Highlights of Diseases and Event in May 2015

Situation of Heat-related Fatalities

The Meteorological Department announces that the temperature during the day will reach as high as 44 degree Celsius, which will be the highest in 55 years, starting from 9 April to mid-May especially in northern and northeastern parts since urban areas in these provinces are filled with valleys, causing less wind to flow the heat away and a significant health problem in the areas.

Reviewing of the data from death certificates (ICD10 X30) identified 23 fatalities in previous 5 years (2010-2014), with 2-7 deaths per year. Among them, 16 deaths were males. Their ages ranged from 21 to 90 years old while people aged more than 40 years old (19 deaths) were the highest age group. Out of total 17 provinces reported, provinces with the highest number of deaths included Bangkok (4 deaths), Nakhon Ratchasima (2 deaths), Nakhon Sawan (2 deaths) and Tak (2 deaths). The period with the highest number of fatalities was between March and May (20 out of total 23 deaths). Farmers and soldiers were the people at risk for heat-related fatalities.

Nevertheless, the data mentioned above might be lower the real situation, especially deaths among children less than 15 years old who were abandoned in the car under the sun as similar events of abandoned children in the car are often

reported in the news every year. In addition to that, 8 cases and 2 deaths of heat stroke were reported from the medical department of army training centers for 2014 batch.

Health-related events are still important causes for public health fatalities such as drowning among children less than 15 years, with 37 out of total 91 fatalities (40%). Most of the deaths occurred during March to May. Moreover, fatalities were also reported among the people who were resting in the cars to avoid the heat outside, with engine running and air condition turning-on. They died due to poison gas from steam pipe leakage into air conditioning system. This event occurred among elderly people with chronic disease in Phrae Province.

Reviewing of the data revealed that the important risk factors associated with deaths due to heat stroke were children and elderly with obesity (BMI > 28), chronic disease such as diabetes and high blood pressure, working or exercise under the sun, and usage of some drugs such as anti-allergic, muscle relaxants, anti-depressants and beta blockers.

Hence, these risk factors should be communicated to the public well so that they can be aware of illnesses and fatality related to heat. Recommendations include:

- (1) Avoid working or exercise outdoor during day-time
- (2) Drink sufficient water for body needs at least 6-8 cups per day
- (3) Wear suitable clothes for weather and better evaporating of sweat