

Current Health Event

Animal Bites– Rabies

Rabies is a vaccine-preventable viral disease, usually transmitted through animal bites (canine and rodents). Most frequent cases of rabies are transmitted by dogs and cats.

Rabies is a public health problem of significant importance in the majority of Southern and Eastern Mediterranean and Middle Eastern countries.

Editorial note:

Rabies occur in more than 150 countries and territories. Animal rabies is known to be endemic in countries bordering Lebanon; however in Lebanon there is scarcity in information regarding incidence of animal rabies.

Rabies can affect both domestic and wild animals. It is spread to people through bites or scratches, usually via saliva; the virus cannot infiltrate intact skin. The incubation period for rabies is typically 3-8 weeks but may vary from 1 week to 1 year, dependent upon factors such as the location of virus entry (shorter incubation periods for sites closer to nerve tissues eg. head and neck) and viral load. Initial symptoms of rabies include a fever with pain and unusual or unexplained tingling, pricking, or burning sensation at the wound site. As the virus spreads to the central nervous system, progressive and fatal inflammation of the brain and spinal cord develops.

Human rabies is one of the reportable diseases in Lebanon. According to the Ministry of Public Health (MoPH) surveillance data (2015) more than 90% of possible cases of rabies exposure due to animal bites occur from domestic and stray dogs. Furthermore, almost a quarter of rabies exposure cases are similar for those aged 0-14 (27.3%), 15-24 (23.2%) and 25-44 (28.6%). An increasing trend is observed in the number of exposed persons to rabies from 379 in 2010 to 1,195 in 2015. Furthermore the post-exposure rabies vaccines administered increased from 847 vaccines in 2010 to

Fig. 1: Exposed persons to animal bites as reported by anti-rabies centers, Lebanon, 2000-2015 (Source MoPH)

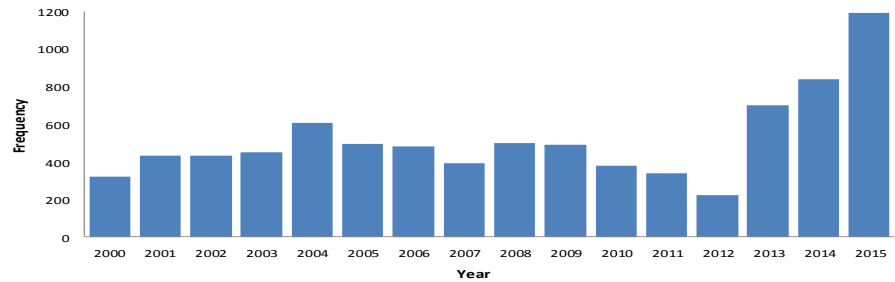
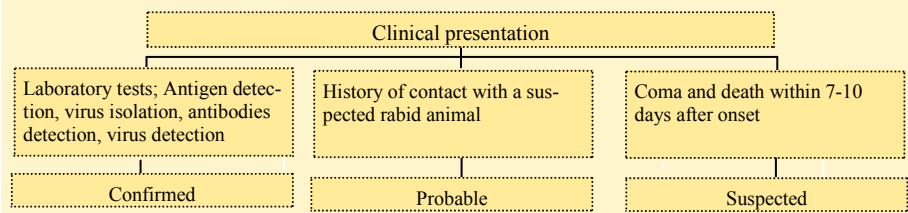


Fig. 2: Rabies Case Classification (Source MoPH)



3,745 vaccines in 2015. The increasing trend is due to the fact that a large number of refugees are living in informal tented settlements which makes them more vulnerable to animal bites. In this respect the MoPH designated 10 anti-rabies centers across Lebanon that provide the rabies vaccine and immunoglobulin for free to exposed persons. Furthermore, an awareness brochure was distributed to all communities. The Ministry of Agriculture, in coordination with MoPH and the municipalities, is purchasing rabies oral vaccine to initiate vaccination for stray dogs.

In 2015, WHO Member States and key partners set a global goal to achieve zero human deaths from dog transmitted rabies by 2030.

- Implement large-scale dog vaccination and ensure prompt delivery of post-exposure treatment to humans in areas at risk of rabies;
- Community engagement and empowerment of at-risk populations;
- Raise awareness and reach remote, rural and at-risk population

Rabies Exposure Case Definition:

Confirmed case:

A person who has a close contact (usually a bite or scratch) with a laboratory-confirmed rabid animal.

Possible case:

A person who had a close contact (a bite or a scratch) with a rabies-susceptible animal and/or origination from a rabies-infected area.

Notifiable Diseases in Lebanon [cumulative n° of cases among all residents (among Syrians)] as of 30 March 2017

Disease	2016	2017	Feb.	Mar.
Vaccine Preventable Diseases				
Polio	0 (0)	0 (0)	0 (0)	0 (0)
AFP	123 (17)	28 (4)	12 (1)	7 (3)
Measles	44 (18)	42 (7)	6 (2)	28 (1)
Mumps	486 (86)	84 (3)	12 (1)	63 (1)
Pertussis	97 (18)	26 (7)	11 (5)	10 (2)
Rabies	0 (0)	0 (0)	0 (0)	0 (0)
Rubella	12 (6)	1 (1)	1 (1)	0 (0)
Tetanus	2 (0)	0 (0)	0 (0)	0 (0)
Viral Hep. B	367 (48)	95 (21)	41 (11)	28 (5)
Water/Food Borne Diseases				
Brucellosis	402 (165)	68 (25)	23 (10)	20 (1)
Cholera	0 (0)	0 (0)	0 (0)	0 (0)
Hydatid cyst	11 (2)	3 (1)	0 (0)	1 (0)
Typhoid fever	598 (11)	126 (3)	25 (1)	55 (1)
Viral Hep. A	519 (78)	138 (26)	41 (5)	31 (4)
Other Diseases				
Leishmaniasis	58 (52)	15 (15)	0 (0)	8 (8)
Meningitis	458 (63)	65 (13)	20 (2)	27 (7)
Viral Hep. C	116 (8)	30 (1)	13 (0)	7 (1)