

# Department of Disease Control, Weekly Disease Forecast No.25/2021\_Chemical Incidents (11 - 17 July 2021)

From the disease surveillance system, the Department of Disease Control (DDC) reveals 6 chemical incidents in Thailand occurred during 1 January to 7 July 2021, i.e., 2 incidents each in February and July and 1 incident each in March and June as follows: 1) **Bird banger plant explosion** in Phichit province causing 4 deaths, one missing person and 1 minorly injured, 2) **Garbage disposal pit fire** in Prachinburi province causing smoke problem in households of 1 to 2 kilometers radius surrounding communities, 3) **Ammonia leakage** from an icemaking plant in Satun province causing vaporized toxic gas in the plant with 12 injured people. Most of them had irritation to the nose, mouth, and throat causing coughing, running nose, watery eyes, nausea, vomiting, and diarrhea, 4) **Chemical explosions and fire** in an agricultural chemical and equipment shop in Chiang-Mai province with one minorly injured person, 5) **Massive explosion and fire at a foam beads plant** in Samut Prakan province with one death and 47 injured persons. Evacuation was done for surrounding households within a radius of 5 km. due to fears of poisonous styrene gas. The short-term exposure to this gas can lead to irritation in the mucous membrane of the respiratory tract, skin, and eyes including changes in colour vision, dizziness, and balance difficulties. The long-term exposure to styrene gas can cause liver damage, hearing loss, severe vision or brain damage. Styrene is also a carcinogenic agent, and 6) **Warehouse fire** in Bangkok with 3 injured and no deaths. The warehouse had kept flammable substance such as alcohol gel, perfume, soap, and shampoo.



According to this week disease forecast, there is a continue risk of chemical incidents such as chemical leakage and chemical transport accident which will have health effects on employees, surrounding communities and the environment.

The Department of Disease Control (DDC), therefore, encourages enterprise owners with these chemical incident risks to prevent leakage, fire, and bigger accidents by following the safety and health guidelines and regulations, having an emergency and mitigation plan, and conducting periodic training on the emergency plan. Knowledge on hazardous chemicals, safe handling and storage as well as essential safety skills should be provided to employees and involved networks. Safe environment should be ensured including adequate ventilation, in order fire fighting system, clear and signposted emergency exits and periodic maintenance of the equipment. Establish surveillance of incidents for early detection of leakage at critical points, coupled to an alarm system is needed. In case of confronting chemical incidents, please immediately call the emergency medical services (EMS) Hotline 1669 and/or the Department of Pollution Control Hotline 1650.

For queries or additional information, please call DDC Hotline 1442.

