

RAPID HEALTH RESPONSE, ASSESSMENT, AND SURVEILLANCE AFTER A TSUNAMI -- THAILAND, 2004–2005

Centers for Disease Control and Prevention (CDC) , Ministry of Public Health, World Health Organization representative to Thailand, Thai Ministry of Health-US CDC Collaboration, Nonthaburi, Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand

On December 26, 2004, an earthquake triggered a devastating tsunami that caused an estimated 225,000 deaths in eight countries (India, Indonesia, Malaysia, Maldives, Seychelles, Somalia, Sri Lanka, and Thailand) on two continents. In Thailand, six provinces (Krabi, Phang-Nga, Phuket, Ranong, Satun, and Trang) were impacted, including prominent international tourist destinations. The Thai Ministry of Public Health (MOPH) responded with rapid mobilization of local and nonlocal clinicians, public health practitioners, and medical supplies; assessment of health-care needs; identification of the dead, injured, and missing; and active surveillance of syndromic illness. The MOPH response was augmented by technical assistance from the Thai MOPH-U.S. CDC Collaboration (TUC) and the Armed Forces Research Institute of Medical Sciences (AFRIMS), with support from the office of the World Health Organization (WHO) representative to Thailand. This report summarizes these activities. The experiences in Thailand underscore the value of written and rehearsed disaster plans, capacity for rapid mobilization, local coordination of relief activities, and active public health surveillance.

MMWR Morb Mortal Wkly Rep. 2005 Jan 21;54(2):61-4.

RAPID HEALTH RESPONSE, ASSESSMENT, AND SURVEILLANCE AFTER A TSUNAMI -- THAILAND, 2004-2005

Guerena F

On December 26, 2004, an earthquake OK the west coast of Northern Sumatra triggered a massive Tsunami that caused more than 225,000 deaths in eight countries, on two continents. In Thailand, six provinces (Krabi, Phang-Nga, Phuket, Ranong, Satun, and Trang) were impacted. The Thai Ministry of Public Health (MOPH) rapidly activated mass casualty plans and mobilized the health-care system to provide emergency relief. As of January 9, an estimated 90,000 persons had received medical and mental health care; 9,798 received outpatient services, 2,233 received inpatient care services, and approximately 80,000 persons received other types of care by mobile teams. During December 30, 2004 - January 6, 2005, three teams of Thai and U.S. health professionals from the MOPH-US CDC collaboration, Nonthaburi (TUC) and AFRIMS, with support from the World Health Organization (WHO) representative to Thailand, conducted a rapid health and needs assessment in the impacted provinces, using a WHO rapid assessment tool. Logistic and strategic support was provided by the Joint U.S.-Thai Military Advisory Group, Thailand. 10 hospitals were primary referral centers for tsunami-related medical care. None of the hospitals had been damaged during the tsunami; all activated mass casualty plans. Shortages of blood, blood products, and certain medical supplies were noted the first 2 days after the tsunami. By January 4 needs for staff and supplies were being met. As of January 25, 5,388 deaths had been

confirmed; 8,457 persons were reported injured, and 3,120 persons remained missing. Among the 3,762 confirmed dead whose nationality was established, 1,184 (48%) were reported to be Thai nationals. Active surveillance was initiated in all 20 districts in the six provinces impacted by the tsunami. During December 26 - January 11 the six provinces reported 1,237 cases of acute diarrhea, 356 wound infections, 177 febrile illness, and 156 respiratory illnesses. Incidence of wound infections was higher than that previously recorded. The MOPH response to the tsunami was rapid and effective at mitigating the health consequences among survivors. A rapid health assessment could identify immediate health needs and helped prioritize public health interventions. Active surveillance was useful in identifying disease events and cluster requiring investigation.

15th Asia-Pacific Military Medicine Conference. Melia Hanoi, Vietnam. 8-13 May 2005: Ses - 75-6.

INTESTINAL PARASITE INFECTIONS AMONG PRE-SCHOOL CHILDREN IN SANGKHLABURI, THAILAND

Wongstitwilairoong B, Srijan A, Fukuda CD, Bodhidatta L, Mason CJ

Background: This study was conducted to investigate the prevalence of intestinal parasites among pre-school children in Sangkhlaburi, a rural district in the west of Thailand along the Thai-Myanmar border.

Method: Stool specimens were collected from October 2001 through October 2002. A total of 472 pre-school children, 233 males and 239 females, 236 children with diarrhea and 236 asymptomatic children, aged 3 months to 5 years, were recruited for the study. After informed consent was obtained, each specimen was processed and examined by direct wet smear, modified acid fast stain, formalin-ethylacetate sedimentation concentration technique, and trichrome stain. In detecting *Giardia lamblia* and *Cryptosporidium* spp. a ProSpecT Microplate Assay (*Alexon-Trend*) was performed.

Result: There were 107 individuals (22.7%), 51 males and 56 females, 41 diarrheal and 66 asymptomatic children, infected with intestinal parasites. The most frequent parasite identified was *G. lamblia* (18.4%), followed by *Cryptosporidium* spp. (3.4%), *Ascaris lumbricoides* (2.8%), *Cyclospora* spp. (1.7%), *Blastocystis hominis* (0.6%), and *Trichuris trichiura* (0.2%). Eighteen specimens (3.8%) showed mixed parasite infections. Highest prevalence of intestinal parasites occurred during the rainy season (June-Oct.). The lowest occurred during cool (Nov.-Feb.) and dry (Mar.-May) seasons. The prevalence of these infections is a public health problem. It is necessary to implement programs for treatment, health education, sanitary improvement and routine surveillance to control these infections.

American Society for Microbiology 105th General Meeting. Georgia World Congress Center, Atlanta, GA. 5-9 June 2005. (Poster)
