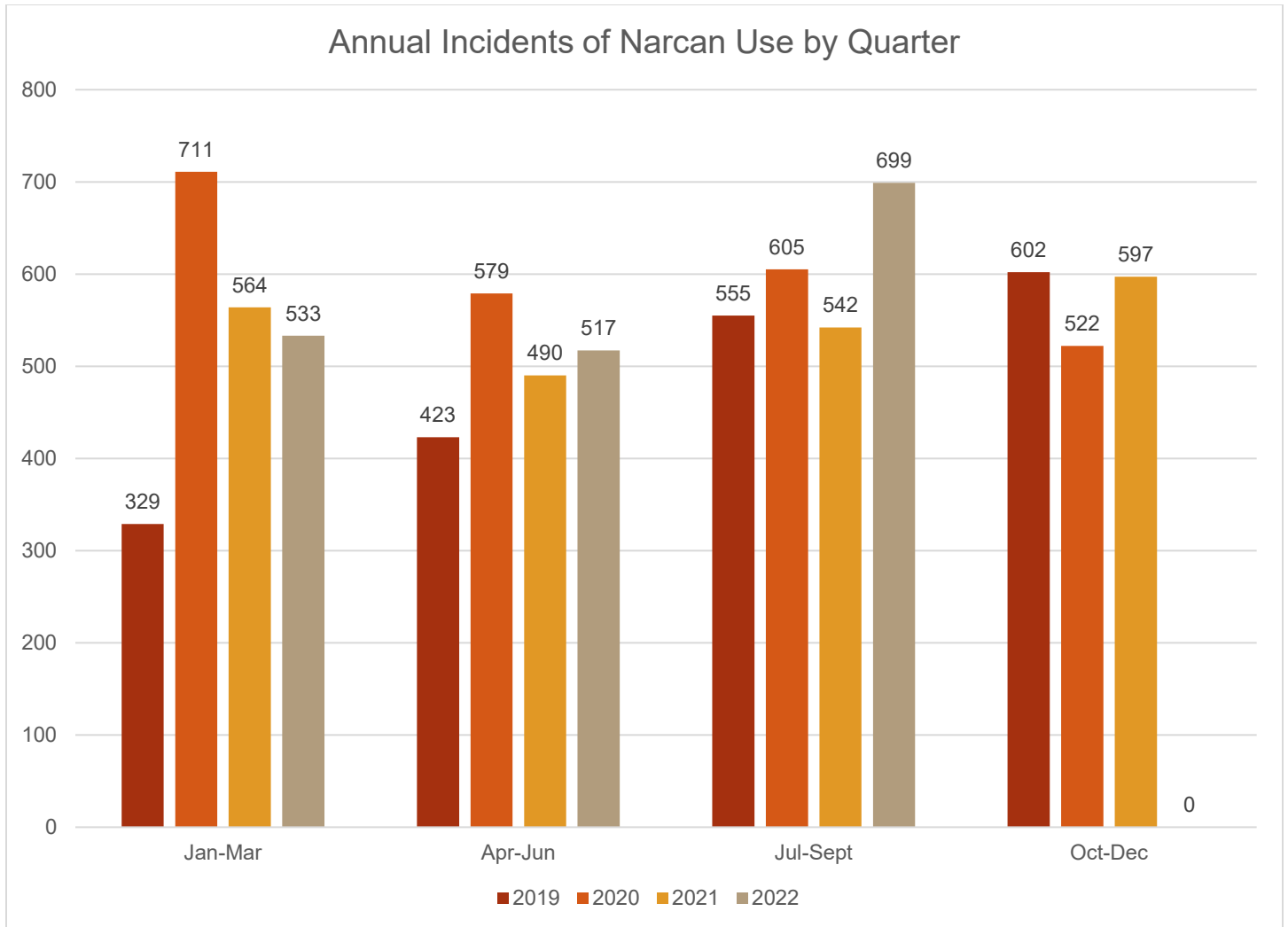


INDIVIDUALS EXPERIENCING HOMELESSNESS – Incident Distribution

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

		No		Yes		Total
EMS8	2022/04	91	44%	115	56%	206
	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	4	24%	13	76%	17
Fire Incidents	2022/04			77		77
	2022/05			74		74
	2022/06			94		94
	2022/07			80		80
	2022/08			76		76
	2022/09			56		56
	2022/10			4		4
Medical Incidents	2022/04	4,938	79%	1,313	21%	6,251
	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	5,544	77%	1,661	23%	7,205
	2022/09	5,584	78%	1,591	22%	7,175
	2022/10	969	77%	295	23%	1,264

NARCAN ADMINISTRATION



COMMUNITY PARAMEDICINE DIVISION

Assistant Deputy Chief Simon Pang
September 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

