



# Lebanese Epidemiological Newsletter

النشرة اللبنانية للوبائيات

July-September 2005  
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# EPI news

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Nowadays nobody ignores the importance of epidemiological surveillance and the need to have access to reliable and representative data as a way to assist in decision taking. Recent (SARS...) and current events (bird flu) have shown, if need be, how important and vital it is to have access to valid and high quality epidemiological data to be shared amongst all stakeholders in and between countries.

It is agreed that the management of epidemiological surveillance activities, whether they are the routine or the exception, in the case of an outbreak for instance, can be neither centralized nor divided up amongst several participants or several regions especially within the same area. So a whole local vision first, then a national and finally a global one are required for the system to be reactive and performing, consequently, rapid and powerful actions.

Decentralized structures have shown the relevance of their actions when controlling health problems and improving epidemiological surveillance on both local and regional levels. However some constraints may arise which are namely linked to the absence of an institutional framework or a clear and normative definition of their missions and attributions.

Such structures can provide in their geographical location the following activities:

- Collecting epidemiological data
- Establishing the local epidemiological profile
- Creating, updating, using, and analyzing databases
- Detecting, giving alert, and investigating epidemic episodes
- Elaborating counterattack plans for emergencies
- Supervision and evaluation of epidemiological surveillance activities
- Taking part in epidemiological training
- Information and retro information.

It is worth noting in this regard the recent decision of the Ministry of Health to proceed to the decentralization of epidemiological surveillance activities, which is completing the avant-gardist work already accomplished by the central unit. The WHO is honored to be part of the team in charge of putting in place this decentralization process which will definitely have the immediate impact of improving the epidemiological surveillance system in Lebanon.

**Dr Jaouad MAHJOUR**  
Representative of the World Health Organization in Lebanon

## Epidemiological Surveillance Program Team

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# NOTIFIABLE COMMUNICABLE DISEASES LEBANON JANUARY - SEPTEMBER 2005

## Measles:

Following the peak in May (159 cases) and June (123 cases), the number of measles cases is decreasing; there are 81 reported cases in July, 23 in August and 5 in September. The most affected mohafazats are the North (353 cases) followed by the Bekaa (91 cases) and the Mount-Lebanon (55 cases). The most affected cazas are Akkar (294) and Tripoli (77 cases). Among all cases, 58% are under 5 years old and 23% are 5 to 9 years old. Most reported cases are inpatients (94%). For cases of 1-4 years old, 69% were not immunized, 27% had unspecified immunization status and 4% had at least 1 dose of Measles Containing Vaccine (MCV). For cases of 5 to 9 years old, 53% were not immunized, 42% had unspecified immunization status and 5% had at least 1 dose of MCV.

## Tetanus neonatorum:

One case of tetanus neonatorum was reported in Akkar (Kachlak) in August 2005. The newborn, a boy, was born at home. During the four days after birth, the newborn did suck and cry well. On day 5 after birth, he developed generalized stiffness and was not able to feed. He was admitted to the hospital on day 6. The baby did not survive.

## الحصبة :

بعد تزايد أعداد حالات الحصبة خلال شهري أيار (١٥٩ حالة) وحزيران (١٢٣ حالة)، بدأت الأعداد بالانخفاض، إذ سجلت ٨١ حالة في شهر تموز، ٢٣ حالة في شهر آب و٥ حالات في شهر أيلول ٢٠٠٥. المحافظات الأكثر تعرضاً هي محافظة الشمال (٣٥٣ حالة)، تليها البقاع (٩١ حالة) وجبل لبنان (٥٥ حالة). أما الاقضية الأكثر تعرضاً فهي عكار (٢٩٤ حالة) وطرابلس (٧٧ حالة). معظم الحالات المبلغ عنها تم إدخالها المستشفى (٩٤%). من بين المرضى من عمر سنة إلى ٤ سنوات، ٦٩% غير ملقحين، ٢٧% غير معروف وضعهم التلقيحي و٤% قد تلقوا جرعة أو أكثر من لقاح متضمناً الحصبة. أما من بين الأطفال المبلغ عنهم، من عمر ٥ إلى ٩ سنوات، ٥٣% غير ملقحين، ٤٢% غير معروف وضعهم التلقيحي و٥% قد تلقوا جرعة أو أكثر من لقاح متضمناً الحصبة.

## الكزاز الوليدي :

سجلت حالة كزاز وليدي في قضاء عكار (بلدة قشلق)، خلال شهر آب ٢٠٠٥. الطفل وُلد في المنزل. خلال الأيام الأولى بعد الولادة، كان يرضع ويصرخ بشكل طبيعي. في اليوم الخامس، ظهرت لديه صعوبة في الرضاعة، بالإضافة إلى تيبس عام وتشنجات. أدخل الطفل المستشفى في اليوم السادس، لكن الطفل لم ينج.

Figure 1: Measles reported cases by week  
Lebanon January - September 2005

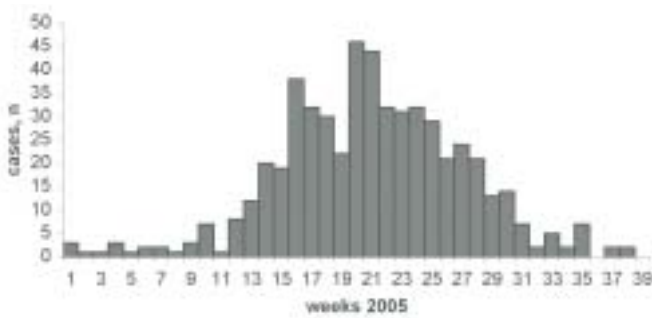


Figure 2: Measles reported cases by caza  
Lebanon January - September 2005

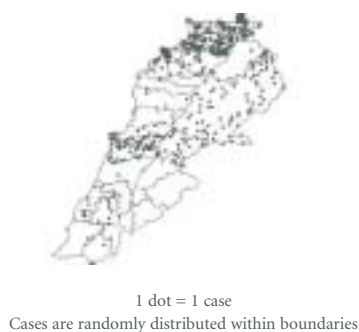


Figure 3: Measles reported cases by age group in different mohafazats  
Lebanon January - September 2005

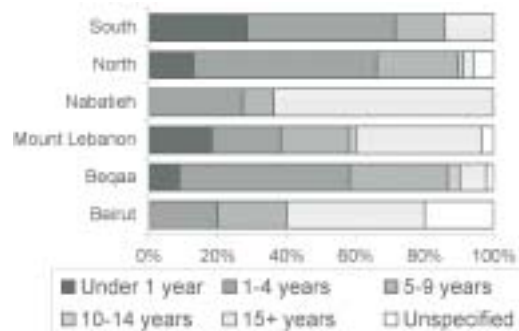
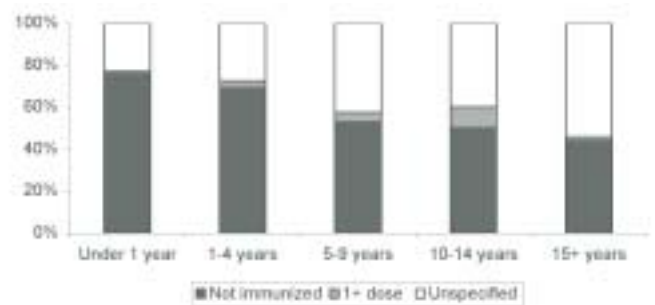


Figure 4: Measles reported cases by immunization status & age group  
Lebanon January - September 2005



## Reported cases by month - Lebanon January to September 2005

Diseases	2004	2005										
		Sum	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	
<b>Vaccine Preventable</b>												
Acute Flaccid Paralysis	21	19	2	3	0	0	7	0	4	1	2	
Acute Poliomyelitis	0	0	0	0	0	0	0	0	0	0	0	
Diphtheria	0	0	0	0	0	0	0	0	0	0	0	
Measles	264	551	8	8	23	115	159	123	81	23	5	
Mumps	54	12	2	0	0	1	4	3	0	2	0	
Pertussis	21	41	3	7	1	3	4	9	6	6	2	
Rabies	1	0	0	0	0	0	0	0	0	0	0	
Rubella	134	21	1	1	3	3	10	1	2	0	0	
Tetanus	2	3	0	0	1	0	0	1	0	1	0	
Tetanus neonatorum	0	1	0	0	0	0	0	0	0	1	0	
Hepatitis B Virus	249	225	13	16	19	38	18	27	25	50	19	
<b>Food &amp; Water Borne</b>												
Brucellosis	198	163	6	11	17	17	19	21	29	28	15	
Cholera	0	0	0	0	0	0	0	0	0	0	0	
Dysentery	143	132	13	6	8	14	9	15	20	23	24	
Food Poisoning	373	55	4	1	0	0	1	11	6	14	18	
Hydatic Cyst	19	5	1	0	1	0	1	0	0	1	1	
Parasitic Worms	50	17	0	1	1	1	6	4	4	0	0	
Trichinosis	0	0	0	0	0	0	0	0	0	0	0	
Typhoid Fever	635	415	21	28	29	32	61	74	69	55	46	
Hepatitis A Virus	398	189	26	24	16	18	32	22	17	17	17	
<b>Other</b>												
Bilharziasis	2	0	0	0	0	0	0	0	0	0	0	
Creutzfeld Jakob Disease	0	1	0	0	0	1	0	0	0	0	0	
Ebola	0	0	0	0	0	0	0	0	0	0	0	
Gonorrhoea	6	1	0	0	0	0	0	1	0	0	0	
Leishmaniasis	1	1	0	0	0	1	0	0	0	0	0	
Leprosy	4	3	0	2	0	0	0	0	0	0	1	
Malaria	69	33	3	2	0	1	3	4	6	13	1	
Meningitis	323	161	9	12	15	10	28	35	18	21	13	
Plague	0	0	0	0	0	0	0	0	0	0	0	
Syphilis	4	8	1	0	1	2	3	0	1	0	0	
Typhus	6	14	0	2	1	2	4	2	0	0	3	
Hepatitis C Virus	47	56	1	5	6	9	4	6	4	14	7	
Yellow Fever	0	0	0	0	0	0	0	0	0	0	0	

## Reported cases by mohafazat - Lebanon January to September 2005

Diseases	Total	Rate/ 100 000 inhab.	Mohafazat							
			North	Bekaa	Nabatieh	South	Mount-Lebanon	Beirut	Un-specified	
<b>Vaccine Preventable</b>										
Acute Flaccid Paralysis	19	0.41	5	0	1	4	7	0	2	
Acute Poliomyelitis	0	0.00	0	0	0	0	0	0	0	
Diphtheria	0	0.00	0	0	0	0	0	0	0	
Measles	551	12.00	353	91	11	17	55	5	15	
Mumps	12	0.26	2	1	1	0	6	2	0	
Pertussis	41	0.89	12	7	4	0	15	1	2	
Rabies	0	0.00	0	0	0	0	0	0	0	
Rubella	21	0.46	6	6	2	0	5	1	1	
Tetanus	3	0.07	3	0	0	0	0	0	1	
Tetanus neonatorum	1	0.00	1	0	0	0	0	0	0	
Hepatitis B Virus	225	4.90	12	22	19	9	42	10	111	
<b>Food &amp; Water Borne</b>										
Brucellosis	163	3.55	29	67	11	7	23	3	23	
Cholera	0	0.00	0	0	0	0	0	0	0	
Dysentery	132	2.88	15	1	0	0	44	16	56	
Food Poisoning	55	1.20	5	3	5	23	10	3	6	
Hydatic Cyst	5	0.11	1	0	0	0	3	0	1	
Parasitic Worms	17	0.37	0	0	0	0	2	6	9	
Trichinosis	0	0.00	0	0	0	0	0	0	0	
Typhoid Fever	415	9.04	147	124	6	12	75	12	39	
Hepatitis A Virus	189	4.12	61	31	5	21	51	5	15	
<b>Other</b>										
Bilharziasis	0	0.00	0	0	0	0	0	0	0	
Creutzfeld Jakob Disease	1	0.02	0	0	0	0	0	1	0	
Ebola	0	0.00	0	0	0	0	0	0	0	
Gonorrhoea	1	0.02	0	0	0	0	1	0	0	
Leishmaniasis	1	0.02	0	0	0	0	1	0	0	
Leprosy	3	0.07	2	0	0	0	0	0	1	
Malaria	33	0.72	10	2	1	7	6	2	5	
Meningitis	161	3.51	45	24	12	10	34	18	9	
Plague	0	0.00	0	0	0	0	0	0	0	
Syphilis	8	0.17	1	0	0	0	0	0	7	
Typhus	14	0.31	0	0	2	1	7	1	3	
Hepatitis C Virus	56	1.22	4	2	3	5	11	2	29	
Yellow Fever	0	0.00	0	0	0	0	0	0	0	

