

Current Health Event

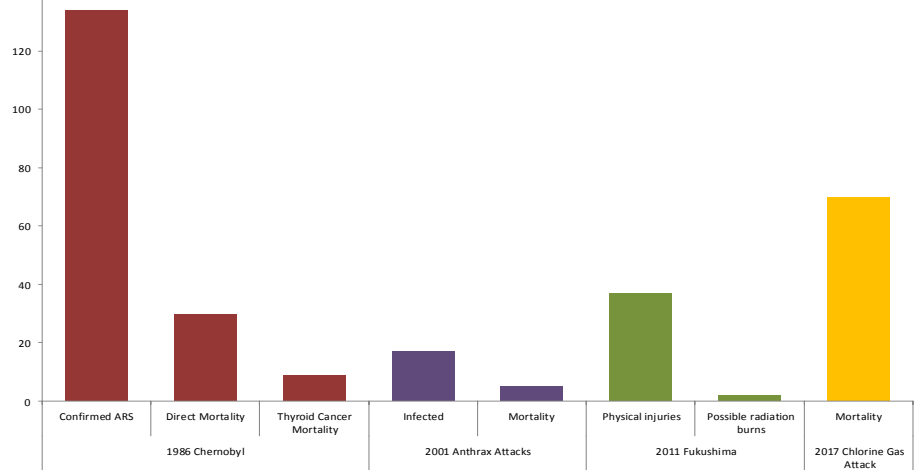
Lebanon expands training on Hazmat

Hazardous material (HAZMAT) are toxic substances: chemical, biological, radiological, and nuclear (CBRN), that can be accidentally or intentionally released/dumped into the environment. These substances are found in a solid, liquid, aerosolized, or gaseous form that may be used or stored for industrial, commercial, medical, military, or domestic purposes.

Editorial note:

Human exposure to hazardous material can cause significant risk on health and may lead to long-term illnesses and mortality. Among radio nuclear threats, the reactor explosions at Chernobyl in 1986 have led to the direct mortality of 30 workers, confirmed acute radiation syndromes of 134, radiation-associated thyroid cancer mortality of an additional 9 people and a projected lifetime expected cancer of 4000. The 2011 Fukushima explosion was less detrimental with only 1 documented mortality case due to circulatory failure. However, the event indirectly led to the mortality of a 1000 people who had to relocate to shelters. 90% of deaths were among those over 66 years of age, with 70% of cases dead in the first 3 months after the incident due to somatic effects and spiritual fatigue, mental or physical burden, and delays in obtaining needed medical support. In 2001, deadly anthrax spores were mailed to media companies and congressional offices in the US leading to the death of 5 people and infection of an additional 17. In recent years, multiple terrorist/warfare attacks have occurred in the Middle East such as Iraq, Syria and Yemen where toxic agents were used. The 2017 chlorine gas attack in Syria led to the death of 70 nationals and several hundreds were affected. This deliberate use of highly harmful toxic agents has stimulated national authorities to strengthen their early warning and response systems.

Figure 1: CBRN associated morbidity and mortality



In Lebanon, under the International Health Regulations (IHR) implementation requirements, MOPH in coordination with WHO, and in collaboration with the Syndicate of Hospitals held a series of capacity building trainings for hospital staff, healthcare providers and MoPH teams in terms of CBRN preparedness. One Medical Hazards Management Team (HazMaT) has been established at Rafik Hariri University hospital in Beirut and is fully equipped, and another team is being currently trained on CBRN response in Tripoli, North. Up to date 81 nurses and doctors have been trained from both private and governmental hospitals, 69 first responders (fire fighters and civil defense) and 31 from emergency medical services (LRC and others) with noticeable participation of a medical team from the Lebanese army in the north. Furthermore, 6 Isolation and Infection Control Pods and Shelters (ISOPOD) are now available at the national level, together with a technical field decontamination tent and another for patients; a field isolation tent is also available at the national level. Moreover, two sets of full HazMat equipment, along with advanced level PPEs, have been procured by WHO for MoPH to be fully prepared and equipped to face any CBRN event. The Lebanese government has also established a national, multi-disciplinary, multi-sectoral CBRN committee at the cabinet of the Prime Minister, tasked to coordinate the national preparedness and response.

Scope of IHR 2005:

The International Health Regulations (IHR 2005) are the world's first legally binding agreement in the fight against public health emergencies of international concern such as those caused by new and re-emerging diseases with epidemic potential, as well as those associated with acute chemical or radio-nuclear events.

Notifiable Diseases in Lebanon [cumulative n° of cases among all residents (among Syrians)] as of 8 September 2017

Disease	2016	2017	July	August
Vaccine Preventable Diseases				
Polio	0 (0)	0 (0)	0 (0)	0 (0)
AFP	123 (17)	56(11)	8(4)	1(0)
Measles	44 (18)	89(29)	8(2)	1(1)
Mumps	486 (86)	190(32)	5(4)	9(5)
Pertussis	97 (18)	72(16)	13(3)	6(0)
Rabies	0 (0)	0 (0)	0 (0)	0 (0)
Rubella	12 (6)	8(5)	2(2)	0 (0)
Tetanus	2 (0)	0 (0)	0 (0)	0 (0)
Viral Hep. B	367 (48)	215(37)	18(3)	13(0)
Water/Food Borne Diseases				
Brucellosis	402 (165)	252(72)	56(7)	18(4)
Cholera	0 (0)	0 (0)	0 (0)	0 (0)
Hydatid cyst	11 (2)	7(1)	0 (0)	0 (0)
Typhoid fever	598 (11)	387(11)	66(0)	40(0)
Viral Hep. A	519 (78)	362(44)	41(7)	38(3)
Other Diseases				
Leishmaniasis	58 (52)	15(15)	0 (0)	0 (0)
Meningitis	458 (63)	220(45)	42(6)	12(2)
Viral Hep. C	116 (8)	74(4)	10(0)	5(1)