- We had many opportunities to show the work the Community Paramedicine division is doing:
 - On September 15, District Attorney Brooke Jenkins and a reporter from the LA Times rode along with Public Information Officer Lt. Jonathan Baxter and Chief Pang as we followed Captain Patrick Renshaw on CP-5. DA Jenkins was able to observe several engagements of the Street teams, with outcomes ranging from ambulance transport to an ED, non-ambulance transport to non-emergent resources, and individuals that chose to remain in the community.
 - On September 27, Fire Commissioner Marcie Fraser rode along with Captain Brandon Chatham on CP-5. This follows a ride along that the Commissioner did on EMS-6 with Captain Jen Ishikawa. Both captains report that the Commissioner was a knowledgeable and insightful observer.
- In 2021 the Board of Supervisors passed a resolution that authorized the Department of Public Health's Behavioral Health Services to train designated SFFD paramedics in assessing and writing 5150 holds. In August, the first 5150 hold by a SFFD member was written. In September, two individuals were placed on holds by community paramedic trained EMS captains. A 5150 hold requires that the individual be evaluated by mental health professionals, usually a psychiatrist, and involuntarily held for up to 72 hours. In both these cases, the holds for both individuals were extended an additional 14 days, called a 5250 hold, after the treating mental health professional determined that the individual needed additional treatment and was unwilling or unable to accept voluntary treatment. It must be noted that a 72-hour 5150 hold can only be extended to a 14-day 5250 hold if a judge, during a hearing with the individual present, agrees with the assessment. Additionally, for quality improvement, every 5150 written by SFFD members are reviewed by the FD Medical Directors (Dr. Graterol and Dr. Lacocque), and a provider from Behavioral Health Services of the Department of Public Health.
- On September 13, the Street Wellness Response Team was added to 32 code calls (unknown medical), and the Street Overdose Response Team was added to 23 code calls (Overdose) as additional resources on 911 incidents. Prior to this our members on these two teams monitored the radio and self-assigned themselves to (respectively) low acuity street level calls and overdose calls. Early data suggests that adding these two teams to Fire Response (FRES) patterns has increased efficiency and effectiveness of these teams. Data analysis of our performance metrics are ongoing.

- Having been asked by the City Planning Department, the Department upstaffed two Street Wellness Response Teams and a community paramedicine captain position during the Dreamforce convention on September 20, 21, and 22. The role of these teams was to help people in need of care around the area of the Moscone convention center. Future, similar requests are anticipated.

EMS-6

Operational period: 9/01/22 - 9/30/22

Total encounters: 378

Average encounters per day: 12

Average connection rate to resource: 55%

Utilization changes of top 20 utilizers engaged by EMS-6 from month before the operational period to current: -64%

Encounter Type	Current
Outreach	192
Consult	95
911 - EMS6 special call	45
Case Conference	26
911 - EMS6 self-assigned	20
Conservator Show of Support	0
	378

Resource	Referrals Offered	Connections Made	Connection Rate
Clinic	1	1	100%
Homeless Outreach Team	1	1	100%
Sobering Center	19	16	84%
Shelter - Long Term	4	3	75%
Navigation Center - Pathway to Housing	2	1	50%
Shelter - Short Term	2	1	50%
Social Services	7	3	43%
Psychiatric Services	5	2	40%
Substance/Dual Diagnosis Treatment	7	2	29%
Joe Healy Detox	6	0	0%
Homeward Bound	1	0	0%
Hummingbird	0	0	0%
Navigation Center - Time Limited	0	0	0%
	55	30	55%

STREET CRISIS RESPONSE TEAM (SCRT)

Operational period 9/1/22 - 9/30/22

Total Calls for Service: 790

Average Response Times: 19.2 minutes

Average on Scene Times: 41.52 minutes

Disposition All Calls for Service

Non-ambulance transport to non-ED resource	79	10%
Ambulance transport to ED	97	12.3%
Remained in the community	297	37.6%
Unable to Locate	219	27.7%
Walked Away	70	8.9%
Information Exchanged	28	3.5%
Total	790	100%

Disposition Engaged Individuals Only

Non-ambulance transport to non-ED resource	79	16.7%
Ambulance transport to ED	97	20.5%
Remained in community	297	62.8%
Total	473	100%

5150

Grave disability	14	51.9%
Self-harm	8	29.6%
Harm to others	5	18.5%
Total	27	100%

Police Presence on Scene

		Percent of total calls for service (790)
PD On Scene Prior to Arrival	21	2.7%
PD requested by SCRT	15	1.9%
SCRT requested by PD	32	4.1%
Total Incidents with PD present on scene	68	8.7%

Assistance provided by Police

		Percent of total calls for service (790)
Immediate danger to personnel or public	5	0.6%
Assist with Restraints	3	0.4%
Scene Management	21	2.7%
Total	29	3.7%

SCRT Highlights:

