Introduction: On August 29, 2021 Hurricane Ida struck New Orleans with Category 4 winds. While the most severe weather occurred during a 24-hr period on August 29, the city suffered significant damage to telecommunication systems, medical facilities, and infrastructure for several weeks afterward. At the height of the storm, multiple events affected routine deployment of EMS, including damage to transmission lines causing interruption of the 911 system, and suspension of ambulance travel for safety when the winds exceeded 50 mph. These factors, as well as pre-storm preparations, affected utilization of EMS by residents and thus a "peri-hurricane" period was examined to determine the overall effect of Hurricane Ida on New Orleans EMS operations.
Method: Run sheets for calls to NOEMS between August 26-September 9, 2021 were analyzed to assess the most frequently reported medical complaint just prior to and after the hurricane. Run sheets were also evaluated to determine average time from call to arrival on scene, time to arrival at patient ("response time"), and time from leaving scene to arrival at destination ("transport time"). To account for the atypical period during which EMS response was suspended due to wind, both mean and median times were calculated. Data was compared to a control period of Aug 26-Sept 9, 2022.
Results: During the study period, 1,971 calls were received, with trauma and respiratory the most common complaints. The mean call-to-arrival time was one hour, although the median time was 15 minutes. Response time was 34 minutes compared to 21 minutes in 2022, and median response time was comparable to the control period. Transport time mean and median were 12.3 and 11.3 minutes, also similar to 2022.
Conclusion: Despite citywide infrastructure failures and suspension of operations for over 12 hours during landfall, multiple mitigation strategies enabled NOEMS to quickly resume operations and minimize impact on patient care times.

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Effectiveness of and Adherence to Triage Algorithms during Prehospital Response to Mass Casualty Incidents

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Introduction: At mass casualty incidents (MCIs) medical needs exceed available resources, requiring prioritization of response efforts and materials. Principles of triage have evolved since the 18th century into several modern-day algorithms that sort casualties into priority groups based on clinical parameters. It is unclear, however, if such algorithms are effective and practical during real-world MCIs. This analysis reviews the literature on use and efficacy of prehospital MCI triage algorithms.
Method: The MEDLINE, Scopus, and Google Scholar databases were searched for peer-reviewed and grey literature on prehospital MCI medical response. Articles discussing MCI triage concepts, triage at MCIs, or algorithm efficacy were included. Articles were excluded if they described law enforcement, ethical, psychological or epidemiological perspectives without detailing the medical response.
Results: Frequently-cited MCI triage algorithms include START (Simple Triage & Rapid Treatment); Triage Sieve; CareFlight; SALT (Sort, Assess, Lifesaving Interventions, Treatment/Transport); and RAMP (Rapid Assessment of Mentation & Pulse). They differ in the physiologic parameters assessed, inclusion of numerical measurements, and number of triage categories. Surveyed providers were less likely to have performed full triage at MCIs (16%) than in training (69%), and more likely to have performed no triage (29% vs. 1%). In retrospective trauma registry analyses, algorithms were generally poorly predictive of the need for life-saving interventions (13-58% sensitive, 72-97% specific) in one study, and variably predictive of critical injury (45-85% sensitive, 86-96% specific) in another. The Glasgow Coma Scale motor component was associated with critical injury (73% sensitive, 96% specific if <6); other physiologic variables had sensitivities under 40%. In prospective studies, algorithms were accurate for 36-52% of adults and 56-59% of children. Some suggest clinician judgment may be similarly effective.
Conclusion: Multiple algorithms exist for MCI triage, but they are infrequently utilized and may be inaccurate. Simpler, more realistic, scalable, and widely accepted response systems need to be instituted.

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Learning from Each Other, Improving Medical Command and Control after the COVID-19 Pandemic: Experiences from a Bosnian-Swedish Collaboration.

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