## Reported cases by caza - Lebanon January to September 2005

Diseases	NORTH							MOUNT-LEBANON			
	Akkar	Menieh Dinnieh	Tripoli	Zghorta	Koura	Becharre	Batroun	Jbeil	Kesrwan	Metn	Baabda
<b>Vaccine Preventable</b>											
Acute Flaccid Paralysis	0 (0)*	1 (0)	1 (0)	0 (0)	0 (0)	0 (0)	2 (0)	0 (0)	0 (0)	1 (0)	0 (0)
Acute Poliomyelitis	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Diphtheria	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Measles	252 (1)	23 (3)	65 (0)	3 (1)	6 (0)	0 (0)	2 (0)	3 (0)	3 (0)	9 (0)	21 (0)
Mumps	1 (0)	0 (0)	1 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (0)	0 (0)	2 (0)	0 (0)
Pertussis	1 (0)	0 (0)	9 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (0)	0 (0)	0 (0)	10 (0)
Rabies	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Rubella	3 (0)	3 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	3 (0)	1 (0)
Tetanus	3 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Tetanus neonatorum	1 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Hepatitis B Virus	7 (0)	0 (0)	5 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	4 (0)	12 (0)	23 (2)
<b>Food &amp; Water Borne</b>											
Brucellosis	9 (0)	2 (0)	12 (1)	1 (1)	2 (0)	2 (1)	0 (0)	3 (0)	3 (0)	10 (0)	5 (1)
Cholera	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Dysentery	0 (0)	4 (1)	9 (0)	1 (0)	0 (0)	0 (0)	1 (0)	3 (0)	26 (8)	14 (4)	1 (1)
Food Poisoning	0 (0)	0 (0)	5 (0)	0 (0)	0 (0)	0 (0)	0 (0)	3 (2)	1 (0)	3 (0)	3 (1)
Hydatic Cyst	0 (0)	0 (0)	0 (0)	1 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (0)	2 (0)
Parasitic Worms	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (0)	0 (0)
Trichinosis	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Typhoid Fever	20 (3)	52 (1)	62 (10)	7 (0)	3 (1)	0 (0)	3 (2)	5 (1)	2 (0)	4 (0)	35 (1)
Hepatitis A Virus	14 (1)	3 (0)	35 (7)	1 (0)	3 (0)	0 (0)	5 (2)	3 (0)	3 (0)	11 (0)	20 (0)
<b>Other</b>											
Bilharziasis	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Creutzfeld Jakob Disease	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (0)	0 (0)	0 (0)
Ebola	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Gonorrhoea	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (0)	0 (0)	0 (0)
Leishmaniasis	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (0)
Leprosy	2 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Malaria	6 (0)	1 (0)	3 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (0)	4 (0)
Meningitis	25 (3)	4 (1)	8 (1)	2 (0)	2 (0)	1 (0)	3 (0)	2 (0)	2 (1)	6 (0)	24 (0)
Plague	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Syphilis	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Typhus	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (1)	5 (0)
Hepatitis C Virus	2 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (0)	0 (0)	2 (0)	0 (0)	5 (1)	4 (0)
Yellow Fever	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

\* The figures between brackets are for September.

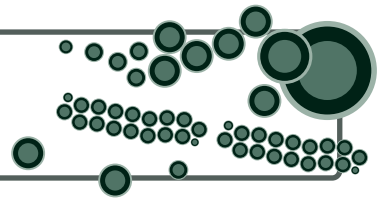
## Reported cases by age &amp; sex - Lebanon January to September 2005

Diseases	Total	Age (years)						UN*	Sex		
		0-4	5-9	10-19	20-39	40-59	≥ 60		Male	Female	UN*
<b>Vaccine Preventable</b>											
Acute Flaccid Paralysis	19	1	2	5	5	1	5	0	14	5	0
Acute Poliomyelitis	0	0	0	0	0	0	0	0	0	0	0
Diphtheria	0	0	0	0	0	0	0	0	0	0	0
Measles	551	324	125	30	36	0	44	325	225	1	
Mumps	12	5	2	4	1	0	0	4	8	0	
Pertussis	41	33	5	0	0	0	3	20	21	0	
Rabies	0	0	0	0	0	0	0	0	0	0	
Rubella	21	9	6	2	3	0	1	12	9	0	
Tetanus	3	1	1	0	0	0	1	3	0	0	
Tetanus neonatorum	1	1	0	0	0	0	0	1	0	0	
Hepatitis B Virus	225	1	4	13	105	34	11	170	55	0	
<b>Food &amp; Water Borne</b>											
Brucellosis	163	3	11	30	51	25	26	93	70	0	
Cholera	0	0	0	0	0	0	0	0	0	0	
Dysentery	132	30	15	6	21	16	26	62	70	0	
Food Poisoning	55	5	9	12	21	5	2	37	18	0	
Hydatic Cyst	5	0	0	1	1	1	1	3	2	0	
Parasitic Worms	17	1	2	0	3	2	0	9	8	0	
Trichinosis	0	0	0	0	0	0	0	0	0	0	
Typhoid Fever	415	69	50	73	80	52	38	210	205	0	
Hepatitis A Virus	189	31	33	54	26	3	4	113	74	2	
<b>Other</b>											
Bilharziasis	0	0	0	0	0	0	0	0	0	0	
Creutzfeld Jakob Disease	1	0	0	0	0	0	1	0	1	0	
Ebola	0	0	0	0	0	0	0	0	0	0	
Gonorrhoea	1	0	0	1	0	0	0	1	0	0	
Leishmaniasis	1	0	0	1	0	0	0	1	0	0	
Leprosy	3	0	0	0	1	1	1	1	2	0	
Malaria	33	0	2	3	14	11	1	28	5	0	
Meningitis	161	40	37	29	24	15	7	109	51	1	
Plague	0	0	0	0	0	0	0	0	0	0	
Syphilis	8	0	0	1	6	0	1	4	4	0	
Typhus	14	2	0	7	3	1	0	13	1	0	
Hepatitis C Virus	56	0	0	1	15	18	4	45	11	0	
Yellow Fever	0	0	0	0	0	0	0	0	0	0	

\* UN = Unspecified

Aley	Chouf	BEKAA					NABATIEH				SOUTH		
		Hermel	Baalbeck	Zahle	West Bekaa	Rashaya	Nabatieh	Hasbaya	Marjeoun	Bint Jbeil	Saida	Tyr	Jezzine
4 (0)	2 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (0)	0 (0)	4 (1)	0 (0)	0 (0)
0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
14 (0)	1 (0)	3 (0)	91 (0)	13 (0)	0 (0)	0 (0)	8 (0)	0 (0)	2 (0)	1 (0)	6 (0)	7 (0)	0 (0)
0 (0)	3 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (0)	1 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
3 (0)	1 (0)	1 (0)	4 (0)	2 (0)	0 (0)	0 (0)	2 (0)	0 (0)	0 (0)	2 (0)	0 (0)	0 (0)	0 (0)
0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
1 (0)	0 (0)	0 (0)	6 (0)	0 (0)	0 (0)	0 (0)	1 (0)	0 (0)	1 (0)	0 (0)	0 (0)	0 (0)	0 (0)
0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
2 (0)	1 (0)	0 (0)	14 (0)	7 (0)	1 (0)	0 (0)	16 (1)	0 (0)	2 (0)	1 (0)	5 (0)	4 (0)	0 (0)
1 (0)	1 (0)	1 (0)	35 (1)	21 (2)	3 (0)	7 (2)	9 (2)	0 (0)	2 (0)	0 (0)	5 (0)	2 (0)	0 (0)
0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
0 (0)	0 (0)	0 (0)	1 (1)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
0 (0)	0 (0)	0 (0)	3 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	5 (0)	8 (0)	15 (15)	0 (0)
0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
0 (0)	1 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
23 (0)	6 (0)	4 (1)	39 (3)	48 (7)	10 (1)	23 (0)	6 (2)	0 (0)	0 (0)	0 (0)	5 (1)	5 (2)	2 (1)
3 (0)	11 (0)	0 (0)	20 (1)	11 (1)	0 (0)	0 (0)	4 (0)	0 (0)	1 (0)	0 (0)	4 (0)	17 (3)	0 (0)
0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
1 (0)	0 (0)	0 (0)	2 (0)	0 (0)	0 (0)	0 (0)	1 (0)	0 (0)	0 (0)	0 (0)	1 (0)	6 (0)	0 (0)
4 (0)	5 (0)	1 (0)	8 (0)	7 (1)	5 (0)	3 (0)	9 (3)	0 (0)	1 (0)	1 (0)	6 (1)	3 (0)	1 (0)
0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
1 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (0)	0 (0)	1 (0)	0 (0)	0 (0)	1 (0)	0 (0)
0 (0)	0 (0)	0 (0)	2 (0)	0 (0)	0 (0)	0 (0)	3 (0)	0 (0)	0 (0)	0 (0)	4 (0)	1 (0)	0 (0)
0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

## البرنامج الوطني للتحصين الشامل، نظرة شاملة (١٩٨٦ - ٢٠٠٤)



### مقدمة

قبل العام ١٩٨٦، كان التلقيح يمارس في عيادات الأطباء الخاصة والمستوصفات في لبنان وفق الرزنامة التي تعلمها الطبيب خلال دراسته في الجامعة. أما الدولة اللبنانية، فكان نشاطها في مجال تلقيح الأطفال محصوراً بالتلقيح عبر حملات تجرى وفق الحاجة عند حدوث موجات وبائية.

أول الأمراض التي تم استهدافها في هذه الحملات كان داء شلل الأطفال وذلك لما له من انعكاسات سلبية على صحة الأطفال من حيث الإعاقات الدائمة التي كان يخلفها.

وكانت الحملات ضد الشلل تنفذ وفق القانون المنفذ بالمرسوم ٩٨٠٩ الصادر بتاريخ ١٩٦٨/٥/٤ والذي حدد فيه عمر التلقيح من الشهر الرابع حتى السنة الثانية عشرة. كذلك كانت الدولة اللبنانية تجري حملات تلقيح ضد داء الجدري والكوليرا وفق الحاجة وحسب الموجات الوبائية ودون برمجة مسبقة.

خلال سنة ١٩٨٤، صدر التعميم رقم ١٣٨ الذي تضمن تعليمات بشأن التلقيح ضد بعض أمراض الطفولة وهي: الشلل، الخانوق، الشاهوق، الكزاز والحصبة. وفي العام ١٩٨٥، وافقت الدولة على التعاون مع منظمتي الصحة العالمية واليونيسف بشأن تلقيح الأطفال وفق برنامج عالمي. وفي شهر حزيران/يونيو من العام ١٩٨٦، بدأ العمل بالمشروع بصورة رسمية بعد تعيين منسق وطني للبرنامج ووضعت خطة سنوية للتنفيذ من قبل وزارة الصحة العامة.

