

for shelter (54.2% to 81.4%), and sanitation (47.4% to 62%). Satisfaction of services rendered by primary healthcare workers also were high; 81.7% for public health midwife (who provided maternal and child health care), and 76.8% for public health inspectors (who provided environmental health and disease control). However, CTC workshops revealed inequalities in access to food based on 'caste' and occupation. Protection issues relating to violence from community and militant groups were reported.

**Conclusions:** Despite IDP satisfaction with healthcare services, there were gaps in food security and violence/protection activities. Recognizing of the role/impact community health volunteers play in health care is an important factor in enhancing primary health care services in IDP camps.

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### (A195) Planning for Special Needs and Vulnerable Populations in Disaster Care

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Caring for special-needs patients is challenging in disasters. They cannot be triaged, treated or discharged without consideration of their disabilities, including caregivers and social situations. The US Government's response to all hazards requires planning for challenges to communication, medical care, independence, and supervision (CMIST) for vulnerable populations. Vulnerable patients, by lack of any other plan or unavailability of an alternate caregiver, may converge on the emergency department, whether or not there is a medical problem. Language, hearing, seeing, and understanding must be included in patient care and discharge in an expedited manner during a disaster situation. Patients with powered devices and/or underlying medical problems may need access to services such as dialysis or electricity. Vulnerable populations have higher risk for injury and recovery from traumatic disasters. Patients with rotating caregivers, whether in an institution or independent, need alternative caregiver plans. Those patients with service animals will need to have animals included in their plans. Supervised nursing home patients, group home patients, psychiatric patients, minors, and high security patients cannot be released to shelters or other venues without adequate supervision. Before being released from medical care, one must ensure that supervision needs for vulnerable persons are met. Vulnerable casualties must also be protected from abuse and fraud. Individuals dependent on handicap access or public transportation or mobility aids will need plans for alternate transportation prior to a disaster. If the patient is not able to return to their normal community setting, discharge planning to alternate facilities will be part of the planning to prevent unnecessary admission to a hospital that may already be over capacity. Central repositories of information must be available to emergency department and social service personnel to allow caregivers and family to reconnect with patients, and to help with expedited care and discharge.

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### (A196) Psychological Distress, Quality of Life and Post-Traumatic Stress among Tsunami Affected People with Disabilities

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The study investigated psychological impact of tsunami of men and women with disabilities two years after the tsunami disaster. A total of 248 tsunami affected people with disabilities aged between 16 to 85 years were included in the final sample. And the sample consisted of 132 males with the mean age 37.9 years, and 116 females with the mean age 40.6 years. SRQ (psychological distress), IES (post-traumatic stress), WHO-DAS (psychosocial disability functioning) and QOL (quality of life) were administered. In addition to scale administration to 248 people, formal discussions were held with 27 mentally retarded people and their guardians/parents, thus making the total sample of 275. Main effects of gender were found significant on IES i.e. post-traumatic stress and main effects of type of disability was found significant on physical QOL, psychological QOL, and post-traumatic stress. Main effects of severity of disability was found significant on all variables. t-tests have been found out to study the inter group differences. All findings have been discussed in the light of supporting studies and theories. Long-term psychosocial and psychiatric interventions are suggested to be provided till the reconstruction and rebuilding phase continues, however, the challenge still remains for the strategy of mainstreaming disabled specific designed interventions within the community based psychosocial care services framework.

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### (A197) Attitudes toward Public Assistance during a Disaster Among Patients with Rheumatoid Arthritis

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**Background:** Recently, the local governments in Japan implemented the measures for people requiring assistance during a disaster (PRAD). These measures aim to provide public assistance during a disaster for the citizens who registered themselves to the PRAD list in advance, by sharing their personal information among relevant local authorities. However, the needs for such assistance were not clear among chronic disease patients, and there are some concerns about privacy protection in relation to the PRAD list.

**Objectives:** The objective of this study is to describe the attitudes toward the registration to the PRAD list among rheumatoid arthritis (RA) patients.

**Methods:** Study subjects were the members of a nationwide RA patient group in Japan. Of about 20,000 members, 1,477 who lived in the municipalities affected by disasters from 2004 to 2006 were enrolled. Self-administered questionnaires were sent by mail. The subjects were asked their attitudes toward the registration to the PRAD list and categorized into three groups:

(1) no need for assistance; (2) need assistance but will not register; and (3) need assistance and wish to register or already registered. Their concerns about privacy protection as well as socio-demographic and health status were also asked.

