

Prehospital Data Provides Insight During Pandemic

Trend reporting and subsequent analyses are more important than ever when we are in the middle of a global pandemic. As California continues combating the mutating coronavirus with interventions such as vaccines and other preventive measures, our Emergency Medical Services (EMS) and trauma data adds to the overall picture of California's public health system. There was a need for meaningful data visualizations related to the COVID-19 pandemic to aid EMS agencies and hospital personnel in implementing this knowledge in future emergencies, hospital care, and to create a path forward for future research and policy-making decisions.

On a weekly and monthly basis, the Emergency Medical Services Authority (EMSA) updates various datasets and tables to display the count of EMS responses for certain EMS provider primary impressions related to COVID-19 symptoms. These main symptoms include cough, fever, shortness of breath, chills, and fatigue. The data captured include patient demographics, count of incidents per day, location (statewide and local EMS agencies), and weekly changes in EMS 911 response calls. Hospital data represent individuals who are thought to have COVID-19 symptoms and admitted due to a traumatic injury. EMSA creates figures and charts depicting this information, which shows changes and trends over time from March 2020 through the current week.

EMS and hospital data related to the COVID-19 pandemic provides insight into how California is dealing with this global health crisis. Trends in EMS numbers mirror the COVID-19 positive case trends we are seeing across the state and across the country. Collecting and analyzing this data helps forecast where California may have surges in cases and/or shortages of resources in the coming months. Future training, administration, quality assurance, and management also benefits from such time-sensitive data because EMS resources are spread thin in certain areas of the state. This long-term situational awareness may lead to lives saved and better resource-management for the state, county, and private-sector healthcare providers.

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