### تطور البرنامج

في العام ١٩٩٥ تم اعتماد لقاح الحصبة/الحصبة الألمانية/أبو كعب من قبل الوزارة في الرزنامة الوطنية للتلقيح، وبحلول العام ١٩٩٨، عدلت هذه الرزنامة مرة جديدة وأدخل عليها لقاح الصغيرة ب. ثم عدلت مجدداً في العام ٢٠٠٢ واعتمد لقاح المستدمية النزفية (Hib) مع اللقاح الثلاثي وغدا ما يسمى باللقاح الرباعي جزءاً من الرزنامة الوطنية (راجع الجدول أ).

خلال العام ٢٠٠٢ أنشأ برنامج لرصد الآثار الجانبية للتلقيح وذلك لما لهذه الآثار من انعكاسات سلبية على نجاح البرنامج، غير أن هذا البرنامج بدأ بالعمل فعلياً خلال العام ٢٠٠٤، وذلك بعد إجراء دورات تدريبية مكثفة حول تقنية التلقيح، سلسلة التبريد ورصد الآثار الجانبية للتلقيح. وقد طالقت هذه الدورات المعنيين بالتلقيح في المناطق اللبنانية كافة. هذا وفي أيامنا هذه، يعتبر برنامج التلقيح من أهم البرامج الوقائية التابعة لوزارة الصحة العامة.

### الأيام الوطنية للتلقيح

خلال العام ١٩٩٤، وبعد مرور بضع سنوات على تسجيل آخر حالة شلل محلية، ظهرت إصابتان محليتان جديدتان في صيف ذلك العام، مما استدعى إجراء حملة وطنية شاملة على الأراضي اللبنانية كافة. وخلال العام ١٩٩٥، رُصدت حالة شلل مستوردة من الخارج أُحضرت إلى لبنان للعلاج (طفل لبناني مغترب من نيجيريا).

ومنذ ذلك العام وحتى يومنا هذا، وبناء على توصيات منظمة الصحة العالمية، دأبت الوزارة على إجراء ما يسمى «بالأيام الوطنية للتلقيح» ضد داء شلل الأطفال بوتيرة سنوية.

خلال العام ٢٠٠٣، وبعد خلو لبنان من المرض لفترة تقارب الثماني سنوات، سجلت حالة شلل مستوردة جديدة تم على أثرها إجراء حملة تلقيح «من بيت إلى بيت» على صعيد قرية «الشيخ عياش» التي سجلت فيها الحالة. ثم أجريت حملة تلقيح على صعيد قضاء عكار الذي تتبع القرية المذكورة له. وتبع ذلك حملة وطنية شاملة على جميع الأراضي اللبنانية.

ولابد هنا من الإشارة إلى أن الأيام الوطنية للتلقيح هي عبارة عن حملة من مرحلتين يفصل بينهما شهر واحد، تستمر كل مرحلة منها أسبوعاً واحداً وهي تجرى عادة في الفصول المعتدلة من السنة حيث يكون احتمال انتقال العدوى لمرض شلل الأطفال في أدنى مستوياته. وهي تشمل الأطفال المتواجدين على الأراضي اللبنانية من عمر يوم وحتى خمس سنوات ومن الجنسيات كافة، حيث تلقح الوزارة الأطفال بواسطة لقاح الشلل الفموي وبغض النظر عن أي جرعة سابقة تلقاها الطفل. ويوزع هذا اللقاح مجاناً على جميع المعنيين بالتلقيح خلال هذه الفترة.

ومن المفيد هنا التركيز على أن لقاح الشلل الذي يعطى بالابرة لا يفيد في حملات التلقيح وذلك لأن هذا اللقاح يعطي مناعة خلطية عالية (humorale) ومناعة خلوية منخفضة (cellulaire) بعكس اللقاح الفموي. وحيث أن فيروس الشلل البري يتكاثر في الأمعاء فإن فيروس اللقاح الفموي إذا سبقه، يتكاثر هو ويسد الطريق على انتشار الفيروس البري مما يحمي الأطفال على صعيد المجتمع وليس على صعيد الأفراد.

#### أهداف البرنامج الوطني للتحصين الشامل

توزعت الأهداف لقيام البرنامج الوطني للتحصين الشامل على مرحلتين :

- المرحلة الأولى : تشمل السيطرة (control) على الأمراض مما يعني الحد من نسبة الحدوث، الحد من المراضة، المضاعفات والوفيات. ويؤمن هذا الهدف بتغطية تحصينية تفوق الـ ٧٠٪ من الأطفال. والمقصود بالتغطية التحصينية الأطفال الذين تلقوا الثلاث جرعات الأساسية من لقاحي الثلاثي (الشاهوق، الخانوق والكزاز) والشلل.

- المرحلة الثانية : وتشمل هدفين :

• أولاً: القضاء (elimination) على بعض الأمراض مثل الكزاز الوليدي والحصبة. ويعرف «القضاء على المرض» بوقف تجول العامل المسبب له دون اختفائه من الطبيعة مما يعني بحسب منظمة الصحة العالمية تخفيض الحالات إلى أقل من حالة واحدة لكل مئة ألف طفل. وهو ما يمكن تحقيقه بتغطية تحصينية تعادل أو تفوق ٩٠٪ لدى الفئة العمرية المستهدفة.

• ثانياً: استئصال (eradication) بعض الأمراض مثل مرض شلل الأطفال. وهو يتطلب زوال العامل المسبب من الطبيعة على الصعيد العالمي. ويمكن تحقيق ذلك من خلال منظور منظمة الصحة العالمية بتغطية تحصينية تفوق الـ ٩٥٪ لدى الفئة العمرية المستهدفة من الأطفال.

#### إنجازات البرنامج الوطني للتحصين الشامل

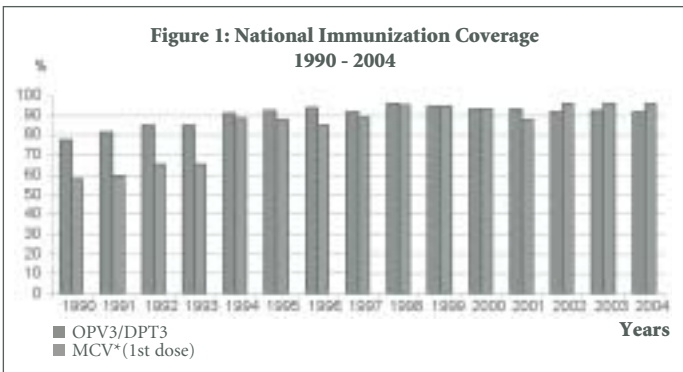
إن هذا البرنامج، ومنذ انطلاقته لا يزال يتقدم من حيث التغطية التلقيحية بالنسبة للأطفال المستهدفين.

فلقد كانت نسبة التغطية التحصينية للقاحي الشلل والثلاثي خلال العام ١٩٩٠ تقارب الـ ٧٨٪ للأطفال دون السنة، ثم تابعت هذه التغطية التلقيحية بالارتفاع. أما بالنسبة للعام ٢٠٠٠ فقد أظهرت الدراسة التي أجرتها إدارة

الإحصاء المركزي في لبنان، وذلك بالتعاون مع وزارة الشؤون الإجتماعية ووزارة الصحة العامة، إلى أن التغطية التحصينية للأطفال ما بين السنة والسنتين من العمر تجاوزت الـ ٩٣٪. واستمرت هذه التغطية التحصينية بالمحافظة على مستواها فوق الـ ٩٠٪ فيما يخص الثلاثي والشلل خلال الأعوام الأربعة الماضية. أما بالنسبة للقاح الحصبة، فلقد بدأت هذه التغطية بـ ٢٣٪ عام ١٩٨٧، ثم وصلت إلى ٥٧٪ بحلول العام ١٩٩٠، وإلى ٨٠٪ بحلول العام ١٩٩٤، ثم ارتفعت في العام ٢٠٠٠ حيث بلغت بحسب الدراسة الأخيرة لإدارة الإحصاء المركزي ما يقارب الـ ٨٨٪. ثم ارتفعت هذه النسبة مجدداً خلال الحملة الوطنية الخاصة بالقضاء على مرضي الحصبة والحصبة الألمانية التي أجريت خلال العام ٢٠٠١ لتصل إلى حوالي ٩٤٪. (أنظر الرسم البياني رقم ١).

#### جدول أ : الرزنامة الوطنية للتلقيح (٢٠٠١ - ٢٠٠٥)

نوع اللقاح Vaccine	عمر الطفل Age
التهاب الكبد الفيروسي البائي Hepatitis B	عند الولادة (At birth)
التهاب الكبد الفيروسي البائي Hepatitis B	نهاية الشهر الأول (1 month)
شلل - رباعي (شاهوق - خانوق - كزاز - المستدمية النزفية) DPT - Hib - Polio	نهاية الشهر الثاني (2 months)
شلل - رباعي (شاهوق - خانوق - كزاز - المستدمية النزفية) DPT - Hib - Polio	نهاية الشهر الثالث (3 months)
شلل - رباعي (شاهوق - خانوق - كزاز - المستدمية النزفية) DPT - Hib - Polio	نهاية الشهر الرابع (4 months)
التهاب الكبد الفيروسي البائي Hepatitis B	
حصبة - حصبة المائنة - ابوكعب MMR	بداية الشهر الثالث عشر (1 year)
شلل - رباعي (شاهوق - خانوق - كزاز - المستدمية النزفية) DPT - Hib - Polio	١٥ - ١٨ شهر (15 - 18 months)
حصبة - حصبة المائنة - ابوكعب MMR	بين السنة الرابعة والخامسة (4 - 5 years)
شلل - ثلاثي (شاهوق - خانوق - كزاز) DPT - Polio	
شلل - ثنائي (خانوق - كزاز) dT - Polio	١٠ - ١٢ سنة (10 - 12 years)



\* MCV Measles containing vaccine (MMR or Measles)

#### المراجع

- 1- Reports on the National EPI Survey, Ministry of PublicHealth- UNICEF, 1990, 1991, 1992, 1994, 1996.  
٢ دراسة وضع الأطفال في لبنان، إدارة الإحصاء المركزي ٢٠٠٠

#### الدكتورة عاتقة بري

رئيس دائرة مكافحة الأمراض الإنتقالية

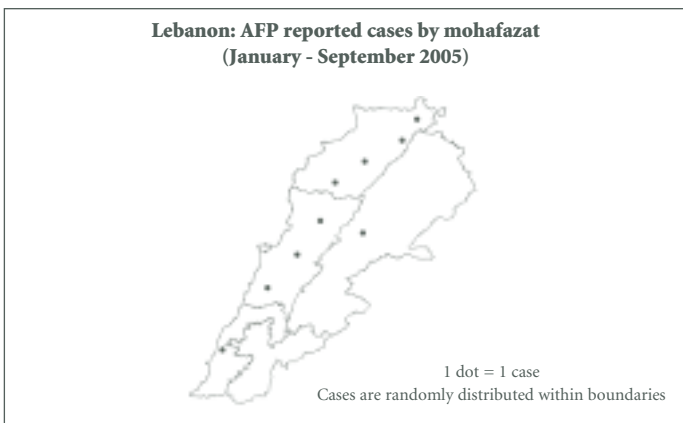
# AFP SURVEILLANCE IN LEBANON JANUARY - SEPTEMBER 2005

1- Total cases: 9 cases of AFP under 15 years were reported.

