World Health Organization
REPUBLIC OF LEBANON
MINISTRY OF PUBLIC HEALTH

Lebanese Epi-Monitor
Updates & Reviews

Volume 4, Issue 2— February 2017

Current Health Event

Air pollution

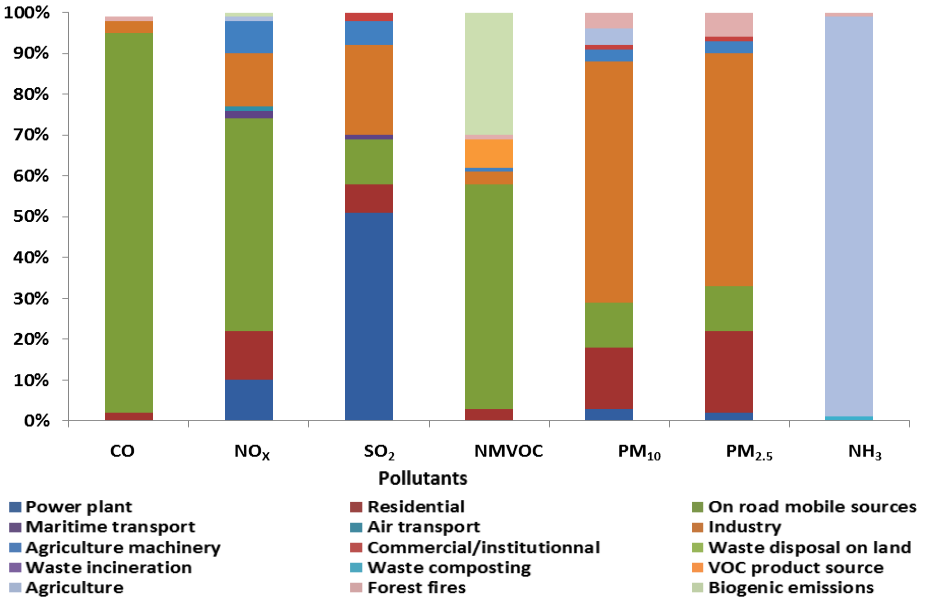
Air pollution is a major environmental risk to health in both developed and developing countries. By reducing air pollution levels, countries can reduce the burden of disease from stroke, heart disease, lung cancer, and both chronic and acute respiratory diseases, including asthma.

Editorial note:

The major sources of outdoor air pollution in the Eastern Mediterranean Region (EMR) are traffic air emissions, industrial emissions and sand and dust storms, all of which are aggravated by climate change. As for indoor air pollution, it is mostly attributed to sources of energy used for cooking and heating and tobacco smoking. In 2016, a new WHO air quality model confirms that 92% of the world's population lives in places where air quality levels exceed WHO -recommended limits. The situation is even worse in the EMR where the percentage rises to 98%. WHO estimates that 3.7 million deaths each year worldwide are attributable to ambient air pollution and 4.3 million deaths from exposure to household air pollution.

Air pollution is of major significance in Lebanon. The cost of air pollution was estimated at around $170 Million per year or 1.025% of the GDP in 2002. It can be expected that these costs are considerably higher nowadays due to an expected increase of emissions. Air pollution is mostly affecting urban and peri-urban areas due to smog, particulate matter, and toxic air pollutants. Epidemiological studies have shown positive associations between the levels of exposure to air pollution and related health outcomes. The current legislations in Lebanon includes: 1. the National Ambient Air Quality Standards (1996); 2. the Emissions Limit Values for point sources (2001); 3. the Draft Law on the Protection of Air Quality (2005). In line with this Draft Law, MOE is developing a National Air Quality Management Strategy mainstreaming cross-sectoral air quality management considerations into different existing and planned strategies. WHO Member States recently adopted a resolution and a road map for responding to the adverse health effects of air pollution; emphasizing on: 1. expanding the knowledge base by building and disseminating global evidence and knowledge of the impacts of air pollution on health and the effectiveness of interventions on health and the effectiveness of interventions and policies to address it; 2. enhancing systems to monitor and report on health trends and progress towards the air pollution related targets of SDGs; 3. enhancing the health sector's capacity to address the adverse health effects from air pollution through training, guidelines and national action plans.

Figure1: Emissions apportionment for the different pollutants for 2010 in Lebanon



Source: Adapted from Waked et al., 2012

Notifiable Diseases in Lebanon
[cumulative n° of cases among all residents (among Syrians)]
as of 01 March 2017

Disease	2016	2017	Jan.	Feb.
Vaccine Preventable Diseases				
Polio	0 (0)	0 (0)	0 (0)	0 (0)
AFP	123 (17)	18 (1)	9 (1)	9 (0)
Measles	44 (18)	8 (6)	4 (3)	4 (3)
Mumps	486 (86)	14 (1)	8 (1)	6 (0)
Pertussis	97 (18)	9 (2)	3 (0)	6 (2)
Rabies	0 (0)	0 (0)	0 (0)	0 (0)
Rubella	12 (6)	1 (1)	0 (0)	1 (1)
Tetanus	2 (0)	0 (0)	0 (0)	0 (0)
Viral Hep. B	367 (48)	52 (8)	21 (3)	31 (5)
Water/Food Borne Diseases				
Brucellosis	402 (165)	22 (8)	15 (7)	7 (1)
Cholera	0 (0)	0 (0)	0 (0)	0 (0)
Hydatid cyst	11 (2)	2 (1)	2 (1)	0 (0)
Typhoid fever	598 (11)	52 (1)	38 (0)	14 (1)
Viral Hep. A	519 (78)	92 (14)	62 (13)	30 (1)
Other Diseases				
Leishmaniasis	58 (52)	3 (3)	3 (3)	0 (0)
Meningitis	458 (63)	31 (6)	18 (4)	13 (2)
Viral Hep. C	116 (8)	22 (0)	10 (0)	12 (0)