

Plastic surgeons should be part of disaster relief planning, response

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When a terrorist bomb explodes, a tornado rips through a town, a hurricane devastates a region, or wildfires ravage homes and businesses, plastic surgeons are not typically atop the list of emergency responders.

But they should be, UT Southwestern Medical Center plastic surgeons and disaster experts recommend in the September issue of *Plastic and Reconstructive Surgery*.

Including plastic surgeons in disaster-relief efforts could improve long-term outcomes for victims of catastrophes, particularly in medical cases that might involve physical scarring and nerve damage, but which can be made worse by lack of quick attention.

"Plastic surgeons are often being overlooked in disaster-planning efforts, particularly in developing medical-team responders," said Dr. Rod Rohrich, chairman of plastic surgery at UT Southwestern and the study's senior author. "Plastic surgeons, particularly those based at academic medical centers and/or major trauma centers, are far more engaged in complex reconstruction procedures on a day-to-day basis than cosmetic surgeons. We are intimately involved in preventing and treating face and tissue scarring, treating burns, and handling sensitive nerve-related injuries, some of which can be best served by having plastic surgeons on the scene or at least near the front lines where disaster victims are being evacuated."

Examining the on-site evidence of several disasters, the authors

identified four pivotal areas in trauma care where plastic surgeons have added expertise:

- soft tissue trauma;
- upper and lower extremity trauma;
- facial trauma; and
- burn management.

The authors suggest that plastic surgeons should be among those who help plan for medical responses prior to disasters, as well part of the responders working in conjunction with traditional surgical responders, such as trauma and orthopaedic surgeons.

The authors examined responses reported in disaster events ranging from devastating earthquakes in Turkey and the London Underground bombings to the Sept. 11 attacks on the East Coast and found a substantial volume of overall cases involving plastic surgery-related issues.

In the case of the London bombings in 2005, facial fractures affected 18 percent of patients. In the Turkey earthquake in 1999, more than 13 percent of hospital beds were occupied by patients needing plastic surgery. In New York City, only 26 percent of burn victims were correctly triaged first to a burn center, despite there being an adequate number of dedicated burn beds in the area.

"Not only should such expert plastic surgeons become part of the disaster preparation team and actual response to applicable incidents, but their training curricula should now also include formal courses in

disaster life support and incident command system management," said Dr. Paul Pepe, chief of emergency medicine at UT Southwestern and an international expert in disaster management. "In essence, both disaster managers and [plastic surgery](#) program directors need to foster the contributions of this previously overlooked resource for dealing with catastrophic events."

Soft tissue injuries, for example, are the most common acute injury from casualties resulting from a blast or explosion and can be treated by other specialties, according to the article. Early intervention by plastic surgeons, however, could help avert problems such as long-term scarring or wound healing and closure, and could be more cost effective.

"Plastic surgeons routinely deal with facial healing, facial fractures, tissue damage and related territory, making access to the expertise of a [plastic surgeon](#) invaluable," Dr. Rohrich said.

Plastic surgeons also bring expertise in tissue viability, amputation and microcirculation issues that can affect whether limbs are preserved, the authors said. Similarly, plastic surgeons have routine experience with burn care that could be invaluable in the case of radiation, biological or fire disasters, as well as help in triaging patients. While other surgical specialists have degrees of expertise in such areas, having direct access to plastic surgeons would be an important asset to disaster medical relief teams.

"As many disciplines gather together to partner in disaster response and preparation, the plastic surgeons should be seen as pivotal members, let alone additional assets, for the medical casualty care team," the study's authors concluded.

Source: UT Southwestern Medical Center ([news](#) : [web](#))

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