

Current Health Event

A suspected case of poliomyelitis in Lebanon

On 10 of March 2014, an 18 month old Syrian girl presented with Acute Flaccid Paralysis (AFP). The date of onset was on 7 March. The case was referred to Taanayel hospital. Two stool specimens were collected on day 5 and day 6 from AFP onset for virological culture. The child received only two doses of OPV. Stool specimens were also collected from other three related siblings. On 26 March: **No polioviruses could be isolated** at the Egyptian VACSERA, a WHO-accredited laboratory.

Editorial Note

AFP is a sudden onset of generalized flaccid weakness in the absence of symptoms of encephalopathy implicating the motor unit. AFP is an emergency in which management priorities are to support vital functions and reach a specific diagnosis in a timely manner with a focused history and physical examination. *Guillain-Barré* syndrome (GBS) is the most common cause of AFP in healthy infants and children. It has an annual incidence of 0.6 to 2.4 cases per 100,000 population, and occurs at all ages and in both sexes. Males are affected approximately 1.5 times more often than females in all age groups.

All AFP cases should have a full clinical and virological investigation with at least 80% of AFP cases having 'adequate' stool specimens collected. 'Adequate' stool specimens are two stool specimens of sufficient quantity for laboratory analysis, collected at least 24 hours apart, within 14 days after the onset of paralysis, and arriving in the laboratory by reverse cold

Table 1: AFP surveillance indicators, Lebanon, 1998-2013

Year	AFP cases reported	Non-polio AFP rate	AFP cases with adequate specimens (%)	Total confirmed polio cases
2013	33	2.2	45	0
2012	24	2.2	50	0
2011	22	2.0	45	0
2010	19	1.7	47	0
2009	8	0.7	50	0
2008	18	1.6	78	0
2007	23	1.9	65	0
2006	15	1.2	53	0
2005	13	1.0	92	0
2004	14	1.1	79	0
2003	20	2.2	75	1 (imported)
2002	16	1.8	81	0
2001	14	1.6	57	0
2000	13	1.5	85	0
1999	14	1.5	21	0
1998	11	1.3	0	0

chain and with proper documentation. At least 80% of AFP cases should have a follow-up examination for residual paralysis at 60 days after the onset of paralysis. Case investigation of AFP considers clinical findings, vaccination status, travel history, CSF results and EMG/ENG results.

AFP:

Acute Flaccid Paralysis (AFP) surveillance is the gold standard for detecting cases of poliomyelitis. The four steps of surveillance are:

- finding and reporting children with acute flaccid paralysis (AFP)
- transporting stool samples for analysis
- isolating and identifying poliovirus in the laboratory
- mapping the virus to determine the origin of the virus strain

In Lebanon, AFP surveillance was established since 1998. Delayed reporting explains inadequate specimen collection (*Table 1 above*).

Currently the WHO Office in Lebanon jointly with UNICEF, is further strengthening the AFP surveillance capacities and activities in Lebanon.

Cumulative Notifiable diseases in Lebanon (Syrian)

Disease	2013 Cumul	2014 Cumul*	Feb	Mar*
Vaccine Preventable Diseases				
Polio	0(0)	0(0)	0(0)	0(0)
Acute Flaccid Paralysis	34(7)	7(3)	2(0)	2(1)
Measles	1760(232)	83(30)	42(15)	20(4)
Mumps	14(2)	12(7)	5(4)	5(2)
Pertussis	59(9)	19(6)	11(5)	0(0)
Rabies	1(1)	0(0)	0(0)	0(0)
Rubella	27(1)	0(0)	0(0)	0(0)
Tetanus	4(0)	0(0)	0(0)	0(0)
Viral Hep B	141(8)	36(3)	16(2)	6(1)
Water/Food Borne Diseases				
Brucellosis	189(12)	23(0)	8(0)	5(0)
Hydatid cyst	13(3)	4(0)	2(0)	0(0)
Typhoid Fever	407(21)	35(0)	19(0)	7(0)
Viral Hep A	1551(220)	363(54)	141(22)	74(7)
Other Diseases				
Leishmaniasis	1033(1032)	219(216)	62(62)	46(46)
Meningitis	204(24)	34(3)	19(1)	2(0)
Viral Hep C	103(4)	19(0)	9(0)	3(0)

Source: Ministry of Public Health, Lebanon. Cumul= Cumulative *to date