2- Distribution by mohafazat:

Mohafazat	Pop < 15 y	Expected*	Reported
North	345883	3.5	4
Bekaa	194433	1.9	1
Nabatieh	102084	1.0	0
South	132464	1.3	1
Mount-Lebanon	441929	4.4	3
Beirut	126233	1.3	0
<b>Lebanon</b>	<b>1434026</b>	<b>13.4</b>	<b>9</b>

\* Expected: A fully performing surveillance system is expected to detect yearly at least one case / 100 000 under 15 years old.



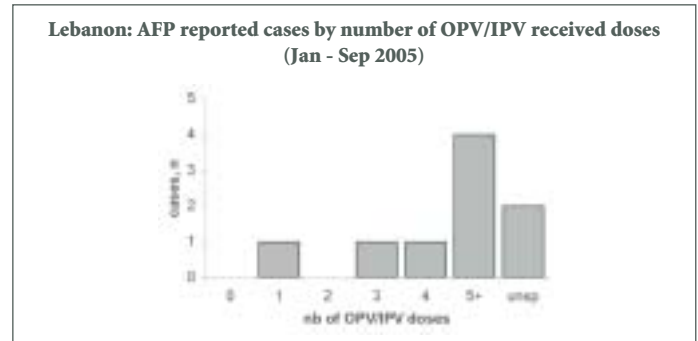
3- Distribution by months:



4- Demographic and clinical findings:

	n	%
<b>Age groups</b>		
< 1 year	1	11.1
1-4 years	2	22.2
5-9 years	3	33.3
10-14 years	3	33.3
≥ 15 years	0	0.0
<b>Fever at onset</b>		
Yes	2	22.2
No	6	66.7
Unspecified	1	11.1
<b>Rapid progression &lt; 4 days</b>		
Yes	7	77.8
No	1	11.1
Unspecified	1	11.1
<b>Paralysis asymetry</b>		
Yes	0	0.0
No	8	88.9
Unspecified	1	11.1

5- Immunization status:



6- Laboratory & follow-up findings:

	n	%
<b>Stool samples</b>		
Adequate	8	88.9
Inadequate	1	11.1
<b>Stool results</b>		
Wild poliovirus	0	0.0
Vaccine-related poliovirus	1	11.1
Non-polio Entovirus	2	22.2
Negative for poliovirus	5	55.6
No specimen processed	1	11.1
<b>Follow-up</b>		
No residual weakness	6	66.7
Residual weakness	2	11.1
Pending	1	11.1

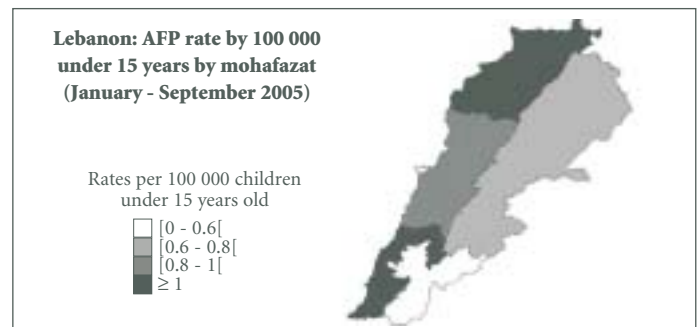
7- Final classification:

	n	%
<b>Final classification</b>		
Polio confirmed	0	0.0
Polio compatible	0	0.0
Polio discarded	9	100.0

8- Comments:

From January to September 2005, 9 AFP under 15 years were reported. Adequate stool specimens were collected from 8 cases. The 9th case, diagnosed as acute myositis, was reported with delay and could not have stool collection. Stool culture was negative for 5 cases and did not find non-poliovirus enterovirus for 2 cases and 1 sabin-like poliovirus type 2 for 1 case. For this case, the final diagnosis was Guillain Barre syndrome with full recovery.

The non-polio AFP rate is below the WHO standards. The annualized rate for non-polio AFP for 2005 is 0.89 per 100,000 children under 15 years old. At mohafazat level, the North (1.54) and the South (1.01) have reached standard rates. Mount-Lebanon (0.91), the Bekaa (0.69), Nabatieh (0) and Beirut are showing under-reporting.



# RUBELLA SURVEILLANCE FINDINGS LEBANON 2004

## I. Acquired Rubella disease

Rubella is a common cause of mild febrile viral disease in childhood with rash and fever.

The name of rubella is derived from Latin, meaning "little red". It was initially considered to be a variant of measles or scarlet fever and was called "third disease".

**It is a public health issue related to the teratogenic effects on primary rubella infection in pregnant women. The resulting Congenital Rubella Syndrome (CRS) is an under-recognized health problem in many developing countries including Lebanon.**

**Agent:** The causative agent is rubella virus of the genus Rubivirus of the family Togaviridae. It is an enveloped RNA-virus.

**Reservoir:** Rubella is a human disease; humans are the only reservoir for the virus.

**Transmission:** Rubella is spread by droplets in the air from the nose and pharynx of infected people, or by direct contact with the nasal or nasopharyngeal secretions. Sub-clinical cases play an important role in rubella transmission. Infants with CRS are source of infection to their contacts because they shed large quantities of the virus in their urine.

**Communicability:** The disease is most contagious when the rash is erupting, but the virus may be shed from 1 week before to 1 week after rash onset. Infants with CRS may shed the virus for months after birth.

**Pathogenesis:** Following respiratory transmission of rubella virus, replication is thought to occur in the nasopharynx and regional lymph nodes. A viremia occurs 5-7 days after exposure with spread of the virus throughout the body.

**Symptoms** are often mild, and 30-50% of cases may be sub-clinical or unapparent. In children, rash is usually the first manifestation and usually without prodromes. In older children and adults, there is often a 1-5 day prodromic period with low-grade fever, malaise, swollen glands, and upper respiratory infection preceding the rash. The rash usually occurs initially on the face and then progresses from head to foot. It lasts about 3 days and is occasionally pruritic. Lymphadenopathy may begin 1 week before the rash and last several weeks. Postauricular, posterior cervical and suboccipital nodes are commonly involved. Arthralgia occur frequently in adults. Other symptoms of rubella include conjunctivitis, testalgia or orchitis.

**Complications** are uncommon but tend to occur more often in adults than in children.

- Arthritis may occur in up to 70% of adult women who contract rubella, but are rare in children or adult males. Fingers, wrists and knees tend to be affected.
- Encephalitis occurs in one per 5000 cases, more frequently in adults than in children.
- Hemorrhagic manifestations occur with an incidence of 1 per 3000 cases occurring more in children than in adults. These manifestations may be secondary to low platelets counts and vascular damage, with thrombocytopenic purpura being the most common manifestation. Usually, most patients recover without sequelae.
- Additional complications include orchitis and neuritis. In rare cases, a late syndrome of progressive panencephalitis can occur years after initial infection.

**Laboratory:** Many rash illnesses may mimic rubella infection and up to 50% of rubella infections may be subclinical. A reliable evidence of acute rubella infection is the presence of rubella-specific IgM antibody.

**Immunity:** Infants born to immune mothers are usually protected for 6 to 9 months. Active immunity is acquired by natural infection or by vaccination.

**Rubella vaccines** are live injectable vaccines. The efficacy is 95%. It usually confers a lifelong immunity. Rubella vaccines are most often combined with vaccines against measles and mumps (MMR).

**National immunization calendar:** In Lebanon, Rubella Containing Vaccines (RCV) have been introduced in 1998 in the national Expanded Program on Immunization (EPI). Since then the schedule for rubella vaccine has been modified 3 times as shown in the table (a).

Age	Year		
	1996	1998	2001
12 months	-	-	MMR (1)
15 months	MMR (1)	MMR (1)	-
4-5 years	-	MMR (2)	MMR (2)

Rubella is primary a disease of childhood. However, in vaccinated populations, it occurs more among adolescents and adults.

## II. Surveillance objectives

Lebanon is considered as a country in the control phase of rubella.

Rubella surveillance objectives are:

- To identify high risk areas or sub-populations,
- To understand the changing epidemiology of the disease,
- To predict the occurrence of outbreaks.

Rubella surveillance is based on syndromic approach focusing on rash and fever for which the differential diagnosis of measles has to be ruled out.

The differential diagnosis if rubella is: measles, scarlet fever and other similar exanthems.

## III. METHODS & MATERIALS

### A- Rubella case definition

**1) Suspected cases of Rubella:** Rubella is suspected

- In the presence of any maculo-papular rash with fever and one of the following symptoms: cervical, suboccipital, or post-auricular adenopathy; or arthralgia/arthritis.
- Or a suspected case of rubella is also any case clinically diagnosed by a physician.

**2) Confirmed cases of Rubella**

Confirmed cases of rubella are those with positive IgM serology.

### B- Rubella reporting

Rubella cases are reported to MOPH through 3 channels:

- Routine passive reporting system: practitioners report to MOPH via the peripheral or central levels. Rubella is an immediately notifiable disease.
- Hospital weekly zero-reporting: the hospital focal person reports to MOPH, on a weekly basis, the presence or absence of rubella cases.
- Hospital active surveillance: MOPH officers review hospital registries, on weekly basis, in selected major hospitals, for rubella cases to complete the passive reporting system.

### C- Case-based rubella surveillance

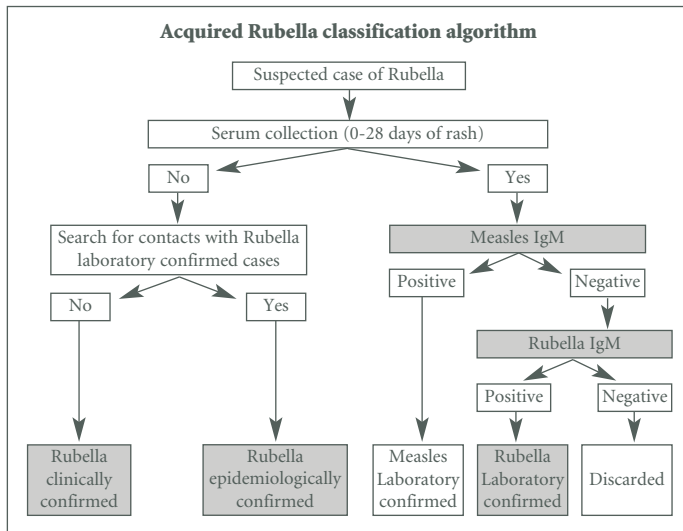
Rubella investigation aims at confirming all reported rubella cases and explaining their occurrence through collecting data and specimen. This has been made mandatory by the MOPH decision 872/2 issued on 11th September 2002, which defines the case-based surveillance with laboratory confirmation.

Data is collected through a specific form for measles and rubella investigation, filled by the practitioner who reported the case. Demographic characteristics, clinical findings, complications issues and vaccination status are the main variables collected.

