Preparedness Response to Hazard and Toxic Incidents, and Food Terrorism

Takemi Yoshida  (Sch.Pharmaceut. Sci., Showa Univ.)

Nerve gas sarin-evoked tragic disasters occurred at Matsumoto city, Nagano on 1994 and Tokyo subways on 1995 are terrorism attacks against non-military citizens. These chemical weapon exposures were the world-shaking event, and have become the objects of social concerns. Thereafter, many toxic substance-evoked incidents have been followed by curry-food containing arsenite at Wakayama city and subsequently followed by other toxic chemical containing foods and drinks. These disasters still remind us as the terrible events happened in our society. Upon these tragic events, government started to prepare risk and medical management system for countering chemical and biological terrorism with instrumentations of nationwide highly-sophisticated analytical instruments in police research institutes and emergency hospitals. Additionally, Ministries and National Research Institutes provide information, guidelines and treatment of chemical and biological agents causalities and so on. On the happening of emergency events such as mass chemical exposures and mass food poisonings, information on “when, where, who, whom, what, how” should be reported rapidly and exactly to the first responders responding national organizations, such as police and fire departments, health care center and hospitals so on. Pharmaceutical scientists and pharmacists have been generally learned and trained with information on and handling of toxic chemical substances as well as drugs, and thus in case of the event, they can become advisers for risk assessment, and for consulting analysis of drugs and chemicals. In Japan, we have sometimes experienced food- and drink-poisonings as terrorism-like attacks in the restricted areas. Poisonings have been occurred by herbicide paraquat and other pesticides including organophosphate insecticides, potassium cyanate and the above-mentioned arsenite-poisoned curry food. Because of easy access to internet-aided purchase of toxic substances and import and export of foods, we should have to pay attention to possible massive exposures through foods, and countering emergency management against them.