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for the ED cohort, highlighting the necessity of intervening sooner for patients with a higher risk of comorbidities. The ED cohort being more likely to be Black/Latino is consistent with previous findings and may be related to systemic barriers to medical treatment these groups have historically faced. Systemic barriers to treatment, whether socioeconomic or racial inequity, warrant further research.

24 Is Housing Stability Associated with Telehealth Utilization among Emergency Department Patients?

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Background: Housing instability is a major social determinant of health and is associated with increased reliance on emergency healthcare. Emergency departments (ED) often serve as an entry point to healthcare for people experiencing homelessness (PEH). Telehealth use has expanded rapidly since the COVID-19 pandemic. The majority of PEH own a mobile phone; many PEH perceive mobile health to be supportive and increase healthcare accessibility. However, telehealth use may be limited by a lack of awareness, inconsistent internet access, and limited access to charging. This study describes the relationship between telehealth utilization and housing stability.

Methods: This is a cross-sectional study conducted during Summer 2024, Spring 2025, and Summer 2025 in an urban safety-net ED. Patients were included if ≥ 18 years old and spoke English or Spanish. They were excluded if altered, critically ill, intoxicated, in law enforcement custody, or on a psychiatric hold. Research associates systematically sampled patients who visited the ED using standardized questions. Telehealth use was defined as accessing healthcare via phone or video call. Housing stability was defined as having a steady place to live (AHC-HRSN). Questions were adapted from a previously tested survey instrument. Chi-square analysis and logistic regression were performed.

Results: Of the 1,164 included patients, 39% used telehealth, 14% reported housing instability, and 89% owned a smartphone. Telehealth utilization was higher in individuals with stable housing (41% v 28%, $p = 0.001$), who own a smartphone (41% v 30%, $p = 0.018$), and with education at the college level or above (47% v 36%, $p = 0.001$). After adjusting for smartphone ownership, health literacy, age, and education, people with stable housing (OR: 1.65, 95% CI 1.13-2.42) and higher education (OR: 1.45, 95% CI 1.09-1.91) had statistically significantly greater odds of telehealth use. Smartphone ownership, age, and health literacy did not have significant associations with telehealth use.

Conclusion: Housing stability and higher education

level are associated with higher rates of telehealth utilization. Innovative and culturally tailored resources may be needed to increase telehealth use for individuals who are affected by social risk factors, specifically housing instability. Limitations include self-reported data from a single site.

25 Patient Outcomes Following Prehospital Naloxone Administration in San Francisco

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Background: Naloxone (NLX) is available to laypersons and an effective public health intervention. In 2024, San Francisco, CA recorded 638 opioid-related deaths, showing the opioid crisis and need to expand bystander NLX access. As NLX is often administered before EMS arrival, understanding prehospital use patterns and transport dispositions is critical. This study quantifies the effects of these interventions on the EMS system.

Methods: The Toxicology Investigators Consortium (ToxIC) Real-World Examination of Naloxone for Drug Overdose Reversal (RENDOR) project is an ongoing multisite observational study where EMS providers collect prehospital data on opioid overdose cases, including demographics, scene type, NLX administrator/dose/route, transport disposition, and provision of leave-behind NLX. Patients were grouped by administrator: Pre-EMS only (family/friend/stranger, police (PD), non-transport fire, and community/social services (C/SS) staff), EMS only, and Pre-EMS + EMS. EMS encounters from 6/2024-12/2025 were included.

Results: Among San Francisco cases ($n = 350$), 79.1% ($n = 277$) were male, and the mean age differed by group ($p = 0.010$): EMS-only recipients were older (45.5 y) than pre-EMS-only (40 y) and pre-EMS + EMS (41.7 y). Most overdoses were on streets/sidewalks ($n = 264$, 75.4%), with pre-EMS responders giving NLX 73% ($n = 193$) of these cases. EMS-only responses were more common in private residences ($n = 24$, 54.5%; $p = 0.001$). IN NLX was predominant among pre-EMS responders ($n = 184$, 93.9%) compared to IN + IM/IV/IO ($n = 4$, 2.0%). EMS used IN in 44.2% ($n = 46$), similar to IM/IV/IO use ($n = 38$, 36.5%), and more often than IN + IM/IV/IO ($n = 19$, 18.3%). Among pre-EMS administrators, bystanders accounted for 87.8% ($n = 216$), with smaller contributions from PD ($n = 10$, 4.1%) and C/SS providers ($n = 20$, 8.1%). Most patients were transported ($n = 253$, 72.3%), while 25.1% ($n = 88$) refused/eloped. On-scene deaths were rare ($n = 6$, 1.7%). No significant difference in transport outcomes was not found for patients

receiving either pre-EMS or EMS-only NLX.

