

## Department of Disease Control

### Weekly Disease Forecast No.147\_ CO Poisoning from Gas Water Heater (12 - 18 February 2018)

From the national disease surveillance system, during 2008 - 2017, Carbon Monoxide (CO) poisoning from gas water heater caused 37 injured patients with 7 deaths. All incidents occurred in the Northern region. The most common risk factors were using poorly ventilated bathroom after many prior occupancies.

In February 2018, a patient in Chiang Mai province was found, after a 30 minutes-bathroom use, with headache, nausea, vomiting, blurred vision, difficulty breathing, dizziness, and conscious lost.



According to this week disease forecast, the risk of Carbon Monoxide (CO) poisoning from gas water heater continues in this cold season especially in mountainous areas where gas water heater are widely used.

The important risk factors are 1) using sub-standard gas water heater not certified by the Thai Industrial Standards Institute (TISI), 2) poorly air ventilated bathroom, e.g. no ventilation fan or ventilation window, 3) using bathroom after many prior occupancies, 4) long duration bathroom use, i.e. over 15 minutes, and 5) having underlying diseases, i.e. heart disease, high blood pressure, anemia, respiratory diseases or breathing problems.

The Department of Disease Control, therefore advises hotel and resort owners and tourism-related sectors, to install only standard gas water heaters as recommended by the TISI and have regular maintenance checks. CO poisoning preventive measures should be strictly followed, i.e. 1) install ventilation window and/or ventilation fan in the bathroom, 2) install gas water heater outside the building, 3) post the advice and warning sign regarding the risk factors and instruction for safe use of the appliance in the bathroom, 4) In case of CO poisoning, the EMS hotline 1669 should be immediately called for help, 5) keep a small oxygen tank for emergency rescue, and 6) after the patient get out of the room, the bathroom door should be left open for at least 15 minutes. There is also an urgent need to call a qualified technician to check and fix the heater before next use.

For queries or additional information, please call DDC hotline 1422.

