A disaster is a catastrophic event that disrupts the infrastructure of a community or society to such a degree that people cannot cope with the consequences using routine methods or resources. In many ways, nothing will ever be the same, as disasters are typically associated with tragedies of great loss of life and property and a relatively long period of recovery follows. A disaster is more than a greater magnitude of what is normally encountered.

The response to a disaster should not merely involve a mobilization of more personnel, supplies and other resources. In fact, disaster management requires a new and different approach from our routine daily management of emergencies, because disasters pose unique problems and challenges rarely faced under normal conditions. The management response to a disaster must encompass many disparate elements that normally do not work together but must suddenly cooperate in a close working relationship to reach the common goal of establishing order out of chaos, and to minimize mortality and morbidity among surviving casualties.

The most common feature of disasters, especially in terms of the medical management of casualties, is that the demand for resources exceeds the supply. Medical assets are overwhelmed, preventing the essentially unlimited application of medical resources to every individual that characterizes the routine approach to emergency medical care in developed countries. The most common factor responsible for this relative scarcity of resources is the large number of casualties that present all at once, which impedes the ability of medical providers to fully evaluate each casualty and allocate available resources to those most in need.

A true mass casualty disaster must involve some level of rationing of resources to most accurately match needs with supplies, and must involve some mechanism for evacuation or redistribution of casualties to other facilities for full care, because by definition all casualties cannot be handled locally. These needs require a fundamental change in approach to the care of injured victims, from the greatest good for each individual to the greatest good for the greatest number.

Every hospital and community should have established plans for disasters, because the response must be so rapid and complex that it cannot possibly happen without all involved elements having thought about it in advance. Each hospital and community has a unique set of requirements and resource needs. Rehearsals of these plans tend to be infrequent and not taken seriously.

Education and training of medical providers in the principles of disaster planning and management is essential, due to how different it is from routine medical practice and the rarity of these events. Surgeons and other acute care providers should be active participants and leaders in disaster management in view of the surgical problems that follow most forms of disaster. Trauma centers should be the foundation of any disaster system, as they have the established infrastructure, personnel, and liaisons that are essential for any disaster response.