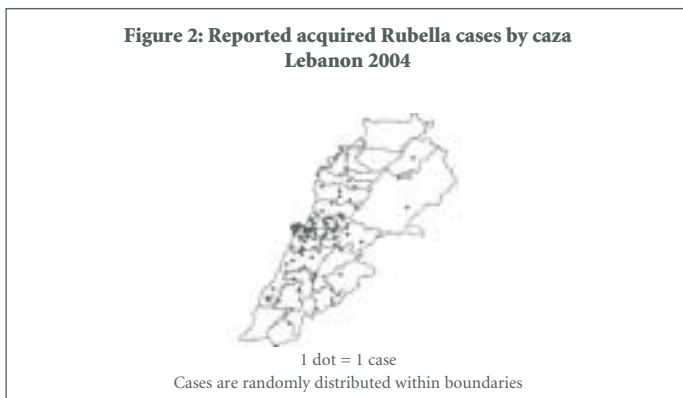
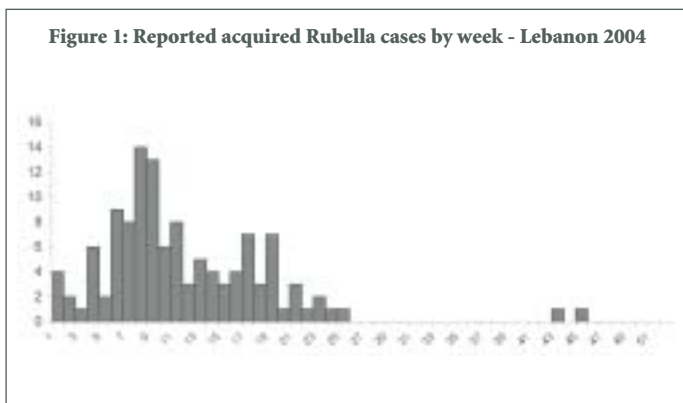
Blood is collected in any laboratory chosen by the patient or the practitioner, during the 28 days following rash onset. At least 5 cc of blood are collected in a sterile dry tube. Blood is centrifuged at 1000xg for 10 minutes. Serum is collected in a sterile dry tube and preserved at 4-8 °C. Thereafter, the serum specimen collected by the MOPH are sent to the national reference laboratory – the Central Public Health Laboratory (CPHL).

At CPHL, sera are tested first for Measles IgM. If Measles IgM serology is negative, sera are tested for Rubella IgM. Results communicated to the ESP, are then sent to the practitioner.

**D- Rubella classification**



- For acquired rubella, the WHO-laboratory classification is as follows:
- Rubella laboratory-confirmed: a case that meets the clinical case definition and is laboratory confirmed (i.e. presence of rubella-specific IgM antibodies)
  - Rubella epidemiologically-confirmed: a case that meets the clinical case definition and is linked epidemiologically to a laboratory-confirmed case
  - Rubella clinically-confirmed: a case that meets the clinical case definition and for which no adequate blood specimen was taken.
  - Rubella-discarded: a suspected case that have negative laboratory results.



**E- Data management**

Data analysis aims at:

- describing cases by place, time and person,
- detecting outbreaks,
- identifying groups and populations at high risk,
- and explaining the occurrence of outbreaks.

Data are weekly updated on the MOPH website: [www.public-health.gov.lb](http://www.public-health.gov.lb)

**IV. Rubella reported cases in 2004**

In 2004, an outbreak was detected in Lebanon. The confirmed cases were 120 of which 85.8% were laboratory-confirmed.

The proportion of hospitalized cases was 17%.

The epidemic curve of the outbreak started to increase in January, peaked in February and March and decreased in May. (Figure 1)

In 2004, most rubella cases occurred in the Mount-Lebanon (68 cases) and Beirut (17 cases), while in other mohafazats had less than 10 cases reported. In the Mount-Lebanon, cases were mostly focused in the cazas of Metn, Baabda, Chouf and Aley. (Tables 1 & 2, Figure 2)

Observed age-specific incidence rates were 6.93/100000 for 15-24 years old, 1.65/100000 for adults older than 24 years and 1.56/100000 for children under 5 years of age.

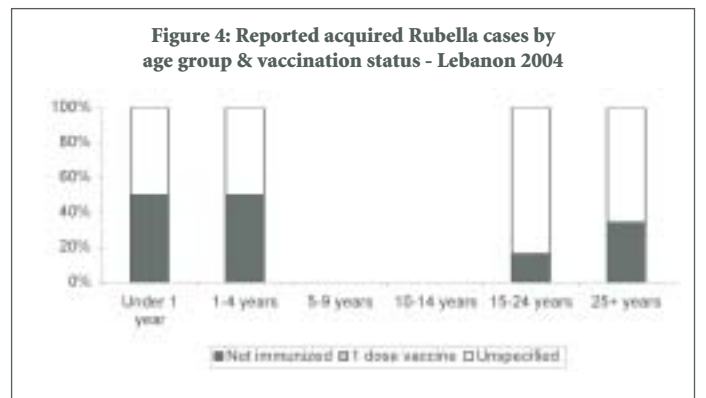
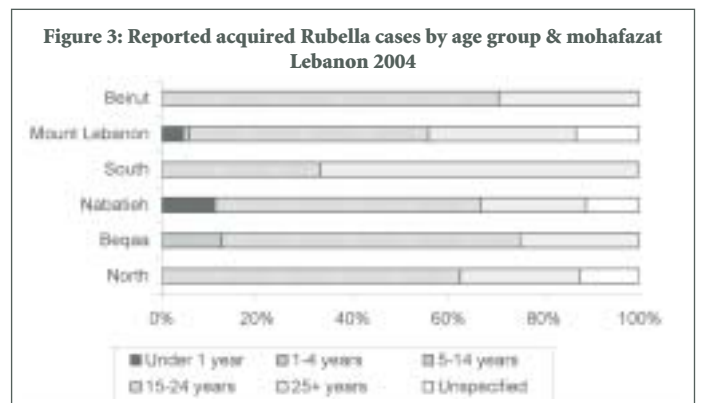
At mohafazat level, highest age-specific incidence rates for 15-24 years old were observed in Beirut (11.03/100000), Mount-Lebanon (10.58/100000) and Nabatieh (8.28/100000). On the other hand, adults older than 24 years old had their highest incidence rate in Mount-Lebanon (2.28/100000). In the under 5 years of age subgroup, the highest rates were in Nabatieh (3.38/100000) followed by Mount-Lebanon (3.15/100000). (Table 3)

The sex ratio M/F was 7.57. Among the female patients, 2 were under 5 years old, 9 were women in child bearing age (15-45 years). None was pregnant.

The rubella vaccination status was unspecified in 77.5 % of cases and 22.5% were unvaccinated. (Table 5)

**V. Comments**

A rubella outbreak occurred in Lebanon in 2004. It included mostly young men of 15-24 years old. Most confirmed cases (78%) occurred among army recruits. No cases of congenital rubella syndrome were reported to the MOPH via the passive reporting system. The outbreak has highlighted the need to review national program to control rubella among young adults.



### Rubella cases by mohafazat & month - Lebanon 2004

Mohafazat	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
North	0	2	4	1	1	0	0	0	0	0	0	0	8
Bekaa	1	0	1	2	2	1	0	0	0	1	0	0	8
Nabatieh	2	1	2	2	1	1	0	0	0	0	0	0	9
South	0	2	0	0	1	0	0	0	0	0	0	0	3
Mount-Lebanon	5	18	21	11	9	3	0	0	0	0	1	0	68
Beirut	4	7	3	2	1	0	0	0	0	0	0	0	17
Unspecified	0	4	1	2	0	0	0	0	0	0	0	0	7
<b>TOTAL</b>	<b>12</b>	<b>34</b>	<b>32</b>	<b>20</b>	<b>15</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>120</b>

### Rubella cases by caza & month - Lebanon 2004

Caza	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Akkar	0	0	0	0	0	0	0	0	0	0	0	0	0
Menieh-Dinnieh	0	0	0	0	0	0	0	0	0	0	0	0	0
Tripoli	0	0	1	0	1	0	0	0	0	0	0	0	2
Zghorta	0	0	0	0	0	0	0	0	0	0	0	0	0
Koura	0	0	1	1	0	0	0	0	0	0	0	0	2
Becharre	0	0	0	0	0	0	0	0	0	0	0	0	0
Batroun	0	2	2	0	0	0	0	0	0	0	0	0	4
Hermel	0	0	0	0	0	1	0	0	0	0	0	0	1
Baalbeck	0	0	0	0	1	0	0	0	0	1	0	0	2
Zahle	0	0	1	2	1	0	0	0	0	0	0	0	4
West-Bekaa	0	0	0	0	0	0	0	0	0	0	0	0	0
Rashaya	1	0	0	0	0	0	0	0	0	0	0	0	1
Nabatieh	1	0	1	0	0	0	0	0	0	0	0	0	2
Hasbaya	1	0	0	2	1	1	0	0	0	0	0	0	5
Marjeoun	0	1	1	0	0	0	0	0	0	0	0	0	2
Bint-Jbeil	0	0	0	0	0	0	0	0	0	0	0	0	0
Saida	0	2	0	0	1	0	0	0	0	0	0	0	3
Tyr	0	0	0	0	0	0	0	0	0	0	0	0	0
Jezzine	0	0	0	0	0	0	0	0	0	0	0	0	0
Jbeil	0	0	1	3	0	0	0	0	0	0	0	0	4
Kesrwan	0	2	1	0	0	1	0	0	0	0	0	0	4
Metn	2	7	14	1	1	0	0	0	0	0	0	0	25
Baabda	1	4	4	5	2	0	0	0	0	0	0	0	16
Aley	1	1	1	2	3	0	0	0	0	0	0	0	8
Chouf	1	4	0	0	3	2	0	0	0	0	1	0	11
Beirut	4	7	3	2	1	0	0	0	0	0	0	0	17
<b>TOTAL</b>	<b>12</b>	<b>34</b>	<b>32</b>	<b>20</b>	<b>15</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>120</b>

### Rubella cases by mohafazat & age - Lebanon 2004

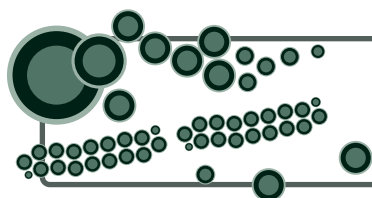
Mohafazat	Age (years)					Unspecified	TOTAL
	0-4	5-9	10-14	15-24	≥25		
North	0	0	0	5	2	1	8
Bekaa	1	0	0	5	2	0	8
Nabatieh	1	0	0	5	2	1	9
South	0	0	0	1	2	0	3
Mount-Lebanon	4	0	0	34	21	9	68
Beirut	0	0	0	12	5	0	17
Unspecified	0	0	0	0	4	3	7
<b>TOTAL</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>62</b>	<b>38</b>	<b>14</b>	<b>120</b>
<b>Rate per 100 000 inhabitants</b>							
North	0.00	0.00	0.00	2.47	0.45	0.00	0.81
Bekaa	1.89	0.00	0.00	4.03	0.74	0.00	1.36
Nabatieh	3.38	0.00	0.00	8.28	1.35	0.00	2.91
South	0.00	0.00	0.00	1.28	1.10	0.00	0.77
Mount-Lebanon	3.15	0.00	0.00	10.58	2.28	0.00	4.05
Beirut	0.00	0.00	0.00	11.03	1.47	0.00	2.96
<b>TOTAL</b>	<b>1.56</b>	<b>0.00</b>	<b>0.00</b>	<b>6.93</b>	<b>1.65</b>	<b>0.00</b>	<b>2.66</b>

