| **Author, Year** | **Sub-category** | **Study Location** | **Study Type** | **Study Design** | **Relevant type of mass casualty event** | **Strategy** | **Findings** | **Outcome Modulators** | **Quality score** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Epley, 200644 | Load sharing | Southwest Texas | Analysis of multiple real events | Pre-post with comparison group: Routine trauma system (pre-/post-) and disaster trauma system | All-hazards, Natural Disaster: Hurricane | Use of comparable coordinated regional trauma systems for routine (Medcom) and disaster (Regional Medical Operations Center) operations to facilitate the rapid transfer of hospitalized and special needs patients following small-scale trauma events and disasters. | Pre-post- analysis of Medcom: • Pre-Medcom (10 mos.): Transfer decision time 115 +/-3 min; transfer accept time 30.5min; total transfer time 145+/-12min. • Post-Medcom (10 yrs): Transfer decision time 80+/-1min, transfer accept time 10 +/-2 min, total transfer time 91 +/- 1 minRegional Medical Operations Center (RMOC) : • Post-Hurricane Katrina- transferred 6 patients/hour & 170 patients/hour from 2 incoming transports • Pre-Hurricane Rita: transferred 20 patients/hour | Medcom (routine) and RMOC (disaster) regional trauma systems are comparable, inter-related and symbiotic.Medcom is practical small-scale rehearsal for major disasters.Authors unaware of comparative data between trauma system; benchmarks would be useful. | 4/8 |
| Simon, 200145 | Load sharing | NYC | Analysis of single real event | Post only with comparison group: Qualitatively compared against counterfactual | Explosive, Terrorism | 1) Control the distribution of urgent patients through scene or central command to limit overwhelming the nearest hospital.2) Site emergency management centers in a low vulnerability location.3) Use robust and interoperable emergency communications systems. | No enforced patient distribution system led to moderate and critical patients swamping the two nearest trauma centers, while a 3rd trauma center 3 miles from scene sat idleAttack damage to Office of Emergency Management (OEM) dramatically exacerbated communication and coordination efforts including patient distributionCell phone and radio disruptions (from attack damage and post-attack overload) prevented response coordination - most patient distribution was blind to hospital resource availability | N/A | 2/8 |