Conclusion: In San Francisco, NLX is often administered by pre-EMS responders in public settings and among younger patients, while EMS use is more common in private residences. Most administrations are by bystanders, highlighting the critical role of layperson NLX use and supporting public health interventions that expand bystander distribution in urban settings.

26 E-Bike Injuries and Rider Characteristics at a Level 1 Trauma Center: A Retrospective Review

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Background: MElectric bicycles (e-bikes) are an increasingly popular and convenient form of transportation, but with variable laws and regulations governing them across the country and the globe. With the increase in e-bikes in use, there has also been an increase in the number of e-bike-related injuries. This study aims to characterize the severity of injuries of patients presenting to a trauma center and to analyze characteristics of the riders.

Methods: This is a retrospective cross-sectional study of the trauma registry of patients presenting after e-bike incidents to a level 1 trauma center in Orange County, California from January 2021 - January 2025. We analyzed registry data including demographic information, mechanism of injury, helmet use, vitals, lab results, Injury Severity Score (ISS) and Abbreviated Injury Scale (AIS).

Results: 397 e-bike incidents were analyzed. 36 patients presented in 2021 with annual numbers increasing to 172 by 2024. 79.8% of riders were male, 16.3% were under 18 years of age, and 9.6% were 65 years or older. 26.8% of patients were wearing helmets at the time of collision. Patients without helmets were more likely to have a higher head and neck AIS score ($p = 0.03$). Other AIS scores were similar between helmeted and unhelmeted groups. Fall from e-bike (48.2%), e-bike vs automotive (35.1%), and e-bike vs stationary object (13.1%) made up the majority of specific mechanisms. Many riders tested positive for alcohol or drugs on urine and blood tests including marijuana (43.8%), alcohol (32.0%), methamphetamine (15.7%) and opiates (5.1%). Patients with alcohol or methamphetamine detected on drug screening were less likely to wear a helmet ($p < 0.001$). There was no difference in average ISS score between patients that tested positive or negative for substances.

Conclusion: This data reflects a trend seen globally of increasing e-bike incidents presenting to trauma centers and emphasizes the importance of addressing this public health concern. In our population, there are high rates of risky riding behavior including lack of helmet use and riding under the

influence of drugs or alcohol. This data can help clinicians, public health officials, policy makers, and other community stakeholders design preventative interventions and target the appropriate populations.

27 Watch Out Below! A Comparison of Hiking and Rock-Climbing Falls at a Level I Trauma Center

Bridger Woods, BS, Allison McNickle, MD, FACS

Background: Over 60 million Americans participate in hiking and 8 million in rock climbing. Limited data is available regarding injury patterns associated with these activities. We hypothesize that lower extremity injuries would be more common in hiking and fewer head injuries would be seen in climbing due to helmet use.

Methods: This is a retrospective review of patients injured in a "fall from cliff" (W15.xxx) at a single Level 1 Trauma Center from January 2017 to December 2024. Event details were collected from Emergency Medical Services (EMS) and hospital documentation with patients excluded if not participating in rock climbing or hiking. Data collected included: initial vitals, interventions, and transport time/method from field to hospital. Hospital data included injuries, length of stay, interventions, and discharge disposition. The groups were compared using Stata with $p < 0.05$ as significant.

Results: The cohort consisted of 127 patients, 51 rock climbers and 76 hikers, with similar demographics. Climbers more frequently used a helmet (65.2% vs. 5.3%, $p < 0.001$). The median fall distance was similar (20 ft vs. 25 ft, $p = 0.682$). Field extrication was mostly by helicopter (62.6%) and transport to the hospital by ground ambulance (65.4%). EMS interventions included spinal motion restriction (69.2%), medications (65.4%) and splinting (43.3%). Admission vital signs were similar. Frequency of traumatic brain injury and spine injuries were not different, but facial injuries were more common in hikers (25% vs 11.8%, $p = 0.066$). Hikers had more upper extremity injuries (38.2% vs. 19.6%, $p = 0.026$) but there was no significant difference in lower extremity injuries (36.8% vs. 51.0%, $p = 0.114$). Almost equal numbers of hikers and climbers had surgery (34 climbers and 30 hikers), usually from orthopedic injuries. Hikers required more laceration repairs (39.5% vs 9.8%, $p < 0.001$). Of the cohort, 22 (17.3%) were discharged from the ED while the remainder were admitted to the hospital, with an average length of stay of 4.6 days. Discharge disposition was mainly to home (83.5%), with 12.6% requiring inpatient rehabilitation and 2 mortalities, both climbers.

Conclusion: Despite differences in helmet use, the injury pattern and treatment for climbing and hiking were similar, except for hikers having higher rates of lacerations and upper extremity injuries. Fortunately, the in-hospital mortality was low, and most patients returned home after injury.