### Rubella cases by caza & age - Lebanon 2004

Caza	Age (years)					Unspecified	TOTAL
	0-4	5-9	10-14	15-24	≥25		
Akkar	0	0	0	0	0	0	0
Menieh-Dinnieh	0	0	0	0	0	0	0
Tripoli	0	0	0	1	1	0	2
Zghorta	0	0	0	0	0	0	0
Koura	0	0	0	0	1	1	2
Becharre	0	0	0	0	0	0	0
Batroun	0	0	0	4	0	0	4
Hermel	1	0	0	0	0	0	1
Baalbeck	0	0	0	0	2	0	2
Zahle	0	0	0	4	0	0	4
West-Bekaa	0	0	0	0	0	0	0
Rashaya	0	0	0	1	0	0	1
Nabatieh	0	0	0	1	0	1	2
Hasbaya	1	0	0	3	1	0	5
Marjeoun	0	0	0	1	1	0	2
Bint-Jbeil	0	0	0	0	0	0	0
Saida	0	0	0	1	2	0	3
Tyr	0	0	0	0	0	0	0
Jezzine	0	0	0	0	0	0	0
Jbeil	0	0	0	3	1	0	4
Kesrwan	0	0	0	2	2	0	4
Metn	2	0	0	11	5	7	25
Baabda	1	0	0	8	7	0	16
Aley	1	0	0	5	2	0	8
Chouf	0	0	0	5	4	2	11
Beirut	0	0	0	12	5	0	17
<b>TOTAL</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>62</b>	<b>38</b>	<b>14</b>	<b>120</b>
<b>Rate per 100 000 inhabitants</b>							
Akkar	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Menieh-Dinnieh	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tripoli	0.00	0.00	0.00	1.42	0.69	0.00	0.61
Zghorta	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Koura	0.00	0.00	0.00	0.00	2.52	0.00	2.82
Becharre	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Batroun	0.00	0.00	0.00	47.04	0.00	0.00	7.63
Hermel	16.99	0.00	0.00	0.00	0.00	0.00	1.70
Baalbeck	0.00	0.00	0.00	0.00	1.93	0.00	0.86
Zahle	0.00	0.00	0.00	11.00	0.00	0.00	2.27
West-Bekaa	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rashaya	0.00	0.00	0.00	13.15	0.00	0.00	2.79
Nabatieh	0.00	0.00	0.00	3.95	0.00	0.00	1.44
Hasbaya	45.93	0.00	0.00	48.51	6.41	0.00	17.09
Marjeoun	0.00	0.00	0.00	8.27	3.18	0.00	3.24
Bint-Jbeil	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Saida	0.00	0.00	0.00	2.87	2.36	0.00	1.68
Tyr	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jezzine	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jbeil	0.00	0.00	0.00	17.13	1.88	0.00	4.26
Kesrwan	0.00	0.00	0.00	6.07	1.83	0.00	2.17
Metn	5.82	0.00	0.00	10.82	1.57	0.00	4.63
Baabda	2.04	0.00	0.00	7.32	2.58	0.00	2.96
Aley	8.35	0.00	0.00	19.20	2.67	0.00	5.55
Chouf	0.00	0.00	0.00	14.75	4.29	0.00	6.31
Beirut	0.00	0.00	0.00	11.03	1.47	0.00	2.96
<b>TOTAL</b>	<b>1.56</b>	<b>0.00</b>	<b>0.00</b>	<b>6.93</b>	<b>1.65</b>	<b>0.00</b>	<b>2.66</b>

### Rubella cases by immunization status & age - Lebanon 2004

Immunization status	Age (years)					Unspecified	TOTAL
	<1	1-4	5-9	10-14	15-24		
Not immunized	2	1	0	0	10	13	27
1 dose vaccine	0	0	0	0	0	0	0
Unspecified	2	1	0	0	52	25	93
<b>TOTAL</b>	<b>4</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>62</b>	<b>38</b>	<b>120</b>



# UNRWA - COMMUNICABLE DISEASES STATISTICS LEBANON 2003 - SEPTEMBER 2005

## 1. Introduction

- Surveillance of communicable diseases started a short period after UNRWA began its operation in 1950.
- The incidence of communicable diseases was high during the fifties and sixties of the twentieth century. The introduction of vaccines, namely DPT (1954). BCG (1954). OPV (1964) and measles (inactivated 1966, attenuated 1970), contributed to the reduction of vaccine-preventable diseases. On the other hand, the incidence of other communicable diseases remained high, due to the poor living conditions in refugee camps.
- Attention was focused on EPI in 1974 and thereafter, where new vaccines were introduced including, rubella (1985), MMR (1991-1995), hepatitis B (1996), and Hib (2005).
- Not only the incidence of vaccine-preventable diseases has been reduced to two levels, but some have been eliminated such as NNT.
- On the other hand, the incidence of communicable diseases other than those preventable by immunization showed a plateau trend with significant under-reporting especially those diseases transmitted through water and food such as typhoid fever and Brucellosis.
- The TIS on surveillance of communicable diseases was revised in 1998 and introduced by the beginning of 1999. Periodic training on proper diseases surveillance and outbreak investigation management is made to all concerned staff.
- Periodic assessment of knowledge, attitudes and practices of Medical Officers on surveillance of communicable diseases is made w.e.f 2001.
- Coordination with the Lebanese Ministry of Public Health (MOPH) regarding disease surveillance and control measures is maintained.

## 2. UNRWA Communicable Diseases Surveillance

Infectious diseases remain a major public health problem in UNRWA's area of operations, despite an obvious decline in morbidity of mortality from such diseases.

## 3. UNRWA's Policy

UNRWA is committed to implement the WHO regional policy for surveillance of CDs and global targets including:

- Poliomyelitis eradication and active participation in NIDs

- Measles and Neonatal Tetanus elimination
- Implementation of DOTS strategy for TB control
- Prevention and control of re-emerging and newly emerging infectious diseases.
- Strengthening Surveillance in general.

## 4. Surveillance System

Aims at learning the on-going pattern of disease occurrence and its potential in population in order to carry out effective investigations, control and preventive measures.

## 5. Sources of Data

25 health centers/pints are regarded as reporting sites provide data on a priority list of reportable infectious diseases. Routine reporting is made on weekly basis, except for certain diseases where reporting should be immediate.

## 6. Reporting

Routine reporting forms comprise a daily tally sheet to be used for recording cases detected during clinical consultations at the health center/point and Weekly Infectious Disease Return (WIDR) which include a data on all infectious diseases detected during the week, consolidated from the daily tally sheets. For certain diseases, a Case Investigation Form should be supplemented.

In most health centers, laboratory work is available and is essential to confirm the diagnosis of suspected cases.

Disease outbreak investigation is ensured through proper surveillance of all reportable diseases.

At all times, Zero reporting is mandatory. Reporting is ensured to be timely, accurate and complete.

**Dr. Hasan Eyadeh**

Field Disease Control Officer

UNRWA-Health Department Disease Prevention & Control Programme Surveillance of Communicable Diseases

1

## UNRWA: Reported of infectious diseases by caza - Lebanon 2003

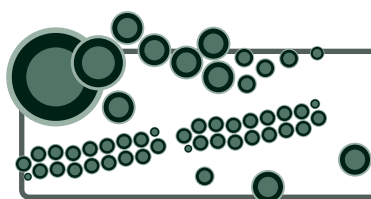
Diseases	Beirut	Baabda	Metn	Zahle	Baalbeck	Menieh	Tripoli	Akkar	Saida	Nabatieh	Chouf	Tyr	Total
<b>Group A</b>													
Acute Flaccid Paralysis	0	0	0	0	0	0	0	0	0	0	0	0	0
Cholera	0	0	0	0	0	0	0	0	0	0	0	0	0
Meningitis	1	0	0	0	0	0	0	0	0	0	0	0	1
Diphtheria	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Group B</b>													
Measles	0	0	0	0	0	0	0	0	2	0	0	0	2
Mumps	2	0	0	0	0	0	0	5	8	0	0	7	22
Pertussis	0	0	0	0	0	0	0	0	0	0	0	0	0
Rubella	0	0	0	0	0	0	0	0	1	0	0	0	1
Tb, smear positive	5	0	0	0	0	0	0	1	0	0	0	0	6
Tb, smear negative	1	2	0	0	3	0	0	1	2	0	0	0	9
Tb, extra pulmonary	2	1	0	0	0	0	0	1	1	0	0	0	7
Tetanus-Neonatorum	0	0	0	0	0	0	0	0	0	0	0	0	0
Brucellosis	0	0	0	0	0	0	0	6	5	0	0	0	11
<b>Other</b>													
Acute Bloody Diarrhoea	35	31	0	144	3	49	0	61	333	9	2	303	970
Diarrhea (0-3 years)	556	593	34	337	118	364	22	373	1,526	41	25	1,180	5,169
Gonorrhoea	0	0	0	0	0	0	0	0	0	0	0	0	0
HIV-AIDS	0	0	0	0	0	0	0	0	1	0	0	0	1
Hepatitis-Viral	5	4	0	0	0	0	1	13	5	0	0	1	29
Typhoid Fever	0	0	0	0	0	0	0	0	0	0	0	0	0
Leishmaniasis	0	0	0	0	0	0	0	0	0	0	0	0	0

## UNRWA: Reported of infectious diseases by caza - Lebanon 2004

Diseases	Beirut	Baabda	Metn	Zahle	Baalbeck	Menieh Dinnieh	Tripoli	Akkar	Saida	Nabatieh	Chouf	Tyr	Total
<b>Group A</b>													
Acute Flaccid Paralysis*	0	0	0	0	0	0	0	0	0	0	0	1	1
Cholera*	0	0	0	0	0	0	0	0	0	0	0	0	0
Meningitis*	0	0	0	0	0	0	0	2	1	0	0	0	3
Diphtheria*	0	0	0	0	0	0	0	0	0	0	0	0	0
Measles	0	0	0	0	0	0	1	0	0	0	0	1	2
Mumps	0	1	0	0	0	0	0	4	6	0	0	5	16
Pertussis	0	0	0	0	0	0	0	0	0	0	0	0	0
Rubella	0	0	0	0	0	0	0	0	0	0	0	0	0
Tb, smear positive*	3	6	0	0	1	0	0	0	2	0	0	1	13
Tb, smear negative*	0	1	0	0	0	0	0	3	0	0	0	0	4
Tb, extra pulmonary*	0	1	0	0	1	0	0	4	3	0	0	2	11
Tetanus-Neonatorum*	0	0	0	0	0	0	0	0	0	0	0	0	0
Brucellosis	0	0	0	0	1	1	0	2	5	0	0	0	9
<b>Group B</b>													
Acute Bloody Diarrhoea	18	11	0	90	7	22	1	37	478	0	1	161	8263
Diarrhea (0-3 years)	330	402	30	255	116	437	36	275	1,752	31	18	1,140	4,822
Gonorrhoea	0	0	0	0	0	0	0	0	0	0	0	0	0
HIV-AIDS	0	0	0	0	0	0	0	0	1	0	0	0	1
Hepatitis-Viral	9	2	0	0	1	0	0	5	10	0	1	12	40
Typhoid Fever	0	0	0	0	0	0	0	0	0	0	0	0	0
Leishmaniasis	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Other</b>													

## UNRWA: Reported of infectious diseases by health center - Lebanon January to September 2005

Diseases	Beirut	Baabda	Metn	Zahle	Baalbeck	Menieh Dinnieh	Tripoli	Akkar	Saida	Nabatieh	Chouf	Tyr	Total
<b>Group A</b>													
Acute Flaccid Paralysis*	0	0	0	0	0	0	0	0	0	0	0	0	0
Cholera*	0	0	0	0	0	0	0	0	0	0	0	0	0
Meningitis Viral*	0	0	0	0	0	0	0	0	0	0	0	0	0
Meningitis Bacterial*	0	0	0	0	0	0	0	0	1	0	0	1	2
Meningitis M-Cocccal*	0	0	0	0	0	0	0	0	0	0	0	0	0
Diphtheria*	0	0	0	0	0	0	0	0	0	0	0	0	0
Measles	0	0	0	0	0	0	0	1	1	0	0	0	2
Mumps	0	1	0	0	0	0	0	4	2	0	0	0	7
Pertussis	0	0	0	0	0	0	0	0	0	0	0	0	0
Rubella suspected	0	0	0	0	0	0	0	2	0	0	0	0	2
Rubella confirmed	0	0	0	0	0	0	0	0	0	0	0	0	0
Tb, smear positive*	1	2	0	0	0	1	0	0	4	0	0	4	12
Tb, smear negative*	0	1	0	0	0	0	0	1	1	0	0	0	3
Tb, extra pulmonary*	0	0	0	0	0	1	1	0	0	0	0	2	4
Tetanus-Neonatorum*	0	0	0	0	0	0	0	0	0	0	0	0	0
Brucellosis	1	1	0	0	0	1	0	0	1	0	0	0	4
<b>Group B</b>													
Acute Bloody Diarrhoea	14	8	0	62	3	24	0	16	120	0	0	107	354
Diarrhea (0-3 years)	299	315	21	194	26	238	156	425	1,324	25	16	758	3,797
Gonorrhoea	0	0	0	0	0	0	0	0	0	0	0	1	1
HIV-AIDS	0	0	0	0	0	0	0	0	0	0	0	1	1
Hepatitis-Viral	7	4	0	0	0	3	0	13	16	0	0	14	57
Typhoid Fever suspected	1	0	0	0	0	2	0	0	1	0	0	0	4
Typhoid Fever confirmed	0	0	0	0	0	0	0	0	1	0	0	0	1
Leishmaniasis	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Other</b>													



## POPULATION ESTIMATIONS LEBANON 2005

In order to measure disease incidence rate, population size per mohafazat and caza is estimated using the latest official available data.

