

Abstract

Many countries in the world experienced heat waves. While the impact of heat on health was well documented in developed countries, there were very few studies of heat-related illnesses (HRI) in tropical countries. Our aim was to describe HRI in Thailand and examine usefulness of the National Health Reporting System in Ministry of Public Health to track HRI during 2010-2013. A descriptive study examined the relationship between hospital visit with ICD-10 codes of T67-679 (effects of heat and light) and temperature from the Meteorological Department. Among 3,963 HRI visits with nine deaths, median age was 43 years (IQR 22-61) with the highest incidence rate 3.8, 2.3 and 1.6 per 100,000 person-year for 65 and above, 55-65 and 45-55 age groups respectively. Male-to-female ratio was 1:1.7. Occupations included skilled agricultural workers (35.7%), odd job persons (15.1%) and students (13.5%). Northern region reported the highest incidence rate (9.3 per 100,000 person-year). This was the first countrywide study describing HRI in Thailand and has been presented to the policy levels. This data could be used to establish a sentinel surveillance and formalize a heat warning collaboration with the Meteorological Department.

Keywords: heat-related illness, climate change, heat stroke, Thailand