**Results:** Of 1,477, 664 (45%) responded validly, and 596 (40%) answered on their attitudes toward the PRAD list. Of these, 365 (61%) reported they need assistance, though 30% of them (108) did not wish to register. A majority of the subjects concerned about privacy protection among those did not wish to register (65%) as well as among those wished to register (55%). Patients who lived alone, and those with low income were more likely to wish to register.

**Conclusions:** There are substantial needs for public assistance during a disaster among RA patients although the privacy protection issue would be a barrier to be overcome for successful utilization of the list.

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### (A198) Bringing H1N1 Vaccinations to Vulnerable Populations

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**Background:** Populations that participated in this project represented > 46% of the total H1N1 patients hospitalized and 34% of deaths in the state of Oregon.

**Methods:** A committee was convened by the Oregon Health Authority to increase access to vulnerable populations. The committee determined the project must be supported by: (1) a local advocacy group; (2) a local Health Department; and (3) an emergency medical services (EMS) provider agency to provide immunization. This project involved outreach to a vulnerable population that may not be able to utilize mass vaccination clinics and may have limited access to medical services. Outreach was accomplished using three models: (1) volunteers delivering meals; (2) mailings to those receiving in-home meals; and (3) a community organization that conducted a flu clinic frequented by people with disabilities. Three models were developed for receiving calls and scheduling appointments. All projects followed the same procedure for vaccine administration.

**Results:** Seventy home-bound individuals met the criteria for vaccination. Post-survey results indicated: 55.2% lived alone and were homebound. Over 70% had previously received their vaccinations from their healthcare provider and 38.9% were not previously vaccinated due to vaccine availability. Fifty-eight individuals were vaccinated. Partner organizations were surveyed after their efforts were completed. Findings indicated that relationships between the EMS agencies and providers were greatly enhanced.

**Conclusions:** Outreach using nontraditional partners was an effective method to reach a vulnerable population. The project demonstrated that qualified vaccinators can be mobilized quickly. However, because this resource-intensive effort is more costly than providing mass vaccination, similar projects should only be utilized when less costly means are not effective, or when the risk level of the vulnerable population being served warrants it.

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### (A204) Importance of Emergency Response Program Organizations in Coping with the Increasing Risk of CBRN Events

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**Introduction:** One of the most prevalent issues identified by Emergency Response Program Organizations (ERPOs), is the inability to care for an overwhelming number of contaminated patients within a civilian community. Even when emergency responders successfully decontaminate and triage large numbers of patients at the scene, it is unlikely that neighboring hospitals are prepared and equipped to receive such a large amount of patients and treat them within the boundaries of the existing healthcare system. Thus, planners must avoid any collapse of the healthcare system and may need to redistribute existing resources to enhance and facilitate patient outcome. As a response to this issue, ERPOs should develop an alternative healthcare facility: the Off-Site Triage, Treatment and Transportation Center (Off-Site Center). This Center is a temporary patient clearinghouse to be disassembled once the flow of new patients has diminished to the point that they can be handled by the existing healthcare systems.

**Methods:** The Off-Site Center is intended to care for patients who have been triaged as “Minimal” at the scene, those patients who are worried that they might have been exposed to contamination, and those who self-refer to the Center.

**Results:** Planners, administrators, first responders, medical professionals, and public health and emergency management personnel must evaluate the Concept of Operation for the Off-Site Center in order to increase their level of preparedness and provide effective mass-casualty care.

**Conclusions:** In this report, some general guidelines will be provided for the efficient planning and management of an Off-Site Center. A practical example will be also illustrated: a case study in Bergamo during a May 2010 National Meeting of the Italian Association of Alps Infantry Troops.

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### (A205) Management of Mass Casualties and Associated Health Effects Following Chemical or Radiological Agent Release: Results of the European Union Mash Study, 2008–2010

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Although emergencies involving mass casualties following the release of chemical or radiological agents are rare, the risks are well-recognized and many countries have prepared national response plans. The MASH (Mass Casualties and Health) study, partially funded by the European Commission, examined preparations for mass-casualty management and associated health risks within the Member States of the European Union (EU). The objective of the study was to improve the overall capacity to manage mass-casualty incidents that may equally