- The following highlights interagency collaboration and the effectiveness of community paramedicine. An ambulance responded to a 911 incident and found an agitated 34-year-old male, whose primary language was not English, asking to be transported to San Francisco General Hospital. As the General Hospital was on divert, the ambulance crew transported him to another local hospital; however, once at the receiving hospital, the individual got off the gurney and walked away. Less than an hour later, police responded to a 911 call for the same individual, standing in a doorway a few blocks from the hospital to which he had been transported. The individual was “screaming for SFPD,” and described as “agitated, not directable, flailing his arms wildly.” Police did calm the individual and requested SCRT. Upon arrival SCRT personnel looked up the individual in a medical database and determined that the

individual was on the autism spectrum and had a local address. After SCRT personnel contacted his parents on the phone, the individual was transported home and reunited with his parents. The elderly couple, who stated that their son left the house after refusing to take his medication and was missing all day, were greatly relieved that their son was found.

STREET OVERDOSE RESPONSE TEAM (SORT)

Operational period: 9/1/22 – 9/30/22

Calls for Service: 195

Total Encounters: 134

Total Encounters with a Confirmed Overdose: 80

Buprenorphine Starts: 4

Clients who Accepted Harm Reduction Supplies: 66

Clients who accepted Project FRIEND Narcan: 65

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.

SORT Highlights:

- During a presentation to the California Bridge Clinical Champions*, an ER physician described the support provided by the Street Overdose Response Team to one of his patients. In this case, a male individual in his 30s overdosed in a public location and was given bystander Narcan. The community paramedic on the Street Overdose Response Team met the patient on scene and, when an ambulance transported the patient to a local hospital, followed him there. Once there, the community paramedic worked with ER staff to connect the patient to a local clinic and to the Post Overdose Engagement Team (POET). The ER doctor, who started buprenorphine in the ER and gave the patient a prescription of the medication, expressed gratitude at having the patient receive real-time engagement and follow-up care by our member.

**California Bridge is a program of the Public Health Institute in Oakland, California, with a goal of improving addiction treatment in hospitals.*

STREET WELLNESS RESPONSE TEAM (SWRT)

Operational period: 9/1/22 – 9/30/22

Total encounters: 625

Call Origin:

On View	433	69.7%
911	188	30.3%
Total	621	100%

Disposition all calls for service:

Non-ambulance transport to non-ED resource	78	12.6%
Ambulance transport to ED	32	5.1%
Remained in community	370	59.6%
Unable to Locate	35	5.6%
Other	106	17.1%
Total	621	100%

Disposition Engaged Individuals Only

Non-ambulance transport to non-ED resource	78	16.3%
Ambulance transport to ED	32	6.7%
Remained in community	370	77%
Total	480	100%

Destination of Non-Emergency Transport

Shelter	25	32%
Mental Health Facility	2	2.6%
Community Clinic	8	10.2%
Sobering Center	26	33.3%
Treatment Program	1	1.3%
Other Destination (Case management, ride home, food kitchen, etc.)	16	20.5%
Total	78	100%

SWRT Highlights:

- A family of six—two parents, four children, two dogs, two cats and a guinea pig—drove across the continent towing a U-Haul trailer to start a new life in California. Their vehicle was involved in an accident on a local highway and the father, who was driving, was taken to a hospital by ambulance. One of the Rescue Captains, Beth Goudreau, after ensuring that the rest of the family members were uninjured, recognized the catastrophic situation the family was in: father in hospital, their car inoperable and towed to a tow yard, a mother with four children under the age of 12, pets, with no immediate access to money, no place to stay, no transportation, and night falling. Captain Goudreau contacted community paramedicine and a SWRT unit arrived on scene to assist. Chief of Department Nicholson was apprised and contacted Section Chief of Community Paramedicine Operations April Sloan. For the next five hours Captain Goudreau, the members of SWRT4, Jennifer Shonkwiler and Adam Sylvester, and the CHP, problem solved on the side of the highway, while Chief Nicholson and Chief Sloan problem solved from afar. The family vehicle, and the trailer behind it was towed, so crucial pieces of luggage were put into the SWRT van. Animal Care and Control came to the scene and transported the 2 dogs, 2 cats, and guinea pig, which were much loved and in good health, to their office for safe keeping. Pizza was purchased, compliments of our members, for the children. And finally, through the efforts of Chief Nicholson acting as an executive champion, the Human Services Agency provided two nights at a local hotel for the family, and SWRT4 transported them there.

The story doesn't end there, as the next day, SWRT2 met the family and spent the next day assisting the mother to provide food for the children, making phone calls and office visits to activate benefits for the family and trying to secure emergency shelter so they would have a place to stay beyond the two nights at the hotel. As it turns out, the family shelters have a 4-person limit on family size, and shelter for the family of 5 could not be secured. Persistence and advocacy were eventually successful, and a third night at the hotel was secured, followed by being accepted into a 14-day emergency family shelter. At last report, the family has signed a lease for housing in a neighboring county.

Special thanks to Chief Nicholson for her role in helping this family in need.