(A189) The U.S. National Veterinary Stockpile: Science-Based Logistics Improving Animal Disease Response

L.M. Myers
National Veterinary Stockpile, Good Hope, United States of America

Background: Agriculture emergency responders always will require equipment and supplies. A rapid and effective logistical response depends upon having the right item in the right quantity at the right time at the right place for the right price in the right condition to the right responder. Established in 2004 by U.S. Homeland Security Presidential Directive 9, the National Veterinary Stockpile (NVS) within the U.S. Department of Agriculture (USDA), Animal and Plant Health Inspection Service, Veterinary Services is the nation’s repository of critical veterinary supplies, equipment, vaccines, and services appropriate to respond to the most damaging animal diseases affecting human health and the economy. An overview of the NVS program, its capabilities, training and exercise strategy, and outreach to stakeholders will be presented.

The NVS Program: The goals of the NVS program are to deploy countermeasures against the 17 most damaging animal disease threats within 24 hours, and to help states/tribes/territories plan, train, and exercise the receipt, processing, and distribution of NVS countermeasures. To meet these goals, the NVS program heavily relies upon science-based logistics to identify animal vaccines and other countermeasures to respond, and sound business processes to purchase, hold, maintain, and deploy the countermeasures. Significant resources also are dedicated to the NVS outreach activities, which interface directly with federal/state/tribe/territory animal health stakeholders. NVS Team members work hand-in-hand with these leaders to help develop written NVS-specific plans for their jurisdictions, provide logistics training, and sponsor discussion-based and operations-based exercises in accordance with the Homeland Security Exercise and Evaluation Program.

Conclusion: The USDA NVS exists to provide states/tribes/territories the countermeasures they need to respond to catastrophic animal disease outbreaks created by either terrorists or nature. As logistical experts, the NVS team develops plans for logistical emergency response, manages their supply chain of countermeasures, and helps stakeholders improve logistical response capabilities.

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(A193) Concurrent Measles and Rubella Outbreaks in Transit Camps in Cote D’Ivoire

I.K. Kouadio,1 H. Oshitani,1 T. Kamigaki,1 A.K. Koffi,2 H. Attoh-Toure3
1. Virology, 8575, Japan
2. Health Policy Science, Tokyo, Japan
3. Department of Research and Training, Abidjan, Côte D’Ivoire

Background: Measles still remains an important cause of morbidity and mortality among children in many developing countries, especially in refugee settings where fatality rates as high as 33% have been documented. From January to April 2004, concurrent measles and rubella outbreaks had occurred in four transit camps hosting 2,767 Liberian refugees in Cote d’Ivoire.

Objective: This study describes the epidemiology of concurrent measles and rubella outbreaks, and the investigation of a Disease Surveillance Team.

Methods: Patients meeting the case-definition (rash and fever > 38°C) were detected actively. Blood sample were collected for measles and rubella IgM antibody confirmation.

Results: Sixty rash and fever cases were identified. During weeks 8 to 13, measles IgM testing had resulted in 61.1% positive tests. The highest incidence (18.5%) was observed in children below 9 months. Ninety-three percent of children aged between 6 months and 12 years received a measles vaccination but the rash and fever cases continued to occur. This prompted a systematic test for both measles and rubella IgM antibodies. Rubella IgM testing had resulted in 74.0% positive tests. The highest incidence (3.88%) was found in children between 5–15 years. Supplemental immunization with a measles-mumps-rubella (MMR) vaccine was conducted, following which, no fever and rash cases were documented.

Conclusions: This study indicates the importance of an early serological testing for measles and rubella together or the use of the MMR vaccine rather than only measles vaccine in disasters settings. Good management of surveillance data will be an asset for effective immunization strategies in refugee settings.

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(A194) “Displaced Voices”: Are those Displaced by War Satisfied with the Provision and Quality of Health Care they Received?

K. Wickramage,1 R. Surentrikumaran2
1. Health, Colombo, Sri Lanka
2. Faculty of Medicine, Jaffna, Sri Lanka

Research into how war-displaced communities value or prioritize aid response is limited. A clearer conceptualization of what affected populations seek from the international humanitarian response to their needs would be valuable in planning for emergencies.

Aim: Exploring internally displaced person’s (IDP) experiences and perceptions of the humanitarian response, with a focus on health risks, resources, and health services received during their displacement.

Method: A mixed-method approach using both quantitative and qualitative methods was used. This study assessed the perceptions of IDPs on provision of health and other services using an interviewer-administered-questionnaire (survey) using a sample frame that included the entire displaced population of 150,000 IDPs living in 97 camps. Findings from the survey were synthesized with the key themes that emerged through the qualitative methodology. In-depth interviews were conducted with health cluster actors. An innovative child-to-child (CTC) based research methodology was used to ascertain the insights and perceptions of displaced children and adolescents.

Results: The survey revealed community satisfaction with health care services immediately after displacement (within IDP camps) improved considerably from 63% to 80% (6 months after the acute phase). Significant gains also were registered
for shelter (54.2% to 81.4%), and sanitation (47.4% to 62%). Satisfaction of services rendered by primary healthcare workers also was 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
S.E. Mae1, C.T.J. Doyle2
1. Emergency Services Institute, Cleveland, Ohio, United States of America
2. Emergency Department, Ann Arbor, United States of America

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
S. Satapathy,1 S. Kasi2
1. PPCCI, 110002, India
2. PSW, Bangaluru, India

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
H. Sato,1 J. Tomio,2 H. Mizumura3
1. Department of Public Health, Tokyo, Japan
2. Preventive Medicine, Kawasaki, Japan
3. Asaka, Japan

**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: