

Responding to the Sakhalin Earthquake

The earthquake that shook the Sakhalin Islands off the east coast of the Russian Federation the night of May 28, 1995 struck hard, killing 529 and injuring 500. The high loss of life and injury rate following the earthquake reveals the serious challenge posed for the organization and delivery of emergency medical services in densely populated metropolitan areas, said Grigoriy Smirnov, MD, chief, Center for Intensive Care and Disaster Medicine, Primorskiy Krai Administration Department of Health in Vladivostok, Russia.

Smirnov's 21-member EMS team from Vladivostok Municipal Clinical Hospital No. 2 and the Vladivostok EMS Center in Russia was one of the first to reach the earthquake victims in Neftegorsk, a town near the epicenter of the earthquake that sustained extensive structural damage and a 40 percent injury rate among the local population. Upon arrival at 2 a.m., Smirnov's team discovered that upwards of 400 victims were trapped within the 17 destroyed buildings.

The Vladivostok EMS team provided relief to the victims in Neftegorsk for nearly a week and used a disaster response plan, based on federal ministry of health guidelines, that called for the removal, treatment and evacuation of the victims by the acuteness of their injuries.

Unanticipated noise from nearby factories prevented response teams from hearing the cries of help from victims trapped under debris, Smirnov said. Therefore, all factories were closed in an attempt to identify the location of victims. Another problem was the lack of coordination and inconsistency in EMS skills among the various emergency response teams in Neftegorsk, he said.

Since the quake, 26 krai emergency response teams have been trained at the Vladivostok EMS Center. And the Vladivostok EMS Center created the first disaster medicine center for Primorskiy Krai in September 1996. The center will facilitate the dissemination of standardized disaster guidelines to the region's emergency centers to alleviate confusion during future disaster response efforts, he said.