### Inputs are

- The latest size of the Lebanese population, available from the Central Administration of Statistics (CAS) survey of 1997, where the population was estimated at 4,005,025 inhabitants;
- The latest population distribution by caza of residence, available from the Ministry of Social Affairs (MOSA) survey of 1996;

- The national growth rates estimated by the United Nations – Population Division. The available estimates are 1.98% for the period 1995-1999, 1.56% for the period 2000-2004 and 1.28% for the period 2005-2009.

These generated estimates are used in the absence of official estimates for the population distribution by caza of residence.

The purpose of using them is to be able to compare temporal and geographical incidence of diseases in Lebanon.

## Population estimation per age, sex & caza - Lebanon 2005

		total	0-4y	5-9y	10-14y	15-19y	20-24y
<b>Beirut</b>	total	583,278	35,433	43,385	47,351	54,139	56,316
	male	281,999	18,502	23,347	24,900	27,973	28,377
	female	301,279	16,932	20,038	22,451	26,166	27,939
<b>Mount-Lebanon</b>	total	1,683,964	128,705	132,330	161,311	159,843	166,386
	male	846,351	66,790	78,764	83,748	81,926	84,597
	female	856,973	61,916	72,926	77,564	77,917	81,790
Baabda	male	272,174	25,355	27,585	30,518	27,568	30,165
	female	276,832	24,333	28,523	26,025	26,579	26,646
Metn	total	549,007	49,688	56,108	56,543	54,147	56,811
	male	270,241	17,519	21,429	23,773	25,760	26,212
	female	278,550	17,373	19,360	22,464	24,517	26,698
	total	548,791	34,892	40,789	46,237	50,277	52,911
Chouf	male	89,350	8,165	9,072	8,807	8,525	8,759
	female	87,499	5,814	7,067	8,807	7,898	9,230
	total	176,849	13,979	16,139	17,614	16,423	17,990
	male	72,374	6,136	8,514	8,197	7,054	6,516
Aley	female	74,019	6,024	7,357	7,642	6,642	6,214
	total	146,393	12,160	15,871	15,838	13,696	12,731
Kesrwan	male	94,661	6,062	7,967	8,362	8,267	8,807
	female	92,294	5,189	6,713	7,967	7,760	8,632
	total	186,955	11,251	14,679	16,329	16,027	17,439
	male	47,551	3,553	4,198	4,091	4,752	4,137
Jbeil	female	47,779	3,183	3,907	4,660	4,522	4,368
	total	95,330	6,736	8,105	8,750	9,273	8,505
<b>South</b>	total	395,678	38,811	47,181	46,405	41,744	37,443
	male	195,104	19,150	23,893	24,414	20,967	18,588
	female	200,573	19,661	23,288	21,991	20,777	18,856
Saida	male	89,128	9,118	10,989	10,618	9,057	8,655
	female	92,222	9,026	10,107	10,061	9,011	8,640
	total	181,349	18,144	21,096	20,679	18,068	17,295
	male	95,008	9,357	12,168	13,000	11,023	9,106
Tyr	female	96,940	10,175	12,278	11,164	10,802	9,390
	total	191,947	19,532	24,446	24,164	21,824	18,496
Jezzine	male	10,969	675	736	796	888	826
	female	11,412	460	903	767	964	826
	total	22,381	1,135	1,639	1,562	1,852	1,653
	total	313,883	30,055	36,608	35,370	30,666	30,611
<b>Nabatieh</b>	total	152,178	15,983	18,302	17,990	15,608	14,822
	male	161,705	14,072	18,305	17,381	15,058	15,789
	female	68,762	8,319	9,261	7,823	6,102	6,102
Nabatieh	female	72,006	7,309	8,408	7,628	6,210	7,255
	total	140,767	15,628	17,669	15,451	12,312	13,358
Bint-Jbeil	male	38,857	3,921	4,534	5,037	4,552	4,088
	female	41,959	3,252	4,925	5,593	4,664	3,753
	total	80,816	7,173	9,459	10,630	9,216	7,841
	male	29,797	2,668	3,188	3,687	3,480	2,668
Marjeoun	female	32,793	2,375	3,668	2,855	2,833	3,292
	total	62,590	5,043	6,855	6,542	6,314	5,960
Hasbaya	male	14,762	1,075	1,320	1,443	1,473	1,964
	female	14,948	1,136	1,305	1,305	1,351	1,489
	total	29,710	2,211	2,625	2,748	2,824	3,453
	total	595,132	53,658	67,322	73,354	65,830	60,106
<b>Bekaa</b>	total	299,639	27,807	34,021	37,793	34,297	31,681
	male	295,492	25,851	33,301	35,561	31,533	28,425
	female	89,926	7,291	8,792	10,507	9,696	9,420
Zhaleh	female	88,609	6,755	8,700	9,466	9,160	8,638
	total	178,536	14,046	17,491	19,974	18,856	18,059
West-Bekaa	male	42,189	3,827	4,802	5,317	5,189	4,618
	female	40,993	3,477	4,765	5,152	4,545	3,533
	total	83,182	7,304	9,567	10,469	9,733	8,151
	male	119,878	12,061	14,831	15,515	13,882	12,248
Baalbeck	female	117,557	11,065	14,052	14,722	12,450	11,562
	total	237,436	23,126	28,883	30,237	26,332	23,810
Hermel	male	29,451	2,893	3,706	4,036	3,221	3,582
	female	30,153	3,080	3,566	3,973	3,519	2,956
	total	59,603	5,974	7,272	8,008	6,740	6,538
	male	18,195	1,736	1,890	2,418	2,309	1,814
Rashaya	female	18,180	1,472	2,217	2,248	1,860	1,736
	total	36,375	3,208	4,108	4,666	4,169	3,549
<b>North</b>	total	998,187	103,916	119,481	122,312	110,871	94,631
	male	496,462	53,934	60,819	62,078	57,382	48,034
	female	501,725	49,982	58,662	60,234	53,489	46,597
Tripoli	male	163,992	17,435	19,425	21,099	19,630	16,740
	female	168,901	15,524	18,936	20,799	18,761	16,282
	total	332,893	32,959	38,360	41,898	38,391	33,022
	male	74,691	8,605	9,692	9,722	9,506	7,936
Menieh-Dinnieh	female	71,137	7,378	8,916	9,443	8,402	7,378
	total	145,827	15,983	18,607	19,166	17,908	15,314
Koura	male	35,912	2,718	3,215	3,790	3,464	3,557
	female	36,269	2,174	2,843	3,355	3,433	3,261
	total	72,181	4,893	6,058	7,145	6,897	6,818
	male	35,438	3,378	3,502	3,470	3,844	3,050
Zghorta	female	38,409	3,517	3,378	3,548	3,533	3,128
	total	73,847	6,895	6,880	7,018	7,376	6,177
Batroun	male	25,939	1,786	2,387	2,513	2,355	1,834
	female	27,252	1,786	2,513	2,418	2,197	2,245
	total	53,191	3,572	4,900	4,931	4,552	4,078
	male	147,488	19,287	21,410	20,326	17,180	13,698
Akkar	female	146,956	18,600	21,136	19,699	15,776	13,240
	total	294,443	37,887	42,546	40,025	32,956	26,938
Becharre	male	13,003	725	1,188	1,158	1,403	1,219
	female	12,801	1,003	941	972	1,388	1,064
	total	25,805	1,728	2,130	2,130	2,791	2,283
	total	2,271,735	202,165	239,147	250,922	238,153	226,099
Lebanon	female	2,317,747	188,413	226,520	235,182	224,940	219,395
Lebanon	total	4,589,482	390,578	465,667	486,104	463,093	445,494

