

Current Health Event

Climate Change

Climate change is one of the greatest challenges of our time; it requires immediate attention as it is already having evident and worsening effects on communities everywhere.

Editorial note:

Emissions of the pollutants driving climate change are growing rapidly. If current trends continue, the world could see a 4°C rise in global mean surface temperatures over the current century. This will entail severe disruptions to precipitation patterns and to the frequency and intensity of some extreme weather events.

Extreme weather events can have adverse impacts on public health, human settlements, transport infrastructure, agriculture production, power supply and the economy. The fragile biodiversity, ecosystems, and natural habitats will be threatened by increased forest fires, pest outbreaks and sea level rise. People living in small island developing states and other coastal regions, megacities, and mountainous and polar regions are the most vulnerable in addition to areas with weak health infrastructure.

Climate change undermines access to safe water, adequate food and clean air exacerbating the approximately 12.6 million deaths each year. Between 2030 and 2050, climate change is expected to cause approximately 250 000 additional deaths per year, from malnutrition, malaria, diarrhoea and heat stress, and billions of dollars in direct damage costs to health.

Climatic changes are expected to have diverse implications on Lebanon's environment, economy, and social structure. The main contributor to greenhouse gas emissions in Lebanon is the energy production sector with 53% of greenhouse gas emissions, followed by the transport sector (23%), waste sector

Fig. 1: Potential economic costs of climate-related risk of death in Lebanon (deaths per year & 2015 USD)

Year	2020	2040	2080
Number of climate-related deaths per year in Lebanon			
Heat stress	3,900	6,600	12,200
Malnutrition, diarrhea, malaria, floods, cardiovascular disease	31,100	33,900	33,300
Total	34,900*	40,500	45,500
Costs of increased risk of death in Lebanon			
Heat stress (millions)	USD 5,200	USD 9,000	USD 16,400
Malnutrition, diarrhea, malaria, floods, cardiovascular disease (millions)	USD 41,900	USD 45,800	USD 45,000
Total (millions)	USD 47,200*	USD 54,700*	USD 61,400

(10.7%) and industrial processes (9.7%). Regional estimates of mortality risk developed by WHO indicate that, if current trends in GHG emissions continue, climate change might cause about 34,900 deaths per year in Lebanon by 2020, 40,500 by 2040, and 45,500 by 2080.

The Costs that climate change might impose on health sector is the highest among other different segments of Lebanon's economy and society (Economic costs to Lebanon from climate change, a first look, MOE, 2015). the potential costs in 2020 associated with potential increases in the risk of death from heat stress, malnutrition, diarrhea, malaria, floods, and cardiovascular disease — total USD 47,200 million. Costs associated with potential increases in illness and disability—from the same climate-related factors—total USD 177,900 million.

As for public health, adaptation measures quickly became a priority after having been identified as one of the most affected sectors by climate change. Reducing emissions of greenhouse gases through better transport, food and energy-use choices can result in improved health, particularly through reduced air pollution. Recommended adaptation measures include improving knowledge and awareness of the interactions between climate change and public health, strengthen systems for monitoring and responding to the effects of climate change on public health, encouraging development related strategies, and strengthen

institutions responsible for preparing for & responding to the effects of climate change on public health.

In 2015, the WHO Executive Board endorsed a new work plan on climate change and health. This includes: 1. Partnerships: to coordinate with partner agencies within the UN system, & ensure that health is

properly represented in the climate change agenda; 2. Awareness raising; 3. Science and evidence: to coordinate reviews of the scientific evidence on the links between climate change and health, and develop a global research agenda; 4. Support countries

Notifiable Diseases in Lebanon [cumulative n° of cases among all residents (among Syrians)] as of 5 October 2017

Disease	2016	2017	Aug.	Sept.
Vaccine Preventable Diseases				
Polio	0 (0)	0 (0)	0 (0)	0 (0)
AFP	123 (17)	62 (12)	1(0)	4 (0)
Measles	44 (18)	89 (29)	1 (1)	0 (0)
Mumps	486 (86)	196(36)	11(6)	4 (3)
Pertussis	97 (18)	74 (16)	10 (0)	0(0)
Rabies	0 (0)	0 (0)	0 (0)	0 (0)
Rubella	12 (6)	8 (5)	0(0)	0 (0)
Tetanus	2 (0)	0 (0)	0 (0)	0 (0)
Viral Hep. B	367(48)	236(38)	26 (0)	7 (1)
Water/Food Borne Diseases				
Brucellosis	402 (165)	304(86)	37 (5)	13 (1)
Cholera	0 (0)	0 (0)	0 (0)	0 (0)
Hydatid cyst	11 (2)	14 (4)	0 (0)	1 (0)
Typhoid fever	598 (11)	461(13)	88 (2)	23 (0)
Viral Hep. A	519(78)	444(71)	82 (17)	36(11)
Other Diseases				
Leishmaniasis	58 (52)	93(82)	1(0)	0 (0)
Meningitis	458 (63)	262(56)	31 (9)	22 (4)
Viral Hep. C	116 (8)	86 (5)	13(2)	4(0)