Medical Care for Earthquake Victims

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A number of recent earthquakes such as the 1985 Mexico City earthquake, the 1986 El Salvador earthquake and the 1988 earthquake in Soviet Armenia demonstrate that the collapse of reinforced-concrete buildings is a significant and continuing problem. Traditionally, search and rescue (SAR) operations have been carried out, for the most part, by untrained persons such as relatives, neighbours, or local volunteer groups. It is clear that the increasing frequency of disasters in large urban areas, coupled with the collapse of reinforced concrete buildings, calls for a more professional approach, particularly for specialized medical and rescue skills.

Past research has shown that factors determining the number of people killed after a building collapses include entrapment, the severity of their injuries, how long they can survive without medical attention, and time to rescue and medical treatment. Rescue and medical personnel operate under a very constrained time element. Following a catastrophic earthquake, research has shown that 85-95% of the live recoveries are made within the first day, while, beyond that time, the rate of recovery of live victims drops off very sharply. Estimates of survivability for entrapped victims buried under collapsed earthen buildings in Turkey and China, indicate that within two to six hours, less than 50% of those buried are still alive. Although it is not always possible to determine whether a trapped person died immediately or survived for some time under the debris, it is undoubtedly true that more people might have been saved if they had been extricated sooner. In everyday trauma we talk about the "Golden Hour." For victims of building collapse,

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Earthquake victim carried from a destroyed building in Guatemala City.