25-29y	30-34y	35-39y	40-44y	45-49y	50-54y	55-59y	60-64y	65+y	NR
50,424	47,370	39,688	36,074	30,993	32,040	28,293	27,517	53,512	742
24,072	21,153	16,577	15,378	14,314	15,328	13,269	13,100	25,709	0
26,352	26,217	23,111	20,696	16,679	16,712	15,024	14,417	27,802	742
151,420	151,471	123,471	123,966	99,894	81,993	72,237	68,617	121,053	1,049
72,783	70,848	58,086	47,017	40,758	36,264	33,241	31,629	59,803	97
78,637	80,623	65,881	52,877	41,235	35,973	35,377	32,057	61,250	952
24,015	22,122	17,111	12,904	11,932	10,725	9,702	8,077	14,362	34
26,243	26,160	18,384	15,552	12,301	10,323	10,089	8,899	16,272	503
50,258	48,282	35,495	28,456	24,233	21,048	19,791	16,976	30,634	537
23,449	23,610	19,021	15,789	14,060	13,171	12,493	12,056	21,898	0
24,839	25,680	22,270	18,844	14,287	13,284	12,884	12,637	22,641	371
48,288	49,291	41,292	34,633	28,347	26,455	25,777	24,693	44,539	371
8,853	7,255	5,374	4,623	4,028	3,275	2,837	3,197	6,581	0
8,493	8,102	6,487	4,545	4,230	3,807	3,165	3,056	6,769	31
17,346	15,357	11,861	9,167	8,258	7,082	6,001	6,253	13,350	31
4,946	5,929	5,438	4,011	3,758	2,711	2,441	1,903	4,771	48
6,246	7,309	6,690	4,836	3,108	2,631	2,679	1,886	4,756	0
11,193	13,238	12,128	8,847	6,866	5,342	5,120	3,789	9,528	48
7,459	7,887	7,173	6,522	4,920	4,968	4,046	4,428	7,792	0
8,142	8,712	8,252	6,411	5,110	4,221	4,269	3,888	6,998	32
15,601	16,599	15,424	12,933	10,031	9,189	8,315	8,316	14,790	32
4,060	4,045	3,968	3,168	2,061	1,415	1,722	1,969	4,399	15
4,675	4,660	3,798	2,691	2,199	1,707	1,892	1,691	3,813	15
8,735	8,704	7,766	5,859	4,259	3,122	3,614	3,660	8,212	31
34,722	32,549	23,561	19,000	14,681	13,972	12,085	11,631	21,814	77
15,753	15,650	10,694	9,195	6,861	7,027	5,862	5,970	11,081	0
18,969	16,899	12,867	9,805	7,820	6,946	6,223	5,661	10,733	77
7,186	7,666	4,899	4,342	3,183	3,338	2,797	2,829	4,451	0
9,103	8,005	6,121	4,621	3,940	3,508	2,829	2,458	4,745	46
16,289	15,671	11,019	8,963	7,123	6,846	5,625	5,287	9,196	46
7,694	7,035	5,198	4,270	3,188	2,984	2,544	2,528	4,914	0
8,902	7,945	5,935	4,617	3,266	2,732	2,843	2,574	4,287	31
16,596	14,980	11,133	8,887	6,453	5,716	5,386	5,103	9,201	31
872	949	598	583	491	705	521	613	1,716	0
964	949	811	567	613	705	552	629	1,700	0
1,837	1,898	1,409	1,150	1,104	1,411	1,073	1,242	3,416	0
27,375	25,844	18,246	13,525	10,702	9,785	10,333	10,501	24,228	34
12,057	11,693	8,312	6,345	4,931	4,416	4,808	4,788	12,123	0
15,317	14,152	9,934	7,180	5,771	5,369	5,524	5,713	12,105	34
5,500	6,121	4,187	3,086	2,093	1,828	1,828	2,200	4,311	0
7,291	7,150	4,719	3,051	2,341	2,004	2,271	2,341	4,009	18
12,790	13,270	8,907	6,138	4,434	3,832	4,098	4,541	8,321	18
2,806	2,602	1,877	1,561	1,171	1,171	1,357	1,115	3,066	0
3,289	3,103	2,416	2,007	1,449	1,467	1,375	1,357	3,307	0
6,095	5,705	4,293	3,568	2,620	2,639	2,732	2,472	6,374	0
2,355	1,834	1,604	1,145	1,145	834	980	875	3,333	0
3,188	2,625	2,062	1,417	1,167	1,208	1,250	1,417	3,438	0
5,543	4,459	3,666	2,562	2,312	2,042	2,229	2,292	6,771	0
1,397	1,136	644	552	521	583	644	598	1,412	0
1,550	1,274	736	705	814	690	629	598	1,351	15
2,947	2,410	1,380	1,257	1,335	1,273	1,273	1,196	2,763	15
51,284	44,277	33,708	28,701	22,875	21,646	18,828	15,728	37,738	77
25,306	20,771	16,688	13,756	11,081	10,776	8,986	7,996	18,664	15
25,978	23,506	17,021	14,945	11,794	10,871	9,842	7,732	19,074	61
7,674	6,633	5,437	4,748	3,921	3,830	3,017	3,125	5,836	0
7,459	7,781	5,698	5,009	4,043	3,600	3,431	2,864	5,943	61
15,133	14,414	11,134	9,758	7,964	7,430	6,449	5,989	11,778	61
3,183	2,741	2,392	1,674	1,711	1,638	1,251	1,104	2,741	0
3,588	3,054	2,355	1,950	1,711	1,214	1,380	1,178	3,091	0
6,771	5,796	4,747	3,625	3,422	2,852	2,631	2,281	5,832	0
10,800	8,077	6,506	5,261	3,813	3,798	3,393	2,427	7,268	0
10,567	9,337	6,210	5,648	4,201	4,373	3,487	2,521	7,361	0
21,367	17,415	12,715	10,909	8,014	8,171	6,880	4,948	14,629	0
2,487	2,002	1,392	1,236	908	767	782	860	1,564	15
2,752	1,768	1,627	1,345	1,125	1,079	1,001	875	1,486	0
5,239	3,770	3,019	2,580	2,033	1,846	1,783	1,736	3,050	15
1,162	1,317	961	837	728	744	543	480	1,256	0
1,611	1,565	1,132	992	713	604	543	294	1,193	0
2,774	2,883	2,093	1,829	1,441	1,348	1,086	774	2,449	0
80,529	72,903	58,570	46,441	36,608	32,172	30,512	28,354	60,545	343
38,353	33,733	27,934	22,511	17,264	15,608	15,224	13,891	29,589	109
42,177	39,170	30,636	23,929	19,343	16,564	15,288	14,463	30,956	235
12,729	10,503	8,781	8,086	6,806	5,875	5,369	4,138	7,360	15
14,023	12,777	11,245	9,380	7,502	5,607	4,896	4,753	8,307	110
26,752	23,279	20,026	17,467	14,308	11,482	10,265	8,891	15,667	126
5,934	5,001	4,115	2,967	2,205	1,910	2,143	1,569	3,355	31
6,337	5,389	4,100	2,952	2,346	1,956	1,771	1,475	3,215	78
12,271	10,391	8,215	5,918	4,551	3,867	3,914	3,043	6,570	109
2,470	2,501	2,065	2,035	1,553	1,490	1,802	1,631	3,557	63
2,827	3,185	2,485	2,222	2,004	1,771	1,569	1,429	3,712	0
5,297	5,685	4,551	4,256	3,557	3,261	3,370	3,060	7,269	63
3,082	3,191	2,381	1,774	1,073	1,121	1,214	1,401	2,958	0
3,361	3,859	2,646	2,179	1,369	1,510	1,526	1,743	3,097	15
6,443	7,050	5,028	3,953	2,442	2,631	2,740	3,145	6,055	15
2,229	2,387	1,849	1,581	1,027	869	964	1,280	2,876	0
2,482	2,465	2,119	1,343	1,107	980	1,155	1,438	3,004	0
4,712	4,853	3,968	2,924	2,134	1,849	2,119	2,718	5,880	0
10,521	9,101	7,910	5,514	4,230	3,864	3,344	3,146	7,956	0
11,912	10,369	7,146	5,314	4,384	4,307	3,772	3,085	8,201	15
22,433	19,471	15,056	10,828	8,614	8,171	7,116	6,231	16,157	15
1,388	1,049	833	555	370	478	386	725	1,527	0
1,234	1,125	894	540	632	432	601	540	1,420	15
2,622	2,174	1,726	1,095	1,001	911	987	1,265	2,947	15
188,324	173,847	138,291	114,202	95,210	89,419	81,389	77,375	156,969	221
207,430	200,567	159,449	129,432	102,642	92,435	87,279	80,043	161,920	2,101
395,754	374,414	297,740	243,635	197,852	181,854	168,668	157,419	318,889	2,321



## إستمارة إبلاغ عن مرض إنتقالي

### Immediately Reportable Cases / الأمراض الإنتقالية التي تبليغ فوراً

- Acute poliomyelitis / شلل الأطفال
- Acute Flaccid Paralysis / الشلل الرخو الحاد
- Cholera / الكوليرا
- Diphtheria / الخانوق
- Food Poisoning / تسمم غذائي
- Malaria / الملاريا
- Meningitis (All Agents) / التهاب السحايا
- Neonatal Tetanus / الكزاز الوليدي
- Rabies / الكلب - السعار
- Measles / الحصبة
- Rubella / الحصبة الألمانية
- Congenital Rubella Syndrome
- Avian Influenzae
- Creutzfeldt-Jacob Disease / كروتسفيلد - جاكوب
- Ebola / الحمى النزفية
- Plague / الطاعون
- Typhus / حمى التيفوس
- Yellow Fever / الحمى الصفراء

### Monthly Reportable Cases / الأمراض الإنتقالية التي تبليغ شهريا

- Bilharzia / بلهارسيا
- Brucellosis / الحمى المالطية
- Dysentery / الزحار
- Hepatitis (A, B, C, D, E) / التهاب الكبد الفيروسي
- Hydatid Cyst / الكيسيات المائية
- Urethritis / السيلان
- Leishmaniasis / داء الليشمانيات
- Cutaneous
- Visceral
- Leprosy / الجذام
- Mumps / أبو كعب
- Parasitic Worms / الديدان المعوية
- Pertussis / الشاهوق
- Syphilis / السفلس
- Tetanus / الكزاز
- Trichinosis / التريشينوز
- Tuberculosis - Pulmonary / السل الرئوي
- Tuberculosis - other sites / السل أشكال أخرى
- Typhoid & Para Typhoid / الحميات التيفية

إن حالات السيدا تبليغ على وثائق خاصة وترسل في ظرف مختم مباشرة إلى البرنامج الوطني لمكافحة السيدا.

إسم المصاب : \_\_\_\_\_  
إسم الأب : \_\_\_\_\_  
الشهرة : \_\_\_\_\_

الجنسية : \_\_\_\_\_  
تاريخ الولادة : \_\_\_\_\_  
الجنس : \_\_\_\_\_  
الوضع التحصيني : ( للمريض المبلغ عنه )  
\_\_\_\_\_  ملقح  غير ملقح  
عدد الجرعات : \_\_\_\_\_  
البلدة/الحي : \_\_\_\_\_  
المحافظة/القضاء : \_\_\_\_\_  
رقم الهاتف : \_\_\_\_\_

تاريخ ظهور عوارض المرض : \_\_\_\_\_  
تاريخ تشخيص المرض : \_\_\_\_\_  
هل دخل المريض المستشفى : \_\_\_\_\_  لا  نعم  
إسم المستشفى : \_\_\_\_\_  
تاريخ دخول المستشفى : \_\_\_\_\_  
هل من تشخيص مخبري : \_\_\_\_\_  لا  نعم  
إذا نعم حدد : \_\_\_\_\_

إسم المستشفى/المركز الصحي/المختبر/عيادة خاصة/غيره : \_\_\_\_\_  
العنوان : \_\_\_\_\_  
الهاتف : \_\_\_\_\_  
إسم وصفة المبلغ : \_\_\_\_\_  
التاريخ : \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ التوقيع

في الحالات التي تبليغ فوراً إضافة إلى ملء الوثيقة يجب الإتصال مباشرة وخلال ٢٤ ساعة ببرنامج الترصد الوبائي  
تلفون : ٠١ / ٦١٤١٩٤ / ٦ - ٦١٠٩٢٠ - ٠١

### أرقام مصالح الصحة في المحافظات وأقسام الصحة في الأفضية

٠٨/٦٦٠٠١٢	البقاع الغربي	٠٧/٧٦٣٢١١	النيبطية	٠٦/٦٧١٠٤٥	بشري	٠٥/٩٢٠٢٤١	جبل لبنان
	بيروت	٠٧/٧٦٠٠١٤	النيبطية	٠٦/٦٩٠٠١٤	عكار	٠٥/٩٢٠٨٦٠	بييدا
٠١/٦١٥٧٣٤	مديرية الوقاية الصحية	٠٧/٤٥٠٠١٧	بنت جبيل	٠٦/٦٦٠١٧٧	زغرتا	٠١/٨٩٠٩١٦	المتن
٠١/٦١١٨٤٥	مصلحة الطب الوقائي	٠٧/٨٣٠٠٠٨	مرجعيون	٠٦/٩٥٠٠٨٤	الكورة	٠٥/٥٠٠١٣	الشوف
٠١/٦١١٨٤٤	دائرة مكافحة الأمراض الإنتقالية	٠٧/٧٢٠٩٧٩	حاصبيا	٠٦/٧٤٠١٥٠	البيرون	٠٥/٥٥٤٦١٤	عالية
	برنامج الترصد الوبائي	٠٨/٨٠٠٦٠٠	البقاع	٠٦/٤٦١٩٤٢	المنية الضنية	٠٩/٥٤٠٢١٨	جبيل
٠١/٦١٤١٩٤-٦	برنامج مكافحة السيدا	٠٨/٨٢٠٦٠١	زحلة	٠٧/٧٢٠٤٨٥	الجنوب	٠٩/٩١٤٩٢٣	كسروان
٠١/٥٦٧٤٠٤-٥	برنامج مكافحة السيدا	٠٨/٣٧٠٢٥٥	بعلبك	٠٧/٧٢٠٤٨٦	صيدا	٠٦/٤٣٣٧٢٥	الشمال
		٠٨/٢٠٠٤٣١	الهرمل	٠٧/٧٤٠٢٩٧	صور	٠٦/٤٣٥٩٩٤	طرابلس
		٠٨/٨٩٠٠٢٦	راشيا	٠٧/٧٨٠١٠٤	جزين		